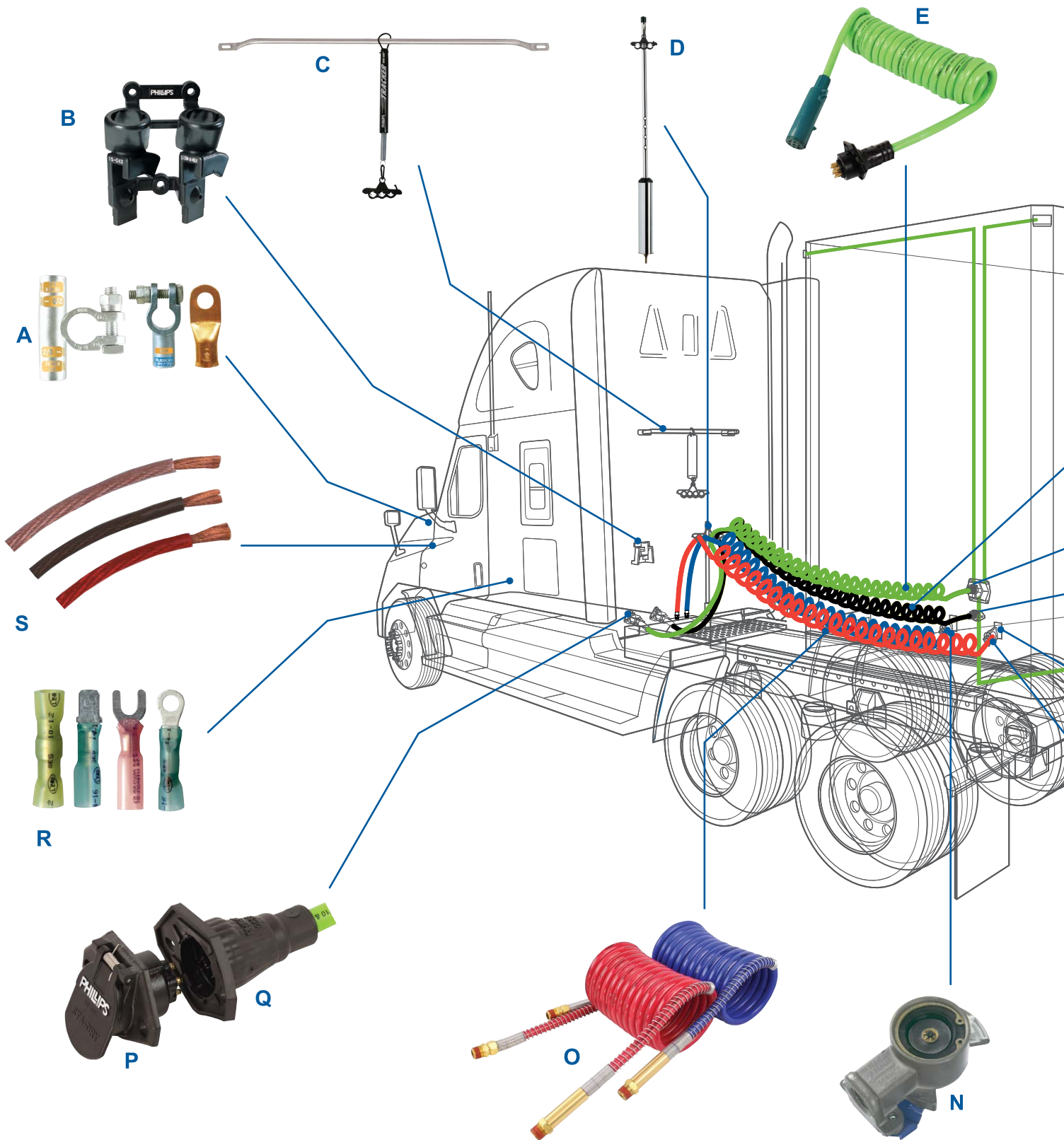


PHILIPS

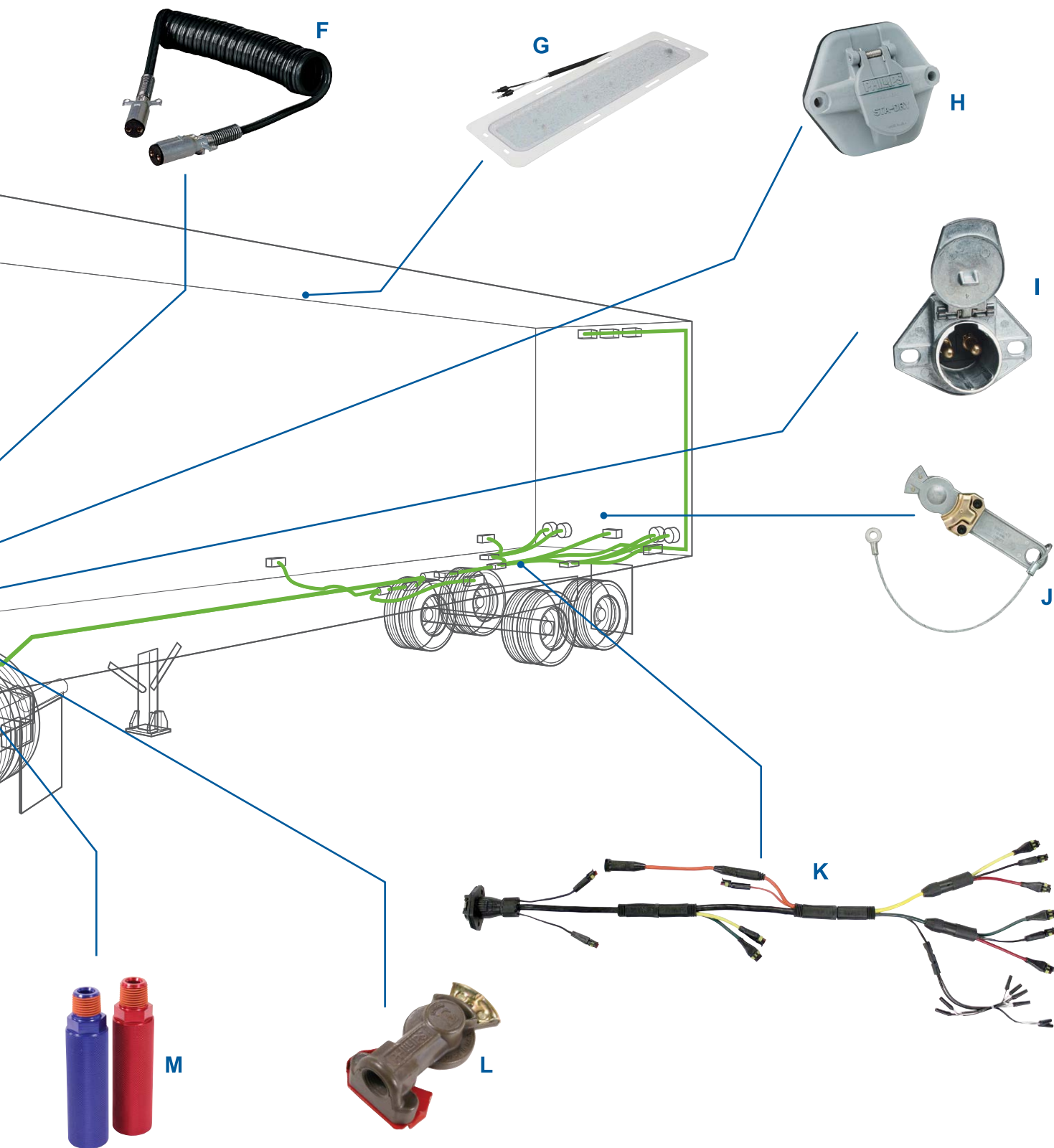
WE MAKE PRODUCTS THAT MAKE A DIFFERENCE®





A. Battery Terminals	Pg. 80
B. STOW-A-WAY™	Pg. 115
C. Tracker Bar Kit	Pg. 116
D. Pogo Stick	Pg. 115
E. STA-DRY® QCMS2™ Assembly.....	Pg. 5

F. Dual Pole Liftgate Cable	Pg. 12
G. PERMALITE™ XB LED.....	Pg. 146
H. STA-DRY® Socketbreaker.....	Pg. 44
I. Dual Pole Socket.....	Pg. 37
J. Shut-Off Gladhand	Pg. 55



K. STA-DRY® Harness	Pg. 126
L. Anodized Gladhand	Pg. 53
M. Coiled Air Grips	Pg. 59
N. QWIK-E® Gladhand	Pg. 51
O. POLAR AIR® Coiled Air	Pg. 18

P. STA-DRY® Socket	Pg. 32
Q. QCS® (Quick-Change Socket) Assembly	Pg. 33
R. STA-DRY® Heat Shrink Terminals	Pg. 94
S. CLEAR-VU™ Battery Cable	Pg. 75

A HISTORY OF MAKING PRODUCTS THAT MAKE A DIFFERENCE

AN OBSESSION

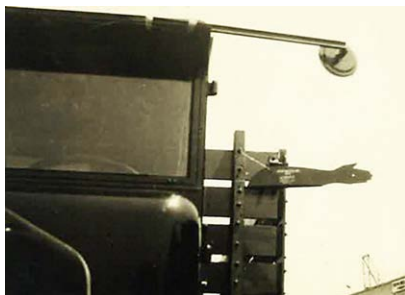


The company mission statement on the wall in the corporate lobby reads, "We are obsessed with improving everything about trucks and trailers, one innovation at a time." Since the beginning, Phillips was

already on its way to becoming a company with a philosophy propelled by providing customers with innovative, solution-driven products. And over the decades, Phillips has built a legacy of making products that make a difference based on the foundation of this philosophy.

THE BEGINNING

With humble beginnings in 1928, H.W. Phillips Mfg. Co. was established when Hugh Phillips started selling truck parts to produce haulers. During a time when vehicle turn signals were an aftermarket item and still emergent in their development, he seized an opportunity and designed and applied for a patent for the first reflective directional signal arm for trucks. The company began manufacturing the arm two years later, and this single product became the foundation on which the company's success was built.



FROM DISTRIBUTOR TO INNOVATOR & MANUFACTURER

Over the decades, Phillips evolved from a parts distributor to an innovator and manufacturer of advanced concept air and electrical parts for the commercial vehicle transportation industry. With an approach of genuinely listening to the customer, in addition to a desire to improve existing products and remedy the challenges faced with their design short-



Bob Phillips - CEO

comings, Bob Phillips continued to tread in his grandfather's footsteps to find better ways.

"In many cases, the only way to meet our specifications was to build it ourselves," says Bob Phillips, CEO.

A REPUTABLE REPUTATION

Phillips Industries has become well-known in the industry. They are a Tier 1 supplier and partner to virtually every major tractor and trailer manufacturer in the US. Phillips' leadership in quality and innovation has been recognized by numerous industry awards and has certification of the coveted industry-wide IATF 16949 and ISO 14001.

With multiple locations, Phillips is currently based in Santa Fe Springs, California, with manufacturing and distribution facilities throughout the U.S., Canada, Mexico, China, and Europe.



A CONTINUED LEGACY OF GROWTH AND INNOVATION

In 2013 Rob Phillips took the helm of the company as President and COO, and Dave Phillips stepped into the role of Executive Vice President. With recent expansive growth, and under their leadership, Phillips officially restructured its business model in 2020 and divided into five distinct strategic business units (SBUs) organized under the Phillips corporate umbrella. These five SBUs are Phillips Aftermarket, Phillips OEM, Phillips Connect Technologies, Phillips Asia-Pacific, and Phillips Europe. By breaking into smaller, more focused businesses, resources are concentrated on specific markets to be more responsive to customer needs, and innovative in product development. With a more customer-centric platform and an obsession to continually strive for better, Phillips is ensuring it remains at the forefront of progress and success.



Rob Phillips - President and COO



Dave Phillips - Executive Vice President

TABLE OF CONTENTS

Electrical Assemblies

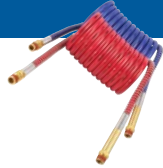
7-way, 6-way, 4-way, Liftgate,
and Auxiliary
Coiled and Straight



4

Air Assemblies

Coiled Nylon Assemblies,
Rubber Air Assemblies,
2-IN-1 Rubber Air Assemblies,
and Bulk Rubber Air



17

Electrical & Air Combo Assemblies

3-IN-1, 4-IN-1 with Single Pole,
4-IN-1 with Dual Pole,
and 4-IN-1 with Auxiliary



23

Electrical Connectors

Plugs, Sockets, Socket Accessories,
Socketbreakers, Noseboxes,
Nosebox Accessories, Trailer Wire Management,
Junction Boxes, and Solenoids



27

Air Connectors

Gladhands (QWIK-E®, Standard,
Corrosion Resistant & Specialty),
AIR-DEFENSE™ System, Air Accessories,
Air Brake Tubing, Brass and Composite Fittings



50

Cable & Wire

Bulk Trailer Cable, Bulk Battery Cable,
Primary Wire, and Service Wire



70

Battery Terminals & Accessories

Terminals, Lugs, Heavy Duty Jumpers,
Booster Cables, Solder Slugs,
Battery and Battery Hardware Accessories



80

Wire Terminals

STA-DRY® Heat Shrink Wire Terminals
and PVC Wire Terminals



94

Heat Shrink Tubing

Dual Wall, Single Wall,
and Self-Sealing Shrink Tape



109

Cable/Wire Support & Accessories

STOW-A-WAY®, Tracker Bar Spring Kits, Pogo Sticks,
Sliding Axle Spring Kits, Replacement Springs,
Hose Holders, Cable Ties, Spiral Wrap, Split Loom,
Grommets, Bushings, and Rubber Cushion Clamps



114

Electrical Harness Systems

Complete Aftermarket Harnesses,
Retrofit Rear Sill, Repair Pieces,
LITE-SENTRY®, Pigtails, and
Adapters



126

PERMALITE™ HD Trailer Lighting

Cargo Lamps, Stop-Tail-Turn Lights,
Side Turn Lights, Marker/
Clearance Lights, License Lights,
and Mounting Accessories



145

Tractor and Trailer Power Management

V-CHECK™ II Battery Status Indicator,
PERMALOGIC™ Products, and
STA-CHARGE™ Battery Charger



161

Tools & General Accessories

Cutters, Strippers, Crimpers, Testers,
Shop Tools and Accessories, Heat
Guns & Torches, Brushes, Charging Clips,
Document Holders, and CSA Kit



169

Traffic Builders

Showroom Displays, Wall Displays,
Counter Top Displays, Clip Strips,
Bulk Merchandising, and Trays/Drawers



182

Index

193

To order, or for further information please contact customer service at 800-423-4512

Phillips Industries has compiled the information contained herein from what it believes are authoritative sources and believes that it is accurate and factual as of the date printed. It is offered solely as a convenience to its customers and is intended only as a guide concerning the products mentioned. Since the user's product formulation, specific use application and conditions of use are beyond Phillips Industries control, Phillips Industries makes no warranty or representation regarding the results that may be obtained by the user, or its suitability or any products mentioned for the user's specific application. This information is not to be taken as a warranty or representation for which Phillips Industries assumes legal responsibility nor as permission to use any patented inventions without a license.

Copyright © 2020 Phillips Industries. All rights reserved.

AIR-DEFENSE™, ARCTIC SUPERFLEX™, CHARGE-BOX™, CLEAR-VU™, CRIMP & SEAL™, CRIMP SOLDER & SEAL™, DURACOIL™, DURAFLEX™, ELECTROLINK™, i-BOX™, ISOCOIL™, ISOFLEX™, LATCH-IT™, LECTRACOIL™, LECTRAX™, PERMACOIL™, PERMALITE™, PERMALOGIC™, PHILLIPS UPTIME™, POWER GRIP™, QBOX™, QCP™, QCMS™, QCMS2™, QWIK-CHANGE™, QWIK-CHECK™, QWIK-CLAMP™, QWIK-FIT™, QWIK-FIX™, QWIK-REPAIR™, QWIK-SHOT™, QWIK-SNAP™, S1™, S2™, S7™, SOLDER & SEAL™, STA-CHARGE™, STA-LOCK™, SLIM-7™, STOW-A-WAY™, THERMOSEALED™, TRAIL-CHARGER™, WEATHER-TITE™, PERMAPLUG™, V-CHECK™ II, VOLT-BOX™ are trademarks of Phillips Industries, Inc.

LITE-SENTRY®, QCS®, QCS2®, QWIK-E®, STA-DRY®, POLARAIR®, X-TEND® and WE MAKE PRODUCTS THAT MAKE A DIFFERENCE® are registered trademarks of Phillips Industries, Inc.

BOARDFREE® is a registered trademark of Innotec Group

ELECTRICAL ASSEMBLIES

STA-DRY® QCMS2™



* Standard on all Phillips electrical cable assemblies and plugs

ELECTRICAL ASSEMBLIES

- Large finger grips for coupling/uncoupling, even with gloves
- Longer plug interior for easy maintenance
- Protected with non-corrosive, non-conductive, dielectric grease
- WEATHER-TITE™ PERMAPLUGS™ have machine-crimped terminals for increased conductivity
- Meets SAE J560, J2222, J2394 or ISO 3731

1/8, 2/10 & 4/12 ga. ABS Applications

Part No.	Description	
30-9334	12', with QCMS2™ and QCP™	*
30-9634	15', with QCMS2™ and QCP™	*
30-9934	15', 48" lead, with QCMS2™ and QCP™	*

- A tight STA-DRY® seal locks out road contaminants, completely stopping the devastating effects of corrosion
- Plugs directly into the tractor and is rarely removed, further reducing the possibility of contaminants entering the electrical system
- Features the revolutionary QCP™ (Quick-Change Plug), with QCP™ cartridge which is field replaceable in under two minutes!
- Works with the QCS® or QCS2® boot, eliminating the need for a socket
- Flexible from -82°F to 195°F (-63°C to 91°C)
- Built-in theft deterrent
- Patent No. 6,483,200
- ABS LECTRACOIL™ jacketing
- Meets SAE J560, J2394 and J2222
- As a recommended practice, use a tracker bar spring kit or pogo stick to support cable assemblies with longer leads

STA-DRY® QCMS2™



1/8, 2/10 & 4/12 ga. ABS Applications

QCP™ (Quick-Change Plug)

5 Year Warranty
See website for details

Part No.	Description	
30-9324	12', with QCP™	*
30-9624	15', with QCP™	*
30-9924	15', 48" lead, with QCP™	*
30-9954	20', with QCP™	*

WEATHER-TITE™ PERMAPLUG™

3 Year Warranty
See website for details

Part No.	Description	
30-9120	10', with WEATHER-TITE™ PERMAPLUGS™	*
30-9320	12', with WEATHER-TITE™ PERMAPLUGS™	*
30-9620	15', with WEATHER-TITE™ PERMAPLUGS™	*
30-9920	15', 48" lead, with WEATHER-TITE™ PERMAPLUGS™	*
30-9820	20', 48" lead, with WEATHER-TITE™ PERMAPLUGS™	*

Zinc Die-Cast Plug

3 Year Warranty
See website for details

Part No.	Description	
30-9321	12', with zinc die-cast plugs	*
30-9621	15', with zinc die-cast plugs	*
30-9921	15', 48" lead, with zinc die-cast plugs	*
30-9951	20', with zinc die-cast plugs	*
30-9821	20', 48" lead, with zinc die-cast plugs	*

- Recommended for ABS applications and trailers with high voltage demands
- Flexible from -82°F to 195°F (-63°C to 91°C)
- Excellent recoil memory, chemical and abrasion resistance
- QCP™ cartridge is field replaceable in under two minutes!
- The WEATHER-TITE™ PERMAPLUG™ seal blocks contaminants from entering the electrical system
- As a recommended practice, use a tracker bar spring kit or pogo stick to support cable assemblies with longer leads

* Working length - As measured by pull force per SAE J2222. Length of actual cable is significantly longer.

ABS LECTRACOIL™



WEATHER-TITE™
PERMAPLUG™



Zinc Die-Cast Plug

16-125
Insert
Cartridge

QCP™
Quick-Change Plug

ABS PERMACOIL™

- Recommended for ABS applications
- Flexible from -87°F to 150°F (-66°C to 66°C)
- Good recoil memory, chemical and abrasion resistance
- QCP™ cartridge is field replaceable in under two minutes!
- The WEATHER-TITE™ PERMAPLUG™ seal blocks contaminants from entering the electrical system
- As a recommended practice, use a tracker bar spring kit or pogo stick to support cable assemblies with longer leads

1/8, 2/10 & 4/12 ga. ABS Applications**QCP™ (Quick-Change Plug)**

Part No.	Description	
30-4324	12', with QCP™	*
30-4624	15', with QCP™	*
30-4924	15', 48" lead, with QCP™	*
30-4954	20', with QCP™	*

WEATHER-TITE™ PERMAPLUG™

Part No.	Description	
30-4320	12', with WEATHER-TITE™ PERMAPLUGS™	*
30-4420	12', 48" lead, with WEATHER-TITE™ PERMAPLUGS™	*
30-4620	15', with WEATHER-TITE™ PERMAPLUGS™	*
30-4920	15', 48" lead, with WEATHER-TITE™ PERMAPLUGS™	*
30-4820	20', 48" lead, with WEATHER-TITE™ PERMAPLUGS™	*

Zinc Die-Cast Plug

Part No.	Description	
30-4321	12', with zinc die-cast plugs	*
30-4621	15', with zinc die-cast plugs	*
30-4721	15', 72" lead, with zinc die-cast plugs	*
30-4921	15', 48" lead, with zinc die-cast plugs	*
30-4951	20', with zinc die-cast plugs	*
30-4821	20', 48" lead, with zinc die-cast plugs	*

DURACOIL™

- For standard 7-way applications, NON-ABS equipped trailers
- Flexible from -82°F to 195°F (-63°C to 91°C)
- Excellent recoil memory, chemical and abrasion resistance
- UNBREAKABLE WEATHER-TITE™ PERMAPLUG™ or heavy duty reinforced zinc die-cast plugs
- The WEATHER-TITE™ PERMAPLUG™ seal blocks contaminants from entering the electrical system
- As a recommended practice, use a tracker bar spring kit or pogo stick to support cable assemblies with longer leads

1/10 & 6/12 ga. NON-ABS Applications**WEATHER-TITE™ PERMAPLUG™**

Part No.	Description	
22-9320	12', with WEATHER-TITE™ PERMAPLUGS™	*
22-9620	15', with WEATHER-TITE™ PERMAPLUGS™	*
22-9720	15', 72" lead, with WEATHER-TITE™ PERMAPLUGS™	*

Zinc Die-Cast Plug

Part No.	Description	
22-9321	12', with zinc die-cast plugs	*
22-9521	12', 72" lead, with zinc die-cast plugs	*
22-9621	15', with zinc die-cast plugs	*
22-9721	15', 72" lead, with zinc die-cast plugs	*
22-9921	15', 48" lead, with zinc die-cast plugs	*

1/12 & 6/14 ga. NON-ABS Applications

Part No.	Description	
24-9621	15', with zinc die-cast plugs	*

* Working length - As measured by pull force per SAE J2222. Length of actual cable is significantly longer.

1/10 & 6/12 ga. NON-ABS Applications**QCP™ (Quick-Change Plug)**

Part No.	Description	
22-4624	15', with QCP™	*
22-4954	20', with QCP™	*

WEATHER-TITE™ PERMAPLUG™

Part No.	Description	
22-4320	12', with WEATHER-TITE™ PERMAPLUGS™	*
22-4620	15', with WEATHER-TITE™ PERMAPLUGS™	*

Zinc Die-Cast Plug

Part No.	Description	
22-4321	12', with zinc die-cast plugs	*
22-4621	15', with zinc die-cast plugs	*
22-4721	15', 72" lead, with zinc die-cast plugs	*
22-4951	20', with zinc die-cast plugs	*

NON-ABS PERMACOIL™

- For standard 7-way applications, NON-ABS equipped trailers with minimal voltage demands
- Flexible from -87°F to 150°F (-66°C to 66°C)
- Good recoil memory, chemical and abrasion resistance
- QCP™ cartridge is field replaceable in under two minutes!
- The WEATHER-TITE™ PERMAPLUG™ seal blocks contaminants from entering the electrical system
- As a recommended practice, use a tracker bar spring kit or pogo stick to support cable assemblies with longer leads

1/12 & 6/14 ga. NON-ABS Applications**QCP™ (Quick-Change Plug)**

Part No.	Description	
24-4324	12', with QCP™	*
24-4624	15', with QCP™	*
24-4954	20', with QCP™	*

WEATHER-TITE™ PERMAPLUG™

Part No.	Description	
24-4320	12', with WEATHER-TITE™ PERMAPLUGS™	*
24-4620	15', with WEATHER-TITE™ PERMAPLUGS™	*

Zinc Die-Cast Plug

Part No.	Description	
24-4321	12', with zinc die-cast plugs	*
24-4621	15', with zinc die-cast plugs	*
24-4951	20', with zinc die-cast plugs	*

Coiled M7**1/8, 2/10 & 4/12 ga. ABS Applications**

Part No.	Description	
30-4327	12', coiled, with molded plugs	*
30-4627	15', coiled, with molded plugs	*
30-4927	15', with 48" lead, coiled, with molded plugs	*

1/12 & 6/14 ga. NON-ABS Applications

Part No.	Description	
24-4327	12', coiled, with molded plugs	*
24-4627	15', coiled, with molded plugs	*

- The M7, or Molded 7-way electrical assembly, features plugs that are unbreakable and completely molded to the electrical cable to combat against the devastating effects of corrosion!
- Jacketing is flexible from -87°F to 150°F (-66°C to 66°C)
- ABS cables feature an army green colored jacketing
- Good recoil memory, chemical and abrasion resistance
- Plug meets SAE J560 standards

* Working length - As measured by pull force per SAE J2222. Length of actual cable is significantly longer.

ISOCOIL™**1/8, 2/10 & 4/12 ga. ISO Applications**

Part No.	Description	
31-9323	12', with zinc die-cast plugs	*
31-9623	15', with zinc die-cast plugs	*
31-9923	15', 48" lead, with zinc die-cast plugs	*

- For ISO (International Standard Organization) / auxiliary applications
- Flexible from -82°F to 195°F (-63°C to 91°C)
- Excellent recoil memory, chemical and abrasion resistance
- Twisted pair brown and green wires to avoid signal noise
- Male ground pin to prevent misconnections
- Heavy duty, reinforced zinc die-cast housing
- As a recommended practice, use a tracker bar spring kit or pogo stick to support cable assemblies with longer leads

Accessory Coil**1/8, 2/10 & 4/12 ga. ISO Applications**

Part No.	Description	
31-4323	12', with zinc die-cast plugs	*
31-4623	15', with zinc die-cast plugs	*

- For auxiliary applications
- Brown and green wires are not twisted
- Flexible from -87°F to 150°F (-66°C to 66°C)
- Good recoil memory, chemical and abrasion resistance
- Male ground pin to prevent misconnections
- Heavy duty, reinforced zinc die-cast plugs

Straight STA-DRY® QCMS2™**1/8, 2/10 & 4/12 ga. ABS Applications**

Part No.	Description	
30-2055	12', with QCMS2™ with QCP™	
30-2075	15', with QCMS2™ with QCP™	
30-2095	20', with QCMS2™ with QCP™	

- A tight STA-DRY® seal locks out road contaminants, completely stopping the devastating effects of corrosion
- Plugs directly to the tractor and is rarely removed, further reducing the possibility of contaminants entering the electrical system
- QCP™ cartridge is field replaceable in under two minutes!
- Works with the QCS® or QCS2® boot, eliminating the need for a socket
- Built-in theft deterrent
- ABS LECTRAFLX™ jacketing
- Flexible from -40°F to 150°F (-40°C to 66°C)
- Available in 3-IN-1 and 4-IN-1 assemblies
- Patent No. 6,483,200

* Working length - As measured by pull force per SAE J2222. Length of actual cable is significantly longer.

1/8, 2/10 & 4/12 ga. ABS Applications**QCP™ (Quick-Change Plug)**

Part No.	Description
30-2054	12', with QCP™
30-2074	15', with QCP™
30-2094	20', with QCP™

WEATHER-TITE™ PERMAPLUG™

Part No.	Description
30-2010	8', with WEATHER-TITE™ PERMAPLUGS™
30-2030	10', with WEATHER-TITE™ PERMAPLUGS™
30-2050	12', with WEATHER-TITE™ PERMAPLUGS™
30-2070	15', with WEATHER-TITE™ PERMAPLUGS™

Zinc Die-Cast Plug

Part No.	Description
30-2011	8', with zinc die-cast plugs
30-2031	10', with zinc die-cast plugs
30-2051	12', with zinc die-cast plugs
30-2071	15', with zinc die-cast plugs
30-2091	20', with zinc die-cast plugs

Straight ABS LECTRAFLEX™

- Spring-wrapped compression contact pins
- Chemical and abrasion resistant
- QCP™ cartridge is field replaceable in under two minutes!
- The WEATHER-TITE™ PERMAPLUG™ seal blocks contaminants from entering the electrical system
- Flexible from -40°F to 150°F (-40°C to 66°C)
- Available in 3-IN-1 and 4-IN-1 assemblies

1/10 & 6/12 ga. NON-ABS Applications

Part No.	Description
22-2011	8', with zinc die-cast plugs
22-2031	10', with zinc die-cast plugs
22-2051	12', with zinc die-cast plugs
22-2071	15', with zinc die-cast plugs

- Chemical and abrasion resistant
- Heavy duty, reinforced zinc die-cast housing
- Spring-wrapped compression contact pins
- Flexible from -40°F to 150°F (-40°C to 66°C)
- Available in 3-IN-1 and 4-IN-1 assemblies

**Straight NON-ABS DURAFLEX™****1/8, 2/10 & 4/12 ga. ABS Applications**

Part No.	Description	
30-2057	12', straight, with molded plugs	*
30-2077	15', straight, with molded plugs	*

1/10 & 6/12 ga. NON-ABS Applications

Part No.	Description	
22-2057	12', straight, with molded plugs	*
22-2077	15', straight, with molded plugs	*

- The M7, or Molded 7-way electrical assembly, features plugs that are unbreakable and completely molded to the electrical cable to combat against the devastating effects of corrosion!
- Jacketing is flexible from -40°F to 150°F (-40°C to 66°C)
- ABS cables feature an army green colored jacketing
- Good chemical and abrasion resistance
- Plug meets SAE J560 standards

Straight M7

* Working length - As measured by pull force per SAE J2222. Length of actual cable is significantly longer.

Straight ISOFLEX™



1/8, 2/10 & 4/12 ga. ISO Applications

Part No.	Description
31-2033	10', with zinc die-cast plugs
31-2053	12', with zinc die-cast plugs
31-2073	15', with zinc die-cast plugs
31-2093	20', with zinc die-cast plugs

- Good chemical and abrasion resistance
- Heavy duty, reinforced zinc die-cast housing
- Flexible from -40°F to 150°F (-40°C to 66°C)
- Available in 4-IN-1 assemblies
- For auxiliary applications
- Twisted pair brown and green wires to reduce signal
- Spring-wrapped compression contact pins

DOLLY CABLES

'Y' Dolly Cables



Zinc Die-Cast Plug

1/8, 2/10 & 4/12 ga. ABS Applications

Part No.	Description	
30-4140	10', 'Y' dolly cable, with WEATHER-TITE™ PERMAPLUGS™	*
30-4141	10', 'Y' dolly cable, with zinc die-cast plugs	*

- For trailer doubles utilizing dolly applications
- Connect electricals to the second trailer and dolly with one cable
- Recommended for ABS applications
- ABS PERMACOIL™ jacketing flexible from -87°F to 150°F (-66°C to 66°C)
- Good recoil memory, chemical and abrasion resistance
- WEATHER-TITE™ PERMAPLUG™ seal blocks all contaminants from entering the electrical system, creating a complete seal!
- Plugs meet SAE J560 specifications

LIGHT DUTY CABLES

STA-DRY® 6 & 4-Way Light Duty Cables



Molded plug for long life!

Coiled

6-Way	4-Way	Description	
19-6708	19-4708	8', with THERMOSEALED™ plugs	*
19-6710	19-4710	10', with THERMOSEALED™ plugs	*
19-6712	19-4712	12', with THERMOSEALED™ plugs	*
19-6715	19-4715	15', with THERMOSEALED™ plugs	*

Straight

6-Way	4-Way	Description	
19-6006	19-4006	6', with THERMOSEALED™ plugs	NEW
19-6008	19-4008	8', with THERMOSEALED™ plugs	NEW
19-6010	19-4010	10', with THERMOSEALED™ plugs	NEW
19-6012	19-4012	12', with THERMOSEALED™ plugs	NEW
19-6015	19-4015	15', with THERMOSEALED™ plugs	NEW
19-6020	19-4020	20', with THERMOSEALED™ plugs	NEW

- For light duty towing applications such as boats and utility trailers
- Plugs are molded for moisture and corrosion resistance
- Coiled cables have the same heavy duty jacket as our PERMACOIL™ and ABS PERMACOIL™
- Flexible from -87°F to 150°F (-66°C to 66°C)
- 16 ga. wires

* Working length - As measured by pull force per SAE J2222. Length of actual cable is significantly longer.

7-Way Light Duty PERMACOIL™

1/14 & 6/16 ga. Fine Stranded Copper		
Part No.	Description	
19-7752	11.5', with PERMAPLUGS™	*

- Light duty 7-way accessory cable for truck mounted applications such as forklifts
- Capable of running stop, turn and tail lights
- 360° compression ring secures PERMAPLUG™ to cable and eliminates moisture and corrosion
- Flexible from -87°F to 150°F (-66°C to 66°C)
- Good recoil memory, chemical and abrasion resistance
- Meets ISO 1185 and ISO 4141 specifications

**STA-DRY® WEATHER-TITE™ M2 LIFTGATE CHARGING CABLES**

- For dual pole liftgate applications utilizing a trailer battery pack
- Features plugs that are unbreakable with non-corrosive housing which are completely molded to the electrical cable to combat against corrosion
- The WEATHER-TITE™ seal adds additional corrosion protection at the front of the plug by blocking moisture and contaminants from entering the electrical system through the coupled connection
- 100 amp continuous capacity, 200 amp intermittent capacity
- Flexible from -82°F to 195°F (-63°C to 91°C)
- Meets J3082 standards

Coiled Dual Pole WEATHER-TITE™ M2 - 4 GA.

2/4 ga. Fine Stranded Copper		
Part No.	Description	
23-23276	12', 1 ground, 1 hot, 4 ga.	NEW
23-26276	15', 1 ground, 1 hot, 4 ga.	NEW
23-29276	15' with 48" lead, 1 ground, 1 hot, 4 ga.	NEW

- Excellent recoil memory, chemical and abrasion resistance

**Coiled Dual Pole WEATHER-TITE™ M2 - 2 GA.**

2/2 ga. Fine Stranded Copper		
Part No.	Description	
25-23276	12', 1 ground, 1 hot, 2 ga.	NEW
25-26276	15', 1 ground, 1 hot, 2 ga.	NEW
25-29276	15' with 48" lead, 1 ground, 1 hot, 2 ga.	NEW

- Excellent recoil memory, chemical and abrasion resistance



* Working length - As measured by pull force per SAE J2222. Length of actual cable is significantly longer.

Straight Dual Pole WEATHER-TITE™ M2 - 4 GA.**2/4 ga. Fine Stranded Copper**

Part No.	Description	
23-22576	12', 1 ground, 1 hot, 4 ga.	NEW
23-22776	15', 1 ground, 1 hot, 4 ga.	NEW

- Good chemical and abrasion resistance

Straight Dual Pole WEATHER-TITE™ M2 - 2 GA.**2/2 ga. Fine Stranded Copper**

Part No.	Description	
25-22576	12', 1 ground, 1 hot, 2 ga.	NEW
25-22776	15', 1 ground, 1 hot, 2 ga.	NEW

- Good chemical and abrasion resistance

ZINC DIE-CAST LIFTGATE CHARGING CABLES

- For liftgate applications utilizing a trailer battery pack
- 4 ga. fine stranded copper for flexibility
- 100 amp continuous capacity; 200 amp intermittent capacity

Dual Pole**2/4 ga. Fine Stranded Copper**

Part No.	Description	
23-2326	12', 1 ground, 1 hot	*
23-2626	15', 1 ground, 1 hot	*
23-2926	15', 48" lead, 1 ground, 1 hot	*

- Excellent recoil memory, chemical and abrasion resistance
- Flexible from -82°F to 195°F (-63°C to 91°C)
- Internal ground to improve ground connections
- As a recommended practice, use a tracker bar spring kit or pogo stick to support cable assemblies with longer leads
- Heavy duty, reinforced zinc die-cast housing
- Mates with dual pole metal socket 15-326

Dual Pole PERMACOIL™**2/4 ga. Fine Stranded Copper**

Part No.	Description	
23-2316	12', 1 ground, 1 hot	*
23-2616	15', 1 ground, 1 hot	*
23-2916	15', 40" lead, 1 ground, 1 hot	*

- Good recoil memory, chemical and abrasion resistance
- Flexible from -87°F to 150°F (-66°C to 66°C)
- Internal ground to improve ground connections
- Mates with dual pole metal socket 15-326
- Same heavy duty jacket as our PERMACOIL™ and ABS PERMACOIL™
- As a recommended practice, use a tracker bar spring kit or pogo stick to support cable assemblies with longer leads

* Working length - As measured by pull force per SAE J2222. Length of actual cable is significantly longer.

Dual Pole "Y" Adapter

2/4 ga. Fine Stranded Copper

Part No.	Description
23-2630	15', 48" and 24" leads, 1 ground, 1 hot *

- For fleets with single and dual pole trailers
- Allows dual pole tractor to connect to single or dual pole trailer
- Coil has dual pole tractor side and dual and single pole plug trailer side
- Excellent recoil memory, chemical and abrasion resistance
- Flexible from -82°F to 195°F (-63°C to 91°C)
- Heavy duty, reinforced zinc die-cast housing
- As a recommended practice, use a tracker bar spring kit or pogo stick to support cable assemblies with longer leads



Dual Pole to Single Pole Lead

2/4 ga. Fine Stranded Copper

Part No.	Description
23-2628	15', 1 ground, 1 hot *

- Coil has one dual pole and one single pole plug
- Excellent recoil memory, chemical and abrasion resistance
- Flexible from -82°F to 195°F (-63°C to 91°C)
- Heavy duty, reinforced zinc die-cast housing



Single Pole

1/4 ga. Fine Stranded Copper

Part No.	Description
23-4325	12', 1 hot *
23-4625	15', 1 hot *
23-4925	15', with 48" lead, 1 hot *

- Good recoil memory, chemical and abrasion resistance
- Flexible from -87°F to 150°F (-66°C to 66°C)
- Heavy duty, reinforced zinc die-cast housing
- Mates with single pole metal socket 15-320
- As a recommended practice, use a tracker bar spring kit or pogo stick to support cable assemblies with longer leads



Straight - Single Pole

1/4 ga. Fine Stranded Copper

Part No.	Description
23-2051	12', 1 hot
23-2071	15', 1 hot
23-2091	20', 1 hot

- Good chemical and abrasion resistance
- Heavy duty, reinforced zinc die-cast plugs
- Flexible from -82°F to 195°F (-63°C to 91°C)
- Mates with 15-320 socket
- Available in 4-IN-1 applications



* Working length - As measured by pull force per SAE J2222. Length of actual cable is significantly longer.

Straight - Dual Pole



2/4 ga. Fine Stranded Copper

Part No.	Description
23-2251	12', 1 ground, 1 hot
23-2271	15', 1 ground, 1 hot

- Good chemical and abrasion resistance
- Internal ground to improve ground connection
- Heavy duty, reinforced zinc die-cast plugs
- Flexible from -82°F to 195°F (-63°C to 91°C)
- Mates with 15-326 socket
- Available in 4-IN-1 applications

AUXILIARY VERTICAL DUAL POLE CABLES

- For auxiliary applications such as tarps, utilizing a trailer battery pack
- Pins are offset allowing for initial ground contact, preventing the potential for arcing
- Made with either 4 ga. or 6 ga. fine stranded copper for flexibility
- Internal ground to improve ground connections
- Heavy duty, reinforced zinc die-cast plugs
- Mates with vertical dual pole metal socket 15-328
- Meets J3082 standards

Vertical Dual Pole - 4 Ga.



2/4 ga. Fine Stranded Copper

Part No.	Description
23-2329	12', 1 ground, 1 hot, 4 ga. *
23-2629	15', 1 ground, 1 hot, 4 ga. *
23-2929	15', with 48" lead, 1 ground, 1 hot, 4 ga. *

- Excellent recoil memory, chemical and abrasion resistance
- Flexible from -82°F to 195°F (-63°C to 91°C)
- 100 amp continuous capacity; 200 amp intermittent capacity

Vertical Dual Pole PERMACOIL™ - 4 Ga.



2/4 ga. Fine Stranded Copper

Part No.	Description
23-4329	12', 1 ground, 1 hot, 4 ga. *
23-4629	15', 1 ground, 1 hot, 4 ga. *
23-4929	15', with 48" lead, 1 ground, 1 hot, 4 ga. *

- Good recoil memory, chemical and abrasion resistance
- Flexible from -87°F to 150°F (-66°C to 66°C)
- 100 amp continuous capacity; 200 amp intermittent capacity
- Same heavy duty jacket as our PERMACOIL™ and ABS PERMACOIL™

Vertical Dual Pole - 6 Ga.



2/6 ga. Fine Stranded Copper

Part No.	Description
21-2329	12', 1 ground, 1 hot, 6 ga. *
21-2629	15', 1 ground, 1 hot, 6 ga. *
21-2929	15', with 48" lead, 1 ground, 1 hot, 6 ga. *

- Excellent recoil memory, chemical and abrasion resistance
- Flexible from -82°F to 195°F (-63°C to 91°C)
- 70 amp continuous capacity; 130 amp intermittent capacity

* Working length - As measured by pull force per SAE J2222. Length of actual cable is significantly longer.

Vertical Dual Pole PERMACOIL™ - 6 Ga.**2/6 ga. Fine Stranded Copper**

Part No.	Description	
21-4329	12', 1 ground, 1 hot, 6 ga.	*
21-4629	15', 1 ground, 1 hot, 6 ga.	*
21-4929	15', with 48" lead, 1 ground, 1 hot, 6 ga.	*

- Good recoil memory, chemical and abrasion resistance
- Flexible from -87°F to 150°F (-66°C to 66°C)
- 70 amp continuous capacity; 130 amp intermittent capacity
- Same heavy duty jacket as our PERMACOIL™ and ABS PERMACOIL™

**Straight - Vertical Dual Pole - 4 Ga.****2/4 ga. Fine Stranded Copper**

Part No.	Description	
23-2232	10', 1 ground, 1 hot, 4 ga.	
23-2252	12', 1 ground, 1 hot, 4 ga.	
23-2272	15', 1 ground, 1 hot, 4 ga.	
23-2292	20', 1 ground, 1 hot, 4 ga.	

- Good chemical and abrasion resistance
- 100 amp continuous capacity; 200 amp intermittent capacity

**Straight - Vertical Dual Pole - 6 Ga.****2/6 ga. Fine Stranded Copper**

Part No.	Description	
21-2232	10', 1 ground, 1 hot, 6 ga.	
21-2252	12', 1 ground, 1 hot, 6 ga.	
21-2272	15', 1 ground, 1 hot, 6 ga.	
21-2292	20', 1 ground, 1 hot, 6 ga.	

- Good chemical and abrasion resistance
- 70 amp continuous capacity; 130 amp intermittent capacity



* Working length - As measured by pull force per SAE J2222. Length of actual cable is significantly longer.

KIT

Liftgate Dual Pole Installation/Conversion Kit



- Improve conductivity with a dual pole charge set-up
- Dual pole sockets offer a secure ground that a 5th wheel does not
- Kit is available with or without 150 amp circuit breakers

Part No.	Description
15-327	Liftgate dual pole conversion kit
15-327-150	Liftgate dual pole conversion kit with 150 amp circuit breakers

Kit Contents		
Part No.	Description	Qty.
3-503-010	4 ga. red battery cable	10 feet
3-504-010	4 ga. black battery cable	10 feet
5-712*	7/16" (center hole) grommet for battery box	1
5-45074*	7/16" rubber cushion clamps, with 3/8" mounting hole	20
6-404*	1-2/0 ga. heavy dual wall heat shrink tubing, black, 1.5"	2
6-405*	1-2/0 ga. heavy dual wall heat shrink tubing, red, 1.5"	2
8-4121*	4 ga. x 1/4" tin-plated copper lug	4
8-4122*	4 ga. x 5/16" tin-plated copper lug	4
8-4123*	4 ga. x 3/8" tin-plated copper lug	2
15-326*	Dual pole socket	1
15-740*	Boot - 7-pin socket	1
15-784*	Flat mounting bracket	1
15-798*	Mounting gasket - 2 hole mount socket	1
17-154*	QWIK-SNAP™ 4-hose holder	1
23-2626*	15' dual pole coiled cable	1
53-515*	150 amp high capacity circuit breakers (included with 15-327-150 only)	1
80-250*	Dielectric grease tubes, 6 grams	2

*Part number quantities listed in the kit break standard pack. If part number is ordered separately outside of the kit, additional quantities will be received.

AIR ASSEMBLIES

POLAR AIR®

Large, 5" coil diameter
to improve flexibility

Pre-applied
thread sealant
provides air
tight seal*

Jacketing provides
superior recoil memory,
chemical and abrasion
resistance

Remains flexible to
-85°F for extreme cold
weather protection

Extra long spring for
strain relief and to
prevent kinking*

Three-piece
swivel tactor
side fitting

POWER GRIP™ long
brass handle for easy
coupling/uncoupling


**EXTREME
COLD WEATHER
AIR COIL**

Featuring Phillips Ultra-Protective
POLAR AIR® Jacketing



* Standard on all Phillips air coils

COILED AIR

POLAR AIR®

**3 YEAR
WARRANTY**

See website
for details



- REMAINS FLEXIBLE AT -85°F (-65°C)!
- FOR EXTREME WEATHER CONDITIONS
- Excellent recoil memory, chemical and abrasion resistance
- Jacketing prevents fractures and provides durable rubber feel
- Large coil diameter prevents kinking and provides greater recoil
- POWER GRIP™ gladhand extension provides superior coupling/uncoupling leverage
- Single piece trailer side and three-piece swivel tractor side fittings
- 1/2" NPTF
- Meets SAE J844 and J1131 specifications
- Meets DOT 49 CFR FMVSS 571.106 specifications
- Meets DOT 49 CFR FMVSS 393.45 specifications
- As a recommended practice, use a tracker bar spring kit or pogo stick to support cable assemblies with longer leads

8' Working Length

Part No.	Description
11-5110	Pair (red and blue)

12' Working Length

Part No.	Description
11-5120	Pair (red and blue)

12' Working Length with 40" Lead

Part No.	Description
11-5300	Pair (red and blue) with 40" lead

15' Working Length

Part No.	Description
11-5150	Pair (red and blue)
11-5151	Red (emergency) coil only
11-5152	Blue (service) coil only

15' Working Length with 40" Lead

Part No.	Description
11-5400	Pair (red and blue) with 40" lead
11-5401	Red (emergency) coil only, with 40" lead
11-5402	Blue (service) coil only, with 40" lead

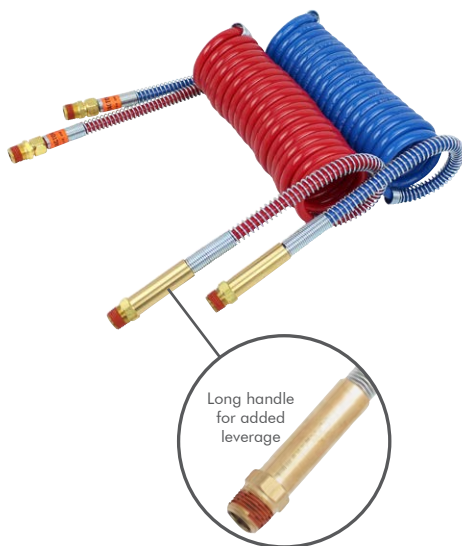
20' Working Length

Part No.	Description
11-5200	Pair (red and blue)

20' Working Length with 40" Lead

Part No.	Description
11-5240	Pair (red and blue)

POWER GRIP™



12' Working Length

Part No.	Description
11-3120	Pair (red and blue)
11-3100	Red (emergency) coil only
11-3110	Blue (service) coil only

15' Working Length

Part No.	Description
11-3150	Pair (red and blue)
11-3170	Red (emergency) coil only
11-3180	Blue (service) coil only

15' Working Length with 40" Lead

Part No.	Description
11-3400	Pair (red and blue), with 40" lead
11-3380	Red (emergency) coil only, with 40" lead
11-3390	Blue (service) coil only, with 40" lead

- POWER GRIP™ gladhand extension provides superior coupling/uncoupling leverage
- Includes thread seal for secure connection to gladhand and chassis
- Single piece trailer side and three-piece swivel tractor side fittings
- Remains flexible at -40°F (-40°C)
- 1/2" NPTF

- Meets SAE J844 and J1131 specifications
- Meets DOT 49 CFR FMVSS 571.106 specifications
- Meets DOT 49 CFR FMVSS 393.45 specifications
- As a recommended practice, use a tracker bar spring kit or pogo stick to support cable assemblies with longer leads

Heavy Duty Coiled Air



12' Working Length	
Part No.	Description
11-312	Pair (red and blue)
11-310	Red (emergency) coil only
11-311	Blue (service) coil only

12' Working Length with 48" Lead	
Part No.	Description
11-333	Pair (red and blue), with 48" lead
11-331	Red (emergency) coil only, with 48" lead
11-332	Blue (service) coil only, with 48" lead

15' Working Length	
Part No.	Description
11-315	Pair (red and blue)
11-317	Red (emergency) coil only
11-318	Blue (service) coil only

15' Working Length with 40" Lead	
Part No.	Description
11-340	Pair (red and blue), with 40" lead
11-338	Red (emergency) coil only, with 40" lead
11-339	Blue (service) coil only, with 40" lead

20' Working Length	
Part No.	Description
11-320	Pair (red and blue)
11-321	Red (emergency) coil only
11-322	Blue (service) coil only

- Includes thread seal for secure connection to gladhand
- Single piece trailer side and three-piece swivel tractor side fittings
- Plated steel spring for added tubing protection
- Remains flexible at -40°F (-40°C)
- 1/2" NPTF
- Meets SAE J844 and J1131 specifications
- Meets DOT 49 CFR FMVSS 571.106 specifications
- Meets DOT 49 CFR FMVSS 393.45 specifications
- As a recommended practice, use a tracker bar spring kit or pogo stick to support cable assemblies with longer leads

Coiled Air with Gladhands



12' Working Length	
Part No.	Description
11-3129	Pair, with 2 gladhands
11-51209	POLAR AIR® pair, with POWER GRIP™ and 2 gladhands

15' Working Length	
Part No.	Description
11-3159	Pair, with 2 gladhands
11-31509	POWER GRIP™ pair, with 2 gladhands
11-51509	POLAR AIR® pair, with POWER GRIP™ and 2 gladhands

15' Working Length with 40" Lead	
Part No.	Description
11-3409	Pair, with 40" lead and 2 gladhands
11-34009	POWER GRIP™ pair, with 40" lead and 2 gladhands
11-54009	POLAR AIR® pair, with 40" lead, with POWER GRIP™ and 2 gladhands

- Pre-installed gladhands torqued to factory specifications
- Air coils are built to "working length" to ensure coil does not kink and gladhands are secure under excessive pull force
- Gladhands are built with a heavy gauge powder-coated connector plate for corrosion protection
- Single piece trailer side and three-piece swivel tractor side fittings
- Air coils remain flexible at -40°F (-40°C) with the exception of POLAR AIR® which remains flexible at -85°F (-65°C)
- 1/2" NPTF
- Meets DOT 49 CFR FMVSS 571.106 specifications
- Meets DOT 49 CFR FMVSS 393.45 specifications
- As a recommended practice, use a tracker bar spring kit or pogo stick to support cable assemblies with longer leads

Coiled Air



12' Working Length

Part No.	Description
11-712	Pair (red and blue)

15' Working Length

Part No.	Description
11-715	Pair (red and blue)
11-717	Red (emergency) coil only
11-718	Blue (service) coil only

15' Working Length with 40" Lead

Part No.	Description
11-738	Red (emergency), with 40" lead
11-739	Blue (service) coil only, with 40" lead
11-740	Pair (red and blue), with 40" lead

- Includes thread seal for secure connection to gladhand
- Comes standard with temporary protective fitting caps to shield thread seal and block unwanted debris before installation
- Steel springs for added tubing protection
- Single piece trailer side and four piece tractor side fittings
- 1/2" NPTF
- Working temperature: -40°F to 200°F (-40°C to 93°C)
- Meets SAE J844 and J1131 specifications
- Meets DOT 49 CFR FMVSS 571.106 specifications
- Meets DOT 49 CFR FMVSS 393.45 specifications
- As a recommended practice, use a tracker bar spring kit or pogo stick to support cable assemblies with longer leads

Sliding Fifth Wheel Coiled Air



11-302



11-300KT

Part No.	Description
11-300	54" extension with 1/4" male pipe thread
11-300KT	11-300 with brass female adapter, 90° elbow fitting and 8" tie
11-302	60" extension with 1/4" quick connect swivel and coil protector
11-303	36" extension with 1/4" male pipe thread

- Brass ends for durability
- Industry standard nylon tubing
- Extra long spring for strain relief

STRAIGHT RUBBER AIR

Rubber Air Lines

8' Working Length	
Part No.	Description
11-81068	Red rubber, with red (emergency) grip
11-81076	Blue rubber, with blue (service) grip
11-81080	Pair, red and blue rubber, with red and blue (emergency and service) grips

12' Working Length	
Part No.	Description
11-8110	Black rubber, with red (emergency) grip
11-8111	Black rubber, with blue (service) grip
11-8112	Pair, black rubber, with red and blue (emergency and service) grips
11-8113	Black rubber, with black (universal) grip
11-81108	Red rubber, with red (emergency) grip
11-81116	Blue rubber, with blue (service) grip
11-81120	Pair, red and blue rubber, with red and blue (emergency and service) grips

15' Working Length	
Part No.	Description
11-8115	Pair, black rubber, with red and blue (emergency and service) grips
11-8117	Black rubber, with red (emergency) grip
11-8118	Black rubber, with blue (service) grip
11-8119	Black rubber, with black (universal) grip
11-81150	Pair, red and blue rubber, with red and blue (emergency and service) grips
11-81178	Red rubber, with red (emergency) grip
11-81186	Blue rubber, with blue (service) grip

20' Working Length	
Part No.	Description
11-8120	Pair, black rubber, with red and blue (emergency and service) grips
11-8121	Black rubber, with red (emergency) grip
11-8122	Black rubber, with blue (service) grip
11-8123	Black rubber, with black (universal) grip
11-81200	Pair, red and blue rubber, with red and blue (emergency and service) grips
11-81218	Red rubber, with red (emergency) grip
11-81226	Blue rubber, with blue (service) grip



- Tractor end includes swivel fitting for easy installation and spring guard for strain relief
- Large grips for easy coupling/uncoupling and hose support
- Provides excellent abrasion resistance and resists cracking, kinking and weathering
- 1/2" NPTF
- Meets DOT CFR 49 FMVSS 571.106 specifications
- Meet SAE J1402 hose specifications
- Red and blue rubber air lines available in 2-IN-1, 3-IN-1 and 4-IN-1 applications

2-IN-1 Air Combination Assemblies



Part No.	Description
11-82120	12' spiral wrapped red & blue rubber air lines, with red & blue (emergency and service) grips
11-82150	15' spiral wrapped red & blue rubber air lines, with red & blue (emergency and service) grips
11-82200	20' spiral wrapped red & blue rubber air lines, with red & blue (emergency and service) grips

- Spiral wrapped for a clean and organized look
- Includes hanging clamp and stainless steel clip for easy installation (P/N: 5-5018)
- Outstanding kink and abrasion resistance
- Tractor end includes swivel fitting for easy installation and spring guard for strain relief
- Large grips for easy coupling/uncoupling and hose support
- 1/2" NPTF
- Meets DOT CFR 49 FMVSS 571.106 specifications
- Meet SAE J1402 hose specifications

Bulk Heavy Duty Rubber Air Hose



Part No.	Description
11-8180-250	3/8" I.D. 250' spool, black
11-8190-250	1/2" I.D. 250' spool, black
11-8186-250	3/8" I.D. 250' spool, blue
11-8188-250	3/8" I.D. 250' spool, red

- Heavy duty EPDM rubber air brake hose
 - 4-spiral polyester reinforced rubber
 - Resists cracking, kinking and weathering
 - Provides excellent abrasion-resistance
- -40°F to 200°F (-40°C to 93°C)
- Burst pressure: 871 PSI
- Operating pressure: 145 PSI
- Meets SAE J1402 specifications

ELECTRICAL & AIR COMBO ASSEMBLIES

3-IN-1 & 4-IN-1

Outstanding kink and abrasion resistance

Red and blue rubber air lines to denote service and emergency

Tractor end swivel brass fittings

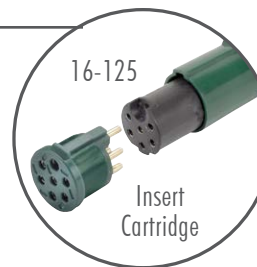
Spiral wrapped for an organized, clean look

QWIK-CLAMP - Quick and easy install (P/N 17-181)*

Large grips for easy coupling/uncoupling leverage and acts as strain relief



The QCMS2™ connects to the QCS2® creating a tight STA-DRY® seal that locks out moisture and contaminants



QCP™ (Quick-Change Plug) cartridge is field replaceable in under two minutes

* Standard on all premium 3-IN-1's with QCMS2™/QCP™ or QCP™ electrical assemblies

ELECTRICAL & AIR COMBO ASSEMBLIES

ALL ASSEMBLIES

- Spiral wrapped for a clean organized look
- Outstanding kink and abrasion resistance
- Cable clamp 5-5018 is included with all assemblies, excluding premium 3-IN-1s
- The QWIK-CLAMP™ 17-181 is included with all premium 3-IN-1s that have QCMS2™ / QCP™ or QCP™ electrical assemblies

ELECTRICAL

ABS LECTRAFLEX™ & NON-ABS DURAFLEX™*

- Spring-wrapped compression contact pins*
- Chemical and abrasion resistant

Liftgate Charging Cable

- For liftgate applications
- 100 amp continuous capacity, 200 amp intermittent capacity

ISOFLEX™ Cable

- For auxiliary applications
- Twisted pair of brown and green wires reduces signal noise

AIR

Rubber Air Lines

- Large red and blue handle grips for easy coupling/uncoupling and hose support
- Tractor end includes swivel fitting for easy installation
- Provides excellent abrasion resistance and resists cracking, kinking and weathering
- Air lines are color coded red and blue to denote emergency and service*
- -40°F to 200°F (-40°C to 93°C)

*With exception to all M7 assemblies

3-IN-1 Electrical & Air Assemblies



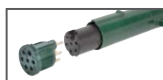
PLUGS & CLAMPS



QCMS2™ connects to QCS2®

QCMS2™

- Connects to the QCS2® creating a tight STA-DRY® seal that locks out moisture and contaminants, stopping the devastating effects of corrosion



QCP™ (Quick-Change Plug)

QCP™ (Quick-Change Plug)

- Reduces maintenance time
- Cartridge is field replaceable in under two minutes

QWIK-CLAMP™ (17-181)

Included with the above premium plug options



WEATHER-TITE™ PERMAPLUG™

WEATHER-TITE™ PERMAPLUG™

- The WEATHER-TITE™ seal resists water and contaminants from entering the electrical system creating a complete seal!



M7

M7 (Molded 7-Way)

- Unbreakable and corrosion resistant
- Completely molded to the cable to prevent water intrusion at the back of the plug



Zinc Die-Cast Plug

Zinc Die-Cast

- Heavy duty reinforced zinc die-cast housing for durability

Cable Clamp (5-5018)

Included with the above three plug options



Straight DURAFLEX™ 1/10 & 6/12 ga. NON-ABS Applications

Zinc Die-Cast Plug

Part No.	Description
22-2151	12', NON-ABS with zinc die-cast plugs, rubber air lines
22-2171	15', NON-ABS with zinc die-cast plugs, rubber air lines

Straight LECTRAFLEX™ 1/8, 2/10 & 4/12 ga. ABS Applications

QCMS2™ and QCP™ (Quick-Change Plug)

Part No.	Description
30-2155	12', ABS with QCMS2™ and QCP™, rubber air lines
30-2175	15', ABS with QCMS2™ and QCP™, rubber air lines
30-2195	20', ABS with QCMS2™ and QCP™, rubber air lines

QCP™ (Quick-Change Plug)

Part No.	Description
30-2154	12', ABS with QCP™, rubber air lines
30-2174	15', ABS with QCP™, rubber air lines
30-2194	20', ABS with QCP™, rubber air lines

WEATHER-TITE™ PERMAPLUG™

Part No.	Description
30-2150	12', ABS with WEATHER-TITE™ PERMAPLUGS™, rubber air lines
30-2170	15', ABS with WEATHER-TITE™ PERMAPLUGS™, rubber air lines
30-2190	20', ABS with WEATHER-TITE™ PERMAPLUGS™, rubber air lines

Zinc Die-Cast Plug

Part No.	Description
30-2151	12', ABS with zinc die-cast plugs, rubber air lines
30-2171	15', ABS with zinc die-cast plugs, rubber air lines
30-2191	20', ABS with zinc die-cast plugs, rubber air lines

1/8, 2/10 & 4/12 ga. ABS Application

M7 (Molded 7-Way)

Part No.	Description
30-1157	12', ABS with M7 plugs, black rubber air lines
30-1177	15', ABS with M7 plugs, black rubber air lines

4-IN-1 Electrical & Air Assemblies - With Single Pole

Straight LECTRAFLEX™ 1/8, 2/10 & 4/12 ga. ABS Applications

QCMS2™ and QCP™ (Quick-Change Plug)

Part No.	Description
30-2259	12', ABS with (1) QCMS2™ and (1) QCP™, single pole, rubber air lines
30-2279	15', ABS with (1) QCMS2™ and (1) QCP™, single pole, rubber air lines
30-2299	20', ABS with (1) QCMS2™ and (1) QCP™, single pole, rubber air lines

QCP™ (Quick-Change Plugs)

Part No.	Description
30-2254	12', ABS with QCP™, single pole, rubber air lines
30-2274	15', ABS with QCP™, single pole, rubber air lines
30-2294	20', ABS with QCP™, single pole, rubber air lines

WEATHER-TITE™ PERMAPLUGS™

Part No.	Description
30-2250	12', ABS with WEATHER-TITE™ PERMAPLUGS™, single pole, rubber air lines
30-2270	15', ABS with WEATHER-TITE™ PERMAPLUGS™, single pole, rubber air lines
30-2290	20', ABS with WEATHER-TITE™ PERMAPLUGS™, single pole, rubber air lines

Zinc Die-Cast Plugs

Part No.	Description
30-2251	12', ABS with zinc die-cast plugs, single pole, rubber air lines
30-2271	15', ABS with zinc die-cast plugs, single pole, rubber air lines
30-2291	20', ABS with zinc die-cast plugs, single pole, rubber air lines



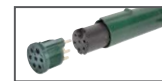
PLUGS



QCMS2™ connects to QCS2®

QCMS2™

- Connects to the QCS2® creating a tight STA-DRY® seal that locks out moisture and contaminants, stopping the devastating effects of corrosion



QCP™
(Quick-Change Plug)

QCP™ (Quick-Change Plug)

- Reduces maintenance time
- Cartridge is field replaceable in under two minutes



WEATHER-TITE™
PERMAPLUG™

WEATHER-TITE™ PERMAPLUG™

- The WEATHER-TITE™ seal resists water and contaminants from entering the electrical system creating a complete seal!



Zinc Die-Cast Plug

Zinc Die-Cast

- Heavy duty reinforced zinc die-cast housing for durability

4-IN-1 Electrical & Air Assemblies - With Dual Pole



PLUGS



QCMS2™ connects to QCS2®

QCMS2™

- Connects to the QCS2® creating a tight STA-DRY® seal that locks out moisture and contaminants, stopping the devastating effects of corrosion



QCP™
(Quick-Change Plug)

QCP™ (Quick-Change Plug)

- Reduces maintenance time
- Cartridge is field replaceable in under two minutes



WEATHER-TITE™
PERMAPLUG™

WEATHER-TITE™ PERMAPLUG™

- The WEATHER-TITE™ seal resists water and contaminants from entering the electrical system creating a complete seal!



Zinc Die-Cast Plug

Zinc Die-Cast

- Heavy duty reinforced zinc die-cast housing for durability

Straight LECTRAFLEX™ 1/8, 2/10 & 4/12 ga. ABS Applications

QCMS2™ and QCP™ (Quick-Change Plug)

Part No.	Description
30-2255	12', ABS with (1) QCMS2™ and (1) QCP™, dual pole, rubber air lines
30-2275	15', ABS with (1) QCMS2™ and (1) QCP™, dual pole, rubber air lines
30-2295	20', ABS with (1) QCMS2™ and (1) QCP™, dual pole, rubber air lines

QCP™ (Quick-Change Plugs)

Part No.	Description
30-2257	12', ABS with QCP™, dual pole, rubber air lines
30-2277	15', ABS with QCP™, dual pole, rubber air lines
30-2297	20', ABS with QCP™, dual pole, rubber air lines

WEATHER-TITE™ PERMAPLUGS™

Part No.	Description
30-2256	12', ABS with WEATHER-TITE™ PERMAPLUGS™, dual pole, rubber air lines
30-2276	15', ABS with WEATHER-TITE™ PERMAPLUGS™, dual pole, rubber air lines
30-2296	20', ABS with WEATHER-TITE™ PERMAPLUGS™, dual pole, rubber air lines

Zinc Die-Cast Plugs

Part No.	Description
30-2252	12', ABS with zinc die-cast plugs, dual pole, rubber air lines
30-2272	15', ABS with zinc die-cast plugs, dual pole, rubber air lines
30-2292	20', ABS with zinc die-cast plugs, dual pole, rubber air lines

4-IN-1 Electrical & Air Assemblies - With ISOFLEX™



1/8, 2/10 & 4/12 ga. ISO Applications

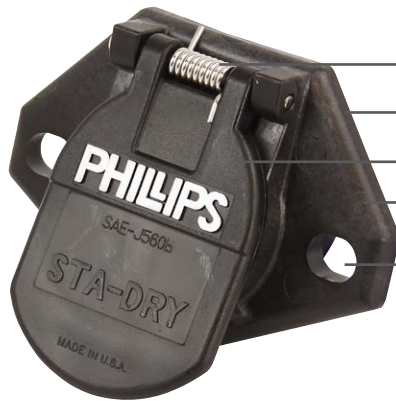
Straight ABS LECTRAFLEX™ 1/8, 2/10 & 4/12 ga. with Zinc Die-Cast Plugs

Part No.	Description
30-2253	12', ABS with zinc die-cast plugs, ISOFLEX™, rubber air lines
30-2273	15', ABS with zinc die-cast plugs, ISOFLEX™, rubber air lines
30-2293	20', ABS with zinc die-cast plugs, ISOFLEX™, rubber air lines

- ISOFLEX™ cable offers a twisted pair of brown and green wires to reduce radio noise for auxiliary connections
- Heavy duty reinforced zinc die-cast plugs

ELECTRICAL CONNECTORS

STA-DRY® Socket (16-720)



- Stainless steel hinge pin and spring*
- Durable glass-filled nylon housing
- Full-opening lid for easy plug insertion*
- UNBREAKABLE lid, non-corrosive housing resists impact in cold weather
- Elongated holes adapt to most mounting positions*

Locking tab inside lid provides solid plug-to-socket connection*

Inner cavity is sealed to prevent corrosion from passing through to wire harness

Slanted 5° for moisture drain*

Extended front barrel for additional cable support*



WEATHER-TITE™ PERMAPLUG™ (16-730)



Large finger grips for easy coupling/uncoupling**

UNBREAKABLE, non-corrosive housing

Floating brass pins for secure installation in misaligned sockets**

WEATHER-TITE™ SEAL

360° cable compression for a solid cable grip

Extended housing allows for easy repair**



* Standard on all Phillips sockets

** Standard on all Phillips plugs

PLUGS

- Large finger grips for ease of coupling/uncoupling
- Meets SAE J560 specifications (ISO meets ISO 3731)
- Floating brass pins for secure installation in misaligned sockets
- Extended housing for easy repair
- Wire insertion on 7-way (non-blade), 6-way and 4-way plugs

WEATHER-TITE™ PERMAPLUG™



Part No.	Description
16-730	WEATHER-TITE™ PERMAPLUG™

- WEATHER-TITE™ seal blocks all contaminants from entering the electrical system, creating a complete seal!
- UNBREAKABLE, non-corrosive housing
- 360° ratcheting compression cable clamp
- Thread sealed screws prevent wire pull-out
- Spring-wrapped, machine crimped brass compression pins
- 15-715 replacement insert
- 5-750 replacement rubber seal
- Patent No. 8,192,216

Zinc Die-Cast Connectors



Part No.	Description
15-710	Heavy duty, reinforced zinc die-cast plug
15-730	Heavy duty, reinforced zinc die-cast plug with cable guard
15-730B	Heavy duty, reinforced zinc die-cast plug with cable guard, individually bagged

- Thread sealed screws prevent wire pull-out
- Spring-wrapped, machine crimped brass compression pins
- Heavy duty, reinforced zinc die-cast housing
- Strong cable guard to support heavy cables
- 15-731 replacement cable guard
- 15-711 replacement insert

ISO Connectors



Part No.	Description
15-830	ISO plug with cable guard

- Replacement plug for ISO 3731 coiled and straight cables
- Heavy duty reinforced zinc die-cast housing for durability
- Male ground pin to prevent misconnection
- Strong cable guard to support heavy cables
- 15-731 replacement cable guard
- 16-811 replacement insert

Cable Guard



Part No.	Description
15-731	Cable guard / replacement spring

- Heavy duty cable guard for 15-710, 15-730, 15-335, 15-336 and 15-830 plugs
- .090 galvanized steel wire
- Prevents kinking and offers strain relief for electrical cables

QCP™ (Quick-Change Plug) Cartridge



Part No.	Description
16-125	Replaceable cartridge

- Plug-in replacement cartridge for QCP™ assemblies ONLY
- High quality machined brass pins
- Floating brass pins for secure installation in misaligned sockets
- PUT ONE IN THE TOOL BOX OR GLOVE BOX AS A SPARE!

6-Way

Part No.	Description
15-611	For Phillips 6 pin plugs

7-Way

Part No.	Description
15-711	For standard Phillips pin SAE J560 plugs, black
15-715	For Phillips WEATHER-TITE™ PERMAPLUG™
16-811	For Phillips pin ISO 3731 plug, yellow

- 15-611 fits Phillips 15-610 and 15-630 plugs
- 15-711 fits Phillips 15-710 and 15-730 plugs
- 15-715 fits Phillips 16-730 plugs
- 16-811 fits Phillips 15-830 plugs
- Floating brass pins for secure installation in misaligned sockets
- Thread sealed screws prevent wire pull-out

Replacement Inserts**WEATHER-TITE™ PERMAPLUG™ Replacement Seal**

Part No.	Description
5-750	WEATHER-TITE™ PERMAPLUG™ replacement rubber seal, 2/bag

- Thick rubberized sealing component for WEATHER-TITE™ PERMAPLUG™
- Three individual wiper rings
- Blocks all contaminants from entering the electrical system, creating a corrosion free connection
- Easily replaceable

**LIGHT DUTY PLUGS****STA-DRY® 6 & 4-Way THERMOSEALED™ Plugs****6-Way 6/16 ga.**

Part No.	Description
19-6102	THERMOSEALED™ plug with 2' (24") blunt cut straight cable NEW
19-6104	THERMOSEALED™ plug with 4' (48") blunt cut straight cable NEW

4-Way 4/16 ga.

Part No.	Description
19-4102	THERMOSEALED™ plug with 2' (24") blunt cut straight cable NEW
19-4104	THERMOSEALED™ plug with 4' (48") blunt cut straight cable NEW

- Plugs are molded for moisture and corrosion resistance
- Flexible from -87°F to 150°F (-66°C to 66°C)
- Heavy duty jacketing for long life

**6-Way**

Part No.	Description
15-610	6-way
15-630	6-way plug with cable guard

4-Way

Part No.	Description
15-410	4-way
15-430	4-way plug with cable guard

- Heavy duty, reinforced zinc die-cast housing
- Brass terminations for superior conductivity
- Rugged finger grips for easy coupling/uncoupling
- 15-611 replacement insert fits Phillips 15-610 and 15-630 plugs

6 & 4-Way Connectors

7-WAY BLADE PLUG

7-Way Blade Type Connector



Part No.	Description
16-713	7-way blade connector

- Light duty truck and RV connections
- Non-corrosive housing
- Large finger grips for easy coupling/uncoupling
- Brass contacts for superior conductivity
- Use with 16-714 socket

7-WAY J560 TYPE CONNECTORS FOR LIGHT DUTY APPLICATIONS

STA-DRY® WEATHER-TITE™ PERMAPLUG™



5-750

Trailer Side 2/10, 1/12 & 4/14 ga.

Part No.	Description
26-2100-048	7-way WEATHER-TITE™ PERMAPLUG™ with 4' (48") blunt cut cable NEW
26-2100-060	7-way WEATHER-TITE™ PERMAPLUG™ with 5' (60") blunt cut cable NEW
26-2100-072	7-way WEATHER-TITE™ PERMAPLUG™ with 6' (72") blunt cut cable NEW

- Connects a light duty trailer to a vehicle with a J560 style socket*
- The WEATHER-TITE™ seal blocks all contaminants from entering the electrical system, creating a complete seal
- Large finger grips for coupling/uncoupling
- Floating brass pins for secure installation in misaligned sockets
- Unbreakable non-corrosive housing
- Flexible from -85°F to 175°F (-65°C to 115°C)
- 5-750 replacement rubber seal

*Important Note: A J560 type socket or plug, normally used for commercial vehicles, can be wired for light duty applications as an alternative connector. However, commercial tractor/trailer J560 connections and light duty applications using the same J560 plug/socket type connectors should never be coupled together. Commercial and light duty applications each have different wire color code configurations for their electrical system. If coupled together, lights will not function properly.

4-WAY FLAT CONNECTORS

STA-DRY® 4-Way Molded Flat Connectors



15-421-024



15-426-024

Vehicle Side	
Part No.	Description
15-421-024	Molded 4-way flat connector, three female pins and one male pin, with 2' (24") cable NEW
15-421-048	Molded 4-way flat connector, three female pins and one male pin, with 4' (48") cable NEW

Trailer Side	
Part No.	Description
15-426-024	Molded 4-way flat connector, three male pins and one female pin, with 2' (24") cable NEW
15-426-048	Molded 4-way flat connector, three male pins and one female pin, with 4' (48") cable NEW

- Common connection for light duty towing - pickups, SUVs, small trailers
- Universal pin size and configuration
- Vehicle side has completely overmolded plug
- 14 ga. wires enclosed in jacketing for corrosion protection
- Flexible from -40°F to 150°F (-40°C to 66°C)
- Meets SAE J1239

LIFTGATE CHARGING PLUGS

- For liftgate applications utilizing a trailer battery pack
- 100 amp continuous capacity; 200 amp intermittent capacity

- Heavy duty, reinforced zinc die-cast housing

Dual Pole

Ground Return System	
Part No.	Description
15-336	Dual pole plug

- Provides separate power and ground connections
- Accepts 4 ga. wire only
- Separate ground pin for ground return systems
- For best fit use solder slug 7-261 (4 ga.)
- Mates with 15-326 socket



Single Pole

Chassis Ground System	
Part No.	Description
15-335	Single pole plug

- Universal single pole plug
- Industry standard plug
- Lug for 4 ga. cable included
- Installs with standard lug crimp tool (crimp code gray)
- Mates with 15-320 socket



Single Conductor Breakaway

Chassis Ground System	
Part No.	Description
15-800	Black socket
15-801	Red socket
15-805	Black plug
15-806	Red plug

- Ideal for dump truck applications
- Breakaway plug/socket
- 10 ga. to 6 ga.
- 50 amp



VERTICAL DUAL POLE AUXILIARY PLUGS

Vertical Dual Pole Auxiliary Plugs

Part No.	Description
15-338	4 ga. vertical dual pole plug
15-339	6 ga. vertical dual pole plug

- For auxiliary applications utilizing a trailer battery pack
- Pins are offset allowing for initial ground contact, preventing the potential for arcing
- Provides separate power and ground connections
- For best fit use solder slug 7-261 (4 ga.) or 7-260 (6 ga.)
- Heavy duty, reinforced zinc die-cast housing
- 4 ga. plug has a 100 amp continuous capacity; 200 amp intermittent capacity
- 6 ga. plug has a 70 amp continuous capacity; 130 amp intermittent capacity



STA-DRY® SOCKETS



- Inner cavity sealed to prevent contaminants from passing to wire harness
- Non-corrosive housing
- Resists magnesium chloride, salt, oil, grease and fuels
- Extended front barrel for additional cable support
- Slanted 5° for moisture drain
- Unbreakable housing and lid
- Stainless steel hinge pin and spring
- Elongated holes for mounting adaptability
- Meets SAE J560 specifications
- All part numbers below have split brass pins
- For solid pin sockets, please contact customer service

Wire Insertion



Part No.	Description
16-720	2-hole, wire insertion, split pin
16-720B	16-720, individually bagged

- Thread sealed screws prevent wire pull-out
- For added protection against moisture, use socket boot P/N 15-740

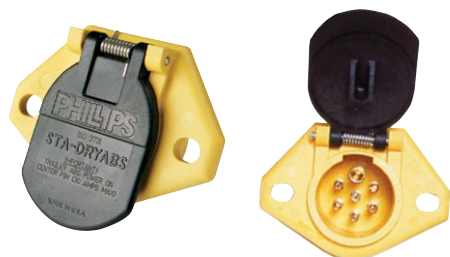
Ring & Bullet Termination



Part No.	Description
16-722	2-hole, ring termination, split pin
16-724	2-hole, bullet termination, split pin
16-725	3-hole, bullet termination, split pin
16-7222	2-hole, ring termination, solid pin
16-7242	2-hole, bullet termination, solid pin

- 16-722 and 16-7222 accept #8 ring terminals
- 16-724, 16-725 and 16-7242 accept .180 bullets
- 16-724 and 16-7242 recommended for use with Phillips QCS2®

ISO



Part No.	Description
16-822	2-hole, ring termination, ISO socket

- For ISO/auxiliary applications
- Meets ISO 3731 specifications
- Female ground pin
- Use #8 ring terminals

QCS2® Harness

QCS2® (Quick-Change Socket)	
Part No.	Description
16-7403	Straight back, 48" blunt-cut cable, includes socket

Replacement Socket	
Part No.	Description
16-724	2-hole, bullet termination, recommended for use with Phillips QCS2®

- Significantly reduces socket replacement time, lowering maintenance costs
- Molded housing includes integrated flange to seal out moisture and corrosion
- For use with standard ABS wiring system
- Standard on most OEM trucks
- 6 o'clock position available
- Contact customer service for blunt cut lengths

**QCS® Harness**

QCS® (Quick-Change Socket)	
Part No.	Description
16-7401	Straight back, 48" blunt-cut cable, includes socket
16-7421	6 o'clock, 48" blunt-cut cable, includes socket

Replacement Socket	
Part No.	Description
16-726	2-hole, bullet with locking clip for Phillips QCS®

- Significantly reduces socket replacement time
- For use with standard ABS wiring systems
- For use with most OEM configurations
- 3 o'clock and 12 o'clock positions available. Contact customer service for more details

**ISO QCS® Harness**

ISO QCS® (Quick-Change Socket)	
Part No.	Description
16-7402	Straight back, 48" blunt-cut cable, includes ISO socket
16-7422	6 o'clock, 48" blunt-cut cable, includes ISO socket

Replacement Socket	
Part No.	Description
16-826	2-hole, bullet termination with locking clip, female ground pin, recommended for Phillips ISO QCS® only

- For ISO/auxiliary applications
- Meets ISO 3731 specifications
- Uses female ground pin
- 3 o'clock, 9 o'clock and 12 o'clock positions available. Contact customer service for more details.



QCS2® Extension Cable



Part No.	Description
16-74036	36" QCS2® straight LECTRAFLEX™ extension cable with QCMS2™

- Provides a 36 in. extension for your QCS2® as needed for applications such as bulkhead racks
- For use with standard ABS wiring system
- The LECTRAFLEX™ cable jacketing is chemical and abrasion resistant and flexible from -40°F to 150°F (-40°C to 66°C)

QCMS2™

- A tight STA-DRY® seal locks out road contaminants, completely stopping the devastating effects of corrosion
- Plugs directly into the QCS® or QCS2® boot, eliminating the need for a socket
- Bolts to QCS® or QCS2® boot creating a built in theft deterrent and is rarely removed further reducing the possibility of contaminants entering the electrical system

QCS2® Boot

- Works with QCS2® socket or QCMS2™ electrical cable
- Molded housing includes integrated flange to seal out moisture and corrosion

ZINC DIE-CAST SOCKETS

7-Way Sockets



Part No.	Description
15-720	2-hole, wire insertion, split pin
15-720B	15-720, individually bagged
15-721	2-hole, wire insertion, solid pin
15-722	3-hole, wire insertion, split pin
15-724	Replacement insert for 15-720, 15-722, split pin
15-796	Replacement lid kit

- Heavy duty, reinforced zinc die-cast housing
- Thread sealed screws prevent wire pull-out
- Elongated holes for mounting adaptability
- Stainless steel hinge pin and spring
- Full-opening lid
- Reduce exposure to contaminants and moisture, use socket boot P/N 15-740

LIGHT DUTY 6 & 4-WAY ROUND SOCKETS

STA-DRY® 6 & 4-Way Molded Sockets



16-400



16-600

4-Way 4/14 ga.

Part No.	Description
16-400	4-way molded socket with 2' (24") blunt cut straight cable, split pin NEW

6-Way 6/14 ga.

Part No.	Description
16-600	6-way molded socket with 2' (24") blunt cut straight cable, split pin NEW

- Sockets are molded for moisture and corrosion resistance
- Elongated holes for mounting adaptability
- Stainless steel hinge pin and spring for long life
- Full opening lid
- Flexible from -87°F to 150°F (-66°C to 66°C)
- Heavy duty cable jacketing for long life

6 & 4-Way Zinc Die-Cast Sockets

6-Way

Part No.	Description
15-600	6-way, wire insertion, split pin

4-Way

Part No.	Description
15-400	4-way, wire insertion, split pin

- Heavy duty, zinc die-cast housing for durability
- Elongated holes for mounting adaptability
- Stainless steel hinge pin and spring for long life
- Full-opening lid
- Reduce exposure to contaminants and moisture, use socket boot P/N 15-640
- Closed back design



7-WAY BLADE SOCKET

Part No.	Description
16-714	7-way blade socket

- Light duty truck and RV OEM connections
- Non-corrosive housing for long life
- Brass terminations for superior conductivity
- Mates with 16-713 plug



7-Way Blade Socket

7-Way Blade Socket with Blunt Cut Cables

2/10, 1/12 & 4/14 ga.

Part No.	Description	
26-2305-024	7-way blade socket, with socket boot, with 2' (24") blunt cut cable	NEW
26-2305-048	7-way blade socket, with socket boot, with 4' (48") blunt cut cable	NEW

- Light duty truck and RV connections
- Non-corrosive housing for long life
- Brass terminations for superior conductivity
- Heavy duty cable jacketing for long life
- Flexible from -85°F to 150°F (-65°C to 66°C)



LIFTGATE CHARGING SOCKETS

- For liftgate applications utilizing a trailer battery pack
- Stainless steel hinge pin and spring for long life
- 100 amp continuous capacity; 200 amp intermittent capacity (with exception to 15-320 & 15-326)
- Zinc die-cast housing

CHARGE-BOX™



Part No.	Description
16-77712	STA-DRY® nosebox with single and dual pole socket

SOCKET

- Zinc die-cast housing for durability
- Solid brass pins
- Elongated holes for mounting adaptability
- Stainless steel hinge pin and spring for long life

STA-DRY® NOSEBOX

- Non-corrosive, nylon housing
- Impact resistant
- Steel reinforced mounting collars

Dual Pole Nosebox



Part No.	Description
16-77526	STA-DRY® nosebox with dual pole socket
15-77526	Zinc die-cast nosebox with dual pole socket

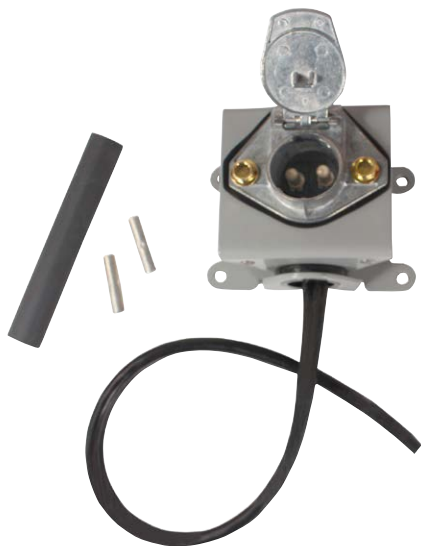
STA-DRY® HOUSING

- STA-DRY® nosebox housing is non-corrosive and impact resistant
- Steel reinforced mounting collars
- Zinc die-cast socket for durability
- Solid brass pins
- Circuit breaker not included
- Assembly includes gasket and grommet

ZINC DIE-CAST HOUSING

- Zinc die-cast nosebox housing and socket for durability
- Solid brass pins
- Circuit breaker not included
- Assembly includes gasket and grommet

S2™ Dual Pole Swivel Socket



Part No.	Description
16-9326	Dual pole swivel socket with 24" blunt cut cable
16-9328	Dual pole swivel socket with 24' (288") blunt cut cable

- Socket swivels 80 degrees side to side (40 degrees each way), following the tractor
- Tested to over 1 million cycles
- Automatic disconnect feature prevents damage to liftgate charging cable and socket
- Steel brackets and swivel housing are coated with epoxy undercoat and polyester topcoat for ultimate resistance to harsh chemicals
- Zinc die-cast socket for durability
- Includes butt splices or copper lugs and heat shrink tubing for ease of installation

16-9326 Includes:

- 8-4920: (2) butt splice
6-212: (1) 6 in. black heat shrink tubing

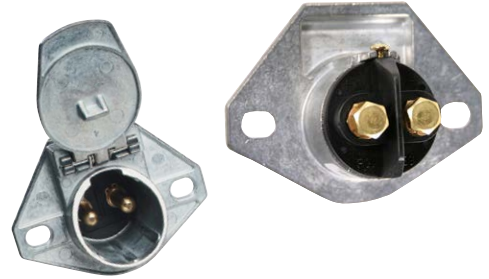
16-9328 Includes:

- 8-2121: (1) 4 ga. x 1/4 in. copper lug
8-2122: (1) 4 ga. x 5/16 in. copper lug
8-2123: (1) 4 ga. x 3/8 in. copper lug
6-404: (1) 1-1/2 in. black heat shrink tubing
6-405: (1) 1-1/2 in. red heat shrink tubing

Dual Pole Socket

Part No.	Description
15-326	Dual pole socket

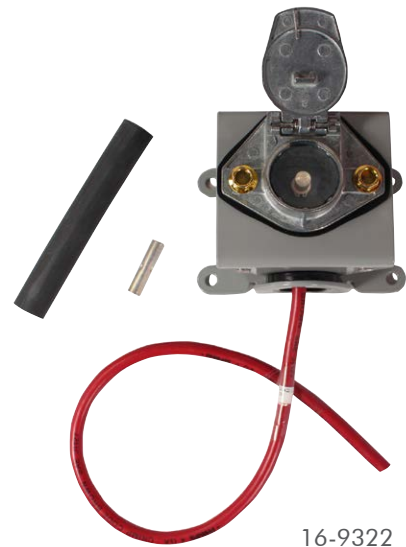
- Zinc die-cast housing for durability
- Solid brass pins
- Elongated holes for mounting adaptability
- Stainless steel hinge pin and spring for long life
- 1/4 in. stud size for lugs
- 150 amp continuous capacity; 200 amp intermittent capacity
- Mates with 15-336 dual pole plug



S1™ Single Pole Swivel Socket

Part No.	Description
16-9322	Single pole swivel socket with 24" blunt cut cable
16-9324	Single pole swivel socket with 24' (288") blunt cut cable

- Socket swivels 80 degrees side to side (40 degrees each way), following the tractor
- Tested to over 1 million cycles
- Automatic disconnect feature prevents damage to liftgate charging cable and socket
- Steel brackets and swivel housing are coated with epoxy undercoat and polyester topcoat for ultimate resistance to harsh chemicals
- Zinc die-cast socket for durability
- Includes butt splices or copper lugs and heat shrink tubing for ease of installation



16-9322

16-9322 Includes:

8-4920: (1) butt splice
6-212: (1) 6 in. black
heat shrink tubing

16-9324 Includes:

8-2121: (1) 4 ga. x 1/4 in. copper lug
8-2122: (1) 4 ga. x 5/16 in. copper lug
6-405: (1) 1-1/2 in. red heat shrink
tubing

Single Pole Socket

Part No.	Description
15-320	Single pole socket

- Zinc die-cast housing for durability
- Solid brass pins
- Elongated holes for mounting adaptability
- Stainless steel hinge pin and spring for long life
- 150 amp continuous capacity; 200 amp intermittent capacity
- Mates with 15-335 single pole plug
- For use with 4 ga., 5/16 in. copper lug



Dual Pole QCS2® Quick-Change Socket



Dual Pole QCS2®

Part No.	Description	
16-2223	6 o'clock angled position, 48" blunt-cut cable, 2 ga., includes dual pole QCS2® socket	NEW
16-2423	6 o'clock angled position, 48" blunt-cut cable, 4 ga., includes dual pole QCS2® socket	NEW

Replacement Socket

Part No.	Description	
16-324	2-hole mount, offset solid brass pins, bullet termination, recommended for use with Phillips dual pole QCS2®	NEW

Dual Pole QCS2® Socket

- Quick and easy plug-in bulletted termination, no re-wiring
- Offset pins to prevent arcing
- Stainless steel hinge pin and spring for long life
- Elongated mounting holes for easy mounting
- Non-corrosive housing resists moisture, magnesium chloride, salt, oil, grease, and fuels
- Extended front barrel for additional cable support and slanted 5° for moisture drain
- Non-corrosive unbreakable lid for long life and durability

Dual Pole QCS2® Boot

- Flexible boot flange bends easily for quick installation through small openings. Flange also grips socket for superior protection
- Sealed inner cavity prevents contaminants from passing to liftgate harness
- Completely molded boot connection creates a waterproof seal
- Cable jacketing has excellent abrasion resistance and resists magnesium and calcium chloride and other chemicals

AUXILIARY VERTICAL DUAL POLE SOCKET

Auxiliary Vertical Dual Pole Socket

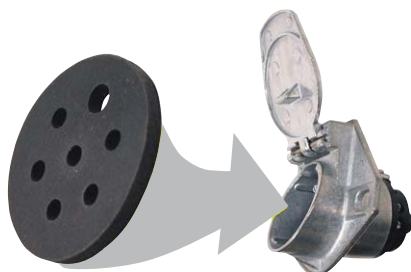


Part No.	Description
15-328	Vertical dual pole socket

- For auxiliary applications utilizing a trailer battery pack
- Pins are offset allowing for initial ground contact, preventing the potential for arcing
- Zinc die-cast housing for durability
- Solid brass pins
- Elongated holes for mounting adaptability
- Stainless steel hinge pin and spring for long life
- Includes (2) 4 ga. and (2) 6 ga. copper lugs
- 1/4 in. stud size for lugs
- 150 amp continuous capacity; 200 amp intermittent capacity
- Mates with 15-338 or 15-339 vertical dual pole plug

SOCKET ACCESSORIES

Foam Socket Seal



Part No.	Description
15-795	Corrosion prevention gaskets, 2/bag
15-7955	Corrosion prevention gaskets, 50/bag
80-795	Corrosion prevention gaskets, 200 count, display bucket

- Insert foam seal into base of socket to help stop corrosion
- Easy and inexpensive way to slow the devastating effects of corrosion

Lid Replacement Kits

Part No.	Description
15-796	Zinc die-cast - for socket and socketbreaker housing
16-797	Black - for ISO 3731 housings
16-798	Gray - for socketbreaker housings
16-799	Black - for socket housings

- Includes lid, stainless steel hinge pin and spring
- 16-797, 16-798 and 16-799 are for use with STA-DRY® sockets



Socket Boot

Part No.	Description
15-640	Fits 15-400 and 15-600
15-740	Fits 15-320, 15-720, 15-721, 15-722, 16-720, 16-721, 16-722, 16-822



Replacement Gasket

Part No.	Description
15-798	2-hole mount socket mounting gasket

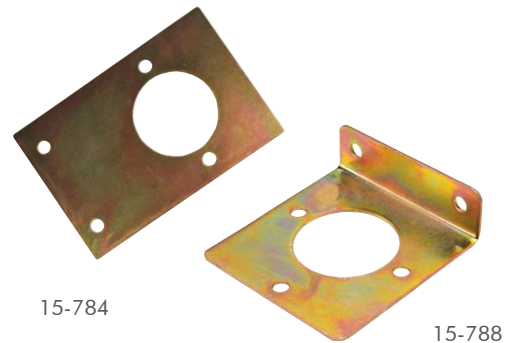
- Replaceable closed cell sponge gaskets for sockets



15-798

Mounting Bracket

Part No.	Description
15-784	Flat, fits all 7-way sockets, 15-720, 15-721, 15-722, 15-326 and 15-320
15-788	90°, fits all 7-way sockets 15-720, 15-721, 15-722, 15-326 and 15-320
63-2724	Fits RV 7-way blade type 16-714



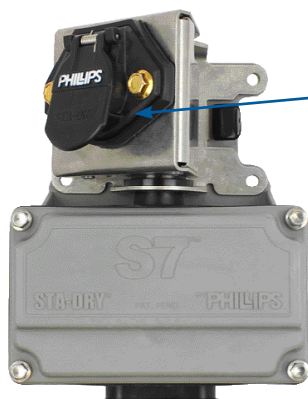
15-784

15-788

STA-DRY® TRAILER WIRE MANAGEMENT



STA-DRY® S7™



QCS2®
16-724

The industry's **ONLY** swivel socket designed to completely eliminate pull-away damage!

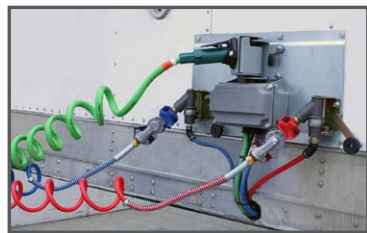


**Top 20 Products
of 2013!**

Part No.	Description
16-9500	Swivel socket without junction box
16-9510	Nosebox without circuit breakers
16-9520	Nosebox with 20 amp circuit breakers
16-9530	Nosebox with 30 amp circuit breakers
16-9515	Replacement lid for STA-DRY® S7™
16-9526PL	Replacement lid for STA-DRY® S7™ with PERMALOGIC™

- Socket swivels 80° side to side (40° each way), following the tractor
- Automatic disconnect feature eliminates damage to all components
- Features our award-winning QCS2® (Quick-Change Socket), for fast and easy socket replacement
- Over 50% more interior room keeps trailer wires organized and pinch-free
- Quick-change 20 amp (P/N 53-120) and 30 amp (P/N 53-130) circuit breakers available
- Durable weather-resistant housing
- Interior wiring sealed against corrosion, chemicals and extreme weather
- U.S. patent pending
- NOW AVAILABLE WITH PERMALOGIC™
- STA-DRY® S7™ QCS2® replacement kits available.
See part numbers 16-7890, 16-7891 and 16-795 for more details.

STA-DRY® S7™ System



Part No.	Description
16-95140	Nosebox without circuit breakers, anodized swinger gladhands, galvanized mounting plate
16-95240	Nosebox with 20 amp circuit breakers, anodized swinger gladhands, galvanized mounting plate
16-95340	Nosebox with 30 amp circuit breakers, anodized swinger gladhands, galvanized mounting plate

- S7™ socket swivels 80° side to side (40° each way)
- Gladhand swivels 180° without kinking air line!
- The automatic disconnect feature eliminates damage to all components
- All components offer superior corrosion protection
- Mounting plate measures 11 in. x 21 in. and comes with pre-drilled trailer mounting holes (Part Number 15-7895)
- Trailer mounting area needed to accommodate entire S7™ System: Approximately 12 1/4 in. x 24 in.
- STA-DRY® S7™ QCS2® replacement kit with ring terminals available.
See part numbers 16-7890 and 16-7891 for more details
- NOW AVAILABLE WITH PERMALOGIC™
- STA-DRY® S7™ QCS2® replacement kits available.
See part numbers 16-7890 and 16-7891 for more details.

STA-DRY® S7™ System Mounting Plate

Part No.	Description
15-7895	Hot dipped galvanized mounting plate

- Hot dipped for extra corrosion protection
- Pre-drilled mounting holes for STA-DRY® S7™ and gladhands
- Pre-drilled trailer mounting holes
- Measure 11 in. x 21 in.

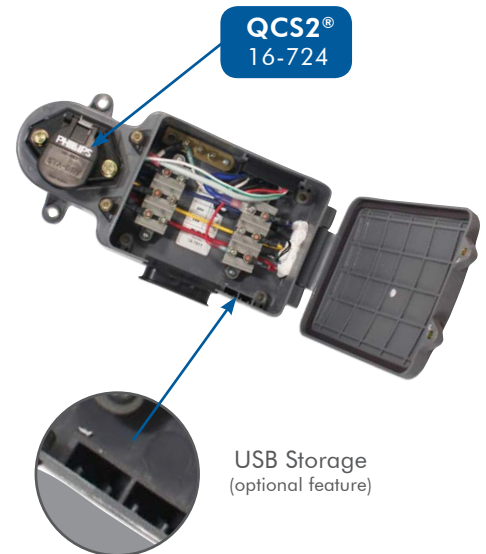
**i-BOX™**

Part No.	Description
16-7800	Without circuit breakers
16-7801	With 15 amp circuit breakers
16-7802	With 20 amp circuit breakers
16-7803	With 30 amp circuit breakers
16-7810	Without circuit breakers, with PERMALOGIC™
16-7811	With 15 amp circuit breakers and PERMALOGIC™
16-7812	With 20 amp circuit breakers and PERMALOGIC™
16-7812TC	With 20 amp circuit breakers and PERMALOGIC™ TC
16-7813	With 30 amp circuit breakers and PERMALOGIC™
16-7820	Without circuit breakers, with 1 USB memory slot
16-7821	With 15 amp circuit breakers and 1 USB memory slot
16-7822	With 20 amp circuit breakers and 1 USB memory slot
16-7823	With 30 amp circuit breakers and 1 USB memory slot
16-7830	Without circuit breakers, with PERMALOGIC™ and 1 USB memory slot
16-7831	With 15 amp circuit breakers, PERMALOGIC™ and 1 USB memory slot
16-7832	With 20 amp circuit breakers, PERMALOGIC™ and 1 USB memory slot
16-7833	With 30 amp circuit breakers, PERMALOGIC™ and 1 USB memory slot
16-780	i-BOX™ replacement lid repair kit - lid, hinge pin, (2) bolts, and gasket seal

- Features our award-winning QCS2® (Quick-Change Socket), for fast and easy socket replacement
- Over 2/3 more working room than traditional noseboxes
- Quick-change 15 amp (P/N 53-115), 20 amp (P/N 53-120) and 30 amp (P/N 53-130) circuit breakers available
- Large ground for more consistent power to the trailer
- Durable, weather-resistant housing
- Hinged lid with weather-proof gasket for easy access and convenience
- U.S. Patent No. D589,456
- Replacement lid available
- i-BOX™ QCS2® replacement kit with ring terminals available. See part number 16-7840 for more details.

Optional Features:

- Our award-winning PERMALOGIC™ Trailer Dome Lamp Controller
- USB memory stick to store important trailer schematics, bills of material
- maintenance documents, etc.
- QCS2® (Quick-Change Socket) available with solid or split pins

**PERMALOGIC™ and PERMALOGIC™ TC**
(optional feature)

Dome lamps are on

Liftgate battery is charging
(16-7812TC only)Normal conditions/
Trailer dome lamps are off

Overloaded circuit

Constant - low voltage
Flashing - low voltage
shut-off

QBOX™



QCS2®
16-724

Part No.	Description
16-8510	Without circuit breakers
16-8511	With 15 amp circuit breakers
16-8512	With 20 amp circuit breakers
16-8513	With 30 amp circuit breakers
16-850	QBOX™ replacement lid repair kit - lid, (4) bolts, and gasket seal

- Features our award-winning QCS2® (Quick-Change Socket), for fast and easy socket replacement
- Over 50% more interior room keeps trailer wires organized and pinch-free
- Quick-change 15 amp (P/N 53-115), 20 amp (P/N 53-120) and 30 amp (P/N 53-130) circuit breakers available
- Durable, weather-resistant housing
- Interior wiring sealed against corrosion, chemicals and extreme weather
- Replacement lid available
- QBOX™ QCS2® replacement kit with ring terminals available. See part number 16-7842 for more details.

VOLT-BOX™



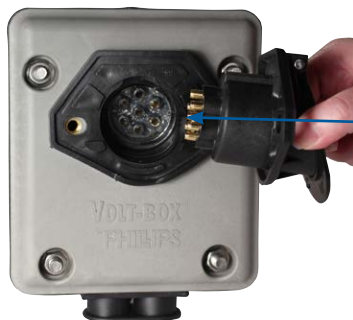
Part No.	Description
16-8000	VOLT-BOX™ 7-way nosebox, without circuit breakers, split pin
16-80002	VOLT-BOX™ 7-way nosebox, without circuit breakers, solid pin

STA-DRY® housing is resistant to impact, chemicals and harsh environments

Keeps wires organized



- Compact design fits tight space constraints
- STA-DRY® housing is resistant to impact, chemicals and harsh environments
- Features the industry standard QCS2® made with high impact composite material with interchangeable mounting holes
- Available with split or solid pin
- Can be used for retrofit and features the standard 7-way trailer mounting bolt pattern
- Offers more interior room than the competition for easier wire maintenance
- Measurements: 6.5 in. high x 5.8 in. wide x 3.02 in. deep and QCS2® J560 socket protrudes 1.5 in. from housing
- Stainless steel mounting carriage bolts for ultimate corrosion resistance
- Available with PERMALOGIC™



STA-DRY® QCS2® for fast and easy socket replacement!

REPLACEMENT KITS

STA-DRY® QCS2® Replacement Kit With Ring Terminals

STA-DRY® S7™	
Part No.	Description
16-7890	S7™ QCS2® (Quick-Change Socket) replacement kit, with ring terminals, for junction box with circuit breakers
16-7891	S7™ QCS2® (Quick-Change Socket) replacement kit, with ring terminals, for junction box without circuit breakers

i-BOX™	
Part No.	Description
16-7840	i-BOX™ QCS2® (Quick Change Socket) replacement kit, with ring terminals for junction box with or without circuit breakers, 3" white wire

QBOX™	
Part No.	Description
16-7842	QBOX™ QCS2® (Quick Change Socket) replacement kit, with ring terminals for junction box with or without circuit breakers, 9" white wire

- Significantly reduces socket replacement time, lowering maintenance costs
- Molded housing includes integrated flange to seal out moisture and corrosion
- For use with standard ABS wiring systems
- Includes QCS2® socket (P/N: 16-724) with split pins
- Standard #10 ring terminals for easy mounting to studs
- 16-7890 compatible with STA-DRY® S7™ PERMALOGIC™ products
- 16-7840 compatible with i-BOX™ PERMALOGIC™ products



16-7890
and
16-7891



16-7840
and
16-7842

STA-DRY® S7™ QCS2® Replacement Kit With SLIM-7™

Part No.	Description
16-795	S7™ QCS2® (Quick-Change Socket) replacement kit, with SLIM-7™, for swivel socket without junction box

- Significantly reduces socket replacement time, lowering maintenance costs
- Molded housing includes integrated flange to seal out moisture and corrosion
- For use with standard ABS wiring systems
- Includes QCS2® socket (P/N: 16-724) with split pins
- Molded SLIM-7™ female harness connector



STA-DRY® SOCKETBREAKERS



- Sealed to prevent contaminants from passing to wire harness
- Non-corrosive housing
- Stainless steel hinge pin and spring for long life
- Quick-change circuit breakers can be replaced in 30 seconds
- Raised interior ribs for moisture exit
- Includes neoprene closed cell sponge mounting gaskets
- Full-opening lid

7-Way Socketbreakers



Quick-change circuit breakers

- Allows up to 5 ground circuits

Without Nosebox

Part No.	Description
16-760	Without circuit breakers, split pins
16-761	With 15 amp circuit breakers, split pins
16-762	With 20 amp circuit breakers, split pins
16-763	With 30 amp circuit breakers, split pins

With STA-DRY® Nosebox*

Part No.	Description
16-77029	Without circuit breakers, solid pins, with STA-DRY® nosebox
16-7709	Without circuit breakers, split pins, with STA-DRY® nosebox
16-77229	With 20 amp circuit breakers, solid pins, with STA-DRY® nosebox
16-7729	With 20 amp circuit breakers, split pins, with STA-DRY® nosebox
16-7739	With 30 amp circuit breakers, split pins, with STA-DRY® nosebox

*Includes 3 1/2 in. deep nosebox (16-775)

7-Way Socketbreakers with 28 Pin Rear



- Allows up to 4 connections on 1 circuit
- Accepts .180 bullet terminals

Part No.	Description
16-7602-28	28-pin, solid pins, without circuit breakers
16-7612-28	28-pin, solid pins, 15 amp circuit breakers
16-7622-28	28-pin, solid pins, 20 amp circuit breakers
16-7632-28	28-pin, solid pins, 30 amp circuit breakers
16-7709-28	28-pin, split pins, single nosebox*, without circuit breakers
16-7719-28	28-pin, split pins, single nosebox*, 15 amp circuit breakers
16-7729-28	28-pin, split pins, single nosebox*, 20 amp circuit breakers
16-7739-28	28-pin, split pins, single nosebox*, 30 amp circuit breakers
16-77029-28	28-pin, solid pins, single nosebox*, without circuit breakers
16-77229-28	28-pin, solid pins, single nosebox*, 20 amp circuit breakers
16-77329-28	28-pin, solid pins, single nosebox*, 30 amp circuit breakers

*Includes 3 1/2 in. deep nosebox (16-775)

ISO Socketbreakers



Quick-change circuit breakers

Part No.	Description
16-860	Without circuit breakers, solid pins with female ground pin
16-861	With 15 amp circuit breakers, solid pins with female ground pin
16-862	With 20 amp circuit breakers, solid pins with female ground pin
16-863	With 30 amp circuit breakers, solid pins with female ground pin

- When 7 circuits are not enough
- Reverse ground pin ensures the correct cable is connected
- For ISO/auxiliary applications
- Meets ISO 3731 specifications
- Allows up to 5 ground circuits
- For use with yellow-jacket cables

STA-DRY® ZINC DIE-CAST SOCKETBREAKERS

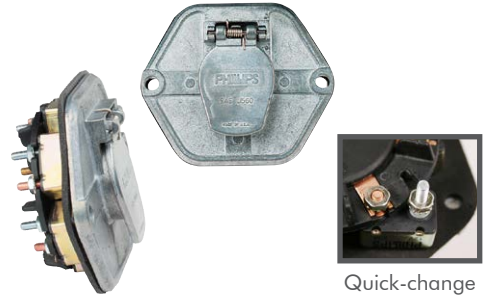
- Meets SAE J560 specifications
- Stainless steel hinge pin and spring
- Full-opening lid
- STA-DRY® feature seals to prevent moisture and contaminants from entering the harness system
- Raised interior ribs for moisture exit
- Includes neoprene closed cell sponge mounting gaskets
- Quick-change circuit breakers can be replaced in 30 seconds



7-Way Low Profile

Part No.	Description
15-750	Without circuit breakers, split pin
15-751	With 15 amp circuit breakers, split pin
15-752	With 20 amp circuit breakers, split pin
15-753	With 30 amp circuit breakers, split pin

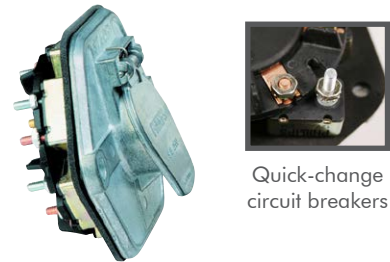
- For container chassis, piggy-back and intermodal trailers where flush applications are required
- Circuit breaker designed to be serviced in 30 seconds
- Allows up to 5 ground circuits



Quick-change circuit breakers

Part No.	Description
15-760	Without circuit breakers, split pin
15-7602	Without circuit breakers, solid pin
15-761	With 15 amp circuit breakers, split pin
15-762	With 20 amp circuit breakers, split pin
15-7622	With 20 amp circuit breakers, solid pin
15-763	With 30 amp circuit breakers, split pin

- Designed to support ABS cable weight
- Circuit breaker designed to be serviced in 30 seconds
- Allows up to 5 ground circuits



Quick-change circuit breakers

7-Way Socketbreaker with Nosebox

Nosebox - 1 7/8" Deep

Part No.	Description
15-7609	Without circuit breakers, split pin
15-7619	With 15 amp circuit breakers, split pin
15-7629	With 20 amp circuit breakers, split pin
15-7639	With 30 amp circuit breakers, split pin

Nosebox - 3 1/8" Deep

Part No.	Description
15-78029	Without circuit breakers, solid pin
15-7809	Without circuit breakers, split pin
15-7819	With 15 amp circuit breakers, split pin
15-7829	With 20 amp circuit breakers, split pin



- 1 7/8 in. or 3 1/8 in. deep zinc die-cast nosebox
- Fits standard mounting holes
- Includes mounting hardware for socketbreaker to nosebox

NOSEBOXES, ACCESSORIES, & FUSES

STA-DRY® Nosebox



Part No.	Description
16-775	Single cavity nosebox kit, 3 1/2" deep with gasket
16-777	Dual cavity nosebox kit, 3 1/2" deep with backplate
16-779	Single cavity nosebox kit, 2 1/2" deep with backplate

- Non-corrosive, nylon housing
- For use with 15 series or 16 series socketbreakers
- Impact-resistant
- Steel reinforced mounting collars
- Kit includes grommet and socketbreaker mounting hardware

Zinc Die-Cast Nosebox



Part No.	Description
15-775	Zinc die-cast nosebox kit

- 55% more interior space than the 15-769
- Larger interior space allows for easier access and maintenance
- 3 1/8 in. deep
- Fits 15 series and 16 series socketbreakers
- Standard hole pattern
- Kit includes gasket, grommet and socketbreaker mounting hardware
- Does not include nosebox mounting hardware

Zinc Die-Cast Nosebox Kit



Part No.	Description
15-769	Zinc die-cast nosebox kit

- 1 7/8 in. deep
- For use with 15 series or 16 series socketbreakers
- Kit includes gasket, grommet and socketbreaker mounting hardware
- Does not include nosebox mounting hardware

Adapter Plate

Part No.	Description
15-770	Adapter, powder-coated, 10 ga. steel

- Allows standard socket to mate with a nosebox
- Can be used on single and dual noseboxes



Replacement Face Plates

Part No.	Description
15-755	Low profile face plate for 15-750, 15-751, 15-752, 15-753
15-773	Extended barrel face plate for 15-760, 15-761, 15-762, 15-763

- Zinc die-cast
- Stainless steel hinge pin and spring



Replacement Gaskets & Grommets

Part No.	Description
15-765	D-shaped grommet for junction box (15-769 and 15-961)
15-766	Socketbreaker mounting gasket
15-767	Nosebox mounting gasket

- Closed cell sponge gaskets



15-765



15-766

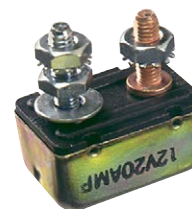


15-767

Replacement Circuit Breakers

Part No.	Description
53-115	15 amp
53-120	20 amp
53-130	30 amp

- Longer "hot" leg for correct and easy installation
- SAE snap-in type, includes nuts and washers
- Copper leg mounts to copper strip in socketbreaker
- Meets SAE J553 standard



High Capacity Circuit Breakers



Part No.	Description
53-515	150 amp
53-520	200 amp

- Water resistant
- Panel or surface mounted
- Made of thermoset plastic
- Rated to 30 VDC, 3000 amp interrupt capacity
- Complies with SAE J1625
- Includes terminal covers

In-Line ATO/ATC Fuse Holder with Case



Part No.	Description
54-350	In-line ATO/ATC fuse holder with case

- 30 amp in-line fuse holder for ATO/ATC fuses
- Includes water resistant cap
- 12 ga. wire is 5 1/2 in. long
- Includes 30 amp fuse

JUNCTION BOXES

Junction Box



15-960



15-961

Part No.	Description
15-960	Black junction box
15-961	CLEAR-VU™ grey junction box

- Larger junction box accepts ABS cable and additional wiring
- Ring termination
- Pass-through grommets accommodate up to .80 O.D. cable
- Seven #10 stud posts
- Hole pattern is 7.37 in. center to center
- Box measures approximately 6 5/8 in. long x 3 3/4 in. wide x 2 1/2 in. deep at its widest points

Quick-Connect Junction Box

Part No.	Description
15-860	10" pigtail with packard plus 4-way flat connectors
15-861	10" pigtail with packard connector
15-865	Replacement lid and pin

- Easily adaptable to most trailer wiring systems
- Perfect for rental vehicles



15-860

15-861

HEAVY DUTY LIFTGATE SOLENOIDS

Intermittent Duty

Part No.	Volt	Amps	Inrush Amps
54-130	12 VDC	80	200

- Intermittent duty, 10 seconds on / 60 seconds off
- Chassis ground
- For liftgate applications



Continuous Duty

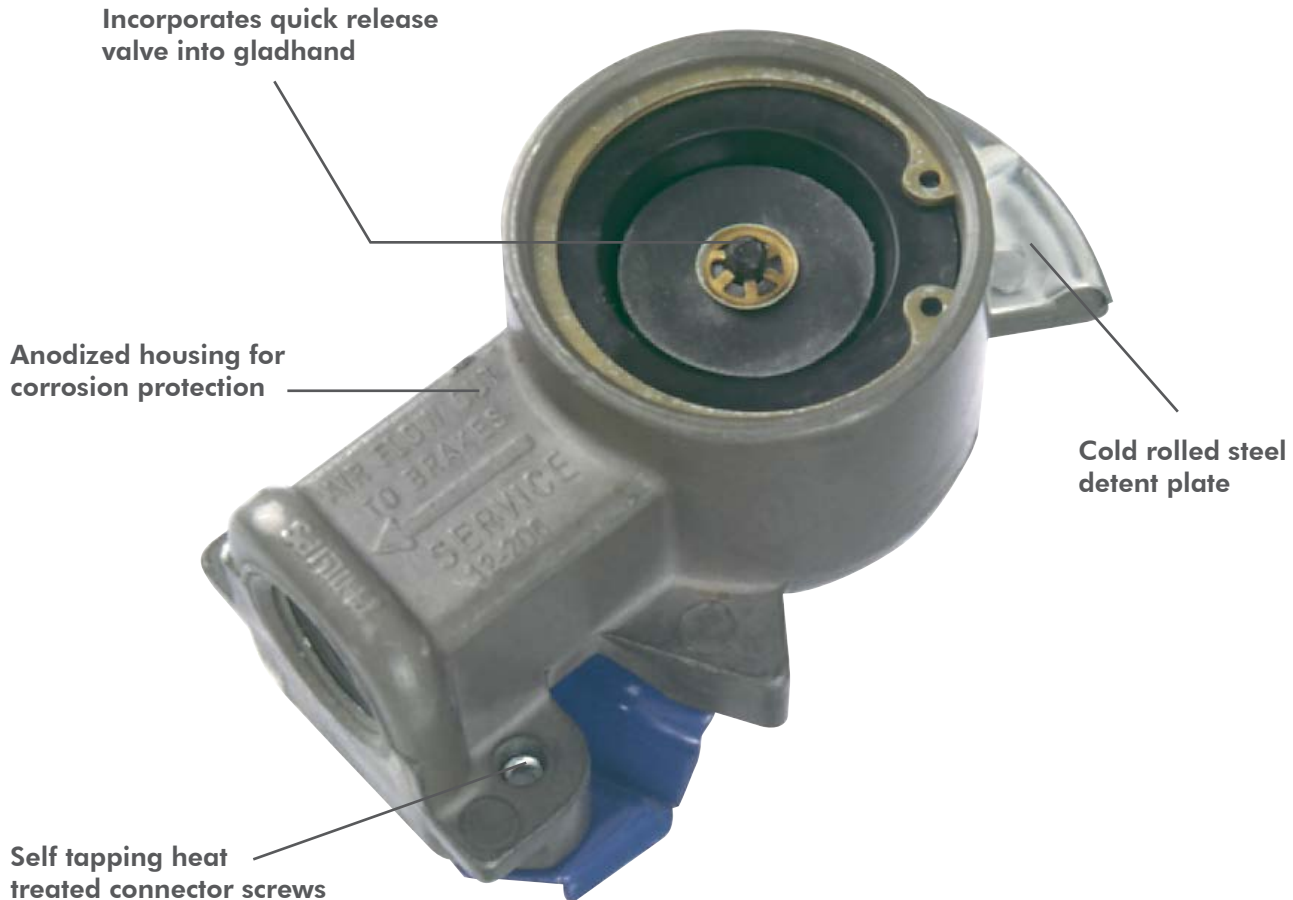
Part No.	Volt	Amps	Inrush Amps
54-140	12 VDC	80	200

- Continuous duty
- External ground
- For liftgate applications

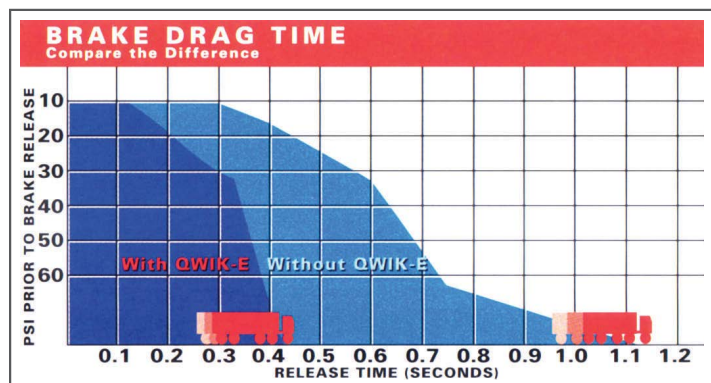


AIR CONNECTORS

QWIK-E® Gladhand



Trailer brakes are released up to 50% faster than with conventional methods!



QWIK-E® GLADHANDS

- Trailer brakes are released up to 50% faster than with conventional methods
- Quick-release valve and gladhand combined
- Reduces tire flat spots
- Anodized housing for corrosion protection
- For use with ABS and non-ABS brake systems
- By reducing brake lining and drum wear, thousands of dollars are saved over the life of the trailer
- Improves response time of brake release - drivers love it!
- Standard equipment on most OEM trailers
- Meets SAE J318 specifications

QWIK-E® Gladhands

Straight Mount	
Part No.	Description
12-206	Service, blue, 1/2" female pipe thread without filter screen
12-2061	Service, blue, 1/2" female pipe thread with filter screen
12-206B	Service, blue, 12-206, individually packaged, polybag

- For use on trailer service lines only

Trailer Mount	
Part No.	Description
12-236	Service, blue, 3/8" female pipe thread bottom port
12-2361	Service, blue, 3/8" female pipe thread bottom port with filter screen
12-23617	Service, blue, 3/8" female pipe thread rear port with filter screen
12-2367	Service, blue, 3/8" female pipe thread rear port
12-236B	Service, blue, 12-236, individually packaged, polybag

- For use on trailer service lines only



12-206



12-236

QWIK-E® Service Kit

Part No.	Description
12-226	Repair service kit

- Kit includes breather valve, polyurethane seal, snap ring and gasket



Quick Exhaust Valve

Part No.	Description
12-810	Trailer side
12-811	Tractor side

- Provides quick exhaust of trailer's service air brake pressure
- Tractor side hooks to the tractor protection valve
- Zinc die-cast



Quick Release Valve

Part No.	Description
12-800	3/8" x 3/8" x 3/8"
12-801	1/2" x 3/8" x 3/8"

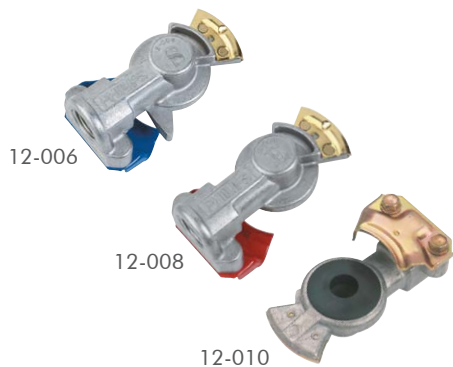
- Aluminum die-cast housing for corrosion resistance
- 150 psi maximum
- Crack pressure 0.5 PSI



STANDARD GLADHANDS

- Wrap-around connector plate provides additional strength
- Powder-coated connector plate for corrosion resistance
- Zinc-coated detent plates
- E-coated screws for corrosion protection
- Meets SAE J318 specifications
- Stainless steel detent plates and connector plates available, please contact customer service
- Service and emergency keyed to prevent cross coupling

Straight Mount



Part No.	Description
12-006	Service, blue, 1/2" female pipe thread
12-0061	Service, blue, with filter screen, 1/2" female pipe thread
12-006B	Service, blue, 1/2" female pipe thread, individually packaged
12-008	Emergency, red, 1/2" female pipe thread
12-0081	Emergency, red, with filter screen, 1/2" female pipe thread
12-008B	Emergency, red, 1/2" female pipe thread, individually packaged
12-010	Universal, 1/2" female pipe thread
12-010B	Universal, 1/2" female pipe thread, individually packaged

- For use on air coil, tractor and trailer
- Many more options available - ask your sales representative or customer service

Trailer Mount (38°)



Part No.	Description
12-136	Service, blue, bottom port, 3/8" female pipe thread
12-1361	Service, blue with filter screen, bottom port, 3/8" female pipe thread
12-13617	Service, blue, with filter screen, rear port, 3/8" female pipe thread
12-138	Emergency, red, bottom port, 3/8" female pipe thread
12-1381	Emergency, red, with filter screen, bottom port, 3/8" female pipe thread
12-13817	Emergency, red, with filter screen, rear port, 3/8" female pipe thread

- For use on trailer

Cast Iron



Part No.	Description
12-406	Service, blue polyurethane seal, 1/2" female pipe thread
12-408	Emergency, red polyurethane seal, 1/2" female pipe thread
12-410	Universal, black polyurethane seal, 1/2" female pipe thread
12-41010	Universal, black polyurethane seal with dust flaps and screen, 1/2" female pipe thread

- Cast iron for durability
- Integrated connector plate
- Spring-loaded ball lock
- Polyurethane seal
- Meets SAE J318 specifications

CORROSION-RESISTANT GLADHANDS

- Anodized for increased protection against magnesium chloride, road salts and chemicals
- Designed for highly corrosive operating conditions
- Wrap-around connector plate provides additional strength
- Powder-coated connector plate for corrosion protection
- Zinc-coated detent plates
- Meets SAE J318 specifications
- Stainless steel detent plates and connector plates available, please contact customer service
- Service and emergency keyed to prevent cross coupling

Anodized Gladhands

Straight Mount	
Part No.	Description
12-00623	Service, blue, anodized, 1/2" female pipe thread
12-00823	Emergency, red, anodized, 1/2" female pipe thread

- For use on air coil, tractor and trailer

Trailer Mount	
Part No.	Description
12-13623	Service, blue, bottom port, anodized, 3/8" female pipe thread
12-13823	Emergency, red, bottom port, anodized, 3/8" female pipe thread



12-00623



12-00823



12-13623



12-13823

SPECIALTY GLADHANDS

Part No.	Description
12-340	Universal, 1/2" female pipe thread
12-346	Service, blue, 1/2" female pipe thread
12-348	Emergency, red, 1/2" female pipe thread

- Durable cast iron connector plate
- Aluminum body to save weight
- Stainless steel ball-bearing provides a positive lock for gladhand mating
- Service and emergency keyed to prevent cross coupling
- Meets SAE J318 specifications

STA-LOCK™ Gladhands



12-340



12-346



12-348

LATCH-IT™ Gladhands



Part No.	Description
12-1119	Universal, 1/2" female pipe thread
12-1169	Service, blue, 1/2" female pipe thread
12-1189	Emergency, red, 1/2" female pipe thread

- HELPS PREVENT ACCIDENTAL GLADHAND DISCONNECTIONS
- Patented latch provides a positive lock
- Easy-grip feature ensures fast coupling/uncoupling, even with gloves
- Powder-coated for easy identification
- Stainless steel connector plate and spring for longevity
- Polyurethane seal
- Meets SAE J318 specifications
- Service and emergency keyed to prevent cross coupling

Swinger Gladhands



Part No.	Description
12-4506	45° with service gladhand, blue, 3/8" female pipe thread, bottom
12-4508	45° with emergency gladhand, red, 3/8" female pipe thread, bottom
12-450623	45° with anodized service gladhand, blue, 3/8" female pipe thread, bottom
12-450823	45° with anodized emergency gladhand, red, 3/8" female pipe thread, bottom
12-4546	45° with cast iron service gladhand, blue, 3/8" female pipe thread, bottom
12-4548	45° with cast iron emergency gladhand, red, 3/8" female pipe thread, bottom
12-4526	45° with QWIK-E® gladhand, blue, 3/8" female pipe thread, bottom

- GLADHAND SWIVELS 180° WITHOUT KINKING AIR LINE!
- When not in use, gladhand is automatically returned to seal, protecting the air lines
- Designed for intermodal and piggy-back trailers where straight or angled gladhands are exposed to damage
- Anodized for increased protection against magnesium chloride, road salt and chemicals
- Stainless steel return spring for long life

STA-LOCK™ Cast Iron Swinger Gladhands



Part No.	Description
12-4906	90° service, blue polyurethane seal
12-4908	90° emergency, red polyurethane seal
12-49064	90° service, blue polyurethane seal with built-in filter screen
12-49084	90° emergency, red polyurethane seal with built-in filter screen

- GLADHAND SWIVELS 180° WITHOUT KINKING AIR LINE!
- Stainless steel ball-bearing provides a positive lock for gladhand mating
- Cast iron for durability
- Stainless steel return spring for long life
- 3/8" female pipe thread, bottom
- Polyurethane gladhand seals with built-in filter screens help keep debris out of the air lines
- When not in use, gladhand is automatically returned to seal, protecting the air system
- Designed for intermodal and piggy-back trailers where straight or angled gladhands are exposed to damage
- Meets SAE J318 specifications

Shut-Off Gladhands

Bulkhead Mount

Part No.	Description
12-306	Service, blue, 3/8" female pipe thread
12-308	Emergency, red, 3/8" female pipe thread

- Mounts in 1 in. hole

Surface Mount

Part No.	Description
12-336	Service, blue, 3/8" female pipe thread
12-338	Emergency, red, 3/8" female pipe thread

- For double trailers
- Comes standard with 12-0167-25 dust flap poly seal and 12-038 filter screen
- Includes bulkhead fitting
- Integrated shut-off valve or arm
- Color-coded connector plate for easy identification
- Meets SAE J318 specifications



12-306



12-308



12-336



12-338

Composite Shut-Off Gladhands

Surface Mount

Part No.	Description
12-316	Service, blue, 3/8" female pipe thread
12-318	Emergency, red, 3/8" female pipe thread

Bulkhead Mount

Part No.	Description
12-326	Service, blue, 3/8" female pipe thread
12-328	Emergency, red, 3/8" female pipe thread

- For double trailers
- Composite material for increased protection against magnesium chloride, road salts and chemicals
- Integrated shut-off arm to seal air system
- Molded in color for easy identification
- Standard with 12-0167-25 dust flap poly seal and 12-038 filter screen
- Patent No. 5,348,043
- Meets SAE J318 specifications



12-316



12-318



12-326



12-328

Economy Shut-Off "Dummy" Gladhand

Part No.	Description
12-0100	Economy shut-off "dummy" gladhand, aluminum

- Inexpensive way to seal rear gladhands for double trailers
- Provides air-tight shut-off
- 18 in. cable with ring terminal



AIR LINE FILTRATION SYSTEMS

NEW

AIR-DEFENSE™ Swinger System With Quick-Change Cartridge

Trailer Air Brake In-Line Filtration System



12-8540



12-8542



12-8546



12-8548



12-854689



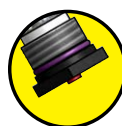
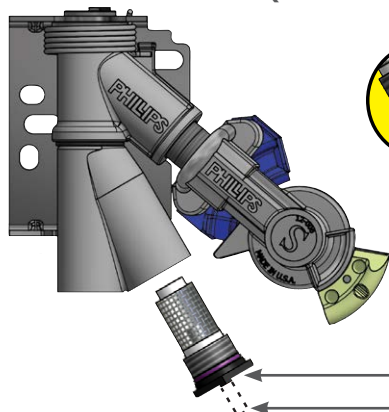
12-854889

Part No.	Description	
12-8540	AIR-DEFENSE™ Swinger System with swinger arm, without gladhand	NEW
12-8542	AIR-DEFENSE™ Swinger System with QWIK-E®	NEW
12-8546	AIR-DEFENSE™ Swinger System with straight service/blue gladhand	NEW
12-8548	AIR-DEFENSE™ Swinger System with straight emergency/red gladhand	NEW
12-854689	AIR-DEFENSE™ Swinger System with straight anodized service/blue gladhand	NEW
12-854889	AIR-DEFENSE™ Swinger System with straight anodized emergency/red gladhand	NEW

Combines a trailer air line filtration system and gladhand into one, offering the best protection for your air lines!

- Debris is trapped in the Quick-Change Cartridge (12-035) of the AIR-DEFENSE™ System, reducing debris entering the trailer air lines and brake valves
- The Quick-Change Cartridge features a bypass mode which ensures full airflow at all times, even when the filter is full
- Visual service indication: Red indicator (non-resettable) notifies mechanic or operator that it's time to replace a dirty air filter cartridge
- The cartridge is replaceable in minutes and in route; simply unscrew the old filter cartridge and replace with a new one
- Can be used on both service and emergency lines
- Swinger gladhands swivel 180°, keeping air lines open and kink-free during use
- When not in use, the gladhand is automatically returned to the seal, protecting the air lines
- Available with the following gladhand options: straight blue/service (anodized or aluminum body), straight red/emergency (anodized or aluminum body), QWIK-E®, or without gladhand for customization (for straight gladhands with 1/2" female pipe thread)
- Patent pending

Quick-Change Cartridge Replacement Filter

INDICATOR POSITION
FOR EMPTY FILTERINDICATOR POSITION
FOR FULL FILTER

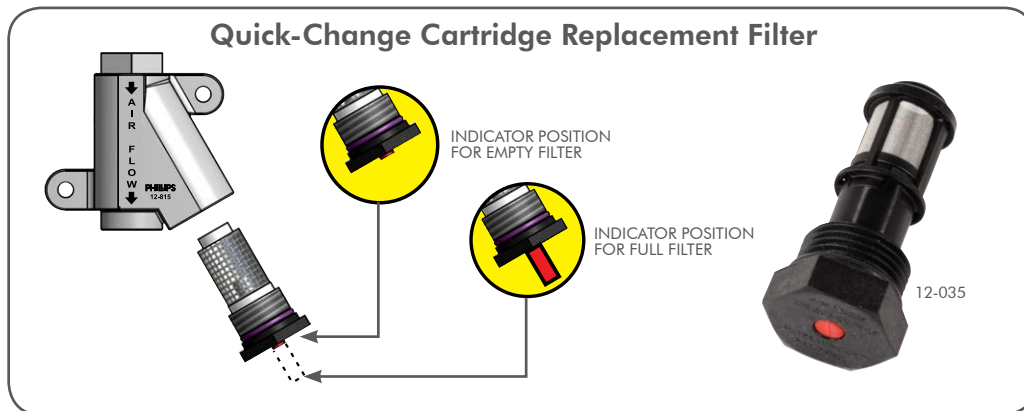
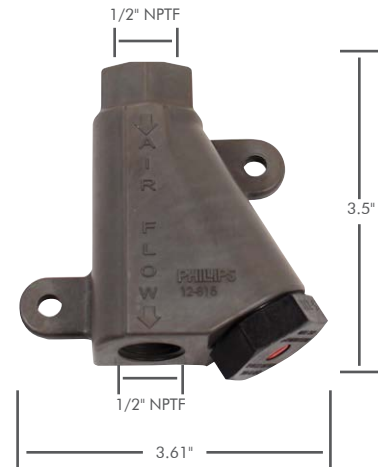
12-035

AIR-DEFENSE™ System With Quick-Change Cartridge

Trailer Air Brake In-Line Filtration System

Part No.	Description
12-815	AIR-DEFENSE™ System

- Debris is trapped in the Quick-Change Cartridge (12-035) of the AIR-DEFENSE™ System, reducing debris entering the trailer air lines and brake valves
- The Quick-Change Cartridge features a bypass mode which ensures full airflow at all times, even when the filter is full
- Visual service indication: Red indicator (non-resettable) notifies mechanic or operator that it's time to replace dirty air filter cartridge
- The cartridge is replaceable in minutes and en route; simply unscrew the old filter cartridge and replace with a new one
- Can be used on both service and emergency lines
- 1/2" NPTF top and bottom ports
- Designed and assembled in the U.S.A.
- The AIR-DEFENSE™ System with Quick-Change Cartridge is intended to be installed between the trailer gladhands and the air lines to the brake valves
- Patent Pending



Quick-Change Cartridge

Part No.	Description
12-035	Quick-Change Cartridge - replacement filter

- Replacement filter for all AIR-DEFENSE™ system products
- Replaceable in minutes in route; simply unscrew the old filter cartridge and replace with a new one
- Visual service indication: Red indicator (non-resettable) notifies mechanic or operator that it's time to replace dirty air filter cartridge
- Always keep at least one cartridge on hand for easy in-transit replacement
- Patent Pending



AIR ACCESSORIES

Gladhand Seals

12-0161-25;
12-0161-10012-0162-25;
12-0162-10012-0102-25;
12-0102-10012-0111-25;
12-0111-10012-0163-25;
12-0163-10012-0167-25;
12-0167-100
must be used with
filter screen12-01611-25;
12-01611-10012-01621-25;
12-01621-10012-01631-25;
12-01631-100

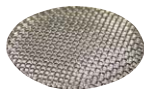
- Fits all industry standard gladhands
- Available in rubber and polyurethane
- Polyurethane available in blue and red to denote service and emergency
- Polyurethane gladhand seals with built-in filter screens help keep debris out of the air lines
- Quantities of 200 available with our selection of gladhand seal displays for retail or easy storage in the shop. See the Traffic Builders section for more details.

Part No.	Description	Qty.
12-011-25	Narrow lip, black (universal), rubber	25
12-011-100	Narrow lip, black (universal), rubber	100
12-012-25	Wide lip, tapered base for easy insertion, black (universal), rubber	25
12-012-100	Wide lip, tapered base for easy insertion, black (universal), rubber	100
12-0161-25	Blue (service), polyurethane	25
12-0161-100	Blue (service), polyurethane	100
12-0162-25	Red (emergency), polyurethane	25
12-0162-100	Red (emergency), polyurethane	100
12-0163-25	Black (universal), polyurethane	25
12-0163-100	Black (universal), polyurethane	100
12-0164-04	Retail pack, 2 red (emergency), 2 blue (service), polyurethane	4
12-0164-100	Retail pack, 50 red (emergency), 50 blue (service), polyurethane	100
12-0167-25	With dust flap, gray (universal), polyurethane (must be used with filter screen)	25
12-0167-100	With dust flap, gray (universal), polyurethane (must be used with filter screen)	100
12-01611-25	Blue (service), polyurethane gladhand seals with built-in filter screen	25
12-01611-100	Blue (service), polyurethane gladhand seals with built-in filter screen	100
12-01621-25	Red (emergency), polyurethane gladhand seals with built-in filter screen	25
12-01621-100	Red (emergency), polyurethane gladhand seals with built-in filter screen	100
12-01631-25	Black (universal), polyurethane gladhand seals with built-in filter screen	25
12-01631-100	Black (universal), polyurethane gladhand seals with built-in filter screen	100

Gladhand Filter Screens



12-038



12-039

Part No.	Description
12-038	Fits gladhand part numbers 12-006, 12-008, 12-010, 12-136, 12-138
12-039	Fits QWIK-E® gladhand part numbers 12-206, 12-236

- 12-038 meets Ontario, Canada special regulations

Coiled Air Gladhand Extensions

Part No.	Description
12-600	Pair (red and blue), clamshell
80-600	Display, includes 9 pairs of 12-600, display rack and header card

- Provides strong leverage for coupling/uncoupling gladhands
- Durable and strong; made of solid machined aluminum
- One-piece body for easy installation
- Bright, corrosion-resistant anodized color coating
- Easy installation - Installs between air coil and gladhand
- Heavy diamond knurl for outstanding grip



12-600

Rubber Air Grips

Part No.	Description
12-606	Service, blue
12-608	Emergency, red
12-610	Universal, black

- Color-coded for easy identification
- One-piece body for easier installation
- Can be used on both straight air lines and Phillips POWER GRIP™ coiled air



Air Coil QWIK-REPAIR™ Kit

Part No.	Description
12-911	Air Coil QWIK-REPAIR™ kit *

12-911 Contents:

Description	Qty.
Economy nylon air tube cutter (P/N 12-90003)	1
1/2" QWIK-FIT™ straight union composite fitting with o-rings	1
1/2" QWIK-FIT™ brass male fitting with o-rings	1

- For use with 1/2 in. O.D. air tubing
- Contents will repair (1) one brass fitting on coiled assembly
- Contents will make (1) one repair to damaged portion of coiled assembly
- Easy to install and reduces downtime
- Includes instructions
- Fittings meet SAE and DOT specifications
- Great addition to your Phillips CSA QWIK-FIX™ kit!



*Repairs made with this kit should be considered as a temporary solution in an emergency situation and are not intended for long terms use. Damaged air coils should be replaced as soon as possible

Rubber Air QWIK-REPAIR™ Kit

Part No.	Description
12-050	QWIK-REPAIR™ kit, 3/8" rubber hose I.D., 1/2" fittings
12-052	QWIK-REPAIR™ kit, 3/8" rubber hose I.D., 3/8" fittings

- For 3/8 in. I.D. rubber air lines
- Easy to install
- Reduces downtime
- Contents will make two repairs
- Great addition to your Phillips CSA QWIK-FIX™ kit!
- Includes installation instructions

12-050 and 12-052 Contents:

- 2 - Cases (each case consist of two pieces)
- 1 - Wrench
- 2 - Assembly rings
- 2 - Male fittings with pre-applied thread sealant
- 2 - Greased lock stems



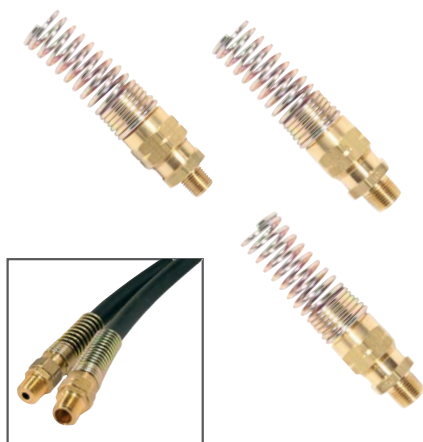
Gladhand Lock



Part No.	Description
12-700	Gladhand lock

- Constructed of corrosion resistant material
- Includes two numbered keys for easy identification
- Uniquely designed to fit standard, angled or swinger style gladhands
- Upon request, multiple orders can be keyed alike

Rubber Air Hose Replacement Fittings



Part No.	Description	Qty.
12-020	1/2" pipe thread, fits 3/8" hose	5
12-022	3/8" pipe thread, fits 3/8" hose	5
12-024	1/4" pipe thread, fits 3/8" hose	5
12-042	3/8" pipe thread, fits 1/2" hose	5
12-044	1/2" pipe thread, fits 1/2" hose	5

- Designed to replace end of rubber air hose
- Includes spring guard

Bulkhead Fittings



Part No.	Clamping Overall Thread Size	Internal Pipe Thread Size	Length
12-804	3/4"	1/4"	2 1/8"
12-806	1"	3/8"	2 1/8"

- Male pipe thread is 1/2 in. NPT
- For bulkheads up to 1/2 in. thick

Rubber Hose Ferrule



Part No.	Description	Qty.
12-026	Brass ferrule for 3/8" rubber air hose	5
12-046	Brass ferrule for 1/2" rubber air hose	5

- Replacement ferrule for rubber air hose
- Can be used with 12-020, 12-022, 12-024

Heavy Duty Drain Valve



Part No.	Description	Qty.
12-820	60" cable with 1/4" pipe thread	5
12-822	60" cable with 3/8" pipe thread	5

- Includes brass valve and cable

AIR BRAKE TUBING

- Phillips' nylon tubing can save as much as 75% in weight over copper tubing or rubber hose
- Resists road salts, oil, grease, gasoline, diesel fuel and moisture
- Bends easily without deforming
- Operating temperature range -40°F to 200°F

Type A - Single Wall Tubing

Part No.	Description
11-125	1/8" O.D., black, 100', box
11-250	1/4" O.D., black, 100', box
11-260	1/4" O.D., black, 250', box
11-253	1/4" O.D., orange, 100', box
11-257	1/4" O.D., red, 100', box
11-258	1/4" O.D., yellow, 100', box

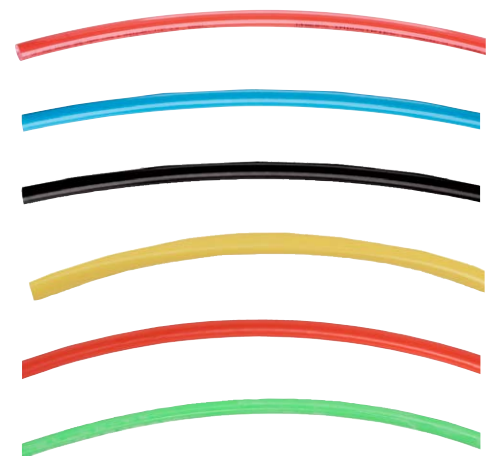
- Ideal for pneumatic accessories that operate off of the air system
- Meets SAE J844 type "A" specifications
- Operating temperature range -40°F to 200°F (-40°C to 93°C)



Type B - Reinforced

Part No.	Description
11-261	3/8" O.D., black, 100', box
11-262	3/8" O.D., black, 250', box
11-263	3/8" O.D., black, 500', spool
11-273	3/8" O.D., orange, 100', box
11-274	3/8" O.D., green, 100', box
11-276	3/8" O.D., blue, 100', box
11-277	3/8" O.D., red, 100', box
11-278	3/8" O.D., yellow, 100', box
11-264	1/2" O.D., black, 100', box
11-265	1/2" O.D., black, 250', box
11-269	1/2" O.D., black, 500', spool
11-266	1/2" O.D., blue, 100', box
11-267	1/2" O.D., red, 100', box
11-268	1/2" O.D., yellow, 100', box
11-270	5/8" O.D., black, 100', box
11-271	3/4" O.D., black, 100', box

- Ideal for pneumatic accessories that operate off of the air system
- Meets SAE J844 type "B" specifications
- Operating temperature range -40°F to 200°F (-40°C to 93°C)



BRASS COMPRESSION FITTINGS

Male Connector



Part No.	Tube Size	Pipe Size	Qty.
12-8304	1/4"	1/8"	10
12-8305	1/4"	1/4"	10
12-8306	1/4"	3/8"	10
12-8307	3/8"	1/4"	10
12-8308	3/8"	3/8"	10
12-8309	3/8"	1/2"	10
12-8311	1/2"	3/8"	10
12-8312	1/2"	1/2"	10

Male Elbow



Part No.	Tube Size	Pipe Size	Qty.
12-8404	1/4"	1/8"	10
12-8405	1/4"	1/4"	10
12-8406	3/8"	1/4"	10
12-8407	3/8"	3/8"	10
12-8408	1/2"	1/4"	10
12-8409	1/2"	3/8"	10
12-8410	1/2"	1/2"	10
12-8411	5/8"	1/2"	10

Full Union



Part No.	Tube Size	Qty.
12-8504	1/4"	10
12-8506	3/8"	10
12-8508	1/2"	10
12-8510	5/8"	10

Tee-Ends



Part No.	Tube Size	Qty.
12-8604	1/4"	10
12-8606	3/8"	10
12-8608	1/2"	10

Nut



Part No.	Tube Size	Qty.
12-8704	1/4"	10
12-8706	3/8"	10
12-8708	1/2"	10
12-8710	5/8"	10

Sleeve

Part No.	Tube Size	Qty.
12-8804	1/4"	10
12-8806	3/8"	10
12-8808	1/2"	10
12-8810	5/8"	10

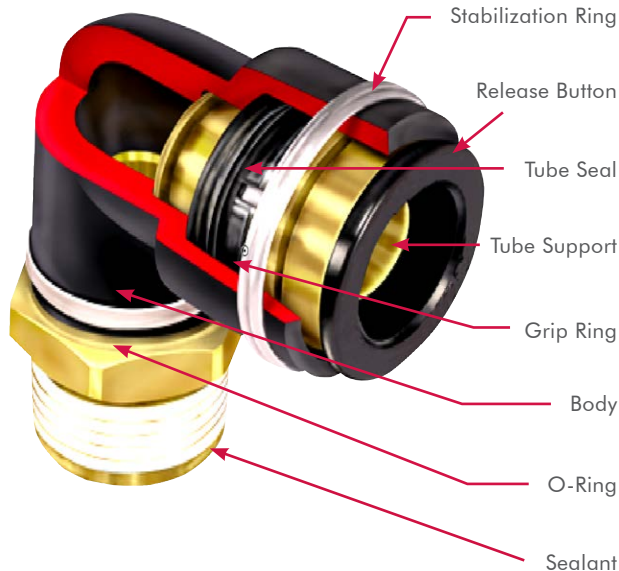


Nylon Tubing Inserts

Part No.	Tube Size	Qty.
12-8904	1/4"	10
12-8906	3/8"	10
12-8908	1/2"	10
12-8910	5/8"	10



QWIK-FIT™ PUSH-TO-CONNECT COMPOSITE AIR FITTINGS



Today's OEM's are turning to composite fittings over brass to save both weight and labor. In fact, a tractor equipped with Phillips QWIK-FIT™ composite fittings can typically save 5-7lbs and can be installed up to 42% faster over brass! With the durability of brass and the savings on weight and labor, the Phillips QWIK-FIT™ composite fittings are ideal for OEM's as well as all other quick air line repairs.

24% - 33% lighter than brass and saves up to 42% in labor costs!!

WARNING

- Phillips QWIK-FIT™ push-to-connect composite fittings are designed only for use in applications where air is utilized as an operating fluid
- Fittings must be used in accordance with manufacturer and industry specifications
- Phillips QWIK-FIT™ push-to-connect composite fittings are not intended for use in environments exceeding 145 PSI or 140°F
- The Department of Transportation FMVSS 49CFR571-106 prohibits the use of this type of fitting for connections between towed and towing vehicles or between a driveshaft and chassis
- Using Phillips QWIK-FIT™ fittings in a manner inconsistent with manufacturer specifications may result in serious injury or property damage

Bulkhead Union

Part No.	Tube Size	Drill Diameter	Qty.
12-90044	1/4"	5/8"	10
12-90066	3/8"	15/16"	10
12-90088	1/2"	1-1/8"	5
12-90010	5/8"	1-5/32"	5



Union Elbow



Part No.	Tube Size	Qty.
12-91022*	1/8"	10
12-91033*	3/16"	10
12-91044	1/4"	10
12-91055*	5/32"	10
12-91066	3/8"	10
12-91088	1/2"	5
12-911010	5/8"	5

Female Bulkhead Union



Part No.	Tube Size	Pipe Size	Qty.
12-92024*	1/8"	1/4"	10
12-92042	1/4"	1/8"	10
12-92044	1/4"	1/4"	10
12-92054*	5/32"	1/4"	10
12-92064	3/8"	1/4"	10
12-92066	3/8"	3/8"	10
12-92086	1/2"	3/8"	5

Female Connector



Part No.	Tube Size	Pipe Size	Qty.
12-88042	1/4"	1/8"	10
12-88044	1/4"	1/4"	10
12-88064	3/8"	1/4"	10
12-88066	3/8"	3/8"	10

Male Connector



Pre-applied
thread sealant
allows for quicker
installation!

Part No.	Tube Size	Pipe Size	Qty.
12-93022*	1/8"	1/8"	10
12-93024*	1/8"	1/4"	10
12-93032*	3/16"	1/8"	10
12-93034*	3/16"	1/4"	10
12-93042	1/4"	1/8"	10
12-93044	1/4"	1/4"	10
12-93046	1/4"	3/8"	10
12-93052*	5/32"	1/8"	10
12-93054*	5/32"	1/4"	10
12-93062	3/8"	1/8"	10
12-93064	3/8"	1/4"	10
12-93066	3/8"	3/8"	10
12-93068	3/8"	1/2"	10
12-93084	1/2"	1/4"	5
12-93086	1/2"	3/8"	5
12-93088	1/2"	1/2"	5
12-93106	5/8"	3/8"	5
12-93108	5/8"	1/2"	5
12-93126	3/4"	3/8"	5
12-93128	3/4"	1/2"	5

*Does not Meet DOT or SAE specifications for air brake applications. Color of fittings differs from those that meet DOT and SAE specifications. NON DOT and SAE fittings are grey and orange in color.

Male Elbow (Swivel) **

Part No.	Tube Size	Pipe Size	Qty.
12-94022*	1/8"	1/8"	10
12-94024*	1/8"	1/4"	10
12-94032*	3/16"	1/8"	10
12-94034*	3/16"	1/4"	10
12-94042	1/4"	1/8"	10
12-94044	1/4"	1/4"	10
12-94046	1/4"	3/8"	10
12-94052*	5/32"	1/8"	10
12-94064	3/8"	1/4"	10
12-94066	3/8"	3/8"	10
12-94068	3/8"	1/2"	10
12-94084	1/2"	1/4"	5
12-94086	1/2"	3/8"	5
12-94088	1/2"	1/2"	5
12-94106	5/8"	3/8"	5
12-94108	5/8"	1/2"	5
12-94128	3/4"	1/2"	5
12-941012	5/8"	3/4"	5



Straight Union

Part No.	Tube Size	Qty.
12-95022*	1/8"	10
12-95033*	3/16"	10
12-95044	1/4"	10
12-95046	1/4" to 3/8"	10
12-95055*	5/32"	10
12-95066	3/8"	10
12-95068	3/8" to 1/2"	10
12-95088	1/2"	5
12-951010	5/8"	5



Union Tee

Part No.	Tube Size	Qty.
12-96222*	1/8"	10
12-96444	1/4"	10
12-96555*	5/32"	10
12-96666	3/8"	10
12-96888	1/2"	5
12-961010	5/8"	5



*Does not meet DOT or SAE specifications for air brake applications. Color of fittings differs from those that meet DOT and SAE specifications. NON DOT and SAE fittings are grey and orange in color.

**Swivel to final position only. Not designed for constant rotation.

Y Union



Part No.	Tube Size	Qty.
12-96044	1/4"	10
12-96055*	5/32"	10
12-96066	3/8"	10

Male Branch Tee (Swivel) **



Pre-applied
thread sealant
allows for quicker
installation!

Part No.	Tube Size	Pipe Size	Qty.
12-97222*	1/8"	1/8"	10
12-97224*	1/8"	1/4"	10
12-97444	1/4"	1/4"	10
12-97446	1/4"	3/8"	10
12-97664	3/8"	1/4"	10
12-97666	3/8"	3/8"	10
12-97668	3/8"	1/2"	10
12-97886	1/2"	3/8"	5
12-97888	1/2"	1/2"	5
12-97106	5/8"	3/8"	5
12-97108	5/8"	1/2"	5

45° Male Elbow (Swivel)**



Pre-applied
thread sealant
allows for quicker
installation!

Part No.	Tube Size	Pipe Size	Qty.
12-98042	1/4"	1/8"	10
12-98044	1/4"	1/4"	10
12-98046	1/4"	3/8"	10
12-98052*	5/32"	1/8"	10
12-98062	3/8"	1/8"	10
12-98064	3/8"	1/4"	10
12-98066	3/8"	3/8"	10
12-98068	3/8"	1/2"	10
12-98084	1/2"	1/4"	5
12-98086	1/2"	3/8"	5
12-98088	1/2"	1/2"	5
12-98106	5/8"	3/8"	5
12-98108	5/8"	1/2"	5
12-981012	5/8"	3/4"	5
12-98126	3/4"	3/8"	5
12-98128	3/4"	1/2"	5

*Does not meet DOT or SAE specifications for air brake applications. Color of fittings differs from those that meet DOT and SAE specifications. NON DOT & SAE fittings are grey and orange in color.

**Swivel to final position only. Not designed for constant rotation.

Male Run Tee (Swivel) **

Part No.	Tube Size	Pipe Size	Qty.
12-99022	1/8"	1/8"	10
12-99024	1/8"	1/4"	10
12-99042	1/4"	1/8"	10
12-99044	1/4"	1/4"	10
12-99046	1/4"	3/8"	10
12-99052	5/32"	1/8"	10
12-99054	5/32"	1/4"	10
12-99064	3/8"	1/4"	10
12-99066	3/8"	3/8"	10
12-99068	3/8"	1/2"	10
12-99084	1/2"	1/4"	5
12-99086	1/2"	3/8"	5
12-99088	1/2"	1/2"	5
12-99108	5/8"	1/2"	5



Pre-applied
thread sealant
allows for quicker
installation!

Male Branch "Y"

Part No.	Tube Size	Pipe Size	Qty.
12-89042	1/4"	1/8"	10
12-89044	1/4"	1/4"	10



Pre-applied
thread sealant
allows for quicker
installation!

Dust Boot

Part No.	Tube Size	Qty.
12-90040	1/4"	10
12-90060	3/8"	10
12-90080	1/2"	10



- Protects air fittings from the elements, ensuring an easy release every time

Plug

Part No.	Tube Size	Qty.
12-90400	1/4"	10
12-90600	3/8"	10
12-90800	1/2"	10



- Provides a positive seal of protection for unoccupied parts

**Swivel to final position only. Not designed for constant rotation.

QWIK-FIT™ Starter Kit



Part No.	Description
80-1290	QWIK-FIT™ starter kit

- 310 – QWIK-FIT™ pieces
- 28 – Bin boxes
- 1 set – Restock labels
- 1 – Color counter mat/wall chart



80-1290 Contents:

Part No.	Description	Tube Size	Thread Size	Assortment Qty.
12-90003	Nylon tube cutter - economy	—	—	5
12-90044	Bulkhead union	1/4"	—	10
12-90066	Bulkhead union	3/8"	—	10
12-90088	Bulkhead union	1/2"	—	5
12-91066	Union elbow	3/8"	—	10
12-91088	Union elbow	1/2"	—	5
12-93042	Male connector	1/4"	1/8"	20
12-93064	Male connector	3/8"	1/4"	20
12-93066	Male connector	3/8"	3/8"	20
12-93086	Male connector	1/2"	3/8"	10
12-94042	Male elbow	1/4"	1/8"	10
12-94044	Male elbow	1/4"	1/4"	10
12-94064	Male elbow	3/8"	1/4"	10
12-94066	Male elbow	3/8"	3/8"	10
12-94086	Male elbow	1/2"	3/8"	5
12-95022	Union	1/8"	—	20
12-95044	Union	1/4"	—	20
12-95055	Union	5/32"	—	20
12-95066	Union	3/8"	—	20
12-95088	Union	1/2"	—	10
12-96444	Union tee	1/4"	—	10
12-96666	Union tee	3/8"	—	10
12-96888	Union tee	1/2"	—	5
12-98044	45° male elbow	1/4"	1/4"	10
12-98064**	45° male elbow	3/8"	1/4"	10
12-98066**	45° male elbow	3/8"	3/8"	10
12-98086**	45° male elbow	1/2"	3/8"	5
12-98088	45° male elbow	1/2"	1/2"	5

**Swivel to final position only. Not designed for constant rotation.

QWIK-FIT™ Travel Kit

Part No.	Description
80-1291	QWIK-FIT™ travel kit

80-1291 Contents:

Part No.	Description	Tube Size	Thread Size	Kit Qty.
12-90040	1/4" dust boot	-	-	10
12-90060	3/8" dust boot	-	-	10
12-90080	1/2" dust boot	-	-	10
12-93044	Male connector	1/4"	1/4"	2
12-93064	Male connector	3/8"	1/4"	2
12-93066	Male connector	3/8"	3/8"	2
12-93086	Male connector	1/2"	3/8"	2
12-95044	Straight union	1/4"	-	2
12-95066	Straight union	3/8"	-	2
12-95088	Straight union	1/2"	-	2
12-98064**	45° male elbow (swivel)	3/8"	1/4"	2
12-98066**	45° male elbow (swivel)	3/8"	3/8"	2

**80-1291**

48 pieces
6 1/2" x 10 1/2"

QWIK-FIT™ Shop Kit

Part No.	Description
80-1292	QWIK-FIT™ shop kit

80-1292 Contents:

Part No.	Description	Tube Size	Thread Size	Kit Qty.
12-90040	1/4" dust boot	-	-	10
12-90060	3/8" dust boot	-	-	10
12-90080	1/2" dust boot	-	-	10
12-93022*	Male connector	1/8"	1/8"	5
12-93042	Male connector	1/4"	1/8"	5
12-93044	Male connector	1/4"	1/4"	10
12-93064	Male connector	3/8"	1/4"	10
12-93066	Male connector	3/8"	3/8"	10
12-93086	Male connector	1/2"	3/8"	5
12-95044	Straight union	1/4"	-	5
12-95066	Straight union	3/8"	-	5
12-95088	Straight union	1/2"	-	5
12-951010	Straight union	5/8"	-	5
12-98064**	45° male elbow (swivel)	3/8"	1/4"	5
12-98066**	45° male elbow (swivel)	3/8"	3/8"	5
12-98086**	45° male elbow (swivel)	1/2"	3/8"	5

**80-1292**

110 pieces
12" x 18"

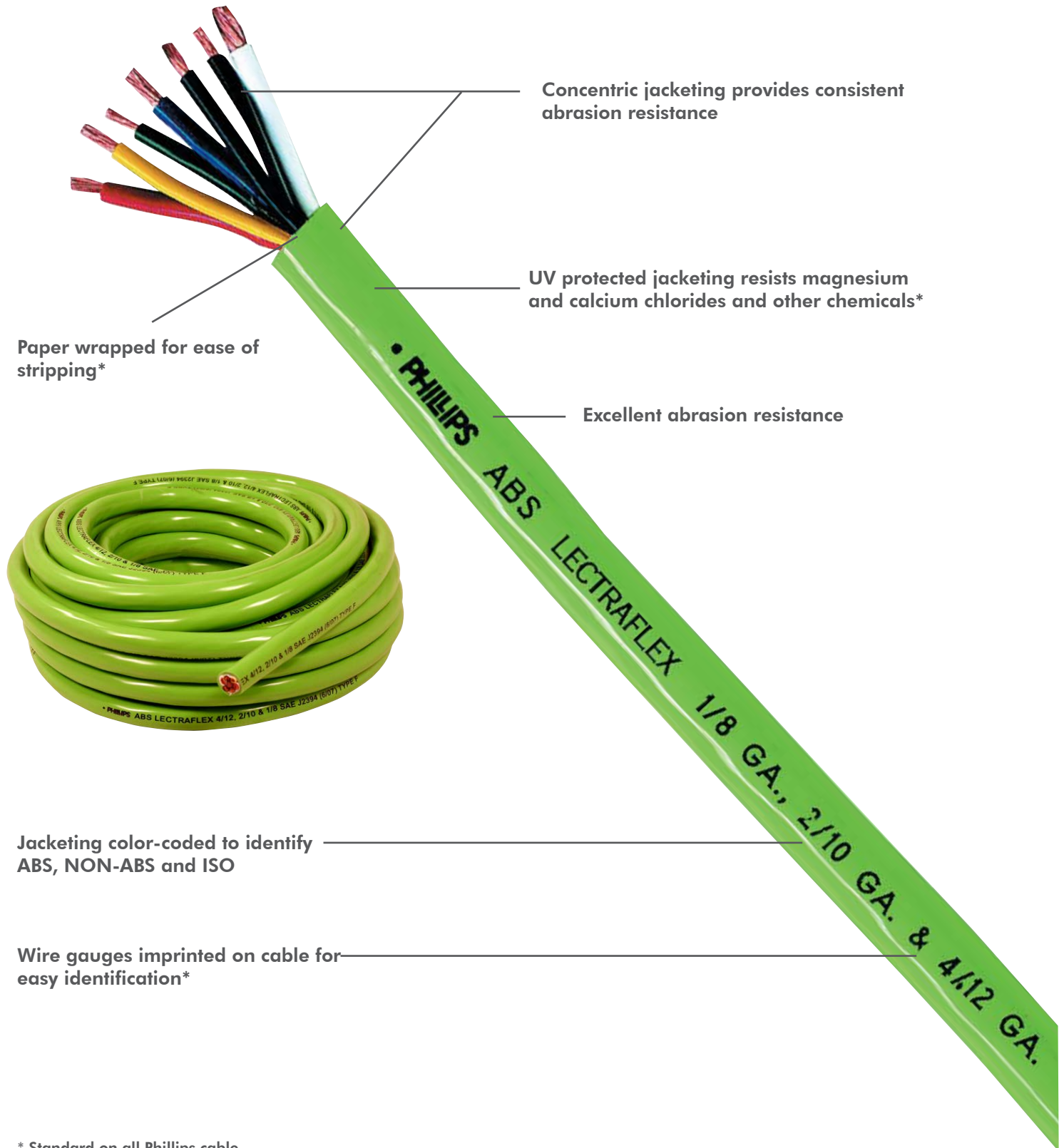
*Does not meet DOT or SAE specifications for air brake applications. Color of fittings differ from those that meet DOT and SAE specifications.

**NON DOT and SAE fittings are grey and orange in color.

**Swivel to final position only. Not designed for constant rotation.

CABLE AND WIRE

LECTRAFLEX™



BULK TRAILER CABLE

- Resistant to chemicals, oils and fuel
- Paper wrapped for ease of stripping
- Concentric jacketing - copper centered in jacket for consistent abrasion resistance

7 CONDUCTOR - 1/8, 2/10, 4/12 ga. ABS .700 O.D. Black - Brown - Blue - Green - Red - White - Yellow

Part No.	Length	Package	Stranding 12 ga.	Stranding 10 ga.	Stranding 8 ga.
3-642	100'	Spool	65 x 30	105 x 30	168 x 30
3-643	250'	Spool	65 x 30	105 x 30	168 x 30
3-644	500'	Spool	65 x 30	105 x 30	168 x 30

7 CONDUCTOR - 1/10, 6/12 ga. .640 O.D. Black - Brown - Blue - Green - Red - White - Yellow

Part No.	Length	Package	Stranding 12 ga.	Stranding 10 ga.
3-632	100'	Spool	65 x 30	105 x 30
3-633	250'	Spool	65 x 30	105 x 30

7 CONDUCTOR - 1/12, 6/14 ga. .570 O.D. Black - Brown - Blue - Green - Red - White - Yellow

Part No.	Length	Package	Stranding 14 ga.	Stranding 12 ga.
3-622	100'	Spool	41 x 30	65 x 30
3-623	250'	Spool	41 x 30	65 x 30
3-624	500'	Spool	41 x 30	65 x 30

6 CONDUCTOR - 6/14 ga. .550 O.D. Black - Brown - Green - Red - White - Yellow

Part No.	Length	Package	Stranding
3-612	100'	Spool	41 x 30
3-613	250'	Spool	41 x 30
3-614	500'	Spool	41 x 30

4 CONDUCTOR - 4/14 ga. .440 O.D. Brown - Yellow - Green - White

Part No.	Length	Package	Stranding
3-602	100'	Spool	41 x 30
3-603	250'	Spool	41 x 30
3-604	500'	Spool	41 x 30

3 CONDUCTOR - 3/14 ga. .440 O.D. Black - Red - White

Part No.	Length	Package	Stranding
3-662	100'	Spool	41 x 30
3-663	250'	Spool	41 x 30
3-664	500'	Spool	41 x 30

2 CONDUCTOR - 2/14 ga. .340 O.D. Black - White

Part No.	Length	Package	Stranding
3-652	100'	Spool	41 x 30
3-653	250'	Spool	41 x 30
3-654	500'	Spool	41 x 30
3-655	1000'	Spool	41 x 30

ARCTIC SUPERFLEX™

FLEXIBLE TO
-85°F



- Designed for durability in extreme temperatures
- Stays flexible from -85°F to 175°F (-65°C to 79°C)
- Dark blue jacket color
- Resistant to chemicals, oils and fuels

DURAFLEX™

- For general trailer rewiring
- Black jacket
- Stays flexible to -40°F (-40°C)
- Meets SAE J1128 specifications

7 CONDUCTOR - 1/10, 6/12 ga. .690 O.D.
Black - Brown - Blue - Green - Red - White - Yellow

Part No.	Length	Package
3-221	50'	Spool
3-222	100'	Spool
3-223	250'	Spool
3-224	500'	Spool
3-225	1000'	Spool

7 CONDUCTOR - 1/12, 6/14 ga. .500 O.D.
Black - Brown - Blue - Green - Red - White - Yellow

Part No.	Length	Package
3-241	50'	Spool
3-242	100'	Spool
3-243	250'	Spool
3-244	500'	Spool
3-245	1000'	Spool

6 CONDUCTOR - 6/14 ga. .500 O.D.
Black - Brown - Green - Red - White - Yellow

Part No.	Length	Package
3-201	50'	Spool
3-202	100'	Spool
3-203	250'	Spool
3-204	500'	Spool
3-205	1000'	Spool

4 CONDUCTOR - 4/14 ga. .400 O.D.
Brown - Yellow - Green - White

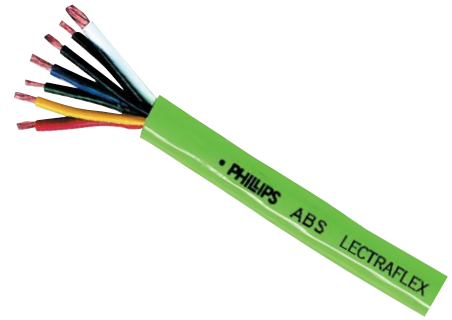
Part No.	Length	Package
3-191	50'	Spool
3-192	100'	Spool
3-193	250'	Spool
3-194	500'	Spool
3-195	1000'	Spool

LECTRAFLEX™

7 CONDUCTOR - 1/8, 2/10, 4/12 ga. ABS BRIGHT GREEN .680 O.D.
Black - Brown - Blue - Green - Red - White - Yellow

Part No.	Length	Package	Stranding 12 ga.	Stranding 10 ga.	Stranding 8 ga.
3-326	50'	Spool	65 x 30	105 x 30	168 x 30
3-327	100'	Spool	65 x 30	105 x 30	168 x 30
3-328	250'	Spool	65 x 30	105 x 30	168 x 30
3-329	500'	Spool	65 x 30	105 x 30	168 x 30
3-330	1000'	Spool	65 x 30	105 x 30	168 x 30

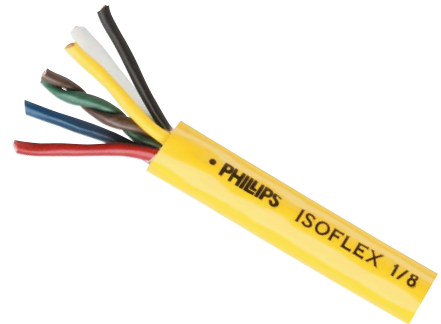
- For ABS applications
- Green jacket
- Superior abrasion resistance
- Stays flexible to -40°F (-40°C)
- Meets SAE J2394 specifications

**ISOFLEX™**

7 CONDUCTOR - 1/8, 2/10, 4/12 ga. ISO BRIGHT YELLOW .770 O.D.
Black - Brown - Blue - Green - Red - White - Yellow

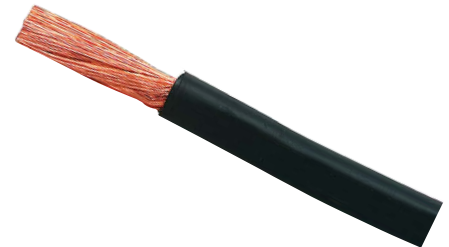
Part No.	Length	Package	Stranding 12 ga.	Stranding 10 ga.	Stranding 8 ga.
3-341	50'	Spool	65 x 30	105 x 30	168 x 30
3-342	100'	Spool	65 x 30	105 x 30	168 x 30
3-343	250'	Spool	65 x 30	105 x 30	168 x 30
3-344	500'	Spool	65 x 30	105 x 30	168 x 30

- Ideal for multiplexing applications
- Twisted pair (green and brown) reduces radio noise
- Good chemical and abrasion resistance
- Bright yellow jacket color
- Stays flexible to -40°F (-40°C)
- Meets ISO 3731

**Welding Cable**

Part No.	Gauge	Length	Package	Stranding	O.D.
3-407	2/0	25'	Spool	1273 x 30	.630

- Fine stranding for superior flexibility
- Neoprene jacketing for durability
- Resistant to chemicals, oils and fuels
- Stays flexible to -58°F (-50°C)
- Black jacket
- Rated to 600V



Bulk Booster Cable - Yellow / Black



Part No.	Description
3-518	4 ga., 2 conductor, yellow and black, 100', spool

- Chemical and abrasion resistant
- Fine stranding for flexibility
- Operating temperature range: -40°F to 140°F (-40°C to 60°C)
- DC voltage rating: 50V max.
- Black/yellow jacketing for ease of polarity identification
- RoHS compliant
- Meets SAE J1494
- Meets SAE J1127 Type SGT

Bulk Booster Cable - Red / Black



Part No.	Description
3-524	4 ga., 2 conductor, red and black, 100', spool
3-524-250	4 ga., 2 conductor, red and black, 250', spool
3-524-500	4 ga., 2 conductor, red and black, 500', spool
3-524-1000	4 ga., 2 conductor, red and black, 1000', spool

- Chemical and abrasion resistant
- Operating temperature: -22°F to 176°F (-30°C to 80°C)
- DC voltage rating: 60V max.
- Black/red jacketing for ease of polarity identification
- RoHS compliant
- Meets SAE J1494
- Meets SAE J1127 Type SGT

Bulk Booster Cable - Orange / Black



Part No.	Description
3-523	6 ga., 2 conductor, orange and black, 100', spool
3-523-250	6 ga., 2 conductor, orange and black, 250', spool
3-523-500	6 ga., 2 conductor, orange and black, 500', spool
3-523-1000	6 ga., 2 conductor, orange and black, 1000', spool

- Chemical and abrasion resistant
- Operating temperature: -22°F to 176°F (-30°C to 80°C)
- DC voltage rating: 60V max.
- Black/orange jacketing for ease of polarity identification
- RoHS compliant
- Meets SAE J1494
- Meets SAE J1127 Type SGT

CLEAR-VU™ Corrosion-Detecting Battery Cable

	Size	Length	Stranding	Package	Part No.	
CLEAR RED	4 ga.	25'	133 x 25	Spool	3-545	CLEAR RED
	4 ga.	100'	133 x 25	Spool	3-545-100	
	1 ga.	25'	133 x 22	Spool	3-555	
	1 ga.	100'	133 x 22	Spool	3-555-100	
	2/0 ga.	25'	259 x 23	Spool	3-565	
	2/0 ga.	100'	259 x 23	Spool	3-565-100	
CLEAR SMOKE	4 ga.	25'	133 x 25	Spool	3-546	CLEAR SMOKE
	4 ga.	100'	133 x 25	Spool	3-546-100	
	1 ga.	25'	133 x 22	Spool	3-556	
	1 ga.	100'	133 x 22	Spool	3-556-100	
	2/0 ga.	25'	259 x 23	Spool	3-566	
	2/0 ga.	100'	259 x 23	Spool	3-566-100	
CLEAR	6 ga.	25'	133 x 27	Spool	3-526	CLEAR
	4 ga.	25'	133 x 25	Spool	3-528	
	4 ga.	100'	133 x 25	Spool	3-528-100	
	2 ga.	25'	133 x 23	Spool	3-530	
	2 ga.	100'	133 x 23	Spool	3-530-100	
	1 ga.	25'	133 x 22	Spool	3-551	
	1 ga.	100'	133 x 22	Spool	3-551-100	
	2/0 ga.	25'	259 x 23	Spool	3-532	
	2/0 ga.	100'	259 x 23	Spool	3-532-100	



- Easy to see corrosion creeping through your battery cable
- Prevents premature battery, starter and alternator replacement
- Rope-style stranding for flexibility
- Easy to strip
- Superior abrasion resistance
- Flexible from -40°F to 150°F (-40°C to 66°C)
- Meets SAE J1127 SGT specifications

Battery Cable



- Rope-style stranding for flexibility
- Easy to strip
- Superior abrasion resistance
- Operating temperature range
-40°F to 150°F (-40°C to 66°C)
- Meets SAE J1127 SGT specifications

	Size	Length	Stranding	Package	Part No.	
RED	6 ga.	25'	133 x 27	Spool	3-501	RED
	6 ga.	100'	133 x 27	Spool	3-501-100	
	6 ga.	250'	133 x 27	Spool	3-501-250	
	4 ga.	25'	133 x 25	Spool	3-503	
	4 ga.	100'	133 x 25	Spool	3-503-100	
	4 ga.	250'	133 x 25	Spool	3-503-250	
	2 ga.	25'	133 x 23	Spool	3-505	
	2 ga.	100'	133 x 23	Spool	3-505-100	
	2 ga.	250'	133 x 23	Spool	3-505-250	
	1 ga.	25'	133 x 22	Spool	3-507	
	1 ga.	100'	133 x 22	Spool	3-507-100	
	1/0 ga.	25'	133 x 21	Spool	3-509	
	1/0 ga.	100'	133 x 21	Spool	3-509-100	
	1/0 ga.	250'	133 x 21	Spool	3-509-250	
	2/0 ga.	25'	259 x 23	Spool	3-511	
	2/0 ga.	100'	259 x 23	Spool	3-511-100	
	2/0 ga.	250'	259 x 23	Spool	3-511-250	
	3/0 ga.	25'	259 x 22	Spool	3-513	
	3/0 ga.	100'	259 x 22	Spool	3-513-100	
	4/0 ga.	25'	259 x 21	Spool	3-515	
BLACK	6 ga.	25'	133 x 27	Spool	3-502	BLACK
	6 ga.	100'	133 x 27	Spool	3-502-100	
	6 ga.	250'	133 x 27	Spool	3-502-250	
	4 ga.	25'	133 x 25	Spool	3-504	
	4 ga.	100'	133 x 25	Spool	3-504-100	
	4 ga.	250'	133 x 25	Spool	3-504-250	
	2 ga.	25'	133 x 23	Spool	3-506	
	2 ga.	100'	133 x 23	Spool	3-506-100	
	2 ga.	250'	133 x 23	Spool	3-506-250	
	1 ga.	25'	133 x 22	Spool	3-508	
	1 ga.	100'	133 x 22	Spool	3-508-100	
	1 ga.	250'	133 x 22	Spool	3-508-250	
	1/0 ga.	25'	133 x 21	Spool	3-510	
	1/0 ga.	100'	133 x 21	Spool	3-510-100	
	1/0 ga.	250'	133 x 21	Spool	3-510-250	
	2/0 ga.	25'	259 x 23	Spool	3-512	
	2/0 ga.	100'	259 x 23	Spool	3-512-100	
	2/0 ga.	250'	259 x 23	Spool	3-512-250	
	3/0 ga.	25'	259 x 22	Spool	3-514	
	3/0 ga.	100'	259 x 22	Spool	3-514-100	
	3/0 ga.	250'	259 x 22	Spool	3-514-250	
	4/0 ga.	25'	259 x 21	Spool	3-516	
	4/0 ga.	100'	259 x 21	Spool	3-516-100	
	4/0 ga.	250'	259 x 21	Spool	3-516-250	

PRIMARY WIRE

- SAE Type GPT (General Purpose Thermoplastic) wire
- Resistant to acids, greases, oils and fuels
- Good abrasion resistance
- Concentric jacketing allows for easy wire stripping
- Soft annealed copper conductors for flexibility
- Operating temperature range -40°F to 150°F (-40°C to 66°C)
- Meets SAE J1128, type GPT
- 60V DC

4-Way Connector Chart		Phillips Plug/ Socket ID
Color	Circuits	
White	Ground return	W
Green	Right turn and brake lights	G
Yellow Red	Left turn and brake lights	R
Brown	Tail lights	B

6-Way Connector Chart		Phillips Plug/ Socket ID
Color	Circuits	
White	Ground return	GD
Brown	Tail lights	TM
Yellow	Left turn	LT
Red	Stop	S
Green	Right turn	RT
Black	Auxiliary circuit	A

7-Way ATA Connector Chart Per SAE J560		Phillips Plug/ Socket ID
Color	Circuits	
White	Ground return	WHT
Black	Clearance, marker and ID	BLK
Brown	Tail lights	BRN
Yellow	Left turn	YEL
Red	Stop	RED
Green	Right turn	GRN
Blue	Auxiliary/ABS	BLU

HOW TO USE THIS CHART:

1. Measure distance from power source/battery to the most distant lamp
2. Determine the total amp draw by adding the amp draw of all the lamps on the circuit
3. Double the distance to include the ground return wire
4. Determine wire gauge by intersecting the length and amp column on the chart. If the length or total amp draw falls in between columns, always use the higher gauge wire

WIRE GAUGE SELECTION CHART

12-Volt System	Total Length of Cable in Circuit from Battery to Most Distant Lamp Including Ground Side									
Amps (APP.)	2.5 ft	5 ft	10 ft	20 ft	30 ft	40 ft	50 ft	60 ft	80 ft	100 ft
1.0	20	20	20	20	20	20	20	20	20	18
1.5	20	20	20	20	20	20	20	20	18	18
2	20	20	20	20	20	20	18	18	16	16
3	20	20	20	20	20	18	18	16	16	14
4	20	20	20	20	18	16	16	16	14	12
5	20	20	20	18	18	16	14	14	12	12
6	20	20	20	18	16	16	14	14	12	12
7	20	20	20	18	16	14	14	12	12	10
8	20	20	20	16	16	14	12	12	10	10
10	20	20	18	16	14	12	12	12	10	10
11	20	20	18	16	14	12	12	10	10	8
12	20	20	18	16	14	12	12	10	10	8
15	20	20	18	14	12	12	10	10	8	8
18	20	20	16	14	12	10	10	8	8	8
20	20	18	16	12	12	10	10	8	8	6
22	20	18	16	12	10	10	8	8	8	6
24	20	18	16	12	10	10	8	8	6	6
36	20	16	14	10	8	8	8	6	6	4
50	18	16	12	10	8	6	6	4	4	2
100	14	12	10	6	4	4	2	2	1	1/0
150	14	10	8	4	2	2	1	1/0	2/0	3/0
200	12	8	6	4	2	1	1/0	2/0	3/0	4/0

Primary Wire



8 Gauge

Color	6' Blister Pack	100' Spool
Black	2-1513	2-151
Red	2-1553	2-155
White	-	2-156

18 Gauge

Color	40' Blister Pack	100' Spool
Black	2-1013	2-101
Blue	2-1023	2-102
Green	2-1043	2-104
Red	2-1053	2-105
White	2-1063	2-106
Yellow	2-1073	2-107

14 Gauge

Color	20' Blister Pack	100' Spool	1000' Spool
Black	2-1213	2-121	2-121-1000
Blue	2-1223	2-122	2-122-1000
Brown	2-1233	2-123	2-123-1000
Green	2-1243	2-124	2-124-1000
Red	2-1253	2-125	2-125-1000
White	2-1263	2-126	2-126-1000
Yellow	2-1273	2-127	2-127-1000

16 Gauge

Color	28' Blister Pack	100' Spool	1000' Spool
Black	2-1113	2-111	2-111-1000
Blue	2-1123	2-112	-
Brown	2-1133	2-113	-
Green	2-1143	2-114	-
Red	2-1153	2-115	2-115-1000
White	2-1163	2-116	2-116-1000
Yellow	2-1173	2-117	2-117-1000

12 Gauge

Color	12' Blister Pack	100' Spool	1000' Spool
Black	2-1313	2-131	2-131-1000
Blue	2-1323	2-132	2-132-1000
Brown	2-1333	2-133	-
Green	2-1343	2-134	2-134-1000
Red	2-1353	2-135	2-135-1000
White	2-1363	2-136	-
Yellow	2-1373	2-137	2-137-1000

10 Gauge

Color	8' Blister Pack	100' Spool
Black	2-1413	2-141
Blue	2-1423	2-142
Green	-	2-144
Red	2-1453	2-145
White	2-1463	2-146
Yellow	2-1473	2-147

Primary Wire Assortment

Part No.	Description
80-2006	Primary wire assortment

Replacement Part No.	Description	Qty.
2-111	Primary wire, 16 ga., black, 100' spool	1
2-112	Primary wire, 16 ga., blue, 100' spool	1
2-115	Primary wire, 16 ga., red, 100' spool	1
2-121	Primary wire, 14 ga., black, 100' spool	1
2-122	Primary wire, 14 ga., blue, 100' spool	1
2-123	Primary wire, 14 ga., brown, 100' spool	1
2-124	Primary wire, 14 ga., green, 100' spool	1
2-125	Primary wire, 14 ga., red, 100' spool	1
2-126	Primary wire, 14 ga., white, 100' spool	1
2-127	Primary wire, 14 ga., yellow, 100' spool	1
2-131	Primary wire, 12 ga., black, 100' spool	1
2-135	Primary wire, 12 ga., red, 100' spool	1



80-2006

12 spool wire assortment,
fits in 80-191 rack below

Wire Rack

Part No.	Description
80-191	Wire rack

- Holds 12 ft. - 100 ft. rolls
- For rolls up to 12 ga.
- Ideal for the 80-2006 primary wire assortment



Part No.	Gauge	Type	Jacket Color		Length	Std. Pkg.
			External	Internal		
2-401	2/16	Fig. 1	Gray	Black, white	100'	Spool
2-402	2/14	Fig. 1	Gray	Black, white	100'	Spool
2-403	2/12	Fig. 1	Gray	Black, white	100'	Spool
2-404	2/10	Fig. 1	Gray	Black, white	100'	Spool
2-422	3/16	Fig. 2	Brown, yellow, green	-	100'	Spool
2-423	4/16	Fig. 3	Brown, yellow, green, white	-	100'	Spool
2-424	3/14	Fig. 2	Brown, yellow, green	-	100'	Spool
2-425	4/14	Fig. 3	Brown, yellow, green, white	-	100'	Spool
2-426	3/12	Fig. 2	Brown, yellow, green	-	100'	Spool

Parallel Wire



Part No.	Gauge	Internal Wire Color	Strands	Length	Pkg.
3-112	2/14	Black, white	41 x 30	250'	Spool
3-113	3/14	Black, white, green	41 x 30	250'	Spool

- Type SJ00W cable
- Great flexibility and excellent resistance to oil and moisture
- Good tensile strength, elongation and aging characteristics
- Excellent abrasion resistance
- UL, CSA certified for indoor/outdoor use
- 300V at -40°F to 194°F (-40°C to 90°C)



U.L. Service Cord

BATTERY TERMINALS & ACCESSORIES

Centered bolt holes improve clamp efficiency and strength

All exceed SAE conductivity standard J163 and J1811

Smooth contact surface provides greater conductivity

Terminal provides full post contact

Gauge, polarity and crimp information printed on the barrel

Chamfered barrel for easy wire entry

Made of 100% copper alloy, zinc plated

Compatible with industry-standard crimper

Color Code and Size

The size dots will help you determine the gauge of an unmarked starter cable. Measure the bare conductor only, not the insulation. Actual diameters vary depending on specific wire stranding.



6

4

2

1

1/0

2/0

3/0

4/0



COPPER BATTERY TERMINALS

- Copper battery connectors are tin-plated for added conductivity and corrosion resistance
- Can be crimped or soldered
- Exceeds SAE conductivity standard J163 and J1811
- Works well with solder slugs
- All part numbers come in quantities of 10

Straight Clamp

Gauge	Positive	Negative	Universal
4	8-1120	8-1121	8-1122
2	8-1130	8-1131	8-1132
1	8-1140	8-1141	-
1/0	8-1150	8-1151	-
2/0	8-1160	8-1161	-
3/0	8-1170	8-1171	-
4/0	8-1180	8-1181	-



8-1160

Left Elbow

Gauge	Positive	Negative
1/0	8-1250	8-1251
2/0	8-1260	8-1261



Right Elbow

Gauge	Positive	Negative
2/0	8-1360	8-1361



Flag

Gauge	Positive	Negative
2/0	8-1460	8-1461
2/0	8-1660*	-
3/0	8-1470	8-1471
4/0	8-1480	8-1481

*Accessory wire capability



GROUP 31

Straight Clamp

Gauge	3/8" Hole Single	3/8" Hole Dual
2/0	8-1763	8-1863



Heavy Duty Copper Locking Lugs

Gauge	3/8" Hole Single	1/2" Hole
2/0	8-2763	8-2765



Non-Rotating Copper Lugs

Gauge	3/8" Hole Single	3/8" Hole Dual
4	8-4723	-
1 & 2	8-4733	-
2/0	8-4763	8-4863
3/0	8-4773	-
4/0	8-4783	-



4-152
Heavy Duty
Hand-Held Crimper

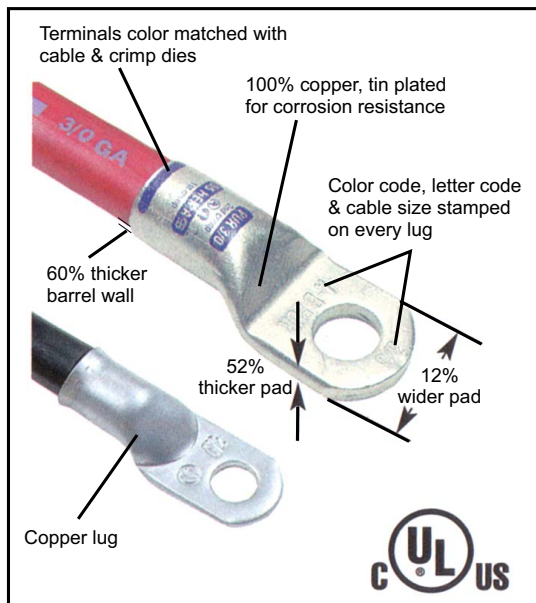


4-153
Bench Mount,
Hex Crimp



HEAVY DUTY TIN-PLATED COPPER LUGS

- Wider and thicker pad for better electrical conductivity and greater strength than standard lugs
- Copper battery lugs are tin-plated for added conductivity and corrosion resistance
- Exceeds SAE standards and conforms to TMC and ATA recommended practices
- Meets UL standard (UL Std. 486A)
- Lugs for every application
- All part numbers come in quantities of 10



Starter/Ground Lug

Gauge	1/4"	5/16"	3/8"	1/2"
6	8-4111	-	-	-
4	8-4121	8-4122	8-4123	8-4125
1 & 2	8-4131	8-4132	8-4133	8-4135
1/0	-	8-4152	8-4153	8-4155
2/0	8-4161	8-4162	8-4163	8-4165
3/0	-	-	8-4173	8-4175
4/0	-	-	8-4183	8-4185

45° Lug

Gauge	3/8"	1/2"
2/0	-	8-4365

Butt Splice



Gauge	Part No.
4	8-4920
1 & 2	8-4930
1/0	8-4950
2/0	8-4960
3/0	8-4970
4/0	8-4980

90° Lug

Gauge	3/8"	1/2"
2/0	8-4463	8-4465

3/8" Elbow

Gauge	Left	Right
2/0	8-4563	8-4663

Brazed Seam Lug - Non-Insulated



Gauge	#10	1/4"	5/16"	3/8"	1/2"
8	-	8-2001	8-2002	8-2003	-
6	8-2010	8-2011	8-2012	8-2013	-
4	-	8-2021	-	8-2023	8-2025
2	-	-	-	8-2033	-
1/0	-	-	-	8-2053	8-2055
2/0	-	-	-	8-2063	8-2065
3/0	-	-	-	8-2073	-

- Serrated barrel increases pull-out strength
- 100% copper, tin-plated
- Cost effective solution

COPPER LUGS

- Some copper battery lugs are tin-plated for added conductivity and corrosion resistance
- Ideal for crimping or soldering
- Exceeds SAE conductivity standard J163 and J1811
- Ideal for general wiring as well as starter or ground connections
- All part numbers come in quantities of 10

Starter/Ground Lug

Gauge	#10	1/4"	5/16"	3/8"	1/2"
8	8-2100	8-2101	-	8-2103	-
6	8-2110	8-2111	8-2112	8-2113	8-2115
4	-	8-2121	8-2122	8-2123	8-2125
2	-	8-2131	8-2132	8-2133	8-2135
1	-	8-2141	8-2142	8-2143	8-2145
1/0	-	-	8-2152	8-2153	8-2155
2/0	-	-	8-2162	8-2163	8-2165
3/0	-	-	-	8-2173	8-2175
4/0	-	-	-	8-2183	8-2185



Straight Lug - Tin-Plated*

Gauge	3/8"	1/2"
8	8-2203	-
6	8-2213	-
4	8-2223	-
2	8-2233	-
1	8-2243	-
1/0	8-2253	8-2255
2/0	8-2263	8-2265
3/0	8-2273	8-2275
4/0	8-2283	8-2285



*Tin-plated for added conductivity

Copper Butt Splice - Tin-Plated*

Gauge	Part No.
8	8-2900
6	8-2910
4	8-2920
2	8-2930
1	8-2940
1/0	8-2950
2/0	8-2960
4/0	8-2980



*Tin-plated for added conductivity

AUTOMOTIVE, HEAVY DUTY, MILITARY, MARINE

Automotive



Part No.	Description	Qty.
8-612	Automotive clamp, universal, 6-2/0 ga., lead	10
8-613	Heavy duty clamp, universal, 1-4/0 ga., lead	10

- Heavy duty design for truck, bus, construction, agriculture and industrial applications
- For temporary field repairs
- Universal size to fit 6 ga. to 2/0 ga.

Military



Part No.	Description	Qty.
8-618	Negative polarity, lead; zinc plated	10
8-619	Positive polarity, lead; zinc plated	10

- Military - complies with MIL SPEC A521425-1/A52425-2

Marine



Part No.	Description	Qty.
8-620	Top post-to 3/8" stud, positive polarity, brass; tin-plated	10
8-621	Top post-to 3/8" stud, positive polarity, lead; zinc plated	10
8-622	Top post-to 5/16" stud, negative polarity, brass; tin-plated	10
8-623	Top post-to 5/16" stud, negative polarity, lead; zinc plated	10

- Marine conversion battery post to stud connector

Top Mount Quick Disconnect



Part No.	Description	Qty.
8-638	Top post, negative polarity, copper; brass plated	10

- Quick disconnect - 1/4 turn of knob to disconnect battery
- Great for RV's, golf carts or long term storage of any vehicle

Conversion Connectors & Adapters

Part	Description
8-6421	Stud-to-post conversion (3/8" - 16), pos. and neg., lead, 1 pair



Accessory Wire Adapters

Fig.	Part No.	Description	Qty.
1	8-644	Adapter bolt, side terminal accessory post for single power lead	10
2	8-648	Adapter nut, terminal accessory post: 3/8" - 16 x 3/4"	10

- For adding accessory wire connections
- Precision-machined from solid brass, includes zinc-plated steel nut and washer
- Connects power accessories directly to battery*
- Adapter nut fits standard battery bolt
- Side terminal adapter bolt available for single and dual power leads

*Caution: Accessories directly connected to battery should be protected by fuse or circuit breaker device



8-644



8-648

Fig. 1

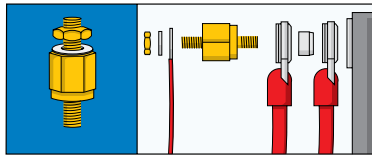
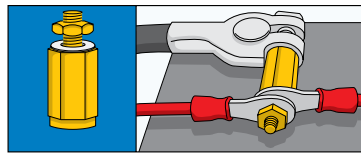


Fig. 2



HEAVY DUTY JUMPERS

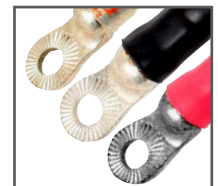
- Truck, bus, farm, construction, etc.
- 2/0 gauge for parallel connections of 2 or 3 batteries
- Exceeds SAE and OEM specifications
- Ideal for Group 31 and similar batteries
- Most efficient way to connect two or three paralleled batteries for delivery of maximum starting power at same voltage

Group 31

Battery Jumpers

Description	Positive (Red)	Negative (Black)	CLEAR-VU™ (Clear)
9", 3/8" hole	9-208	9-209	9-210
12", 3/8" hole	9-211	9-212	9-213
15", 3/8" hole	9-214	9-215	9-216
17", 3/8" hole	9-217	9-218	9-219

- Non-rotating, heavy duty battery terminals
- 2/0 ga. cable and terminals

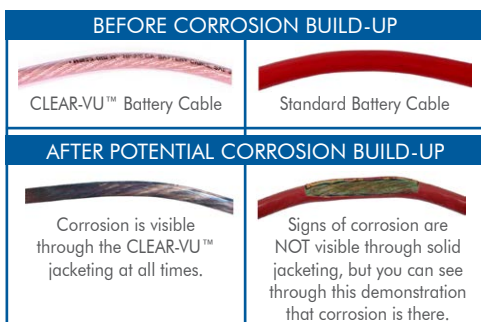


CLEAR-VU™ Battery Jumpers - OEM Replacement



Part No.	Description
9-350	2/0 CLEAR-VU™ clear, 2 lug, 8"
9-351	2/0 CLEAR-VU™ translucent smoke, 2 lug, 8"
9-352	2/0 CLEAR-VU™ translucent red, 2 lug, 8"
9-360	2/0 CLEAR-VU™ clear, 3 lug, 17"
9-361	2/0 CLEAR-VU™ translucent smoke, 3 lug, 17"
9-362	2/0 CLEAR-VU™ translucent red, 3 lug, 17"
9-370	2/0 CLEAR-VU™ clear, 4 lug, 26"
9-371	2/0 CLEAR-VU™ translucent smoke, 4 lug, 26"
9-372	2/0 CLEAR-VU™ translucent red, 4 lug, 26"

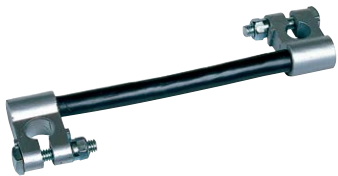
- Replaces OEM battery cables
- Translucent cable allows you to see corrosion
- Heavy wall shrink tubing stops water and contaminants from entering charging system
- Rope-style stranding for flexibility
- Operating temperature range -40°F to 150°F (-40°C to 66°C)
- Non-rotating 3/8 in. lugs



OEM Replacement Chart

PHILLIPS	Volvo/Mack	Freightliner	Peterbilt	Kenworth	International
9-351	32001404	N54-4226	D6204-3035	D6204-3035	547937C91
9-352	3201140280	N54-4883	D6207-1046	D6207-1046	546389C91
9-361	8085769	N54-4667	-	-	546889C91
9-362	8075153	N54-4688	-	-	547422C91

Battery-To-Battery Jumpers



Gauge	8"	12"
2/0	9-126	9-128

- Lead terminals
- 2/0 ga. cable
- Black cable

Braided Ground Straps



Gauge	12"	18"	24"
4	9-150	9-151	9-152

- Fine stranded copper conductor for maximum conductivity and flexibility
- Corrosion resistant plating
- 3/8 in. hole

Coiled Ground Cable



Part No.	Description
9-5560	5' PERMACOIL™ coiled ground cable, 8 ga.

- Cable offers more flexibility and allows for less tangling when the fifth wheel is adjusted back and forth
- 5 ft. extended working length
- PERMACOIL™ cable jacketing has good recoil memory and is UV, chemical and abrasion resistant
- Flexible from -87°F to 150°F (-66°C to 66°C)
- Tin-plated copper lugs and heat shrink tubing used to help prevent corrosion at the connections

Two Battery Jumpers

Top Post-to-Power Take-Off Post

Description	Positive	Negative
7-3/8"	9-242	9-243

Stud-to-Power Take-Off Stud

Description	Positive	Negative
7-3/8"	9-262	9-263



Three Battery Jumpers

Stud-to-Power Take-Off Post

Description	Positive	Negative
14-3/4"	9-282	9-283

Stud-to-Power Take-Off Stud

Description	Positive	Negative
13-5/8"	9-290	9-291
14-3/4"	9-292	9-293



TERMINAL PROTECTORS

- Protects alternator and electrical system from shorts
- Reduces the risk of battery explosion caused by sparks
- High temperature PVC construction, rated at 190°F (90°C)
- Color-coded for easy polarity identification

Straight Clamp

Gauge	Red	Black
1 & 2	8-7122	8-7123
1/0 & 2/0	8-7124	8-7125
3/0 & 4/0	8-7126	8-7127



Right Elbow

Gauge	Red	Black
1/0 & 3/0	8-7132	8-7133



Left Elbow

Gauge	Red	Black
1/0 & 3/0	—	8-7137



Flag Clamp

Gauge	Red	Black
1/0 & 2/0	8-7142	8-7143



Heavy Duty Starter

Gauge	Red	Black
1/0 & 2/0	8-7146	8-7147



Straight or Angle Lug

Gauge	Red	Black
4	8-7150	8-7151



SOLDER SLUGS

Solder Flux



Part No.	Description	Qty.
7-259	2 oz. bottle of solder flux	1

- Cleans conductors and terminals for soldering

Solder Slugs



Part No.	Wire Gauge	Color	Qty.
7-260	6	Gray	25
7-261	4	Gray	25
7-262	2	Green	25
7-263	1	Pink	25
7-264	1/0	Black	25
7-265	2/0	Orange	25
7-266	3/0	Purple	25
7-267	4/0	Yellow	25

Solder slugs were developed as a quick way to attach a battery terminal to the cable. Solder slugs eliminate the need for a crimping tool.

- Makes an OEM quality sealed connection
- Drop slug into terminal, insert cable, heat...finished!
- Fast-easy-clean-safe
- For best results, use STA-DRY® heat shrink tubing

Solder Kit



7-1800

Part No.	Description
7-1800	Solder kit

7-1800 Contents:

Replacement Part No.	Description	Qty.
6-402	STA-DRY® heat shrink tubing 6-4 ga., 1/2", black	10
6-403	STA-DRY® heat shrink tubing 6-4 ga., 1/2", red	10
6-404	STA-DRY® heat shrink tubing 2-2/0 ga., 3/4", black	10
6-405	STA-DRY® heat shrink tubing 2-2/0 ga., 3/4", red	10
7-259	Battery terminal solder flux	1
7-260	Solder slug - 6 ga., gray	20
7-261	Solder slug - 4 ga., gray	20
7-263	Solder slug - 1 ga., pink	10
7-264	Solder slug - 1/0 ga., black	10
7-265	Solder slug - 2/0 ga., orange	10

BATTERY FASTENER HARDWARE

- Complete selection of standard and heavy duty battery related hardware
- Hardware meets or exceeds OEM, SAE or MIL specifications, where relevant

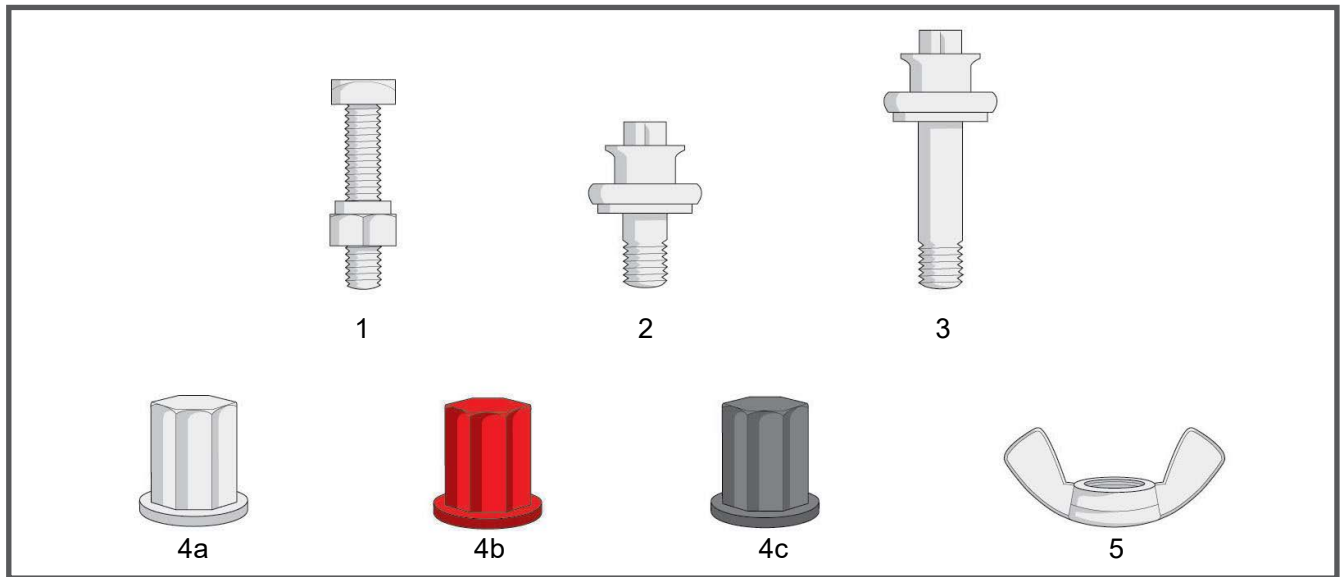


Fig.	Part No.	Description	Qty.
1	8-651	Bolt, square head and shoulder nut, 5/16" - 18 x 1-1/4", steel, tin-plated	10
2	8-656	Bolt, side terminal, 3/8" - 16 x 15/32", for single power lead, OEM type	10
3	8-657	Bolt, side terminal, 3/8" - 16 x 1", for dual power leads, OEM type	10
4a	8-662	Nut, closed-cap, 3/8" - 16, stainless steel, group 31, universal	10
4b	8-663	Nut, closed-cap, 3/8" - 16, red, stainless steel, positive	10
4c	8-664	Nut, closed-cap, 3/8" - 16, black, stainless steel, negative	10
5	8-667	Nut, wing, 3/8" - 16	10

BATTERY BOXES & HOLD-DOWNS

Commercial Battery Boxes



Part No.	Description
9-404	8D High (Inside 21"L x 11-3/4"W x 11"D, Outside 24-1/2"L x 14-1/2"W x 13"D)

- Composite
- Resists acid, gasoline, oil and solvents
- Flame resistant
- UV stabilized (rating 6)
- Rugged, durable heavy wall construction
- Top vents prevent hydrogen gas build-up
- Cover held firmly with convenient thumb screws

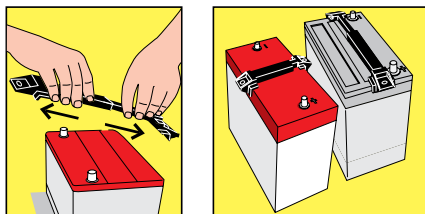
Heavy Duty Battery Boxes



Part No.	Description
9-405	Group 24 (Inside 10-3/8"L x 7"W x 9-1/2"H, Outside 16-1/2"L x 9"W x 10-1/4"H)
9-407	Group 24-31 (Inside 12-3/4"L x 7-1/4"W x 9-3/4"H, Outside 14-3/4"L x 9"W x 10-1/2"H)

- Acid-proof, seamless polyethylene construction keeps battery clean and dry
- Top vents prevent hydrogen gas build-up
- Includes hold-down strap and mounting brackets

Battery Hold-Down



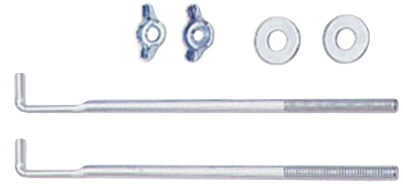
Description	5 1/2" to 9"	8 5/8" to 14 3/4"
Offset hold-down	9-413	-
Flush hold-down	-	9-416

- Infinitely adjustable and lockable
- Non-conductive; eliminates hold-down as source of shorts
- Ideal for all applications
- Fiberglass-reinforced polypropylene is rust and corrosion proof
- Does not include mounting hardware
- Standard pack of 1

Hold-Down Bolt Sets - "L" Style

Part No.	Description	Qty.
9-427	Hold-down bolt set, 8"	1
9-428	Hold-down bolt set, 10"	1

- Long thread accommodates all crossbar / frame designs
- Use with battery trays
- "L" style bend eliminates any need to shift or remove battery
- Sold as a pair - hardware included



BOOSTER CABLES

- Tangle-proof cable
- Flexible from -58°F to 221°F (-50°C to 105°C)
- 100% copper welding cable for maximum conductivity
- Solid copper 500 and 800 amp clamps

Description	500 amp	800 amp
Booster clamps	9-309	9-310

- Solid copper parrot clamps
- Sold in pairs only
- Hardware included
- 9-309 will accept up to 1/0 ga. lug and cable
- 9-310 will accept up to 3/0 ga. lug and cable



Heavy Duty Booster Cable

Part No.	Gauge	Amp	Length	Clamp Style
9-313	4	500	16'	Coated parrot
9-323	2	500	20'	Mechanic

- Resealable vinyl bag
- Carrying handle



Commercial Heavy Duty Booster Cable



Part No.	Gauge	Amp	Length	Clamp Style
9-325	2/0	800	20'	Parrot clamp

- Resealable / waterproof bucket
- Carrying handle

PREVENTIVE MAINTENANCE

Protective Spray



Part No.	Description	Qty.
8-752	Protective aerosol spray, 10 oz.	1

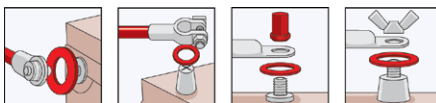
- Red spray protects exposed electrical connections from corrosion, ensuring maximum current flow
- Use on battery terminals, connectors and hardware
- Compact size fits in toolbox or pocket
- For occasional use

Protective Washers



Part No.	Description
9-435	Felt washers, top post terminal, black, 100 pieces
9-436	Felt washers, top post terminal, red, 100 pieces

- Contains long-lasting corrosion inhibitors to extend life of battery connectors and hardware
- Easy to install - slip over post



SERVICE KITS

Field Service Kit

Part No.	Description
9-1002	2/0 battery cable field service kit

9-1002 Contents:

Replacement Part No.	Description	Qty.
-	Heavy duty handheld cable cutter	1
4-152	Heavy duty handheld hex crimp tool	1
6-211	Red 6" heat shrink tubing, 6-2/0 ga.	2
6-212	Black 6" heat shrink tubing, 6-2/0 ga.	2
8-1160	2/0 ga. straight clamps, positive	2
8-1161	2/0 ga. straight clamps, negative	2
8-1460	2/0 ga. flag clamps, positive	2
8-1461	2/0 ga. flag clamps, negative	2
8-4165	2/0 ga. heavy duty tin-plated straight lugs, 1/2" stud	2
8-4763	2/0 ga. single cable locking anti-rotational lugs, 3/8" stud	2
8-4863	2/0 ga. dual cable locking anti-rotational lugs, 3/8" stud	2
8-7124	Red terminal protectors, straight clamps - fits 1/0 and 2/0 ga.	4
8-7125	Black terminal protectors, straight clamps - fits 1/0 and 2/0 ga.	4
8-7142	Red terminal protectors, flag clamps - fits 1/0 and 2/0 ga.	2
8-7143	Black terminal protectors, flag clamps - fits 1/0 and 2/0 ga.	2



9-1002

- Field repair kit contains components to build or repair 2/0 battery cables
- Portable and convenient durable (7) compartment metal box with handle and latch

Field Service Kit - Heavy Duty

Part No.	Description
9-1004	Heavy duty battery cable field service kit

9-1004 Contents:

Replacement Part No.	Description	Qty.
6-404	Black 1.5" heat shrink tubing, 6-2/0 ga.	20
6-405	Red 1.5" heat shrink tubing, 6-2/0 ga.	20
8-651	5/16" x 1 1/4" tin-plated battery bolts and 5/16" nuts	28
8-662	3/8" stainless steel closed cap nuts	5
8-1160	2/0 ga. straight clamps, positive	10
8-1161	2/0 ga. straight clamps, negative	10
8-1460	2/0 ga. flag clamps, positive	4
8-1461	2/0 ga. flag clamps, negative	4
8-2263	2/0 ga. tin-plated straight lugs, 3/8" stud	10
8-2265	2/0 ga. tin-plated straight lugs, 1/2" stud	10
8-2763	2/0 ga. terminal locking lugs, 3/8" stud	10
8-2765	2/0 ga. terminal locking lugs, 1/2" stud	5
8-4165	2/0 ga. heavy duty tin-plated straight lugs, 1/2" stud	5
8-4763	2/0 ga. single cable locking anti-rotational lugs, 3/8" stud	5
8-4863	2/0 ga. dual cable locking anti-rotational lugs, 3/8" stud	4
8-7124	Red terminal protectors, straight clamps - fits 1/0 and 2/0 ga.	5
8-7125	Black terminal protectors, straight clamps - fits 1/0 and 2/0 ga.	5
8-7142	Red terminal protectors, flag clamps - fits 1/0 and 2/0 ga.	3
8-7143	Black terminal protectors, flag clamps - fits 1/0 and 2/0 ga.	3

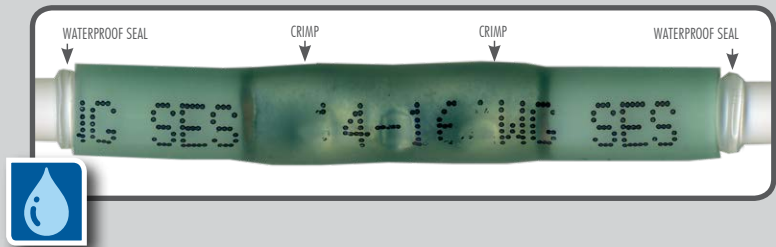
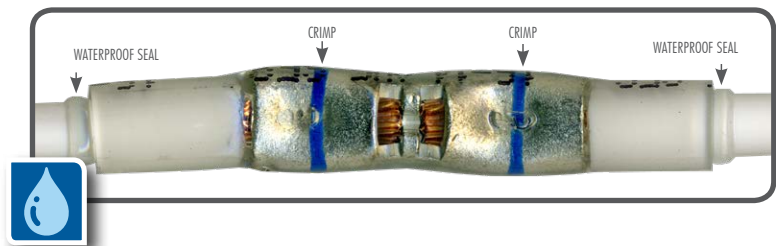
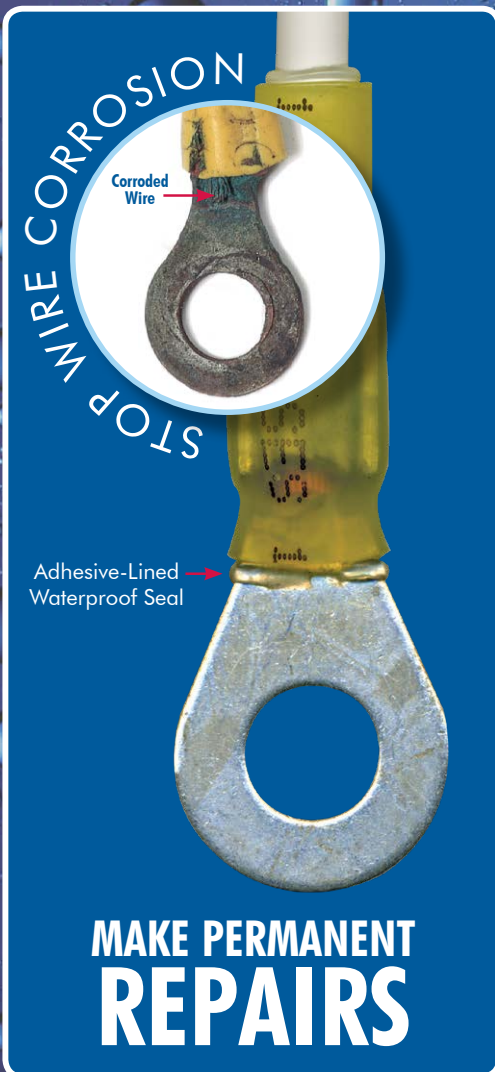


9-1004

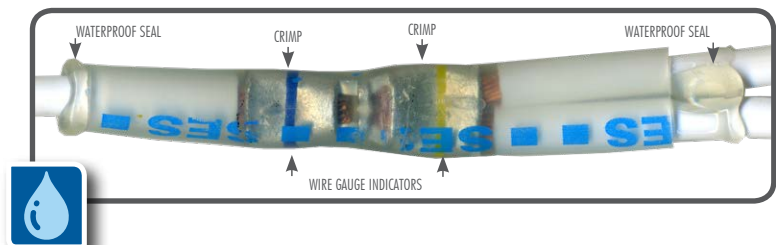
- Assortment contains components needed to make OEM quality cables
- Durable 24 compartment metal box with handle and latch fits into standard fastener rack

PHILLIPS STA-DRY® HEAT SHRINK CONNECTORS

Designed to meet the
harshest electrical
demands a tractor or
trailer will encounter!



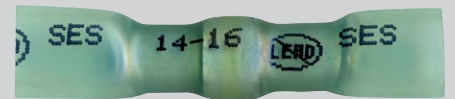
SPECIALTY TRAILER WIRING



CRIMP, SOLDER & SEAL™ The Ultimate Electrical Connection!

- Crimp provides mechanical reliability and holds wires in place for soldering
- Solder provides maximum tensile strength and conductivity
- Seal prevents wire corrosion ... Keeps out moisture and road salts

1-1862



81% stronger than



CLEAR-VU™, CRIMP & SEAL™ Innovative Crimp Connectors!

- Crystal-clear tubing provides unparalleled visual inspection and weatherproof seal
- Window ensures the wire is stripped to proper length and is fully seated to wire stop
- Color-coded stripes identify wire gauge size and show where to crimp the connector

1-1662



50% stronger than



CRIMP & SEAL™ Excellent Mechanical Connection!

- Crimp provides mechanical reliability for excellent conductivity
- Seal prevents wire corrosion ... Keeps out moisture and road salts

1-1962



50% stronger than



STA-DRY™ MULTIPLE WIRE CONNECTOR

- Allows splicing 2 wires to 1 wire
- Easy to crimp for a strong mechanical termination
- Window allows for visual inspection
- Seal prevents wire corrosion

1-1724

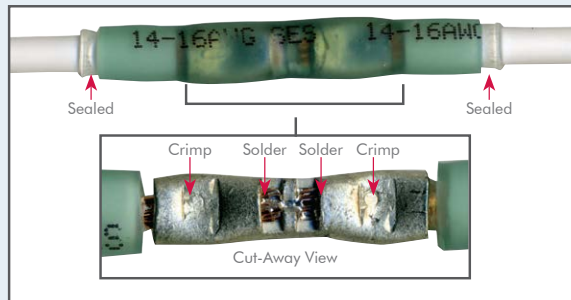


STA-DRY® CRIMP, SOLDER & SEAL™

The Ultimate Electrical Connection!



- Crimp provides mechanical reliability and holds wires in place for soldering
- Solder flows into window to solder wire to connector
- Solder provides maximum tensile strength and conductivity
- Seal prevents wire corrosion...keeps out moisture and road salts
- CRIMP, SOLDER & SEAL™ connectors meet or exceed the most stringent OEM standards
- RoHS compliant



Butt Connectors



Heat Required



Color	Gauge	Part No. (25 Pcs. Per Bag)	Part No. (100 Pcs. Per Bag)	Part No. (500 Pcs. Per Bag)	Part No. (5 Pcs. Per Clamshell)	Part No. (60 Pcs. Per Jar)	Part No. (100 Pcs. Per Jar)
Red	22-18	1-1863	1-1863-100	1-1863-500	1-1863C	-	1-1863J
Blue	16-14	1-1862	1-1862-100	1-1862-500	1-1862C	-	1-1862J
Yellow	12-10	1-1861	1-1861-100	1-1861-500	1-1861C	1-1861J	-



SHAKE JAR

Ring Terminals



Heat Required



Color	Gauge	Stud	Part No. (25 Pcs. Per Bag)	Part No. (5 Pcs. Per Clamshell)
Red	22-18	#10	1-1878	-
Blue	16-14	#10	1-1875	1-1875C
Blue	16-14	1/4"	1-1876	-
Blue	16-14	3/8"	1-1877	-
Yellow	12-10	#10	1-1871	-
Yellow	12-10	1/2"	1-1872	-
Yellow	12-10	1/4"	1-1873	1-1873C
Yellow	12-10	3/8"	1-1874	1-1874C

Spade Terminals

Color	Gauge	Stud	Part No. (25 Pcs. Per Bag)
Blue	16-14	#10	1-1880
Yellow	12-10	#10	1-1879



Heat Required



Slip-On Terminals

Color	Gauge	Tab	Style	Part No. (25 Pcs. Per Bag)	Part No. (5 Pcs. Per Clamshell)
Blue	16-14	.250"	Female	1-1893	1-1893C
Blue	16-14	.250"	Male	1-1894	1-1894C
Yellow	12-10	.250"	Female	1-1891	-
Yellow	12-10	.250"	Male	1-1892	-



Heat Required



STA-DRY® CRIMP, SOLDER & SEAL™ Kit

Part No.	Description
1-1803	STA-DRY® CRIMP, SOLDER & SEAL™ kit

1-1803 Contents:

Connector Style	Gauge & Size	Part No.	Qty.
Butt connector	12-10	1-1861	4
Butt connector	16-14	1-1862	8
Butt connector	22-18	1-1863	4
Ring	12-10, 1/4"	1-1873	4
Ring	12-10, 3/8"	1-1874	4
Ring	16-14, 10"	1-1875	4
Ring	16-14 1/4"	1-1876	4
Ring	16-14, 3/8"	1-1877	4
Ring	22-18, 10"	1-1878	3
Female slip-on	16-14, .250"	1-1893	3
Male slip-on	16-14, .250"	1-1894	3



1-1803

11 Part #'s, 45 Pieces
7 1/2 in. x 3 3/4 in.

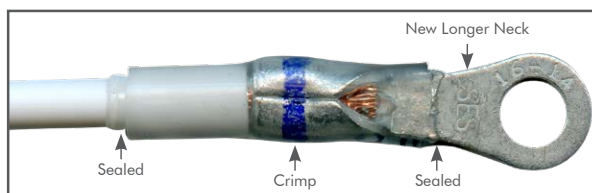
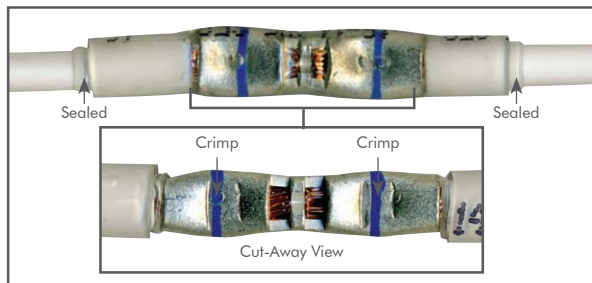
STA-DRY® CLEAR-VU™ CRIMP & SEAL™

Innovative Crimp Connectors!



50% stronger than

- CLEAR-VU™ crystal-clear tubing provides unparalleled visual inspection
- Window ensures the wire is stripped to the proper length and is fully seated to wire stop
- Color-coded stripes identify wire gauge size to use and where to crimp the connector
- Crimp provides mechanical reliability for excellent conductivity
- Waterproof seal prevents wire corrosion ...keeps out moisture and road salts
- Seamless barrel ensures superior crimp performance
- Wire-stop prevents over-insertion of wire
- Wire gauge imprint simplifies wire size identification
- RoHS compliant



CLEAR-VU™ Window Butt Connectors



Heat Required



Color	Gauge	Part No. (25 Pcs. Per Bag)	Part No. (100 Pcs. Per Bag)	Part No. (60 Pcs. Per Jar)	Part No. (100 Pcs. Per Jar)
Red	22-18	1-1661	1-1661-100	-	1-1661J
Blue	16-14	1-1662	1-1662-100	-	1-1662J
Yellow	12-10	1-1663	1-1663-100	1-1663J	-



SHAKE JAR

CLEAR-VU™ Window Step-Down Connectors



Heat Required

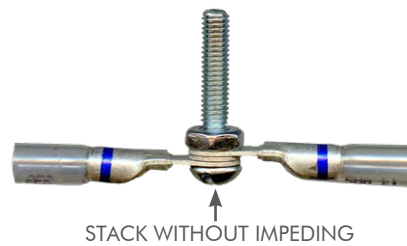


Gauge	Side 1 ga.	TO	Side 2 ga.	Part No. (25 Pcs. Per Bag)
16-14	22-18		16-14	1-1618
12-10	16-14		12-10	1-1617
8	12-10		8	1-1616

CLEAR-VU™ Ring Terminals

Color	Gauge	Stud	Part No. (25 Pcs. Per Bag)
Blue	16-14	#10	1-1623
Blue	16-14	1/4"	1-1624
Blue	16-14	3/8"	1-1626
Yellow	12-10	#10	1-1633
Yellow	12-10	1/4"	1-1634
Yellow	12-10	3/8"	1-1636

CLEAR-VU™ ring terminals have a longer neck, enabling them to be stacked without the tubing impeding contact between the screw and terminal and providing a flush mount.



Heat Required



CLEAR-VU™ Fully Insulated Slip-On Terminals

Color	Gauge	Tab	Style	Part No. (25 Pcs. Per Bag)
Red	22-18	.250"	Female	1-1675
Red	22-18	.250"	Male	1-1676
Blue	16-14	.250"	Female	1-1671
Blue	16-14	.250"	Male	1-1672
Yellow	12-10	.250"	Female	1-1665
Yellow	12-10	.250"	Male	1-1666



Heat Required



STA-DRY® CRIMP & SEAL™

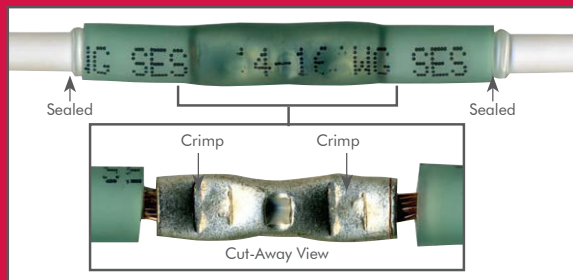
A Strong Electrical Connection!



50% stronger than



- Crimp provides mechanical reliability for excellent conductivity
- Seal prevents wire corrosion ... Keeps out moisture and road salts
- RoHS compliant



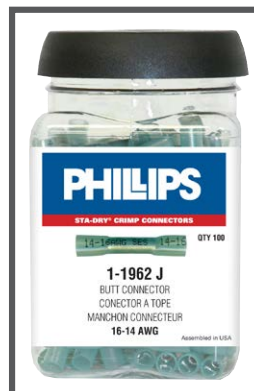
Butt Connectors



Heat Required



Color	Gauge	Part No. (25 Pcs. Per Bag)	Part No. (100 Pcs. Per Bag)	Part No. (500 Pcs. Per Bag)	Part No. (5 Pcs. Per Clamshell)	Part No. (60 Pcs. Per Jar)	Part No. (100 Pcs. Per Jar)
Red	22-18	1-1961	1-1961-100	1-1961-500	1-1961C	-	1-1961J
Blue	16-14	1-1962	1-1962-100	1-1962-500	1-1962C	-	1-1962J
Yellow	12-10	1-1963	1-1963-100	1-1963-500	1-1963C	1-1963J	-
Red	8	1-1964	-	-	-	-	-



SHAKE JAR

Step-Down Connectors

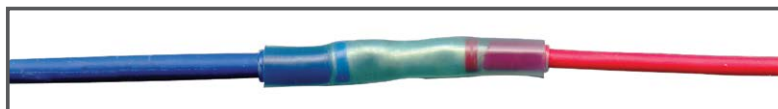


Heat Required



Color	Gauge	Side 1 ga.	TO	Side 2 ga.	Part No. (10 Pcs. Per Bag)
Blue	16-14	22-18		16-14	1-1728
Yellow	12-10	16-14		12-10	1-1727
Red	8	12-10		8	1-1726

- Connects 2 different wire gauges
- Each end color coded



Ring Terminals

Color	Gauge	Stud	Part No. (10 Pcs. Per Bag)	Part No. (25 Pcs. Per Bag)	Part No. (100 Pcs. Per Bag)	Part No. (5 Pcs. Per Clamshell)
Red	22-18	#6	-	1-1917	-	-
Red	22-18	#8	-	1-1918	-	-
Red	22-18	#10	-	1-1919	-	1-1919C
Red	22-18	1/4"	-	1-1920	-	-
Blue	16-14	#6	-	1-1921	-	-
Blue	16-14	#8	-	1-1922	-	-
Blue	16-14	#10	-	1-1923	1-1923-100	1-1923C
Blue	16-14	1/4"	-	1-1924	1-1924-100	1-1924C
Blue	16-14	5/16"	-	1-1925	-	-
Blue	16-14	3/8"	-	1-1926	1-1926-100	1-1926C
Yellow	12-10	#8	-	1-1932	-	-
Yellow	12-10	#10	-	1-1933	1-1933-100	1-1933C
Yellow	12-10	1/4"	-	1-1934	1-1934-100	1-1934C
Yellow	12-10	5/16"	-	1-1935	-	-
Yellow	12-10	3/8"	-	1-1936	1-1936-100	-
Yellow	12-10	1/2"	-	1-1937	-	-
Red	8	#10	1-1945	-	-	-
Red	8	1/4"	1-1946	-	-	-
Red	8	5/16"	1-1947	-	-	-
Red	8	3/8"	1-1948	-	-	-



Heat Required



Spade Terminals

Color	Gauge	Stud	Part No. (25 Pcs. Per Bag)
Red	22-18	#8	1-1939
Blue	16-14	#6	1-1940
Blue	16-14	#8	1-1941
Blue	16-14	#10	1-1942
Yellow	12-10	#10	1-1944



Heat Required



Fully Insulated Slip-On Terminals

Color	Gauge	Tab	Style	Part No. (25 Pcs. Per Bag)	Part No. (100 Pcs. Per Bag)	Part No. (5 Pcs. Per Clamshell)
Red	22-18	.250"	Female	1-1975	-	1-1975C
Red	22-18	.250"	Male	1-1976	-	1-1976C
Blue	16-14	.250"	Female	1-1971	1-1971-100	1-1971C
Blue	16-14	.250"	Male	1-1972	1-1972-100	1-1972C
Yellow	12-10	.250"	Female	1-1965	1-1965-100	1-1965C
Yellow	12-10	.250"	Male	1-1966	1-1966-100	-



Heat Required



Slip-On Terminals



Heat Required



Color	Gauge	Tab	Style	Part No. (25 Pcs. Per Bag)
Red	22-18	.110"	Female	1-1950
Red	22-18	.250"	Female	1-1951
Red	22-18	.250"	Male	1-1952
Blue	16-14	.187"	Female	1-1953
Blue	16-14	.250"	Female	1-1954
Blue	16-14	.250"	Male	1-1955
Yellow	12-10	.250"	Female	1-1956
Yellow	12-10	.250"	Male	1-1957

4-Wire Connectors



Heat Required



Color	Gauge	Part No. (25 Pcs. Per Bag)
Blue	16-14	1-2241
Yellow	12-10	1-2242

Bullet Connectors



Heat Required



Color	Gauge	Diameter	Style	Part No. (25 Pcs. Per Bag)	Part No. (100 Pcs. Per Bag)	Part No. (5 Pcs. Per Clamshell)
Red	22-18	.157"	Male	1-1982	-	-
Red	22-18	.180"	Male	1-2268	-	-
Red	22-18	.157"	Female	1-1981	-	-
Red	22-18	.180"	Female	1-2266	-	-
Blue	16-14	.157"	Male	1-1984	-	-
Blue	16-14	.180"	Male	1-2269	1-2269-100	1-2269C
Blue	16-14	.157"	Female	1-1983	-	-
Blue	16-14	.180"	Female	1-2267	1-2267-100	1-2267C

STA-DRY® CRIMP & SEAL™ Kits

Connector Style	Wire Gauge & Size	Part No.	1-1905 Mini Kit	1-1903 Mini Kit	1-1900 Kit
Ring	22-18, #10	1-1919	-	4	5
Ring	16-14, #10	1-1923	-	4	5
Ring	16-14, 1/4"	1-1924	-	4	5
Ring	16-14, 3/8"	1-1926	-	4	5
Ring	12-10, #10	1-1933	-	4	5
Ring	12-10, 1/4"	1-1934	-	4	5
Butt connector	22-18	1-1961	10	5	20
Butt connector	16-14	1-1962	10	10	30
Butt connector	12-10	1-1963	10	5	20
Butt connector	24-22	1-1967	-	-	1
Female slip-on	16-14, .250"	1-1971	-	4	5
Male slip-on	16-14, .250"	1-1972	-	4	5
Female slip-on	22-18, .250"	1-1975	-	4	-
Mini-jet torch		4-054	1	-	-

1-1905

4 Part #'s
30 Pieces
1 Mini-Torch
7 1/2 in. x 3 3/4 in.

**1-1903**

12 Part #'s
56 Pieces
7 1/2 in. x 3 3/4 in.

**1-1900**

12 Part #'s
115 Pieces
11 in. x 6 3/4 in.

**MOBILE WIRE REPAIR KIT**
STA-DRY® CRIMP & SEAL™

Part No.	Description
80-1000	STA-DRY® CRIMP & SEAL™ mobile wire repair kit

80-1000 Contents:

Part No.	Description
1-1961	22-18 ga., red, 25 pcs.
1-1962	16-14 ga., blue, 25 pcs.
1-1963	12-10 ga., yellow, 25 pcs.
1-1919	22-18 ga., #10, red, 25 pcs.
1-1923	16-14 ga., #10, blue, 25 pcs.
1-1933	12-10 ga., #10, yellow, 25 pcs.
1-1924	16-14 ga., 1/4", blue, 25 pcs.
1-1926	16-14 ga., 3/8", blue, 25 pcs.
1-1934	12-10 ga., 1/4", yellow, 25 pcs.
1-2269	16-14 ga., .180", male, blue, 25 pcs.
1-2267	16-14 ga., .180", female, blue, 25 pcs.
1-1971	16-14 ga., .250", female, blue, 25 pcs.
1-1972	16-14 ga., .250", male, blue, 25 pcs.
1-2268	22-18 ga., .180", male, red, 25 pcs.
1-2266	22-18 ga., .180", female, red, 25 pcs.
1-1939	22-18 ga., #8, red, 25 pcs.
1-1942	16-14 ga., #10, blue, 25 pcs.
1-1944	12-10 ga., #10, yellow, 25 pcs.
1-1728	22-18 to 16-14 ga., blue, 10 pcs.
1-1727	16-14 to 12-10 ga., yellow, 10 pcs.
4-214	Wire stripping and crimping tool
6-300	20-16 ga., STA-DRY® flexible dual wall heat shrink tubing, 6 pcs.
6-301	16-14 ga., STA-DRY® flexible dual wall heat shrink tubing, 6 pcs.
—	Cable ties - 8" L 50lb. black, 25 pcs.
—	Butane torch

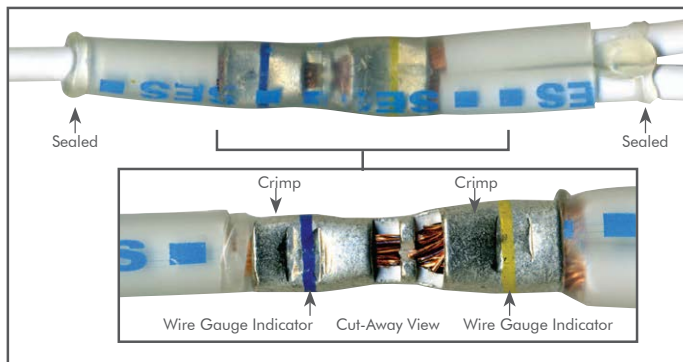


Torch and Multi-Purpose Crimp Tool Included

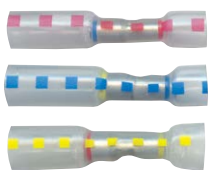


STA-DRY® MULTIPLE WIRE CONNECTORS

- Window ensures the wire is stripped to the proper length and is fully seated to the wire stop
- Allows for "daisy chain" by joining 3 wires in-line
- Active adhesive seals between multiple wires to prevent corrosion
- Tapered barrel has a uniform copper wall, making it easy to crimp with a strong termination
- Color-coded stripes identify wire gauge size to use and where to crimp the connector
- Crimp provides mechanical reliability for excellent conductivity
- RoHS compliant



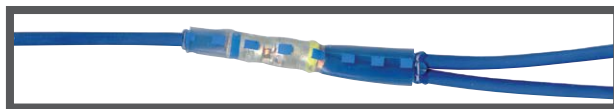
Multiple Wire Connectors



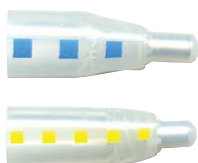
Heat Required



Color	Gauge	Tubing Color	Part No. (10 Pcs. Per Bag)	Part No. (100 Pcs. Per Bag)	Part No. (25 Pcs. Per Jar)
Red	22-18	Clear/Red	1-1725	1-1725-100	-
Blue	16-14	Clear/Blue	1-1724	1-1724-100	1-1724J
Yellow	12-10	Clear/Yellow	1-1723	1-1723-100	-



Closed-End Connectors



Heat Required



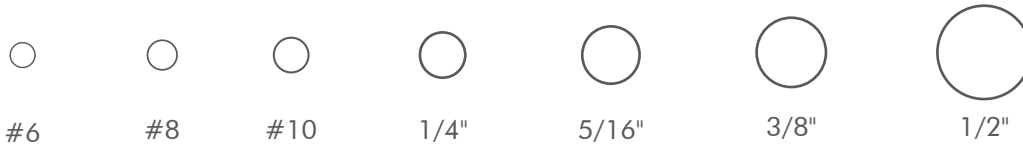
Color	Gauge	Tubing Color	Part No. (10 Pcs. Per Bag)
Blue	22-14	Clear/Blue	1-1730
Yellow	18-10	Clear/Yellow	1-1729



PVC TERMINALS

STUD HOLE CHART

Actual-Size Stud Hole Gauge



Stud Size	6	8	10	1/4	5/16	3/8	1/2
Hole Diam. - in	.143	.169	.196	.262	.323	.388	.516
Hole Diam. - mm	3.3632	4.292	4.978	6.655	8.204	9.855	13.106

Butt Connectors - PVC

Color	Gauge	Part No. (25 Pcs. Per Bag)	Part No. (100 Pcs. Per Bag)
Red	22-18	-	1-51006
Blue	16-14	1-51104	1-51106
Yellow	12-10	1-51204	1-51206
Blue	6	1-51304	-



Hook Terminal - PVC

Color	Gauge	Stud	Part No. (25 Pcs. Per Bag)
Blue	16-14	#10	1-52424



Ring Terminals - PVC



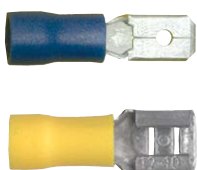
Color	Gauge	Stud	Part No. (25 Pcs. Per Bag)	Part No. (50 Pcs. Per Bag)	Part No. (100 Pcs. Per Bag)
Red	22-18	#10	-	-	1-52026
Red	22-18	1/4"	1-52034	-	-
Red	22-18	5/16"	1-52044	-	-
Red	22-18	3/8"	1-52054	-	-
Blue	16-14	#8	1-52114	-	1-52116
Blue	16-14	#10	1-52124	-	1-52126
Blue	16-14	1/4"	1-52134	-	1-52136
Blue	16-14	5/16"	1-52144	-	1-52146
Blue	16-14	3/8"	1-52154	-	1-52156
Yellow	12-10	#8	1-52214	-	1-52216
Yellow	12-10	#10	1-52224	-	1-52226
Yellow	12-10	1/4"	1-52234	-	1-52236
Yellow	12-10	5/16"	1-52244	-	1-52246
Yellow	12-10	3/8"	1-52254	-	1-52256
Yellow	12-10	1/2"	-	1-52265	-
Blue	6	1/4"	1-52334	-	-
Blue	6	3/8"	1-52354	-	-
Blue	6	1/2"	1-52364	-	-

Spade Terminals - PVC



Color	Gauge	Stud	Part No. (25 Pcs. Per Bag)
Red	22-18	#8	1-54014
Red	22-18	#10	1-54024
Blue	16-14	#6	1-54104
Blue	16-14	#8	1-54114
Blue	16-14	#10	1-54124
Yellow	12-10	#10	1-54224
Yellow	12-10	1/4"	1-54234

Slip-On Terminals - PVC



Color	Gauge	Tab	Style	Part No. (25 Pcs. Per Bag)	Part No. (50 Pcs. Per Bag)	Part No. (100 Pcs. Per Bag)
Blue	16-14	.250"	Male	1-53104	1-53105	-
Blue	16-14	.250"	Female	1-53114	1-53115	-
Blue	16-14	.187"	Female	1-53134	-	-
Yellow	12-10	.250"	Male	1-53204	-	1-53206
Yellow	12-10	.250"	Female	1-53214	-	1-53216

Fully Insulated Slip-On Terminals - PVC

Color	Gauge	Tab	Style	Part No. (25 Pcs. Per Bag)	Part No. (50 Pcs. Per Bag)
Red	22-18	.250"	Male	1-53304	-
Red	22-18	.250"	Female	1-53314	-
Blue	16-14	.250"	Male	1-53404	-
Blue	16-14	.250"	Female	1-53414	-
Yellow	12-10	.250"	Male	1-53504	1-53505
Yellow	12-10	.250"	Female	1-53514	1-53515



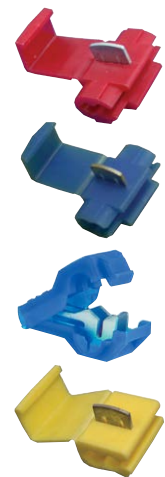
Bullet Connectors - PVC

Color	Gauge	Diameter	Style	Part No. (25 Pcs. Per Bag)	Part No. (50 Pcs. Per Bag)	Part No. (100 Pcs. Per Bag)
Blue	16-14	.157"	Male	1-55104	-	1-55106
Blue	16-14	.157"	Female	1-55114	-	1-55116
Blue	16-14	.188"	Male	1-55124	1-55125	-
Blue	16-14	.188"	Female	1-55134	1-55135	-



Quick Splice - PVC

Color	Gauge	Style	Part No. (5 Pcs. Per Bag)	Part No. (15 Pcs. Per Bag)	Part No. (25 Pcs. Per Bag)	Part No. (100 Pcs. Per Bag)
Red	22-18	In-line	1-56001	1-56003	-	-
Red	22-18	T-tap	1-56011	1-56013	-	-
Blue	16-14	In-line	1-56101	-	1-56104	1-56106
Blue	16-14	T-tap	1-56111	-	1-56114	1-56116
Yellow	12-10	In-line	1-56201	1-56203	-	-
Yellow	12-10	T-tap	1-56211	1-56213	-	-



Wire Terminal Kit - PVC



1-2200

Part No.	Description
1-2200	PVC wire terminal kit

1-2200 Contents:

Equivalent Replacement Part No.	Description	Qty.
1-51006*	Butt connector - 22-18 ga., insulated PVC	50
1-51106*	Butt connector - 16-14 ga., insulated PVC	50
1-51206*	Butt connector - 12-10 ga., insulated PVC	50
1-52124	Ring terminal - 16-14 ga., #10, insulated PVC	25
1-52134	Ring terminal - 16-14 ga., 1/4", insulated PVC	25
1-52154	Ring terminal - 16-14 ga., 3/8", insulated PVC	25
1-52224	Ring terminal - 12-10 ga., #10, insulated PVC	25
1-52234	Ring terminal - 12-10 ga., 1/4", insulated PVC	25
1-52254	Ring terminal - 12-10 ga., 3/8", insulated PVC	25
1-53104	Slip-on terminal - 16-14 ga., .250 male, insulated PVC	25
1-53114	Slip-on terminal - 16-14 ga., .250 female, insulated PVC	25
1-53404	Slip-on terminal - 16-14 ga., .250", male, fully insulated PVC	25
1-53414	Slip-on terminal - 16-14 ga., .250", female, fully insulated PVC	25
1-54124	Spade terminal - 16-14 ga., #10, PVC	25
1-54224	Spade terminal - 12-10 ga., #10, PVC	25
1-55124	Bullet connector - 16-14 ga., .188", male, insulated PVC	25
1-55134	Bullet connector - 16-14 ga., .188", female, insulated PVC	25
1-56104	Quick splice - 16-14 ga., inline, PVC	25
4-214	Shop tool - wire stripping and crimping tool	1
8-33087*	Cable tie - 7 1/2" blade, nylon, 50lb.	20

*Replacement part number quantities listed break standard pack. If part number is ordered outside of kit separately, additional quantities will be received.

HEAT SHRINK TUBING



Phillips STA-DRY® heat shrink tubing provides the best protection for connections subject to extreme conditions. Heat shrink tubing provides outstanding defense from calcium and magnesium chlorides, heat, shock, cold, vibration, moisture and other critical environmental conditions.

DO IT ONCE. DO IT RIGHT.

Heat shrink tubing can extend the life of terminals indefinitely and assures reliable electrical performance. When heated, the inner wall of adhesive within Dual Wall tubing conforms to the size and shape of the underlying materials making a fast, easy, semi-permanent seal with natural strain-relief properties.

	Heavy Duty Dual Wall	CLEAR-VU™ Hi-Flow	CLEAR-VU™ Dual Wall	Flexible Dual Wall	Single Wall
Material	Cross-Linked Polyolefin	Cross-Linked Polyolefin	Cross-Linked Polyolefin	Cross-Linked Polyolefin	Cross-Linked Polyolefin
Shrink Ratio	3:1	4:1	3:1	3:1	2:1
Colors	Red and Black	Clear	Translucent Red, Blue, Yellow	Red, Black and Clear	Red, Blue, Yellow
Meltable Sealant	Yes	Yes	Yes	Yes	No
UL	486 D	No	E157227	E157227	E35506
CSA	C622.2	No	No	No	LR31929
Military Spec.	MIL-DTL-23053/15, Class 2	No	MIL-DTL-23053/4	MIL-DTL-23053/4 Class 3	MIL-DTL-23053/5, Class 1
Flame Retardant	Yes	No	No	Red and Black	Yes
Operating Temperature	-67°F To 230°F (-55°C To 110°C)	-67°F To 230°F (-55°C To 110°C)	-67°F To 230°F (-55°C To 110°C)	-67°F To 230°F (-55°C To 110°C)	-67°F To 275°F (-55°C To 135°C)

STA-DRY® Heavy Duty Dual Wall



Heat Required



- Waterproofs, seals and insulates
- Adhesive lined cross-linked polyolefin
- Color-coded for polarity identification
- Dielectric strength: 500V
- "C" in part number denotes clamshell package
- Ideal for battery cable

	Color	Wire Gauge*	Expanded ID	After Recovery	Qty.	Length	Part No.	
RED	Red	8-6	.500"	.0167"	6	6"	6-210	RED
	Red	8-6	.500"	.0167"	6	1.5"	6-403	
	Red	1-2/0	.750"	.250"	6	6"	6-211	
	Red	1-2/0	.750"	.250"	1	6"	6-211C	
	Red	1-2/0	.750"	.250"	6	1.5"	6-405	
	Red	1/0-4/0	1.100"	.367"	6	6"	6-207	
	Red	1/0-4/0	1.100"	.367"	6	2"	6-401	
	Red	1/0-4/0	1.100"	.367"	1	48"	6-209	
BLACK	Black	12-10	.400"	.150"	6	6"	6-202	BLACK
	Black	8-6	.500"	.167"	6	6"	6-204	
	Black	8-6	.500"	.167"	6	1.5"	6-402	
	Black	1-2/0	.750"	.250"	6	6"	6-212	
	Black	1-2/0	.750"	.250"	1	6"	6-212C	
	Black	1-2/0	.750"	.250"	6	1.5"	6-404	
	Black	1/0-4/0	1.100"	.367"	6	6"	6-206	
	Black	1/0-4/0	1.100"	.367"	6	2"	6-400	
	Black	1/0-4/0	1.100"	.367"	1	48"	6-208	

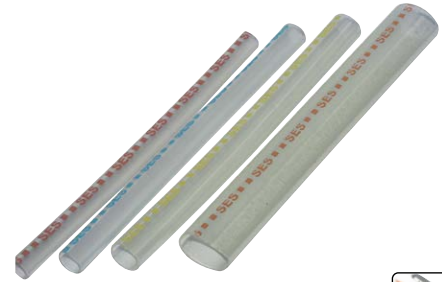
*Recommended wire gauge

STA-DRY® CLEAR-VU™ Hi-Adhesive Flow Tubing

Color	Wire Gauge*	Expanded ID	After Recovery	Qty.	Length	Part No.
Red	20-10	0.30"	0.06"	6	6"	6-351
Blue	16-8	0.35"	0.08"	6	6"	6-353
Yellow	14-4	0.45"	0.105"	6	6"	6-355
Orange	8-2/0	0.70"	0.175"	6	6"	6-357

* Recommended wire gauge

- Waterproofs, seals and insulates
- Adhesive-lined, cross-linked polyolefin
- Active adhesive seals between multiple wires to prevent corrosion
- Dielectric strength: 500V



Heat Required



STA-DRY® Flexible Dual Wall

	Color	Wire Gauge*	Expanded ID	After Recovery	Qty.	Length	Part No.	
RED	Red	1-2/0	0.750"	0.250"	6	6"	6-306	RED
	Red	1/0-4/0	1.000"	0.320"	6	6"	6-308	
BLACK	Black	22-18	0.125"	0.040"	6	6"	6-309	BLACK
	Black	20-16	0.187"	0.062"	6	6"	6-300	
	Black	16-14	0.250"	0.080"	6	6"	6-301	
	Black	12-10	0.375"	0.120"	6	6"	6-302	
	Black	8-6	0.500"	0.160"	6	6"	6-304	
	Black	1-2/0	0.750"	0.250"	6	6"	6-305	
	Black	1/0-4/0	1.000"	0.320"	6	6"	6-307	
Clear	Clear	22-18	.125"	.040"	6	6"	6-310	Clear
	Clear	20-16	.187"	.062"	6	6"	6-311	
	Clear	16-14	.250"	.080"	6	6"	6-312	
	Clear	12-10	.375"	.120"	6	6"	6-313	
	Clear	8-6	.500"	.160"	6	6"	6-314	
	Clear	4-2/0	.750"	.250"	6	6"	6-315	

*Recommended wire gauge

- Waterproofs, seals and insulates
- Adhesive lined cross-linked polyolefin
- Color-coded for polarity identification
- Dielectric strength: 700V



Heat Required



STA-DRY® CLEAR-VU™ Dual Wall

	Color	Wire Gauge*	Expanded ID	After Recovery	Qty.	Length	Part No.	
RED	Red	22-18	0.245"	0.045"	6	6"	6-103	RED
	Red	22-18	0.245"	0.045"	3	6"	6-103C	
BLUE	Blue	16-14	0.245"	0.080"	6	6"	6-105	BLUE
	Blue	16-14	0.245"	0.080"	3	6"	6-105C	
Yellow	Yellow	12-10	0.360"	0.100"	6	6"	6-107	Yellow
	Yellow	12-10	0.360"	0.100"	3	6"	6-107C	

*Recommended wire gauge

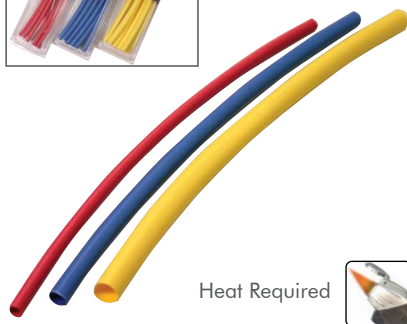
- Waterproof seal and insulates
- Adhesive lined cross-linked polyolefin
- Color-coded for wire gauge identification
- "C" in part number denotes clamshell package
- Dielectric Strength: 900V



Heat Required



Single Wall



Heat Required



	Color	Wire Gauge*	Expanded ID	After Recovery	Qty.	Length	Part No.	
RED	Red	22-18	.1875"	0.093"	6	6"	6-102	RED
	Red	22-18	.1875"	0.093"	6	6"	6-102C	
BLUE	Blue	16-14	.2500"	0.125"	6	6"	6-104	BLUE
	Blue	16-14	.2500"	0.125"	6	6"	6-104C	
Yellow	Yellow	12-10	.375"	0.187"	6	6"	6-106	Yellow
	Yellow	12-10	.375"	0.187"	6	6"	6-106C	

*Recommended wire gauge

- Insulates
- Flexible polyolefin
- Color-coded for wire gauge identification
- "C" in part number denotes clamshell package
- Dielectric strength: 900 Volts

STA-DRY® Heat Shrink Tubing Kits



STA-DRY® Flexible Dual Wall Part # 6-1800

12 Part #'s
78 Pieces
11 in. x 6 3/4 in.

**PRIMARY WIRE
APPLICATIONS**



STA-DRY® Flexible Dual Wall Part # 6-1801

12 Part #'s
150 Pieces
Fits in Standard Cabinets

**PRIMARY WIRE
APPLICATIONS**

Part No.	Type	Wire Gauge	6-1800 Mini Kit	6-1801 Drawer
6-300	STA-DRY® flexible dual wall	20-16 AWG	10	15
6-301	STA-DRY® flexible dual wall	16-14 AWG	10	15
6-302	STA-DRY® flexible dual wall	12-10 AWG	5	10
6-304	STA-DRY® flexible dual wall	8-6 AWG	2	10
6-305	STA-DRY® flexible dual wall	1-2/0 AWG	2	10
6-309	STA-DRY® flexible dual wall	22-18 AWG	10	15
6-310	STA-DRY® flexible dual wall	22-18 AWG	10	15
6-311	STA-DRY® flexible dual wall	20-16 AWG	10	15
6-312	STA-DRY® flexible dual wall	16-14 AWG	10	15
6-313	STA-DRY® flexible dual wall	12-10 AWG	5	10
6-314	STA-DRY® flexible dual wall	8-6 AWG	2	10
6-315	STA-DRY® flexible dual wall	4-2/0 AWG	2	10

Self-Sealing Shrink Tape

Part No.	Description
6-521	1" x 30'

- For watertight connections that cannot use heat
- Tape seals to itself and creates a tight, yet flexible waterproof bond
- Can be applied in any weather condition
- Withstands hard cleaning chemicals and steam
- Conforms to the contours of oddly shaped objects
- Seals to rubber, plastics and metals
- Rated from -40°F to 212°F (-40°C to 100°C)



Self-Sealing Pads

Part No.	Description	Qty.
6-532	2.5" x 2.5" pads	25

- Designed for moisture protection on all electrical connections, such as battery terminals
- 45 mil thickness provides outstanding corrosion, chemical and UV protection
- Compatible with plastic, rubber and metal
- Rated from 0°F to 220°F (-18°C to 105°C)
- Rated to 600V



Torches

Part No.	Description
4-054	Mini-jet torch
4-057	Professional torch
4-058	Heavy duty torch

- Refillable butane tanks from 30 to 220 minute capacity depending on selected torch (butane not included)
- All torches meet Consumer Product Safety Commission 16CFR Part 1212 - Safety Standard for Multi-Purpose Lighter (Child Resistant)
- See page 177 and 178 for more details regarding each individual torch



4-054



4-057



4-058



CABLE/WIRE SUPPORT & ACCESSORIES

Tracker Spring Kit with QWIK-CLAMP™

Metal snap-on clip - quickly unhook the spring assembly without unbolting the tracker bar



Keep cables off the deck plate!

Hassle-free installation, no tools required. Installs in seconds, and cable location adjustment is easy

Pin keeps the sleeve at the top of the spring

Durable PVC sleeve tubing stays with the top of the spring

Heavy gauge galvanized wire (.10) offers better recoil memory and longer spring life. Stretches to 35" at 30 lbs. of pull force (P/N: 17-121)

Stainless steel 304 snap-on clip unhooks the QWIK-CLAMP™ in seconds (P/N: 17-173)

Multi-functional QWIK-CLAMP™ converts from a 1, 2, or 3-hose holder to a cable clamp for a 3-IN-1 by removing the insert

1, 2, or 3-hose holder



17-180

Hose Holder: Supports straight ABS electrical cables and 3/8" rubber air hoses, or coiled ABS electrical cables and nylon air lines with longer leads



3-IN-1 clamp



17-181

3-IN-1: Clamp will support Phillips 3-IN-1s or assemblies approximately 1.60" in diameter



STOW-A-WAY™

Part No.	Description
15-041	1 plug, 2 gladhand holder
15-042	2 plug, 2 gladhand holder

- 32% of truckers Workmen's Comp claims are from accidents occurring behind the cab, according to leading insurance carriers
- STOW-A-WAY™ offers safe, easy storage for coiled electrical cables, liftgate cables and air lines when not in use
- Corrosion resistant and extremely durable
- Air and electrical can be coupled/uncoupled with both feet on the ground
- Angled for easy access



15-041



15-042

Mounting Kit

Part No.	Description
17-039	Mounting kit

- Securely mounts STOW-A-WAY™ to pogo sticks

**Pogo Sticks**

Part No.	Description
17-0240	24" chrome
17-0241	24" gold chromate
17-0400	40" chrome
17-0401	40" gold chromate

- Designed for heavier ABS cables
- Extra heavy duty internal spring
- Can accept STOW-A-WAY™ (15-041, 15-042), with 17-039 mounting kit
- Includes QWIK-SNAP™ 3-hose holder
- 8 in. coated spring for corrosion resistance
- Heavy duty 7/16 in. mounting bolt



Keep cables off
the deck plate!



17-0241



17-0400



17-0401

X-TEND™ Tracker Bar Extension



Part No.	Description
17-3000	X-TEND™ tracker bar extension, for tracker bars with a 3/4" diameter NEW
17-3001	X-TEND™ tracker bar extension, for tracker bars with a 1" diameter NEW

Prevents damage from cables banging up against the back of the cab by extending them out and away from the back of the tractor.

- Extends the tracker spring kit and cables out an additional 8 inches from the tracker bar
- Prevents spiral wrapped assemblies from banging up against the back of the cab and causing damage
- Avoid costs to repair damage at the back of the cab and increase the tractor's resale value
- Easy to Install. Snaps on. No hardware!
- Available for either 3/4" or 1" diameter tracker bars
- Stainless steel metal tubing and eye hook
- Non-corrosive nylon mounting and support brackets

Can be used on tractors with a solid metal back or windows with a metal frame down the center of the back of the cab. NOT for use with tractors that have solid, one-piece back windows.



Tracker Bars



Part No.	Description
17-147	Tracker bar, 43"
17-247	Tracker bar, 36"

- Stainless steel

Tracker Bar Kits



Part No.	Description
17-149	Kit with 43" bar and 20" spring
17-246	Kit with 36" bar and 25" spring
17-249	Kit with 36" bar and 20" spring

- Back of cab cable support
- Kits include bar, snap-on clip, PVC sleeve, QWIK-SNAP™ 3-hose holder and spring
- Stainless steel bar



Tracker Spring Kits

Part No.	Description
17-145	Kit with 25" single heavy duty spring, with QWIK-SNAP™
17-148	Kit with 20" single heavy duty spring, with QWIK-SNAP™
17-1481	Kit with 20.5" extra heavy duty spring, with QWIK-CLAMP™ (17-180) NEW
17-1487	Kit with 20" single heavy duty spring, with U-bolt holder
17-1488	Kit with 20.5" extra heavy duty spring, with cable clamp holder
17-420	Kit with 16" dual springs, with QWIK-SNAP™

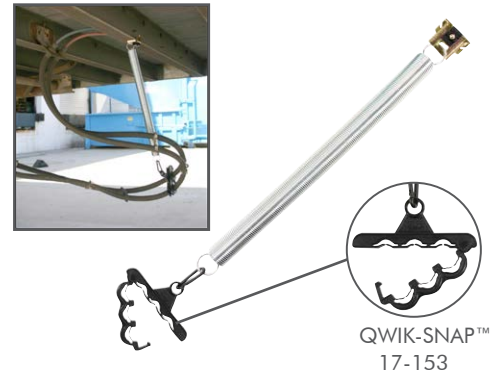
- Replacement spring and hardware for tracker bars
- Kits include snap-on clip, PVC sleeve, spring(s) and 3-hose holder, cable clamp holder, or QWIK-CLAMP™
- Ideal for ABS cable use



Sliding Axle Spring Kits

Part No.	Description
17-182	Single 16" spring with QWIK-SNAP™ 2-hose holder
17-183	Single 16" spring with QWIK-SNAP™ 3-hose holder

- Quick change - save up to 5 minutes!
- Great spring memory
- Won't chaff hoses



Replacement Springs

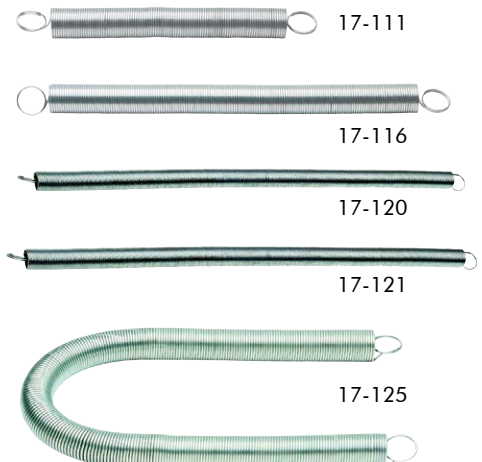
Sliding Axles	
Part No.	Description
17-103	3" spring with tandem frame clip (5-5007), 3/4" O.D.
17-106	6" spring, 1.10" O.D.

- For use on trailers with sliding axles
- Supports air lines to rear axle
- 17-106 has pre-galvanized hard drawn wire per SAE-ASTM-A227-77



Cable & Hose Support	
Part No.	Description
17-111	11", tandem cable and air line support, 1.10" O.D.
17-116	16", recommended for straight cable assemblies, 1.10" O.D.
17-120	20", heavy duty, for use with ABS coiled assemblies, 0.90" O.D.
17-121	20.5", extra heavy duty, for use with combination electrical and air assemblies and with hydraulic lines, 0.93" O.D.
17-125	25", extra heavy duty, for use with ABS coiled assemblies, 0.90" O.D.

- Pre-galvanized hard drawn wire per SAE-ASTM-A227-77



Hose Separators



Part No.	Description
17-150	2-hose separator, 3/8" hose
17-151	4-hose separator, 3/8" hose
17-155	2-hose separator, 1/2" hose
17-170	2-hose separator, 1/2" and 3/8" hose
17-171	4-hose separator, 1/2" hose
17-172	2-hose separator, 3/8" and 1/4" hose

- Keeps nylon air hoses secure and out of the way
- For tractor coiled air, trailer slider hose applications

QWIK-CLAMP™



Part No.	Description
17-180	QWIK-CLAMP™ with insert NEW
17-181	QWIK-CLAMP™ without insert NEW

- The QWIK-CLAMP™ is multi-functional, converting from a 1, 2, or 3-hose holder to a cable clamp for a 3-IN-1 by removing the insert
- Installation is quick, easy, and no tools are required. It installs in seconds and cable location adjustment is easy
- Clamp and insert are non-corrosive and UV resistant
- Recommended assembly/cable sizes:
 - 3-IN-1: Clamp will support Phillips 3-IN-1s or assemblies approximately 1.60" in diameter
 - Hose Holder: Supports straight ABS electrical cables and 3/8" rubber air hoses, or coiled ABS electrical cables and nylon air lines with longer leads
- Patent No. 10436352

QWIK-SNAP™ Hose Holders



Part No.	Description
17-152	2-hose holder
17-153	3-hose holder
17-154	4-hose holder

- Easy to use with gloves - no loose parts
- Positive lock - stays connected at over 80 lbs. of pull force
- Durable nylon for extreme weather, corrosion and impact resistance
- Quicker than conventional hose holders - change hoses in seconds!
- Versatile design adjusts to accommodate 3/8" and 1/2" hoses
- Tested over 30,000 cycles with no sign of failure
- Patent No. 8,408,501

Eye Bolt Hose Holders



Part No.	Description
17-156	2-hose holder, 3/4" O.D.
17-177	3-hose holder, 3/4" O.D.

- Zinc-plated hardware
- 2-piece ABS clamp

U-Bolt Hose Holders

Part No.	Description
17-157	3-hose holder, 3/4" O.D.
17-158	4-hose holder (2) 3/4" O.D. and (2) 5/8" O.D.

- Zinc-plated hardware
- 2-piece ABS clamp



17-157



17-158

Cable Clamp Holder

Part No.	Description
5-5008	Cable clamp holder, 1 5/8" I.D.
5-5018	Cable clamp holder with stainless steel snap-on clip (17-173)

- Designed for use with the electrical and air combo assemblies (3-IN-1 and 4-IN-1)
- Offers easy installation



5-5008



5-5018

Snap-On Clip

Part No.	Description
17-160	Large snap-on clip, black, 4"
17-163	Small snap-on clip, black, 2.4"
17-169	Large snap-on clip, stainless steel, 4"
17-173	Small snap-on clip, stainless steel, 2.4"

- Offers easy replacement for spring kits
- No need to unhook tracker bar



Tandem Frame Clip

Part No.	Description	Qty.
5-5007	Frame clip	5

- For wire, air hoses and tubing
- Easy to install, simply slide clip into place (can also be used with rivets or self-tapping screws)
- Secure hose or tubing in place with spring or cable ties



Universal Gladhand Holder

Part No.	Description
15-039	Gold chromate
15-040	Chrome plated

- Accepts individual gladhands
- Mounts at back of cab or attaches to pogo stick



15-039



CABLE TIES

Phillips Cable Ties

Manufactured to combine the lowest insertion force with the highest tensile strength. The design of the pawl (locking mechanism) makes Phillips cable ties superior in strength and allows our products to exceed the required industry standard tensile strengths.

Phillips Mounting Pads

Incorporates a unique no-slip tab that holds cable ties in place during installation.

Storage Recommendations for Cable Ties* and Mounting Pads**:

Store at room temperature in at least 50% humidity (recommended 80%RH) in a completely sealed polyethylene bag if not being used. In extreme heat and cold, limit the exposure of unused cable ties and/or mounting pads. If after being exposed to extreme temperatures and/or extreme relative humidities, the cable ties and/or mounting pads must be allowed to be stored at room temperature and at least 50% humidity (recommended 80%RH) for at least 24 hrs. in a sealed bag before being used again.

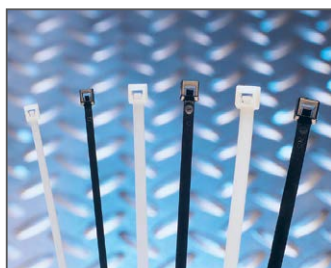
*Includes Assortment Pack

**Excludes Dual Tie Wraps – See Below For This Information

Storage Recommendations for Dual Tie Wraps:

Store at 73°F with 50%RH in a completely sealed polyethylene bag if not being used and avoid direct, prolonged exposure to heat sources and sunlight.

Light & Medium Duty Nylon - 18 & 50 lb



18 lb. Nylon

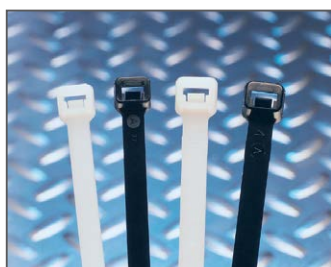
Length	Per Bag	Tie Tensile	Bundle Diameter Inches (mm)	Part No.	Color
4"	100	18 lb.	0.157" (4) - 0.9" (22)	8-41047	UV Black

50 lb. Nylon

Length	Per Bag	Tie Tensile	Bundle Diameter Inches (mm)	Part No.	Color
7.5"	100	50 lb.	0.276" (7) - 1.97" (50)	8-33087	Natural
11"	100	50 lb.	0.276" (7) - 2.76" (70)	8-33117	Natural
14"	100	50 lb.	0.276" (7) - 4.016" (102)	8-33147	Natural
7.5"	40	50 lb.	0.276" (7) - 1.97" (50)	8-43084	UV Black
	100			8-43087	UV Black
11"	100	50 lb.	0.276" (7) - 2.76" (70)	8-43117	UV Black
14"	100	50 lb.	0.276" (7) - 4.016" (102)	8-43147	UV Black
17"	100	50 lb.	0.276" (7) - 4.331" (110)	8-43177	UV Black

- UL recognized / CSA approved
- Operating temperature -4°F to 185°F (-20°C to 85°C)
- Minimum installation temperature: 5°F (-15°C)

Heavy Duty Nylon - 120 lb.



Length	Per Bag	Tie Tensile	Bundle Diameter Inches (mm)	Part No.	Color
15"	100	120 lb.	0.551" (14) - 4.016" (102)	8-34147	Natural
15"	100	120 lb.	0.551" (14) - 4.016" (102)	8-44147	UV Black

- UL recognized / CSA approved
- Operating temperature -4°F to 185°F (-20°C to 85°C)
- Minimum installation temperature: 5°F (-15°C)

Mounting Hole - 50 & 120 lb.

Length	Per Bag	Tie Tensile	Screw Size	Bundle Diameter Inches (mm)	Part No.	Color
8"	100	50 lb.	#10	0.276" (7) - 1.811" (46)	8-49077	UV Black
15"	100	120 lb.	1/4"	0.551" (14) - 3.86" (98)	8-49157	UV Black

- 8 in. UL recognized / CSA approved
- ROHS compliant
- Operating temperature -4°F to 185°F (-20°C to 85°C)
- Minimum installation temperature: 5°F (-15°C)



Releasable - 50 lb.

Length	Per Bag	Tie Tensile	Bundle Diameter Inches (mm)	Part No.	Color
8"	100	50 lb.	0.276" (7) - 1.97" (50)	8-48087	UV Black
14"	100	50 lb.	0.551" (14) - 4.02" (102)	8-48147	UV Black

- 8 in. UL recognized / CSA approved
- ROHS compliant
- Operating temperature -4°F to 185°F (-20°C to 85°C)
- Minimum installation temperature: 5°F (-15°C)



Assortment Packs

Length	Per Pack	Tie Tensile	Bundle Diameter Inches (mm)	Part No.	Color
4"	200	18 lb.	0.157" (4) - 0.9" (22)	8-61020	UV Black
8"	100	50 lb.	0.276" (7) - 2.76" (70)		
11"	100	50 lb.	0.276" (7) - 1.97" (50)		

- UL recognized / CSA approved
- Clamshell dimensions: 15 in. x 7 1/8 in. x 2 in.
- Great for shop use
- Operating temperature -4°F to 185°F (-20°C to 85°C)
- Minimum installation temperature: 5°F (-15°C)



8-61020

Mounting Pads

Length	Per Bag	Height	Slot Height	Slot Width	Adhesive	Part No.	Color
.74"	10	.19"	.05"	.20"	Rubber	8-30050	Natural
	100					8-30057	Natural
.74"	10	.19"	.05"	.20"	Rubber	8-40050	UV Black
	100					8-40057	UV Black

- UL recognized / CSA approved, excluding sticky adhesive
- Operating temperature -4°F to 185°F (-20°C to 85°C)
- Minimum installation temperature: 5°F (-15°C)



**Makes installation
easy!!!**

Dual Tie Wraps



Part No.	Description	Pkg. Qty.	Weight	Recommended Stud Size In. (mm)	Min. Tensile Strength	Max. Bundle Dia. In. (mm)	Approx. Length In. (mm)	Approx. Width In. (mm)
8-45134	Dual clamp cable ties black, 13" length	25	0.9 lbs.	1/4" (6.35)	150 lbs	1.3 each side (33.02)	12.9" (327.66)	0.50"
8-45194	Dual clamp cable ties black, 19" length	25	1.3 lbs	1/4" (6.35)	150 lbs	2.3" each side (58.42)	19.2" (487.68)	0.50"

- Dual-head design lets you wrap two separate bundles with a single cable tie
- Mounting holes allow easy attachment to walls, trailers, and vehicle chassis
- Minimum 150 lb. tensile strength
- Provides parallel spacing between cable bundles, hoses, tubing or wires
- Made of high impact black nylon 6/6
- Operating temperature -40°F to 230°F (-40°C to 110°C)
- Minimum installation temperature: -40°F (-40°C)

Cable Tie Installation Tool



Part No.	Description
4-231	Plastic cable tie installation tool

- Secures nylon cable ties
- Good for light duty or occasional use, 18-50 lb ties

WIRE SUPPORT & ACCESSORIES

Bulk Spiral Wrap

For multiple installations and/or fleet maintenance shops. Varying sizes for multiple types of applications.



Part No.	I.D.	Length	Application Type
5-525	3/8"	100'	Small wire and air tubing
5-527	1/2"	100'	Small wire and air tubing
5-530	5/8"	100'	Small wire and air tubing
5-532	3/4"	100'	Small wire and air tubing
5-534	1"	100'	Medium wire and air tubing
5-536	1 3/8"	100'	Combination assemblies
5-538	2"	100'	Hydraulic lines and 4-IN-1 combination assemblies

- Protects cables, wires, hoses and tubing from abrasion, tangling, chaffing, wire pull-out and deterioration
- UV and abrasion resistant, and unaffected by most solvents
- Operating temperature range: -40°F to 280°F (-40°C to 137°C)

Pre-Cut Spiral Wrap

For one time do-it-yourself installations



Part No.	I.D.	Length	Application Type
5-523	1 3/8"	8'	Combination assemblies NEW
5-524	1 3/8"	10'	Combination assemblies NEW

- Organize and protect your air and electrical assemblies!
- UV and abrasion resistant, and unaffected by most solvents
- Operating temperature range: -40°F to 280°F (-40°C to 137°C)

Mini Pre-Cut Spiral Wrap ("Minis")

For one time **QUICK** and **EASY** do-it-yourself installations/
replacement

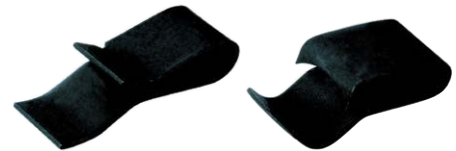
Part No.	I.D.	Length	Qty.	Application Type
5-522	1 3/8"	2.5"	3	Combination assemblies NEW

- Easy maintenance - avoid time consuming removal and replacement of traditional spiral wrap when replacing or repairing cables
- Alternative to cable ties - replaces cable ties which have the potential to damage rubber air lines as they contract and expand during braking
- Easily store a few extra on board
- UV and abrasion resistant, and unaffected by most solvents
- Operating temperature range: -40°F to 280°F (-40°C to 137°C)



Frame Clips

Part No.	Description	Qty.
5-5003	Holds 2-3, 14 ga. wires	100
5-5006	Holds 5-6, 14 ga. wires	100



5-5003

5-5006

Nylon Cable Wrap

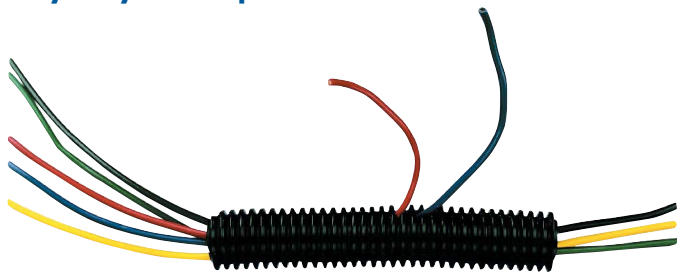
For 3-IN-1 Combination Assemblies

Part No.	Description	Application Type
5-608	8' nylon cable wrap	12' combination assemblies NEW
5-610	10' nylon cable wrap	13'-15' combination assemblies NEW
5-612	12' nylon cable wrap	15' combination assemblies NEW
5-616	16' nylon cable wrap	20' combination assemblies NEW

- Easy to assemble and build custom 3-IN-1 combination assemblies
- Easy to unwrap for cable repair/replacement and DOT inspections
- Uses hook-and-loop to securely fasten the wrap together
- Simple and convenient alternative replacement for spiral wrap
- Made from durable woven nylon for protection against the elements with double stitched ends to prevent fraying
- Stainless steel grommets for cable ties for optional security
- UV coated for sun protection and water resistant inner lining for winter weather protection
- Protects cables from damage due to harsh weather conditions, chaffing, rubbing and tangling
- Keeps cables organized



Polyethylene Split Loom



Popular choice for routing and protection of wires

- Provides crush-resistant protection for electrical wires
- Protects electrical wires even when bent or twisted
- Wires are inserted quickly, eliminating the time needed for tape, braid or cloth loom
- Lightweight with excellent flexibility
- Good abrasion and chemical resistance
- Operating temperature range -40°F to 200°F

Part No.	I.D.	Length	Std. Pack
5-023	1/4"	100'	Box
5-023-250	1/4"	250'	Box
5-023-1000	1/4"	1000'	Spool
5-025	3/8"	100'	Box
5-025-250	3/8"	250'	Box
5-025-1000	3/8"	1000'	Spool
5-027	1/2"	100'	Box
5-027-250	1/2"	250'	Box
5-027-1000	1/2"	1000'	Spool
5-029	5/8"	100'	Box
5-029-250	5/8"	250'	Box

Part No.	I.D.	Length	Std. Pack
5-030	3/4"	100'	Box
5-030-250	3/4"	250'	Box
5-030-500	3/4"	500'	Spool
5-032	1"	100'	Box
5-032-250	1"	250'	Box
5-032-500	1"	500'	Spool
5-034	1 1/4"	100'	Box
5-034-250	1 1/4"	250'	Box
5-036	1 1/2"	100'	Box
5-036-250	1 1/2"	250'	Box
5-040	2"	100'	Box

Neoprene Grommets



Part No.	Groove Width	Drill Diameter	Center Hole	Qty.
5-710	1/16"	5/16"	3/16"	50
5-711	1/16"	7/16"	5/16"	50
5-712	1/16"	11/16"	7/16"	50
5-713	1/16"	7/8"	5/8"	50
5-714	1/4"	13/16"	9/16"	50
5-715	1/4"	1"	11/16"	50
5-716	1/4"	1 1/6"	3/4"	50

Protect your wire and cable from sharp edges

- Eliminates sharp and rough edges from through-holes
- Made from neoprene for durability and flexibility
- Adds a neat, clean look to any installation
- High resistance to acids, greases, oils and diesel fuels
- Grommets for 1/16 in. and 1/4 in. panels

Nylon Insulating Bushings



Part No.	Hole Diameter	Max. Thickness	Center Hole	Qty.
5-811	3/4"	1/8"	5/8"	50
5-812	1"	1/8"	3/4"	50
5-813	1 1/4"	1/8"	15/16"	50
5-814	1 1/2"	1 1/4"	1 1/16"	50
5-815	1 3/4"	1 1/4"	1 3/8"	50
5-816	2"	1 1/4"	1 5/8"	50

DRILL HOLE - SNAP IN - RUN CABLE OR HOSE. IT'S THAT EASY!

- Easy to mount by quickly snapping into place
- Multiple locks ensure secure fit
- Protects wire, cable or tubing from sharp, unfinished edges
- Adds a neat, clean look to any installation
- Spring-like fingers snap out to hold the grommet in place

Rubber Cushion Clamps

- Provides electrical insulation and vibration absorption
- Allows for easy adding or rerouting of wires
- Recommended for long-term applications
- Galvanized steel for corrosion protection
- Elongated holes allow for minor adjustments of clamped parts



Note: When using with split loom, select the next size up from the size of the split loom. Example: 3/8 in. split loom needs 7/16 in. clamp

1/4" Mounting Hole				
Part No.	Mounting Hole Size (A)	Tube Size (B)	Width (C)	Qty.
5-45034	1/4"	3/16"	1/2"	25
5-45044	1/4"	1/4"	1/2"	25
5-45054	1/4"	5/16"	1/2"	25
5-45064	1/4"	3/8"	1/2"	25
5-45074	1/4"	7/16"	1/2"	25
5-45084	1/4"	1/2"	1/2"	25
5-45094	1/4"	9/16"	1/2"	25
5-45104	1/4"	5/8"	1/2"	25
5-45124	1/4"	3/4"	1/2"	25
5-45144	1/4"	7/8"	1/2"	25
5-45164	1/4"	1"	1/2"	25
5-45224	1/4"	1-1/8"	1/2"	25
5-45241	1/4"	1-1/4"	1/2"	5
5-45261	1/4"	1-3/8"	1/2"	5
5-45271	1/4"	1-7/16"	1/2"	5

3/8" Mounting Hole				
Part No.	Mounting Hole Size (A)	Tube Size (B)	Width (C)	Qty.
5-46034	3/8"	3/16"	5/8"	25
5-46044	3/8"	1/4"	5/8"	25
5-46054	3/8"	5/16"	5/8"	25
5-46064	3/8"	3/8"	5/8"	25
5-46074	3/8"	7/16"	5/8"	25
5-46084	3/8"	1/2"	5/8"	25
5-46094	3/8"	9/16"	5/8"	25
5-46104	3/8"	5/8"	5/8"	25
5-46124	3/8"	3/4"	5/8"	25
5-46144	3/8"	7/8"	5/8"	25
5-46164	3/8"	1"	5/8"	25
5-46224	3/8"	1-1/8"	5/8"	25
5-46241	3/8"	1-1/4"	5/8"	5
5-46261	3/8"	1-3/8"	5/8"	5
5-46271	3/8"	1-7/16"	5/8"	5
5-46281	3/8"	2"	5/8"	5
5-46291	3/8"	2-1/2"	5/8"	5
5-46301	3/8"	3"	5/8"	5

3/8" Clamp Assortment Kit

Part No.	Description
5-1000	3/8" clamp assortment kit

5-1000 Contents:

Replacement Part No.	Mounting Hole Size	Tube size	Qty.
5-46034	3/8"	3/16"	50
5-46044	3/8"	1/4"	50
5-46064	3/8"	3/8"	50
5-46084	3/8"	1/2"	50
5-46104	3/8"	5/8"	50
5-46124	3/8"	3/4"	50
5-46164	3/8"	1"	25



ELECTRICAL HARNESS SYSTEMS

STA-DRY® SLIM-7™



- Incredibly strong seal
- Extraordinary corrosion protection
- Slim design allows for tight squeezes
- Shape transitions from a round cable to a square plug making pull-through easier
- Accepts a wide array of cables and wires providing many harness design options
- Provides the best moisture barrier in the market by using less space than any other standard heavy duty truck 7 pole connection

STA-DRY® HARNESSSES

Protect against moisture, corrosion and failure by choosing an electrical harness system built to withstand the most extreme environmental conditions. Phillips has the capability to handle your custom harness needs from design through production.

Superior Quality

- 100% factory tested components

Corrosion-Resistant

- Corrosion-inhibiting grease on all modules
- Molded material on all plugs adheres / bonds to cables
- Molded connections keep moisture and contaminants from penetrating the electrical system

Easy to Install

- Industry-standard lamp pigtails
- Indexed plugs ensure proper connection

Easy to Maintain

- Harness modules allow for easy replacement should accidental damage occur
- Universal pigtail modules eliminate the need to stock separate "curbside" and "roadside" pigtails

STA-DRY® SLIM-7™ SYSTEMS

CUSTOM CAPABILITIES

All STA-DRY® Electrical Harness System part numbers are recommendations. Additional lengths, molded ends and other options are available.

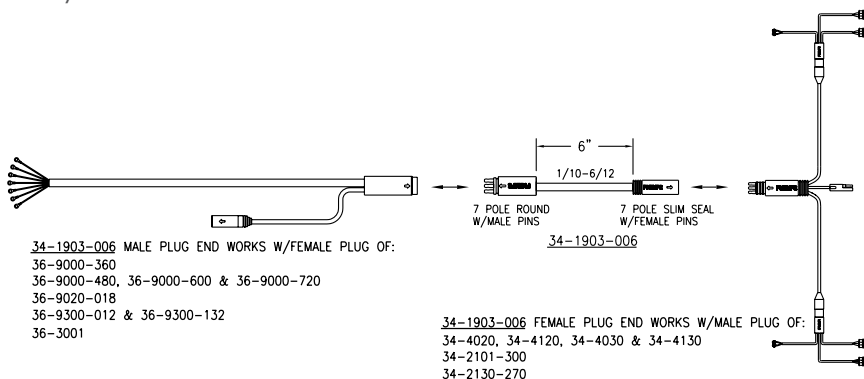
34 series (STA-DRY® SLIM-7™ System) is not interchangeable with the 36 series (STA-DRY® System) except where noted. Adapter available below.



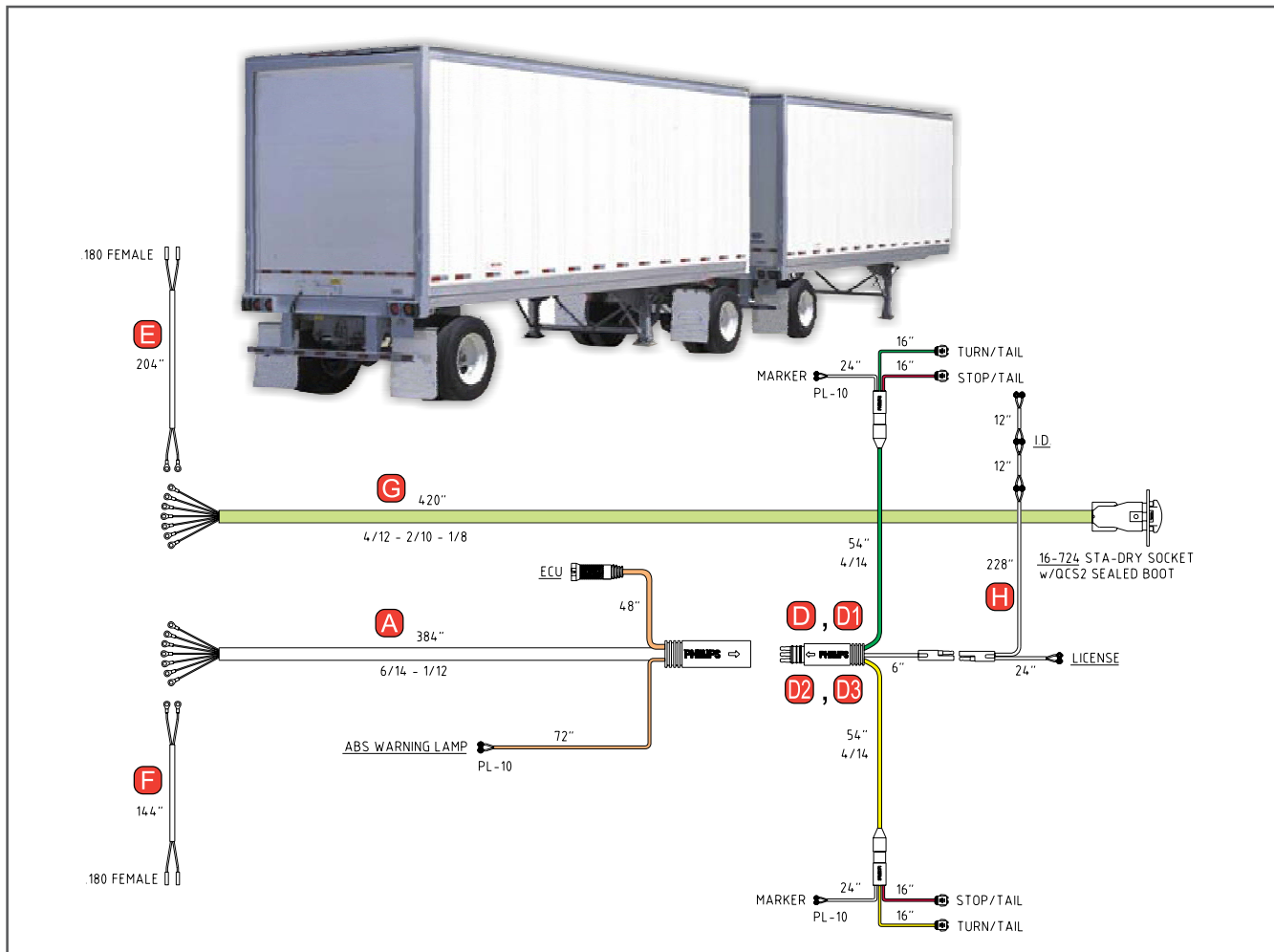
Harness Adapter

Part No.	Description
34-1903-006	7 way round male to 7-way SLIM-7™ female harness adapter

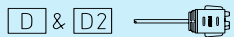
- Connects main and/or mid-main 36 series STA-DRY® modular harness systems to the 34 series STA-DRY® SLIM-7™
- Molded plug connections keep moisture and contaminants from penetrating the electrical system
- Corrosion resistant pre-applied dielectric grease
- Easy to install



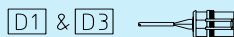
STA-DRY® SLIM-7™ System - Van Doubles (28 ft.)



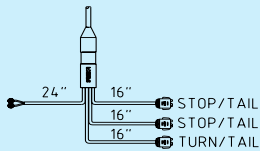
STANDARD PIGTAILS (PL-3)



AMP STYLE PIGTAIL



WITH 3 STOP / TURN / TAIL LIGHTS



D2 = STANDARD CONNECTION

D3 = AMP STYLE CONNECTION

Standard (Length as shown above)

28 ft.

Part No.	Description	Key
34-1300-384	Main with ECU and ABS warning lamp drop, 384" (32')	A
34-5100-204	Front marker, 204" (17')	E
34-5100-144	Front marker, 144" (12')	F
34-1402-420	Main with socket for pintle hook connection, 420" (35')	G
36-9601-228	ID / license *	H

2-Lamp Rear Sill Harness Options

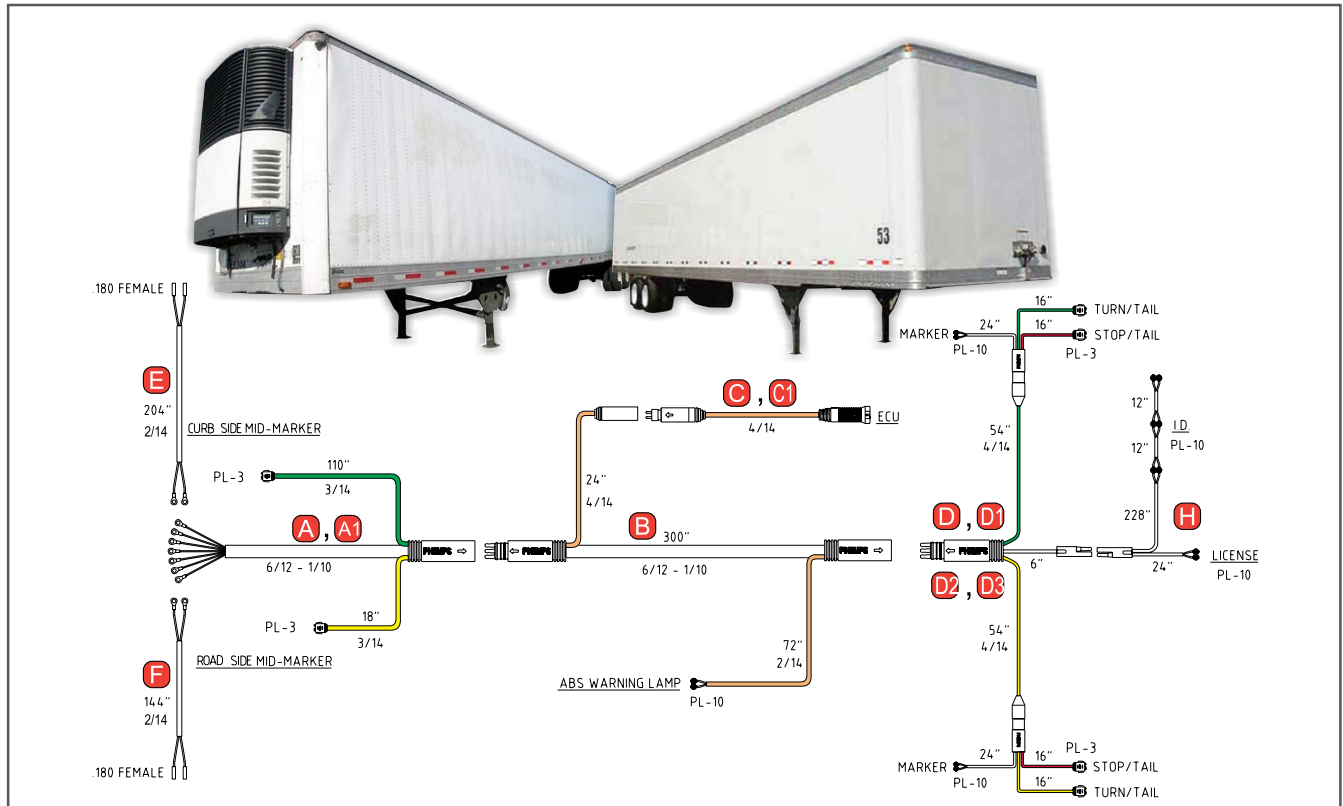
Part No.	Description	Key
34-4020	With 2 stop/turn/tail, standard pigtails	D
34-4120	With 2 stop/turn/tail, amp style pigtails	D1

3-Lamp Rear Sill Harness Options

Part No.	Description	Key
34-4030	With 3 stop/turn/tail, standard pigtails	D2
34-4130	With 3 stop/turn/tail, amp style pigtails	D3

* Will fit both 34 series (STA-DRY® SLIM-7™ System) and 36 series (STA-DRY® System)

STA-DRY® SLIM-7™ System - Reefer & Dry Freight Van (48ft. to 53ft.)



Standard (Length as shown above)

48 ft. & 53 ft.

Part No.	Description	Key
34-2101-300	Mid-main with ECU and ABS warning lamp drop, 300" (25')	B
34-5100-204	Curbside front marker, 204" (17')	E
34-5100-144	Roadside front marker, 144" (12')	F
36-9601-228	ID / license	* H

Main Options

Part No.	Description	Key
34-1231-324	Main, 324" (27'), 48' trailer	A
34-1231-384	Main, 384" (32'), 53' trailer	A1

ABS Options

Part No.	Description	Key
34-3000-156	ABS power harness, 156" (13')	C
34-3000-288	ABS power harness, 288" (24')	C1

2-Lamp Rear Sill Harness Options

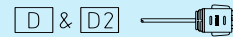
Part No.	Description	Key
34-4020	With 2 stop/turn/tail, standard pigtails	D
34-4120	With 2 stop/turn/tail, amp style pigtails	D1

3-Lamp Rear Sill Harness Options

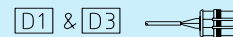
Part No.	Description	Key
34-4030	With 3 stop/turn/tail, standard pigtails	D2
34-4130	With 3 stop/turn/tail, amp style pigtails	D3

* Will fit both 34 series (STA-DRY® SLIM-7™ System) and 36 series (STA-DRY® System)

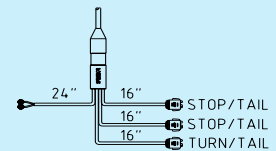
STANDARD PIGTAILS (PL-3)



AMP STYLE PIGTAIL



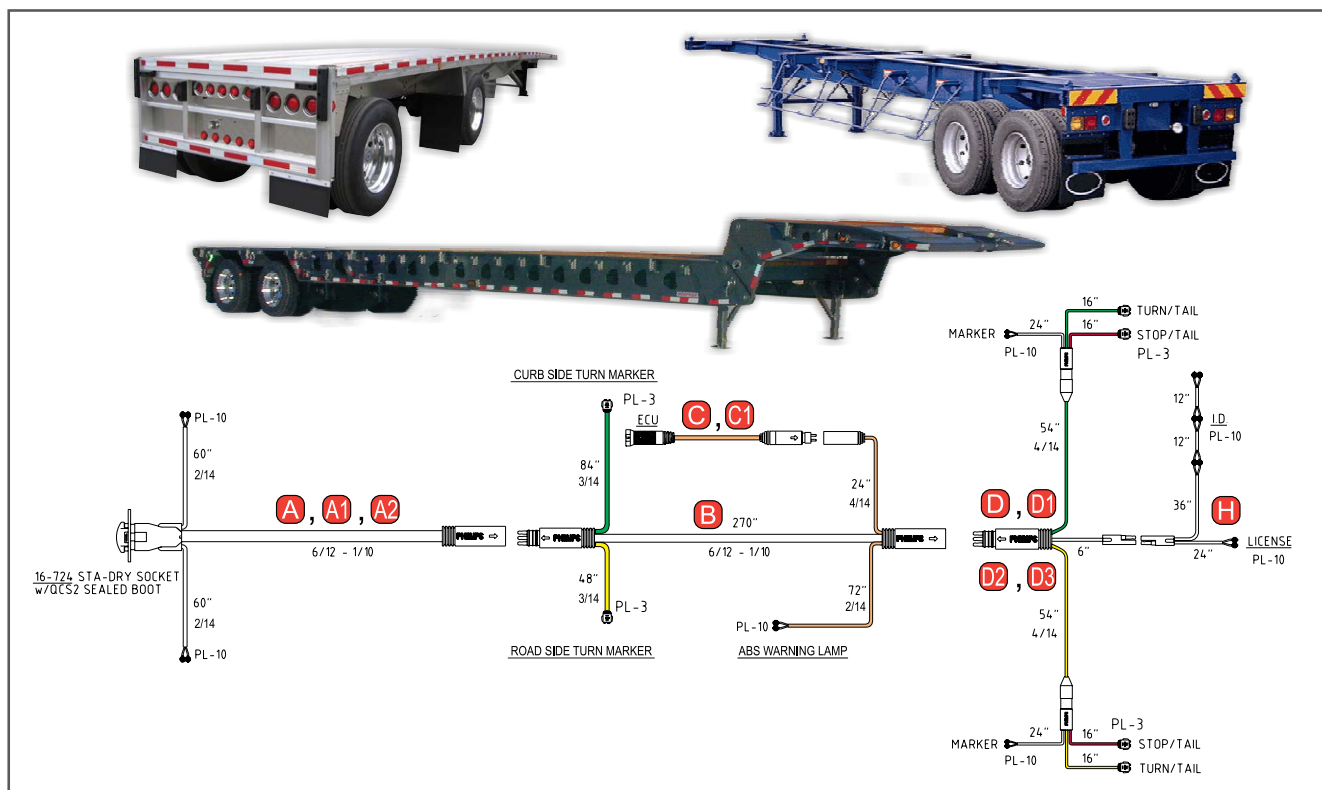
WITH 3 STOP / TURN / TAIL LIGHTS



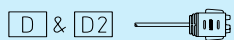
D2 = STANDARD CONNECTION

D3 = AMP STYLE CONNECTION

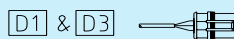
STA-DRY® SLIM-7™ System - Flatbed & Container Chassis



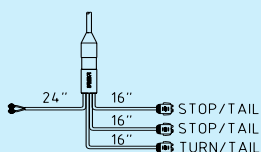
STANDARD PIGTAILS (PL-3)



AMP STYLE PIGTAIL



WITH 3 STOP / TURN / TAIL LIGHTS



D2 = STANDARD CONNECTION

D3 = AMP STYLE CONNECTION

Standard (Length as shown above)

Part No.	Description	Key
34-2130-270	Mid-main with mid-marker, ECU and ABS warning lamp drop, 270" (22'-5")	B
36-9601-036	ID / license	* H

Main Options

Part No.	Description	Key
34-1010-300	45' trailer main, 300" (25')	A
34-1010-336	48' trailer main, 336" (28')	A1
34-1010-396	53' trailer main, 396" (33')	A2

ABS Options

Part No.	Description	Key
34-3000-156	ABS power harness, 156" (13')	C
34-3000-288	ABS power harness, 288" (24')	C1

2-Lamp Rear Sill Harness Options

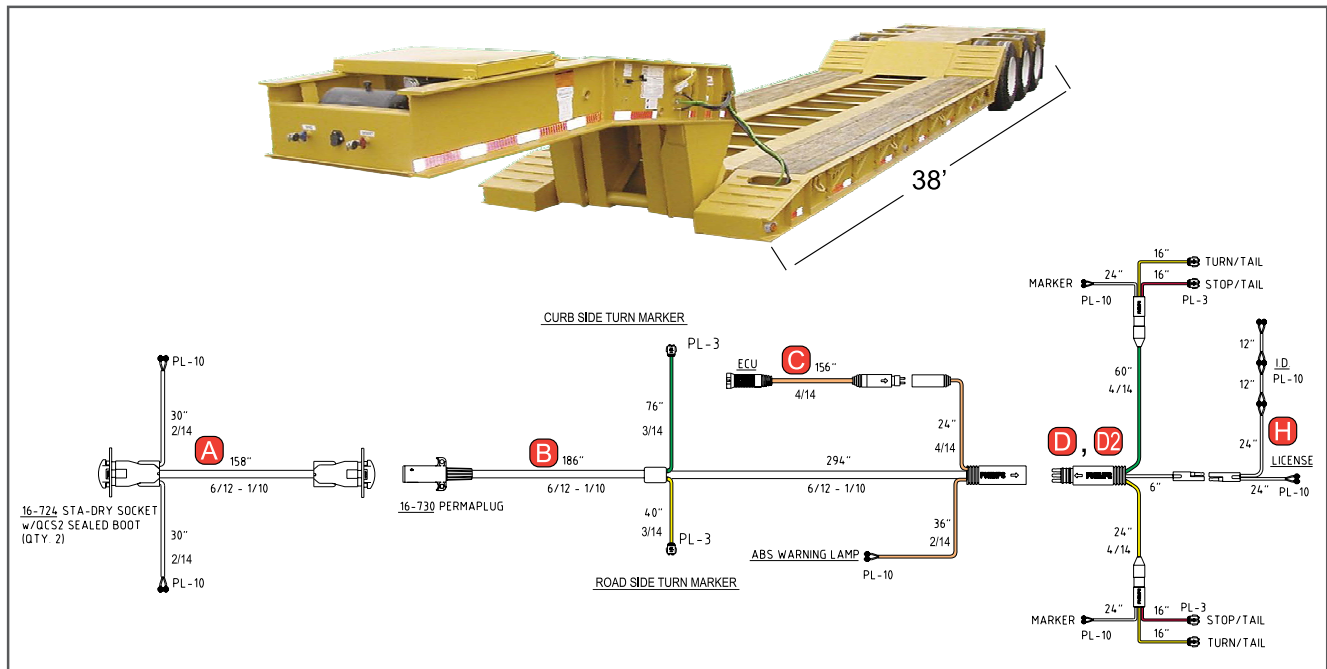
Part No.	Description	Key
34-4020	With 2 stop/turn/tail, standard pigtails	D
34-4120	With 2 stop/turn/tail, amp style pigtails	D1

3-Lamp Rear Sill Harness Options

Part No.	Description	Key
34-4030	With 3 stop/turn/tail, standard pigtails	D2
34-4130	With 3 stop/turn/tail, amp style pigtails	D3

* Will fit both 34 series (STA-DRY® SLIM-7™ System) and 36 series (STA-DRY® System)

STA-DRY® SLIM-7™ System - Detachable Gooseneck



Standard (Length as shown above)

Part No.	Description	Key
34-1111-158	Main, 158" (13'-2")	A
34-2231-480	Mid-main with mid-marker, ECU and ABS warning lamp drop, 480" (40')	B
34-3000-156	ABS power harness, 156" (13')	C
36-9601-024	ID / license	* H

2-Lamp Rear Sill Harness Options

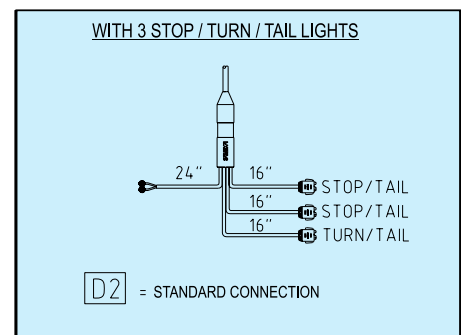
Part No.	Description	Key
34-4020-01	With 2 stop/turn/tail, standard pigtails	D

3-Lamp Rear Sill Harness Options

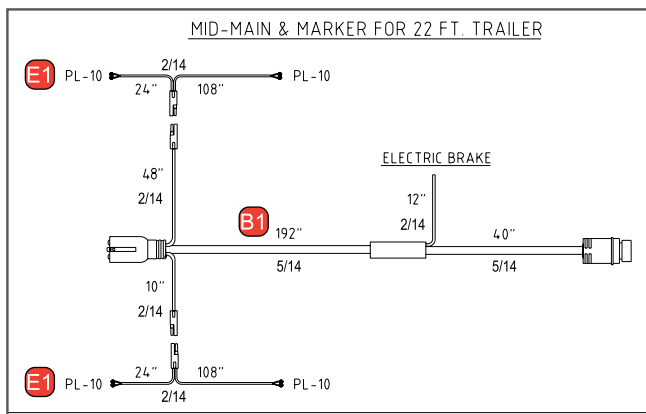
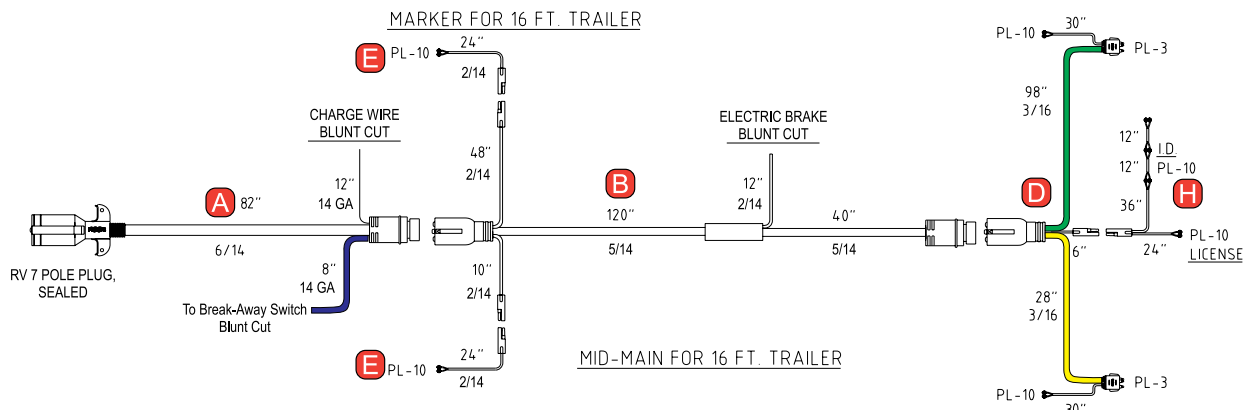
Part No.	Description	Key
34-4030-01	With 3 stop/turn/tail, standard pigtails	D2

* Will fit both 34 series (STA-DRY® SLIM-7™ System) and 36 series (STA-DRY® System)

REAR SILL HARNESS STOP/TURN/TAIL LIGHT OPTIONS



STA-DRY® System - Tagalong, Equipment & Landscape - Electric Brakes



Standard (Length as shown above)

Part No.	Description	Key
34-1703-082	Main, 82" (6'-10")	A
34-4010	Rear sill	D
36-9601-036	ID / license	* H

* Will fit both 34 series (STA-DRY® SLIM-7™ System) and 36 series (STA-DRY® System)

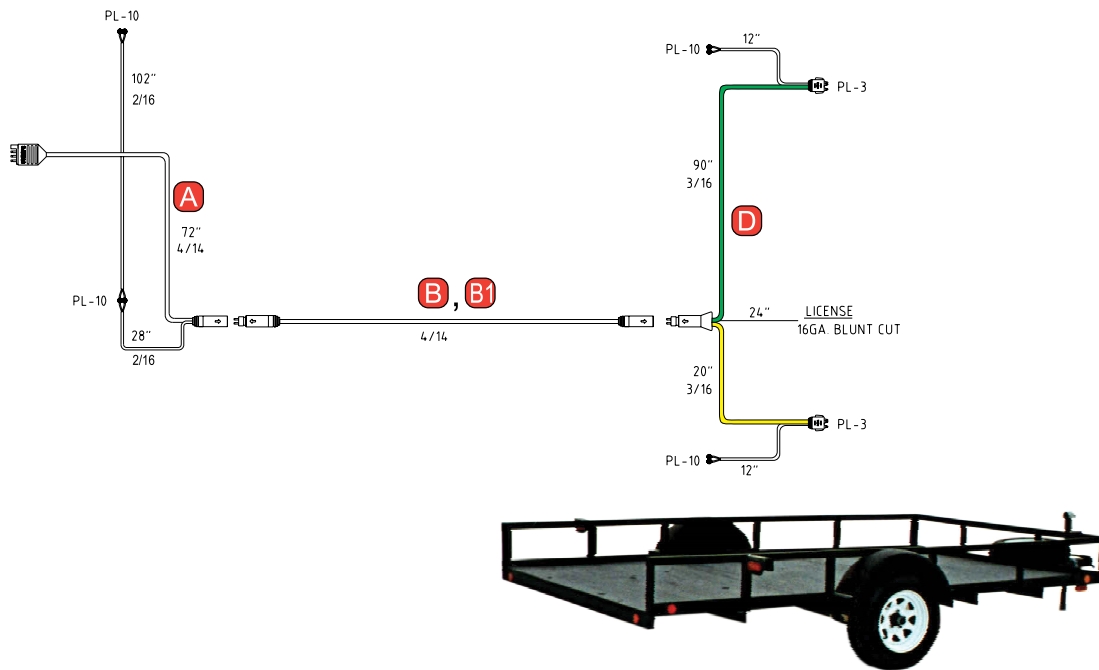
Mid-Main Harness Options

Part No.	Description	Key
34-2023-160	16' trailer mid-main with marker and electric brake drop, 160" (13'-4")	B
34-2023-232	22' trailer mid-main with marker and electric brake drop, 232" (19'-4")	B1

Marker Lamp Lead Options

Part No.	Description	Key
34-5211-024	16' trailer mid-marker, 24" (2')	E
34-5221-024108	22' trailer mid-marker, 24"/108" (2'/9")	E1

STA-DRY® System - Utility Trailer



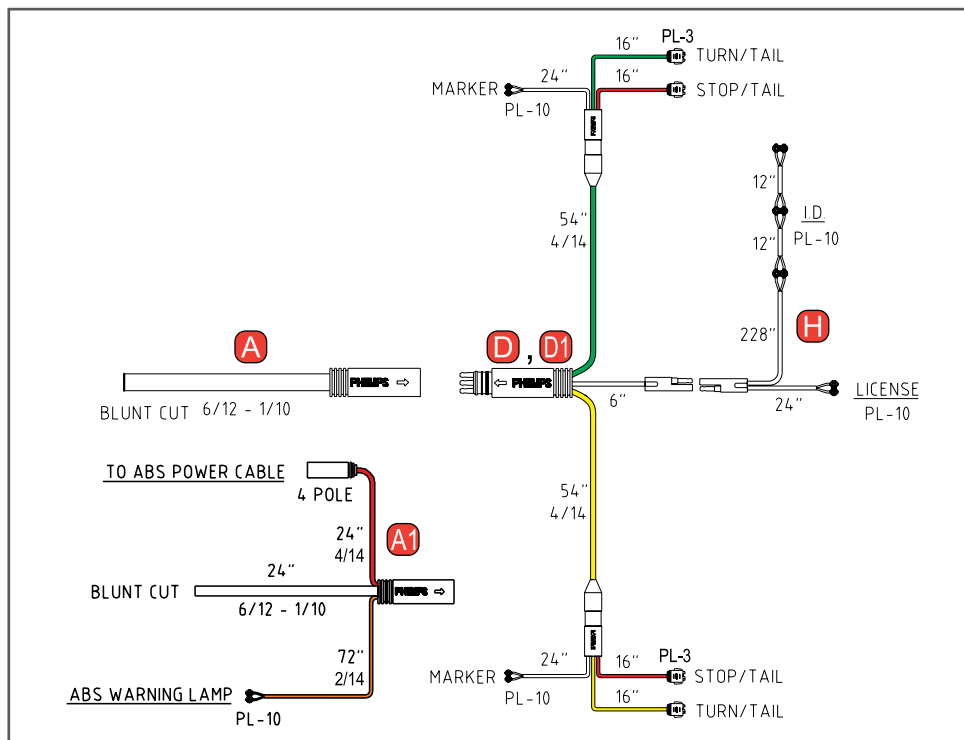
Standard (Length as shown above)

Part No.	Description	Key
34-1824-072	Main, 72" (6')	A
34-4012	Rear sill	D

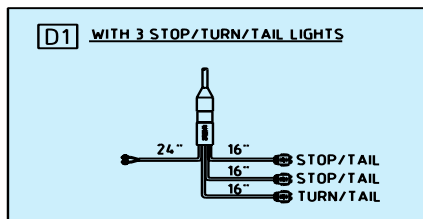
Mid-Main Harness Options

Part No.	Description	Key
34-2004-066	8' trailer mid-main, 66" (5'-6")	B
34-2004-114	12' trailer mid-main, 114" (9'-6")	B1

STA-DRY® SLIM-7™ System - Retrofit Trailer



REAR SILL HARNESS STOP/TURN/TAIL LIGHT OPTIONS



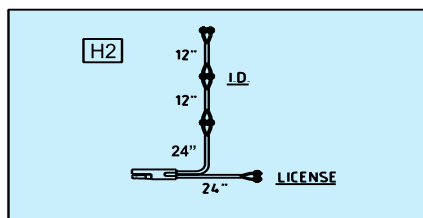
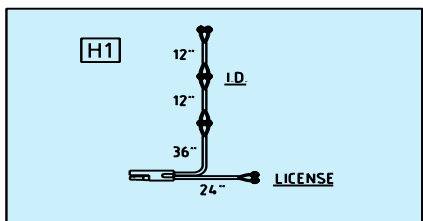
Main Harness

Part No.	Description	Key
34-1901-024	Main, 24" (2')	A
34-1902-024	Main, 24" (2') with ABS drop	A1

2-Lamp Rear Sill Harness Options

Part No.	Description	Key
34-4020	With 2 stop/turn/tail, standard pigtails	D

ID / LICENSE OPTIONS



3-Lamp Rear Sill Harness Options

Part No.	Description	Key
34-4030	With 3 stop/turn/tail, standard pigtails	D1

ID / License Rear Sill Harness Options

Part No.	Description	Key
36-9601-024	ID / license, 24" (2')	* H2
36-9601-228	ID / license, 228" (19')	* H
36-9601-036	ID / license, 36" (3')	* H1

* Will fit both 34 series (STA-DRY® SLIM-7™ System) and 36 series (STA-DRY® System)

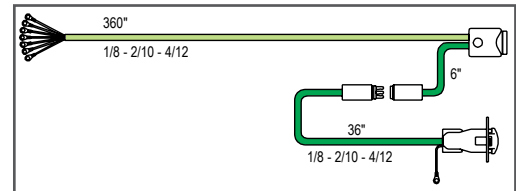
34 series (STA-DRY® SLIM-7™ System) is not interchangeable with the 36 series (STA-DRY® System) except where noted.
Adapter available, page 127.

STA-DRY® MAIN MODULE

Double Trailer

Part No.	Description
36-9000-360	30' with 3' QCS® extension

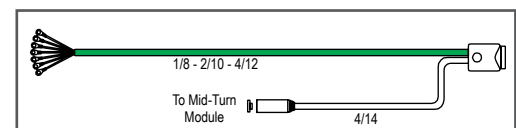
- 1/8, 2/10 and 4/12 ga. conductors exceed the maximum power requirements for the ABS unit
- Equipped with a detachable 36 in. molded QCS® socket for double trailer use
- Ring terminals



Single Trailer

Part No.	Description
36-9000-480	40' with 20' mid-turn module outlet
36-9000-600	50' with 25' mid-turn module outlet
36-9000-720	60' with 30' mid-turn module outlet

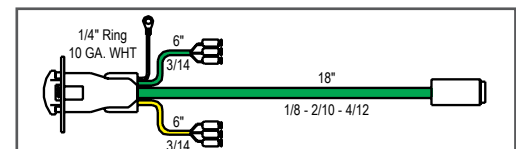
- 1/8, 2/10 and 4/12 ga. conductors exceed the maximum amperes
- Easy connection to mid-turn module
- All mid-turn outlets are "dummy" plugged
- Ring terminals



QCS2® Main

Part No.	Description
36-9020-018	18" with 6" marker drop and 7 pole female

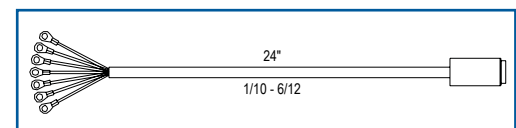
- 1/8, 2/10 and 4/12 ga. conductors
- QCS2® socket



Main Repair Harness

Part No.	Description
36-3001	24" with 7 pole female, 1/10 - 6/12 ga.

- #10 ring terminals

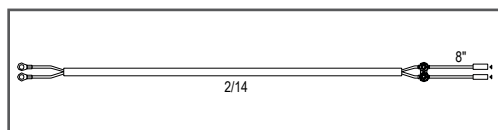


34 series (STA-DRY® SLIM-7™ System) is not interchangeable with the 36 series (STA-DRY® System) except where noted.
Adapter available, page 127.



JUMPER HARNESS

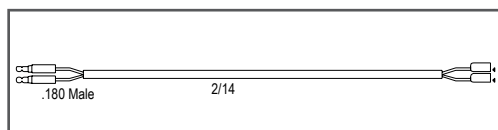
Marker Harness



Part No.	Description
36-9100-060	5', lower marker/clearance lamps
36-9100-192	16', upper marker/clearance lamps

- For use with front (nosebox) marker lamps
- Standard with #10 ring terminals for a positive connection
- Standard with female .180 bullets to add additional lamps
- Dummy plugged female bullets
- Custom harness lengths available in 12 in. increments

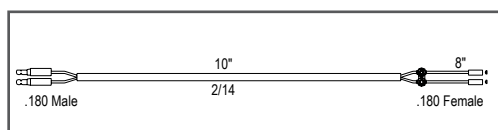
Male/Female Jumper Harness



Part No.	Description
36-9101-060	5', with 2 pole female bullets
36-9101-192	16', with 2 female bullets

- Female bullets connect to pin lamp pigtails
- 2 female bullets per conductor for additional connections
- Color coded conductors to ensure proper connections
- Custom harness lengths available in 12 in. increments

Marker/Clearance Harness



Part No.	Description
36-9701	10" marker/clearance lamps with additional marker connection

- Unique design enables any amount of lamps to be connected using marker modules or additional pigtails

34 series (STA-DRY® SLIM-7™ System) is not interchangeable with the 36 series (STA-DRY® System) except where noted.
Adapter available, page 127.



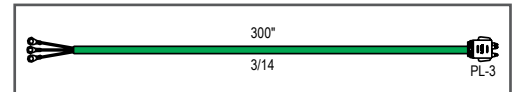
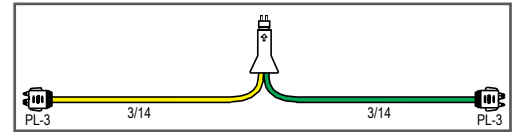
MID-TURN MODULE

Mid-Turn Module

Part No.	Description
36-9200-6060	Center, 60" roadside, 60" curbside
36-9200-2484	Offset, 24" roadside, 84" curbside

- Provides a moisture proof connection to main harness

Part No.	Description
36-9202-300	Mid-turn, 25' extension

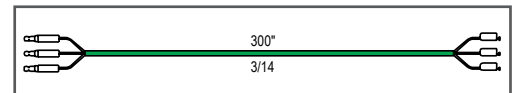
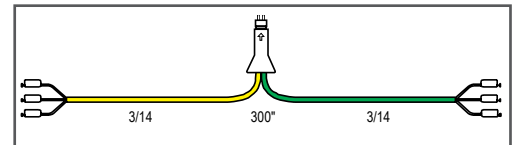


Part No.	Description
36-9201-6060	Center, 60" roadside, 60" curbside
36-9201-2484	Offset, 24" roadside, 84" curbside

- Provides a moisture proof connection to main harness

Part No.	Description
36-9203-300	Mid-turn, 25' extension

LED & Male Pin

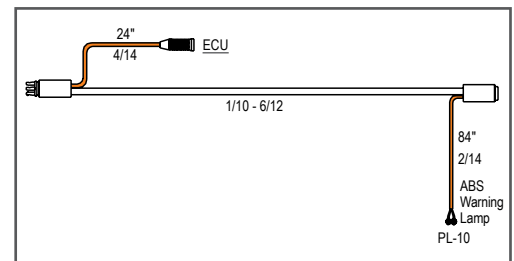


ALL OTHER MODULES

ABS Module

Part No.	Description
36-9300-012	1' for forward axle ABS position, 1/10 - 6/12 ga.
36-9300-132	11' for rear axle ABS position, 1/10 - 6/12 ga.

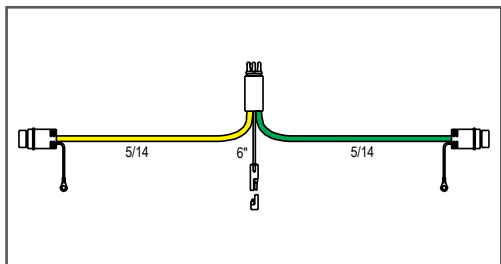
- Sealed thermo-plastic ABS ECU connector
- ECU connector is industry-standard
- ECU and warning lamp cables color coded orange for easy identification



34 series (STA-DRY® SLIM-7™ System) is not interchangeable with the 36 series (STA-DRY® System) except where noted.
Adapter available, page 127.

Additional ABS harness configurations are available, please ask your sales representative.

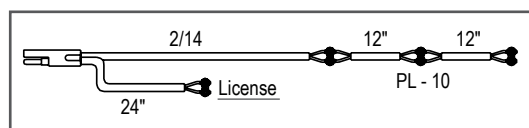
Rear "T" Module



Part No.	Description
36-9400-2484	Offset, 24" roadside, 84" curbside
36-9400-5050	Center, 50" roadside, 50" curbside

- Additional ground wires ensure a solid ground
- 2 pole plug from center for I.D. and license module connection, dummy plugged

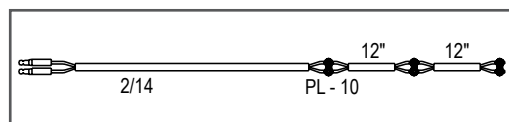
Rear "T" License & I.D. Marker Harness Module



Part No.	Description
36-9601-024	2', lower I.D. lamps and 2' license lamp *
36-9601-036	3', lower I.D. lamps and 2' license lamp *
36-9601-228	19', upper I.D. lamps and 2' license lamp *

- Plugs to rear "T" for a sealed connection
- Dimensions fit standard upper and lower position I.D. lamp, plus a license lamp connection

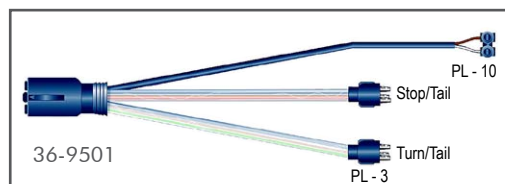
Pigtail Module, License & I.D. Marker Harness



Part No.	Description
36-9603-036	3', lower I.D. lamps
36-9603-228	19', upper I.D. lamps

- Connect to pigtail module with a male .180 bullet

Lamp Rear "T" Plug-In Pigtail Module - Standard

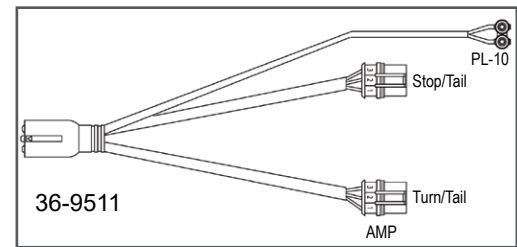


Part No.	Description
36-9501	2 stop/turn/tail and 1 PL-10 sealed marker, 4 pin
36-9502	2 stop/turn/tail and 4 .180 double female bullets, 5 pin
36-9503	3 stop/turn/tail and 1 PL-10 sealed marker, 4 pin
36-9504	3 stop/turn/tail and 4 .180 double female bullets, 5 pin

* Will fit both 34 series (STA-DRY® SLIM-7™ System) and 36 series (STA-DRY® System)

LED Model 44 & 60 Lamp Module - AMP Connector

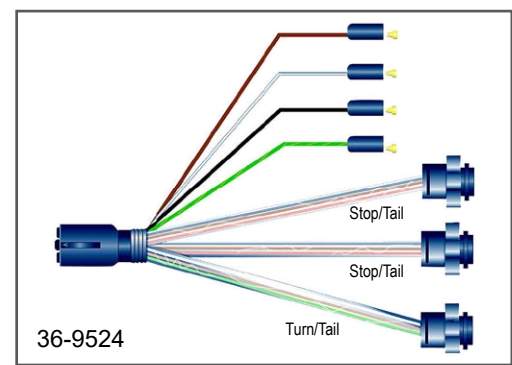
Part No.	Description
36-9511	2 stop/turn/tail and 1 PL-10 marker, 4 pin
36-9512	2 stop/turn/tail and 4 .180 double female bullets, 5 pin
36-9513	3 stop/turn/tail and 1 PL-10 marker, 4 pin
36-9514	3 stop/turn/tail and 4 .180 double female bullets, 5 pin



Female Pin Plugs, Mates to Male Pin Lamp Module

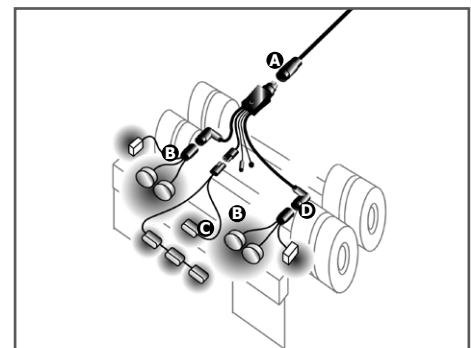
Part No.	Description
36-9523	3 stop/turn/tail and 1 PL-10 sealed marker
36-9524	3 stop/turn/tail and 4 .180 double female bullets

- 2 or 3 stop-tail-turn lamp connections
- Available with 4 double female .180 bullets for connecting additional lamps
- Clear shield protects wire conductors and makes it easy to see wire color and function
- Green and yellow stripe wire indicates turn signal function and eliminates the need to stock separate curbside and roadside pigtails
- Unique "pop" together mold design keeps pigtails connected to rear "T" and keeps moisture and contamination out



Part No.	Description	Key
36-3001	Main	A
36-9501	Marker modules	B
36-9601-036	ID/license	C
36-9400-2484	Rear "T"	D

STA-DRY® System - Repair Kit



34 series (STA-DRY® SLIM-7™ System) is not interchangeable with the 36 series (STA-DRY® System) except where noted.

Adapter available, page 127.

LITE-SENTRY®

LITE-SENTRY®

Know instantly if a trailer light or trailer lighting connection has failed!



Find out how this can be customized to fit your new fleet spec or retrofit application!

Part No.	Description
34-1107-024	2' LITE-SENTRY® indicator, with QCS2® socket and SLIM-7™*

*Current design shown (P/N: 34-1107-024) is for OEM only

- Works with all 12V LED lights that draw more than 19mA
- Designed to work with LED exterior trailer lighting only
- Integrated and completely sealed into a Phillips STA-DRY® electrical harness
- Optional: Lighting and connection failure notifications can also be sent via telematics to fleet managers or any other individual that would benefit from this knowledge
- Integrated short circuit protection: No more electrical harnesses burning up due to "dead shorts"
- Contact your local sales representative to find out how to integrate the LITE-SENTRY® into your electrical harness system with custom lengths and terminations available for both OEM and retrofit chassis applications
- Patent No.9434308

The LITE-SENTRY® monitors the exterior trailer lighting for lighting connection failures and notifies the driver by an indicator light mounted at the front of the trailer.

SLIM-7™

Sealed 7-Pin Connection

.180 Double Female Connectors

For Marker/Clearance Lights

QCS2®

SAE J560 Socket

LITE-SENTRY®

Current Monitoring Device

Indicator Light

ON: Light/connection failure
OFF: No problem detected

HOW IT WORKS

SYSTEM INTEGRATION:

The LITE-SENTRY® is integrated into the front of the trailer harness system and monitors the current that flows through the trailer's electrical system while the vehicle is powered on.

UPON INITIAL START UP:

When power is supplied to the electrical system, the amber indicator light will turn on for approximately 3 seconds to confirm that the LITE-SENTRY® is functioning.

DURING THE RIDE:

With the vehicle powered on, and after initial start-up, the indicator light should be monitored regularly, similarly to how the lights on the dashboard of a tractor are monitored.

DETECTION OF LIGHTING FAILURES:

With power supplied to the trailer, when the driver engages any exterior trailer lighting, if a significant drop in electrical current is detected within the electrical system, the indicator light will turn on, and stay on, to notify the driver of possible lighting failure.

NORMAL LIGHT OPERATION

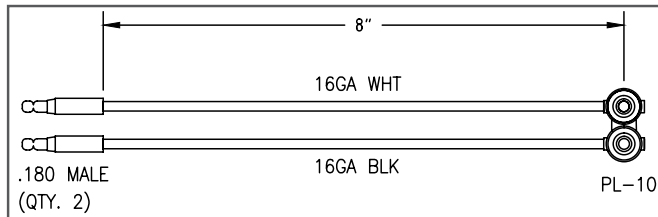
If the indicator light remains off during the ride, no problems are detected.

MARKER / CLEARANCE LIGHT PIGTAILS

PL-10 Connector

Part No.	Description	Qty.
51-96010	PL-10 connector, (2) bullets, 8"	1
51-96010-25	PL-10 connector, (2) bullets, 8"	25

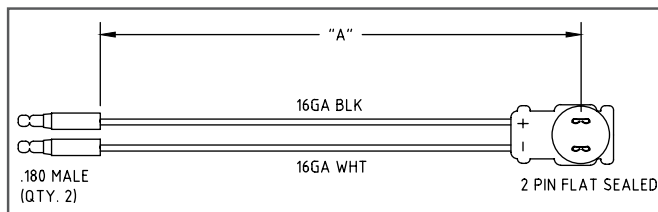
- Molded connections to protect against contaminants
- 16 ga. black and white wires
- .180 male bullets



Flat Seal Connector

Part No.	Description	Qty.
51-96110	Flat seal connector, (2) bullets, 6"	1
51-96110-25	Flat seal connector, (2) bullets, 6"	25

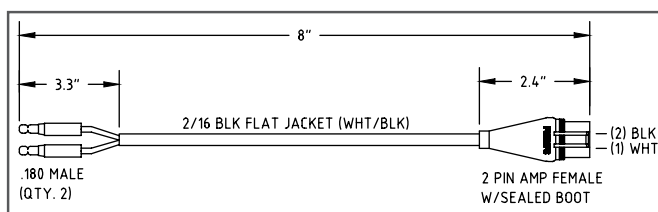
- Molded connections to protect against contaminants
- Molded o-ring ensures water-tight connection
- 16 ga. black and white wires
- .180 male bullets



2 Pin AMP Connector with STA-DRY® Sealed Boot

Part No.	Description	Qty.
51-96310	2 pin amp connector with STA-DRY® sealed boot, (2) bullets, 8"	1
51-96310-25	2 pin amp connector with STA-DRY® sealed boot, (2) bullets, 8"	25

- 2 pin amp connector with STA-DRY® sealed boot adds additional protection to help seal out moisture and contaminants
- 16 ga. black and white wires
- .180 male bullets

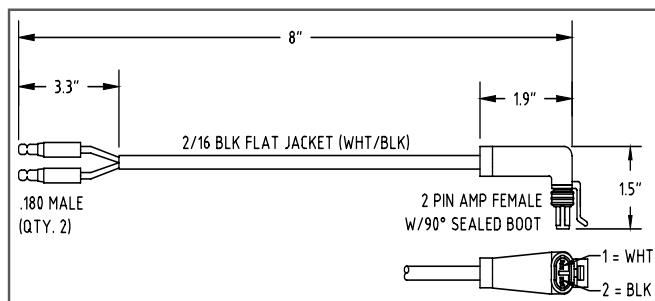


90° 2 Pin AMP Connector with STA-DRY® Sealed Boot



Part No.	Description	Qty.
51-96319	90° 2 pin amp connector with STA-DRY® sealed boot, (2) bullets, 8"	1
51-96319-25	90° 2 pin amp connector with STA-DRY® sealed boot, (2) bullets, 8"	25

- For use with LED lights
- For use in tight spaces
- STA-DRY® sealed boot adds additional protection to help seal out moisture and contaminants

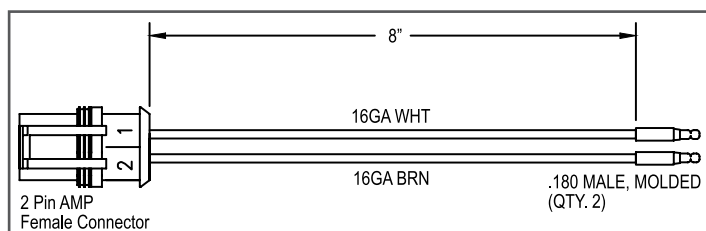


2 Pin AMP Connector



Part No.	Description	Qty.
51-96210	2 pin amp connector, (2) bullets, 8"	1
51-96210-25	2 pin amp connector, (2) bullets, 8"	25

- For use with LED lights
- For use in tight spaces
- Molded connections to protect against contaminants
- 16 gauge white and brown wires
- .180 male bullets

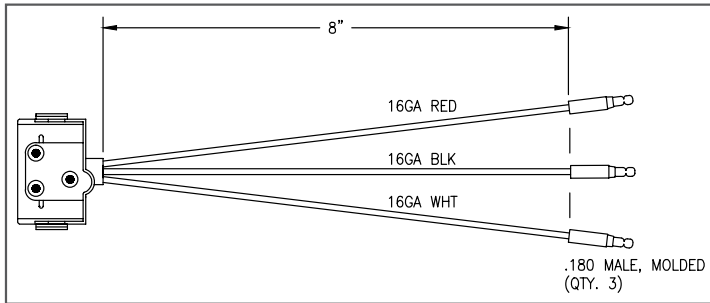


STOP-TAIL-TURN & MID-TURN LIGHT PIGTAILS

90 Degree PL-3 Connector

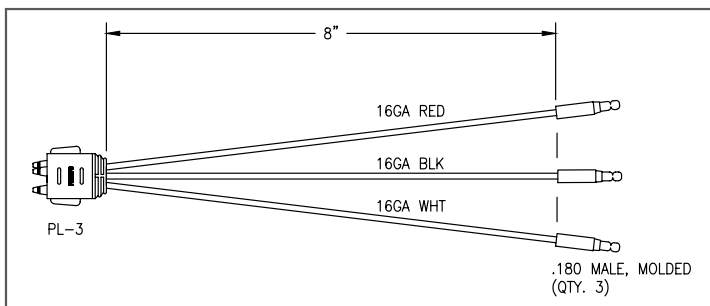
Part No.	Description	Qty.
51-96510	90 degree, PL-3 connector, (3) bullets, 8"	1
51-96510-25	90 degree, PL-3 connector, (3) bullets, 8"	25

- Molded connections to protect against contaminants
- 90° plug-in connection with splash guard for added protection
- 16 ga. black, white, and red wires
- .180 male bullets



Part No.	Description	Qty.
51-96410	PL-3 connector, (3) bullets, 8"	1
51-96410-25	PL-3 connector, (3) bullets, 8"	25

- Molded connections to protect against contaminants
- 16 ga. black, white, and red wires
- .180 male bullets
- Can be used with adapter 51-97470 to convert the PL-3 connection to a 3 pin amp connection

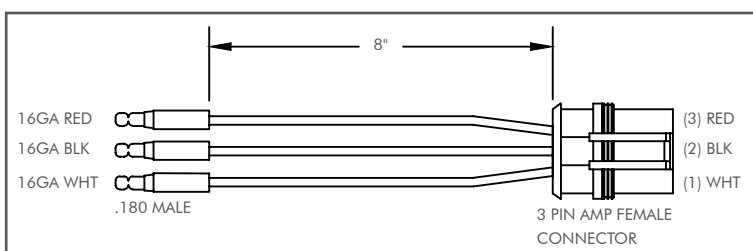


PL-3 Connector



Part No.	Description	Qty.
51-96610	3 pin amp connector, (3) bullets, 8"	1
51-96610-25	3 pin amp connector, (3) bullets, 8"	25

- For use with LED lights
- For use in tight spaces
- Molded connections to protect against contaminants



3 Pin AMP Connector



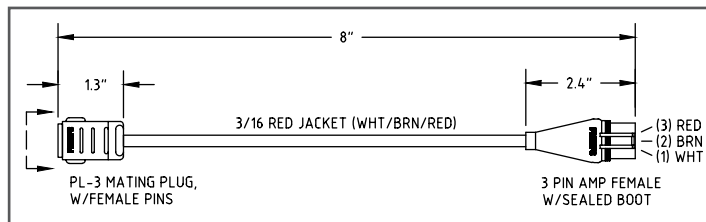
PIGTAIL ADAPTERS

- Converts the PL-3 connection to a 3 pin amp connection
- For use with stop-tail-turn or mid-turn lights
- Molded connections to protect against contaminants
- 3 pin amp connector with STA-DRY® sealed boot adds additional protection to help seal out moisture and contaminants
- 16 ga. white, brown, and red wires

PL-3 to 3 Pin AMP Pigtail Adapter



Part No.	Description	Qty.
51-97470	PL-3 to 3 pin amp connector adapter, 8"	1
51-97470-25	PL-3 to 3 pin amp connector adapter, 8"	25

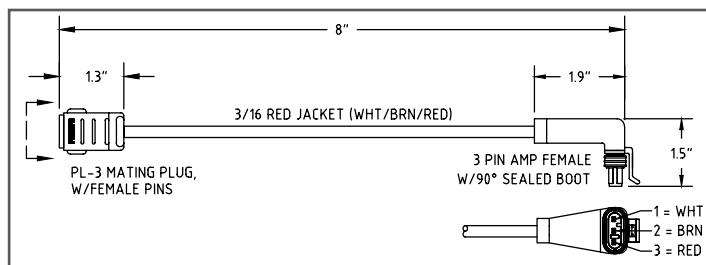


PL-3 to 90° 3 Pin AMP Connector Adapter

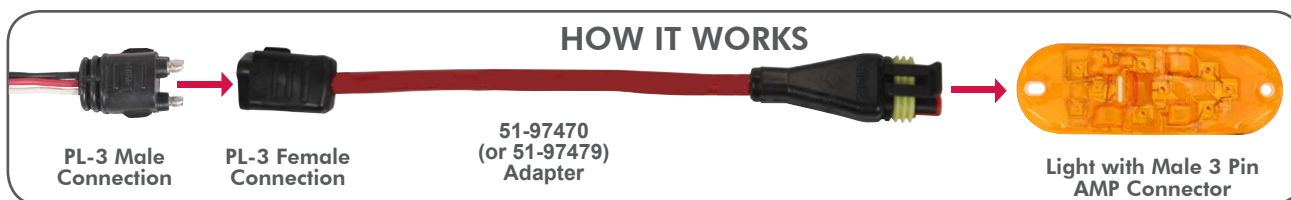


Part No.	Description	Qty.
51-97479	PL-3 to 90° 3 pin amp connector adapter, 8"	1
51-97479-25	PL-3 to 90° 3 pin amp connector adapter, 8"	25

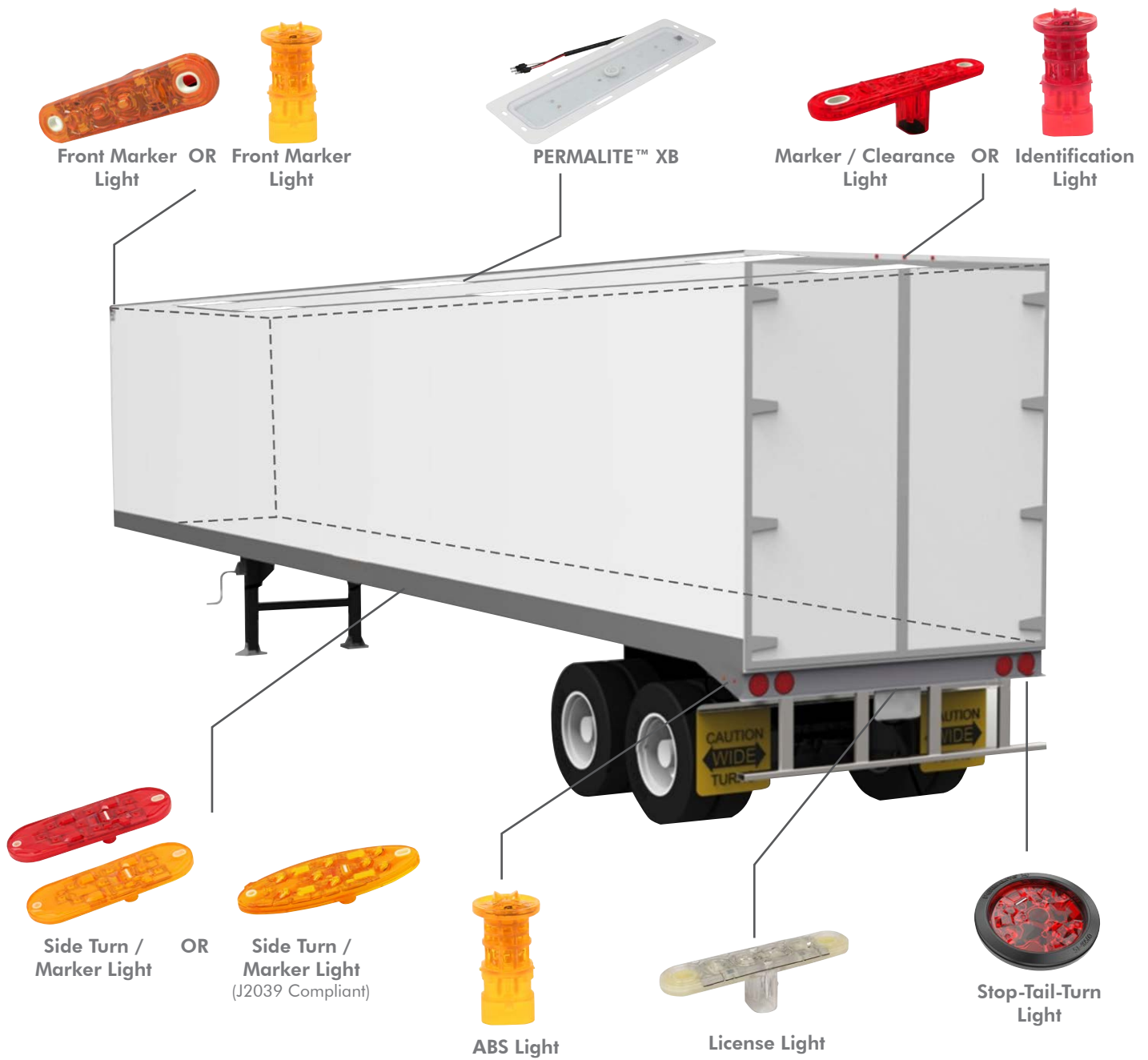
- For use in tight spaces



HOW IT WORKS



PERMALITE™ HD TRAILER LIGHTING



PERMALITE™ XB CARGO LAMPS

- Up to two times brighter than the competition
- Fits almost any application with a slim, light weight design and universal mounting holes
- Available with PIR motion sensor – Light automatically turns on and off
- Consistent light output throughout the operating voltage range

Specifications



51-22221/51-22224



51-22211/51-22214

Operating Voltage	10 - 36V DC	10 - 36V DC
Multi-volt 12V & 24V (10V-36V)	Yes	Yes
Current Draw (at 12V)	1.5A	1.5A
Operating Temperature	-40°F to 176°F (-40°C to 80°C)	-40°F to 176°F (-40°C to 80°C)
IP Rating	IP65	IP65
Dimensions	18.19 in x 5.75 in x 1.17 in (46.21 cm x 14.61 cm x 2.97 cm)	18.19 in x 5.75 in x .91 in (46.21 cm x 14.61 cm x 2.31 cm)
Lumens	2200	2200
Lens	Textured Clear Polycarbonate	Textured Clear Polycarbonate
Housing Color	Powder Coated White	Powder Coated White
Housing Material	Aluminum	Aluminum
LED Warranty	3 Years	3 Years
Lighting Source	20 LEDs	20 LEDs
Reverse Polarity Protection	Yes	Yes
Universal Mounting Holes	Yes	Yes
.180 male bullet connectors	Yes	Yes

Passive Infrared (PIR) Motion Sensor (51-22221/51-22224)

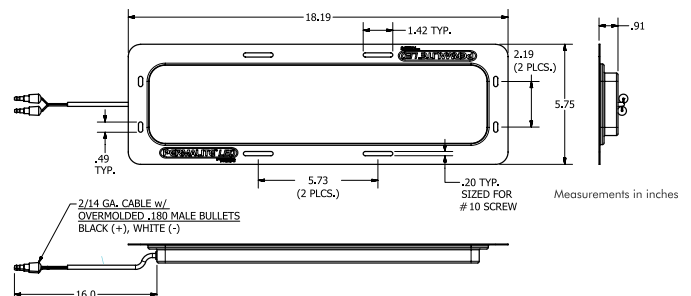
Detection Angle	100°
Detection Distance	Max 16.4 ft (5m)
Shut Off Timer (after activity stops)	5 Minutes



- [illegible]

Part No.	Description	Qty.
51-22211	Cargo lamp, 20 LEDs, 2200 lumens, individual retail box	1
51-22214	Cargo lamp, 20 LEDs, 2200 lumens, bulk pack	6

-



PERMALITE™ XT EXTERIOR TRAILER LIGHTING

Manufactured for exclusive distribution by Phillips Industries – A California Corporation

All Lighting

- Superior durability and impact resistance
- Resistance to corrosion, harsh chemicals and UV exposure

BOARDFREE® Technology

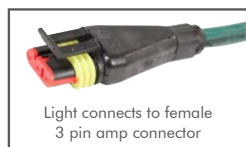
- Utilizes BOARDFREE® technology; a patented in-mold LED lighting solution that eliminates the need for a printed circuit board
- No printed circuit board means:
 - No hazardous waste
 - Optimal heat management which leads to a longer life expectancy
- BOARDFREE® is a registered trademark of Innotec Group

Hard Wired Lighting

- Hard wired LED lighting
- For applications with space restrictions
- Available with AMP and bullet connections

4.0" Round Flange Mount Stop-Tail-Turn Light

BOARDFREE® Technology

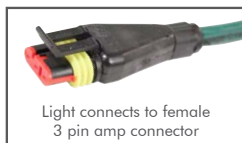
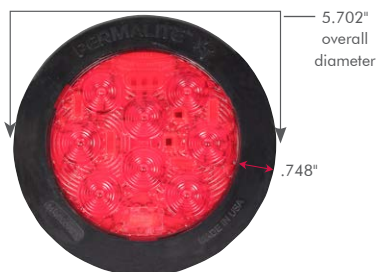


Part No.	Description	Qty.
51-40202	4.0" round flange mount stop-tail-turn light, red	1
51-40202-16	4.0" round flange mount stop-tail-turn light, red	16

- ABS and acrylic construction
- Sealed and greased male 3 pin amp connector
- BOARDFREE® technology with 9 diodes
- Meets SAE S2 and T2 specifications
- Slotted low stress mounting holes with standard mounting dimensions
- Can be mounted any direction and meets DOT specifications
- Connects to Phillips pigtail: P/N: 51-96610
- Optional stainless steel trim ring available (P/N: 51-40904)

4.0" Anti-Theft Round Stop-Tail-Turn Light

BOARDFREE® Technology



Part No.	Description	Qty.
51-40122	4.0" round stop-tail-turn light, with black anti-theft overmold, for 3/16" trailer plate thickness, red	1
51-40122-16	4.0" round stop-tail-turn light, with black anti-theft overmold, for 3/16" trailer plate thickness, red	16
51-40132	4.0" round stop-tail-turn light, with silver anti-theft overmold, for 3/16" trailer plate thickness, red	1
51-40132-16	4.0" round stop-tail-turn light, with silver anti-theft overmold, for 3/16" trailer plate thickness, red	16
51-40142	4.0" round stop-tail-turn light, with black anti-theft overmold, for 1/4" trailer plate thickness, red	1
51-40142-16	4.0" round stop-tail-turn light, with black anti-theft overmold, for 1/4" trailer plate thickness, red	16
51-40152	4.0" round stop-tail-turn light, with silver anti-theft overmold, for 1/4" trailer plate thickness, red	1
51-40152-16	4.0" round stop-tail-turn light, with silver anti-theft overmold, for 1/4" trailer plate thickness, red	16

- ABS and acrylic construction
- Sealed and greased male 3 pin amp connector
- BOARDFREE® technology with 8 diodes
- Meets SAE S2 and T2 specifications
- Molded anti-theft ring is designed to install in a 4.5 in. mounting hole with a trailer plate thickness of 3/16 in. or 1/4 in.
- Connects to Phillips pigtail: P/N: 51-96610
- Patent pending

4.0" Round Grommet Mount Stop-Tail-Turn Light

BOARDFREE® Technology

Part No.	Description	Qty.
51-40212	4.0" round grommet mount stop-tail-turn light, red*	1
51-40212-16	4.0" round grommet mount stop-tail-turn light, red*	16
51-40500	Mounting grommet for 4.0" round light*	1
51-40500-25	Mounting grommet for 4.0" round light*	25
51-40212K	Kit - 4.0" round grommet mount stop-tail-turn light, red (51-40212) and grommet (51-40500)	1

*Light and grommet sold separately. Select kit 51-40212K to purchase both the light and grommet together.

Grommet Mount Light

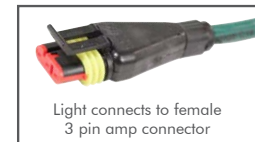
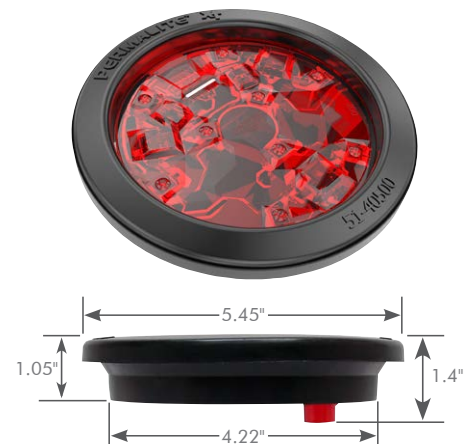
- ABS and acrylic construction
- Sealed and greased intergrated male 3 pin amp connector
- BOARDFREE® technology with 9 diodes
- Meets SAE S2 and T2 specifications
- Can be mounted any direction and meets DOT specifications
- Sold separately from grommet
- Connects to Phillips pigtail: P/N: 51-96610

Grommet

- Grommet provides additional protection to the light against vibration and shock
- Fits in standard 4.5 in. openings
- Grommet mounts up to a 1/4 in. plate

Kit

- Includes:
 - 51-40212 (1) 4.0 in. round grommet mount stop-tail-turn light
 - 51-40500 (1) Mounting grommet for 4.0 in. round light



4.0" Round Grommet Mount Reverse Light

BOARDFREE® Technology

Part No.	Description	Qty.
51-40811	4.0" round grommet mount reverse light, clear*	1
51-40811-16	4.0" round grommet mount reverse light, clear*	16
51-40500	Mounting grommet for 4.0" round light*	1
51-40500-25	Mounting grommet for 4.0" round light*	25
51-40811K	Kit - 4.0" round grommet mount reverse light, clear, (51-40811) and grommet (51-40500)	1

*Light and grommet sold separately. Select kit 51-40811K to purchase both the light and grommet together.

Grommet Mount Light

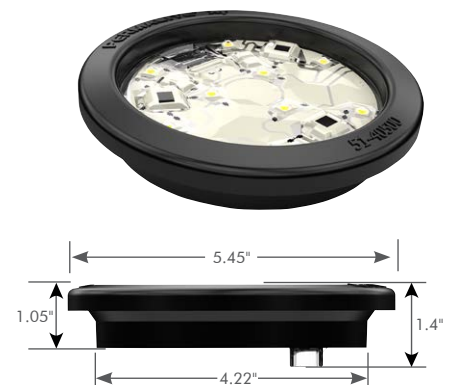
- ABS and acrylic construction
- Sealed and greased intergrated male 3 pin amp connector
- BOARDFREE® technology with 9 diodes
- Meets SAE R specifications
- Can be mounted any direction and meets DOT specifications
- Sold separately from grommet
- Connects to 2 pin tail light connector

Grommet

- Grommet provides additional protection to the light against vibration and shock
- Fits in standard 4.5 in. openings
- Grommet mounts up to a 1/4 in. plate
- Made of UV protected EPDM
- Sold separately from light
- For use with round grommet mount lights only

Kit

- Includes:
 - 51-40811 (1) 4.0 in. round grommet mount reverse light
 - 51-40500 (1) Mounting grommet for 4.0 in. round light



4.0" Round Flange Mount Reverse Light

BOARDFREE® Technology

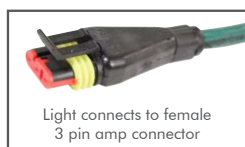


Part No.	Description	Qty.
51-40801	4.0" round flange mount reverse light, clear	1
51-40801-16	4.0" round flange mount reverse light, clear	16

- ABS and acrylic construction
- Sealed and greased integrated male 3 pin amp connector
- BOARDFREE® technology with 9 diodes
- Meets SAE R specifications
- Slotted low stress mounting holes with standard mounting dimensions
- Can be mounted any direction and meets DOT specifications
- Connects to 2 pin tail light connector
- Optional stainless steel trim ring available (P/N: 51-40904)

6.5" Oval Grommet Mount Side Turn/Marker & Stop-Tail-Turn Lights

BOARDFREE® Technology



Light connects to female 3 pin amp connector

Part No.	Description	Qty.
51-60312	6.5" oval grommet mount stop-tail-turn light, red* NEW	1
51-60312-16	6.5" oval grommet mount stop-tail-turn light, red* NEW	16
51-60313	6.5" oval grommet mount side turn/marker light, amber* NEW	1
51-60313-16	6.5" oval grommet mount side turn/marker light, amber* NEW	16
51-60500	Mounting grommet for 6.5" oval light*	1
51-60500-25	Mounting grommet for 6.5" oval light*	25
51-60312K	Kit - 6.5" oval grommet mount stop-tail-turn light, red (51-60312) and grommet (51-60500) NEW	1
51-60313K	Kit - 6.5" oval grommet mount side turn/marker light, amber (51-60313) and grommet (51-60500) NEW	1

*Light and grommet sold separately. Select kit 51-60312K/51-60313K to purchase both the light and grommet together.

Grommet Mount Light

- ABS and acrylic construction
- BOARDFREE® technology with 9 diodes
- Sealed and greased integrated male 3 pin amp connector
- Side turn light meets SAE I6, P2 and P3 for turn signals and side markers
- Stop-tail-turn light meets SAE S2 and T2 specifications
- Sold separately from grommet
- Connects to Phillips pigtail: P/N: 51-96610

Grommet

- Grommet provides additional protection to the light against vibration and shock
- Fits in standard openings
- Grommet mounts up to a 1/4 in. plate
- Made of UV protected EPDM
- Sold separately from light
- For use with oval grommet mount lights only

Kit

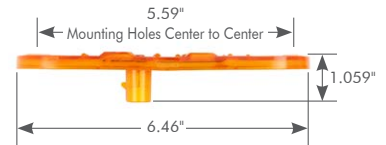
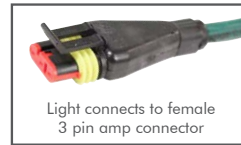
- 51-60312K Includes:
51-60312 (1) 6.5 in. oval grommet mount light, red
51-60500 (1) Mounting grommet for 6.5 in. oval light
- 51-60313K Includes:
51-60313 (1) 6.5 in. oval grommet mount light, amber
51-60500 (1) Mounting grommet for 6.5 in. oval light

6.5" Surface Mount Oval Side Turn/Marker & Stop-Tail-Turn Lights

BOARDFREE® Technology

Part No.	Description	Qty.
51-60302	6.5" oval stop-tail-turn light, red NEW	1
51-60302-16	6.5" oval stop-tail-turn light, red NEW	16
51-60303	6.5" oval side turn/marker light, amber NEW	1
51-60303-16	6.5" oval side turn/marker light, amber NEW	16

- ABS and acrylic construction
- BOARDFREE® technology with 9 diodes
- Sealed and greased integrated male 3 pin amp connector
- Side turn light meets SAE I6, P2 and P3 for turn signals and side markers
- Stop-tail-turn light meets SAE S2 and T2 specifications
- Low stress mounting holes
- Connects to Phillips pigtail: P/N: 51-96610
- Optional stainless steel trim ring available (P/N: 51-60904)

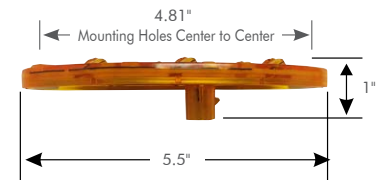


5.5" J2039 Side Turn/Marker Light

BOARDFREE® Technology

Part No.	Description	Qty.
51-60213	5.5" J2039 side turn/marker light, amber	1
51-60213-4	5.5" J2039 side turn/marker light, amber	4

- ABS and acrylic construction
- 10 times thinner than any other J2039 side turn light on the market
- BOARDFREE® technology with 9 diodes
- Sealed and greased integrated male 3 pin amp connector
- Meets SAE P2 E for turn signals and side markers
- Low stress mounting holes
- Connects to Phillips pigtail: P/N: 51-96610

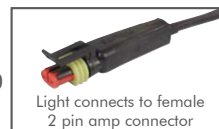


4.0" Low Profile Marker/Clearance Lights

BOARDFREE® Technology

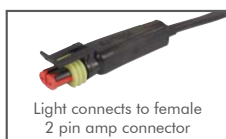
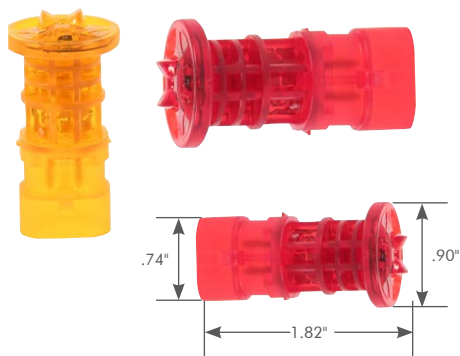
Part No.	Description	Qty.
51-18312	4.0" low profile marker/clearance light, red	1
51-18312-10	4.0" low profile marker/clearance light, red	10
51-18313	4.0" low profile marker/clearance light, amber	1
51-18313-10	4.0" low profile marker/clearance light, amber	10

- ABS and acrylic construction
- BOARDFREE® technology with 4 diodes
- Sealed and greased integrated male 2 pin amp connector
- Meets SAE PC standards for marker lights
- Meets FMVSS 108
- Slotted low stress mounting hole
- Connects to Phillips pigtails: P/Ns: 51-96310; 51-96319; 51-96210
- Optional mounting gasket available (P/N: 51-18500)



3/4" PC2 Rated Round Marker/Clearance Light

BOARDFREE® Technology



*PC2 light must be mounted with 51-34500 grommet
when mounting against trim ring or adapter plates

Part No.	Description	Qty.
51-34302	3/4" PC2 rated round marker/clearance light, red	1
51-34302-10	3/4" PC2 rated round marker/clearance light, red	10
51-34303	3/4" PC2 rated round marker/clearance light, amber	1
51-34303-10	3/4" PC2 rated round marker/clearance light, amber	10
51-34500	Mounting grommet for 3/4" PC2 rated round marker/clearance light*	1
51-34500-10	Mounting grommet for 3/4" PC2 rated round marker/clearance light*	10
51-34550	Anti-theft mounting ring for 3/4" PC2 rated round marker/clearance light	1
51-34550-10	Anti-theft mounting ring for 3/4" PC2 rated round marker/clearance light	10

- Acrylic construction
- Sealed and greased integrated male 2 pin amp connector
- BOARDFREE® technology with a single diode
- Meets SAE PC2 standard for marker lights
- Anti-theft mounting ring or mounting grommet available
- Connects to Phillips pigtails: P/Ns: 51-96310; 51-96319; 51-96210
- Optional trim ring available* (P/N: 51-34904)
- Optional adapter plates available* (P/N: 51-34020 or 51-34025)

3/4" Round Single Function Marker/Clearance Light

Hard Wired

Amp Connections

Part No.	Description	Qty.
51-34312	3/4" PC rated round single function light, 2 pin amp connector, red	1
51-34312-25	3/4" PC rated round single function light, 2 pin amp connector, red	25
51-34313	3/4" PC rated round single function light, 2 pin amp connector, amber	1
51-34313-25	3/4" PC rated round single function light, 2 pin amp connector, amber	25

- Polycarbonate lens with sealed housing and hard wired connection
- 3 diodes
- 16 ga., 8 in. wire leads with sealed 2 pin male amp connection
- Meets SAE J592 standards for P2/PC marker/clearance lights
- IP65 rated
- Includes mounting grommet (P/N: 51-34501)
- Optional adapter plates available (P/N: 51-34020 or 51-34025)
- Connects to Phillips pigtails: P/Ns: 51-96310; 51-96319; 51-96210



Amp Connections

Bullet Connections

Part No.	Description	Qty.
51-34322	3/4" PC rated round single function light, (2) .180 bullet connectors, red	1
51-34322-25	3/4" PC rated round single function light, (2) .180 bullet connectors, red	25
51-34323	3/4" PC rated round single function light, (2) .180 bullet connectors, amber	1
51-34323-25	3/4" PC rated round single function light, (2) .180 bullet connectors, amber	25

- Polycarbonate lens with sealed housing and hard wired connections
- 3 diodes
- 16 ga., 8 in. wire leads with .180 male bullet connections
- Meets SAE J592 standards for P2/PC marker/clearance lights
- IP65 rated
- Includes mounting grommet (P/N: 51-34501)
- Optional adapter plates available (P/N: 51-34020 or 51-34025)



Bullet Connections



Included Mounting Grommet
P/N: 51-34501

3/4" Round Dual Function Marker/Clearance Light

Hard Wired



Amp Connections

Amp Connections

Part No.	Description	Qty.
51-35312	3/4" PC rated round dual function light, 3 pin amp connector, red	1
51-35312-25	3/4" PC rated round dual function light, 3 pin amp connector, red	25
51-35313	3/4" PC rated round dual function light, 3 pin amp connector, amber	1
51-35313-25	3/4" PC rated round dual function light, 3 pin amp connector, amber	25

- Polycarbonate lens with sealed housing and hard wired connection
- 3 diodes
- 16 ga., 8 in. wire leads with sealed 3 pin male AMP connection
- Meets SAE J592 standards for P2/PC marker/clearance lights in low mode
- IP65 rated
- Includes mounting grommet (P/N: 51-34501)
- Optional adapter plates available (P/N: 51-34020 or 51-34025)
- Connects to Phillips pigtail: P/N: 51-96610



Bullet Connections

Bullet Connections

Part No.	Description	Qty.
51-35322	3/4" PC rated round dual function light, (3) .180 bullet connectors, red	1
51-35322-25	3/4" PC rated round dual function light, (3) .180 bullet connectors, red	25
51-35323	3/4" PC rated round dual function light, (3) .180 bullet connectors, amber	1
51-35323-25	3/4" PC rated round dual function light, (3) .180 bullet connectors, amber	25

- Polycarbonate lens with sealed housing and hard wired connections
- 3 diodes
- 16 ga., 8 in. wire lead with .180 male bullet connections
- Meets SAE J592 standards for P2/PC marker/clearance lights in low mode
- IP65 rated
- Includes mounting grommet (P/N: 51-34501)
- Optional adapter plates available (P/N: 51-34020 or 51-34025)



Included Mounting Grommet
P/N: 51-34501

4.0" Low Profile License Light

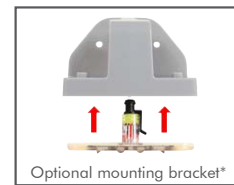
BOARDFREE® Technology

Part No.	Description	Qty.
51-18701	4.0" low profile license light, clear	1
51-18701-10	4.0" low profile license light, clear	10
51-18701K	Kit - 4.0" low profile license light, (51-18701), mounting bracket (51-18900) and pigtail amp connector (51-96210)	1

- ABS and acrylic construction
- Sealed and greased integrated male 2 pin amp connector
- BOARDFREE® technology with 4 diodes
- Meets SAE L standard for use as a license light by FMVSS
- Slotted low stress mounting holes
- Optional mounting bracket available (P/N: 51-18900)
- Connects to Phillips pigtails: P/Ns: 51-96310; 51-96319; 51-96210

Kit

- 51-18701K Includes:
 - 51-18701 (1) 4.0 in. low profile license light
 - 51-18900 (1) 4.0 in. low profile license light mounting bracket
 - 51-96210 (1) Pigtail, 2 pin female amp connector to (2) .180 male bullet connections



51-18701K Kit

Amp Connections

Part No.	Description	Qty.
51-34711	3/4" round license light, 2 pin amp connector, clear	1
51-34711-10	3/4" round license light, 2 pin amp connector, clear	10

- Polycarbonate lens with sealed housing and hard wired connection
- 3 diodes
- 16 ga., 8 in. wire leads with sealed 2 pin male amp connection
- Meets SAE L standard for use as a license light when mounted correctly
- Includes hooded mounting grommet
- Connects to Phillips pigtails: P/Ns: 51-96310; 51-96319; 51-96210

Bullet Connections

Part No.	Description	Qty.
51-34721	3/4" round license light, (2) .180 bullet connectors, clear	1
51-34721-10	3/4" round license light, (2) .180 bullet connectors, clear	10

- Polycarbonate lens with sealed housing and hard wired connections
- 3 diodes
- 16 ga., 8 in. wire lead with .180 male bullet connections
- Meets SAE L standard for use as a license light when mounted correctly
- Includes hooded mounting grommet

3/4" Round License Light

Hard Wired



3/4" Round Auxiliary Light

Hard Wired



AMP Connections

Part No.	Description	Qty.
51-34011	3/4" round auxiliary light, 2 pin amp connector, clear	1
51-34011-10	3/4" round auxiliary light, 2 pin amp connector, clear	10

- Polycarbonate lens with sealed housing and hard wired connection
- 3 diodes
- 16 ga., 8 in. wire leads with sealed 2 pin male amp connection
- Includes mounting grommet (P/N: 51-34501)
- Optional adapter plates available (P/N: 51-34020 or 51-34025)
- Connects to Phillips pigtails: P/Ns: 51-96310; 51-96319; 51-96210

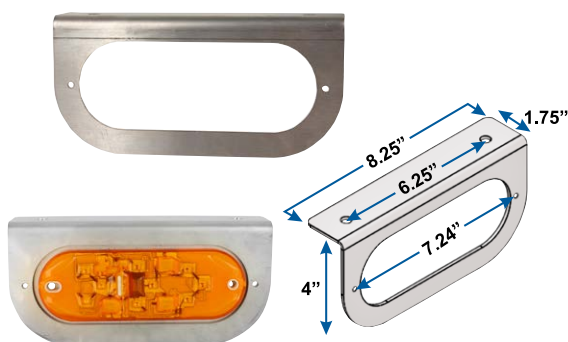
Bullet Connections

Part No.	Description	Qty.
51-34021	3/4" round auxiliary light, (2) .180 bullet connectors, clear	1
51-34021-10	3/4" round auxiliary light, (2) .180 bullet connectors, clear	10

- Polycarbonate lens with sealed housing and hard wired connections
- 3 diodes
- 16 ga., 8 in. wire lead with .180 male bullet connections
- Includes mounting grommet (P/N: 51-34501)
- Optional adapter plates available (P/N: 51-34020 or 51-34025)

BRACKET AND MOUNTING ACCESSORIES

Side Turn Light Mounting Bracket

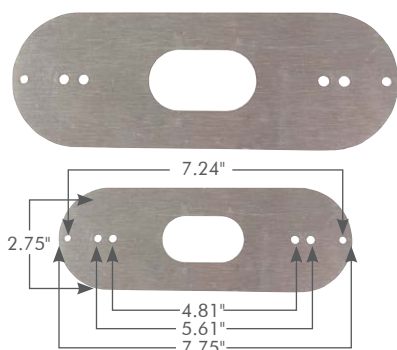


Lights pictured sold separately

Part No.	Description	Qty.
51-60900	Mounting bracket for side turn lights	1
51-60900-10	Mounting bracket for side turn lights	10

- Features high-strength 12 ga. 304 stainless steel construction with 90 degree flange for mounting
- 6.25 in. mounting hole spacing
- 0.365 in. mounting holes
- Accommodates standard grommet or flange mounted 6 in. oval side turn lighting products on the market
- Surface mount PERMALITE™ XT side turn lights (P/N: 51-60303 and 51-60213) will require back plate adapter (P/N: 51-60910) for installation

Back Plate Adapter



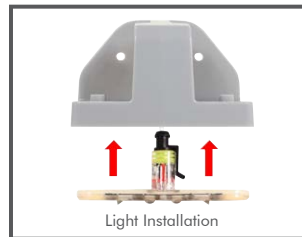
Part No.	Description	Qty.
51-60910	Back plate adapter for side turn lights	1
51-60910-10	Back plate adapter for side turn lights	10

- Features high-strength 12 ga. 304 stainless steel construction
- Designed to mount PERMALITE™ XT side turn lights (P/N: 51-60303 and 51-60213) on standard industry mounting brackets (Phillips mounting bracket P/N: 51-60900)

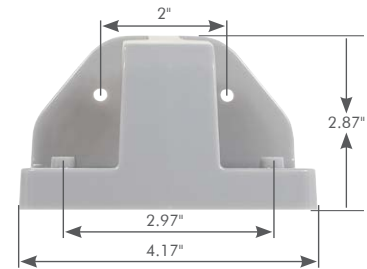
4.0" Low Profile License Light Bracket

Part No.	Description	Qty.
51-18900	4.0" low profile license light mounting bracket	1

- Adds additional protection to the PERMALITE™ XT 4.0 in. low profile license light
- Made of UV resistant non-corrosive polycarbonate material
- The 2 pin amp connector without a sealed boot must be used to accommodate for spacing within the bracket for the pigtail wiring (Phillips P/N: 51-96210)



Light and pigtail pictured sold separately



Part No.	Description	Qty.
51-40500	Mounting grommet for 4.0" round grommet mount lights	1
51-40500-25	Mounting grommet for 4.0" round grommet mount lights	25

- Grommet provides additional protection to the light against vibration and shock
- Fits in standard 4.5 in. openings
- Grommet mounts up to a 1/4 in. plate
- Made of UV protected EPDM

4.0" Mounting Grommet For 4.0" Round Grommet Mount Lights



Light pictured sold separately

Part No.	Description	Qty.
51-60500	Mounting grommet for 6.5" oval grommet mount stop-tail-turn and side turn/marker lights	1
51-60500-25	Mounting grommet for 6.5" oval grommet mount stop-tail-turn and side turn/marker lights	25

- Grommet provides additional protection to the light against vibration and shock
- Fits in standard openings
- Grommet mounts up to a 1/4 in. plate
- Made of UV protected EPDM



Lights pictured sold separately

6.5" Mounting Grommet For 6.5" Oval Grommet Mount Lights



3/4" PC2 Mounting Grommet

For 3/4" PC2 Rated Round Marker/Clearance Lights



Light pictured sold separately

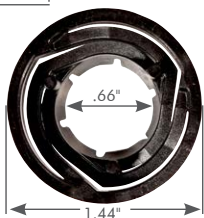


Part No.	Description	Qty.
51-34500	Mounting grommet for 3/4" PC2 rated round marker/clearance lights	1
51-34500-10	Mounting grommet for 3/4" PC2 rated round marker/clearance lights	10

- For use with the PERMALITE™ XT 3/4 in. PC2 rated round marker/clearance light only
- Constructed of EPM rubber and is resistant to the weather elements

3/4" PC2 Anti-Theft Mounting Ring

For 3/4" PC2 Rated Round Marker/Clearance Lights



Part No.	Description	Qty.
51-34550	Anti-theft mounting ring for 3/4" PC2 rated round marker/clearance lights	1
51-34550-10	Anti-theft mounting ring for 3/4" PC2 rated round marker/clearance lights	10

- For use with the PERMALITE™ XT 3/4 in. PC2 rated round marker/clearance lights
- Constructed of high-strength POM material which is abrasion and heat resistant

3/4" Mounting Grommet

For 3/4" Round Hard Wired Lights



Light pictured not included with purchase of 51-34501

Part No.	Description	Qty.
51-34501	Mounting grommet for 3/4" round hard wired lights	5

- For use with 3/4 in. round hard wired single function, dual function and auxiliary lights (Not for use with 3/4 in. round hard wired license lights)
- Constructed of EPM rubber and is resistant to the weather elements
- Fits trailer plate thickness of 1/8 in. – 1/4 in.

2.0" Mounting Adapter Plate

For 3/4" Round Lights

Part No.	Description	Qty.
51-34020	2.0" adapter plate for 3/4" PC and PC2 lights	1
51-34020-10	2.0" adapter plate for 3/4" PC and PC2 lights	10

- For use with PERMALITE™ XT 3/4 in. round lights
- Light must be mounted with grommet to the adapter plate
- Adapter plate comes with installation holes for riveting to the surface around the light
- Constructed of non-corrosive polycarbonate material
- Used to upgrade traditional 2.0 in. flange style lights to smaller more efficient LED lights
- Universal mounting pattern

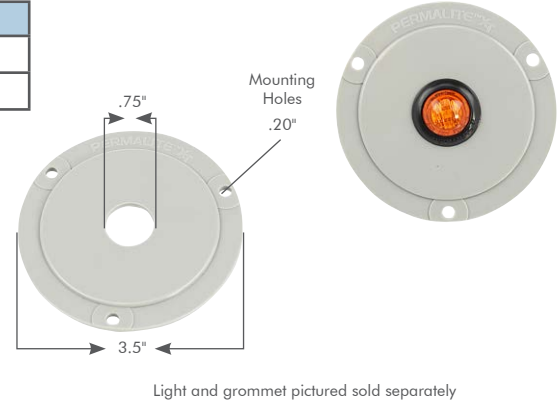


2.5" Mounting Adapter Plate

For 3/4" Round Lights

Part No.	Description	Qty.
51-34025	2.5" adapter plate for 3/4" PC and PC2 lights	1
51-34025-10	2.5" adapter plate for 3/4" PC and PC2 lights	10

- For use with PERMALITE™ XT 3/4 in. round lights
- Light must be mounted with grommet to the adapter plate
- Adapter plate comes with installation holes for riveting to the surface around the light
- Constructed of non-corrosive polycarbonate material
- Used to upgrade traditional 2.5 in. flange style lights to smaller more efficient LED lights
- Universal mounting pattern



LIGHTING STAINLESS STEEL TRIM RINGS

- Attractive add-on feature
- Provides added anti-theft benefits when installed using rivets
- All trim rings are made of stainless steel for durability and corrosion resistance

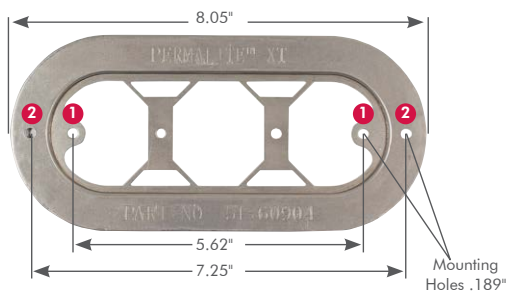
Trim Ring For 4.0" Flange Mount Lights

Part No.	Description	Qty.
51-40904	Trim ring for 4.0" round stop-tail-turn light	1

- For use with PERMALITE™ XT 4.0 in. round stop-tail-turn light
- (P/N: 51-40202 and reverse light P/N: 51-40801)
- Can also be used on similar flanged lights
- Install using 1/4 in. rivets for additional protection against theft



Trim Ring For 6.5" Oval Lights



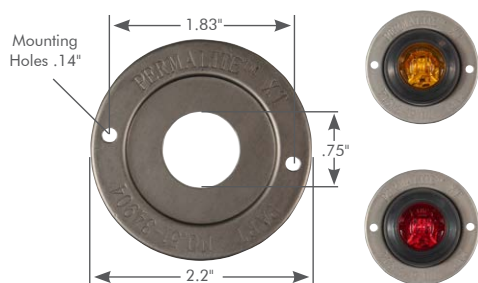
Light pictured sold separately

Part No.	Description	Qty.
51-60904	Trim ring/adapter plate for 6.5" oval side turn lights	1

- For use with PERMALITE™ XT 6.5 in. oval side turn/marker light (P/N: 51-60303) and PERMALITE™ XT 6.5 in. oval stop-tail-turn light (P/N: 51-60302)
- Can be used to install the light in a standard opening without the use of an additional adapter plate by:
 1. Riveting the light directly to the trim ring
 2. Then riveting the trim ring to the mounting surface around the opening

(Mounting holes for 1 & 2 can be referenced in the figure to the left)

Trim Ring For 3/4" PC2 Rated Round Lights



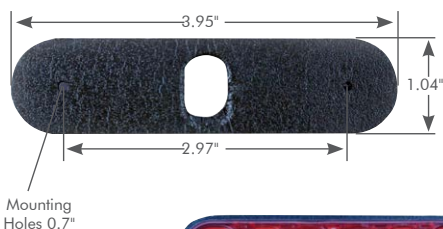
Lights and grommet pictured sold separately

Part No.	Description	Qty. 1
51-34904	Trim ring for 3/4" PC2 rated round marker/clearance light	1

- For use with PERMALITE™ XT PC2 rated round marker/clearance lights (P/N: 51-34302; red and 51-34303; amber)
- Light must be mounted with 51-34500 grommet against trim ring
- Trim ring comes with installation holes for optional riveting to the surface around the light

LIGHTING GASKET

4.0" Low Profile Marker/Clearance Light Mounting Gasket



Light pictured sold separately

Part No.	Description	Qty. 1
51-18500	Mounting gasket for low profile marker/clearance lights	1
51-18500-10	Mounting gasket for low profile marker/clearance lights	10

- Helps prevent water intrusion and corrosion
- For use with the PERMALITE™ XT 4.0 in. low profile marker/clearance lights (P/N: 51-18312; red and 51-18313; amber)
- Constructed of PE foam with adhesive back

TRACTOR AND TRAILER POWER MANAGEMENT



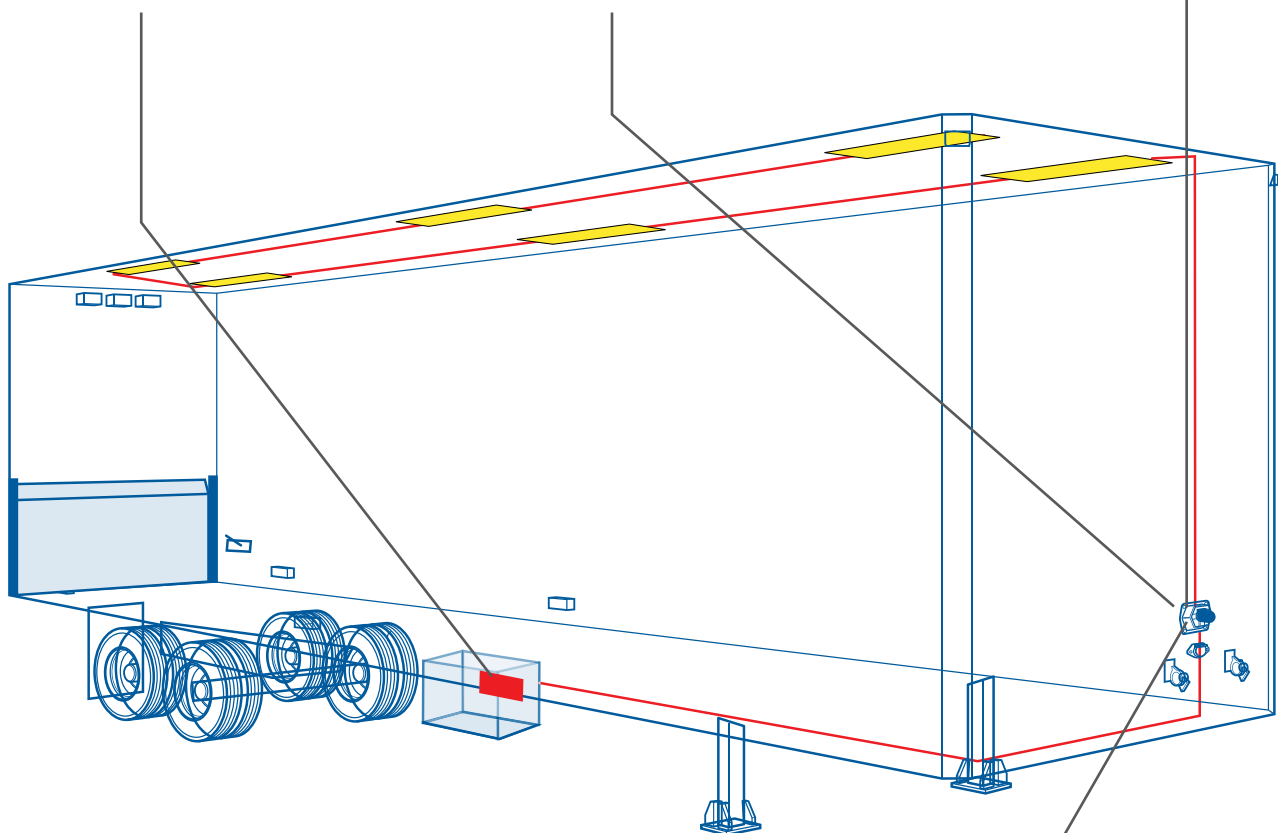
V-CHECK™ II



PERMALOGIC™ NOSEBOX



PERMALOGIC™ REMOTE



QWIK-CHECK™

V-CHECK™ II



One look is all it takes to ensure your batteries have all the power they need. V-CHECK™ II digitally monitors the state of power for any battery, particularly liftgate batteries.

Part No.	Description
60-9100	V-CHECK™ II battery status indicator, digital with 'Go/No-Go' LED, 12V

- Provides a digital display of the battery voltage (9-16 volts), and the battery state of charge
- Features the 'Go / No-Go' LED – Know instantly if your battery is ready for the ride!
- Easy to install
- 2.0" diameter face
- Voltage color guide sticker included



HOW IT WORKS

DIGITAL VOLT DISPLAY

- Voltage measurement and battery state of charge will appear every 15 seconds
- If the voltage is 15.0V – 16.0V the state of charge will be displayed as 'HI'
- If the voltage is 9.0V – 11.2V the state of charge will be displayed as 'SOS'
- If the voltage is below 9.0V, the digital display will read as _9.0 with a state of charge displayed as 'SOS'

GO/NO-GO LED COLOR CODE

- GREEN: 12.6V – 16.0V*
- YELLOW: 12.4V – 12.5V
- RED: 12.3V and below

SLEEP MODE

- Unit will enter sleep mode after 2 days of no activity
- Unit will wake when voltage fluctuates +/- 0.2V

Voltage Measurement	State of Charge	LED Color Code
15.0V - 16.0V	HI*	GREEN ●
12.6V - 14.9V	95% - 100%	GREEN ●
12.4V - 12.5V	75% - 80%	YELLOW ●
11.3V - 12.3V	10% - 70%	RED ●
11.2V - 9.0V	SOS	RED ●
_9.0V (Below 9.0V)	SOS	RED ●

*A digital reading of "HI" (15V - 16V) will most likely never be displayed, however, if it does, it's an indication that the batteries are overcharged. Most often this leads to the batteries dying rapidly. However, in rare instances it can also cause the batteries to become hot and melt or swell, causing them to leak chemicals and burst.

QWIK-CHECK™



60-9200



60-9201 and 60-9202

Part No.	Description	
60-9200	QWIK-CHECK™ for universal installation, with 12" blunt cut wires and #10 ring terminals for installation	NEW
60-9201	QWIK-CHECK™ replacement for i-BOX™, with #10 ring terminals pre-installed	NEW
60-9202	QWIK-CHECK™ replacement for VOLT-BOX™, with #10 ring terminals pre-installed	NEW

- Quickly and easily assess if there is power within the 7-way connection between the tractor and trailer
- LED indicator easily identifies which circuit is not receiving power
- Designed for integration into the electrical system at the nosebox*
- Eliminates the immediate need for a continuity tester

Important Note:

This product does not eliminate or replace the need to perform a pre-trip inspection. It only confirms an electrical signal from the tractor to the trailer. It does NOT check the lighting and wires on the trailer.

*Additional tools (not included) may be needed for installation. Phillips is not liable for damage caused to any nosebox when installing for retrofit.

HOW IT WORKS

With the tractor turned on, and power supplied from the tractor to the trailer 7-way connection, the LED lights on the QWIK-CHECK™ will light up as each circuit receives power. Each light is an indication that power on that correlating circuit is reaching the trailer 7-way connection. If the correlating LED does not light up, there is a problem with the circuit.

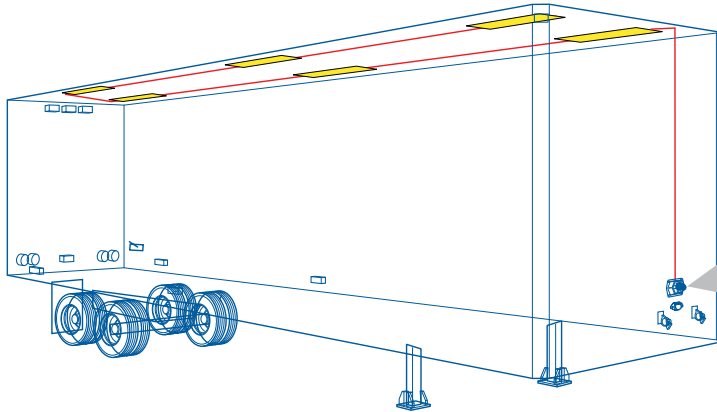
Note: The LED lights are an indication of continuity at the 7-way connection only. They do not confirm if there is sufficient voltage to power a circuit.

Color	Circuit/Function
BLU	ABS/Auxiliary (Automatically engages by turning on the ignition)
BRN	Tail Lights (Turn on headlights)
BLK	Marker/Clearance Lights (Turn on marker/clearance lights or flip the switch on the dashboard)
GRN	Right Turn Signal (Turn on hazards)
YEL	Left Turn Signal (Turn on hazards)
RED	Brake (Step on the brake pedal)

PERMALOGIC™

Trailer Dome Lamp Controller

PERMALOGIC™ is an all-weather, all-electronic controller designed to manage power to trailer dome lamps. By simply stepping on the brake pedal, allowing the automatic timer to turn off the lamps, manually flipping a switch, or low battery voltage disconnect - you'll save the life of your battery and the expense of a road call.



Lamps are on



Overloaded circuit

Normal conditions/
Trailer dome lamps
are offConstant - low voltage
Flashing - low voltage
shut-off

- Eliminates any chance of leaving trailer dome lamps on
- Turns off trailer dome lamps by stepping on the brake pedal
- Fully electronic - eliminates mechanical air pressure switch
- Visual indicator of tractor battery condition
- Weatherproof, solid-state electronics
- Patent No. 7,498,687

REMOTE

Part No.	Description
60-2500	Single circuit, remote unit
60-2502	Dual circuit, remote unit



REMOTE UNIT

NOSEBOX

Part No.	Description
60-2520	Single circuit, without circuit breakers, composite nosebox
60-2520-20	Single circuit, with 20 amp circuit breakers, composite nosebox
60-2520-30	Single circuit, with 30 amp circuit breakers, composite nosebox
60-2522	Dual circuit, without circuit breakers, composite nosebox
60-2522-20	Dual circuit, with 20 amp circuit breakers, composite nosebox

- All -20 part numbers contain 20 amp circuit breakers, 30 amp on blue wire

STA-DRY® S7™ NOSEBOX

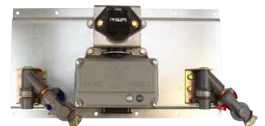
Part No.	Description
16-9520PL	STA-DRY® S7™ nosebox with 20 amp circuit breakers
16-9530PL	STA-DRY® S7™ nosebox with 30 amp circuit breakers
16-95246PL	STA-DRY® S7™ nosebox with 20 amp circuit breakers, emergency and QWIK-E® gladhands on mounting plate



NOSEBOX KIT



STA-DRY® S7™ NOSEBOX

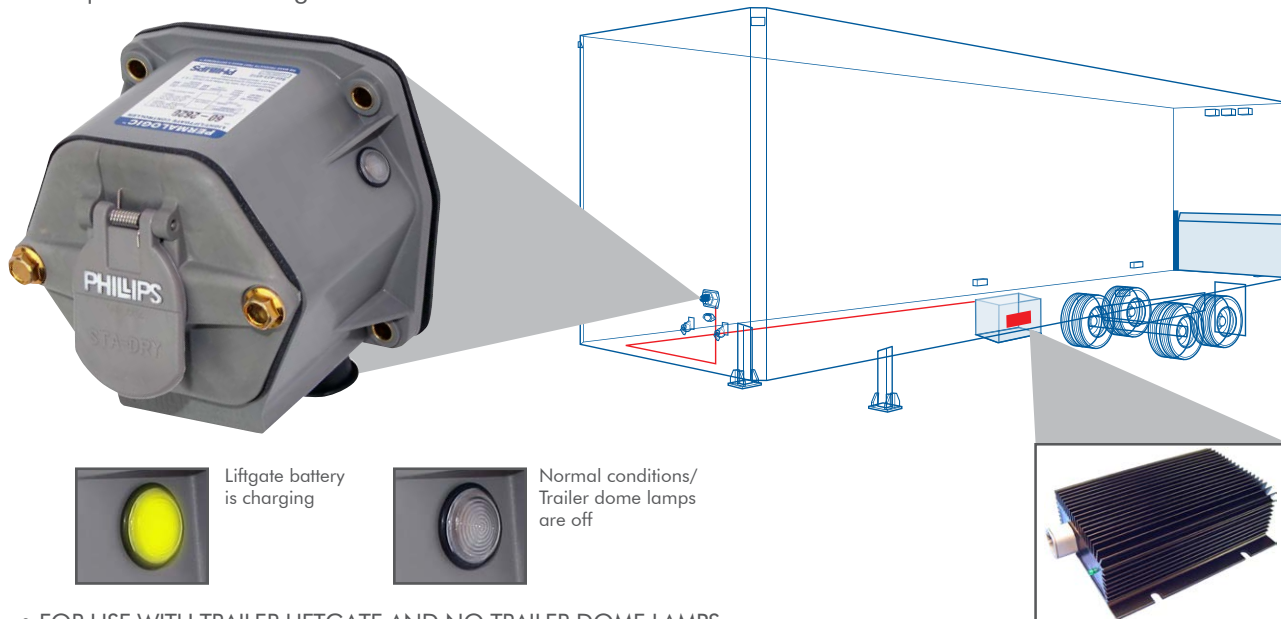


STA-DRY® S7™ SYSTEM

PERMALOGIC™ TC

Liftgate Battery Charging System

PERMALOGIC™ TC can eliminate the need for a single or dual pole set-up in most situations* by providing a 14.4 volt charge to the liftgate battery. By stepping up the voltage, the liftgate battery is charged to capacity, allowing for more frequent use of the liftgate.



- FOR USE WITH TRAILER LIFTGATE AND NO TRAILER DOME LAMPS
- Provides a 14.4V, 20A charge to the liftgate battery
- Eliminates a single or dual pole set-up in most situations*
- Brake light activated - If brakes are activated at any time, the PERMALOGIC™ TC automatically turns off the charge to the liftgate battery. By doing this, all power is available for the trailer ABS braking system.
- Patent No. 7,498,687



REMOTE UNIT

REMOTE UNIT	
Part No.	Description
60-2600	Remote unit

NOSEBOX KIT	
Part No.	Description
60-2620KT	Without circuit breakers, composite nosebox
60-2620-20KT	With 20 amp circuit breakers, composite nosebox

- Kit contents: PERMALOGIC™ TC nosebox, 50 ft. plug-in harness and TRAIL-CHARGER™



NOSEBOX KIT

REPLACEMENT PARTS	
Part No.	Description
60-2620	Without circuit breakers, composite nosebox
60-2690	50' plug-in harness, 2/8 and 1/14 ga.
60-2699	TRAIL-CHARGER™ - liftgate battery charger

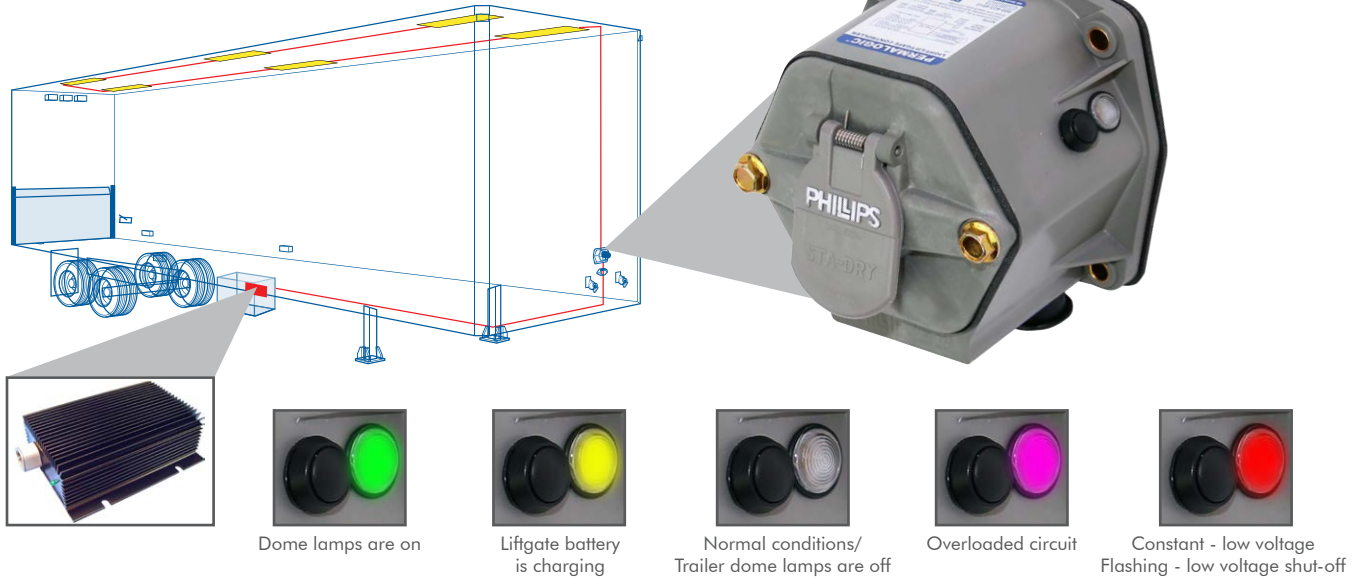
- All -20 part numbers contain 20 amp circuit breakers, 30 amp on blue wire

* Depending on liftgate load, size and cycles

PERMALOGIC™ TC PLUS

Complete Trailer Power Management System

PERMALOGIC™ TC PLUS offers both the trailer dome lamp controller and liftgate charger, in one package. Trailer dome lamps can be controlled normally and the liftgate charger is automatically used when needed to provide maximum charge to the liftgate battery.



- FOR USE WITH TRAILER LIFTGATE AND TRAILER DOME LAMPS
- Provides a 14.4V, 20A charge to the liftgate battery
- Automatically charges liftgate batteries when the trailer dome lamps are not in use
- Brake light activated - By simply stepping on the brake pedal the PERMALOGIC™ TC PLUS automatically turns off the trailer dome lamps and the charge to the liftgate battery. By doing this, all power is available for the trailer ABS braking system.
- Patent No. 7,498,687

NOSEBOX KIT	
Part No.	Description
60-2720KT	Single circuit, without circuit breakers, composite nosebox
60-2720-20KT	Single circuit, with 20 amp circuit breakers, composite nosebox

- Kit contents: PERMALOGIC™ TC PLUS nosebox, 50 ft. plug-in harness and TRAIL-CHARGER™



REMOTE UNIT

REPLACEMENT PARTS	
Part No.	Description
60-2700	Single circuit, remote unit
60-2720	Single circuit, without circuit breakers, composite nosebox
60-2720-20	Single circuit, with 20 amp circuit breakers, composite nosebox
60-2690	50' plug-in harness, 2/8 and 1/14 ga.
60-2699	TRAIL-CHARGER™ - liftgate battery charger



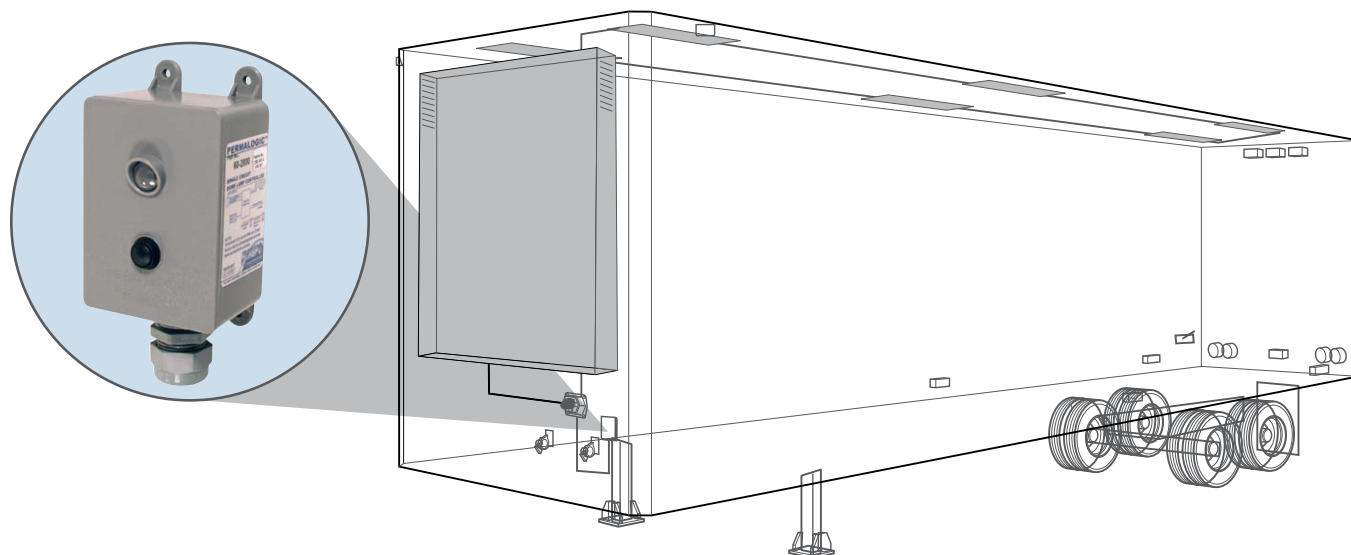
NOSEBOX KIT

- All -20 part numbers contain 20 amp circuit breakers, 30 amp on blue wire

PERMALOGIC™ REEFER

Trailer Dome Lamp Controller For Refrigeration Units

PERMALOGIC™ REEFER is an all-weather, all-electronic controller designed to manage power to trailer dome lamps in trailers with refrigeration units. By simply stepping on the brake pedal, allowing the automatic timer to turn off the lamps, or manually flipping a switch - you'll save the life of your battery and the expense of a road call.



- For trailers with dome lamps powered by a reefer battery
- Eliminates any chance of leaving trailer dome lamps on
- Brake pedal activated
- Fully electronic - eliminates mechanical air pressure switch
- Weatherproof - sealed to prevent contaminants from passing to the wire harness
- Anti-corrosive housing to protect against magnesium and calcium chlorides
- Patent No. 7,498,687



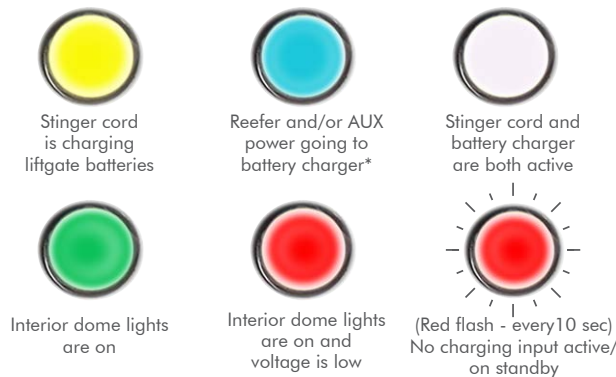
REMOTE	
Part No.	Description
60-2800	Single circuit, stand-alone

PERMALOGIC™ SMART-CHARGE

Trailer Power Management

The PERMALOGIC™ Smart-Charge is a “smart” charging system for liftgate and auxiliary battery banks that recognizes and automatically manages the best power source(s) to charge your batteries from ALL available sources collectively at the same time.

- Regulates power draw from ALL available sources collectively
- Recognizes and automatically manages the best power source(s) to charge your batteries
- Has built-in low voltage detection to avoid draining power sources
- LED indicator displays which power input source is being utilized



*When the jumper wire from solenoid to rectifier is used, the aqua light indicates that the 7-way/reefer/stinger is charging the liftgate



How it works

- With the PERMALOGIC™ Smart-Charge, the STA-CHARGE™ Battery Charger pulls power at no more than a maximum combined 28 Amps from the following sources collectively:
 1. J560 7-way AUX/BLUE circuit
 2. Reefer unit
 3. Additional input to accommodate for technological charging input advances – ie. solar
- If these sources run low or become depleted, and power from the STA-CHARGE™ Battery Charger is no longer enough, the PERMALOGIC™ Smart-Charge will automatically engage the liftgate/auxiliary charging system to supplement the charging.
- The liftgate/auxiliary charging system will work in conjunction with the STA-CHARGE™ battery charger, or independently.

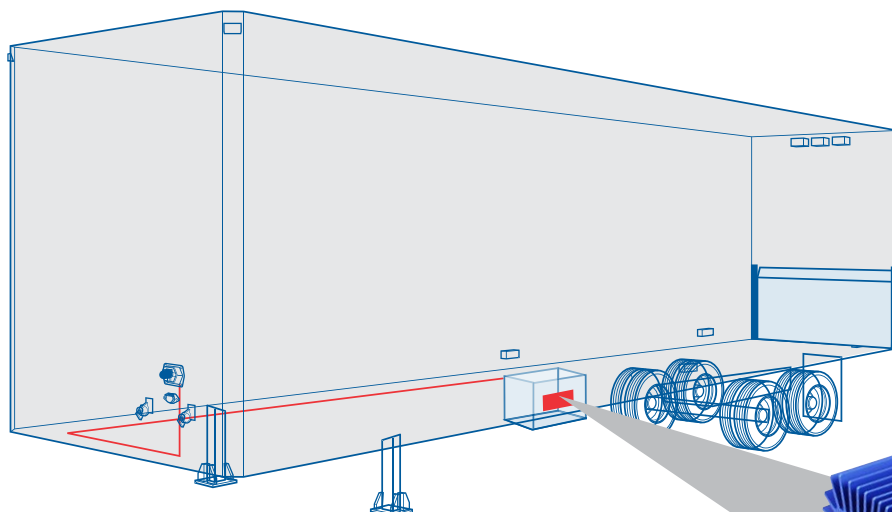
PERMALOGIC™ SMART-CHARGE kit

Part No.	Description
60-3000KT	PERMALOGIC™ Smart-Charge kit

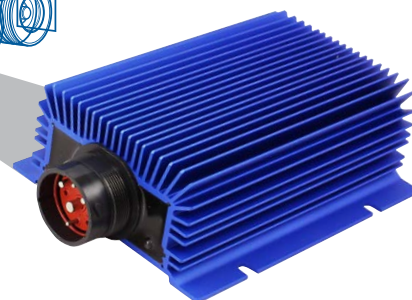
60-3000KT Contents

Part No.	Description
60-3000	PERMALOGIC™ Smart-Charge – dual nosebox
60-3600	STA-CHARGE™ - liftgate battery charger
60-3656-540	45', STA-CHARGE™ harness with fuses
60-2687	45', dual pole/single pole (stinger) cable, 2 ga.
60-2691	5', 7-way AUX harness
60-2692	10', reefer harness

STA-CHARGE™ Battery Charger



- Maximizes the liftgate or auxiliary battery efficiency with a faster charge when paired with a Phillips STA-CHARGE™ harness.
- Regulates over-charging of trailer batteries
- Prevents 12V truck battery from becoming so low it won't start



STA-CHARGE™	
Part No.	Description
60-3600	STA-CHARGE™ Battery Charger

- For 12V liftgate/load batteries
- Input voltage: 8V – 16V
- Output voltage: 14.4V**
- Maximum input current: 27A
- Maximum output current: 23A
- Automatically adjusts output voltage depending on temperature
- Environmentally sealed connector
- Anodized cooling heatsink

- Visual indicator shows status of charging
- Phillips patented Lock Out feature: stops charging batteries when brakes are pressed
 - When tied to the BLUE circuit, this ensures all power is available during an ABS event
- Standard mounting pattern
- Must be used with a Phillips STA-CHARGE™ harness or available harness adapters (see below)

**Voltage is temperature compensated so that in cold temperature the batteries are charged at a higher voltage.



STA-CHARGE™ Harness	
Part No.	Description
60-3656-540	45' STA-CHARGE™ harness with fuses

- Other charging systems use 10 ga. wire harnesses, which increase the time it takes to charge the batteries. The STA-CHARGE™ 8 ga. harness allows for a faster charge rate, resulting in an increased number of liftgate cycles sooner.
- Other lengths are available
- Contact your sales representative for more information

Harness Adapters	
Part No.	Description
60-3651	Harness Adapter – TRAIL-CHARGER™ harness to STA-CHARGE™ assembly

- For retrofitting a STA-CHARGE™ with existing TRAIL-CHARGER™ harness

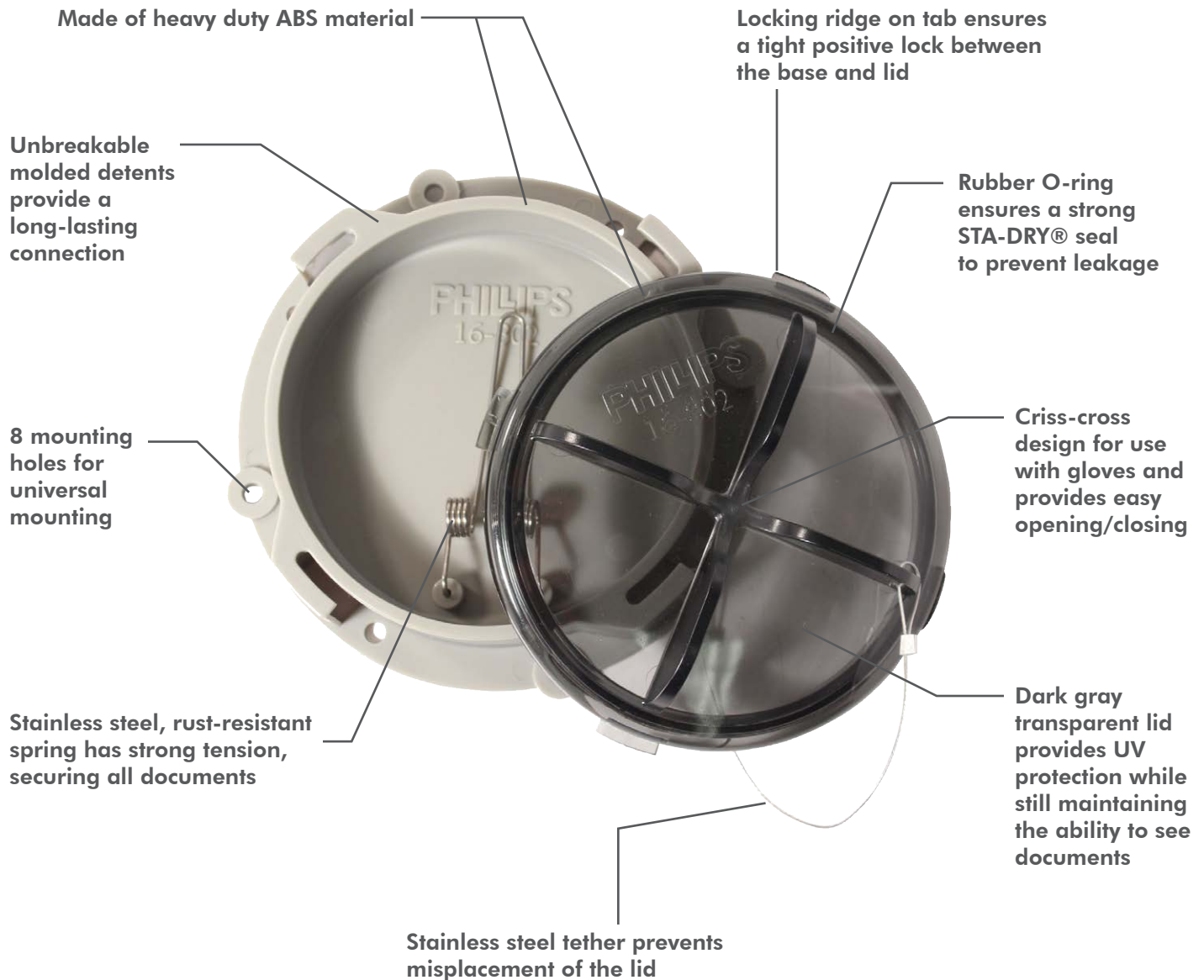
Part No.	Description
60-3652	Harness Adapter – STA-CHARGE™ harness to TRAIL-CHARGER™ assembly

- For retrofitting a new STA-CHARGE™ harness with an existing TRAIL-CHARGER™ unit



TOOLS & GENERAL ACCESSORIES

STA-DRY® Document Holder



TOOLS

Heavy Duty Handheld Cable Cutter



Part No.	Description
4-101	Heavy duty handheld cable cutter

- Cuts up to 2/0 cable
- For use with copper cable only

Hammer Crimper



Part No.	Description
4-140	Hammer style crimping tool

- Crimps 8 thru 4/0 ga. connectors
- Use with hammer
- Fits in any toolbox

6/0 Cable Cutters



Part No.	Description
4-146	Heavy duty cutter, bench mount
4-147	Heavy duty cutter, handheld

- Cuts cable up to 6/0 ga. (250 MCM)
- Blades made of carbon steel for strength and long life
- 26 in. handle(s)

Battery Terminal Crimper



Part No.	Description
4-150	Crimper, lever style

- Designed for light and medium duty battery terminals
- Crimps 8 ga. thru 1/0 ga.
- 15 in. handles

Heavy Duty Battery Terminal Crimpers

Part No.	Description
4-152	Handheld, hex crimp
4-153	Bench mount, hex crimp

- Handheld and bench mount models
- Bench mount also attaches to wall, service trucks, etc.
- Bench mount tools are easier and safer to use
- Crimps 8 ga. thru 6/0 ga.
- 26 in. handle(s)



Wire Stripping & Crimping Tool

Part No.	Description
4-214	Wire stripping and crimping tool

- Multi-purpose tool
- Strips wire sizes from 22 thru 10 ga.
- Crimps insulated and non-insulated terminals
- Machined for precision wire cuts and strips
- Color-coded to ensure proper crimp
- Overlapping teeth provide a consistent cut
- Insulated handles for safety



Cable Stripper

Part No.	Description
4-221	Cable stripper

- Strips 10 thru 4/0 ga. cable and 2 to 7 conductor round cable
- Easily removes cable insulation
- Adjustable stripper depth
- Contains replacement blade



Ratcheting Crimper



Part No.	Description
4-230	Ratcheting crimper

- Calibrated for STA-DRY® heat shrink connectors
- Assures the proper crimp force will be applied to heat shrink connectors every time
- Color-coded crimp nest for ease and accurate crimp
- Designed to install 20 thru 8 ga. terminals

Cable Tie Installation Tool



Part No.	Description
4-231	Plastic cable tie installation tool

- Secures nylon cable ties
- Plastic is good for light duty or occasional use

Heavy Duty Wire Stripper & Cutter



Part No.	Description
4-507	Heavy duty wire stripper and cutter

- Cuts and crimps 22 thru 6 ga. wire and terminals

QWIK-FIT™ Tubing Release Tool

Part No.	Description
12-90005	QWIK-FIT™ tubing release tool

- Designed to push and connect tubing to fittings in hard to reach places such as under the dashboard
- Accommodates 1/8 in. and 1/4 in. sized fitting



Nylon Air Tube Cutters

Part No.	Description
12-90003	Nylon tube cutter - economy

- Compact – Ideal for emergency situations
- Preset tubing guides



Economy

Part No.	Description
12-90002	Nylon tube cutter – standard

- Ideal for shop use
- 1/2 in. tubing maximum
- Preset tubing guides



Standard

Part No.	Description
12-90004	Nylon tube cutter – heavy duty*
4-904	Replacement blade for nylon tube cutter heavy duty

- Ideal for heavy use or production lines
- Shortened nose for greater clearance during installation
- Preset tubing guides

* Replaceable blade sold separately



Heavy Duty

POCKET CONTINUITY TESTERS

- Checks conductivity of all circuits
- Fits all standard 7-way round, 7-way blade type and 4-way flat connectors
- LED lights glow when circuit is functioning correctly
- All testers are internally grounded
- Handy and essential tool for every shop
- Many drivers carry these LED circuit checkers to quickly identify lighting problems prior to leaving yard

7-Way Socket Circuit Checker



Part No.	Description
15-200	7-way LED circuit checker for J560 system

- For SAE J560 sockets
- For use on tractor side or back of trailer when there is a 7-way socket available

7-Way Plug Circuit Checker



Part No.	Description
15-208	7-way LED circuit checker for J560 system

- For SAE J560 plugs
- For use on tractor side

7-Way E-Z Tester



Part No.	Description
63-0170	7-way tester for 7-way blade socket type

- For 7-way RV type sockets

4-Way E-Z Tester



Part No.	Description
63-0040	4-way tester

- For 4-way flat connections

Digital Multimeter



Part No.	Description
4-532	Digital multimeter

Check fuses, plugs, sockets, electrical cables, extension cords, control panels, small appliance, batteries, wall receptacles, etc.

- Pocket size
- Large LED display
- Temperature display
- Overload protection
- Accurate within .5%
- Low battery indicator

SHOP TOOLS & ACCESSORIES

66 LED with Flashlight

Part No.	Description
8-120	Rechargeable LED work lamp

- 66 bright white LED floodlight runs up to 4 hours
- 6 bright white LED flashlight runs up to 24 hours
- Rechargeable – charges in about 3 hours on 110/220V AC or 12V DC power
- Dual mode switch – operates floodlight or flashlight



Professional Fluorescent Work Lamp with Tool

Part No.	Description
8-110	26 watt fluorescent work lamp

- 26 watts, equivalent to 125 watt incandescent bulb
- Spot work light on top
- 90 degree swivel cord pivots for hands-free, stand-up use
- 3 wire, 25 ft. cord
- Retractable and removable nylon-tipped double hang hook rotates 360 degrees
- Polarized plug with 12 amp grounded receptacle



Retractable Triple Outlet Cord Reel

Part No.	Length	Gauge
8-103	30'	3/16

- Triple outlet retractable cord reel provides three grounding outlets
- Rugged cord reel and jacketed cord give superior performance under the toughest conditions
- Complete with mounting hardware
- 3 conductor SJTW-A, 300V



SHOP TOOLS & ACCESSORIES

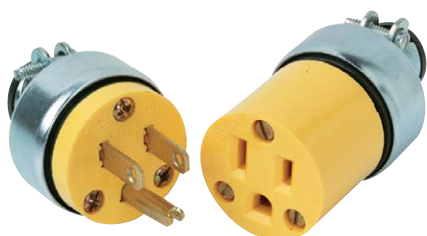
110 Volt Drop Light



Part No.	Gauge	Length
8-101	3/16	50'

- High-visibility, heavy duty jacketing resists oil, grease, fuel, acids and abrasion
- 3 conductor drop light
- Metal bulb shield (bulb not included)
- UL listed

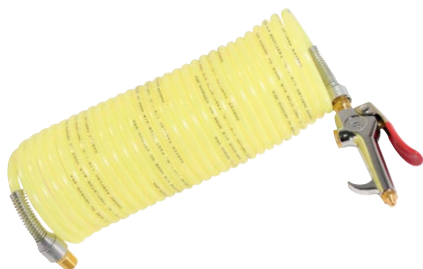
110 Volt Plug & Socket



Part No.	Description
8-210	15a. - 125v. male plug
8-211	15a. - 125v. female socket

- 2-pole, 3-wire, enclosed parallel grounding
- Armored cap yellow vinyl

Air Cab Blower



Part No.	Description
11-304	Cab blower kit
4-500	Air gun only

- Cleans the cab in a hurry
- 18 ft. working length
- Swivel fitting on one end
- 1/4 in. M.P.T. on both ends
- Desirable safety yellow color per U.S. Government OSHA directives
- Service temperature range: -40°F to 200°F (-40°C to 93°C)
- 225 PSI maximum working pressure

Retractable Shop Air Hose



Part No.	I.D.	Working Length	Each End
11-414	1/4"	18'	1/4" NPT
11-416	3/8"	18'	3/8" NPT

- For work bench, overhead air supply and low-pressure air powered equipment and tools
- Swivel fitting on one end
- 225 PSI maximum working pressure
- Desirable safety yellow color per U.S. Government OSHA directives
- Service temperature range: -40°F to 200°F (-40°C to 93°C)

HEAVY DUTY TIRE INFLATOR

Heavy Duty Tire Inflator

Part No.	Description
11-301	50' heavy duty tire inflator

- For use on trucks with air brake systems
- 50 ft. straight PVC air hose to reach all tires
- Includes universal gladhand (12-010) and air chuck



HEAT GUN & TORCHES

Heat Gun

Part No.	Description
4-046	Heavy duty heat gun

- Includes stand and deflector shield for easy use
- Lightweight - 2 1/2 lbs
- Built-in circuit breaker protects operator and unit
- Adjustable air intake and heat settings
- Double jacketed nozzle helps insulate heat
- Heat range 500°F to 750°F
- 115V; 14 amps



Mini-Jet Torch

Part No.	Description
4-054	Mini-jet torch, blister pack
4-055	Mini-jet torch, 2 clip strips with 6 blister packs per strip

- For small jobs and quick repairs
- Lifetime waterproof ignition system
- Refillable tank provides up to 30 minutes of butane capacity
- Adjustable gas flow with wind-resistant flame
- Protective flip-open cap
- See-through fuel tank
- Meets Consumer Product Safety Commission 16CFR Part 1212 - Safety Standard for Multi-Purpose Lighters (Child Resistant)

Specifications		
Length	35 mm	(1.4 in)
Height	71 mm	(2.8 in)
Width	20 mm	(0.8 in)
Weight (when gas-filled)	46 g	
Flame temperature	1300°C	(2500°F)
Gas container capacity	5 ml	
Operating capacity (one gas filling)	30 min.	



Professional Torch

220 MINUTE
CAPACITY



Part No.	Description
4-057	Professional torch, box

- For daily professional use
- Adjustable flame
- Refillable tank provides up to 220 minutes of butane capacity
- Brass body covered with a protective grip
- Waterproof piezoelectric ignition system
- Removable base provides for storage flexibility
- Meets Consumer Product Safety Commission
- 16CFR Part 1212 - Safety Standard for Multi-Purpose Lighters (Child Resistance)

Specifications

Length	100 mm (1.4 in)
Height W/O stand	138 mm (2.8 in)
Width	36 mm (0.8 in)
Weight (when gas-filled)	280 g
Flame temperature	1300°C (2500°F)
Gas container capacity	60 ml
Operating capacity (one gas filling)	220 min.

Heavy Duty Torch

120 MINUTE
CAPACITY



Part No.	Description
4-058	Heavy duty torch, clamshell

- For battery terminals and heavy wall shrink tubing
- Highest BTU output of all Phillips torches
- Adjustable flame
- Waterproof piezoelectric ignition system
- Refillable tank provides up to 120 minutes of butane capacity
- Powerful wind-resistant flame
- Meets Consumer Product Safety Commission
- 16CFR Part 1212 - Safety Standard for Multi-Purpose Lighters (Child Resistance)
- Due to large flame, this torch is not recommended for use with heat shrink terminals

Specifications

Length	128 mm (4.73 in)
Height	172 mm (6.8 in)
Grip Diameter	45 mm (1.78 in)
Base Diameter	65 mm (2.56 in)
Weight (Empty)	460 g
Flame temperature	2600°F (1350°C)
Gas container capacity	60 ml
Operating capacity (one gas filling)	120 min.

BRUSHES

Heavy Duty Battery Post & Terminal Cleaner

Part No.	Description
4-120	Battery post and terminal brush

- Internal wire brush



6 & 7-Way Plug & Socket Brush

Part No.	Description
4-121	7-way plug and socket brush
4-122	6-way plug and socket brush

- Stainless steel bristles for durability
- Perfect for glove box or tool box



CHARGING CLIPS AND TEST CLIPS

Test Clips

Part No.	Description	Qty.
7-410	5 amp miniature alligator clip	25

- Nickel-plated steel
- Full-meshing teeth
- Jaw opens .19 in.



Charging Clips

Part No.	Description	Qty.
7-412	10 amp center squeeze charging clip	25
7-414	25 amp center squeeze charging clip	25
7-416	50 amp center squeeze charging clip	25

- Screw or crimp connection
- Full-meshing teeth
- Zinc-plated steel



CSA KITS

CSA QWIK-FIX™ Kit



Keep cables off
the deck plate!

New regulations deliver harsher penalties to the driver and fleet for electrical and air system failures. Our CSA QWIK-FIX™ KIT keeps standard electrical and air products at your fingertips, so if the situation arises, you'll be prepared!

Part No.	Description
80-850	CSA QWIK-FIX™ KIT

80-850 Contents

Replacement Part No.	Description	Qty.
16-720	STA-DRY® 7-way socket	1
16-730	STA-DRY® WEATHER-TITE™ PERMAPLUG™ 7-way plug	1
4-121	7-way plug and socket brush	1
4-250	QWIK-SHOT™ grease tubes	2
12-010	Universal gladhands	2
12-012-25	Gladhand rubber seals	5
12-95066	3/8" QWIK-FIT™ composite air fittings - union	2
12-95088	1/2" QWIK-FIT™ composite air fittings - union	2
12-90003	Economy nylon air tube cutter	1
17-153	QWIK-SNAP™ 3-hose holder	1
8-43087	7.5" cable ties	100
17-150	2-hose separators	4

DOCUMENT HOLDERS

STA-DRY® Document Holder

Part No.	Description
16-802	STA-DRY® document holder
16-801	STA-DRY® document holder replacement lid *

*Tether not included with replacement lid.

- Waterproof – documents remain dry in extreme weather
- Stainless steel tether - prevents misplacement of lid
- Twist-on lens with large grips – easy to use with gloves
- Stainless steel hardware – keeps documents rust free
- Mounts with most competitive document holders - 8 mounting holes
- Large interior for multiple documents

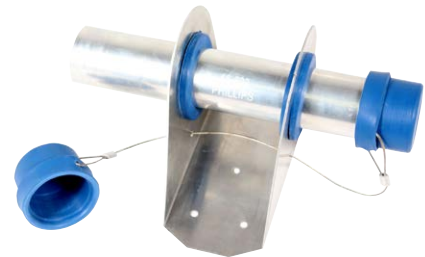


Tube Document Holder

Part No.	Description
16-803	Aluminum tube document holder with mounting bracket
16-804	Replacement rubber cap *

*Tether not included with replacement cap.

- Features a sturdy, light-weight aluminum tubular body and mounting bracket with cushioned tube support
- UV protected rubber end caps with watertight seal
- Stainless steel tether – prevents misplacement of rubber end cap
- Easy to install – mounts to any flat surface



TRAFFIC BUILDERS

Prominent Phillips header card is easily visible from a distance

Removable hanging side racks maximize the display's real estate to display even more product

Comes with top moving air and electrical products

Great as an end aisle display



Branded Phillips display buckets offer plenty of room for product

Bucket stickers offer a quick and easy visual reference of the product and part number to help customers find what they're looking for and to aid in restocking

Rack is easy to assemble and maintain

Designed to turn more than 6 times per year

Air & Electrical Center

Part No.	Description
80-130	Air and electrical center wall assortment

- Get organized
- Increase gross profit through impulse sales
- Includes top moving items - designed to turn at least 6 times per year

Assortment Includes:

- Products
- Gondola header card
- Re-order stickers
- Floor talkers
- 25 products pull-through sales flyers
- Detailed planogram

**Gondola Header Card****Re-order Stickers****Floor Talkers****80-130 Contents:***

Replacement Part No.	Description	Qty.
11-315	Heavy duty coiled air, 15' pair (red and blue)	5
11-3150	POWER GRIP™, 15' pair (red and blue)	5
11-5150	POLAR AIR®, 15' pair (red and blue)	5
12-006	Gladhand - service, straight mount	25
12-008	Gladhand - emergency, straight mount	25
15-042	STOW-A-WAY™, gladhand and plug holder	10
15-720	7-way zinc die-cast socket	25
15-730	7-way zinc die-cast plug	25
15-762	7-way zinc die-cast plug with extended barrel socketbreaker	10
16-720	STA-DRY® socket, 2-hole, wire insertion	25
16-730	WEATHER-TITE™ PERMAPLUG™	25
22-4621	NON-ABS PERMACOIL™, 15', with zinc die-cast plugs, 1/10 and 6/12 ga.	5
24-4621	NON-ABS PERMACOIL™, 15', with zinc die-cast plugs, 1/12 and 6/14 ga.	5
30-4621	ABS PERMACOIL™, 15', with zinc die-cast plugs, 1/8, 2/10 and 4/12 ga.	5

* Does not come with shelves, fences or gondola

Air Center



Part No.	Description
80-131	Air center wall assortment

- Get organized
- Increase gross profit through impulse sales
- Includes top moving items - designed to turn at least 6 times per year

Assortment Includes:

- Products
- Gondola header card
- Re-order stickers
- Floor talkers
- 25 products pull-through sales flyers



Gondola Header Card



Re-order Stickers



Floor Talkers

80-131 Contents:*

Replacement Part No.	Description	Qty.
11-312	Heavy duty coiled air, 12' pair (red and blue)	5
11-315	Heavy duty coiled air, 15' pair (red and blue)	5
11-320	Heavy duty coiled air, 20' pair (red and blue)	5
11-340	Heavy duty coiled air, 15' pair (red and blue) with 40" lead	5
11-3150	POWER GRIP™, 15' pair (red and blue)	5
11-5150	POLAR AIR®, 15' pair (red and blue)	5
12-006	Gladhand - service, straight mount	25
12-008	Gladhand - emergency, straight mount	25
12-010	Gladhand - universal, straight mount	25
12-600	Coiled air gladhand grips, pair (red and blue)	12
12-136	Gladhand - service, angle mount	25
12-138	Gladhand - emergency, angle mount	25
12-0100	Gladhand - dummy	25
12-012-25	Gladhand seal - wide lip, polybag	25

* Does not come with shelves, fences or gondola

Deluxe Air & Electrical Center Bucket Display

Part No.	Description
80-110	Deluxe air and electrical display

80-110 Contents:

Replacement Part No.	Description	Qty.
11-315	Heavy duty coiled air, 15' pair (red and blue)	5
11-3150	POWER GRIP™, 15' pair (red and blue)	5
11-5150	POLAR AIR®, 15' pair (red and blue)	5
12-006	Gladhand - service, straight mount	25
12-008	Gladhand - emergency, straight mount	25
15-042	STOW-A-WAY™, gladhand and plug holder	10
15-720	7-way zinc die-cast socket	25
15-730	7-way zinc die-cast plug	25
15-762	7-way zinc die-cast socket with extended barrel socketbreaker	10
16-720	STA-DRY® socket, 2-hole, wire insertion	25
16-730	WEATHER-TITE™ PERMAPLUG™	25
22-4621	NON-ABS PERMACOIL™, 15', with zinc die-cast plugs, 1/10 and 6/12 ga.	5
24-4621	NON-ABS PERMACOIL™, 15', with zinc die-cast plugs, 1/12 and 6/14 ga.	5
30-4621	ABS PERMACOIL™, 15', with zinc die-cast plugs, 1/8, 2/10 and 4/12 ga.	5
80-106	Bucket rack with 8 buckets	1
80-107	Side attachment set	1
80-1078	Bucket sticker set	1

- Contains 14 of our top-moving gladhands, plugs, sockets, air and electrical assemblies
- Great as an end and aisle display
- Easy to assemble and maintain
- Dimensions: 79 in. x 33 in. x 13 in.*

*Approximate measurements are of display rack with header card, excluding buckets and any product.



80-110

Air & Electrical Center Bucket Display

Part No.	Description
80-105	Air and electrical display

80-105 Contents:

Replacement Part No.	Description	Qty.
12-006	Gladhand - service, straight mount	25
12-008	Gladhand - emergency, straight mount	25
15-042	STOW-A-WAY™, gladhand and plug holder	10
15-720	7-way zinc die-cast socket	25
15-730	7-way zinc die-cast plug	25
15-762	7-way zinc die-cast socket with extended barrel socketbreaker	10
16-720	STA-DRY® socket, 2-hole, wire insertion	25
16-730	WEATHER-TITE™ PERMAPLUG™	25
80-106	Bucket rack with 8 buckets	1
80-1078	Bucket sticker set	1

Replacement Part No.	Description
80-801	Phillips display bucket

**DESIGNED
TO TURN MORE
THAN 6 TIMES
PER YEAR!**



80-801



STA-DRY® Heat Shrink Display



80-1850

25.5"

Generate New Customers and Repeat Revenue

Every fleet uses these items. Keep them coming back for more.

Sturdy Self-Standing Display

Takes up just 4 sq. ft. of floor space

Display Dimensions

25.5 in. wide
69.5 in. tall (including header card)
21 in. deep

Part No.	Description
80-1850	STA-DRY® heat shrink connector display

80-1850 Contents:

Replacement Part No.	Description	Qty.
1-1661	STA-DRY® CRIMP & SEAL™, CLEAR-VU™, butt connector, 22-18 ga., red stripe, 25 pcs/bag	2
1-1662	STA-DRY® CRIMP & SEAL™, CLEAR-VU™, butt connector, 16-14 ga., blue stripe, 25 pcs/bag	2
1-1663	STA-DRY® CRIMP & SEAL™, CLEAR-VU™, butt connector, 12-10 ga., yellow stripe, 25 pcs/bag	2
1-1723	STA-DRY® CRIMP & SEAL™ - butt connector, daisy chain, 12-10 ga., yellow stripe, 10 pcs/bag	2
1-1724	STA-DRY® CRIMP & SEAL™ - butt connector, daisy chain, 16-14 ga., blue stripe, 10 pcs/bag	2
1-1861	STA-DRY® CRIMP, SOLDER & SEAL™ - butt connector 12-10 ga., yellow, 25 pcs/bag	2
1-1861C	STA-DRY® CRIMP, SOLDER & SEAL™ - butt connector 12-10 ga., yellow, 5 pcs/clamshell	5
1-1862	STA-DRY® CRIMP, SOLDER & SEAL™ - butt connector 16-14 ga., blue, 25 pcs/bag	2
1-1862C	STA-DRY® CRIMP, SOLDER & SEAL™ - butt connector 16-14 ga., blue, 5 pcs/clamshell	5
1-1863	STA-DRY® CRIMP, SOLDER & SEAL™ - butt connector 22-18 ga., red, 25 pcs/bag	2
1-1863C	STA-DRY® CRIMP, SOLDER & SEAL™ - butt connector 22-18 ga., red, 5 pcs/clamshell	5
1-1922	STA-DRY® CRIMP & SEAL™ - ring terminal, 16-14 ga., blue, #8 stud, 25 pcs/bag	2
1-1923	STA-DRY® CRIMP & SEAL™ - ring terminal, 16-14 ga., blue, #10 stud, 25 pcs/bag	2
1-1923C	STA-DRY® CRIMP & SEAL™ - ring terminal, 16-14 ga., blue, #10 stud, 5 pcs/clamshell	5
1-1924	STA-DRY® CRIMP & SEAL™ - ring terminal, 16-14 ga., blue, 1/4" stud, 25 pcs/bag	2
1-1926	STA-DRY® CRIMP & SEAL™ - ring terminal, 16-14 ga., blue, 3/8" stud, 25 pcs/bag	2
1-1933	STA-DRY® CRIMP & SEAL™ - ring terminal, 12-10 ga., yellow, #10 stud, 25 pcs/bag	2
1-1935	STA-DRY® CRIMP & SEAL™ - ring terminal, 12-10 ga., yellow, 5/16" stud, 25 pcs/bag	2
1-1936	STA-DRY® CRIMP & SEAL™ - ring terminal, 12-10 ga., yellow, 3/8" stud, 25 pcs/bag	2
1-1961	STA-DRY® CRIMP & SEAL™ - butt connector, 22-18 ga., red, 25 pcs/bag	3
1-1961C	STA-DRY® CRIMP & SEAL™ - butt connector, 22-18 ga., red, 5 pcs/clamshell	5
1-1962	STA-DRY® CRIMP & SEAL™ - butt connector, 16-14 ga., blue, 25 pcs/bag	3
1-1962C	STA-DRY® CRIMP & SEAL™ - butt connector, 16-14 ga., blue, 5 pcs/clamshell	5
1-1963	STA-DRY® CRIMP & SEAL™ - butt connector, 12-10 ga., yellow, 25 pcs/bag	3
1-1963C	STA-DRY® CRIMP & SEAL™ - butt connector, 12-10 ga., yellow, 5 pcs/clamshell	5
1-1964	STA-DRY® CRIMP & SEAL™ - butt connector, 8 ga., red, 25 pcs/bag	2
1-1971	STA-DRY® CRIMP & SEAL™ - slip-on terminal, fully insulated, .250" tab, 16-14 ga., blue, female, 25 pcs/bag	2
1-1972	STA-DRY® CRIMP & SEAL™ - slip-on terminal, fully insulated, .250" tab, 16-14 ga., blue, male, 25 pcs/bag	2
1-2267	STA-DRY® CRIMP & SEAL™ - bullet terminal, fully insulated, .180" diameter, 16-14 ga., blue, female, 25 pcs/bag	2
1-2269	STA-DRY® CRIMP & SEAL™ - bullet terminal, .180" diameter, 16-14 ga., blue, male, 25 pcs/bag	2
1-2269C	STA-DRY® CRIMP & SEAL™ - bullet terminal, .180" diameter, 16-14 ga., blue, male, 5 pcs/clamshell	5
4-057	Professional torch, box	1
4-214*	Shop tool - wire stripping and crimping tool	1
6-300	STA-DRY® flexible dual wall heat shrink tubing - 20-16 ga., black, 6", 6 pcs/bag	2
6-301	STA-DRY® flexible dual wall heat shrink tubing - 16-14 ga., black, 6", 6 pcs/bag	2
6-302	STA-DRY® flexible dual wall heat shrink tubing - 12-10 ga., black, 6", 6 pcs/bag	2
6-304	STA-DRY® flexible dual wall heat shrink tubing - 8-6 ga., black, 6", 6 pcs/bag	2
6-305	STA-DRY® flexible dual wall heat shrink tubing - 1-2/0 ga., black, 6", 6 pcs/bag	2

*Part number quantity listed in display breaks standard pack. If part number is ordered separately outside of display to replenish inventory, additional quantities will be received.

QWIK-CHANGE™ Tracker Bar Spring Kit Display

Part No.	Description
80-420	QWIK-CHANGE™ tracker bar spring kit display

80-420 Contents:

Replacement Part No.	Description	Qty.
17-148	Kit with 20" heavy duty spring, with QWIK-SNAP™	5
17-1481	Kit with 20.5" extra heavy duty spring, with QWIK-CLAMP™	5
-	20" tracker bar - to display/hang product	1
-	Poster for easy identification and product replenishment	1

- Branded Phillips display poster, easily visible from a distance
- Poster offers a quick and easy visual reference of the product and part number
- Uses minimal wall space at 20 in. wide x 36 in. tall x 5 in. deep
- Kits include snap-on clip, PVC sleeve, spring, and our QWIK-SNAP™ 3-hose holder, or QWIK-CLAMP™ that converts from a 1, 2 or 3-hose holder to cable clamp for 3-IN-1s (approx 1.6 in. diameter)

Equipped with the
QWIK-SNAP™ or
QWIK-CLAMP™



Does not include slatwall



2/0 CLEAR-VU™ Battery Jumpers Display

**TAKE CARE OF CORROSION
BEFORE CORROSION TAKES CARE OF YOU!**

Part No.	Description
80-903	2/0 CLEAR-VU™ battery jumpers display

80-903 Contents:

Replacement Part No.	Description	Qty.
9-350	2/0 CLEAR-VU™ clear, 2 lug, 8"	3
9-351	2/0 CLEAR-VU™ translucent smoke, 2 lug, 8"	3
9-352	2/0 CLEAR-VU™ translucent red, 2 lug, 8"	3
9-360	2/0 CLEAR-VU™ clear, 3 lug, 17"	3
9-361	2/0 CLEAR-VU™ translucent smoke, 3 lug, 17"	3
9-362	2/0 CLEAR-VU™ translucent red, 3 lug, 17"	3
9-370	2/0 CLEAR-VU™ clear, 4 lug, 26"	3
9-371	2/0 CLEAR-VU™ translucent smoke, 4 lug, 26"	3
9-372	2/0 CLEAR-VU™ translucent red, 4 lug, 26"	3
-	Display poster	1
-	Slatwall hooks	9

- Branded Phillips display poster, easily visible from a distance
- Poster offers a quick and easy visual reference of the product and part number
- Comes with 9 OF THE FASTEST MOVING Phillips 2/0 battery jumpers
- Display poster has OEM replacement chart for ease of interchangeability between manufacturers
- Uses minimal wall space at 22 in. wide x 34 in. tall x 3 in. deep
- Display poster comes double sided with English on one side and French on the reverse side

Does not include slatwall



**Double-sided poster
with English and French
translation!**

STA-DRY® Heat Shrink Connector Shake Jar Display



Includes Product Sample Board!

- Contains nine of our most popular STA-DRY® heat shrink connectors in easy to sell shake jars!
- Increase profit through impulse sales!
- Comes pre-assembled
- Dimensions are approximately 12 in. x 12 in. x 12 in., the header card is approximately 8 in. x 12 in.
- Includes product sample board

STA-DRY® Heat Shrink Connector Shake Jar Display WITH Replacement Jars

Part No.	Description
80-1860	Shake jar display - English (includes 21 jars)
80-1860F	Shake jar display - French (includes 21 jars)
80-1860S	Shake jar display - Spanish (includes 21 jars)

STA-DRY® Heat Shrink Connector Shake Jar Display WITHOUT Replacement Jars

Part No.	Description
80-1861	Shake jar display - English (includes 12 jars)
80-1861F	Shake jar display - French (includes 12 jars)
80-1861S	Shake jar display - Spanish (includes 12 jars)

Contents:

Part No.	Description	80-1860; 80-1860F; 80-1860S; Contents	80-1861; 80-1861F; 80-1861S; Contents
1-1661J	STA-DRY® CRIMP & SEAL™, CLEAR-VU™ window, 22-18 ga., 100 pcs/jar	2	1
1-1662J	STA-DRY® CRIMP & SEAL™ CLEAR-VU™ window, 16-14 ga., 100 pcs/jar	3	2
1-1663J	STA-DRY® CRIMP & SEAL™, CLEAR-VU™ window, 12-10 ga., 60 pcs/jar	2	1
1-1861J	STA-DRY® CRIMP, SOLDER & SEAL™, 12-10 ga., 60 pcs/jar	2	1
1-1862J	STA-DRY® CRIMP, SOLDER & SEAL™, 16-14 ga., 100 pcs/jar	3	2
1-1863J	STA-DRY® CRIMP, SOLDER & SEAL™, 22-18 ga., 100 pcs/jar	2	1
1-1961J	STA-DRY® CRIMP & SEAL™, 22-18 ga., 100 pcs/jar	2	1
1-1962J	STA-DRY® CRIMP & SEAL™, 16-14 ga., 100 pcs/jar	3	2
1-1963J	STA-DRY® CRIMP & SEAL™, 12-10 ga., 60 pcs/jar	2	1
-	STA-DRY® heat shrink connectors sample board	1	1

QWIK-SNAP™ Display



Part No.	Description
80-153	QWIK-SNAP™ hose holder counter top display

80-153 Contents:

Replacement Part No.	Description	Qty.
17-152	QWIK-SNAP™ 2-hose holder	10
17-153	QWIK-SNAP™ 3-hose holder	10
17-154	QWIK-SNAP™ 4-hose holder	10
-	Display header card	1
-	Counter rack	1

- Contains all three of our QWIK-SNAP™ hose holders
- Increase gross profit through impulse sales
- Quicker than conventional hose holders - change hoses in seconds

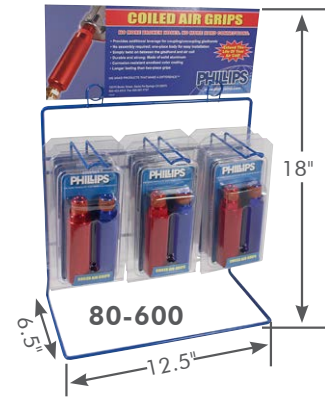
Coiled Air Gladhand Extension Display

Part No.	Description
80-600	Coiled air gladhand extension counter top display

80-600 Contents:

Part No.	Description	Qty.
12-600	Coiled air gladhand extension pairs (red and blue)	9
-	Display header card	1
-	Counter rack	1

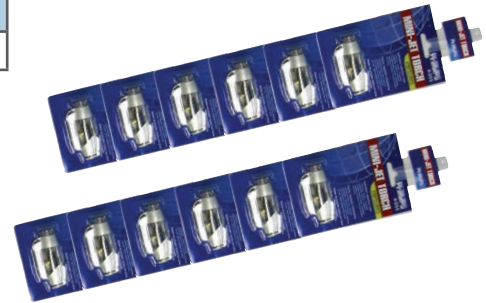
- Provides strong leverage for coupling/uncoupling gladhands
- One-piece body for easy installation
- Durable and strong; made of solid aluminum
- Corrosion-resistant anodized color coating
- Easy installation - installs between air coil and gladhand



Mini-Jet Torch Clip Strips

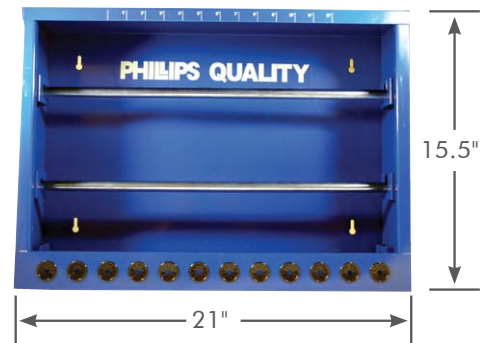
Part No.	Description
4-055	2 clip strips with 12 blister packs of 4-054

- Contains 12 mini-torches 4-054
- Packaged as 2 clip strips with 6 torches each



Part No.	Description
80-191	Primary wire rack

- Ideal for the 80-2006 primary wire assortment
- Holds 12 ft. - 100 ft. primary wire spools
- Keeps wire organized and accessible
- Printed 1 ft. ruler for easy measuring
- Wall mountable or freestanding
- Sturdy rack that is built to last
- 21 in. x 15.5 in. x 5.5 in.



Wire Rack

Gladhand Seal Buckets



Part No.	Description
80-012	Black rubber, 200 count
80-0161	Blue polyurethane, 200 count
80-0162	Red polyurethane, 200 count
80-0163	Black polyurethane, 200 count
80-0164	Blue and red polyurethane, 200 count (100 blue, 100 red)
80-0167	Grey polyurethane with dust flap, 200 count

- Great for countertop impulse sales
- Place to "write in" price
- Barcode on label for scanning
- Fits all industry standard gladhands
- SILENT SALESMAN FOR THE COUNTER!

Gladhand Seal Dispenser Box Displays



Part No.	Description	
80-1161	Blue (service) polyurethane gladhand seals, 200 count	NEW
80-1162	Red (emergency) polyurethane gladhand seals, 200 count	NEW
80-1163	Black (universal) polyurethane gladhand seals, 200 count	NEW
80-1164	Blue (service) and red (emergency) polyurethane, 100 count each color	NEW
80-112	Black (universal) rubber gladhand seals with wide lip, 200 count	NEW

- For retail display or easy grab-n-go storage in the shop
- Comes pre-assembled and pre-filled with gladhand seals
- Easy to refill and keep inventory replenished
- Environmentally friendly - biodegradable and recyclable
- Aesthetically pleasing visual design with a location to write pricing in
- Box dimensions:
8 1/8 in. tall x 5 in. wide x 5 1/2 in. deep
Fully opened front lip to back of box: 8 7/8 in. deep

QWIK-SHOT™ Grease Tube Bucket



Part No.	Description
80-250	Grease tubes, 6 grams, 200 count bucket

- Perfect for use on plug/socket connection
- Great for countertop impulse sales
- Convenient one-use tubes
- High film strength and exceptional anti-wear properties
- Creates non-conductive, watertight barrier for electrical connections
- Unlimited applications - heavy duty, automotive, marine, agriculture, construction, material handling
- SILENT SALESMAN FOR THE COUNTER!

Foam Socket Seal Bucket



Part No.	Description
80-795	Corrosion prevention gaskets, 200 count bucket

- Keep corrosion out of the electrical system!
- Easy to install in 7-way J560 socket only
- Weather and chemical resistant
- Great for counter top impulse sales
- SILENT SALESMAN FOR THE COUNTER!

OUR TOP MOVERS IN A NO-HASSLE DISPLAY!

Bulk Merchandisers

Heavy Duty Coiled Air

Part No.	Description	Qty.
11-315G	15', Pair (red and blue)	50

- Most popular coiled air sets; packaged for easy sales
- Individually bagged



NON-ABS PERMACOIL™

Part No.	Description	Qty.
24-4621G	15', with two zinc die-cast plugs *	100

- Most popular NON-ABS coiled electrical; packaged to move
- Individually bagged



ABS PERMACOIL™

Part No.	Description	Qty.
30-4621G	15', with two zinc die-cast plugs *	100

- Most popular ABS coiled electrical; guaranteed to increase sales
- Individually bagged



* Working length - As measured by pull force per SAE J2222. Length of actual cable is significantly longer.

ASSORTMENT TRAYS

Empty Tray



Part No.	Description
80-1901	Tray only

- Great for creating your own assortment
- 24 compartments

3/8" Assortment Clamp Kit



Part No.	Description
5-1000	3/8" assortment clamp kit

- Please see page 125 for complete contents

Flexible Heat Shrink Tubing



Part No.	Description
6-1801	STA-DRY® flexible dual wall shrink tubing assortment

- Please see page 112 for complete contents

2/0 Heavy Duty Crimp Kit



Part No.	Description
9-1004	Heavy duty 2/0 ga. crimp assortment

- Please see page 93 for complete contents

Mobile Wire Repair Kit



Part No.	Description
80-1000	STA-DRY® CRIMP & SEAL™ mobile wire repair kit

- Please see page 103 for complete contents

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
1-1616.....	98	1-1917.....	101	1-1975.....	101, 103	1-54114.....	106
1-1617.....	98	1-1918.....	101	1-1975C.....	101	1-54124.....	106, 108
1-1618.....	98	1-1919.....	101, 103	1-1976.....	101	1-54224.....	106, 108
1-1623.....	99	1-1919C.....	101	1-1976C.....	101	1-54234.....	106
1-1624.....	99	1-1920.....	101	1-1981.....	102	1-55104.....	107
1-1626.....	99	1-1921.....	101	1-1982.....	102	1-55106.....	107
1-1633.....	99	1-1922.....	101, 186	1-1983.....	102	1-55114.....	107
1-1634.....	99	1-1923.....	101, 103, 186	1-1984.....	102	1-55116.....	107
1-1636.....	99	1-1923-100.....	101	1-2200.....	108	1-55124.....	107, 108
1-1661.....	98, 186	1-1923C.....	101, 186	1-2241.....	102	1-55125.....	107
1-1661-100.....	98	1-1924.....	101, 103, 186	1-2242.....	102	1-55134.....	107, 108
1-1661J.....	98, 188	1-1924-100.....	101	1-2266.....	102, 103	1-55135.....	107
1-1662.....	95, 98, 186	1-1924C.....	101	1-2267.....	102, 103, 186	1-56001.....	107
1-1662-100.....	98	1-1925.....	101	1-2267-100.....	102	1-56003.....	107
1-1662J.....	98, 188	1-1926.....	101, 103, 186	1-2267C.....	102	1-56011.....	107
1-1663.....	98, 186	1-1926-100.....	101	1-2268.....	102, 103	1-56013.....	107
1-1663-100.....	98	1-1926C.....	101	1-2269.....	102, 103, 186	1-56101.....	107
1-1663J.....	98, 188	1-1932.....	101	1-2269-100.....	102	1-56104.....	107, 108
1-1665.....	99	1-1933.....	101, 103, 186	1-2269C.....	102, 186	1-56106.....	107
1-1666.....	99	1-1933-100.....	101	1-51006.....	105, 108	1-56111.....	107
1-1671.....	99	1-1933C.....	101	1-51104.....	105	1-56114.....	107
1-1672.....	99	1-1934.....	101, 103	1-51106.....	105, 108	1-56116.....	107
1-1675.....	99	1-1934-100.....	101	1-51204.....	105	1-56201.....	107
1-1676.....	99	1-1934C.....	101	1-51206.....	105, 108	1-56203.....	107
1-1723.....	104, 186	1-1935.....	101, 186	1-51304.....	105	1-56211.....	107
1-1723-100.....	104	1-1936.....	101, 186	1-52026.....	106	1-56213.....	107
1-1724.....	95, 104, 186	1-1936-100.....	101	1-52034.....	106	2-101.....	78
1-1724-100.....	104	1-1937.....	101	1-52044.....	106	2-102.....	78
1-1724J.....	104	1-1939.....	101, 103	1-52054.....	106	2-104.....	78
1-1725.....	104	1-1940.....	101	1-52114.....	106	2-105.....	78
1-1725-100.....	104	1-1941.....	101	1-52116.....	106	2-106.....	78
1-1726.....	100	1-1942.....	101, 103	1-52124.....	106, 108	2-107.....	78
1-1727.....	100, 103	1-1944.....	101, 103	1-52126.....	106	2-111.....	78, 79
1-1728.....	100, 103	1-1945.....	101	1-52134.....	106, 108	2-111-1000.....	78
1-1729.....	104	1-1946.....	101	1-52136.....	106	2-112.....	78, 79
1-1730.....	104	1-1947.....	101	1-52144.....	106	2-113.....	78
1-1803.....	97	1-1948.....	101	1-52146.....	106	2-114.....	78
1-1861.....	96, 97, 186	1-1950.....	102	1-52154.....	106, 108	2-115.....	78, 79
1-1861-100.....	96	1-1951.....	102	1-52156.....	106	2-115-1000.....	78
1-1861-500.....	96	1-1952.....	102	1-52214.....	106	2-116.....	78
1-1861C.....	96, 186	1-1953.....	102	1-52216.....	106	2-116-1000.....	78
1-1861J.....	96, 188	1-1954.....	102	1-52224.....	106, 108	2-117.....	78
1-1862.....	95, 96, 97, 186	1-1955.....	102	1-52226.....	106	2-117-1000.....	78
1-1862-100.....	96	1-1956.....	102	1-52234.....	106, 108	2-121.....	78, 79
1-1862-500.....	96	1-1957.....	102	1-52236.....	106	2-121-1000.....	78
1-1862C.....	96, 186	1-1961.....	100, 103, 186	1-52244.....	106	2-122.....	78, 79
1-1862J.....	96, 188	1-1961-100.....	100	1-52246.....	106	2-122-1000.....	78
1-1863.....	96, 97, 186	1-1961-500.....	100	1-52254.....	106, 108	2-123.....	78, 79
1-1863-100.....	96	1-1961C.....	100, 186	1-52256.....	106	2-123-1000.....	78
1-1863-500.....	96	1-1961J.....	100, 188	1-52265.....	106	2-124.....	78, 79
1-1863C.....	96, 186	1-1962.....	95, 100, 103	1-52334.....	106	2-124-1000.....	78
1-1863J.....	96, 188			1-52354.....	106	2-125.....	78, 79
1-1871.....	96	1-1962-100.....	100	1-52364.....	106	2-125-1000.....	78
1-1872.....	96	1-1962-500.....	100	1-52424.....	105	2-126.....	78, 79
1-1873.....	96, 97	1-1962C.....	100, 186	1-53104.....	106, 108	2-126-1000.....	78
1-1873C.....	96	1-1962J.....	100, 188	1-53105.....	106	2-127.....	78, 79
1-1874.....	96, 97	1-1963.....	100, 103, 186	1-53114.....	106, 108	2-127-1000.....	78
1-1874C.....	96	1-1963-100.....	100	1-53115.....	106	2-131.....	78, 79
1-1875.....	96, 97	1-1963-500.....	100	1-53134.....	106	2-131-1000.....	78
1-1875C.....	96	1-1963C.....	100, 186	1-53204.....	106	2-132.....	78
1-1876.....	96, 97	1-1963J.....	100, 188	1-53206.....	106	2-132-1000.....	78
1-1877.....	96, 97	1-1964.....	100, 186	1-53214.....	106	2-133.....	78
1-1878.....	96, 97	1-1965.....	101	1-53216.....	106	2-134.....	78
1-1879.....	97	1-1965-100.....	101	1-53304.....	107	2-134-1000.....	78
1-1880.....	97	1-1965C.....	101	1-53314.....	107	2-135.....	78, 79
1-1891.....	97	1-1966.....	101	1-53404.....	107, 108	2-135-1000.....	78
1-1892.....	97	1-1966-100.....	101	1-53414.....	107, 108	2-136.....	78
1-1893.....	97	1-1967.....	103	1-53504.....	107	2-137.....	78
1-1893C.....	97	1-1971.....	101, 103, 186	1-53505.....	107	2-137-1000.....	78
1-1894.....	97	1-1971-100.....	101	1-53514.....	107	2-141.....	78
1-1894C.....	97	1-1971C.....	101	1-53515.....	107	2-142.....	78
1-1900.....	103	1-1972.....	101, 103, 186	1-54014.....	106	2-144.....	78
1-1903.....	103	1-1972-100.....	101	1-54024.....	106	2-145.....	78
1-1905.....	103	1-1972C.....	101	1-54104.....	106	2-146.....	78

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
2-147.....	78	3-341.....	73	3-555-100.....	75	5-036-250.....	124
2-151.....	78	3-342.....	73	3-556.....	75	5-040.....	124
2-155.....	78	3-343.....	73	3-556-100.....	75	5-522.....	123
2-156.....	78	3-344.....	73	3-565.....	75	5-523.....	122
2-401.....	79	3-407.....	73	3-565-100.....	75	5-524.....	122
2-402.....	79	3-501.....	76	3-566.....	75	5-525.....	122
2-403.....	79	3-501-100.....	76	3-566-100.....	75	5-527.....	122
2-404.....	79	3-501-250.....	76	3-602.....	71	5-530.....	122
2-422.....	79	3-502.....	76	3-603.....	71	5-532.....	122
2-423.....	79	3-502-100.....	76	3-604.....	71	5-534.....	122
2-424.....	79	3-502-250.....	76	3-612.....	71	5-536.....	122
2-425.....	79	3-503.....	76	3-613.....	71	5-538.....	122
2-426.....	79	3-503-010.....	16	3-614.....	71	5-608.....	123
2-1013.....	78	3-503-100.....	76	3-622.....	71	5-610.....	123
2-1023.....	78	3-503-250.....	76	3-623.....	71	5-612.....	123
2-1043.....	78	3-504.....	76	3-624.....	71	5-616.....	123
2-1053.....	78	3-504-010.....	16	3-632.....	71	5-710.....	124
2-1063.....	78	3-504-100.....	76	3-633.....	71	5-711.....	124
2-1073.....	78	3-504-250.....	76	3-642.....	71	5-712.....	16, 124
2-1113.....	78	3-505.....	76	3-643.....	71	5-713.....	124
2-1123.....	78	3-505-100.....	76	3-644.....	71	5-714.....	124
2-1133.....	78	3-505-250.....	76	3-652.....	71	5-715.....	124
2-1143.....	78	3-506.....	76	3-653.....	71	5-716.....	124
2-1153.....	78	3-506-100.....	76	3-654.....	71	5-750.....	28, 29, 30
2-1163.....	78	3-506-250.....	76	3-655.....	71	5-811.....	124
2-1173.....	78	3-507.....	76	3-662.....	71	5-812.....	124
2-1213.....	78	3-507-100.....	76	3-663.....	71	5-813.....	124
2-1223.....	78	3-508.....	76	3-664.....	71	5-814.....	124
2-1233.....	78	3-508-100.....	76	4-046.....	177	5-815.....	124
2-1243.....	78	3-508-250.....	76	4-054.....	103, 113, 177	5-816.....	124
2-1253.....	78	3-509.....	76	.....	189	5-1000.....	125, 192
2-1263.....	78	3-509-100.....	76	4-055.....	177, 189	5-5003.....	123
2-1273.....	78	3-509-250.....	76	4-057.....	113, 178, 186	5-5006.....	123
2-1313.....	78	3-510.....	76	4-058.....	113, 178	5-5007.....	117, 119
2-1323.....	78	3-510-100.....	76	4-101.....	170	5-5008.....	119
2-1333.....	78	3-510-250.....	76	4-120.....	179	5-5018.....	24, 119
2-1343.....	78	3-511.....	76	4-121.....	179, 180	5-45034.....	125
2-1353.....	78	3-511-100.....	76	4-122.....	179	5-45044.....	125
2-1363.....	78	3-511-250.....	76	4-140.....	170	5-45054.....	125
2-1373.....	78	3-512.....	76	4-146.....	170	5-45064.....	125
2-1413.....	78	3-512-100.....	76	4-147.....	170	5-45074.....	16, 125
2-1423.....	78	3-512-250.....	76	4-150.....	170	5-45084.....	125
2-1453.....	78	3-513.....	76	4-152.....	81, 93, 171	5-45094.....	125
2-1463.....	78	3-513-100.....	76	4-153.....	81, 171	5-45104.....	125
2-1473.....	78	3-514.....	76	4-214.....	103, 108, 171	5-45124.....	125
2-1513.....	78	3-514-100.....	76	.....	186	5-45144.....	125
2-1553.....	78	3-514-250.....	76	4-221.....	171	5-45164.....	125
3-112.....	79	3-515.....	76	4-230.....	172	5-45224.....	125
3-113.....	79	3-516.....	76	4-231.....	122, 172	5-45241.....	125
3-191.....	72	3-516-100.....	76	4-250.....	180	5-45261.....	125
3-192.....	72	3-516-250.....	76	4-500.....	176	5-45271.....	125
3-193.....	72	3-518.....	74	4-507.....	172	5-46034.....	125
3-194.....	72	3-523.....	74	4-532.....	174	5-46044.....	125
3-195.....	72	3-523-250.....	74	4-904.....	173	5-46054.....	125
3-201.....	72	3-523-500.....	74	5-023.....	124	5-46064.....	125
3-202.....	72	3-523-1000.....	74	5-023-250.....	124	5-46074.....	125
3-203.....	72	3-524.....	74	5-023-1000.....	124	5-46084.....	125
3-204.....	72	3-524-250.....	74	5-025.....	124	5-46094.....	125
3-205.....	72	3-524-500.....	74	5-025-250.....	124	5-46104.....	125
3-221.....	72	3-524-1000.....	74	5-025-1000.....	124	5-46124.....	125
3-222.....	72	3-526.....	75	5-027.....	124	5-46144.....	125
3-223.....	72	3-528.....	75	5-027-250.....	124	5-46164.....	125
3-224.....	72	3-528-100.....	75	5-027-1000.....	124	5-46224.....	125
3-225.....	72	3-530.....	75	5-029.....	124	5-46241.....	125
3-241.....	72	3-530-100.....	75	5-029-250.....	124	5-46261.....	125
3-242.....	72	3-532.....	75	5-030.....	124	5-46271.....	125
3-243.....	72	3-532-100.....	75	5-030-250.....	124	5-46281.....	125
3-244.....	72	3-545.....	75	5-030-500.....	124	5-46291.....	125
3-245.....	72	3-545-100.....	75	5-032.....	124	5-46301.....	125
3-326.....	73	3-546.....	75	5-032-250.....	124	6-102.....	112
3-327.....	73	3-546-100.....	75	5-032-500.....	124	6-102C.....	112
3-328.....	73	3-551.....	75	5-034.....	124	6-103.....	111
3-329.....	73	3-551-100.....	75	5-034-250.....	124	6-103C.....	111
3-330.....	73	3-555.....	75	5-036.....	124	6-104.....	112

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
6-104C	112	8-619	84	8-2125	83	8-4930	82
6-105	111	8-620	84	8-2131	83	8-4950	82
6-105C	111	8-621	84	8-2132	83	8-4960	82
6-106	112	8-622	84	8-2133	83	8-4970	82
6-106C	112	8-623	84	8-2135	83	8-4980	82
6-107	111	8-638	84	8-2141	83	8-6421	85
6-107C	111	8-644	85	8-2142	83	8-7122	87
6-202	110	8-648	85	8-2143	83	8-7123	87
6-204	110	8-651	89, 93	8-2145	83	8-7124	87, 93
6-206	110	8-656	89	8-2152	83	8-7125	87, 93
6-207	110	8-657	89	8-2153	83	8-7126	87
6-208	110	8-662	89, 93	8-2155	83	8-7127	87
6-209	110	8-663	89	8-2162	83	8-7132	87
6-210	110	8-664	89	8-2163	83	8-7133	87
6-211	93, 110	8-667	89	8-2165	83	8-7137	87
6-211C	110	8-752	92	8-2173	83	8-7142	87, 93
6-212	36, 37, 93, 110	8-1120	81	8-2175	83	8-7143	87, 93
6-212C	110	8-1121	81	8-2183	83	8-7146	87
6-300	103, 111, 112	8-1122	81	8-2185	83	8-7147	87
	186	8-1130	81	8-2203	83	8-7150	87
6-301	103, 111, 112	8-1131	81	8-2213	83	8-7151	87
	186	8-1132	81	8-2223	83	8-30050	121
6-302	111, 112, 186	8-1140	81	8-2233	83	8-30057	121
6-304	111, 112, 186	8-1141	81	8-2243	83	8-33087	108, 120
6-305	111, 112, 186	8-1150	81	8-2253	83	8-33117	120
6-306	111	8-1151	81	8-2255	83	8-33147	120
6-307	111	8-1160	81, 93	8-2263	83, 93	8-34147	120
6-308	111	8-1161	81, 93	8-2265	83, 93	8-40050	121
6-309	111, 112	8-1170	81	8-2273	83	8-40057	121
6-310	111, 112	8-1171	81	8-2275	83	8-41047	120
6-311	111, 112	8-1180	81	8-2283	83	8-43084	120
6-312	111, 112	8-1181	81	8-2285	83	8-43087	120, 180
6-313	111, 112	8-1250	81	8-2763	81, 93	8-43117	120
6-314	111, 112	8-1251	81	8-2765	81, 93	8-43147	120
6-315	111, 112	8-1260	81	8-2900	83	8-43177	120
6-351	111	8-1261	81	8-2910	83	8-44147	120
6-353	111	8-1360	81	8-2920	83	8-45134	122
6-355	111	8-1361	81	8-2930	83	8-45194	122
6-357	111	8-1460	81, 93	8-2940	83	8-48087	121
6-400	110	8-1461	81, 93	8-2950	83	8-48147	121
6-401	110	8-1470	81	8-2960	83	8-49077	121
6-402	88, 110	8-1471	81	8-2980	83	8-49157	121
6-403	88, 110	8-1480	81	8-4111	82	8-61020	121
6-404	16, 36, 88, 93	8-1481	81	8-4121	16, 82	9-126	86
	110	8-1660	81	8-4122	16, 82	9-128	86
6-405	16, 36, 37, 88	8-1763	81	8-4123	16, 82	9-150	86
	93, 110	8-1863	81	8-4125	82	9-151	86
6-521	113	8-2001	82	8-4131	82	9-152	86
6-532	113	8-2002	82	8-4132	82	9-208	85
6-1800	112	8-2003	82	8-4133	82	9-209	85
6-1801	112, 192	8-2010	82	8-4135	82	9-210	85
7-259	88	8-2011	82	8-4152	82	9-211	85
7-260	31, 88	8-2012	82	8-4153	82	9-212	85
7-261	31, 88	8-2013	82	8-4155	82	9-213	85
7-262	88	8-2021	82	8-4161	82	9-214	85
7-263	88	8-2023	82	8-4162	82	9-215	85
7-264	88	8-2025	82	8-4163	82	9-216	85
7-265	88	8-2033	82	8-4165	82, 93	9-217	85
7-266	88	8-2053	82	8-4173	82	9-218	85
7-267	88	8-2055	82	8-4175	82	9-219	85
7-410	179	8-2063	82	8-4183	82	9-242	87
7-412	179	8-2065	82	8-4185	82	9-243	87
7-414	179	8-2073	82	8-4365	82	9-262	87
7-416	179	8-2100	83	8-4463	82	9-263	87
7-1800	88	8-2101	83	8-4465	82	9-282	87
8-101	176	8-2103	83	8-4563	82	9-283	87
8-103	175	8-2110	83	8-4663	82	9-290	87
8-110	175	8-2111	83	8-4723	81	9-291	87
8-120	175	8-2112	83	8-4733	81	9-292	87
8-210	176	8-2113	83	8-4763	81, 93	9-293	87
8-211	176	8-2115	83	8-4773	81	9-309	91
8-612	84	8-2121	36, 37, 83	8-4783	81	9-310	91
8-613	84	8-2122	36, 37, 83	8-4863	81, 93	9-313	91
8-618	84	8-2123	36, 83	8-4920	36, 37, 82	9-323	91

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
9-325.....	92	11-739.....	20	12-012-25.....	58, 180, 184	12-4546.....	54
9-350.....	86, 187	11-740.....	20	12-012-100.....	58	12-4548.....	54
9-351.....	86, 187	11-3100.....	18	12-020.....	60	12-4906.....	54
9-352.....	86, 187	11-3110.....	18	12-022.....	60	12-4908.....	54
9-360.....	86, 187	11-3120.....	18	12-024.....	60	12-8304.....	62
9-361.....	86, 187	11-3129.....	19	12-026.....	60	12-8305.....	62
9-362.....	86, 187	11-3150.....	18, 183, 184	12-035.....	56, 57	12-8306.....	62
9-370.....	86, 187	.....	185	12-038.....	55, 58	12-8307.....	62
9-371.....	86, 187	11-3159.....	19	12-039.....	58	12-8308.....	62
9-372.....	86, 187	11-3170.....	18	12-042.....	60	12-8309.....	62
9-404.....	90	11-3180.....	18	12-044.....	60	12-8311.....	62
9-405.....	90	11-3380.....	18	12-046.....	60	12-8312.....	62
9-407.....	90	11-3390.....	18	12-050.....	59	12-8404.....	62
9-413.....	90	11-3400.....	18	12-052.....	59	12-8405.....	62
9-416.....	90	11-3409.....	19	12-136.....	52, 58, 184	12-8406.....	62
9-427.....	91	11-5110.....	18	12-138.....	52, 58, 184	12-8407.....	62
9-428.....	91	11-5120.....	18	12-206.....	51, 58	12-8408.....	62
9-435.....	92	11-5150.....	18, 183, 184	12-206B.....	51	12-8409.....	62
9-436.....	92	.....	185	12-226.....	51	12-8410.....	62
9-1002.....	93	11-5151.....	18	12-236.....	51, 58	12-8411.....	62
9-1004.....	93, 192	11-5152.....	18	12-236B.....	51	12-8504.....	62
9-5560.....	86	11-5200.....	18	12-306.....	55	12-8506.....	62
11-125.....	61	11-5240.....	18	12-308.....	55	12-8508.....	62
11-250.....	61	11-5300.....	18	12-316.....	55	12-8510.....	62
11-253.....	61	11-5400.....	18	12-318.....	55	12-8540.....	56
11-257.....	61	11-5401.....	18	12-326.....	55	12-8542.....	56
11-258.....	61	11-5402.....	18	12-328.....	55	12-8546.....	56
11-260.....	61	11-8110.....	21	12-336.....	55	12-8548.....	56
11-261.....	61	11-8111.....	21	12-338.....	55	12-8604.....	62
11-262.....	61	11-8112.....	21	12-340.....	53	12-8606.....	62
11-263.....	61	11-8113.....	21	12-346.....	53	12-8608.....	62
11-264.....	61	11-8115.....	21	12-348.....	53	12-8704.....	62
11-265.....	61	11-8117.....	21	12-406.....	52	12-8706.....	62
11-266.....	61	11-8118.....	21	12-408.....	52	12-8708.....	62
11-267.....	61	11-8119.....	21	12-410.....	52	12-8710.....	62
11-268.....	61	11-8120.....	21	12-600.....	59, 184, 189	12-8804.....	63
11-269.....	61	11-8121.....	21	12-606.....	59	12-8806.....	63
11-270.....	61	11-8122.....	21	12-608.....	59	12-8808.....	63
11-271.....	61	11-8123.....	21	12-610.....	59	12-8810.....	63
11-273.....	61	11-8180-250.....	22	12-700.....	60	12-8904.....	63
11-274.....	61	11-8186-250.....	22	12-800.....	51	12-8906.....	63
11-276.....	61	11-8188-250.....	22	12-801.....	51	12-8908.....	63
11-277.....	61	11-8190-250.....	22	12-804.....	60	12-8910.....	63
11-278.....	61	11-31509.....	19	12-806.....	60	12-00623.....	53
11-300.....	20	11-34009.....	19	12-810.....	51	12-00823.....	53
11-300KT.....	20	11-51209.....	19	12-811.....	51	12-01611-25.....	58
11-301.....	177	11-51509.....	19	12-815.....	57	12-01611-100.....	58
11-302.....	20	11-54009.....	19	12-820.....	60	12-01621-25.....	58
11-303.....	20	11-81068.....	21	12-822.....	60	12-01621-100.....	58
11-304.....	176	11-81076.....	21	12-911.....	59	12-01631-25.....	58
11-310.....	19	11-81080.....	21	12-0061.....	52	12-01631-100.....	58
11-311.....	19	11-81108.....	21	12-0081.....	52	12-13617.....	52
11-312.....	19, 184	11-81116.....	21	12-0100.....	55, 184	12-13623.....	53
11-315.....	19, 183, 184	11-81120.....	21	12-0161-25.....	58	12-13817.....	52
.....	185, 191	11-81150.....	21	12-0161-100.....	58	12-13823.....	53
11-315G.....	191	11-81178.....	21	12-0162-25.....	58	12-23617.....	51
11-317.....	19	11-81186.....	21	12-0162-100.....	58	12-41010.....	52
11-318.....	19	11-81200.....	21	12-0163-25.....	58	12-49064.....	54
11-320.....	19, 184	11-81218.....	21	12-0163-100.....	58	12-49084.....	54
11-321.....	19	11-81226.....	21	12-0164-04.....	58	12-88042.....	64
11-322.....	19	11-82120.....	22	12-0164-100.....	58	12-88044.....	64
11-331.....	19	11-82150.....	22	12-0167-25.....	55, 58	12-88064.....	64
11-332.....	19	11-82200.....	22	12-0167-100.....	58	12-88066.....	64
11-333.....	19	12-006.....	52, 58, 183	12-1119.....	54	12-89042.....	67
11-338.....	19	.....	184, 185	12-1169.....	54	12-89044.....	67
11-339.....	19	12-006B.....	52	12-1189.....	54	12-90002.....	173
11-340.....	19, 184	12-008.....	52, 58, 183	12-1361.....	52	12-90003.....	59, 173, 180
11-414.....	176	.....	184, 185	12-1381.....	52	12-90004.....	173
11-416.....	176	12-008B.....	52	12-2061.....	51	12-90005.....	173
11-712.....	20	12-010.....	52, 58, 177, 180	12-2361.....	51	12-90010.....	63
11-715.....	20	.....	184	12-2367.....	51	12-90040.....	67, 69
11-717.....	20	12-010B.....	52	12-4506.....	54	12-90044.....	63, 68
11-718.....	20	12-011-25.....	58	12-4508.....	54	12-90060.....	67, 69
11-738.....	20	12-011-100.....	58	12-4526.....	54	12-90066.....	63, 68

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
12-90080.....	67, 69	12-97108.....	66	15-611.....	29	16-725.....	32
12-90088.....	63, 68	12-97222.....	66	15-630.....	29	16-726.....	33
12-90400.....	67	12-97224.....	66	15-640.....	35, 39	16-730.....	27, 28, 29, 180
12-90600.....	67	12-97444.....	66	15-710.....	28, 29		183, 185
12-90800.....	67	12-97446.....	66	15-711.....	28, 29	16-760.....	44
12-91022.....	64	12-97664.....	66	15-715.....	28, 29	16-761.....	44
12-91033.....	64	12-97666.....	66	15-720....	34, 39, 183, 185	16-762.....	44
12-91044.....	64	12-97668.....	66	15-720B.....	34	16-763.....	44
12-91055.....	64	12-97886.....	66	15-721.....	34, 39	16-775.....	44, 46
12-91066.....	64, 68	12-97888.....	66	15-722.....	34, 39	16-777.....	46
12-91088.....	64, 68	12-98042.....	66	15-724.....	34	16-779.....	46
12-92024.....	64	12-98044.....	66, 68	15-730.....	28, 29, 183	16-780.....	41
12-92042.....	64	12-98046.....	66		185	16-795.....	40, 43
12-92044.....	64	12-98052.....	66	15-730B.....	28	16-797.....	39
12-92054.....	64	12-98062.....	66	15-731.....	28	16-798.....	39
12-92064.....	64	12-98064.....	66, 68, 69	15-740.....	16, 32, 34, 39	16-799.....	39
12-92066.....	64	12-98066.....	66, 68, 69	15-750.....	45, 47	16-801.....	181
12-92086.....	64	12-98068.....	66	15-751.....	45, 47	16-802.....	181
12-93022.....	64, 69	12-98084.....	66	15-752.....	45, 47	16-803.....	181
12-93024.....	64	12-98086.....	66, 68, 69	15-753.....	45, 47	16-804.....	181
12-93032.....	64	12-98088.....	66, 68	15-755.....	47	16-811.....	28, 29
12-93034.....	64	12-98106.....	66	15-760.....	45, 47	16-822.....	32, 39
12-93042.....	64, 68, 69	12-98108.....	66	15-761.....	45, 47	16-826.....	33
12-93044.....	64, 69	12-98126.....	66	15-762.....	45, 47, 183	16-850.....	42
12-93046.....	64	12-98128.....	66		185	16-860.....	44
12-93052.....	64	12-99022.....	67	15-763.....	45, 47	16-861.....	44
12-93054.....	64	12-99024.....	67	15-765.....	47	16-862.....	44
12-93062.....	64	12-99042.....	67	15-766.....	47	16-863.....	44
12-93064.....	64, 68, 69	12-99044.....	67	15-767.....	47	16-2223.....	38
12-93066.....	64, 68, 69	12-99046.....	67	15-769.....	46, 47	16-2423.....	38
12-93068.....	64	12-99052.....	67	15-770.....	47	16-7222.....	32
12-93084.....	64	12-99054.....	67	15-773.....	47	16-7242.....	32
12-93086.....	64, 68, 69	12-99064.....	67	15-775.....	46	16-7401.....	33
12-93088.....	64	12-99066.....	67	15-784.....	16, 39	16-7402.....	33
12-93106.....	64	12-99068.....	67	15-788.....	39	16-7403.....	33
12-93108.....	64	12-99084.....	67	15-795.....	38	16-7421.....	33
12-93126.....	64	12-99086.....	67	15-796.....	34, 39	16-7422.....	33
12-93128.....	64	12-99088.....	67	15-798.....	16, 39	16-7602-28.....	44
12-94022.....	65	12-99108.....	67	15-800.....	31	16-7612-28.....	44
12-94024.....	65	12-450623.....	54	15-801.....	31	16-7622-28.....	44
12-94032.....	65	12-450823.....	54	15-805.....	31	16-7632-28.....	44
12-94034.....	65	12-854689.....	56	15-806.....	31	16-7709.....	44
12-94042.....	65, 68	12-854889.....	56	15-830.....	28, 29	16-7729.....	44
12-94044.....	65, 68	12-911010.....	64	15-860.....	49	16-7739.....	44
12-94046.....	65	12-941012.....	65	15-861.....	49	16-7709-28.....	44
12-94052.....	65	12-951010.....	65, 69	15-865.....	49	16-7719-28.....	44
12-94064.....	65, 68	12-961010.....	65	15-960.....	48	16-7729-28.....	44
12-94066.....	65, 68	12-981012.....	66	15-961.....	47, 48	16-7739-28.....	44
12-94068.....	65	15-039.....	119	15-7602.....	45	16-74036.....	34
12-94084.....	65	15-040.....	119	15-7609.....	45	16-77029.....	44
12-94086.....	65, 68	15-041.....	115	15-7619.....	45	16-77229.....	44
12-94088.....	65	15-042.....	115, 183, 185	15-7622.....	45	16-77029-28.....	44
12-94106.....	65	15-200.....	174	15-7629.....	45	16-77229-28.....	44
12-94108.....	65	15-208.....	174	15-7639.....	45	16-77329-28.....	44
12-94128.....	65	15-320.....	13, 31, 36, 37	15-7809.....	45	16-77526.....	36
12-95022.....	65, 68		39	15-7819.....	45	16-77712.....	36
12-95033.....	65	15-326.....	12, 14, 16, 31	15-7829.....	45	16-7800.....	41
12-95044.....	65, 68, 69		36, 37, 39	15-7895.....	40, 41	16-7801.....	41
12-95046.....	65	15-327.....	16	15-7955.....	38	16-7802.....	41
12-95055.....	65, 68	15-328.....	14, 38	15-77526.....	36	16-7803.....	41
12-95066.....	65, 68, 69	15-327-150.....	16	15-78029.....	45	16-7810.....	41
	180	15-335.....	28, 31, 37	16-125.....	67, 9, 23, 28	16-7811.....	41
12-95068.....	65	15-336.....	28, 31, 37	16-324.....	38	16-7812.....	41
12-95088.....	65, 68, 69	15-338.....	31, 38	16-400.....	34	16-7812TC.....	41
	180	15-339.....	31, 38	16-600.....	34	16-7813.....	41
12-96044.....	66	15-400.....	35, 39	16-713.....	30, 35	16-7820.....	41
12-96055.....	66	15-410.....	29	16-714.....	30, 35, 39	16-7821.....	41
12-96066.....	66	15-421-024.....	30	16-720.....	27, 32, 39, 180	16-7822.....	41
12-96222.....	65	15-421-048.....	30		183, 185	16-7823.....	41
12-96444.....	65, 68	15-426-024.....	30	16-720B.....	32	16-7830.....	41
12-96555.....	65	15-426-048.....	30	16-721.....	39	16-7831.....	41
12-96666.....	65, 68	15-430.....	29	16-722.....	32, 39	16-7832.....	41
12-96888.....	65, 68	15-600.....	35, 39	16-724.....	32, 33, 41	16-7833.....	41
12-97106.....	66	15-610.....	29		42, 43	16-7840.....	41, 43

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
16-7842.....	42, 43	19-4008.....	10	23-2630.....	13	30-2255.....	26
16-7890.....	40, 43	19-4010.....	10	23-2916.....	12	30-2256.....	26
16-7891.....	40, 43	19-4012.....	10	23-2926.....	12	30-2257.....	26
16-8000.....	42	19-4015.....	10	23-2929.....	14	30-2259.....	25
16-8510.....	42	19-4020.....	10	23-4325.....	13	30-2270.....	25
16-8511.....	42	19-4102.....	29	23-4329.....	14	30-2271.....	25
16-8512.....	42	19-4104.....	29	23-4625.....	13	30-2272.....	26
16-8513.....	42	19-4708.....	10	23-4629.....	14	30-2273.....	26
16-9322.....	37	19-4710.....	10	23-4925.....	13	30-2274.....	25
16-9324.....	37	19-4712.....	10	23-4929.....	14	30-2275.....	26
16-9326.....	36	19-4715.....	10	23-22576.....	12	30-2276.....	26
16-9328.....	36	19-6006.....	10	23-22776.....	12	30-2277.....	26
16-9500.....	40	19-6008.....	10	23-23276.....	11	30-2279.....	25
16-9510.....	40	19-6010.....	10	23-26276.....	11	30-2290.....	25
16-9515.....	40	19-6012.....	10	23-29276.....	11	30-2291.....	25
16-9520.....	40	19-6015.....	10	24-4320.....	7	30-2292.....	26
16-9520PL.....	163	19-6020.....	10	24-4321.....	7	30-2293.....	26
16-9526PL.....	40	19-6102.....	29	24-4324.....	7	30-2294.....	25
16-9530.....	40	19-6104.....	29	24-4327.....	7	30-2295.....	26
16-9530PL.....	163	19-6708.....	10	24-4620.....	7	30-2296.....	26
16-80002.....	42	19-6710.....	10	24-4621.....	7, 183, 185	30-2297.....	26
16-95140.....	40	19-6712.....	10	.....	191	30-2299.....	25
16-95240.....	40	19-6715.....	10	24-4621G.....	191	30-4140.....	10
16-95340.....	40	19-7752.....	11	24-4624.....	7	30-4141.....	10
16-95246PL.....	163	21-2232.....	15	24-4627.....	7	30-4320.....	6
17-039.....	115	21-2252.....	15	24-4951.....	7	30-4321.....	6
17-103.....	117	21-2272.....	15	24-4954.....	7	30-4324.....	6
17-106.....	117	21-2292.....	15	24-9621.....	6	30-4327.....	7
17-111.....	117	21-2329.....	14	25-22576.....	12	30-4420.....	6
17-116.....	117	21-2629.....	14	25-22776.....	12	30-4620.....	6
17-120.....	117	21-2929.....	14	25-23276.....	11	30-4621.....	6, 183, 185
17-121.....	114, 117	21-4329.....	15	25-26276.....	11	.....	191
17-125.....	117	21-4629.....	15	25-29276.....	11	30-4621G.....	191
17-145.....	117	21-4929.....	15	26-2100-048.....	30	30-4624.....	6
17-147.....	116	22-2011.....	9	26-2100-060.....	30	30-4627.....	7
17-148.....	117, 187	22-2031.....	9	26-2100-072.....	30	30-4721.....	6
17-149.....	116	22-2051.....	9	26-2305-024.....	35	30-4820.....	6
17-150.....	118, 180	22-2057.....	9	26-2305-048.....	35	30-4821.....	6
17-151.....	118	22-2071.....	9	30-1157.....	24	30-4920.....	6
17-152.....	118, 188	22-2077.....	9	30-1177.....	24	30-4921.....	6
17-153.....	116, 117, 118	22-2151.....	24	30-2010.....	9	30-4924.....	6
.....	180, 187, 188	22-2171.....	24	30-2011.....	9	30-4927.....	7
17-154.....	16, 118, 188	22-4320.....	7	30-2030.....	9	30-4951.....	6
17-155.....	118	22-4321.....	7	30-2031.....	9	30-4954.....	6
17-156.....	118	22-4620.....	7	30-2050.....	9	30-9120.....	5
17-157.....	119	22-4621.....	7, 183, 185	30-2051.....	9	30-9320.....	5
17-158.....	119	22-4624.....	7	30-2054.....	9	30-9321.....	5
17-160.....	119	22-4721.....	7	30-2055.....	8	30-9324.....	5
17-163.....	119	22-4951.....	7	30-2057.....	9	30-9334.....	5
17-169.....	119	22-4954.....	7	30-2070.....	9	30-9620.....	5
17-170.....	118	22-9320.....	6	30-2071.....	9	30-9621.....	5
17-171.....	118	22-9321.....	6	30-2074.....	9	30-9624.....	5
17-172.....	118	22-9521.....	6	30-2075.....	8	30-9634.....	5
17-173.....	114, 119	22-9620.....	6	30-2077.....	9	30-9820.....	5
17-177.....	118	22-9621.....	6	30-2091.....	9	30-9821.....	5
17-180.....	114, 117, 118	22-9720.....	6	30-2094.....	9	30-9920.....	5
.....	187	22-9721.....	6	30-2095.....	8	30-9921.....	5
17-181.....	23, 24, 114, 118	22-9921.....	6	30-2150.....	24	30-9924.....	5
17-182.....	117	23-2051.....	13	30-2151.....	24	30-9934.....	5
17-183.....	117	23-2071.....	13	30-2154.....	24	30-9951.....	5
17-246.....	116	23-2091.....	13	30-2155.....	24	30-9954.....	5
17-247.....	116	23-2232.....	15	30-2170.....	24	31-2033.....	10
17-249.....	116	23-2251.....	14	30-2171.....	24	31-2053.....	10
17-420.....	117	23-2252.....	15	30-2174.....	24	31-2073.....	10
17-0240.....	115	23-2271.....	14	30-2175.....	24	31-2093.....	10
17-0241.....	115	23-2272.....	15	30-2190.....	24	31-4323.....	8
17-0400.....	115	23-2292.....	15	30-2191.....	24	31-4623.....	8
17-0401.....	115	23-2316.....	12	30-2194.....	24	31-9323.....	8
17-1481.....	114, 117, 187	23-2326.....	12	30-2195.....	24	31-9623.....	8
17-1487.....	117	23-2329.....	14	30-2250.....	25	31-9923.....	8
17-1488.....	117	23-2616.....	12	30-2251.....	25	34-1010-300.....	130
17-3000.....	116	23-2626.....	12, 16	30-2252.....	26	34-1010-336.....	130
17-3001.....	116	23-2629.....	14	30-2253.....	26	34-1010-396.....	130
19-4006.....	10	23-2628.....	13	30-2254.....	25	34-1107-024.....	140

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
34-1111-158.....	131	51-18312-10.....	151	51-40904....	148, 150, 159	60-3000.....	167
34-1231-324.....	129	51-18313.....	151, 160	51-60302.....	151, 160	60-3000KT.....	167
34-1231-384.....	129	51-18313-10.....	151	51-60302-16.....	151	60-3600.....	167, 168
34-1300-384.....	128	51-18500.....	151, 160	51-60303....	151, 156, 160	60-3656-540.....	167, 168
34-1402-420.....	128	51-18500-10.....	160	51-60303-16.....	151	60-3651.....	168
34-1703-082.....	132	51-18900.....	155, 157	51-60312.....	150	60-3652.....	168
34-1824-072.....	133	51-18701.....	155	51-60312-16.....	150	60-9100.....	162
34-1901-024.....	134	51-18701-10.....	155	51-60312K.....	150	60-9200.....	162
34-1902-024.....	134	51-18701K.....	155	51-60313.....	150	60-9201.....	162
34-1903-006.....	127	51-22211.....	146, 147	51-60313-16.....	150	60-9202.....	162
34-2004-066.....	133	51-22214.....	146, 147	51-60313K.....	150	63-0040.....	174
34-2004-114.....	133	51-22221.....	146, 147	51-60213.....	151, 156	63-0170.....	174
34-2023-160.....	132	51-22224.....	146, 147	51-60213-4.....	151	63-2724.....	39
34-2023-232.....	132	51-34011.....	156	51-60500.....	150, 157	80-012.....	190
34-2101-300.....	129	51-34011-10.....	156	51-60500-25.....	150, 157	80-105.....	185
34-2130-270.....	130	51-34020....	152, 153, 154	51-60900.....	156	80-106.....	185
34-2231-480.....	131	51-34020-10.....	159	51-60900-10.....	156	80-107.....	185
34-3000-156.....	129, 130	51-34021.....	156	51-60904.....	151, 160	80-110.....	185
.....	131	51-34021-10.....	156	51-60910.....	156	80-112.....	190
34-3000-288.....	129, 130	51-34025....	152, 153, 154	51-60910-10.....	156	80-130.....	183
34-4010.....	132	51-34025-10.....	159	51-96010.....	141	80-131.....	184
34-4012.....	133	51-34302.....	152, 160	51-96010-25.....	141	80-153.....	188
34-4020.....	128, 129, 130	51-34302-10.....	152	51-96110.....	141	80-191.....	79, 189
.....	134	51-34312.....	153	51-96110-25.....	141	80-250.....	16, 190
34-4020-1.....	131	51-34312-25.....	153	51-96210....	142, 151, 152	80-420.....	187
34-4030.....	128, 129, 130	51-34313.....	153	.....	153, 155, 156, 157	80-600.....	59, 189
.....	134	51-34313-25.....	153	51-96210-25.....	142	80-795.....	38, 190
34-4030-1.....	131	51-34313-25.....	153	51-96310....	141, 151, 152	80-801.....	185
34-4120.....	128, 129, 130	51-34303.....	152, 160	.....	153, 155, 156	80-850.....	180
34-4130.....	128, 129, 130	51-34303-10.....	152	51-96310-25.....	141	80-903.....	187
34-5100-144.....	128, 129	51-34322.....	153	51-96319....	142, 151, 152	80-0161.....	190
34-5100-204.....	128, 129	51-34322-25.....	153	.....	153, 155, 156	80-0162.....	190
34-5211-024.....	132	51-34323.....	153	51-96319-25.....	142	80-0163.....	190
34-5221-024108.....	132	51-34323-25.....	153	51-96410.....	143	80-0164.....	190
36-3001.....	135, 139	51-34500....	152, 158, 160	51-96410-25.....	143	80-0167.....	190
36-9000-360.....	135	51-34500-10.....	152, 158	51-96510.....	143	80-1000.....	103, 192
36-9000-480.....	135	51-34501....	153, 154, 156	51-96510-25.....	143	80-1078.....	185
36-9000-600.....	135	.....	158	51-96610....	143, 148, 149	80-1161.....	190
36-9000-720.....	135	51-34550.....	152, 158	.....	150, 151, 154	80-1162.....	190
36-9020-018.....	135	51-34550-10.....	152, 158	51-96610-25.....	143	80-1163.....	190
36-9100-060.....	136	51-34711.....	155	51-97470.....	144	80-1164.....	190
36-9100-192.....	136	51-34711-10.....	155	51-97470-25.....	144	80-1290.....	68
36-9101-060.....	136	51-34721.....	155	51-97479.....	144	80-1291.....	69
36-9101-192.....	136	51-34721-10.....	155	51-97479-25.....	144	80-1292.....	69
36-9200-2484.....	137	51-34904.....	152, 160	53-115.....	41, 42, 47	80-1850.....	186
36-9200-6060.....	137	51-35312.....	154	53-120.....	40, 41, 42, 47	80-1860.....	188
36-9201-2484.....	137	51-35312-25.....	154	53-130.....	40, 41, 42, 47	80-1860F.....	188
36-9201-6060.....	137	51-35313.....	154	53-515.....	16, 48	80-1860S.....	188
36-9202-300.....	137	51-35313-25.....	154	53-520.....	48	80-1861.....	188
36-9203-300.....	137	51-35322.....	154	54-130.....	49	80-1861F.....	188
36-9300-012.....	137	51-35322-25.....	154	54-140.....	49	80-1861S.....	188
36-9300-132.....	137	51-35323.....	154	54-350.....	48	80-1901.....	192
36-9400-2484....	138, 139	51-35323-25.....	154	60-2500.....	163	80-2006.....	79, 189
36-9400-5050.....	138	51-40122.....	148	60-2502.....	163		
36-9501.....	138, 139	51-40122-16.....	148	60-2520.....	163		
36-9502.....	138	51-40132.....	148	60-2520-20.....	163		
36-9503.....	138	51-40132-16.....	148	60-2520-30.....	163		
36-9504.....	138	51-40142.....	148	60-2522.....	163		
36-9511.....	139	51-40142-16.....	148	60-2522-20.....	163		
36-9512.....	139	51-40152.....	148	60-2600.....	164		
36-9513.....	139	51-40152-16.....	148	60-2620.....	164		
36-9514.....	139	.....	148	60-2620KT.....	164		
36-9523.....	139	51-40202.....	148, 159	60-2620-20KT.....	164		
36-9524.....	139	51-40202-16.....	148	60-2687.....	167		
36-9601-024.....	131, 134	51-40212.....	149	60-2690.....	164, 165		
.....	138	51-40212-16.....	149	60-2691.....	167		
36-9601-036.....	130, 132	51-40212K.....	149	60-2692.....	167		
.....	134, 138	51-40500.....	149, 157	60-2699.....	164, 165		
36-9601-228.....	128, 129	51-40500-25.....	149, 157	60-2700.....	165		
.....	134, 138	51-40801.....	150, 159	60-2720.....	165		
36-9603-036.....	138	51-40801-16.....	150	60-2720KT.....	165		
36-9603-228.....	138	51-40811.....	149	60-2720-20.....	165		
36-9701.....	136	51-40811-16.....	149	60-2720-20KT.....	165		
51-18312.....	151, 160	51-40811K.....	149	60-2800.....	166		

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

NOTES

Phillips Industries - USA

12070 Burke Street
Santa Fe Springs, CA 90670
TEL: 800-423-4512
FAX: 800-597-7757
TECH HOTLINE: 888-959-0995
IAFT 16949 & ISO 14001

Phillips Connect Technologies - USA

4740 Von Karman Avenue, Ste. 120
Newport Beach, CA 92660
TEL: 833-213-5839

Phillips Industries – Mexico**Phillips Industries de México S. de R. L. de C.V.**

Avenida Bob Phillips # 755 Int.
Parque Industrial Davisa Arteaga
Arteaga, Coahuila México 25350
TEL: 52-844-986-9200
FAX: 52-844-986-9229
IAFT 16949 & ISO 14001

Phillips - China

No.176 Qinghe Road
Beilun District
Ningbo, China 315800
TEL: 86-574-8781-6600
FAX: 86-574-8781-7755
IAFT 16949 & ISO 14001

Phillips - Europe**Phillips Poland Sp. z o. o**

Chechło Pierwsze
ul. Zwycięstwa 32,
95-082 Dobroń, Poland
TEL: +48 42 215-34-34
FAX: +48 42 227-13-90
IAFT 16949 & ISO 14001

Phillips Industries - Canada

2495 Meadowpine Blvd., Unit 3
Mississauga, ON L5N 6C3
TEL: 905-814-1975
FAX: 905-814-5830



www.phillipsind.com

CAT0120

Copyright © 2020 by Phillips Industries Inc. All Rights Reserved.