

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

### 2003 & NEWER CHEVROLET C4500 RT3 UNDERCARRIAGE MOUNTING INSTRUCTIONS (PART NO. LTA05150B)

**PUSHING THE EDGE** 

MSC05154-3

## 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.

Always follow the vehicle manufacturers' recommendations relating to snowplow installation. 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.

#### 2003 & NEWER CHEVROLET C4500 RT3 UNDERCARRIAGE MOUNTING INSTRUCTIONS

The mounting procedure outlined below covers the 2003 and Newer Chevrolet C4500 4x2 and 4x4 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 the four bolts and nuts connecting the bumper, tow hook, and leaf spring bracket to the driver side of the frame. Remove the tow hook and replace the two rear bolts and nuts. Remove the bolt and nut connecting the leaf spring bracket to the bottom of the driver side of the frame. Install Driver Side Support Bracket Assembly (3L) inside of the driver side frame rail using 5/8"-11 x 3" Grade 8 Bolts (A) and 5/8"-11 Grade C Lock Nuts (B). In the bottom, slotted hole in Driver Side Support Bracket Assembly (3L), install  $\frac{1}{2}$ "-13 x 2" Grade 5 Bolt (C),  $\frac{1}{2}$ " Flat Washers (E), and  $\frac{1}{2}$ "-13 Grade 5 Lock Nut (D). Leave hardware finger tight. Repeat the process on the passenger side frame rail for Passenger Side Support Bracket (3R).

2. Remove the two inner existing bolts connecting the front cross member to the driver side frame rail. Install Driver Side Support Plate (2L) to Driver Side Support Bracket (3L) using 5/8"-11 x 2" Grade 5 Bolts (G) and 5/8"-11 Grade C Lock Nuts (B). Replace the two original bolts previously removed from the cross member through Driver Side Support Plate (2L). Install M20 x 2.5 Grade 10.9 Lock Nut (F) onto the existing leaf spring bolt. Note: Support Plates (2L & 2R) mount over the existing leaf spring bolt and nut; this hardware should NOT be removed. Leave hardware finger tight. Repeat the process on the passenger side for Passenger Side Support Plate (2R).

3. Remove the four bolts connecting the ABS Module to the driver side frame rail. Remove the existing bolt plate from the inside of the frame rail. Remove the two existing bolts in the bottom of the frame rail directly below the ABS Module. Install Driver Side Angle Bracket (4L) using the two original bolts from the bottom of the frame. One of the side frame holes for Driver Side Angle Bracket (4L) must be drilled out to a diameter of 9/16". After this is done, insert Bolt Bars (5) through the large access hole in the frame and insert into the mounting holes in Driver Side Angle Bracket (4L). Note: Bend the rod on Bolt Bar (5) to fish the bolt into place. With all four bolt bars in place, replace the ABS Module over Driver Side Angle Bracket (4L) and install ½" Split Lock Washers (H) and ½"-13 Grade B

Finished Nuts (I). Leave all hardware finger tight. Repeat the process on the passenger side frame rail for Passenger Side Angle Bracket (4R) but skip steps relating to the ABS Module.

4. Install Push Beam Assembly (1) between Support Plates (2L & 2R) using <sup>1</sup>/<sub>2</sub>"-13 x 2" Grade 5 Bolts (C) and <sup>1</sup>/<sub>2</sub>"-13 Grade 5 Lock Nuts (D). The front bolts must be installed so that the bolt head is on the inside and the nut is on the outside. This is to provide clearance for the plow's coupler. The height of Push Beam Assembly must be 15-1/2" from the ground to the center of the pin receiving hole (see Figure 2). It is possible that this height will not be achieved due to the low profile of the truck's bumper. If this is the case, the bumper should be notched to provide clearance around the push beam hooks. Be sure to make the cut wide enough to allow clearance for the side plates on the plow's coupler.

5. Tighten all hardware. Refer to Figure 3 for proper torque specifications.

6. Support Plate Assemblies (2L & 2R) may need to be trimmed up on 4X2 trucks to create desired ground clearance.

7. 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.

Note: Use Headlight Adapter Kit MSC04599 for Chevrolet C4500 and C5500 trucks. The yellow and Black wires must be swapped. Refer to manual MSC04749 for detailed installation instructions.

<b>REF. NO.</b> 1 2L 2R 3L 3R 4L 4R 5	<b>DESCRIPTION</b> Push Beam Assembly, RT3 Support Plate Assembly, Driver Side Support Plate Assembly, Passenger Side Support Bracket Assembly, Driver Side Angle Bracket Assembly, Driver Side Angle Bracket Assembly, Passenger Side Bolt Bar	<b>PART NO.</b> PBA05151 PBA05105 PBA05108 PBA05109 PBA05110 LTA05116 LTA05117 LTA05132	QTY. 1 1 1 1 1 1 7
Includes:	FASTENER KIT, C4500/5500	HDW05130	1
A	5/8"-11 x 3" Hex Head Bolt, GR 8	HDW05126	4
В	5/8"-11 Oval Top Lock Nut, GR C	VHD07433	4
С	1/2"-13 x 2" Hex Head Bolt, GR 5	HDW01755	14
D	1⁄2"-13 Oval Top Lock Nut, GR B	HDW05597	14
E	1⁄2" Flat Washer	HDW05501	4
F	M20 x 20.5 Oval Top Lock Nut, GR 10.9	HDW05131	2
G	5/8"-11 x 2" Hex Head Bolt, GR 5	HDW01731	4
H	1/2" Split Lock Washer	HDW01732	7
I	<sup>1</sup> ⁄ <sub>2</sub> "-13 Finished Nut, GR 5	HDW02410	7

#### 2003 & NEWER CHEVROLET C4500 RT3 UNDERCARRIAGE INSTALLATION PROCEDURE

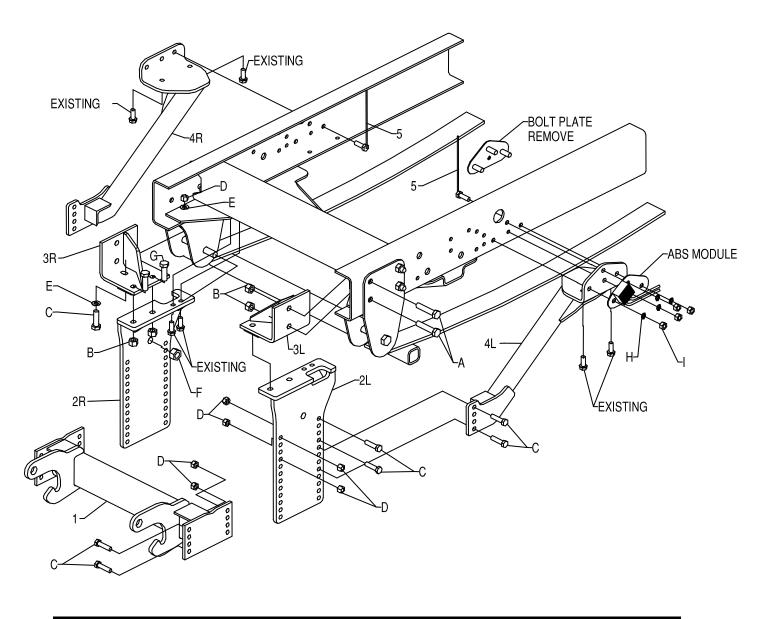


Figure1

G10256

# Figure 2 GUIDE TO RECOMMENDED ASSEMBLY TORQUE

**RECOMMENDED PUSHBEAM HEIGHT** 

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

G10155

\* 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 FASTENERS AFTER 2 HOURS OF PLOWING.