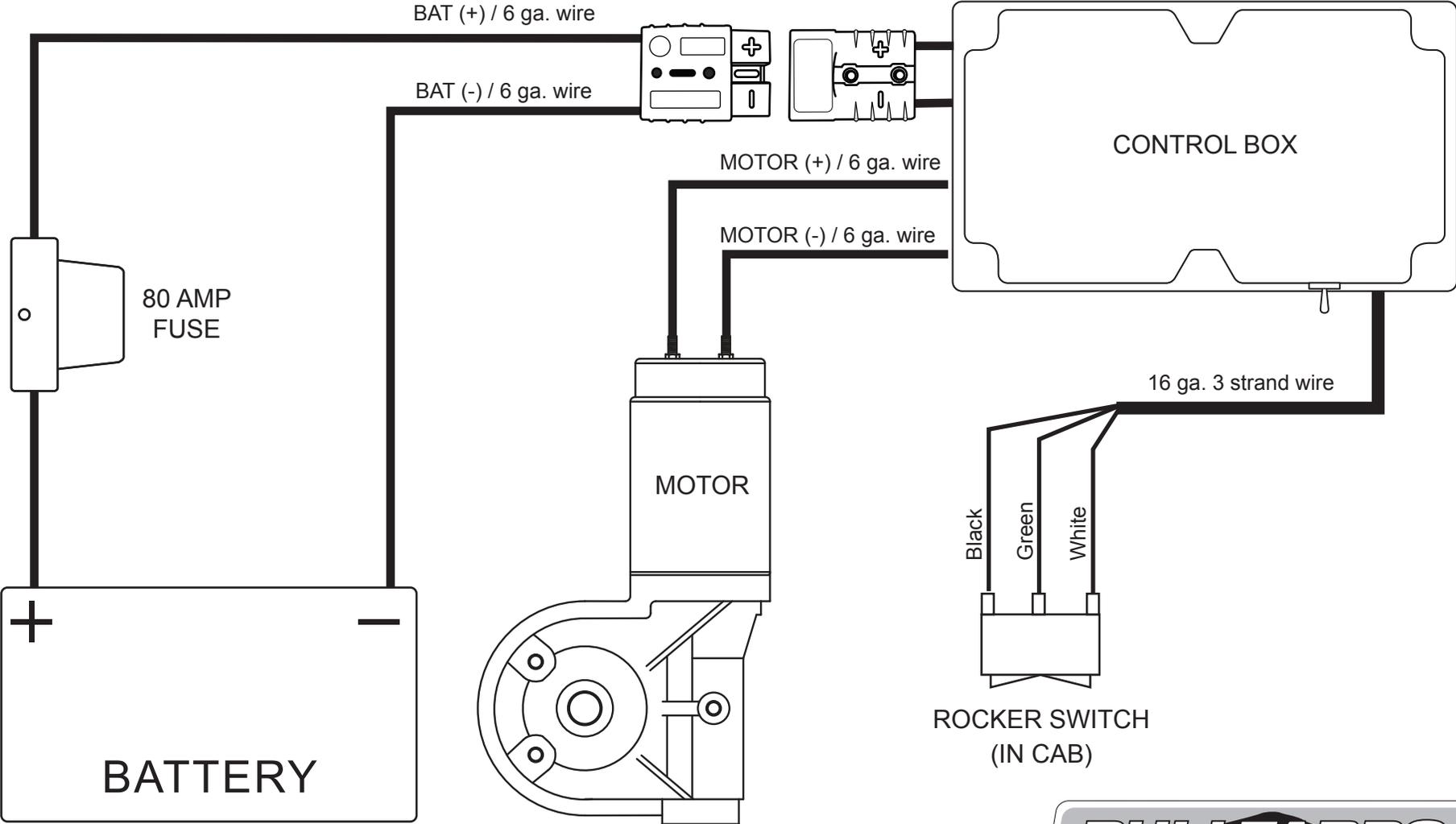


Smart Switch with Cab / External Switch - 24 volt (501-9933)

Wiring Instructions

BAB 6/9/09



Smart  Switch™

607-0090



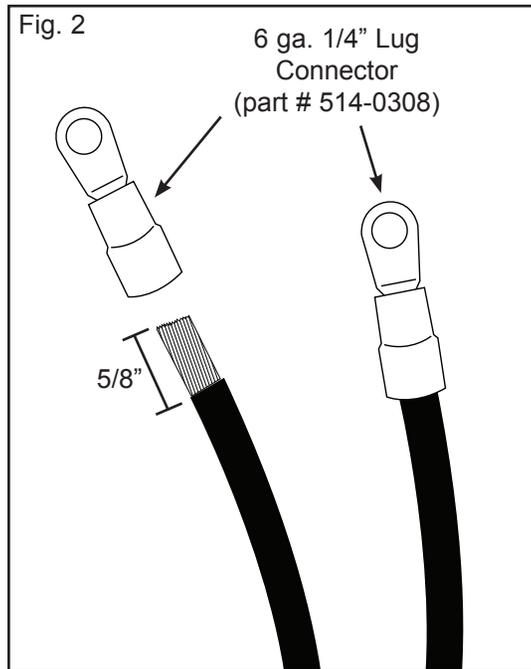
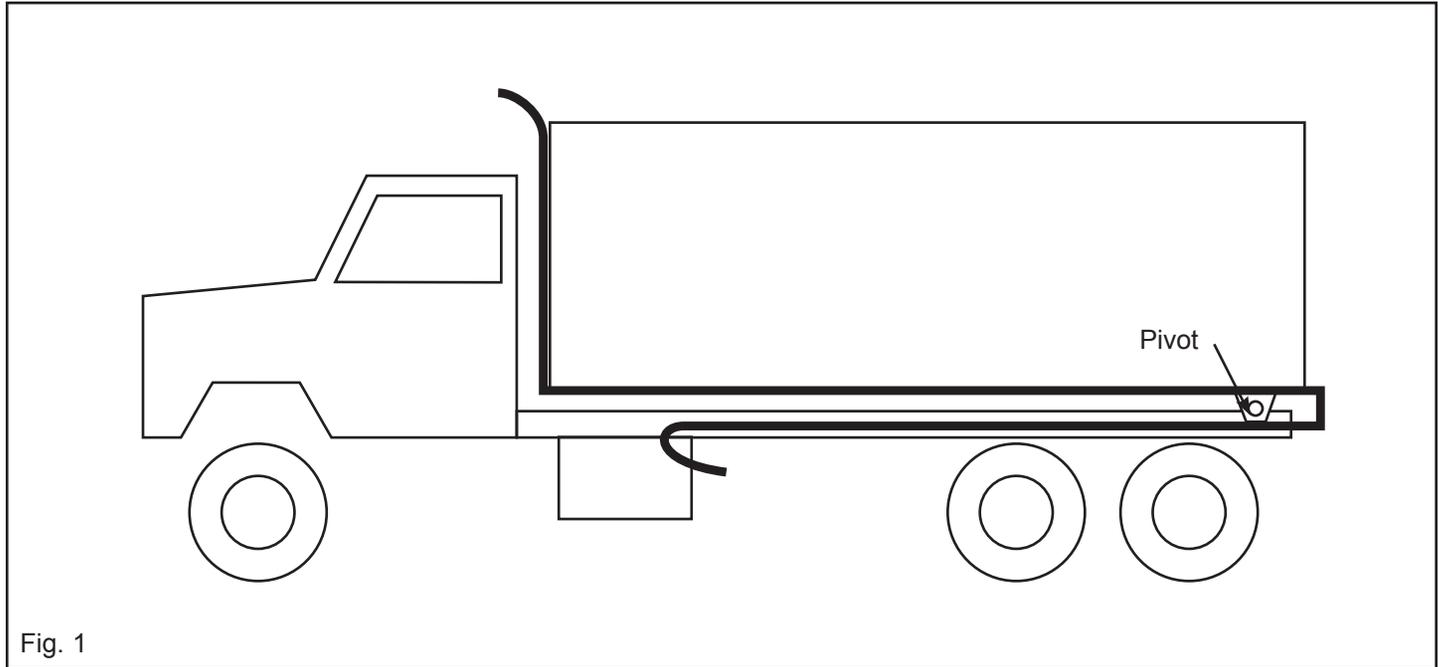
1404 N. Marshall Ave, El Cajon, CA 92020
For Technical Assistance
Call Toll Free: (800) 368-3075

Step. 1

Run the 6 ga. wire to both locations (motor & battery box) and attach to truck body as shown in Fig. 1.

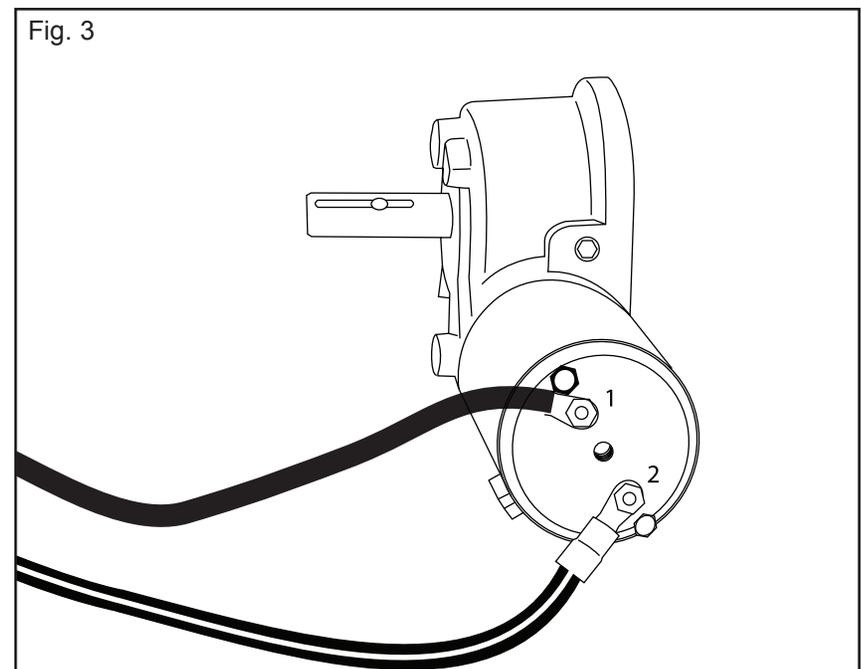
Note: The wire must go beyond the pivot point.

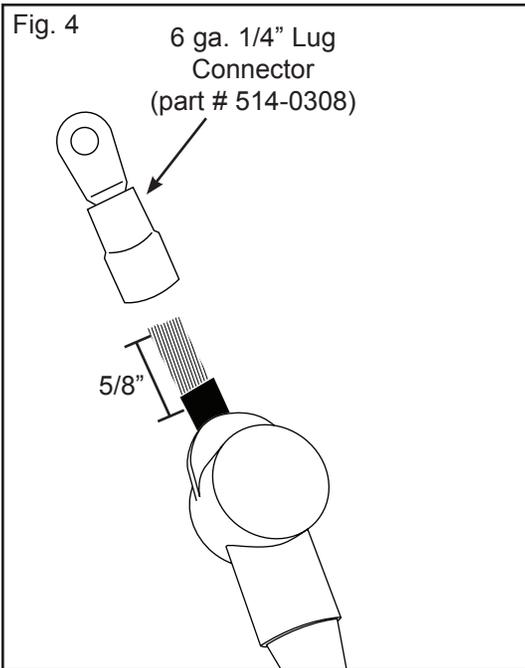
Caution: Make sure wire does not get pinched at the pivot.



Step 2. Attaching The Connectors (Motor)

- A. Split the molded 6 ga. wire approximately 4" and strip the ends about 5/8" down.
- B. Attach connectors (part # 514-0308) and crimp (Fig. 2).
- C. Attach black wire to Terminal # 1 on motor (Fig. 3).
- D. Attach red striped wire to Terminal # 2 on motor (Fig. 3).

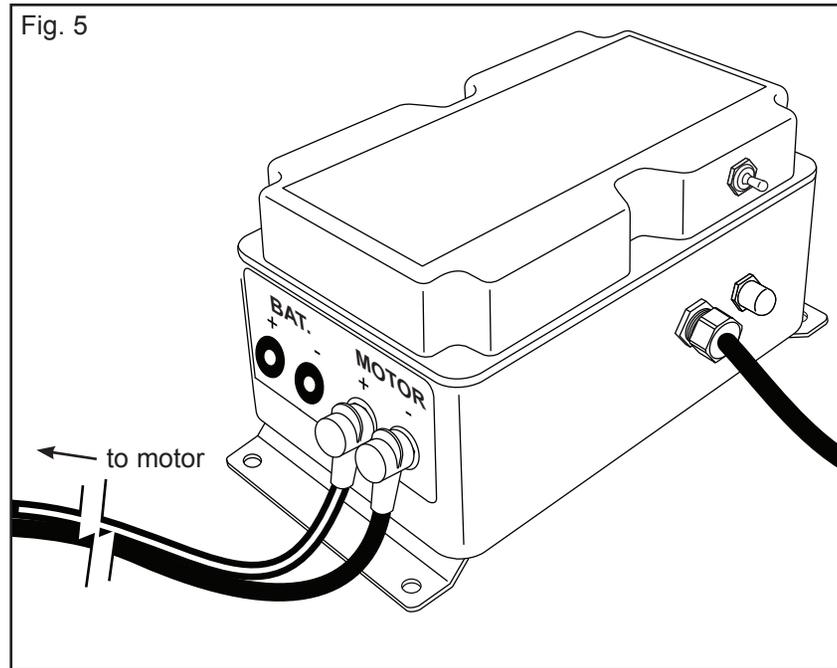




Step 3.

- A. Mount the Control Box near the battery.
- B. Split the 6 ga. wire at the Control Box about 4" back and slip on rubber boots - Red Boot (part # 514-0319) on red striped wire and Black Boot (part # 514-0317) on black wire (Fig. 4 & 5).
- C. Strip wire about 5/8" and attach connectors (part # 514-0308) (Fig. 4). Crimp Connectors.
- D. Attach Red Striped wire to Motor (+) and Black wire to Motor (-) on Control Box (Fig. 5).

Do not over tighten nuts on connections!



Step 4. Run 16 ga. Wire to Cab from solenoid

- A. Mount Switch Bracket (part # 514-9954) in a convenient place in cab using the two self drilling screws (part # 506-9904).
- B. Run the 3 Strand wire to the cab switch location.
- C. Strip wire in cab about 1/4" and attach push on connectors (part # 514-0321) and crimp (Fig. 6).
- D. Pull wire through Switch Bracket (part # 514-9954) (Fig. 6).
- E. Attach wire to Rocker Switch (part # 514-0117) (Fig. 6).
Green to Center
Black to Top
White to Bottom
- F. Snap Rocker Switch firmly in Switch Bracket.

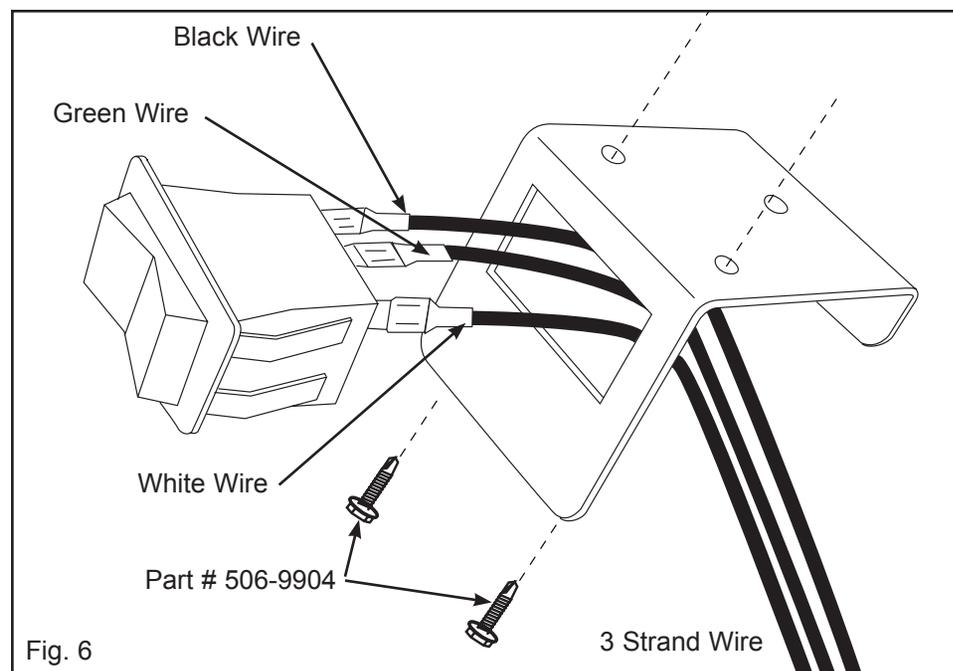
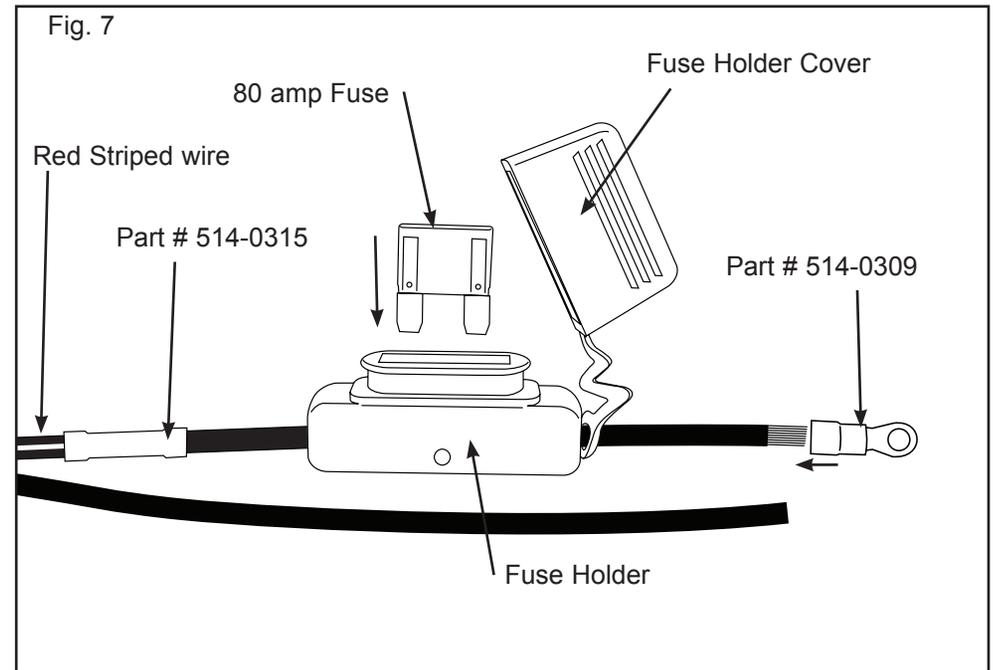


Fig. 6

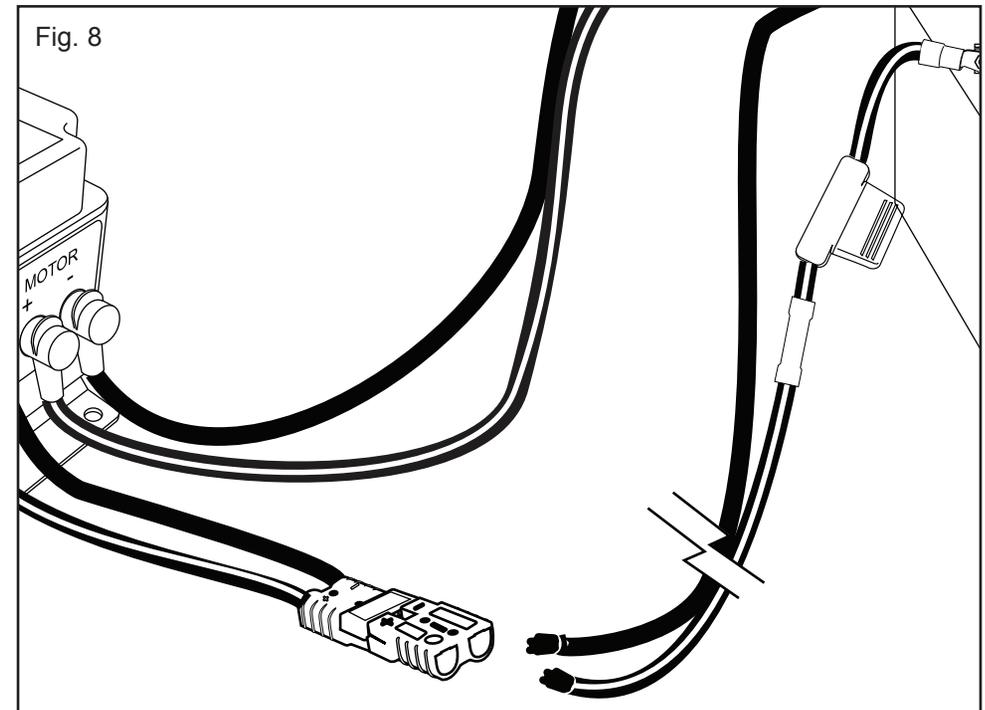
Step 5. Wiring the Fuse

- A. Cut a length of 6ga. duplex wire long enough to run from the battery to the Control Box.
- B. Split the duplex wire at the battery.
- C. Strip one end of the Red Striped wire about 5/8", and strip one end of the fuse holder wire about 5/8". Attach the 6 ga. Butt Connector (part # 514-0315) and crimp.
- D. Strip the other end of the fuse holder wire about 5/8" and attach the 6 ga. 3/8" terminal end (part # 514-0309) or the 6 ga. 1/4" terminal end (part # 514-0308), depending on the size of the terminal at the battery. Do not attach to positive (+) terminal on battery at this time.
- E. Install 80 amp fuse in fuse holder.
- F. Push the fuse holder cover over the fuse.



Step 6.

Strip the insulation off the end of the red and black wires far enough to fit the contacts for the heavy duty plugs. (Fig. 8)



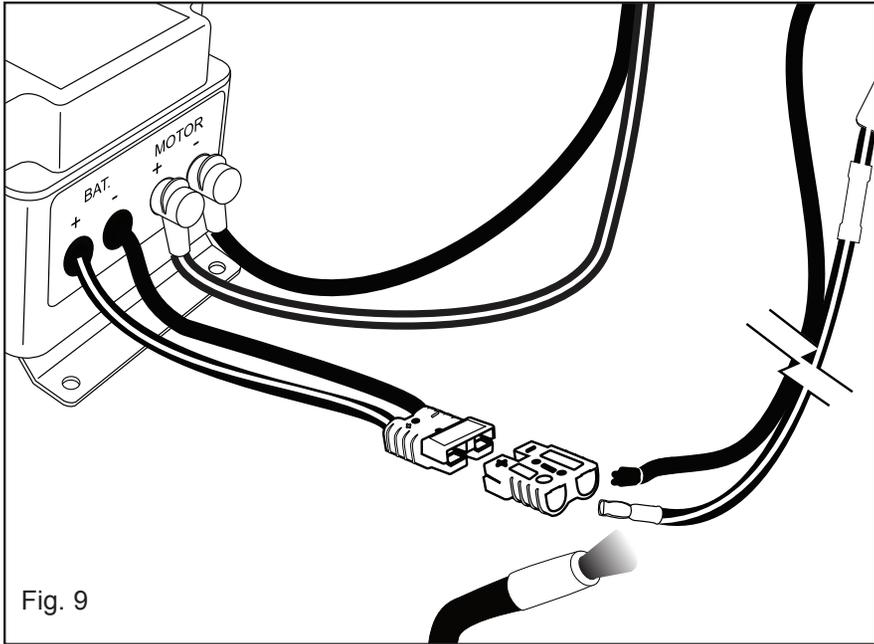


Fig. 9

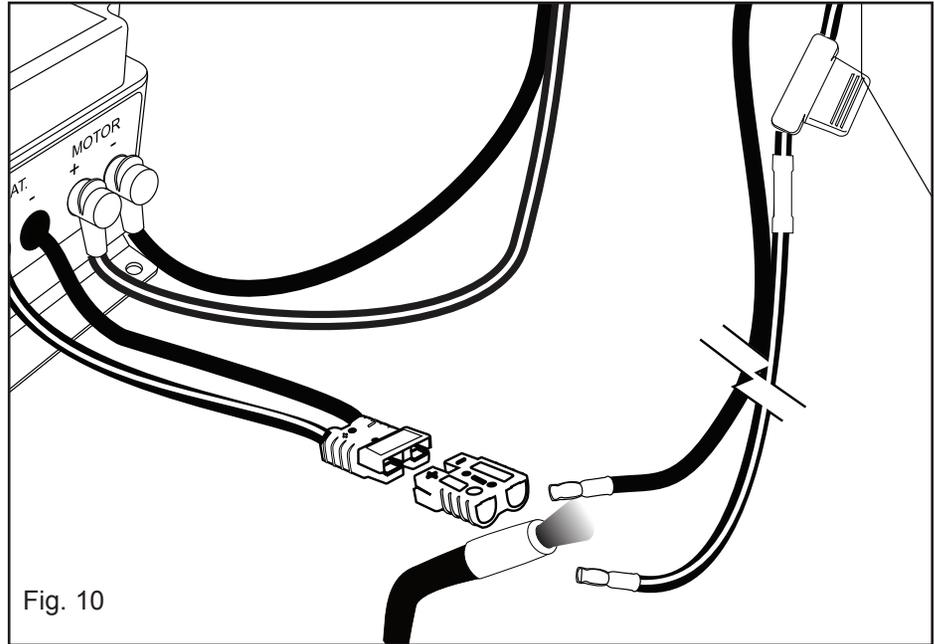


Fig. 10

Step 7.
Solder contacts to the ends of the wire. (Fig. 9-10)

Step 8.
Push contacts in the plugs from the back. Be sure that the contacts are inserted properly so that the spring tab in the plug locks the contact in place. (Fig. 11)

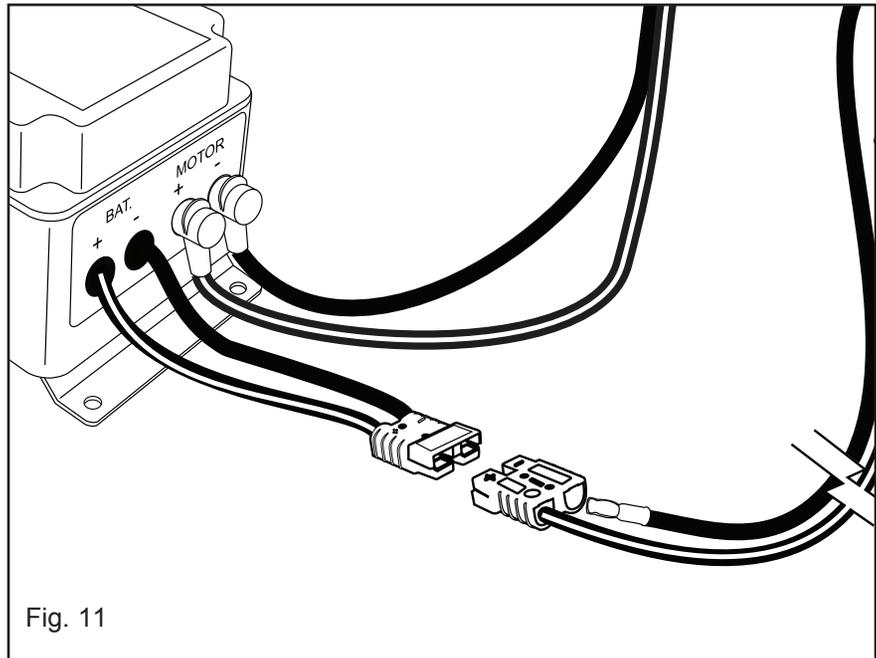
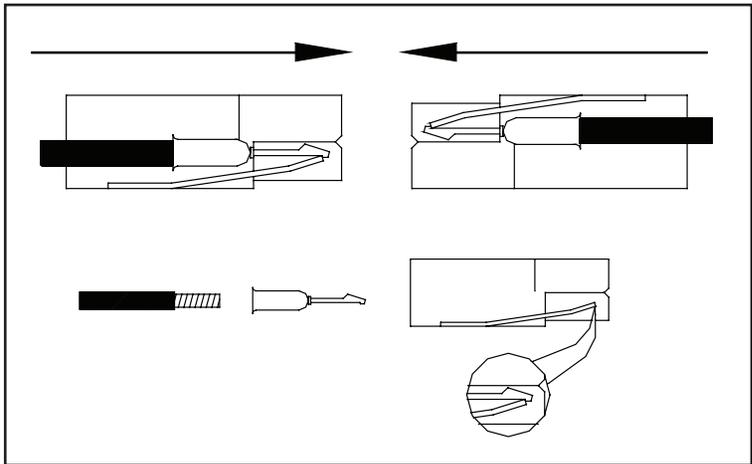
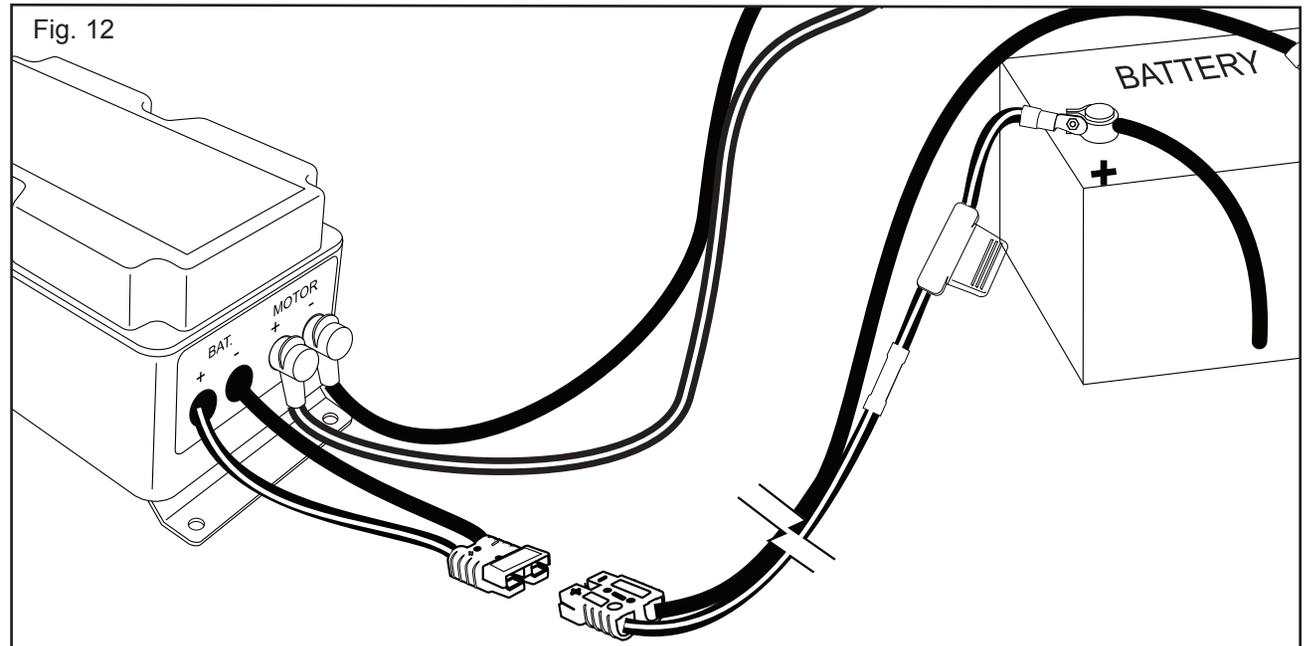


Fig. 11

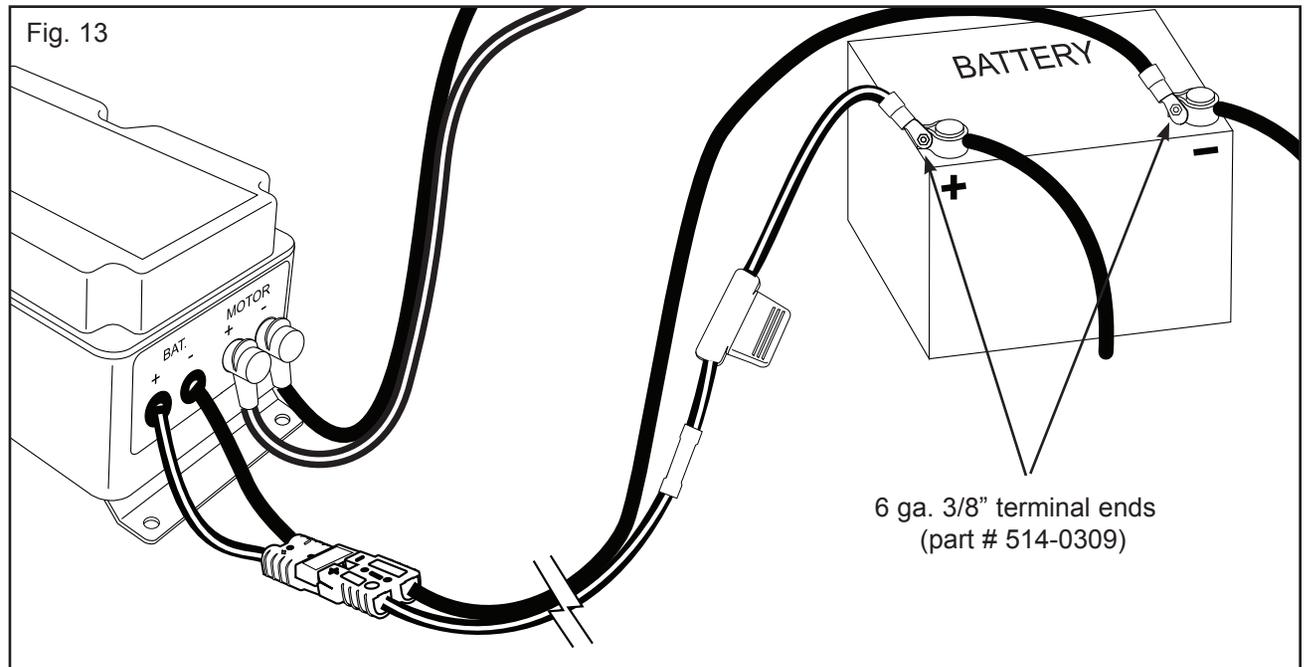
Step 9. Wiring the Battery

- A. Connect the black 6 ga. wire to the negative terminal on the battery using a 6 ga. 3/8" terminal end (part # 514-0309) or 1/4" terminal end (part # 514-0309), depending on the size of the terminal at the battery. (Fig. 12).
- B. Connect the black and red striped 6 ga. wire to BAT (+) at the battery. Connect the heavy duty plug at the Smart Switch Box. (Fig. 13).

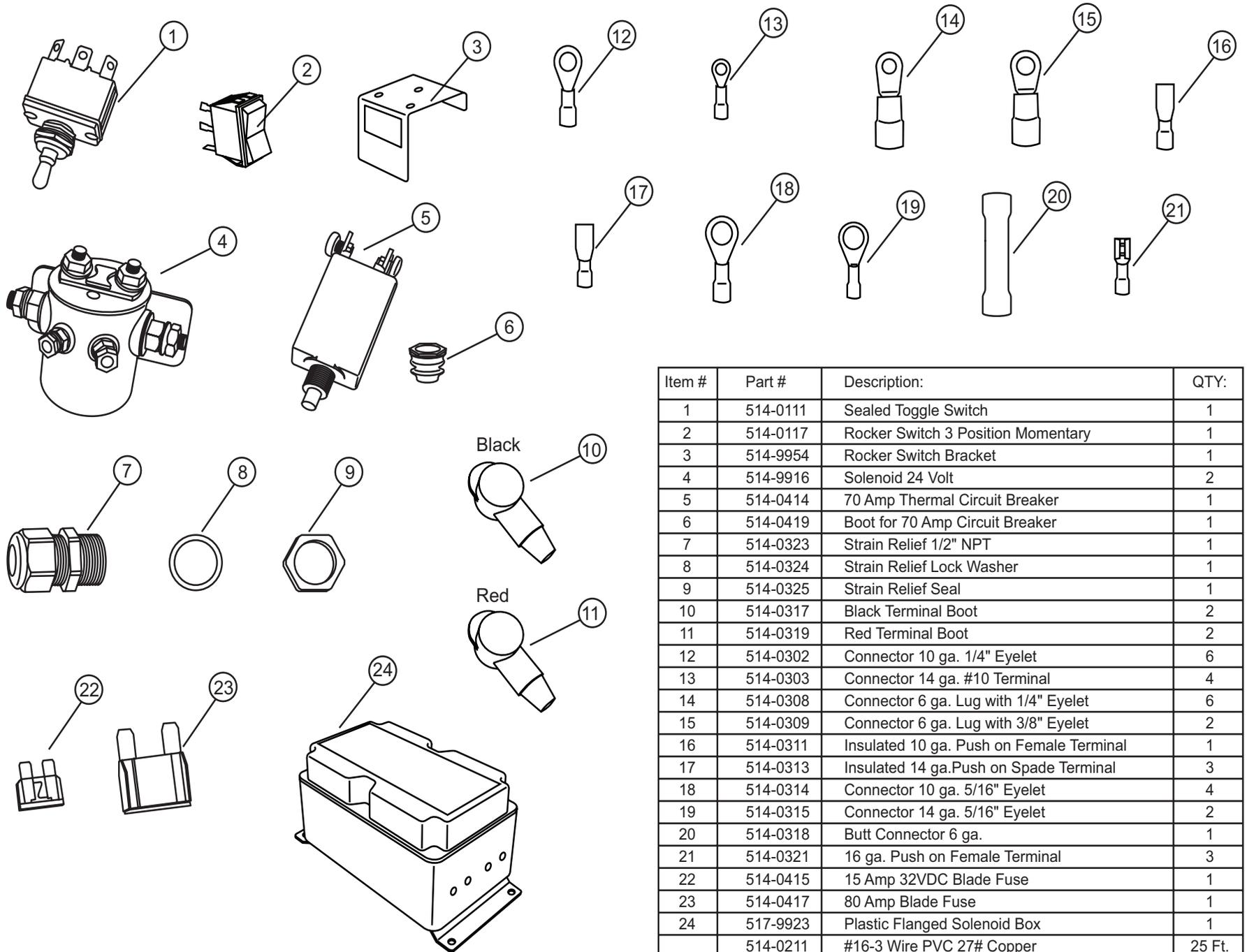


Warning: You must attach the black 6 ga. wire to the battery first, before attaching it to the box.

Note: If the system operates backwards then reverse the 6 ga. wires on the motor.



Smart Switch with Cab / External Switch - 24 volt (501-9933)



Item #	Part #	Description:	QTY:
1	514-0111	Sealed Toggle Switch	1
2	514-0117	Rocker Switch 3 Position Momentary	1
3	514-9954	Rocker Switch Bracket	1
4	514-9916	Solenoid 24 Volt	2
5	514-0414	70 Amp Thermal Circuit Breaker	1
6	514-0419	Boot for 70 Amp Circuit Breaker	1
7	514-0323	Strain Relief 1/2" NPT	1
8	514-0324	Strain Relief Lock Washer	1
9	514-0325	Strain Relief Seal	1
10	514-0317	Black Terminal Boot	2
11	514-0319	Red Terminal Boot	2
12	514-0302	Connector 10 ga. 1/4" Eyelet	6
13	514-0303	Connector 14 ga. #10 Terminal	4
14	514-0308	Connector 6 ga. Lug with 1/4" Eyelet	6
15	514-0309	Connector 6 ga. Lug with 3/8" Eyelet	2
16	514-0311	Insulated 10 ga. Push on Female Terminal	1
17	514-0313	Insulated 14 ga. Push on Spade Terminal	3
18	514-0314	Connector 10 ga. 5/16" Eyelet	4
19	514-0315	Connector 14 ga. 5/16" Eyelet	2
20	514-0318	Butt Connector 6 ga.	1
21	514-0321	16 ga. Push on Female Terminal	3
22	514-0415	15 Amp 32VDC Blade Fuse	1
23	514-0417	80 Amp Blade Fuse	1
24	517-9923	Plastic Flanged Solenoid Box	1
	514-0211	#16-3 Wire PVC 27# Copper	25 Ft.