



**A Division of The Toro Company**

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ISO 9001:2008 REGISTERED

bossplow.com

**2007 & NEWER  
GENERAL MOTORS ½ TON  
RT3 UNDERCARRIAGE  
MOUNTING INSTRUCTIONS  
(PART NO. LTA09001C)**

# **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.

## **2007 & NEWER GENERAL MOTORS ½ TON RT3 UNDERCARRIAGE MOUNTING INSTRUCTIONS**

The mounting procedure outlined below covers 2007 & Newer ½ ton 4 X 4 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 front bumper on SUV's or trucks if notching is required. Remove existing tow hook bolts. Position PUSH BEAM SUPPORT PLATES (62A & 62B) to the front frame rails of the truck.
2. Use ½"-13 x 5-½" GR5 Hex Head Bolts (I), ½"-13 x 1-½" GR5 Hex Head Bolts (A), ½"-13 Nylon Lock Nuts (C) and M12x1.75x50mm Hex Flange Bolt (J) to fasten PUSH BEAM SUPPORT PLATES (62A & 62B) in place (see Fig. 3). Drill frame rail for the additional left hand bolt position on PUSH BEAM SUPPORT PLATES. Use ½"-13 x 1-½" GR5 Hex Head Bolts (A) in drilled hole. Fasteners should only be finger tight.
3. For 2016 model, remove middle bolt from Factory Support Bracket (shown in grey in Figure 3), hold ANGLE BRACKET (75A & 75B) in position and reinstall bolt through matching hole in rear of ANGLE BRACKET. Using ½"-13 x 2" GR5 Hex Head Bolts (E) and ½"-13 Nylon Lock Nuts (D) loosely mount ANGLE BRACKETS to PUSH BEAM SUPPORT PLATES. Mark and drill rear mounting hole. Fasten the ANGLE BRACKETS to frame with ½"-13 x 1-½" GR5 Hex Head Bolts (A), ½" Split Lock Washers (C), ½"-13 Hex Full Nuts (G), use Bolt Pullers to guide bolts through frame. Bolts should only be finger tight.
4. Some 2015 models may have frame changes present on the 2016 without the additional Factory Support Bracket. For these trucks, use the provided M14x80MM Bolt (K) and SPACER PLATE (99) to attach the ANGLE BRACKET to the threaded hole in the frame.
5. For earlier models, using ½"-13 x 2" GR5 Hex Head Bolts (E) and ½"-13 Nylon Lock Nuts (D) loosely mount ANGLE BRACKETS (75A & 75B) to PUSH BEAM SUPPORT PLATES. Hold rear of ANGLE BRACKET tight against frame then mark and drill rear mounting holes. Insert the

provided SPACER PLATE (99) between the frame and the ANGLE BRACKET. Fasten the ANGLE BRACKETS to frame with ½"-13 x 1-½" GR5 Hex Head Bolts (A), ½" Split Lock Washers (C), ½"-13 Hex Full Nuts (G), ⅝"-11 x 2" GR5 Hex Head Bolts (B), ⅝" Split Lock Washers (H), ⅝"-11 Hex Full Nuts (F), use Bolt Pullers to guide bolts through frame. Bolts should only be finger tight.

6. Notch bumper on SUV's or trucks with a molded bumper using template in Figure 1 for 2007-2014. Notching of bumper rear support may be necessary for some newer models refer to Figure 2. NOTE: THIS IS ONLY A GUIDE. SOME VEHICLES MAY NOT REQUIRE NOTCHING.

7. Re-install bumper on vehicle if necessary.

8. Bolt PUSH BEAM (62) to PUSH BEAM SUPPORT PLATES (62A & 62B) using ½"-13 x 1-½" GR5 Hex Head Bolts (A) in front holes, and ½"-13 x 2" GR5 Hex Head Bolts (E) in rear holes and ½"-13 Nylon Lock Nuts (D). Fasteners should only be finger tight. NOTE: The proper height adjustment for the PUSH BEAM is 15-½" from the ground to the center of PUSH BEAM (62) pin-receiving hole (See Figure 4). Bumper trimming can be reduced or eliminated by lowering PUSH BEAM, however, lowering PUSH BEAM more than 1" may affect plow performance.

9. With all undercarriage parts in place, securely fasten all mounting hardware. It is important that all fasteners be properly torqued (See Figure 5) to assure a safe operating plow. Re-tighten all fasteners after 2 hours of plowing.

#### Installation Notes:

A. Use headlight adapter MSC09003 for all Chevy and GMC ½ Ton trucks and Chevy SUV's from 2007 to 2013 with 4 headlamp system. Use headlight adapter MSC09044 for 2014 and up. Use headlight adapter MSC09993 for GMC SUV's with 2 headlamp system.

B. Power for the turn signals is taken directly from the battery using the relays built into the headlight adapters. No extra relay kit is needed.

## BUMPER TEMPLATE (For Reference Only)

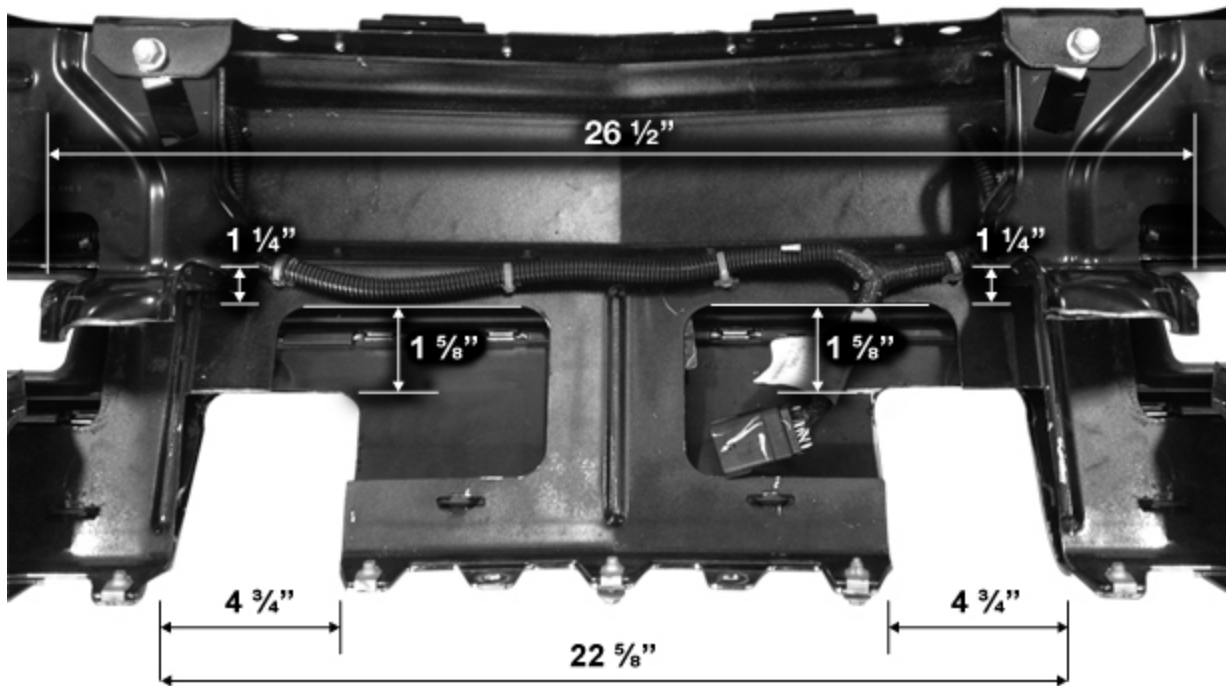
This is only a guide for SUV's or trucks (2007-2013) with a molded bumper some vehicles may not require notching



**Figure 1** – Front View of Bumper (2007-2013)

G10454

This is only a guide for SUV's or trucks (2014 & Newer), some vehicles may not require notching.



**Figure 2 – Rear View of Bumper (2014+)**

G10808

REF. NO.	DESCRIPTION	PART NO.	QTY.
62	Push Beam Assembly	PBA09042	1
62A	Push Beam Support Plate, Passenger Side	PBA09012	1
62B	Push Beam Support Plate, Drivers Side	PBA09008	1
75A	Angle Bracket, Passenger Side	LTA09036	1
75B	Angle Bracket, Driver Side	LTA09035	1
99	Angle Bracket Spacer Plate	LTA08978	2
	FASTENER KIT, CHEVY 1/2 TON, 07&UP	HDW08976	1
Includes:			
A	1/2" - 13 x 1- 1/2" GR5 Hex Head Bolt	HDW01728	8
B	5/8" - 11 x 2" GR5 Hex Head Bolt	HDW01731	2
C	1/2" Split Lock Washer	HDW01732	2
D	1/2" - 13 Nylon Lock Nut	HDW01748	12
E	1/2" - 13 x 2" GR5 Hex Head Bolt	HDW01755	4
F	5/8" - 11 Hex Full Nut	HDW01777	2
G	1/2" - 13 Hex Full Nut	HDW02410	2
H	5/8" Split Lock Washer	HDW03891	2
I	1/2" - 13 x 5-1/2" GR5 Hex Head Bolt	HDW05525	2
J	M12 x 1.75 x 50mm Hex Flange Head Bolt	HDW08977	2
K	M14 x 2.0 x 80mm Hex Flange Head Bolt	HDW19099	2

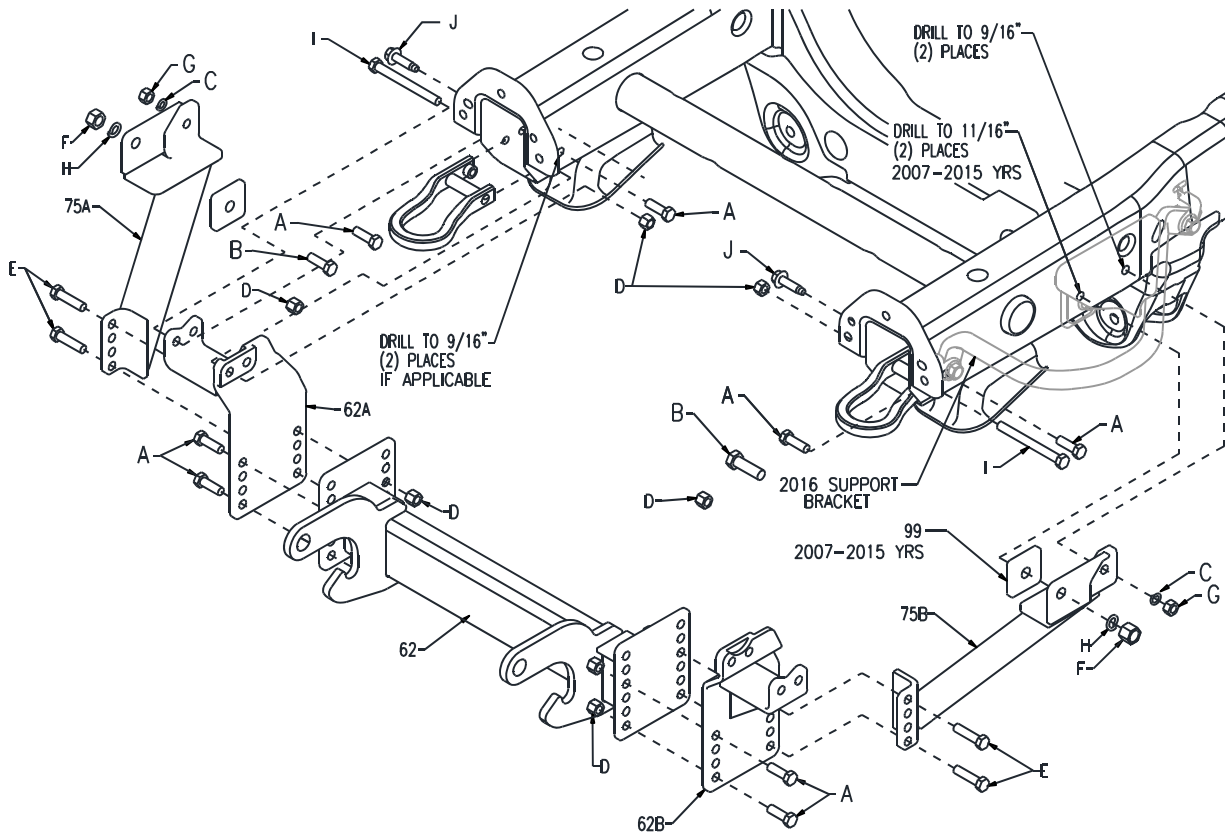


Figure 3

G10810

## RECOMMENDED PUSHBEAM HEIGHT

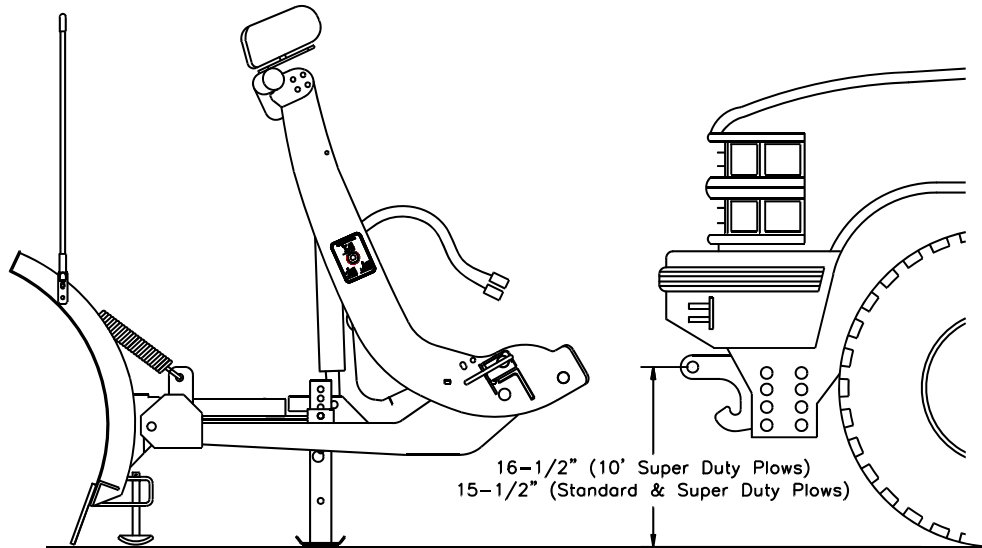
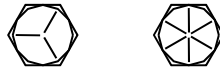


Figure 4

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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 5

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. RE-TIGHTEN ALL FASTENERS AFTER 2 HOURS OF PLOWING.