

## REAR BRAKE LIGHT: FULL SIZE (2-70131) / CREW CAB (16900)

THIS KIT IS USED ON 2017 AND OLDER MODELS WITH POLY BEDS

**As illustrated below, this kit contains:**

Tail light	Qty: 1	Nuts #10	Qty: 2
Brake light switch	Qty: 1	Bolt, 1/4"x1 1/2"	Qty: 2
Wire harness	Qty: 1	Nut, 1/4" nylon lock	Qty: 2
Tail light bracket	Qty: 1	Bolt, 3/8 x 2 1/2"	Qty: 1
Brake light switch bracket	Qty: 1	Nut, 3/8 nylon lock	Qty: 1
Spacer sleeve	Qty: 1	Spring	Qty: 1
Screws, #8 x 2 1/2"	Qty: 2	Eye bolt	Qty: 1
Nuts #8	Qty: 2	Nuts, 5/16"	Qty: 2
Flat washer, #10	Qty: 2	Cotter pin, 1/8 x 1	Qty: 1
Flat washer, 1/2"	Qty: 2	Cable ties	Qty: 12
Screws #10 x 3/4"	Qty: 2		

**TOOLS REQUIRED**

5/16" socket wrench      3/8" socket wrench  
7/16" socket wrench      1/2" socket wrench  
philips screwdriver



**NOTE:** Not all pieces / fasteners shown

**Procedure:**

- 1** Disconnect the battery.
- 2 PROP SHAFT COVER REMOVAL (4WD ONLY)**  
If installing on a 4WD unit, starting with the front prop shaft cover remove the four 1/2" bolts and retaining nuts to expose the brake rod clevis area as shown in **figure 1**. Retaining nuts are on underside of the frame.
- 3** Using the flat head screw driver or pry tool, carefully remove the parking brake insert in the center console as shown in **figure 2**.
- 4** Using the 5/16" socket, remove the ten bolts securing the center console as shown in **figure 3**. Lift and slide the console off to the right out of the way.

**If you are installing this kit on a 4x4 model, skip to step 6**

**4WD UNIT PROP SHAFT COVER**

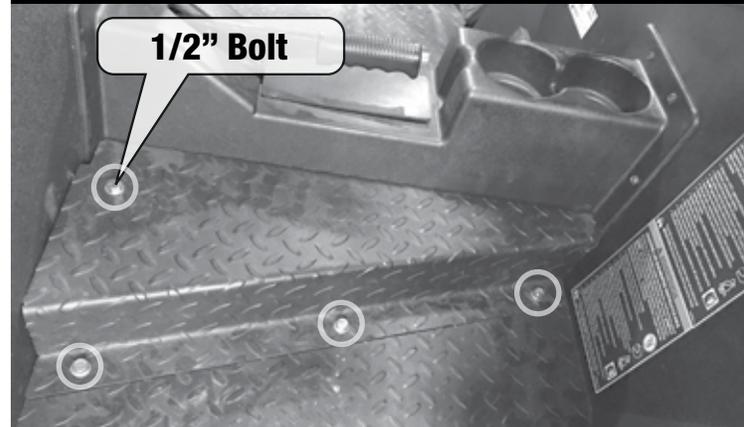


fig. 1

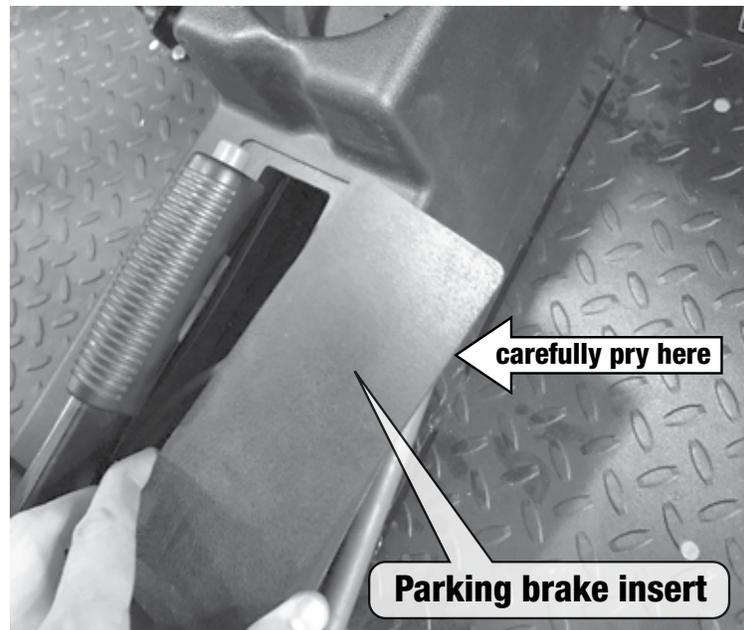


fig. 2

- 5** Refer to **figure 4**.  
At the pedal assembly remove the brake rod clevis bolt (**there is no clevis bolt on 4x4 models**) and remove the pedal return stop shoulder bolt. Tighten the nut on the pedal return stop shoulder bolt all the way up to the unthreaded portion of the shoulder bolt. Using the pedal return stop shoulder bolt, fasten the brake switch bracket to the floor.

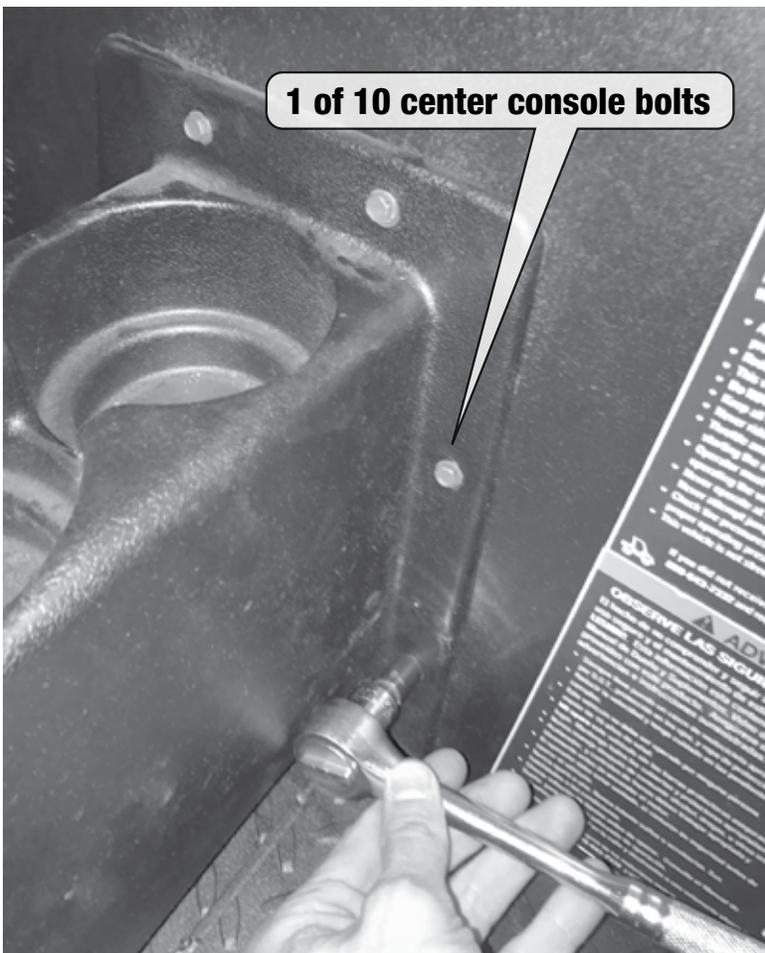


fig. 3

**7** Using two #10 x 3/4" screws and nuts, install the switch with a 3/8" wrench on the bracket and adjust so that the spacer sleeve pushes the switch button in when the pedal is released as shown in **figure 5**.

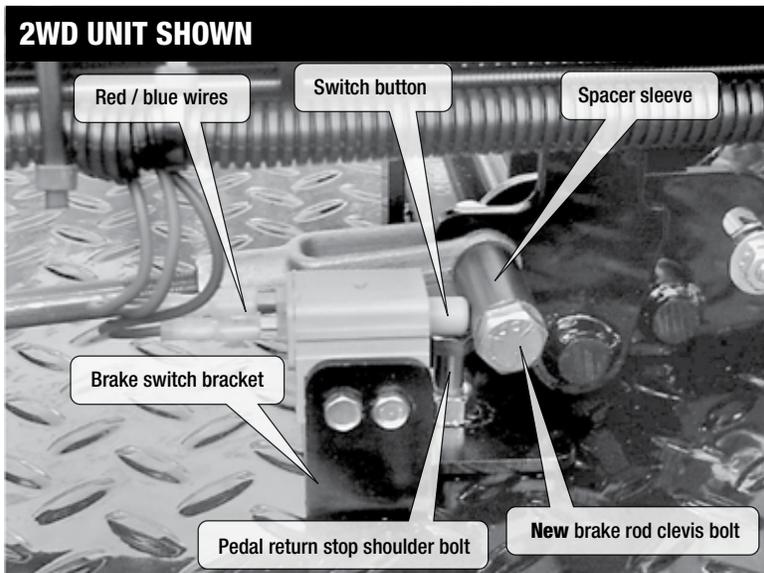


fig. 5

**8** Remove the terminal block cover under the hood of the vehicle using an 5/16" socket on the two terminal block cover bolts (see figure 6).

If you have an earlier model without the terminal block see step **8a**.

For electric (48V) models see step **8b**.

Run the provided tail light wire harness from the switch to the terminal block. Plug the red wire onto the fifth terminal from the top with the solid brown wires. Then, plug the black wire onto the terminal second row from the top with the green wires as shown in **figure 7**. Re-install the terminal block cover. Attach the red and blue wires to the switch as shown in figure 5 (wires can be attached in any order).

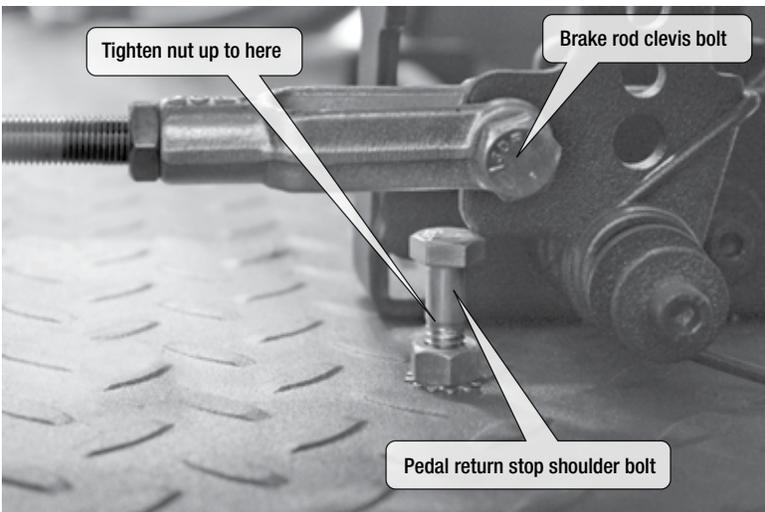


fig. 4

**6 2WD ONLY**

Place the spacer sleeve provided in the kit on the 3/8 x 2 1/2" bolt provided. Reconnect the brake rod using the new bolt with spacer sleeve so that the spacer is on the **right (passenger) side** (see **figure 5**). Tighten the 3/8 nylon lock nut onto brake rod clevis bolt using a 9/16" wrench until the end of the bolt is even with the top of the nut (The clevis should be free to rotate).

**4WD ONLY**

Install the bolt with the spacer in the lower hole on the brake pedal lever. The spacer should be on the **right (passenger) side**. Fasten tightly with the provided 3/8 nylon lock nut.

**UNDERNEATH HOOD**

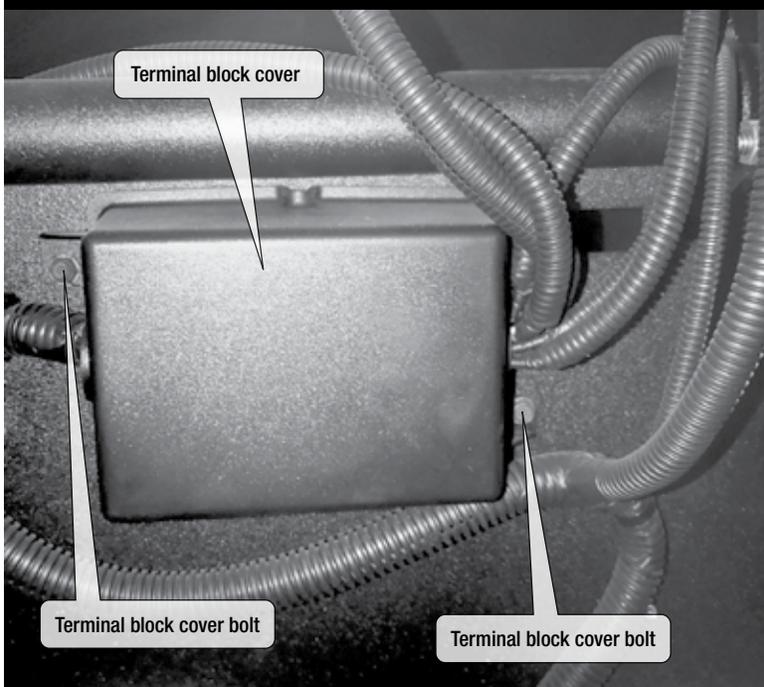


fig. 6

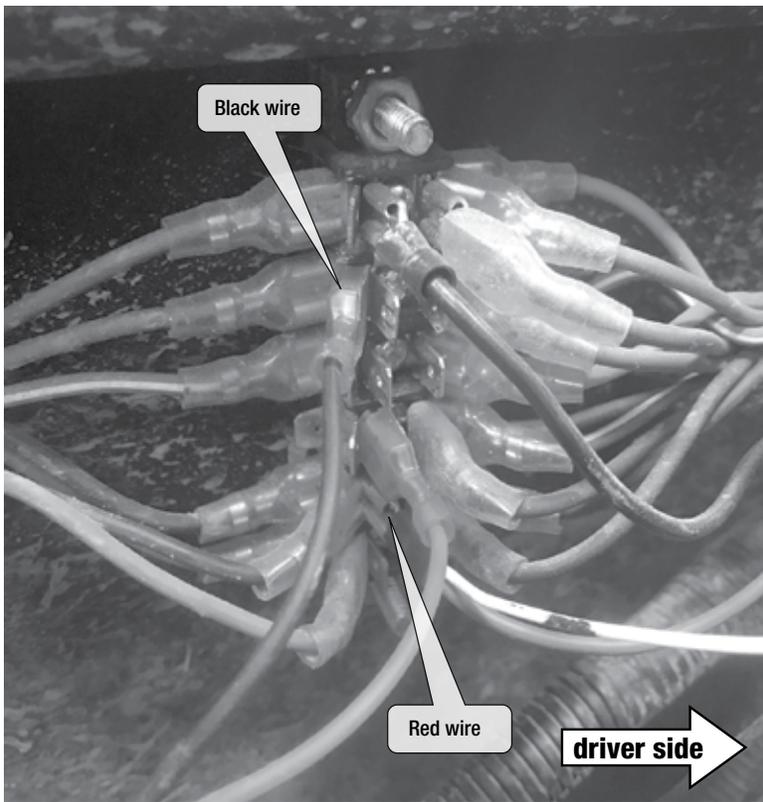


fig. 7

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*continued*

**8a.** If you have an earlier model without the terminal block, find the red and black wires that connect the headlight switch to the key switch. Splice the tail light wires into these wires (red to red, black to black).

**8b.** If you have an Electric (48V) model, plug the red and black wires into the terminal block as shown in **figure 8**.

**48 VOLT MODELS**

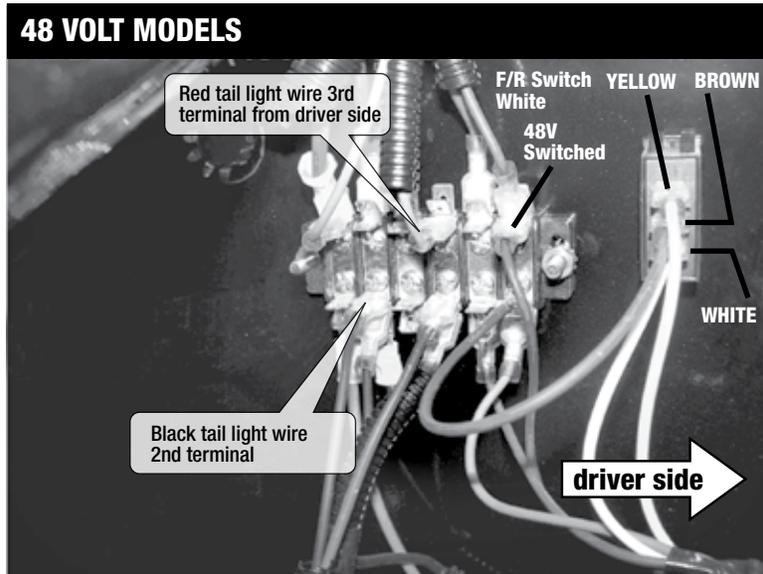


fig. 8

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Use cable ties to fasten the wire harness to the frame tube above the switch. Make sure the wires do not interfere with any moving parts in the brake system. Run the harness to the back along the diagonal frame tube. Fasten with cable ties as shown in **figure 9**.

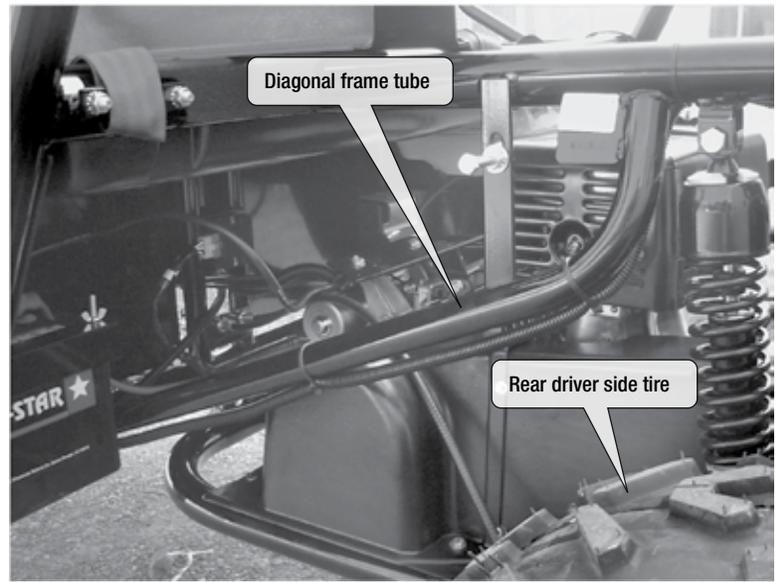


fig. 9

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Mounting holes are provided in the rear of the poly bed as shown in **figure 10**.

11

Fasten the tail light bracket with two 1/4" x 1 1/2" bolts, two 1/4" washers and two 1/4" nylon lock nuts using a 7/16" wrench. Connect the wires to the tail light and install it on the bracket using the #10 x 1 1/2" screws, nuts and #10 washers using a 3/8" wrench and philips screwdriver. Use extra cable ties to fasten the loose harness to the frame, making sure it has enough slack for the bed to open and close.

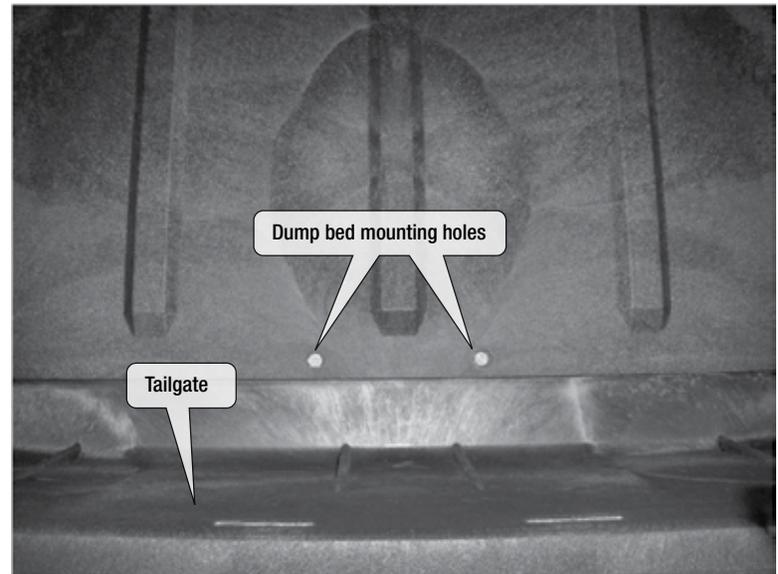


fig. 10

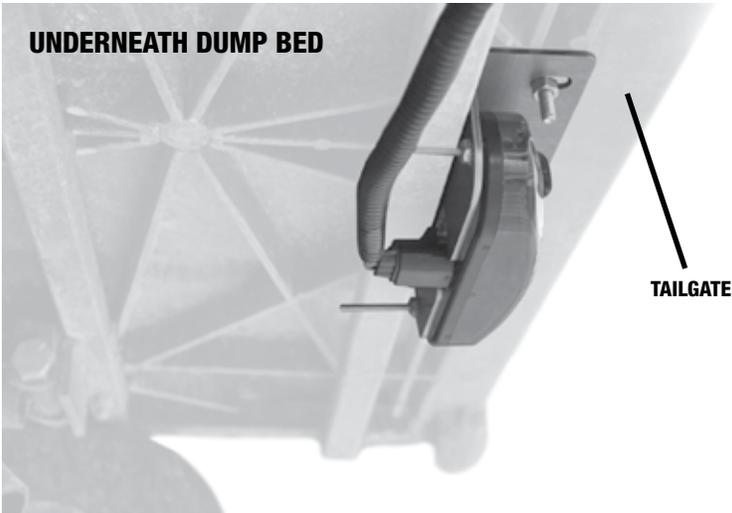
**12** We have designed the tail light on the **2017 and newer** gas models to be on any time the key switch is on. Likewise, the key switch must be on for the brake light to function. Release the parking brake, chock the wheels and reconnect battery. Turn key switch to **ON** position and the tail light should light up. Press the brake pedal and the light should get brighter. If it does not get brighter, adjust the switch position until it operates as such. When properly adjusted, the switch should have slight engagement when the brake pedal is **NOT** pressed.

For the other models, we have designed the tail light to be on any time the key switch **AND** headlights are on. Release the parking brake, chock the wheels and reconnect battery. Turn key switch to **ON** position but do not start the engine. The tail light should light up when the headlights are on. With the headlights on, press the brake pedal and the light should get brighter. If it does not get brighter, adjust the switch position until it operates as such. When properly adjusted, the switch should have slight engagement when the brake pedal is **NOT** pressed.

**13** Re-install the console, parking brake insert. **Re-install prop shaft cover if a 4WD unit.**



**fig. 12 finished installation**



**fig. 11 finished installation**