

VEHICLE INSTALLATION INSTRUCTIONS FOR:
FORD F-150 4x4: 2015 & NEWER

INSTRUCTION SHEET NO: 25013558

September 16, 2015



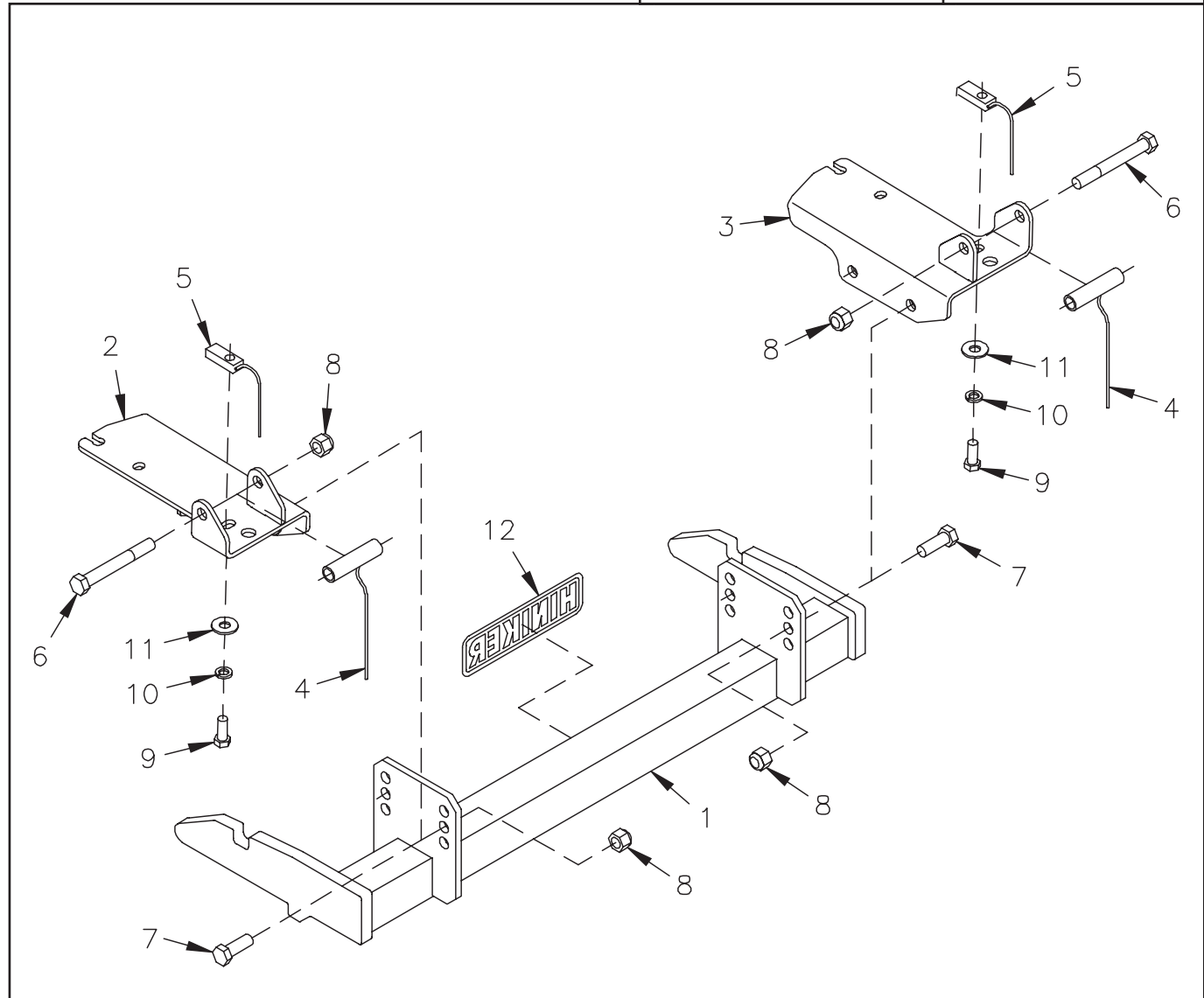
IMPORTANT: Read notes beginning on Page 2 for restrictions on plow/truck compatibility before installing mount components on the vehicle. Read the snowplow operators manual before assembling this kit.

VEHICLE REQUIREMENTS:

- Snowplow Prep Package
- Heavy Payload Package (7,850 lb. GVWR)
- 5.0L Engine
- 4x4 Only

REAR BALLAST-

1,200 lbs. when plow is attached. Secure weight centered at least 36" behind the rear axle.



Mount Kit 25013553

DWG. NO. 7308

REF. NO.	PART NUMBER	DESCRIPTION	QTY.	REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	25010491	Prong Weldment	1	8	060756	Lock Nut 5/8-11 Nylon Insert	6
2	25013554	LH Bracket Weldment	1	9	950-001-111	Hex Head Cap Screw 1/2-13 x 1 1/4 Gr. 5	2
3	25013555	RH Bracket Weldment	1	10	952-001-004	Lock Washer, 1/2 Inch	2
4	25013556	Spacer Bushing Weldment	2	11	952-004-067	Flat Washer, 1/2 Inch Hardened	2
5	25013557	Nut Bar Weldment	2	12	25010008	Hiniker Decal	1
6	950-001-148	Hex Head Cap Screw 5/8-11 x 5 Gr. 5	2		25013560	Bolt Bag	1
7	950-001-132	Hex Head Cap Screw 5/8-11 x 1 3/4 Gr. 5	4				

NOTE: The F-150 snowplow installation is intended for residential/personal use only.

NOTE: The engine Outside Air Temperature (OAT) sensor is subject to error unless relocated to unblocked air flow.

MINIMUM REQUIRED EQUIPMENT SNOWPLOW PREP PACKAGE (68P)

- 4x4 only
- Requires 5.0L V8 engine (99F)
- Lariat trim (only): Electronic Shift-On-The-Fly (ESOF) replaces standard 2-speed automatic 4WD
- Lariat Technology Package (68T) not available with Snowplow Prep Package (68P)
- Available on Regular, Super Cab and Super Crew models (5.5', 6.5' and 8.0' boxes)
- Available with XL, XLT and Lariat trim
- Both regular and heavy duty payload packages
- "Snow Plow" mode button on instrument panel will disable (load shed) the following features to maintain required electrical charge margins during plow operation: 110V inverter, fog lamps, heated steering wheel, heated front/rear seats, and massaging seats. Snow Plow mode also activates relay to snowplow controls

COMPLETED VEHICLE WEIGHT

Minimum ballast weight and aft-of-rear axle ballast position listed on Page 1 are given for trucks with the Heavy Duty Payload Package (7,850 lb GVWR) carrying a Hiniker medium weight snowplow with no additional option content.

The weight of a heavier plow or additional aftermarket equipment may overload the Front Gross Axle Weight Rating (FGAWR) or Gross Vehicle Weight Rating (GVWR) of the truck.

Installing any Hiniker snowplow on trucks with a Standard Payload Package (6,400 lbs. to 7,050 lbs. GVWR) may overload front axle components even with recommended ballast weight installed.

Vehicles must not be operated when overloaded. A vehicle is overloaded when the weight of the completed vehicle with aftermarket equipment installed, plus driver, passengers and cargo exceeds either the FGAWR, RGAWR or GVWR established by Ford Motor Company and displayed on the Safety Compliance Certification Label.

The addition of ballast weight placed rearward of the rear axle is required to prevent exceeding FGAWR, and to provide good vehicle braking and handling. The ballast should be attached securely to the vehicle with consideration for the normal driving dynamics of snowplowing, and occupant safety in accidents.

FRONT END WHEEL ALIGNMENT AND HEADLIGHT AIM

Front end wheel alignment (toe) and headlight aim may require readjustment after installation of snowplow equipment. Failure to reset front wheel alignment may cause premature uneven tire wear. If required, reset to chassis manufacturer's specifications found in the *Ford Shop Manual*.

ELECTRICAL CONNECTIONS

Installation of inductive load devices such as electric motors must not be connected to Ford vehicle wiring or fuse panels. Power for such devices should be taken directly from the battery or starter motor relay power terminal. Control of these devices should be achieved via relays. No direct current path should exist between Ford vehicle wiring and the installed load that is not filtered by the battery. These recommendations are intended to eliminate or minimize any induced reverse voltage into the Ford circuitry.

Beginning with Model Year 2015 F-150 trucks, battery charge state is determined with a Hall Effect sensor on the negative battery lead. All negative current must pass through this sensor. Failure to do so will result in malfunction of the vehicle charging system and shortened battery life. **Do not make direct to battery connections at the negative battery post.**

To ensure proper charging system function, the battery return should be made at the grounding point circled in the picture below:

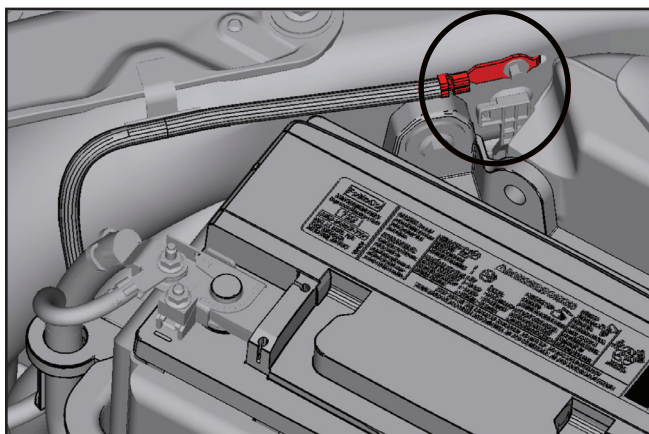


PHOTO NO. Q-231

Vehicles equipped with the Snow Plow Prep option will include a Snow Plow Mode switch located on the dash. Activating Snow Plow Mode will provide 10 Amp B+ power to a dedicated feed for the plow controller.

The switch circuit is accessed through a blunt cut Yellow/Orange wire taped to the headlamp switch harness located behind the left side of the driver's side dash panel.

Splice the Red/White wire from the snowplow underhood harness to the Yellow/Orange truck wire for proper plow function.

When the Snow Plow Mode button is activated, the vehicle will enter a special load shedding strategy to ensure continuous operation of the plow during periods of high electrical demand.

MOUNT BRACKET INSTALLATION

All hardware should be tightened only enough to ensure safety during assembly. Fully tighten all hardware after entire assembly is completed.

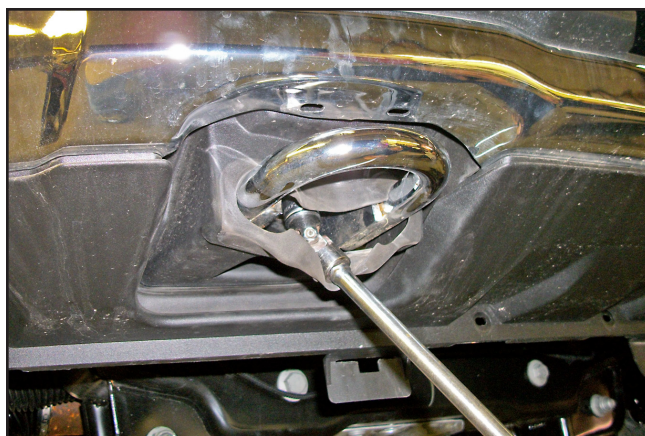
GRADE 5 TYPE B & F LOCK NUT TORQUE VALUES

Size	Ft-lbs.	N-m
5/16"	13-18	17-25
3/8"	23-33	31-44
1/2"	58-82	79-112
5/8"	117-165	158-223

GRADE 5 BOLT TORQUE VALUES*

Size	Ft-lbs.	N-m
1/4"	8-12	11-16
3/8"	29-41	39-56
1/2"	73-103	99-140
5/8"	146-206	198-279
* Applications without lock nuts		

1. Unbolt the plastic air dam from the lower edge of the front bumper. The air dam will not be reinstalled with this mount and should be returned to the truck owner for reinstallation if the plow mount is removed from the truck in the future.
2. Loosen the front bolt from each tow hook about 3/8 inch.



Loosen but do not remove front bolts. PHOTO NO. 100-2848

Fully remove the rear bolt from both tow hooks and save for reinstallation. The bolt retainers inside the truck frame are loose, so care should be taken to maintain hole alignment.

3. Insert a spacer bushing weldment from the mount kit parts bag through the rearmost square hole in the bottom of each frame rail.

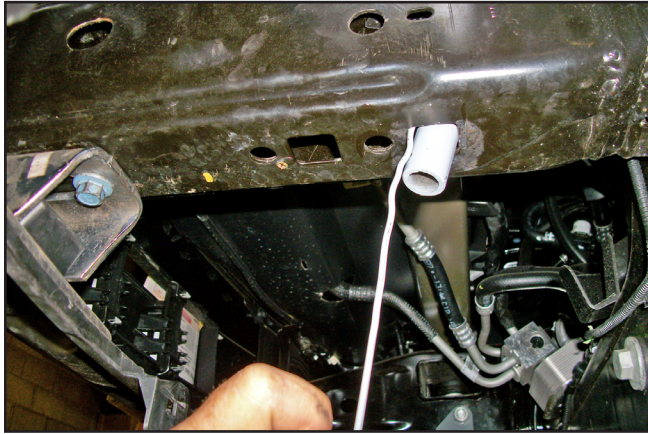


PHOTO NO. 100-2840

Bend wire handles to position bushings crossways between holes in the truck frame, then insert a punch or long screwdriver to hold alignment.

Likewise, insert nut bar weldments through the same square holes, then bend wires to position bars forward over round holes in the bottom of the frame rails. Leave wire handles hanging straight down.

4. Lift the LH and RH mount brackets up to the truck frame rails so that both wire handles pass through rear holes of the brackets.

Slide brackets forward between tow hooks and frame rails until front tow hook bolts are in slots. Align rear tow hook holes, then start bolts back into the frame to loosely hold brackets in place.



PHOTO NO. 100-2822

Use protruding wire handles to maintain spacer bushing alignment while rotating mount brackets up to the vehicle frame.

Insert 5/8 inch x 5 inch hex bolts through bracket tabs and spacer bushings, then secure the assembly with 5/8 inch lock nuts.

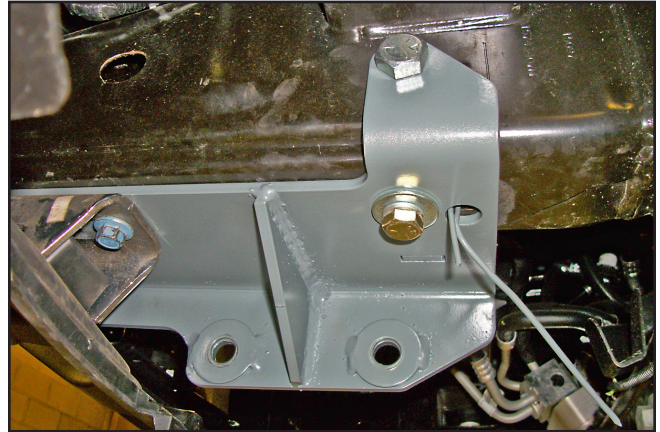


PHOTO NO. 100-2810

Thread 1/2 inch x 1 1/4 inch hex bolts with lock washers and flat washers installed through the bottom bracket holes and thread into nut bars. Bend wire handles upward to an out of the way position.

5. Fasten mount plates of the prong weldment between the LH and RH brackets with four 5/8 inch x 1 3/4 inch hex bolts and lock nuts.



PHOTO NO. 100-2807

Bottom edges of the prongs should measure about 10 inches above the ground. Ideally, the prongs should lift the plow frame slightly when driving onto the plow.

6. Fully tighten all hardware to specified torque values.