

**TARP SYSTEMS & ACCESSORIES** 

READ BEFORE INSTALLING

P/N 1121005 Rev. G



# Wiring 4500 Series & Three ProTraps INSTALLATION INSTRUCTIONS

2309 SHUR-LOK STREET • YANKTON, SD 57078-0713 PHONE: 1-800-SHUR-LOK *(1-800-474-8756)* • FAX: 1-605-665-0501 **WWW.SHURCO.com** 

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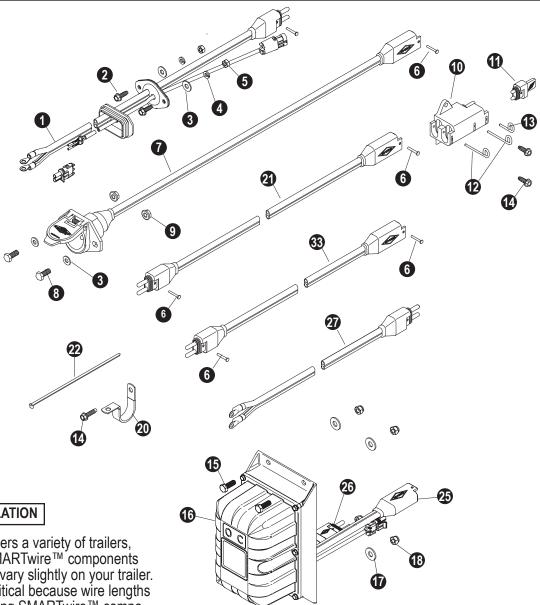
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#### SHUR-CO<sup>®</sup> UK LIMITED

Unit 41, Rochester Airport Estate Laker Road Rochester, Kent ME1 3QX



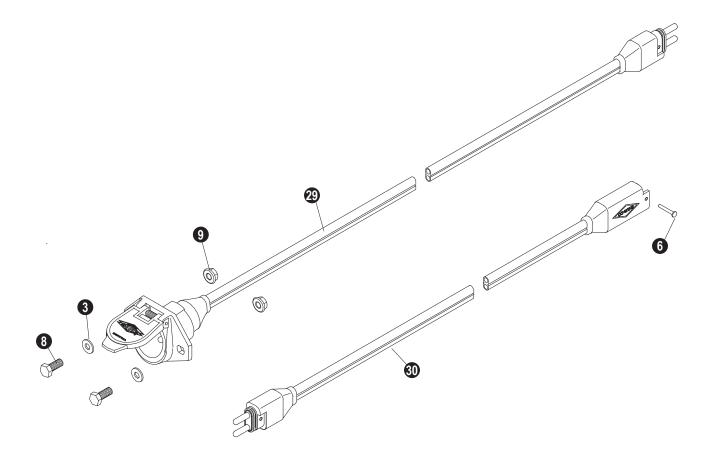
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## SMARTWIRE™ INSTALLATION

This instruction sheet covers a variety of trailers, therefore locations for 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 locations shown will not only ensure quick and easy installation but also facilitate SMARTwire™ upgrades.

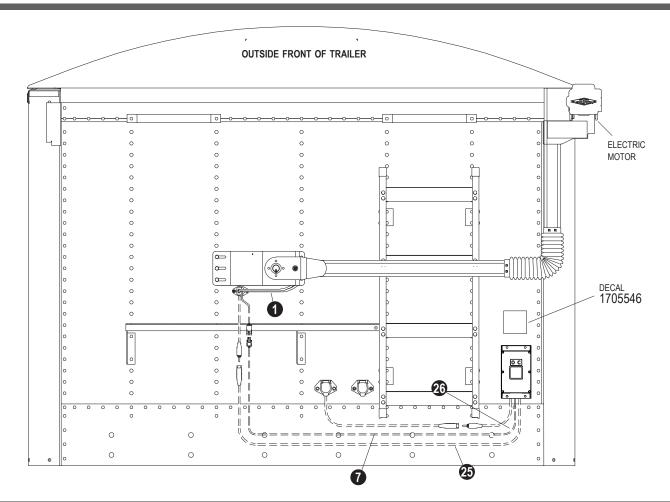
ltem	Part #	Description
1.		SMARŤwire™ - 6 Ga Plug - 9' 9"
		w/Encoder Wire
2.	1700403	Self-Tapping Screw - 1/4" x 3/4"
3.	1700427	Flat Washer - 1/4"
4.	1700436	Lock Washer - 1/4"
5.	1700408	Hex Nut - 1/4"
6.	1704751	Harness Lock Pin - 1/4" x 7/8"
7.	1120670	SMARTwire <sup>™</sup> Dual-Conductor Socket
8.	1701045	Cap Screw - 5/16" x 3/4"
9.	1704946	Flanged Top Lock Nut - 5/16"
10.	1704695	Harness Junction Block - Black Rubber
11.	1704717	Wire Harness Rubber Plug - Black
12.	1704696	Harness Lock Pin - Long

Item	Part #	Description
13.	1704711	Harness Lock Pin - Short
14.	1704338	Self-Tapping Screw - 1/4" x 1"
15.	1702926	Cap Screw - 5/16" x 7/8"
16.		ShurLink <sup>™</sup> Receiver
17.	1700428	Flat Washer - 5/16"
18.	1700419	Lock Nut - 5/16"
20.	1702108	Wire Clip - 3/4"
21.	1704704	SMARTwire™ - 6 Ga. x 25' - Plug/Socket
22.	1703231	Cable Tie - 8"
25.	1120817	SMARTwire™ - 6 Ga. x 6' 3" - Socket
26.	1704705	SMARTwire™ - 6 Ga. x - 2' 4" Plug
27.	1704716	SMARTwire <sup>™</sup> - 6 Ga. x 10' - Plug/Ring Terminals
33.	1704827	SMARTwire™ - 6 Ga. x 16' - Plug/Socket



# LEAD TRAILER WIRING PARTS FOR SUPPLYING POWER TO REAR/PUP TRAILERS

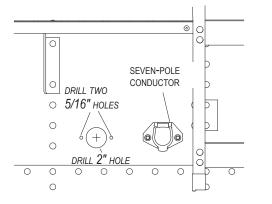
Item	Part #	Description
3.	1700427	Flat Washer - 1/4"
6.	1704751	Harness Lock Pin - 1/4" x 7/8"
8.	1701045	Cap Screw - 5/16" x 3/4"
9.	1704946	Flanged Top Lock Nut - 5/16"
29.	1122541	SMARTwire <sup>™</sup> - 4 Ga. x 22' - Dual-Conductor Socket
	1122542	SMARTwire <sup>™</sup> - 4 Ga. x 32' - Dual-Conductor Socket
	1122543	SMARTwire <sup>™</sup> - 4 Ga. x 40' - Dual-Conductor Socket
30.	1704888	SMARTwire™ - 4 Ga. x 25' - Plug/Socket



**NOTE:** Wire lengths are predetermined. Before installing SMARTwire<sup>™</sup> components, review and confirm wire routing so wires reach components with ample room for connection.

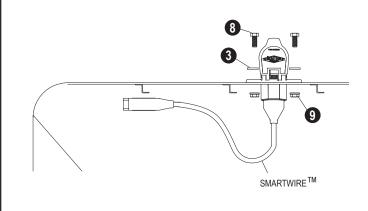
## DUAL-POLE CONDUCTOR SOCKET INSTALLATION

**STEP 1:** Locate dual-pole conductor socket near sevenpole conductor socket as shown. Determine location and drill 2 inch hole through trailer skin.



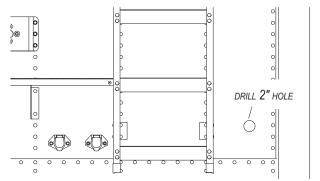
**STEP 2:** Align socket over 2 inch hole. Using holes in flanges on socket as guide, mark and drill two 5/16 inch holes.

**STEP 3:** Fasten conductor socket to trailer with screws (8), flat washers (3) and nuts (9).

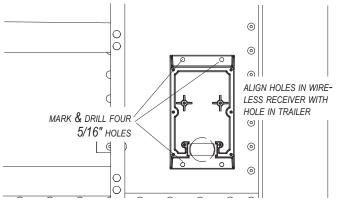


#### SHUR-CO® WIRELESS RECEIVER INSTALLATION

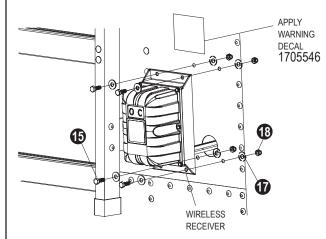
**STEP 1:** In order to clear travel area of front arm, locate Shur-Co<sup>®</sup> wireless receiver as low as possible on front of trailer. Determine location and drill 2 inch hole through trailer skin.



**STEP 2:** Align holes in wireless receiver over 2 inch hole in trailer as shown below. Using holes on flanges on receiver as guide, mark and drill four 5/16 inch holes as shown.

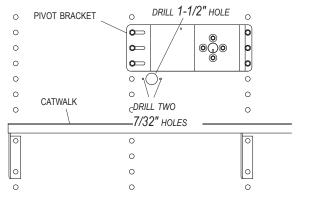


**STEP 3:** Align holes on wireless receiver with holes on trailer. Fasten receiver to trailer with screws (**15**), lock washers (**17**) and nuts (**18**). Apply warning decal P/N 1705546 above receiver in locations shown.



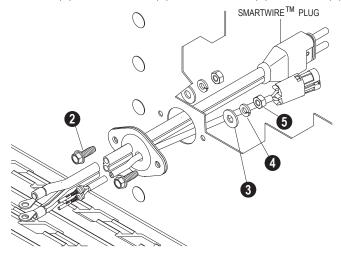
## ADAPTER PLUG INSTALLATION

**STEP 1:** Measure 11 inches horizontally from center line of trailer and 1 inch down from lower edge of pivot bracket. Mark and drill 1-1/2 inch hole through trailer skin.



**STEP 2:** Align adapter plug with 1-1/2 inch hole. Using plug as guide, mark and drill two 7/32 inch holes as shown.

**STEP 3:** Fasten adapter plug to front of trailer with screws (2), flat washers (3) lock washers (4) and nuts (5).



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

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Do not fasten SMARTwire<sup>™</sup> components to trailer through hopper walls.

## FRONT OF TRAILER

**STEP 1:** Route SMARTwire  $\mathbb{M}$  (25) from wireless receiver to adapter plug (1). Connect encoder wire ends. 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 location where wires reach. Mount junction block (10a) at this location. Using holes in junction block as guide, mark and drill two 7/32 inch holes.

**STEP 3:** Fasten junction block (**10a**) to trailer with screws (**14**).

**STEP 4:** Connect SMARTwires (7), (21) and (26) to junction block (10a). Insert plug (11) into remaining socket. Secure connections with lock pins (12) and (13).

**STEP 5:** Route SMARTwire  $\mathbb{M}$  (21) from front to apex of trailer.

## APEX OF TRAILER

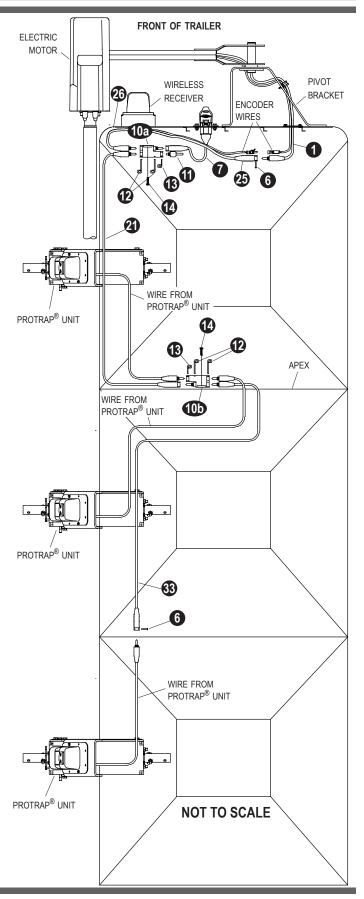
**STEP 6:** To determine location for junction block (**10b**), route SMARTwires (**21**) and wires from ProTraps<sup>®</sup> to location on apex of trailer where wires reach. Position junction block (**10b**) at this location. Using holes in junction block as guide, mark and drill two 7/32 inch holes.

**STEP 7:** Fasten junction block (**10b**) to trailer with screws (**14**).

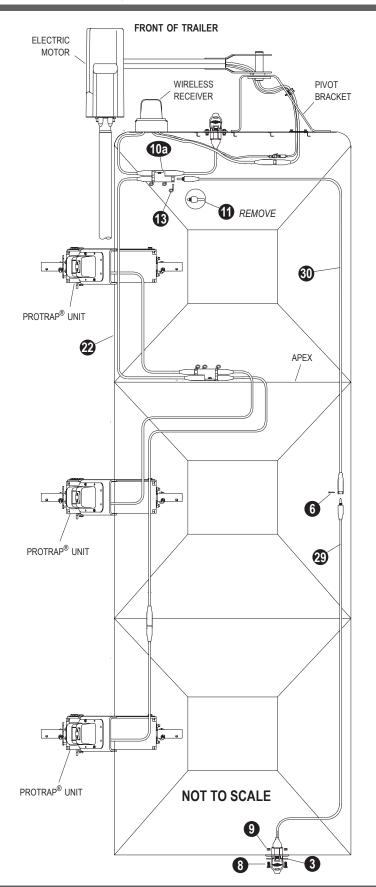
**STEP 8:** Connect SMARTwires (21), (33) and wires from ProTraps to junction block (10b) at apex of trailer. Secure all connections with lock pins (12) and (13).

**STEP 9:** Route SMARTwire<sup>™</sup> (**33**) toward rear of trailer and connect to SMARTwire<sup>™</sup> from rear ProTrap<sup>®</sup>. Secure with lock pin (**6**).

**STEP 10:** Secure all wires to trailer with cable clips (20) and screws (14). If needed, use cable ties (21).



# Wiring Schematic - 4500 Series & Three ProTraps w/Lead Wiring to Rear/pup Trailer



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



Do not fasten SMARTwire<sup>™</sup> components to trailer through hopper walls.

#### FRONT OF TRAILER

**STEP 1:** Remove lock pin (**13**) and plug (**11**) from junction block (**10a**). Connect SMART-wire<sup>™</sup> (**30**) to junction block (**10a**) and secure with lock pin (**13**).

**STEP 2:** Route SMARTwire  $\mathbb{M}$  (30) towards rear of trailer.

#### **REAR OF TRAILER**

**STEP 3:** To determine location for conductor socket (29) on rear of trailer, route SMART-wire™ (30) and SMARTwire™ from conductor socket (29) to location near middle of trailer, where wires will reach. Mount conductor socket at this location.

**STEP 4:** Follow STEPS 1 to 3 on page 3 to install conductor socket (**29**).

#### MIDDLE OF TRAILER

**STEP 5:** Connect SMARTwires (**30**) and (**29**). Secure with lock pin (**6**).

**STEP 6:** Secure all wires to trailer with cable clips (**20**) and screws (**14**). If needed, use cable ties (**21**).

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