

BOSS PRODUCTS A Division of Northern Star Industries, Inc. P.O Box 787 Iron Mountain MI 49801-0787 www.bossplow.com

2002 & NEWER 1/2 TON DODGE SPORT DUTY UNDERCARRIAGE MOUNTING INSTRUCTIONS (PART NO. LTA05435)

PUSHING THE EDGE

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.

2002 & NEWER 1/2 TON DODGE SPORT DUTY UNDERCARRIAGE MOUNTING INSTRUCTIONS

The mounting procedure outlined below covers the 2002 & newer 1/2 Ton Dodge 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. Remove transfer case skid plate if applicable. Remove the plastic air dam from the bumper. Remove the mounting hardware connecting the bumper to the driver side of the frame while leaving the passenger side attached. Align the two vertical holes on Push Beam Support Plate (62B) with the bumper mounting holes on the outside of the frame. Attach Push Beam Support Plate (62B) to the frame using the existing Bolt Bar (BB) and existing Nuts (AA). If the vehicle is equipped with tow hooks the Push Beam Support Plate (62B) must be attached to the frame using 1/2"-13 X 5" Hex Head Bolts (G), 1/2" Flat Washers (H), and 1/2"-13 Nylon Lock Nuts (B) instead of the existing bolts. Adjust the bumper to its highest height before tightening the nuts. Insert Square Washer (103) into the frame of the truck through the Vertical Slot on the inside of the frame. Insert Bolt Bar (102) down through the Top Hole of the frame rail through Square Washer (103), through the bottom of the frame rail, and then through the aligned horizontal mounting hole on Push Beam Support Plate (62B). Install ¹/₂"-13 Hex Head Nylon Lock Nut (B) onto Bolt Bar (102). Make sure the driver side is secure to the frame and then repeat the process on the passenger side while leaving the driver side attached. Secure both plates before proceeding. NOTE: While Push Beam Support Plates (62A & 62B) have two mounting holes on the horizontal plate, only the single aligned hole will be utilized during installation.

2. For 2002 and 2003 model year vehicles, continue on to step 3. For 2004 model year vehicles, skip to step 4.

3. Insert Nut Plate (101) inside the frame crossmember by sliding it between the top of the frame crossmember and swing arm. Align the holes with the large oval holes in the bottom of the skid plate. Assemble Skid Plate Attachment (80) onto the vehicle's skid plate using 5/8" Split Lock Washers (F) and 5/8"-11 X 2" Hex Head Bolts (E). Center Skid Plate Attachment (80) and finger tighten the 5/8"-11 X 2" Hex Head Bolts (E).

4. Assemble Angle Brackets (75A & 75B) onto the outside of the tabs on the bottom of the Skid Plate Attachment (80) using two $\frac{1}{2}$ "-13 X 1-1/2" Hex Head Bolts (A) and $\frac{1}{2}$ "-13 Hex Head Nylon Lock Nuts (B) on each side. Finger tighten the assembly.

5. Assemble Push Beam Assembly (62) between Push Beam Support Plates (62A & 62B) using four $\frac{1}{2}$ "-13 X 1-1/2" Hex Head Bolts (A) and $\frac{1}{2}$ " -13 Hex Head Nylon Lock Nuts (B) on each side. NOTE: The proper height adjustment for Push Beam Assembly (62) is 14-1/2" from the ground to the center of the pin receiving hole (see Figure 2). Leave hardware finger tight. Assemble Angle Brackets (75A & 75B) onto the tabs on the back side of Push Beam Assembly (62) using two $\frac{1}{2}$ "-13 X 1-1/2" Hex Head Bolt, GR8 (C) and $\frac{1}{2}$ "-13 Hex Head Top Lock Nut, GRC, (D) on each side.

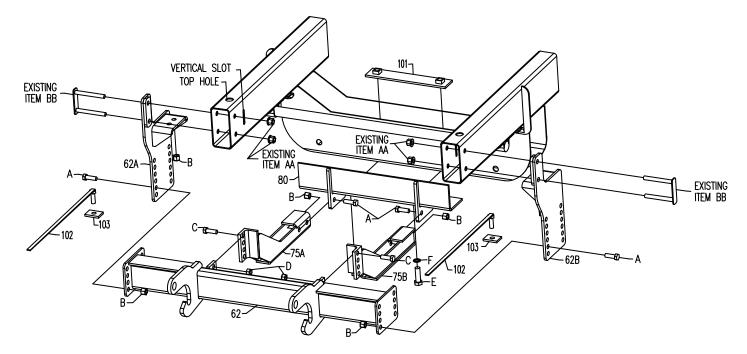
6. <u>For model year 2004 vehicles</u>, the frame crossmember does not have existing holes. Align the fully assembled undercarriage onto the frame crossmember. Make sure the Skid Plate Attachment (80) contacts the front of the frame crossmember and is centered. Use the existing holes in Skid Plate Attachment (80) to mark and drill two 11/16" holes in the frame crossmember. Insert Nut Plate (101) inside the frame crossmember by sliding it between the top of the frame crossmember and swing arm. Mount Skid Plate Attachment (80) using Nut Plate (101), 5/8" Split Lock Washers (F), and 5/8"-11 X 2" Hex Head Bolts (E).

7. With all components in place, begin tightening the hardware. Skid Plate Attachment (80) should be tightened first. Make sure Angle Brackets (75A & 75B) are attached to correct holes in Push Beam Assembly (62) tabs. Angle Brackets (75A & 75B) should be level with the ground. Tighten the remaining hardware.

8. With all undercarriage parts in place, securely fasten all mounting hardware. It is important that all fasteners be properly torqued (see Fig. 3) to assure a safe operating plow. Re-tighten all fasteners after 2 hours of plowing.

2002 & NEWER ½ TON DODGE SPORT DUTY UNDERCARRIAGE INSTALLATION PROCEDURE

REF. NO.	DESCRIPTION	PART NO.	QTY.
62	Push Beam Assembly	PBA05436	1
62A	Push Beam Support Plate, Passenger Side	LTA04880	1
62B	Push Beam Support Plate, Driver Side	LTA04879	1
75A	Angle Bracket, Passenger Side	LTA04877	1
75B	Angle Bracket, Driver Side	LTA04876	1
80	Skid Plate Attachment	LTA04878	1
101	Nut Plate	LTA04897	1
102	Bolt Bar	LTA04896	2
103	5/8" Square Washer	LTA04892	2
	FASTENER KIT, 2002 & UP DODGE 1/2 TON	HDW04899	1
Includes:			
A	1/2" – 13 x 1- 1/2" Hex Head Bolt	HDW01728	12
В	1⁄2" – 13 Hex Head Nylon Lock Nut	HDW01748	18
С	1⁄2" – 13 x 1- 1⁄2" Hex Head Bolt, GR8	HDW05553	4
D	1/2" – 13 Hex Head Top Lock Nut, GRC	HDW05554	4
E	5/8" – 11 x 2" Hex Head Bolt	HDW01731	2
F	5/8" Split Lock Washer	HDW03891	2
G	1/2" – 13 x 5" Hex Head Bolt	HDW05499	4
Н	1/2" Flat Washer	HDW05501	4



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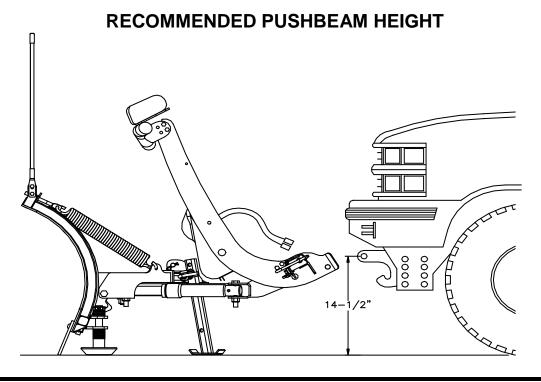


Figure 2

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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

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* 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. RE-TIGHTEN ALL FSTENERS AFTER 2 HOURS OF PLOWING.