



**A Division of The Toro Company**

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ISO 9001:2008 REGISTERED

bossplow.com

**1999 - 2010  
GENERAL MOTORS 3/4 & 1 TON  
RT3 UNDERCARRIAGE  
MOUNTING INSTRUCTIONS  
(PART NO. LTA04767B)**

# **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.

## **1999 - 2010 GENERAL MOTORS 3/4 & 1 TON RT3 UNDERCARRIAGE MOUNTING INSTRUCTIONS**

The mounting procedure outlined below covers the 1999 - 2010 General Motors 3/4 & 1 ton 4 x 4 truck. 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 six mounting bolts being used on the two tow hooks and position the PUSH BEAM SUPPORT PLATES (Ref. 2L and R, Fig. 1) to the front frame rails of the truck. Use M12-1.75 x 40mm hex head bolts (I), 1/2" split lock washers (J) and 1/2" flat washers (M) to bolt the PUSH BEAM SUPPORT PLATES through the frame rail to the tow hooks (see Fig. 1). With both support plates in place two slots should be cut in the air dam for clearance of the support plate bottom plates (Ref. 2L and R). Fasteners should only be finger tight.

NOTE: For 07 and newer applications use 1/2"-13X5 hex head bolts (N), and 1/2"-13 self locking nuts (D) in the horizontal holes of existing tow hooks. Thread bolt puller (99) on 1/2"-13x1-1/2" grade 5 hex head bolt (A) with 1/2" split lock washer (J). Feed bolt puller (99) through frame rail and into rear hole of PUSH BEAM SUPPORT PLATE. Add 1/2" flat washers (M), 1/2" split lock washer (J), and 1/2"-13 full nut (O). Use M12-1.75 x 40mm hex head bolts (I), 1/2" split lock washers (J) and 1/2" flat washers (M) for front hole of PUSH BEAM SUPPORT PLATE. Fasteners should only be finger tight.

2. Remove the five rear existing bolts holding the plastic skid plate in place on the vehicle. Use M10-1.5 x 40mm hex head bolts (G), M10 lock washers (H), 5/8"-11x2" hex head bolts (E), 5/8"-11 self locking nuts (F), 5/8" lock washer (K), and the 5/8"-11 nut (L) to mount the ANGLE BRACKET (Ref. 3, Fig. 1) into place on the inside of the skid plate. The skid plate will have to be cut for clearance of the 5/8"-11 nut and 5/8" washer. Bolts should only be finger tight.

3. Bolt PUSH BEAM (Ref. 1, Fig. 1) in place using 1/2"-13x1-1/2" grade 5 hex head bolts (A), 1/2"-13x1-1/2" grade 8 hex head bolts (C), and nylon lock nuts (B) and grade C (D) nuts provided. To achieve the proper push beam height the push beam will need to be pushed up into the air dam causing deformation of the plastic. Fasteners should only be finger tight. NOTE: The proper height adjustment for the PUSH BEAM is approximately 15-1/2" from the ground to the center of the PUSH BEAM pin-receiving hole (See Figure 2).

4. 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.

# 1999 - 2010 ¾ & 1 TON GENERAL MOTORS RT3 UNDERCARRIAGE INSTALLATION PROCEDURE

REF. NO.	DESCRIPTION	PART NO.	QTY.
1	Push Beam Assembly	PBA04373	1
2R	Push Beam Support Plate (RH)	PBA15555	1
2L	Push Beam Support Plate (LH)	PBA15556	1
3	Angle Bracket	LTA15552	1
99	Bolt Puller	MSC09670	1
	FASTENER KIT, CHEVY ¾ TON 99	HDW05582	1
Includes:			
A	½" – 13 x 1- ½" Gr 5 Hex Head Bolt	HDW01728	8
B	½" – 13 Gr B Oval Top Lock Nut	HDW01748	8
C	½" – 13 x 1- ½" Gr 8 Hex Head Bolt YZN	HDW05553	6
D	½" – 13 Gr C Oval Top Lock Nut YZN	HDW05554	6
E	5/8"-11 x 2" Gr 8 Hex Head Bolt	HDW01731	3
F	5/8"-11 Gr B Oval Top Lock Nut	HDW01709	2
G	M10-1.5 x 40mm Gr 10.9 Hex Head Bolt	HDW05594	2
H	M10 Lock Washer	HDW05595	2
I	M12-1.75 x 40mm Gr 10.9 Hex head Bolt	HDW05584	6
J	1/2" Split Lock Washer	HDW01732	10
K	5/8" Lock Washer	HDW03891	1
L	5/8"-11 Gr 5 Nut	HDW05596	1
M	½" Flat Washer	HDW01729	6
N	½"-13 X 5 Gr5 YZN HHCS	HDW05499	2
O	Nut, 1/2"-13, Fin, Full, YZN	HDW02410	2

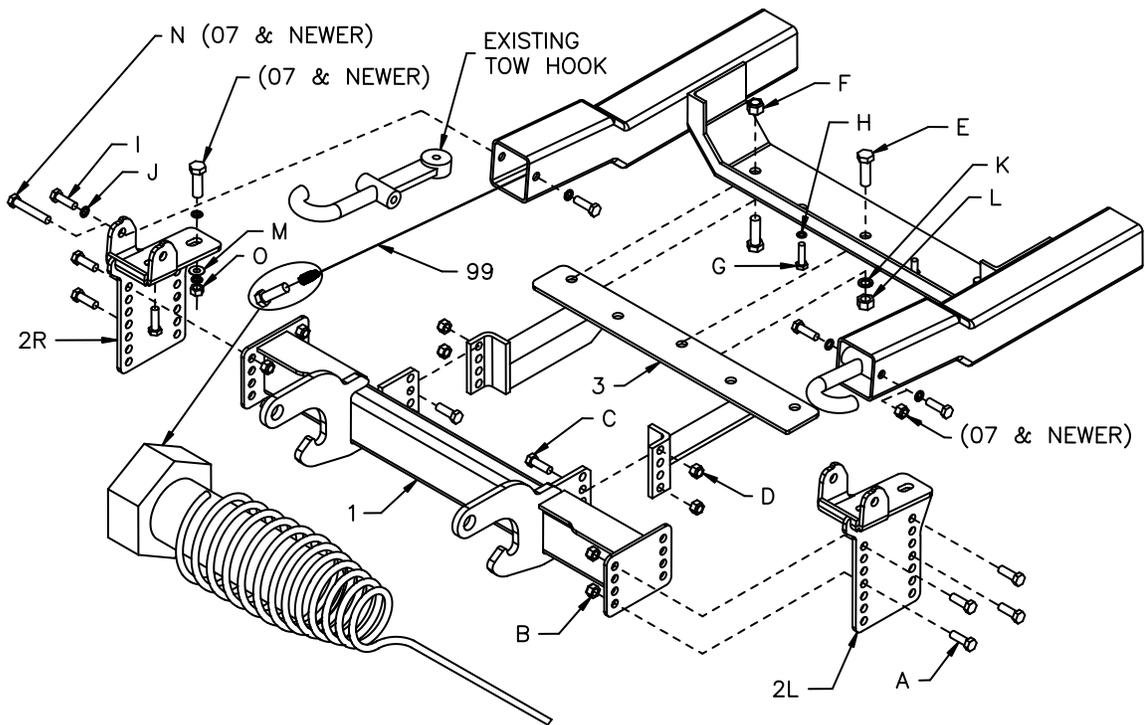
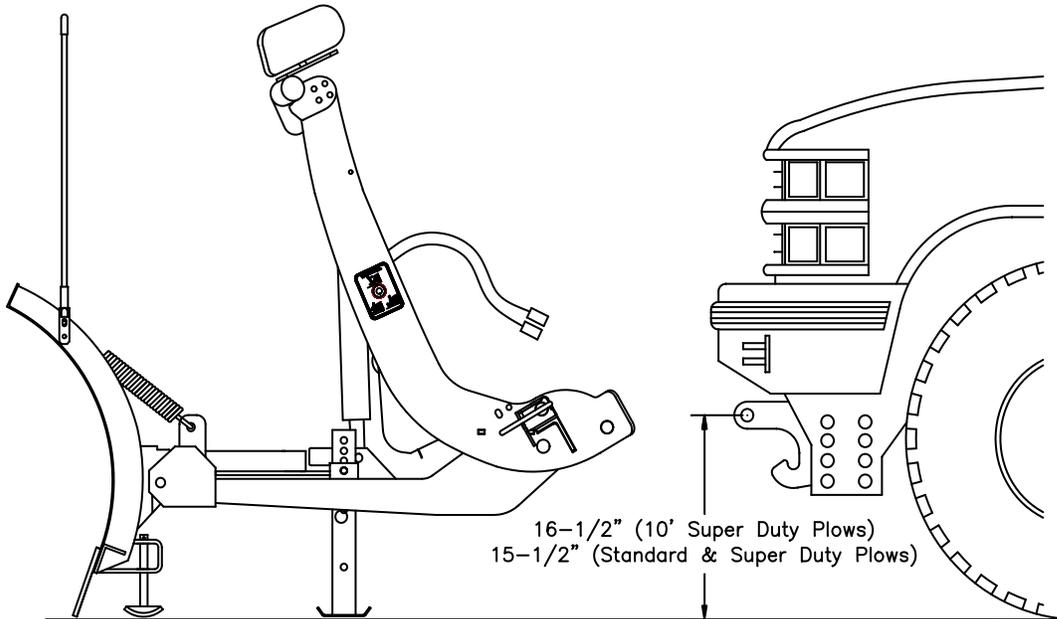


Figure 1

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## RECOMMENDED PUSHBEAM HEIGHT



**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 FASTENERS AFTER 2 HOURS OF PLOWING.