



TARPING SYSTEMS & ACCESSORIES

P/N 1121091 Rev. C

INSTALLATION INSTRUCTIONS

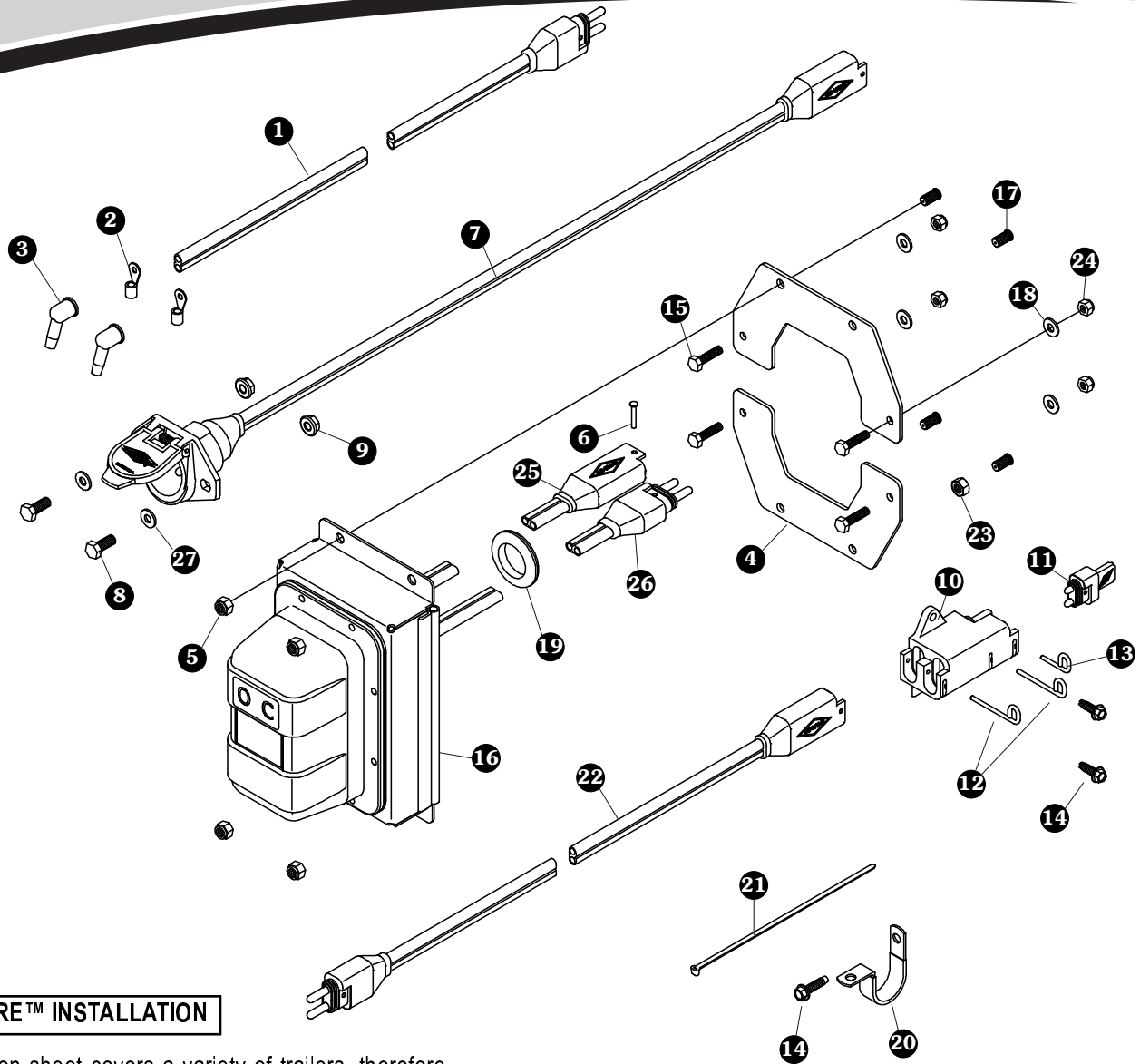


Wiring - Add On ProTraps to 3500 Series w/Remote Box

READ BEFORE INSTALLING

PO BOX 713 ■ 2309 SHUR-LOK STREET ■ YANKTON, SD 57078-0713
PHONE 1-800-4-SHUR-LOK (1-800-474-8756) ■ FAX 605-665-0501
www.shurco.com

SHOP ONLINE: www.shopshurco.com



SMARTWIRE™ INSTALLATION

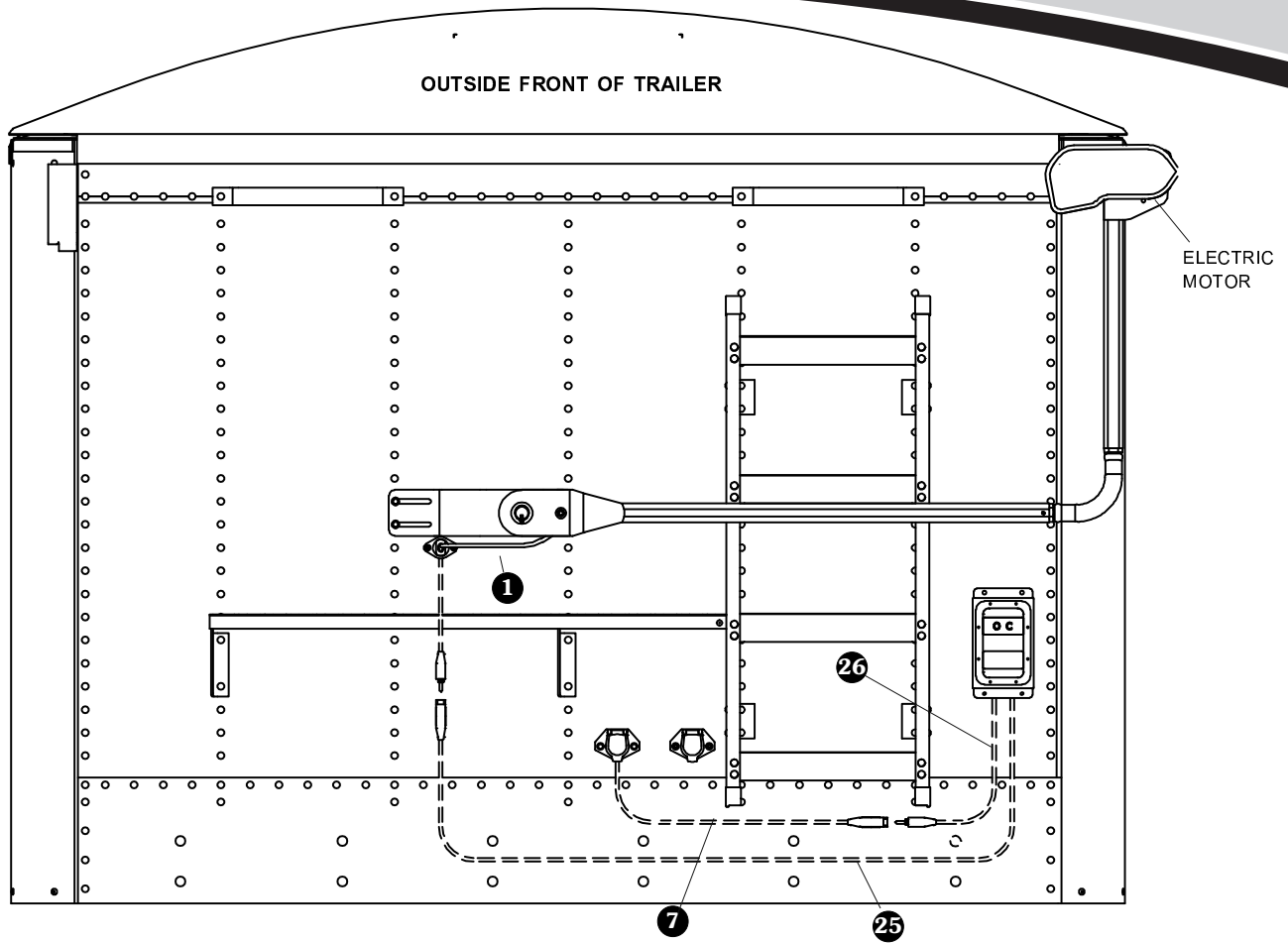
This instruction sheet covers a variety of trailers, therefore the locations for the SMARTwire™ components shown here may need to vary slightly on your trailer. Mounting locations are critical because wire lengths cannot be altered. Mounting SMARTwire™ components as close as possible to the locations shown will not only ensure a quick and easy installation, but will also facilitate SMARTwire™ upgrades.

Item Part # Description

1.		SMARTwire™ - 6 Ga. x 9' 9" - Plug
2.	1702707	Ring Terminal- 6 Ga. 1/4 Stud
	1703245	Ring Terminal - 6 Ga. #10 Stud
3.	1704330	Rubber Boot
4.	1118304	Bracket Adapter
5.	1700419	Nylon Lock Nut - 5/16"
6.	1704751	Harness Lock Pin - 1/4" x 7/8"
7.	1120670	SMARTwire™ Dual-Conductor Socket
8.	1701045	Cap Screw - 5/16" x 3/4"
9.	1704946	Flanged Top Lock Nut - 5/16"
10.	1704695	Harness Junction Block

Item Part # Description

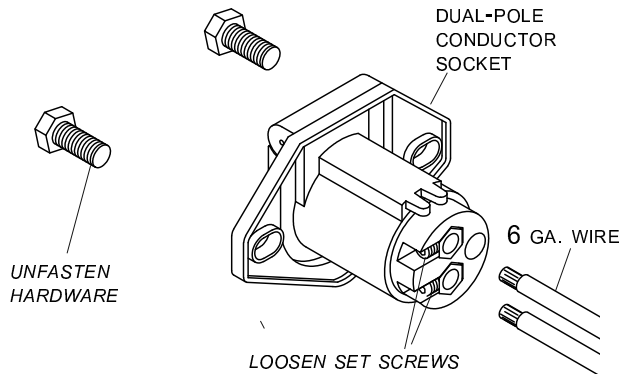
11.	1704717	Wire Harness Rubber Plug
12.	1704696	Harness Lock Pin - Long
13.	1704711	Harness Lock Pin - Short
14.	1704338	Self-Tapping Screw - 1/4" x 1"
15.	1700381	Cap Screw - 1/4" x 1"
16.		Shur-Co® Wireless Receiver - SMARTWire™
17.	1704344	Flush Stud
18.	1700427	Flat Washer - 1/4"
19.	1202938	Rubber Grommet - 1 1/2" Insert
20.	1702108	Wire Clip - 3/4"
21.	1703231	Cable Tie - 8"
22.	1704704	SMARTwire™ - 6 Ga. x 25' - Plug/Socket
23.	1700411	Hex Nut - 5/16"
24.		Nylon Lock Nut - 1/4"
25.		SMARTwire™ - 6 Ga. x 6' 3" - Socket
26.		SMARTwire™ - 6 Ga. x 2' 4" - Plug
27.	1700427	Flat Washer - 1/4"



NOTE: Wire lengths are predetermined. Before installing SMARTwire™ components, review and confirm wire routing so that wires will reach components with ample room for connection.

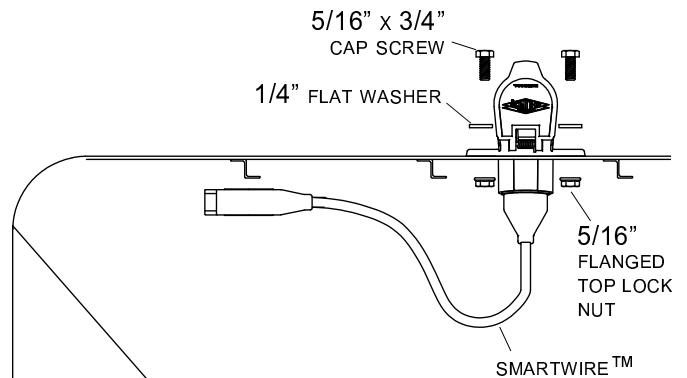
DUAL-POLE CONDUCTOR SOCKET INSTALLATION

STEP 1: Loosen set screws on back of existing dual-pole conductor socket and disconnect 6-ga. wire.

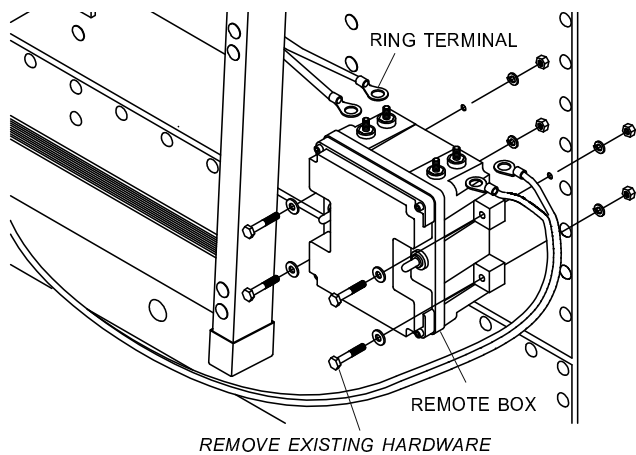


STEP 2: Unfasten and remove dual-pole conductor socket from front of trailer.

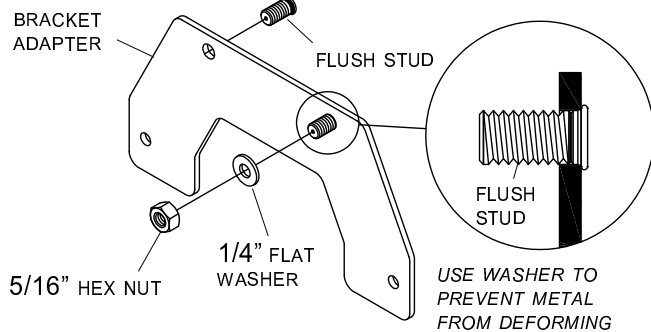
STEP 3: Fasten SMARTwire™ conductor socket to trailer with 5/16" x 3/4" cap screws, flat washers and nuts.



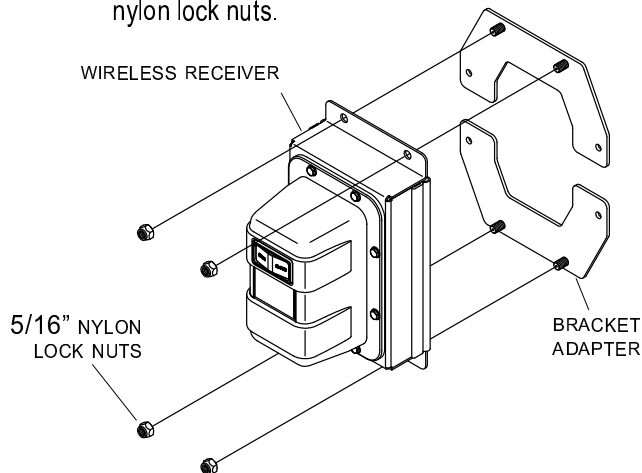
STEP 1: Unfasten ring terminals from existing remote box. Remove fasteners, then remove remote box from trailer.



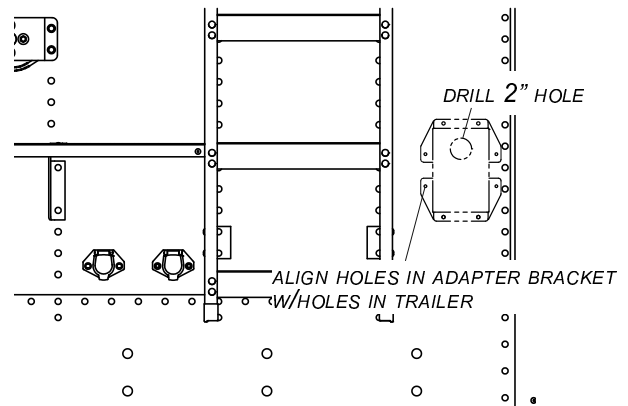
STEP 2: Insert flush studs through holes shown in bracket adapters. Slide 1/4" washer and 5/16" hex nut (not lock nut) over flush stud. Tighten nut onto each flush stud, tightening studs into bracket adapters until stud heads are nearly flush with adapters. Remove and discard washers and nuts.



STEP 3: Fasten wireless receiver to bracket adapters with 5/16" nylon lock nuts.

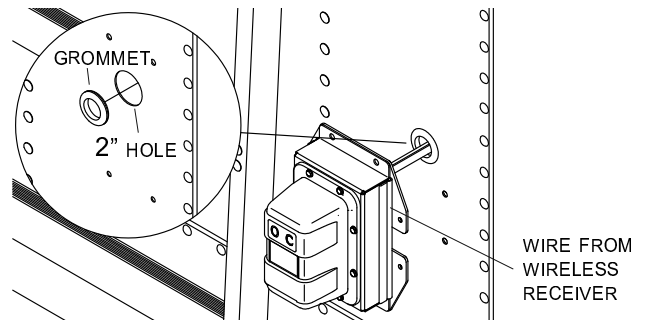


STEP 4: To determine hole location for receiver wires to go through trailer skin, align holes in adapter bracket with existing holes in trailer. Drill 2" hole as shown.

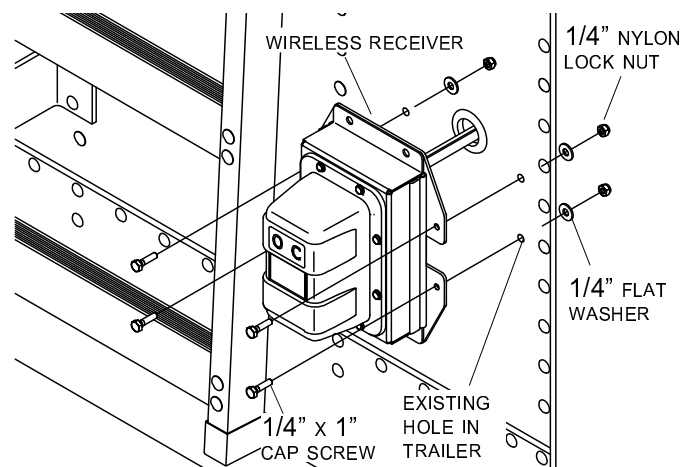


NOTE: If there is a hole in trailer wall for wires from remote box to pass through, this hole may be used for wireless receiver wires. If hole is less than 2" diameter, enlarge hole to fit wires.

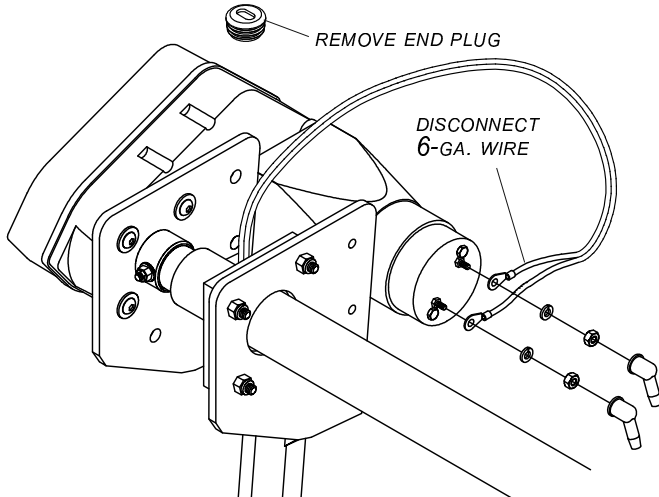
STEP 5: Install grommet into 2" hole. Insert wire from wireless receiver through grommet.



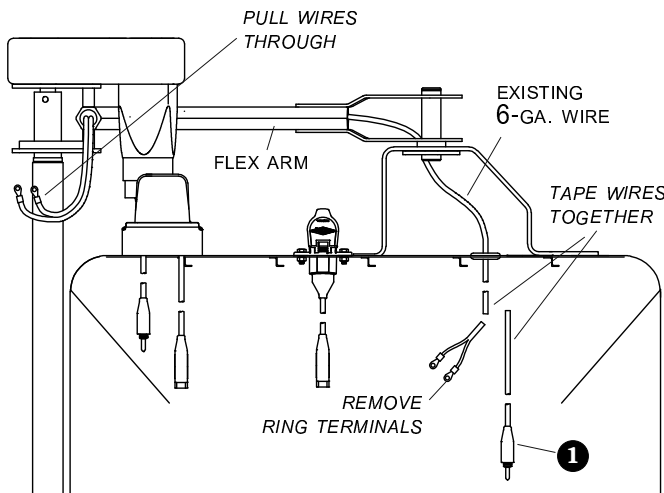
STEP 6: Align holes in adapter bracket with existing holes in trailer. Fasten wireless receiver assembly to front of trailer with 1/4" x 1" cap screws, flat washers and nylon lock nuts.



STEP 1: Identify existing 6-ga. wire running from electric motor, through front flex arm. Disconnect wire from motor and remove end plug from upper flex arm.



STEP 2: On inside of trailer wall, remove ring terminals from end of existing 6-ga. wire. Tape end of new 6-ga. motor wire ① to end of existing 6-ga. motor wire.



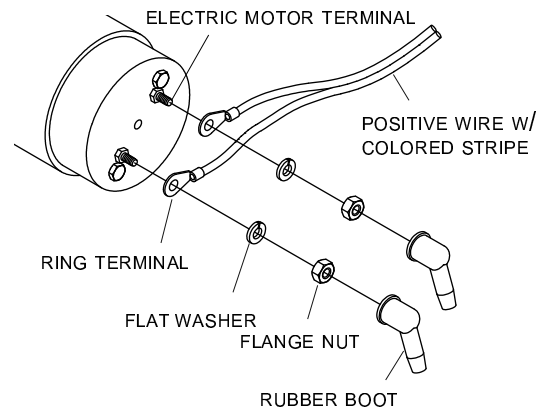
STEP 3: From outside of trailer, use existing motor wire to pull new 6-ga. motor wire ① through grommet in trailer wall and flex arm assembly. Pull wire through end plug and replace end plug on upper flex arm.

⚠ CAUTION

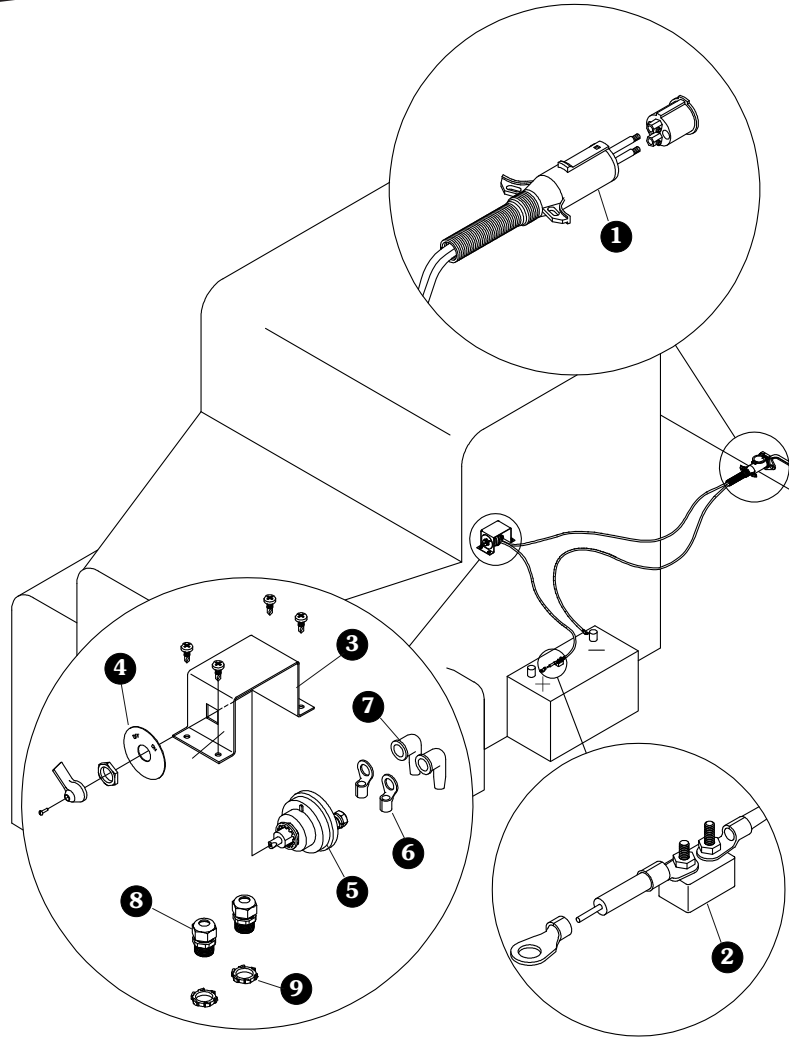
To prevent possible damage to wire insulation, use care when pulling wire through flex arm assembly. Flex arm and motor may be unfastened and arm may be straightened while pulling wire through arm, if needed.

STEP 4: Run wire through rubber boots. Crimp ring terminals to wire ends. On back of motor, place positive wire on positive post and negative wire on negative post. Secure with lock washers and hex nuts (supplied with motor). Coat with dielectric grease and install rubber boots over ring terminals.

NOTE: Cut wires to length and strip only enough wire insulation to install ring terminals. Insert bare wire into ring terminals and crimp securely.



NOTE: Use dielectric grease (p/n 1704378) to prevent corrosion on terminals.

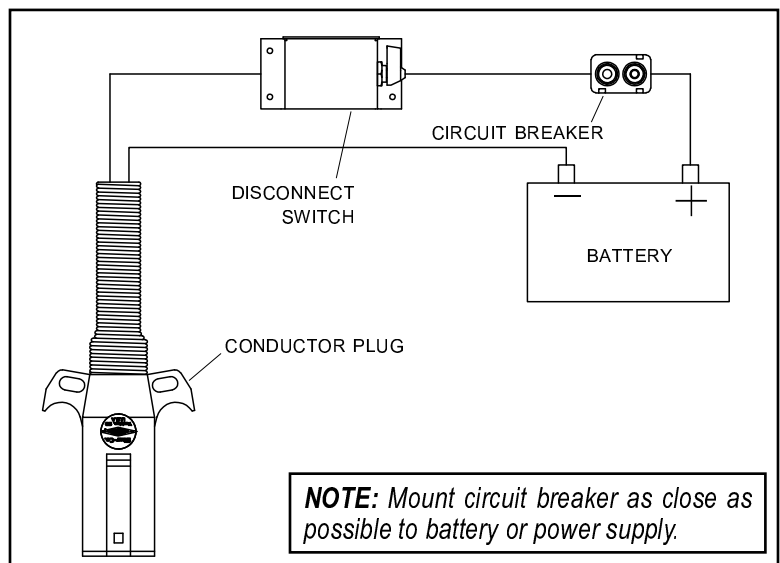
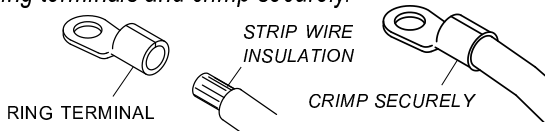


Item Part # Description

1. 1115385 Heavy-Duty Dual-Conductor Plug
2. 1704354 40-Amp Modified-Reset Circuit Breaker
3. 1118323 Disconnect Switch Mounting Bracket
4. 1704284 Face Plate
5. 1704283 Battery Disconnect Rotary Switch
6. 1703244 Ring Terminal - 6 Ga. x 3/8" Stud
7. 1704330 Rubber Insulating Boot
8. 1700398 Self-Drilling Screw - 1/4" x 3/4"
9. 1704152 Dome Nut - 1/2"
10. 1704187 Lock Nut - 1/2"

NOTE: Add grommets to all holes drilled in trailer for routing wires.

NOTE: Cut wires to length and strip only enough wire insulation to install ring terminals. Insert bare wire into ring terminals and crimp securely.

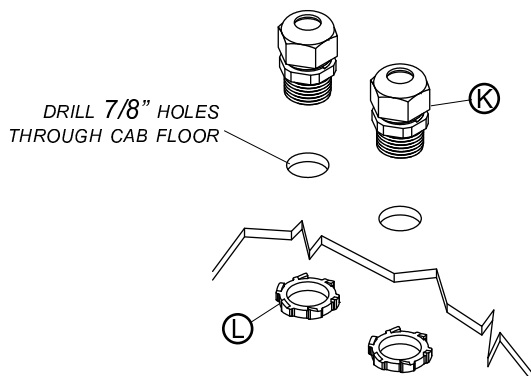


NOTE: Mount circuit breaker as close as possible to battery or power supply.

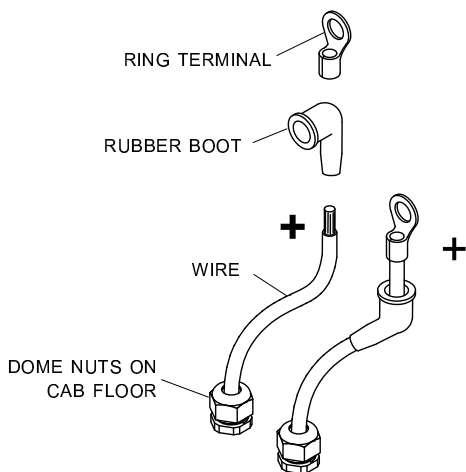
NOTE: Master disconnect switch must be installed when operating ProTrap® units or a 4500 Series/ProTrap® combination.

STEP 1: Disconnect and remove solenoid and rocker switch from cab.

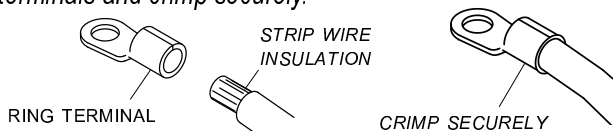
STEP 2: Drill two 7/8" holes in cab floor to route wire into cab. Install dome nut strain reliefs into holes.



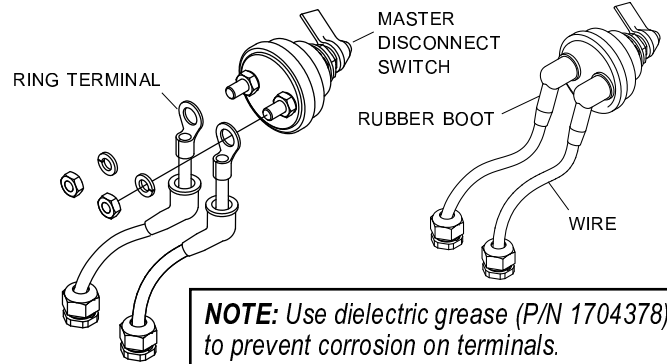
STEP 3: Run positive 6-ga. wire from battery through dome nuts on cab floor. Run wire ends through rubber boots and crimp 3/8" ring terminals to ends of wire.



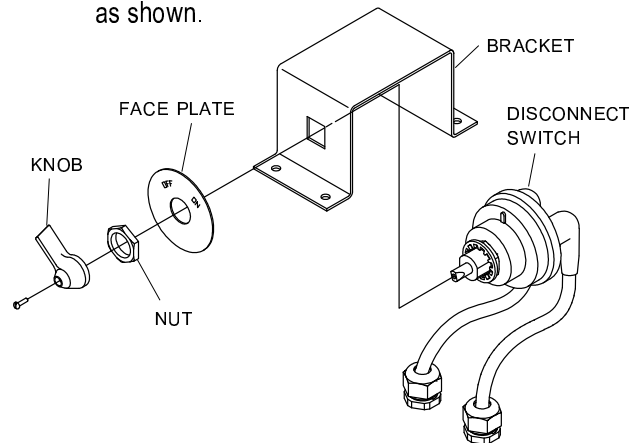
NOTE: Cut wires to length and strip only enough wire insulation to install ring terminals. Insert bare wire into ring terminals and crimp securely.



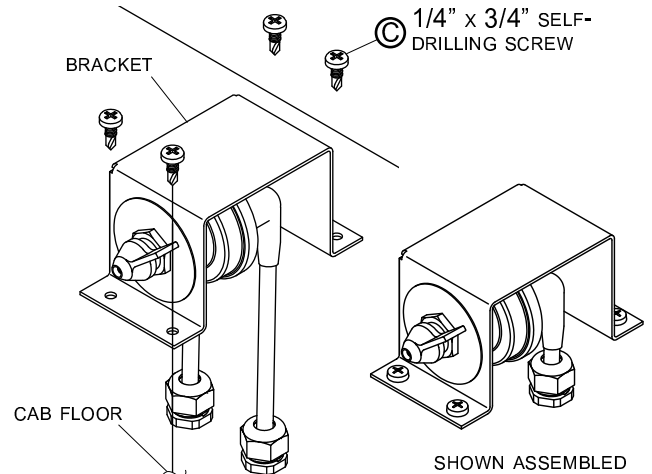
STEP 4: Connect wires to disconnect switch. Coat with dielectric grease and install rubber boots over ring terminals.



STEP 5: Remove knob and nut from disconnect switch and assemble face plate and disconnect switch to bracket as shown.



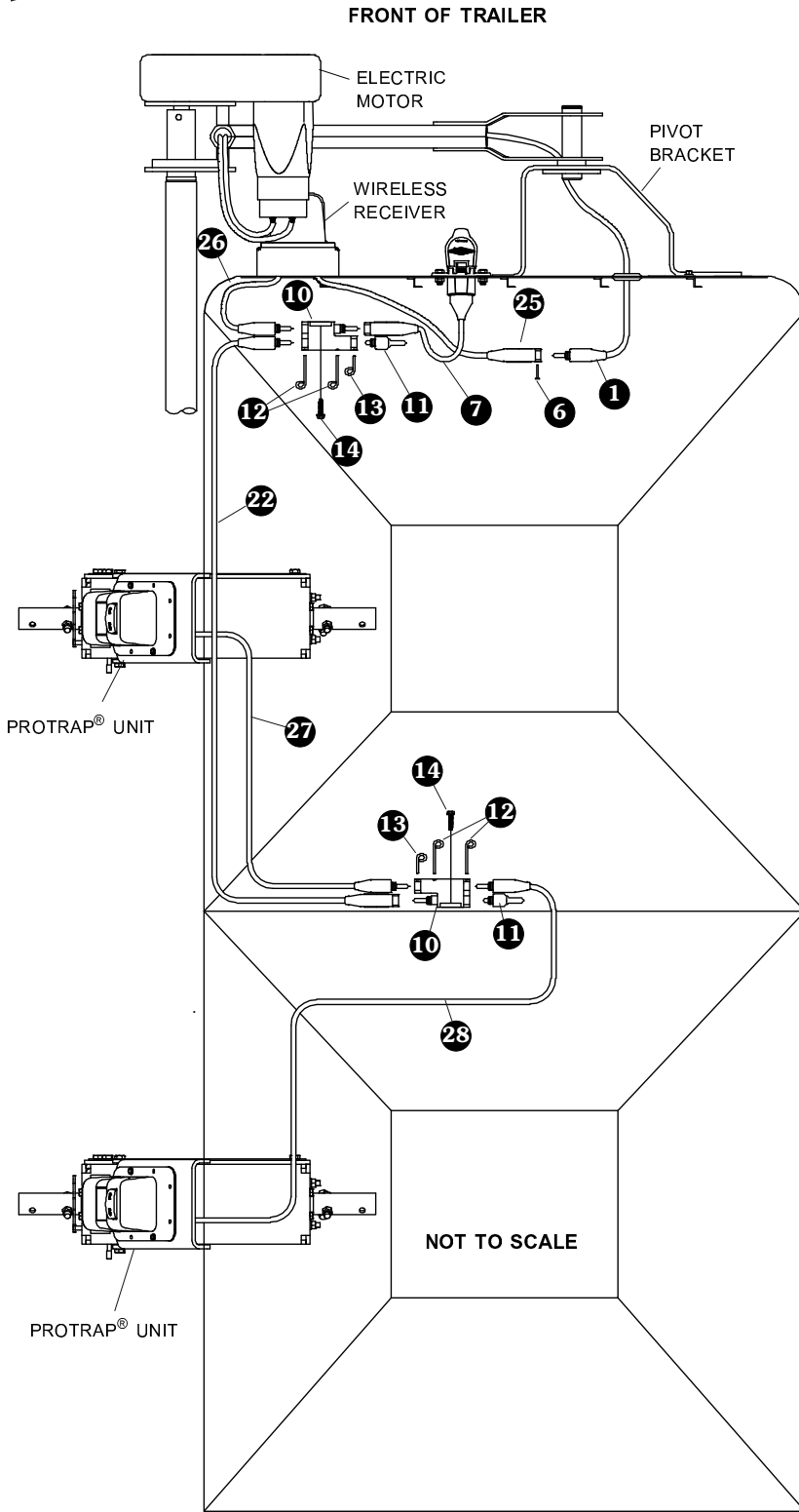
STEP 6: Fasten bracket to cab floor with 1/4" x 3/4" self-drilling screws.



NOTE: ProTrap® rocker switch will remain active until master disconnect switch is turned off.

NOTE: Coat each connection with dielectric grease (P/N 1704378) to prevent corrosion.

CAUTION
Do not fasten SMARTwire™ components to trailer through hopper walls.



FRONT OF TRAILER

- STEP 1:** Route SMARTwire™ 25 from wireless receiver to adapter plug 1. Connect wire to adapter plug and secure with lock pin 6.
- STEP 2:** To determine location of front junction block, route SMARTwires 7 and 26 to a location where wires will reach. Mount junction block 10 at this location. Using holes in junction block as a guide, mark and drill two 7/32" holes.
- STEP 3:** Fasten junction block 10 to trailer with screws 14.
- STEP 4:** Connect SMARTwires 7, 22 and 26 to junction block 10. Insert plug 11 into remaining socket. Secure connections with lock pins 12 and 13.
- STEP 5:** Route SMARTwire™ 22 from front to apex of trailer.

APEX OF TRAILER

- STEP 6:** To determine location of second junction block, route SMARTwires 22, 27 and 28 to a location near apex of trailer where wires will reach. Mount junction block 10 at this location. Using holes in junction block as a guide, mark and drill two 7/32" holes.
- STEP 7:** Fasten junction block 10 to trailer with screws 14.
- STEP 8:** Connect SMARTwires 22, 27 and 28 to junction block 10 at apex of trailer. Insert plug 11 into remaining socket. Secure all connections with lock pins 12 and 13.
- STEP 9:** Secure all wires to trailer with cable clips 20 and screws 14. If needed, use cable ties 21.