



A Division of The Toro Company

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ISO 9001:2008 REGISTERED

bossplow.com

**1999 - 2007 FORD SUPER DUTY
RT3 UNDERCARRIAGE
MOUNTING INSTRUCTIONS
(PART NO. LTA03654C)**

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.

1999-2007 FORD SUPER DUTY RT3 UNDERCARRIAGE MOUNTING INSTRUCTIONS

The mounting procedure outlined below covers 1999-2007 FORD SUPER DUTY $\frac{3}{4}$ and 1 ton. 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 front bumper and air deflector plates from the front frame rails.

If the vehicle is equipped with the Ford BlockerBeam™ (Refer to Fig. 2), it must be removed. If the vehicle model year is 1999 through 2004, the BlockerBeam™ support brackets should remain on the frame rails. If the vehicle model year is 2005 or later, the support brackets should be removed with the BlockerBeam™. Keep the BlockerBeam™; if PUSH BEAM (62) is ever removed from the truck the BlockerBeam™ must be re-installed.

NOTE: Ford has issued the following warning: "Removing the BlockerBeam™ without installing snow plow attachment hardware may effect air bag deployment in a crash. Do not operate the truck unless either the BlockerBeam™ or snow plow attachment hardware is installed on the vehicle."

2. Position PUSH BEAM SUPPORT PLATES (62A & 62B) to the front frame rails directly behind the bumper mounting brackets. Using $\frac{1}{2}$ " – 13 x 1-1/4" Carriage Bolts (D) and $\frac{1}{2}$ " – 13 Self-Locking Nuts (B) bolt PUSH BEAM SUPPORT PLATES (62A & 62B) in place.
3. Bolt UPPER SUPPORT BRACKETS (62C & 62D) to the top two holes of PUSH BEAM SUPPORT PLATES (62A & 62B) using $\frac{1}{2}$ " - 13 x 1 1/2" Hex Head Bolts (A) and $\frac{1}{2}$ " – 13 Self-Locking Nuts (B). Transfer punch the two lower holes on PUSH BEAM SUPPORT PLATES (62A & 62B) and UPPER SUPPORT BRACKETS (62C & 62D) and drill 9/16" diameter holes into the frame rail. Secure with $\frac{1}{2}$ " - 13 x 1 1/2" Hex Head Bolts (A) and $\frac{1}{2}$ " – 13 Self-Locking Nuts (B).
4. Bolt PUSH BEAM (62) in place using $\frac{1}{2}$ " - 13 x 1 1/2" Hex Head Bolts (A), $\frac{1}{2}$ " - 13 x 2" Hex Head Bolts (C) and $\frac{1}{2}$ " – 13 Self-Locking Nuts (B) provided (a total of 4 nuts and bolts per end). The 2" bolts are for the back of PUSH BEAM (62) where the bolt must also pass through ANGLE BRACKETS (75A & 75B). NOTE: the proper height adjustment for PUSH BEAM (62) is approximately 15-1/2" from the ground to

the center of the PUSH BEAM (62) pin-receiving hole (see Fig. 4).

5. Install RIGHT ANGLE BRACKET (75A) and LEFT ANGLE BRACKET (75B) from the mounting points on PUSH BEAM SUPPORT PLATES (62A & 62B) to their respective positions on the truck frame. For 1999 through 2005 model year vehicles, ANGLE BRACKETS (75A & 75B) may be bolted directly to the bottom of the frame using $\frac{1}{2}$ " - 13 x 1-1/2" Hex Head Bolts (A) and $\frac{1}{2}$ " - 13 Self-Locking Nuts (B) provided. For 2005 and later model year vehicles, un-bolt the swaybar from the bottom of the frame. Remove the swaybar bracket and use ANGLE BRACKETS (75A & 75B) to secure the swaybar to the frame. You will need to slide the rubber swaybar bushing outward on the swaybar. Be sure that the rubber bushing is centered in ANGLE BRACKETS (75A & 75B) and is properly seated against ANGLE BRACKETS (75A & 75B) and the bottom of the frame (Refer to Fig. 1). Tighten the hardware in the bottom of ANGLE BRACKETS (75A & 75B) before proceeding to step 6.

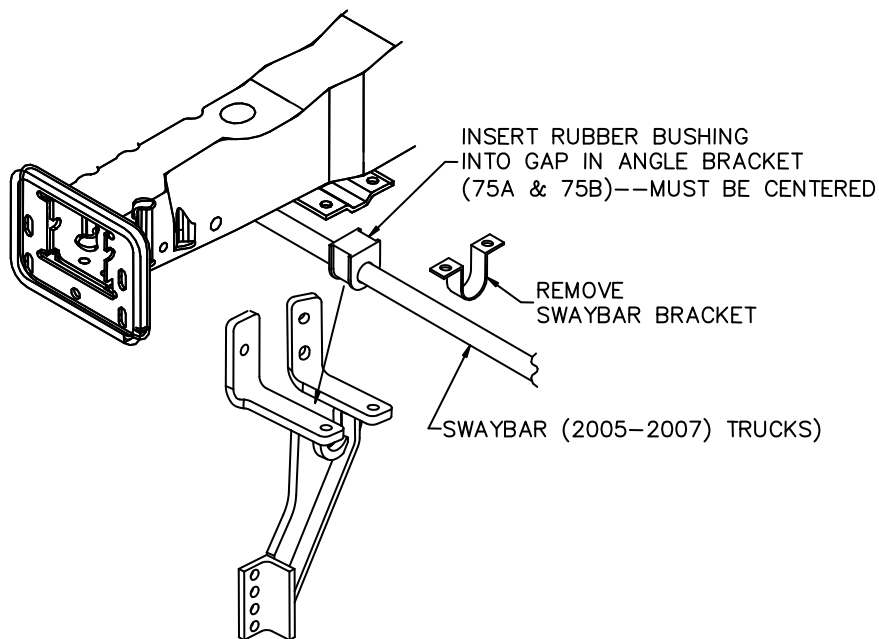


Figure 1

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6. Transfer punch the three holes in each ANGLE BRACKET (75A & 75B) to the sidewall of the frame and drill to 9/16 diameter. Assemble one $\frac{1}{2}$ " - 13 x 2" hex head bolt (C) onto one BOLT PULLER (99). Insert the wire end of the BOLT PULLER (99) into the Driver Side frame and feed it through the rear most hole you drilled in the frame. While holding the bolt in place, back-thread BOLT PULLER (99) off the bolt. Using $\frac{1}{2}$ " - 13 Full Nuts (E), $\frac{1}{2}$ " Split Lock Washers (F) and the $\frac{1}{2}$ " - 13 x 2" hex head bolt you have just inserted into the frame, bolt each ANGLE BRACKET (75A & 75B) to the frame. Use $\frac{1}{2}$ " Flat Washer (G) on slotted hole. For 2005 and later model year vehicles, install BUMPER BRACE (80A & 80B) in the forward hole in ANGLE BRACKETS (75A & 75B) and bolt the bumper side bracket to this using $\frac{1}{2}$ " - 13 Hex Head Bolt (A), $\frac{1}{2}$ " - 13 Self Locking Nut (B), and $\frac{1}{2}$ " Flat Washer (G). Additional $\frac{1}{2}$ " - 13 x 1 1/2" hex head bolts and 1/2" - 13 nuts are included for other applications and will be left over.
7. Re-attach the bumper and air deflector using the original bumper hardware and BUMPER BRACKET SPACER (90).
8. With all undercarriage parts in place, securely fasten all mounting hardware. It is important that all

fasteners be properly torqued (see Fig. 5) to assure a safe operating plow. Re-tighten all fasteners after 2 hours of plowing.

Note: For 2005 and later model year vehicles, use Headlight Adapter Kit MSC08839.

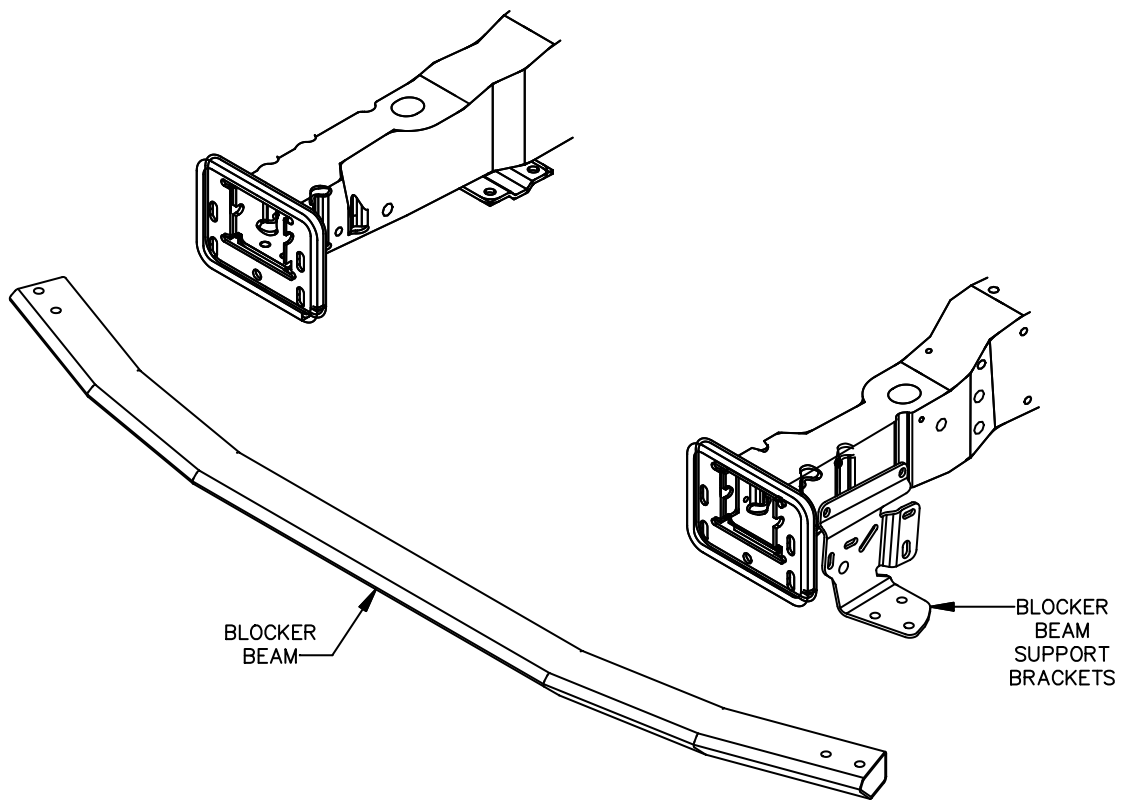


Figure 2

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1999-2007 FORD SUPER DUTY UNDERCARRIAGE INSTALLATION PROCEDURE

REF. NO.	DESCRIPTION	PART NO.	QTY.
62	Push Beam Assembly	PBA04579	1
62A	Push Beam Support Plate (RH)	PBA04122	1
62B	Push Beam Support Plate (LH)	PBA04123	1
62C	Upper Support Bracket (RH)	PBA04124	1
62D	Upper Support Bracket (LH)	PBA04125	1
75A	Angle Bracket (RH)	LTA05645	1
75B	Angle Bracket (LH)	LTA05640	1
80A	Bumper Brace (RH)	LTA05648	1
80B	Bumper Brace (LH)	LTA05650	1
90	Bumper Bracket Spacer	LTA09736	2
99	Bolt Puller	MSC09670	2
	FASTENER KIT, FORD 99	HDW05572	1
Includes:			
A	1/2" – 13 X 1-1/2" Hex Head Bolt, GR5 ZN	HDW01728	30
B	1/2" – 13 Hex Head Self Locking Nut, GR5 ZN	HDW01748	40
C	1/2" – 13 X 2" Hex Head Bolt, GR5 ZN	HDW01755	12
D	1/2" – 13 X 1-1/4" Carriage Bolt, Short Neck, GR5 ZN	HDW05633	4
E	1/2"-13 Hex Head Full Nut, GR5, ZN	HDW02410	6
F	1/2" Split Lock Washer, ZN	HDW01732	6
G	1/2" SAE Flat Washer, ZN, Hardened	HDW01729	2

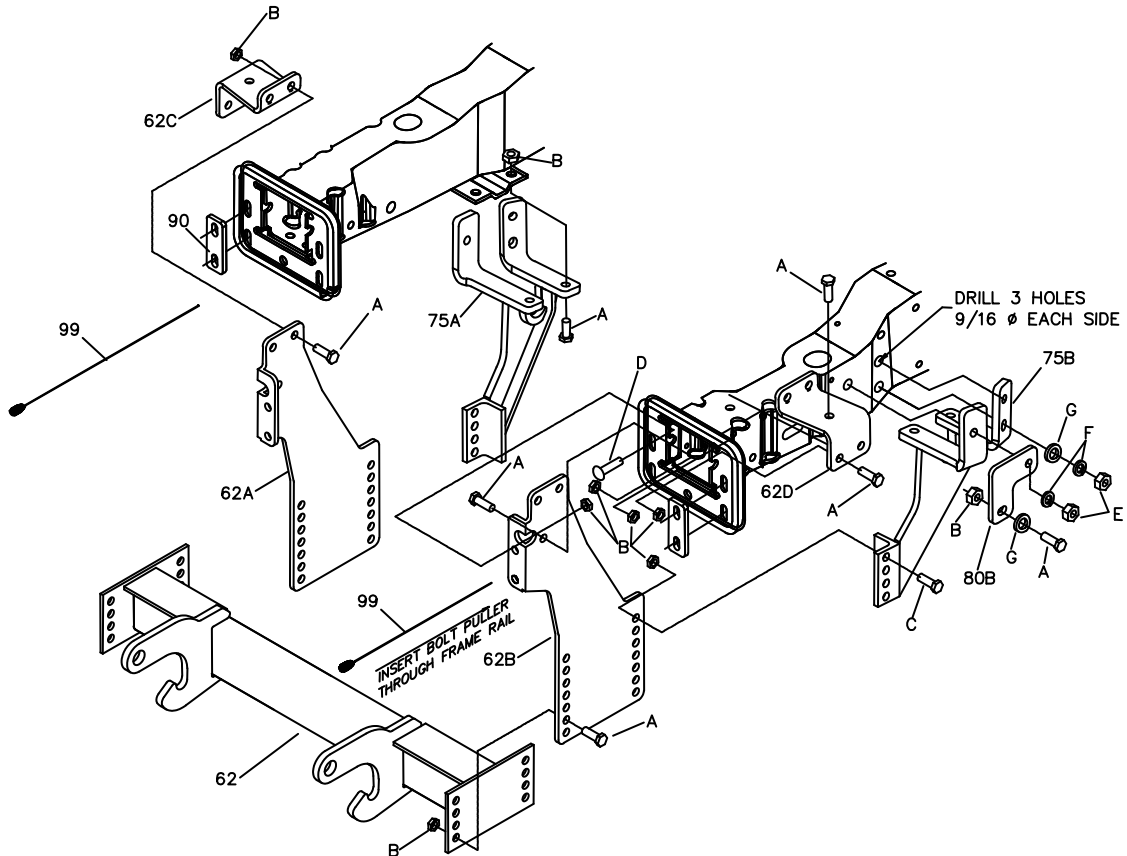


Figure 3

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RECOMMENDED PUSHBEAM HEIGHT

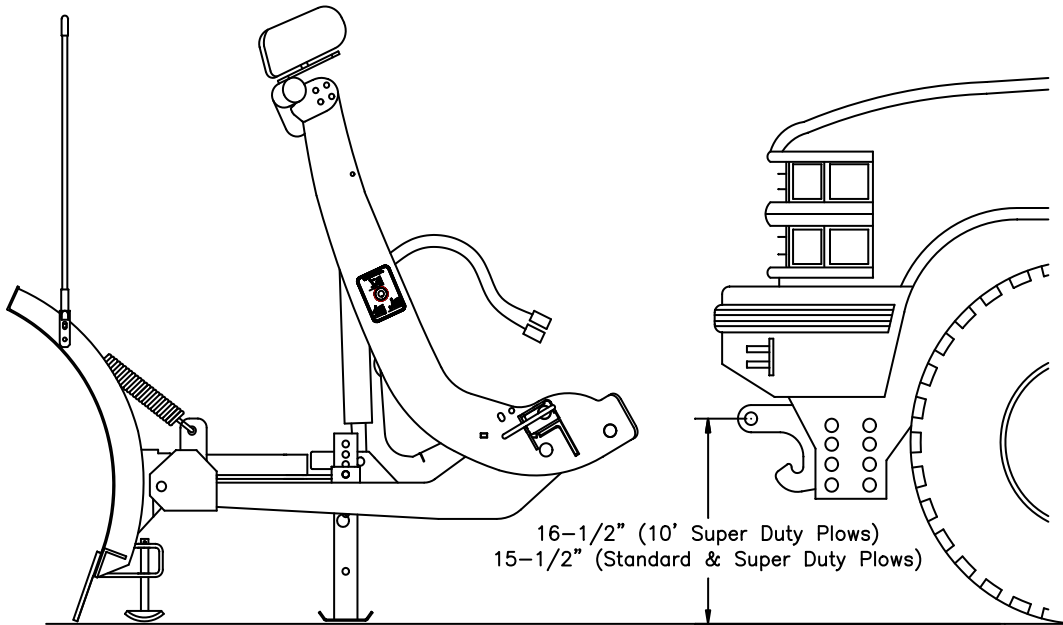


Figure 4

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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

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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.