

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

**1997 - 2003 FORD  
F150, F250 (UNDER 8500 GVWR)  
SPORT DUTY UNDERCARRIAGE  
MOUNTING INSTRUCTIONS  
(PART NO. LTA05440)**

***DRIVEN TO BE THE BEST***

MSC05449-1

## **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.

## **1997 - 2003 FORD F150, F250 (UNDER 8500 GVWR) SPORT DUTY UNDERCARRIAGE MOUNTING INSTRUCTIONS**

The mounting procedure outlined below covers 1997 - 2003 FORD F150, F250 (under 8500 GVWR) trucks equipped with four wheel drive. 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. Unbolt left tow hook from the lower surface of the frame rail. Position Push Beam Support Plate (62B) under the frame rail and align with the tow hook bolt holes. Position tow hook under Push Beam Support Plate (62B) and attach with original tow hook bolts. Tighten these bolts. Insert ½" – 13 x 4 ½" Hex Head Bolt (E) into the top hole of Push Beam Support Plate (62B) and through the side of the frame rail. Install ½" – 13 Hex Head Nylon Lock Nut GR5 (D) in ½" – 13 x 4 ½" Hex Head Bolt (E). This fastener should only be finger tight.

**Note:** It may be necessary to cut the plastic air dam located under the front bumper near the tow hooks to position Push Beam Support Plates (62A & 62B) to the frame.

2. Using the hole located in the vertical plate of the Push Beam Support Plate (62B) as a guide, drill a 9/16" diameter hole through the truck frame.

3. Install ½"-13 1-1/2" Hex Head Bolt GR5 (C) and ½" Split Lock Washer through the hole drilled in the previous step. Secure by inserting Nut Bar (102) through the truck frame.
4. Repeat steps 1-3 to install Push Beam Support Plate (62A) on the right frame rail.
5. Insert Bolt Bar (101) through the right ¾" x 1" rectangular hole in the front of the frame cross member. Holding on to the handle of Bolt Bar (101), reach the bolt through the rear right hole of the frame cross member. Insert another Bolt Bar (101) through the left ¾" x 1" rectangular hole in the front of the cross member and into the rear left hole of the frame cross member.
6. Insert 3/8"-16 J-Nut (G) into each ¾" x 1" rectangular hole located in the front of the frame cross member and align with the round hole to the outside of the ¾" x 1" square hole. Repeat on opposite side.
7. Position the Angle Bracket (75) on the frame cross member, aligning the rear holes of Angle Bracket (75) with the Bolt Bars (101). Install ½"-13 Hex Head Nylon Lock Nut GR5 (D) onto each of the Bolt Bars (101). Nuts should only be finger tight.
8. Align the front holes of the Angle Bracket (75) with 3/8"-16 J-Nuts (G) and fasten using two 3/8"-16 x 1 ½" Hex Head Bolts (F).

**Note:** It may be necessary to loosen the tow hook bolts prior to installation of Push Beam (62).

9. Attach Push Beam (62) to Push Beam Support Plates (62A & 62B) using four ½"-13 x 1 ½" Hex Head Bolts GR5 (C) and four ½"-13 Hex Head Nylon Lock Nuts GR5 (D) on each end of Push Beam (62).

**Note:** The proper height adjustment for Push Beam (62) is 14-½" from the ground to the center of Push Beam (62) pin receiving hole (See Figure 2). The torsion bar suspension may be adjusted to raise or lower the front of the truck if required to achieve the desired height.

10. Align the rear tab holes of Push Beam (62) with the front holes of Angle Bracket (75). Bolt Push Beam (62) and Angle Bracket (75) together using two ½"-13 x 1 ½" Hex Head Bolts GR8 (A) and Hex Head Top Lock Nuts GR8 (B) on each tab of Push Beam (62).
11. With all undercarriage components now in place, tighten each of the fasteners, starting with Push Beam (62), to the torque specified in Figure 3. Re-torque all fasteners after first five hours of plowing.

# 1997 - 2003 FORD F150, F250 (UNDER 8500 GVWR) SPORT DUTY UNDERCARRIAGE INSTALLATION PROCEDURE

REF. NO.	DESCRIPTION	PART NO.	QTY.
62	Push Beam	PBA05441	1
62A	Push Beam Support Plate (RH)	PBA05446	1
62B	Push Beam Support Plate (LH)	PBA05445	1
75	Angle Bracket	LTA04108	1
101	Bolt Bar	LTA04113	2
102	Nut Bar	LTA05391	2
	FASTENER KIT, FORD F150 F250, 97-03(-8500)	HDW05552	1
Includes:			
A	1/2" - 13 x 1- 1/2" Hex Head Bolt GR8	HDW05553	4
B	1/2" - 13 Hex Head Top Lock Nut GR8	HDW05554	4
C	1/2" - 13 x 1- 1/2" Hex Head Bolt GR5	HDW01728	10
D	1/2" - 13 Hex Head Nylon Lock Nut GR5	HDW01748	10
E	1/2" - 13 x 4- 1/2" Hex Head Bolt	HDW01778	2
F	3/8" - 16 x 1-1/2" Hex Head Bolt	HDW01719	2
G	3/8" - 16 J - Nut	HDW05555	2
H	3/8" Washer, Split Lock	HDW01718	2
J	1/2" Washer, Split Lock	HDW01732	2

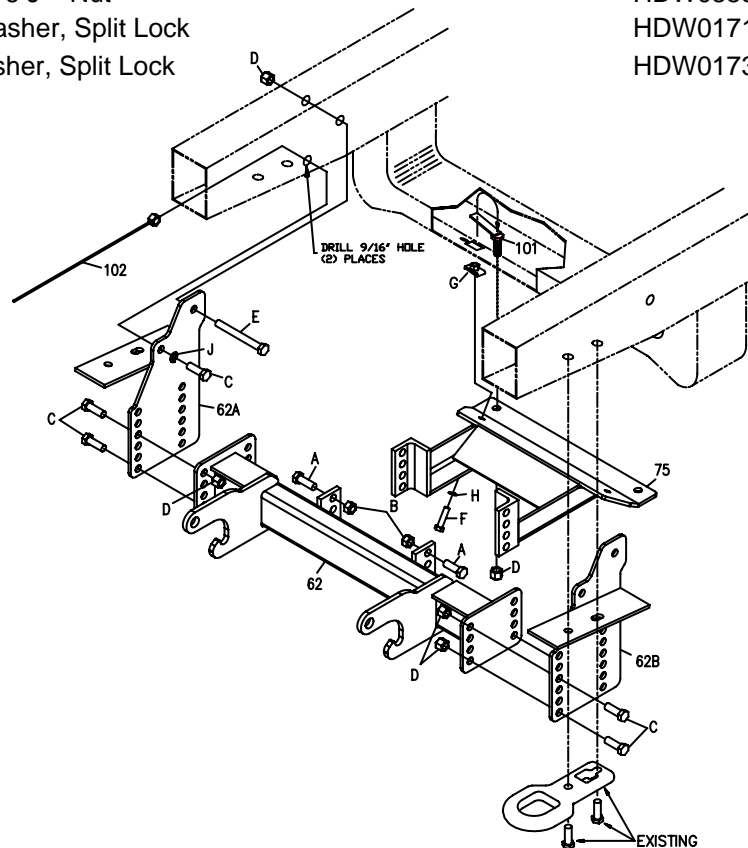
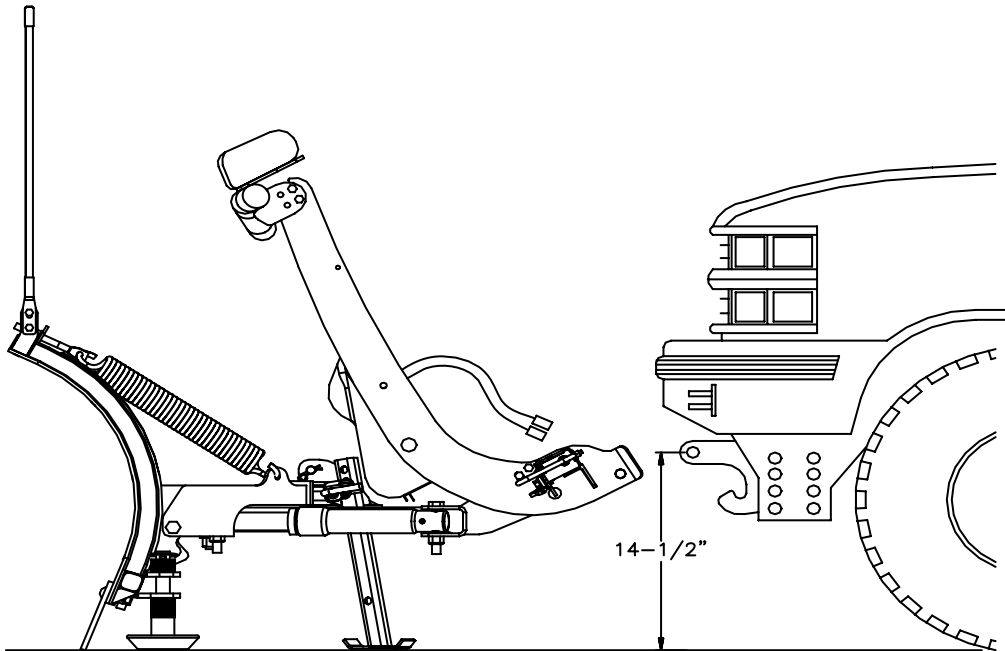


Figure 1

G10346

## 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.