



OVER 35 YEARS OF INNOVATION, QUALITY, SAFETY.
IMPORTANT OWNER-OPERATOR INSTALLATION INSTRUCTIONS

A7742

HIDDEN POWER

1994-2002

2500, 3500 - Any Cab Long Bed

A7742 INVENTORY LIST

1- Frame Plate	1- Triangular Strap
1- Battery Tray	4- 1/4"-20 x 3/4" Hex Bolt
4- 1/4" Lock Washer	4- 1/4"-20 Hex Nut
4- 1/4" Washer USS	4- 1/4" Fender Washer
2- 3/8"-16 x 2" Hex Bolt Grade 8	2- 3/8"-16 Flanged Nylock Nut
3- 1/2"-13 x 4-1/2" Hex Bolt Grade 8	6- 1/2" Washer SAE
3- 1/2" Lock Washer	3- 1/2"-13 Hex Nut
1- 1/4" x 1-3/8" Bail Pin	2- 50A Power Connector
1- Group 24-31 Battery Box	
2- 3/8"-16 Hex Nut 1- Battery Box Strap	

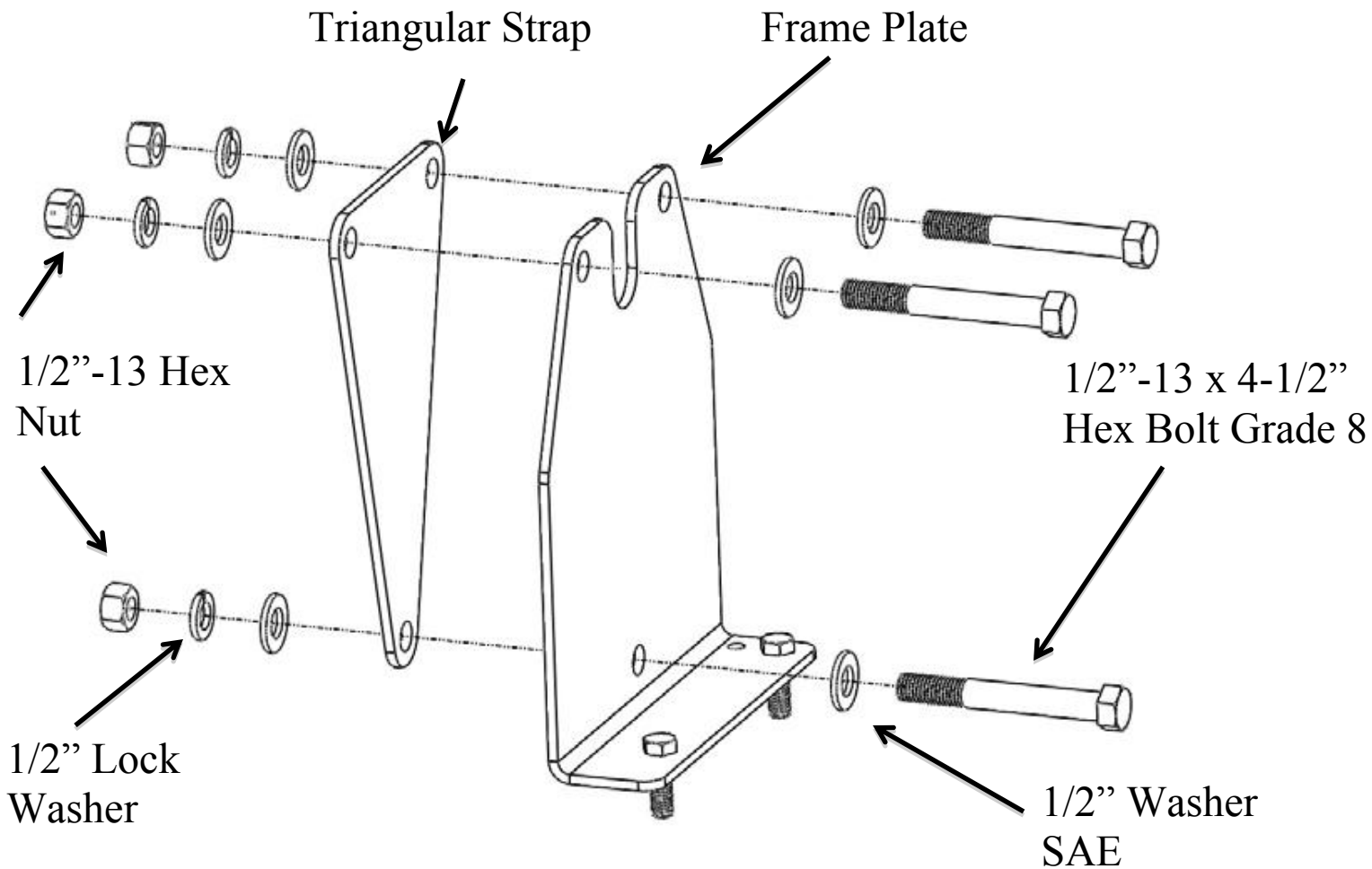
Installation:

Locate and inventory all parts to become familiar with all brackets. Read and understand all instructions prior to installation. Make sure the vehicle is in park, on a level surface and wheels are chocked before starting the installation.

Step 1-

On the passenger side of the vehicle, slide the Frame Plate on the outside of the frame, just behind the cab. With the Triangular Strap on the inside of the frame, place two 1/2"-13 x 4-1/2" Hex Bolt Grade 8 with one 1/2" Washer SAE each through the Frame Plate and Triangular Strap. Secure each bolt with an additional 1/2" Washer SAE, 1/2" Lock Washer, and 1/2"-13 Hex Nut. Leave nuts loose at this time. Secure the bottom of the Frame Plate to the Triangular Strap with a 1/2"-13 x 4" Hex Bolt Grade 5 and a 1/2" Washer SAE on either side, followed by a 1/2" Lock Washer and 1/2"-13 Hex Nut. **See Figure 1.1**

Figure 1.1



Step 2-

While holding the Triangular Strap against the frame, finger tighten all 1/2"-13 Hex Nuts. Once the nuts are finger tight and the Triangular Plate is flat against the frame, torque all 1/2"-13 Hex Nuts to 15 Ft-Lbs.(20nm)

Step 3-

Place a 3/8"-16 Flanged Nylock Nut on the bottom of each Frame Plate stud. Leave approximately 3/8" of space between the Frame Plate and lock washer.

Step 4-

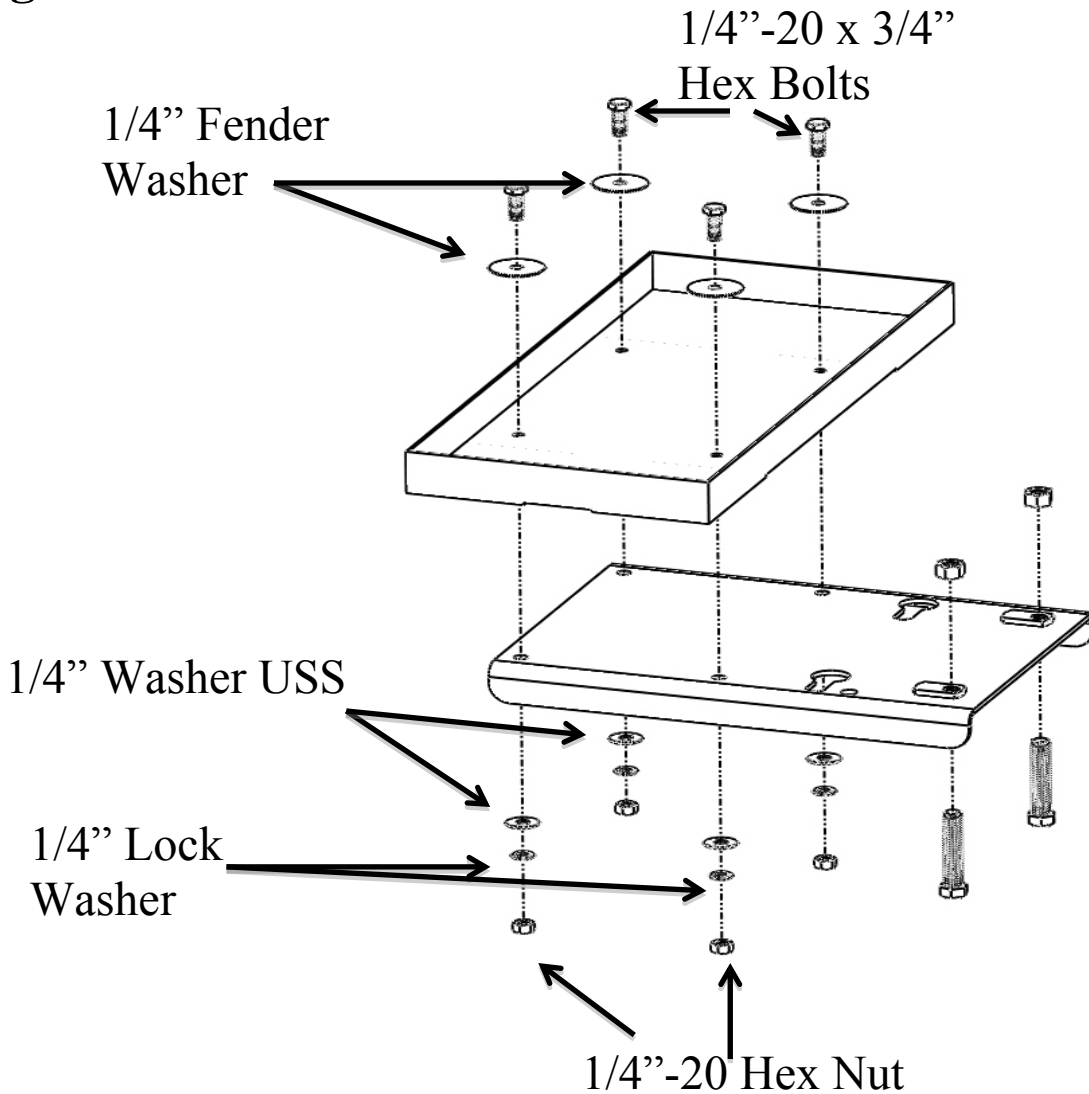
Lift the Battery Tray up to the Frame Plate, with the Frame Plate studs going through the large portion of the key holes in the Battery Tray. Slide the Battery Tray to the rear of the vehicle and lightly tighten the 3/8"-16 Flanged Nylock Nuts with a wrench. With the Battery Tray in place, lift the empty Group 24-31 Battery Box onto the Battery Tray. Place the Group 24-31 Battery Box in a position where it will not interfere with any moving parts, fuel lines, or brake lines, then mark the Battery Tray holes onto the bottom of the Group 24-31 Battery Box. If the Group 24-31 Battery Box is not centered on the Battery Tray, make sure that the empty side of the Group 24-31 Battery Box is on the side that overhangs the Battery Tray the most. In some cases, it may be necessary to cut one or both handles off of the battery box lid for the battery box to fit in place.

Step 5-

Remove the Group 24-31 Battery Box and Battery Tray. Drill four 1/4" holes in the previously marked locations. With the supplied Battery Box Strap placed between the battery box and battery tray, secure the Group 24-31 Battery Box to the Battery Tray using four 1/4"-20 x 3/4" Hex Bolts, 1/4" Fender Washer, 1/4" Washer USS, 1/4" Lock Washers and 1/4"-20 Hex Nut. Torque to 7 Ft-Lbs. See Figure 5.1. Install the battery (not included) into the Group 24-31 Battery Box, and connect the leads to the appropriate terminals. For your convenience, two 50A Power Connectors have been included to aid in the installation and future removal of the battery.

**For all questions relating to connecting your new battery to your current system, please contact your local RV Service Center.*

Figure 5.1

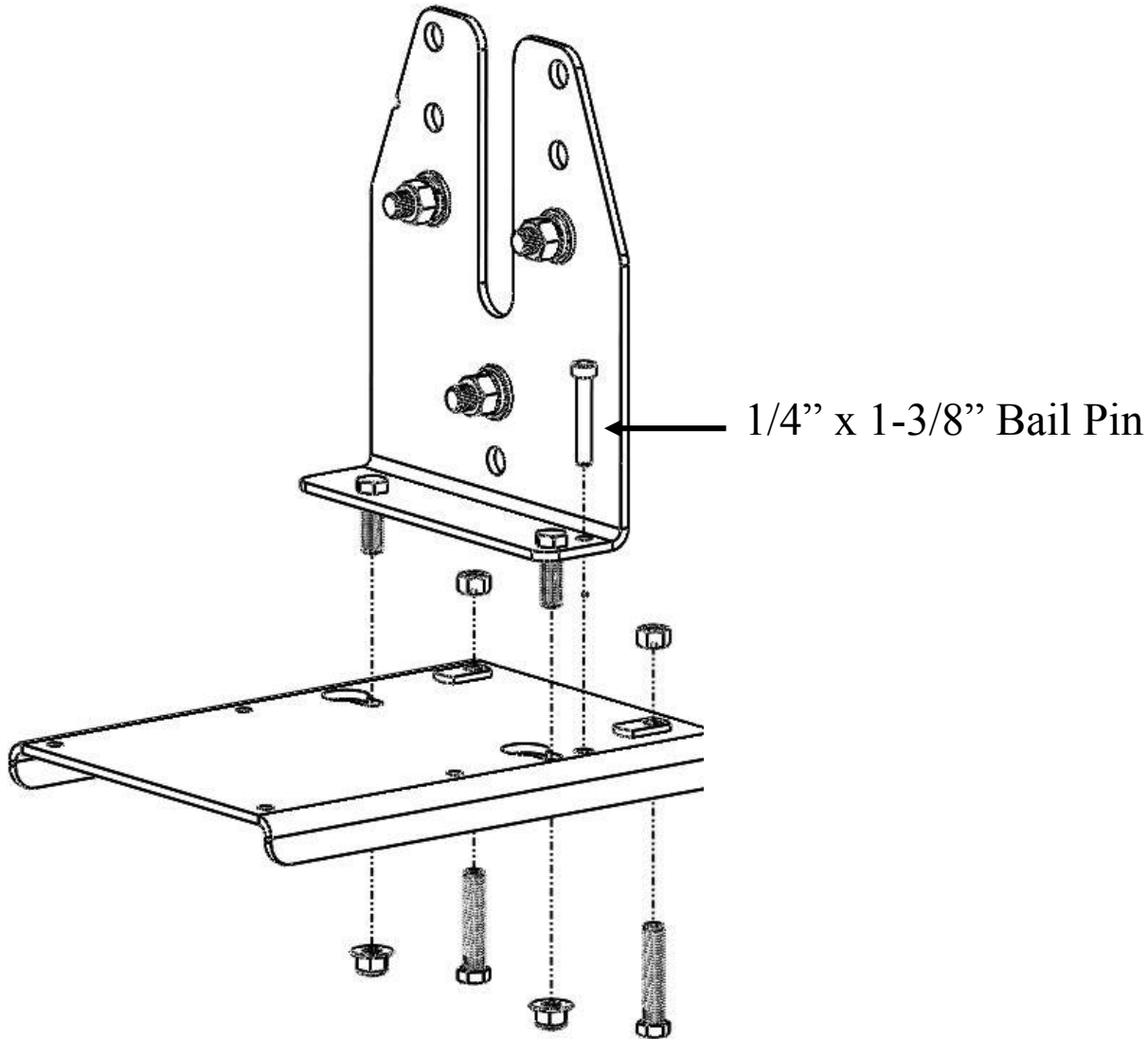


Step 6-

With the battery installed into the Group 24-31 Battery Box, lift the Group 24-31 Battery Box and Battery Tray up to the Frame Plate and guide the Battery Tray so the Frame Plate studs go through the large part of the key holes in the Battery Tray. Slide the Battery Tray to the rear of the vehicle so the Frame Plate studs are in the small part of the keyholes. While supporting the battery with one hand, install the included 1/4" x 1-3/8" Bail Pin through the safety hole in the Frame Plate and Battery Tray. **See Figure 6.1.**

****Torque the 3/8"-16 Flanged Nylock Nuts on the Frame Plate studs to 25 Ft-Lbs.(33nm)****

Figure 6.1



Step 7-

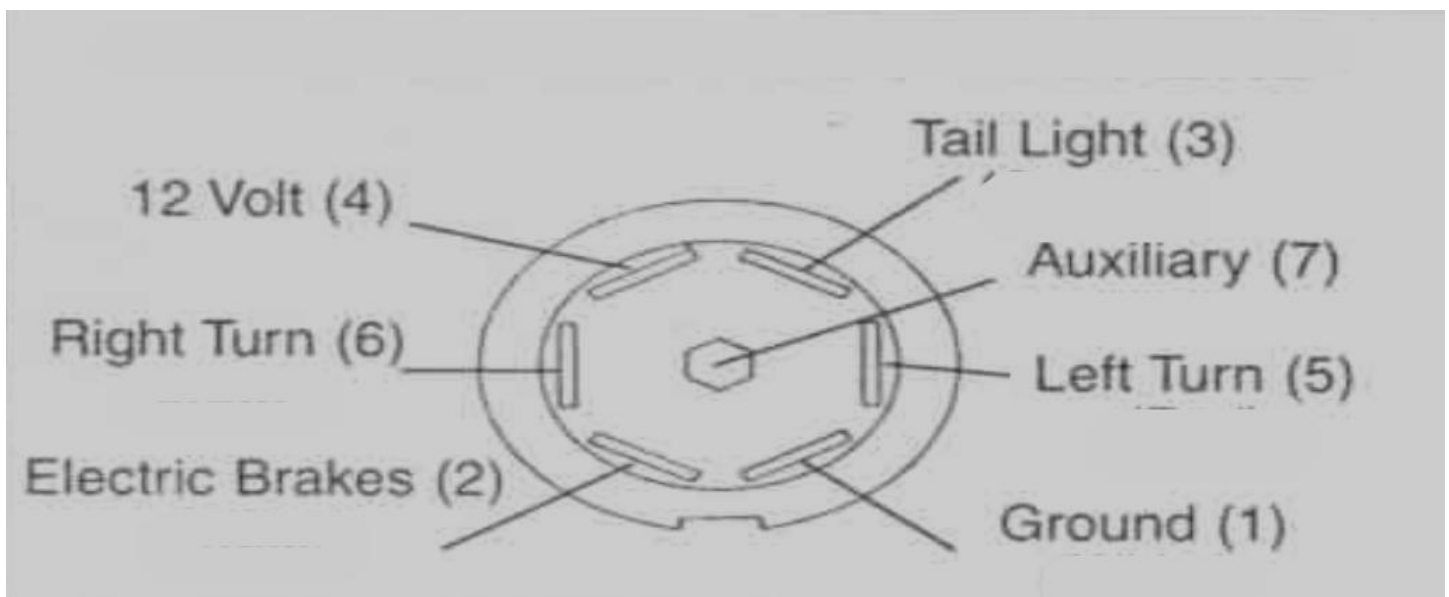
Install the 3/8"-16 x 2" Hex Bolt Grade 8 through the weld nuts in the Battery Tray from the bottom side. Install a 3/8"-16 Hex Nut onto the 3/8"-16 x 2" Hex Bolt Grade 8 from the top side of the Battery Tray. Thread the 3/8"-16 x 2" Hex Bolt Grade 8 up by hand until they contact the frame of the truck. Thread the 3/8"-16 Hex Nuts down on the bolts until they contact the weld nuts on the Battery Tray. Snug the nuts tight with a wrench to lock the 3/8"-16 x 2" Hex Bolt Grade 8 in place.

Battery Charging Wire Diagrams

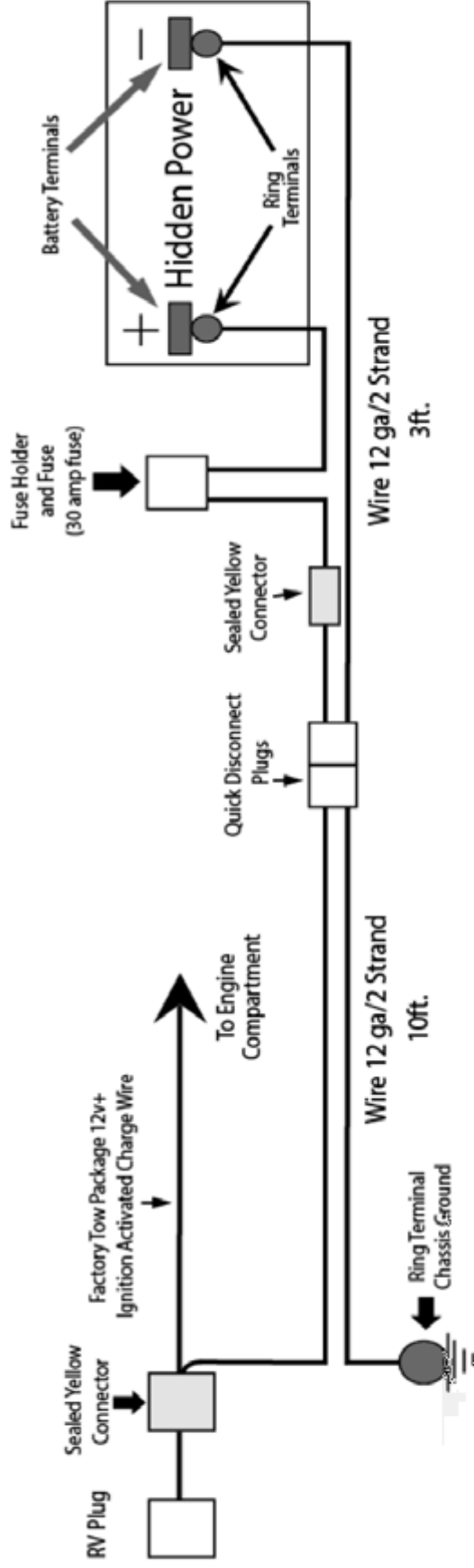
To test if you have a factory battery separator, use a voltmeter or a 12V test light to test for key on/ key off positive power at the RV Plug. See RV Plug Diagram below.

***NOTE:** Wire color is going to vary from manufacturer to manufacturer which is why you should always wire by function and use a Volt Meter or a 12V test light when wiring. There is no official industry standard for wire color. If you are trying to wire by matching colors, there is a very good chance that it will be wired incorrectly. Be sure to test each wire to ensure you are wiring for the correct function.*

<u>Pin #</u>	<u>Function</u>
(1)	Ground
(2)	Trailer Brakes
(3)	Tail / Running Lights
(4)	Aux 12V+ (Charging)
(5)	Left Turn / Stop
(6)	Right Turn / Stop
(7)	Backup Lights



#1 For Trucks with Factory Installed Ignition Activated Tow Package



For Trucks without Factory Installed Ignition Activated Tow Package

#2

