

BOSS PRODUCTS  
A Division of Northern Star Industries, Inc.  
P.O. Box 787 Iron Mountain MI 49801-0787  
[www.bosspow.com](http://www.bosspow.com)

**2004 & NEWER FORD F150  
SPORT DUTY UNDERCARRIAGE  
MOUNTING INSTRUCTIONS  
(PART NO. LTA05430)**

***DRIVEN TO BE THE BEST***

MSC05447-1

# **WARNING**

Many newer trucks are now equipped with air bags. DO NOT under any circumstances disable, remove or relocate any sensors or other components related to the operation of the air bags.

For recommended vehicle models refer to the Boss Snowplow Application Chart and Selection Guide.

To comply with Federal Regulations and to assure a safe vehicle, the Front Gross Axle Weight Rating (FGAWR), Rear Gross Axle Weight Rating (RGAWR), and the Gross Vehicle Weight Rating (GAWR) must not be exceeded at any time.

Due to the variety of equipment that can be installed on this vehicle, it is necessary to verify that the Front Gross Axle Weight Rating (FGAWR), Rear Gross Axle Weight Rating (RGAWR), and the Gross Vehicle Weight Rating (GAWR) are not exceeded at any time. This may require weighing the vehicle and adding ballast as necessary. It may also limit payload capacity of the vehicle. It is the operator's responsibility to verify that these ratings are not exceeded.

## **2004 & NEWER FORD F150 SPORT DUTY UNDERCARRIAGE MOUNTING INSTRUCTIONS**

The mounting procedure outlined below covers the 2004 and Newer Ford F150 trucks. You will need to refer to the illustrations and familiarize yourself with each of the undercarriage components and their relative position to each other. Then proceed as follows:

1. Begin by removing the two bolts affixing each tow hook to the truck frame.
2. Insert 5/8" Washer Bar (103) into the truck frame through the front of the frame horn. Align the hole in the washer with the frame slot. Drop 5/8" Bolt Bar (102) down through 5/8" Washer Bar (103) and through the frame slot. Repeat on the other frame rail.
3. Assemble Push Beam Support Plate (62A & 62B) to the bottom of the frame rail. Begin by assembling 5/8" Split Lock Washer (F) and 5/8"-11 Finished Nut (E) to 5/8" Bolt Bar (102) installed in step 2. Next, replace the tow hook and tow hook bolts removed in step 1. Leave all hardware finger tight. Repeat on the other frame rail.
4. Drill two holes in each inside frame wall for Push Beam Support Plate (62A & 62B). Drill for 1/2" bolts.
5. Install 1/2" Bolt Bar (101) through one of the holes in the outside frame wall and install through the drilled hole in the inside frame wall for Push Beam Support Plate (62A & 62B). Assemble 1/2" Split Lock Washer (D) and 1/2"-13 Finished Nut (C) to 1/2" Bolt Bar (101). Leave hardware finger tight. Repeat on the second drilled hole and on the other frame rail.
6. Assemble Push Beam (62) to Push Beam Support Plates (62A & 62B) using 1/2"-13 x 1-1/2" Bolts (A) and 1/2"-13 Lock Nuts (B). Leave hardware finger tight. The hole in the Push Beam (62) receiver hooks should be 14-1/2" from the ground (See Figure 2). The plastic valance on the bottom of the bumper may need to be removed or notched in order to achieve this.

7. Assemble Angle Bracket (75) to the tabs on the back of Push Beam (62) using ½"-13 1-1/2" (A) and ½"-13 lock Nuts (B). Be sure that Angle Bracket (75) is level and matches the contour of the cross-member on the bottom and on the forward angled face.
8. Drill four holes in the cross member for Angle Bracket (75). Drill for ½" bolts.
9. Install ½" Bolt Bar (101) through the large hole in the center of the cross member and assemble to one of the holes drilled in step 8. Assemble 1/2" Split Lock Washer (D) and ½"-13 Finished Nut (C) to ½" Bolt Bar. Repeat on all four drilled holes.
10. Tighten all hardware beginning with Push Beam Support Plates (62A & 62B). Continue with Angle Bracket (75) hardware and finally Push Beam (62) hardware.

Installation Notes:

- A. Use Headlight Adapter Kit MSC08839.
- B. Check for hood swing clearance with the plow attached to the truck. The grill is attached to the hood on the 2004 Ford F150 which can cause an interference between the grill and the plow lights/light bar. If there is an interference, move the light bar to the forward mounting position. See owner's manual for further details.

## 2004 & NEWER FORD F150 SPORT DUTY UNDERCARRIAGE INSTALLATION PROCEDURE

REF. NO.	DESCRIPTION	PART NO.	QTY.
62	Push Beam Assembly	PBA05431	1
62A	Push Beam Support Plate, Passenger Side	PBA05313	1
62B	Push Beam Support Plate, Driver Side	PBA05308	1
75	Angle Bracket	LTA05301	1
101	1/2" Bolt Bar	LTA05132	8
102	5/8" Bolt Bar	LTA05316	2
103	5/8" Washer Bar	LTA05323	2
	FASTENER KIT, FORD F150 2004 & UP	HDW05321	1
Includes:			
A	1/2" – 13 x 1- 1/2" Hex Head Bolt	HDW01728	12
B	1/2" – 13 Hex Head Nylon Lock Nut	HDW01748	12
C	1/2" – 13 Hex Head Finished Nut	HDW02410	8
D	1/2" Split Lock Washer	HDW01732	8
E	5/8"-11 Hex Head Finished Nut	HDW05596	2
F	5/8" Split Lock Washer	HDW03891	2

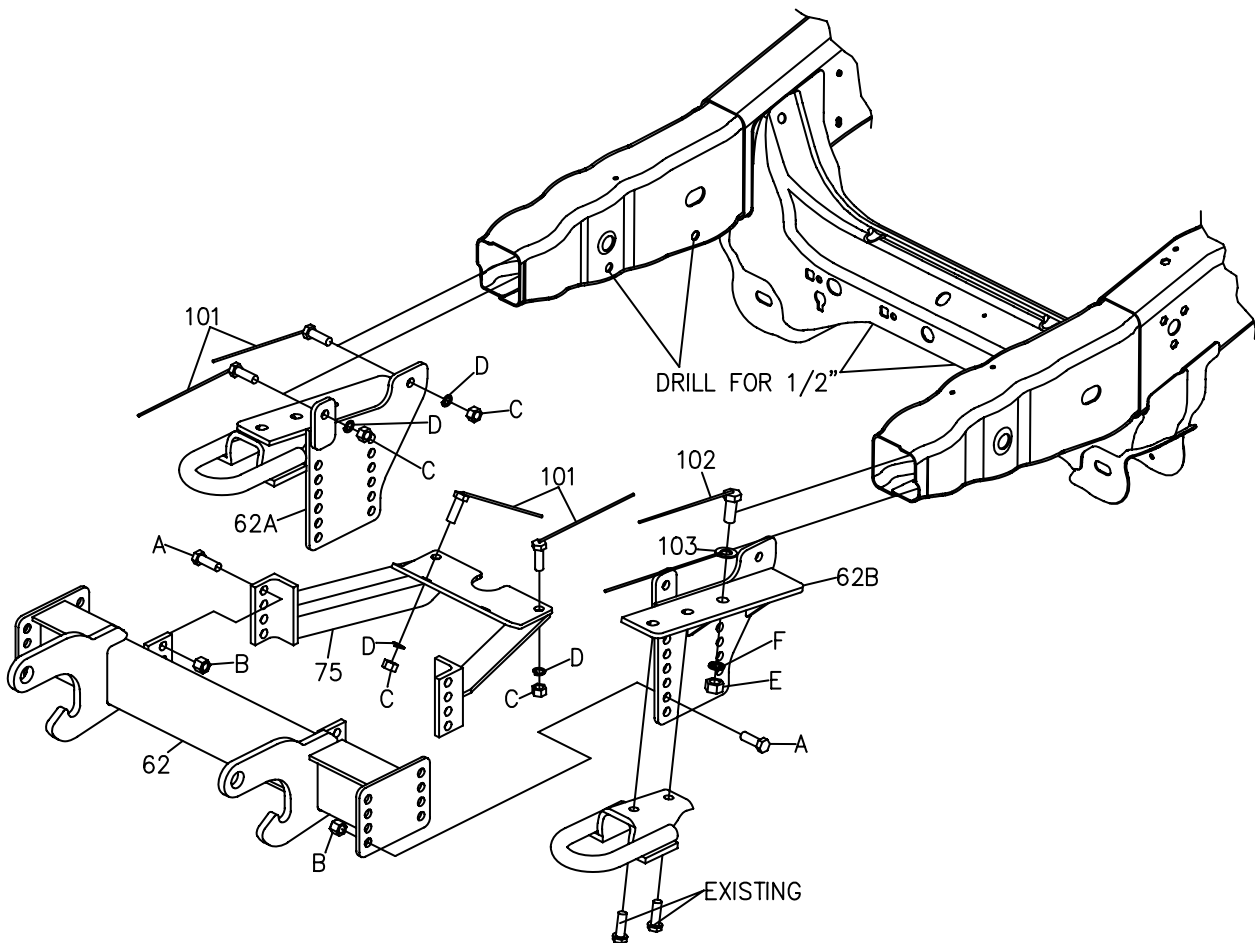
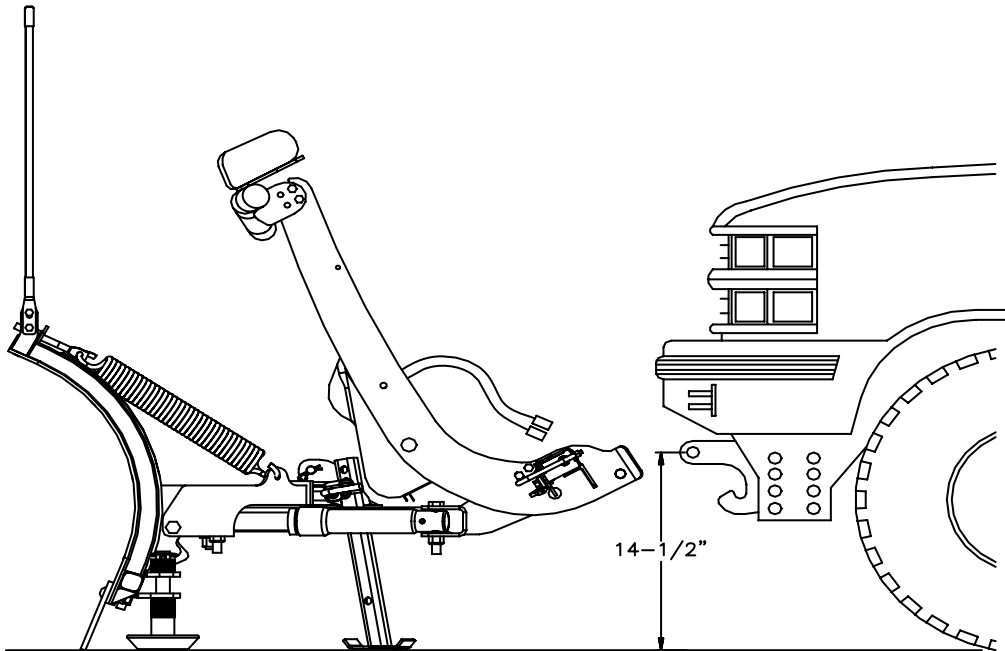


Figure 1

G10273

## RECOMMENDED PUSHBEAM HEIGHT



**Figure 2**

G10299

## GUIDE TO RECOMMENDED ASSEMBLY TORQUE



DIAMETER / PITCH	GRADE 5	GRADE 8	GRADE 8.8	GRADE 10.9
1/4-20	6	9		
5/16-18	14	19		
3/8-16	23	33		
7/16-14	38	53		
1/2-13	56	80		
9/16-12	82	116		
5/8-11	113	159		
3/4-10	201	283		
M10 X 1.25			36	
M10 X 1.5				49
M12 X 1.75				71
M14 X 2.0				80

ALL TORQUE VALUES ARE IN FOOT-POUNDS (FT.-LB.)

**Figure 3**

G10410

\* The torque values listed above are based on dry, coated bolts, variables such as oil, or other lubrications may appreciably alter these values and must be taken into consideration.

**NOTE:** IT IS IMPORTANT THAT ALL FASTENERS BE PROPERLY TORQUED TO ASSURE A SAFE OPERATING PLOW.