

INSTALLATION INSTRUCTIONS

TRAFCON ARROWBOARD

for Traffix Scorpion® *Fast-Trak* Attenuator

PARTS LIST

- (1) ARROWBOARD, REMOTE & CABLES
- (1) SMART FLASH MANUAL
- (1) VERTICAL SUPPORTS WITH MOUNTING
HARDWARE
- (1) HYDRAULIC CYLINDER, VALVE & HOSES
- (1) REMOTE STORAGE CABINET w/ HARDWARE
(OPTIONAL)
- (1) SOLAR PKG., (1) SOLAR PANEL, SOLAR
REGULATOR, BATT. TRAY & BATT. BOX
(OPTIONAL)

Support Assembly and Installation

1. Install one 1/2"x3 1/2" bolt, flat washers and lock nut in *each* of the lower holes of the Scorpion® Fast-Trak hitch sign support receiver pockets and tighten and torque to 75ftlb.

(see picture 1)



(Picture 1)

2. Secure upper and lower vertical support frame with appropriate binding device *prior* to lifting vertical support.

(see Picture 2)



(picture 2)

3. Using proper lifting procedures lift & insert arrowboard vertical support frame and hydraulic assembly into the Scorpion® Fast-Trak hitch sign support receiver pockets. The arrowboard vertical sign support will rest on top of the bolts installed in step #1. Insert one 1/2"x3 1/2" bolt, flat washers and lock nut each into the top receiver pockets and arrowboard vertical support frame. Tighten and torque bolts to 75ftlb.

(see Picture 3)



(Picture 3)

- 3.** Assemble arrowboard to vertical uprights on the vertical lift frame with the vertical lift frame to the back of the arrowboard and the arrowboard face to the rear of the truck. The arrowboard is pre-drilled to match the vertical lift frame. Starting at the top of the arrowboard install 5/16"x1" bolts, washers and lock nuts thru arrowboard and vertical uprights. Note: use 5/16" flat washers on the arrowboard side and 1/4" flat washers inside the arrowboard frame. Tighten bolts to 17ftlb. *(see picture 4)*



(Picture 4)

Hydraulic Valve

Install Hydraulic valve at the base of the lift cylinder and assemble fillings and hoses as illustrated. Connect hose 1 to port L1 on the attenuator valve. Connect hose 2 to port L2 of the attenuator valve. Follow attenuator instructions for hydraulic pump valve operation.

(see Picture 5 & 6)



(picture 5)



(Picture 6)

Power Connection

For standard applications the power for the arrowboard is drawn from the tow vehicle via the attenuator lighting cable. The 7 (round) pin connector will use pin #7 (aux.), blue wire for (+red) and pin #1 (ground), white wire for (-black).

Use a TruckLite® #77-856 connector (not included) to plug into the attenuator terminal block. See Scorpion® Attenuator Manual for attenuator wiring detail.

IMPORTANT: ensure that the tow vehicle has 12-14v, 20A power supply to the above referenced connector pins.

Route the arrowboard power cable from the arrowboard down the supports and forward to the electrical junction the front of the attenuator, secure cable with wire ties.

If a direct wire power feed or other type power connector is to be used the (+) and (-) supply wires shall not be less than 12ga with connector and power circuit rated at minimum 20A.

SOLAR (OPTION)

Due to the unknown and varied configurations of the rear of the host truck the exact placement and installation of the battery tray, battery box and battery cannot be specified. After determining an appropriate location for the battery tray and install it in a workmanship manor, place plastic battery box into metal tray. Ensure webbed battery box restraining strap is under plastic battery box and not pinched. Bolt the plastic battery box to metal battery tray using two holes in the tray and box using (2) 5/16" x1"1/4" bolts, flat washers and lock nuts. Tighten bolts to 17ftlb.

Install a group 24, 12v deep cycle battery (not included) in the battery box. Place the battery box lid (with solar regulator installed) close to the battery and connect the orange wire from the solar regulator (with fuse) to the battery (+) positive terminal and the tan wire from the solar regulator to the battery (-) negative terminal. *(see Picture 7)*



(Picture 7)

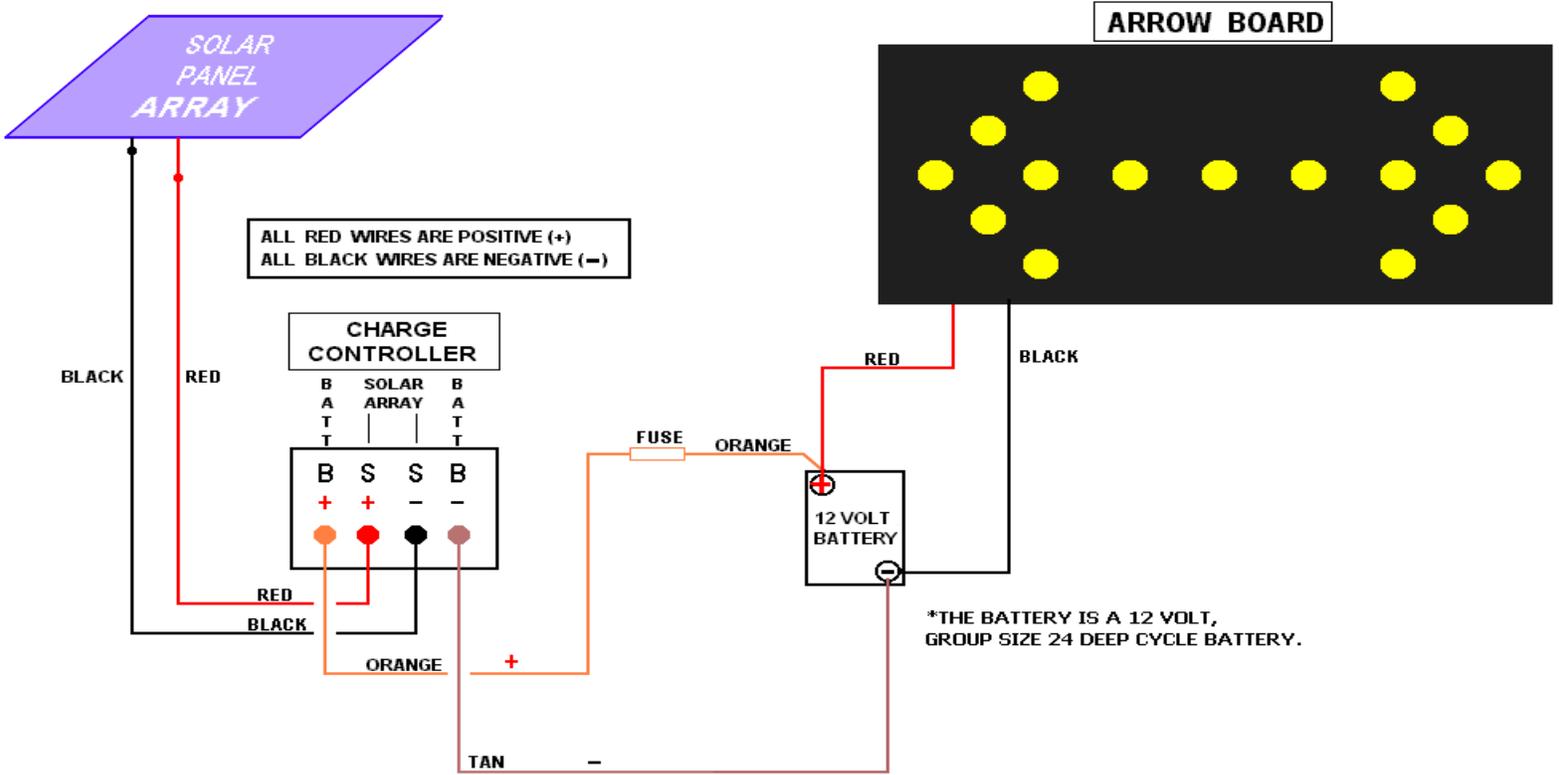
Install solar panel mount brackets, with mount ears facing toward the center of the arrow panel frame, to the studs in the top channel of the arrow panel using $\frac{3}{8}$ " lock nuts. Install the solar panel to the solar panel mount brackets using (4) $\frac{1}{4}$ "x1" bolts washers and lock nuts. Tighten bolts to 8ftlb. (see Picture 8)



(Picture 8)

Mark the solar panel power lead end with a bit of tape. Route the solar panel power lead and the sign panel power lead down the mount support to the battery box. Allow enough slack for sign panel to operate without pulling the cables and secure with heavy duty wire ties. Attach the sign panel power leads to the battery: Red (+) Black (-). Attach the solar panel power leads (marked with tape) to the solar regulator: Red- Array(+) Black- Array(-) Install battery box lid and secure with web strap.

TRAFCON ATTENUATOR POWER WIRING DIAGRAM



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