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**IMPORTANT OWNER-OPERATOR INSTALLATION INSTRUCTIONS** 

# A7728

# **HIDDEN POWER**

**APPLICATION:** 

2008-2012 FORD F250/F350/F450 with Battery Box

# A7728 INVENTORY LIST

- **Frame Plate** 1-**Bent Hook Bracket** 1-L Spacer 1-3/8"-16 x 1-1/2" Hex Bolt 1-1-1/2"-13 x 3" Hex Bolt 2-1/2" Washer SAE 1/2"-13 Hex Nut 2-1/4"-20 x 3/4" Hex Bolt 4-
- 4- 1/4" Washer USS
- 4- 1/4"-20 Hex Nut

- 1- Side Gusset
- **1- Battery Tray**
- 1- Plastic Battery Box
- 3- 3/8"-16 Flanged Nylock Nuts
- 1- 1/2"-13 x 2" Hex Bolt
- 2- 1/2" Lock Washer
- 1- 1"(2cm) x 2"(5cm) Plate Washer
- 4- 1/4" Lock Washer
- 4- 1/4" Fender Washer
- 1- 3/8" Washer USS
- 2- 50A Quick Disconnect Power Connector

# **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-

Starting on your passenger side. If your vehicle is equipped with TorkLift front tie downs, remove the rear most bolt on the tie down. Hook the **Frame Plate** over the frame just to the front of the passenger side leaf spring hanger. The **Frame Plate** should wrap over the front edge of the leaf spring hanger and the frame. The right side arm of the **Frame Plate** has a hole that lines up with the hole in the frame.

# Step 2-

Install the 1/2"-13 x 2" Hex Bolt with 1/2" Washer SAE through the Side Gusset, right arm of the Frame Plate, tie down, and vehicle frame. If you vehicle is not equipped with TorkLift front tie downs, you will need to slide the included L Spacer between the frame and the Frame Plate as shown in Figure 2.1. Install a 1"(2cm) x 2"(5cm) Plate Washer, 1/2" Lock Washer, and 1/2"-13 Hex Nut onto the bolt from the opposite side of the frame. Leave the nut finger tight at this time.

# Figure 2.1



# Step 3-

Install the 1/2"-13 x 3" Hex Bolt through the Bent Hook Bracket and Frame Plate as shown in Figure 2.1. Secure with a 1/2" Washer SAE, 1/2" Lock Washer, and 1/2"-13 Hex Nut. Torque to 35 Ft-Lbs.(47nm) Step 4-

Install a **3/8"-16 Flanged Nylock Nut** onto the bottom of each **3/8" Frame Plate** stud. Leave approximately 3/8" between the **3/8"-16 Flanged Nylock Nut** and **Frame Plate**. **See Figure 4.1**.



### Step 5-

Lift the **Battery Tray** and empty **Battery Box** up to the **Frame Plate** so that the **Frame Plate** studs protrude through the keyholes in the **Battery Tray**. Rotate the **3/8"-16 Flanged Nylock Nuts** on the **Frame Plate** studs until they are lightly snug. Then mark the **Battery Tray** holes onto the bottom of the **Battery Box**. If the **Battery Box** is not centered on the **Battery Tray**, make sure that the empty side of the **Battery Box** is 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. Remove the **Battery Tray** and **Battery Box**. **Step 6-**

Using a 1/4" drill bit, drill the holes previously marked on the **Battery Box**. Insert the 1/4"-20 x 3/4" Hex Bolts and 1/4" Fender Washers into the holes in the **Battery Box** from the inside. Secure the **Battery Box** to the **Battery Tray** by using the 1/4" Washer USS, 1/4" Lock Washers, and 1/4"-20 Hex Nuts as seen in Figure 6.1. Tighten to 7 Ft-Lbs.

# Figure 6.1



### Step 7-

Install the Battery (*not included*) into the **Battery Box**, and connect the leads to the appropriate terminals. For your convenience, a **50A Quick Disconnect Power Connector** has been included to aid in the installation and future removal of the battery for maintenance.

\*For all questions relating to connecting your new battery to your current system, please contact you local RV Service Center. Step 8-

Using a floor jack, lift the **Battery Box** and **Battery Tray** up to the **Frame Plate**. Guide the **Battery Tray** so that the **Frame Plate** studs protrude through the keyholes in the **Battery Tray**. You may need to rotate the **Side** 

**Gusset** towards the front of the truck for clearance. Slide the **Battery Tray** so the **Frame Plate** studs are in the small part of the keyholes. **Step 9-**

With the **Battery Tray** supported by the **Frame Plate** studs, rotate the **Side Gusset** down so the lower hole lines up with the hole in the **Battery Tray**. Install the **3/8"-16 x 1-1/2" Hex Bolt** and **3/8" Washer USS** through the **Side Gusset** and **Battery Tray**. Secure the bolt with one **3/8"-16 Flanged Nylock Nut**. **See Figure 9.1**. Torque all **3/8"-16 Flanged Nylock Nuts** to 35 Ft-Lbs.(47nm) Torque the **1/2"-13 x 2" Hex Bolt** in the **Frame Plate** to 50 Ft-Lbs.(67nm) **Figure 9.1** 





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



# For Trucks with Factory Installed Ignition **Activated Tow Package** #



