

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)

**1998 & NEWER FORD RANGER  
SPORT DUTY UNDERCARRIAGE  
MOUNTING INSTRUCTIONS  
(PART NO. LTA05375)**

***DRIVEN TO BE THE BEST***

MSC05388-4

# **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.

## **1998 & NEWER FORD RANGER SPORT DUTY UNDERCARRIAGE MOUNTING INSTRUCTIONS**

The mounting procedure outlined below covers the 1998 and Newer Ford Ranger 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 (4) bolts holding the plastic skid plate to the bottom of the frame rails under the radiator. Remove the plastic skid plate.
2. Drill out the first and third holes in the bottom of the driver side frame rail for ½" bolts. Refer to Figure 1. Repeat on passenger side frame rail. Also drill out the corresponding holes in the plastic skid plate removed in Step 1.
3. Assemble Driver Side Push Beam Support Plate (62B) to the bottom of the driver side frame rail. Begin by inserting a Nut Bar (103) into the frame rail through either the slot in the side wall or the slot in the bottom wall. Align bottom hole in Push Beam Support Plate (62B) with hole in frame and Nut Bar (103). Replace the plastic skid plate over the bottom plate on Driver Side Push Beam Support Plate (62B). Insert one ½"-13 x 1-1/2" Hex Head Bolt (A) and one ½" Split Lock Washer (C). Repeat on the second hole in the bottom of Push Beam Support Plate (62B). Leave hardware finger tight.
4. Repeat Step 3 on the passenger side frame rail.
5. Install Push Beam Assembly (62) between Push Beam Support Plates (62A & 62B) using eight ½"-13 X 1-1/2" Hex Head Bolts (A) and eight ½"-13 Lock Nuts (B). For Light Duty Plow applications, the center of the receiver hole in Push Beam Assembly (62) should be 14-1/2" from the ground (refer to Figure 4). Leave hardware finger tight.
6. Tighten two ½"-13 x 1-1/2" Hex Head Bolts connecting Driver Side Push Beam Support Plate (62B) to the bottom of the frame rail. Repeat on the passenger side.
7. Drill a hole for a ½" bolt in the driver side frame rail outside wall through the upper hole in Driver Side Push Beam Support Plate (62B). Repeat on the inside frame rail side wall for the inside tab hole in Driver Side Push Beam Support Plate (62B). Repeat on the passenger side.

8. Install one ½"-13 x 4" Hex Head Bolt (D) and one ½"-13 Lock Nut in the upper holes in Driver Side Push Beam Support Plate (62B). Repeat on the passenger side.
9. Assemble Angle Bracket (75) to the back of Push Beam Assembly (62) using four ½"-13 X1-1/2" Hex Head Bolts (A) and four ½"-13 Lock Nuts (B). Leave hardware finger tight.
10. Insert Nut Plate (101) and Nut Plate (102) into the cross member through the large holes in the bottom of the cross member. Align the nut bars with the center hole and the two outer holes in the cross member.
11. Assemble the rear portion of Angle Bracket (75) to the truck's cross member using three ½" Split Lock Washers (C), two ½"-13 X 2" Hex Head Bolts (E) and one ½"-13 x 1-1/2" Hex Head Bolt (A). Begin by aligning one ½"-13 x 2" Hex Head Bolt (E) into the center hole in the bottom of Angle Bracket (75) and threading it into Nut Plate (101). Complete by inserting the remaining hardware into the two outer holes.
12. Tighten the remaining hardware beginning at the rear of Angle Bracket (75) and working forward.

Installation Notes:

No headlight adapter is required.

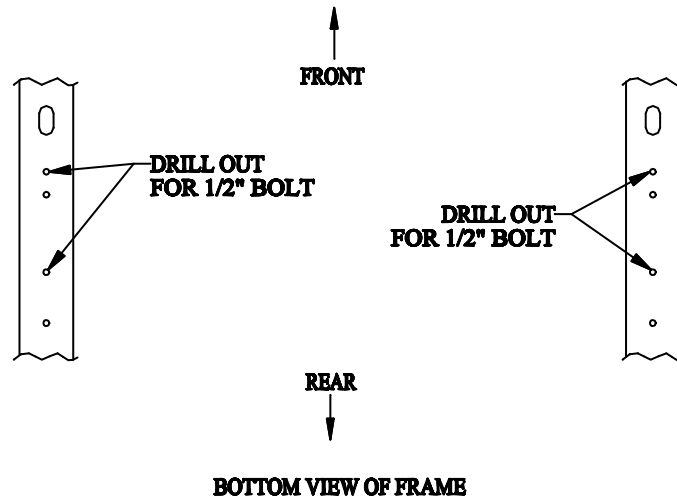


Figure 1

G10307

# 1998 & NEWER FORD RANGER SPORT DUTY UNDERCARRIAGE INSTALLATION PROCEDURE

REF. NO.	DESCRIPTION	PART NO.	QTY.
62	Push Beam Assembly, Sport Duty	PBA05253	1
62A	Push Beam Support Plate, Passenger Side	PBA05377	1
62B	Push Beam Support Plate, Driver Side	PBA05376	1
75	Angle Bracket	LTA05385	1
101	Nut Plate (1 Nut)	LTA05413	1
102	Nut Plate (2 Nuts)	LTA05387	1
103	Nut Bar	LTA05391	4
	FASTENER KIT, RANGER, 1998 & NEWER	HDW05390	1
Includes:			
A	1/2" - 13 x 1- 1/2" Hex Head Bolt	HDW01728	17
B	1/2" - 13 Hex Head Lock Nut	HDW01748	14
C	1/2" Split Lock Washer	HDW01732	7
D	1/2" - 13 x 4" Hex Head Bolt	HDW01780	2
E	1/2" - 13 x 2" Hex Head Bolt	HDW01755	2

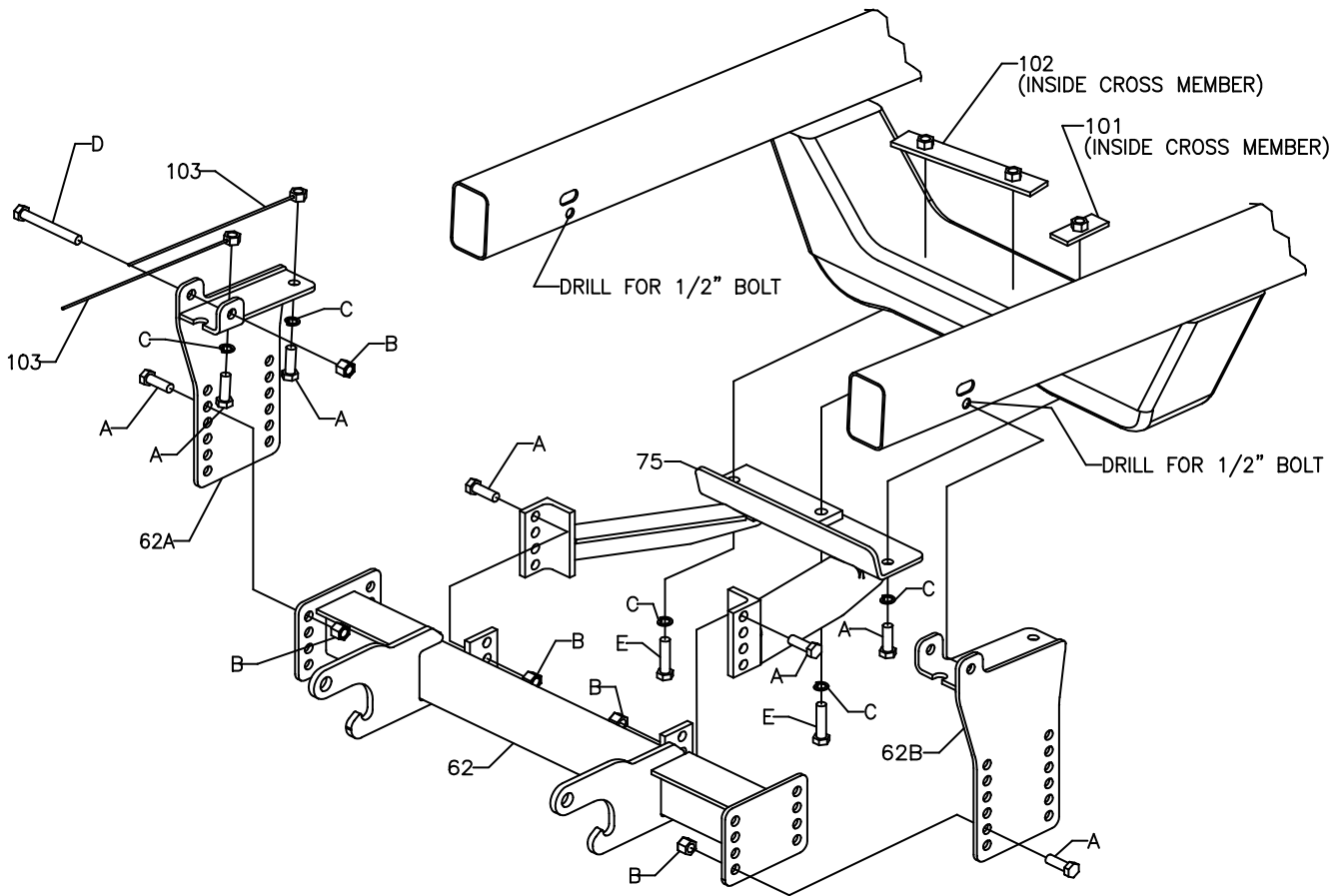
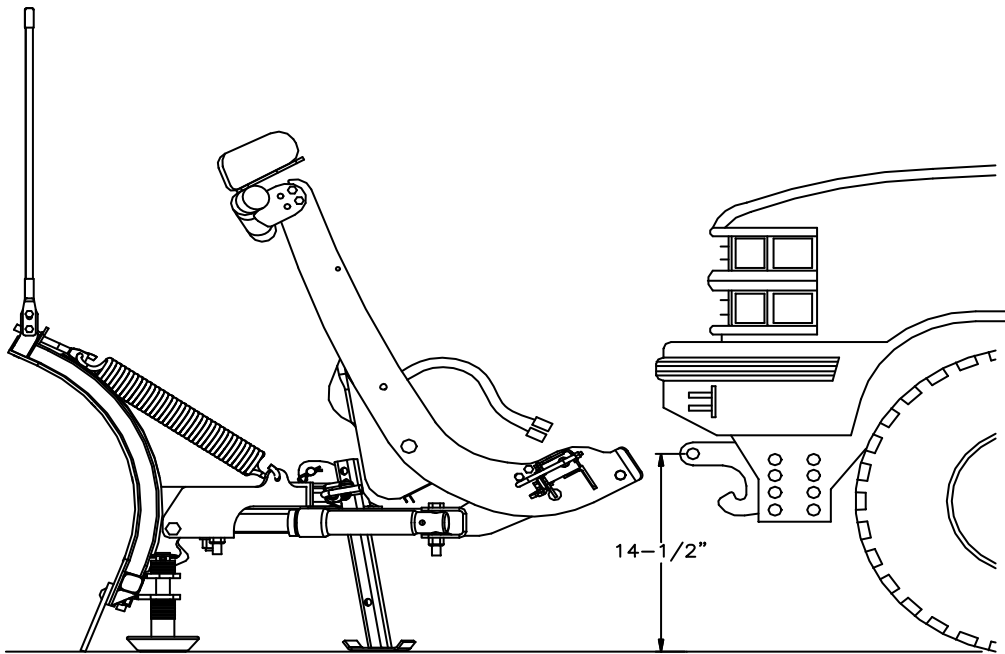


Figure 2

G10308

## RECOMMENDED PUSHBEAM HEIGHT



**Figure 3**

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 4**

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.