

BOSS PRODUCTS
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**1981 – 1991 FORD F150, F250, & F350
RT3 UNDERCARRIAGE
MOUNTING INSTRUCTIONS
(PART NO. LTA03674)**

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.

1981 – 1991 FORD F150, F250, & F350 RT3 UNDERCARRIAGE MOUNTING INSTURCTIONS

The mounting procedure outlined below covers FORD F150, F250 and F350 trucks with gasoline engines built between 1981 and 1991. 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.
2. Position the PUSH BEAM SUPPORT PLATES (Ref. 62A and 62B, Fig. 1) on the frame horn.

NOTE:

Some vehicles are equipped with an evaporator canister that may interfere with the undercarriage assembly. Relocate the canister to a higher position on the wheel well, making sure the port end of the canister is up.

If the vehicle is equipped with an underslung stabilizer bar, it will need to be removed to install the snowplow.

FOR 1987 – 1991 VEHICLES:

Insert a ½" – 13 x 2" HEX HEAD BOLT with a ½" FLAT WASHER through the lower front hole of the PUSH BEAM SUPPORT PLATE and frame. Install a ½" FLAT WASHER and ½" – 13 x 2" HEX HEAD BOLT, ½" FLAT WASHER, and ½" – 13 HEX HEAD SELF LOCKING NUT, attach the bumper and PUSH BEAM SUPPORT PLATE to the side of the frame as shown in Figure 1.

FOR 1981 – 1986 VEHICLES:

Using the PUSH BEAM SUPPORT PLATE as a template, drill two 9/16 holes into the side of the frame. With a 1/2" – 13 x 2" HEX HEAD BOLT, 1/2" FLAT WASHES, and 1/2" – 13 HEX HEAD SELF LOCKING NUT, attach the PUSH BEAM SUPPORT PLATE to the side of the frame as shown in Figure 1. Position the bumper over the PUSH BEAM SUPPORT PLATE to the side of the frame as shown in Figure 1. Position the bumper over the PUSH BEAM SUPPORT PLATE and attach to the front of the frame using 1/2" – 13 x 2" HEX HEAD BOLTS, 1/2" FLAT WASHERS and 1/2" – 13 HEX HEAD SELF LOCKING NUTS as shown in Figure 1.

3. Attach the CROSS MEMBER WELDMENT (Ref. 62C, Fig. 1) to the PUSH BEAM SUPPORT PLATES using 1/2" – 13 x 1- 1/2" HEX HEAD BOLTS, and 1/2" – 13 HEX HEAD SELF LOCKING NUTS.

4. Position the PUSH BEAM (Ref. 62, Fig. 1) between the PUSH BEAM SUPPORT PLATES. Use 1/2" – 13 x 1- 1/2" HEX HEAD BOLTS for the rear attachment of the PUSH BEAM and PUSH BEAM SUPPORT PLATES.

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).

5. Position the ANGLE BRACKET (RH) (Ref. 75R, Fig. 1) between the frame rail and PUSH BEAM SUPPORT PLATE. Bolt the ANGLE BRACKET to the front of the PUSH BEAM and the PUSH BEAM SUPPORT PLATE. Bolt in place using 1/2" – 13 x 2" HEX HEAD BOLTS and SELF LOCKING NUTS.

6. Push the frame end of the ANGLE BRACKET tightly against the frame, then drill two 11/16 holes into the frame using the ANGLE BRACKET as a template to locate the holes. Bolt the ANGLE BRACKET to the frame using 5/8" – 11 x 2" HEX HEAD BOLTS, and NUT PLATE (Ref. 99R, 99L, Fig. 1) provided.

7. Torque all fasteners to the values specified in Figure 3 in the following order:

1. Bumper Mounting Bolts (Front)
2. Bumper Mounting Bolts (Side)
3. Angle Bracket to Frame
4. Cross Member Weldment
5. Push Beam

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. Retighten all fasteners after 2 hours of plowing.

1981 – 1991 FORD F150, F250, & F350 RT3 UNDERCARRIAGE INSTALLATION PROCEDURE

REF. NO.	DESCRIPTION	PART NO.	QTY.
62	Push Beam Assembly	PBA03644	1
62A	Push Beam Support Plate (RH)	LTA03580	1
62B	Push Beam Support Plate (LH)	LTA03586	1
62C	Cross Member Weldment	LTA03588	1
75R	Angle Bracket (RH)	LTA03591	1
75L	Angle Bracket (LH)	LTA03595	1
99R	Nut Plate (Right Hand)	LTA03311	1
99L	Nut Plate (Left Hand)	LTA03310	1
	FASTENER KIT, FORD 81-91	HDW03597	1
Includes:			
A	1/2" – 13 x 1- 1/2" Hex Head Bolt	HDW01728	14
B	1/2" – 13 x 2" Hex Head Bolt	HDW01755	12
C	1/2" – 13 Hex Head Self Locking Nut	HDW01748	26
D	5/8" – 11 x 2" Hex Head Bolt	HDW01731	4
E	1/2" Hardened Washer	HDW05501	12

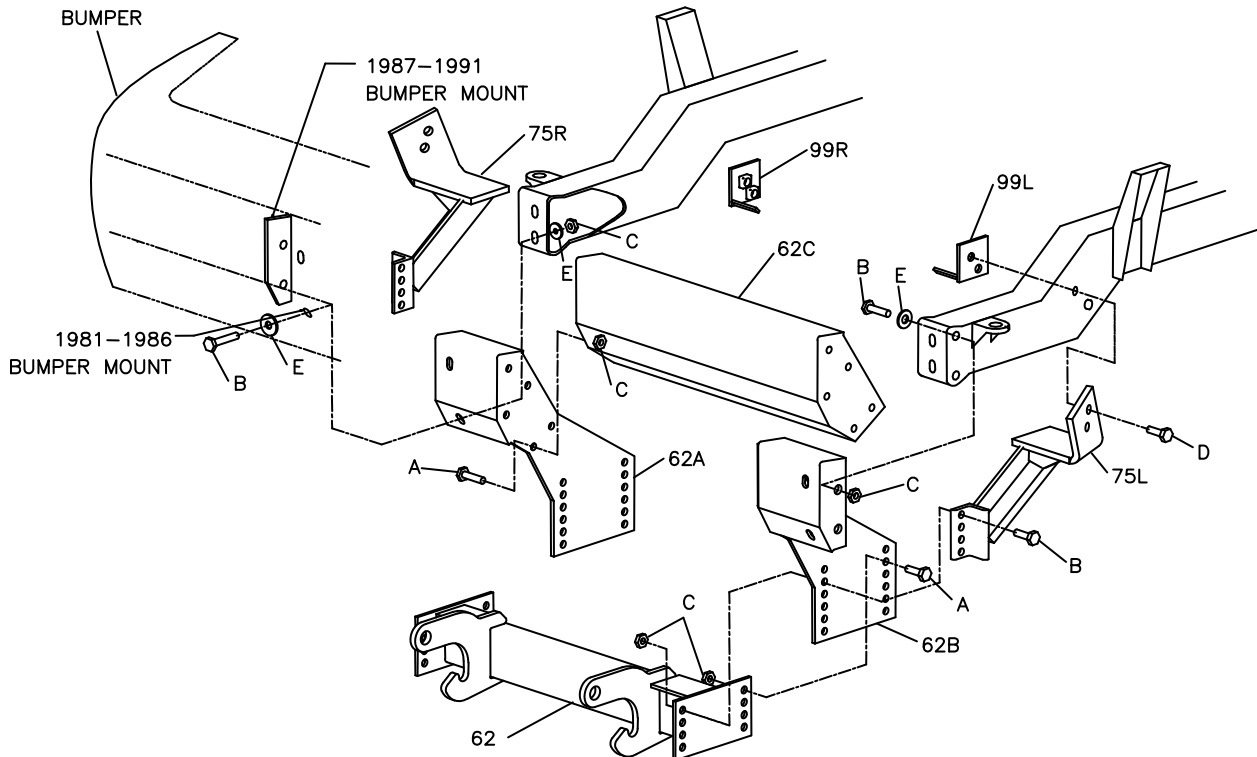


Figure 1

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RECOMMENDED PUSHBEAM HEIGHT

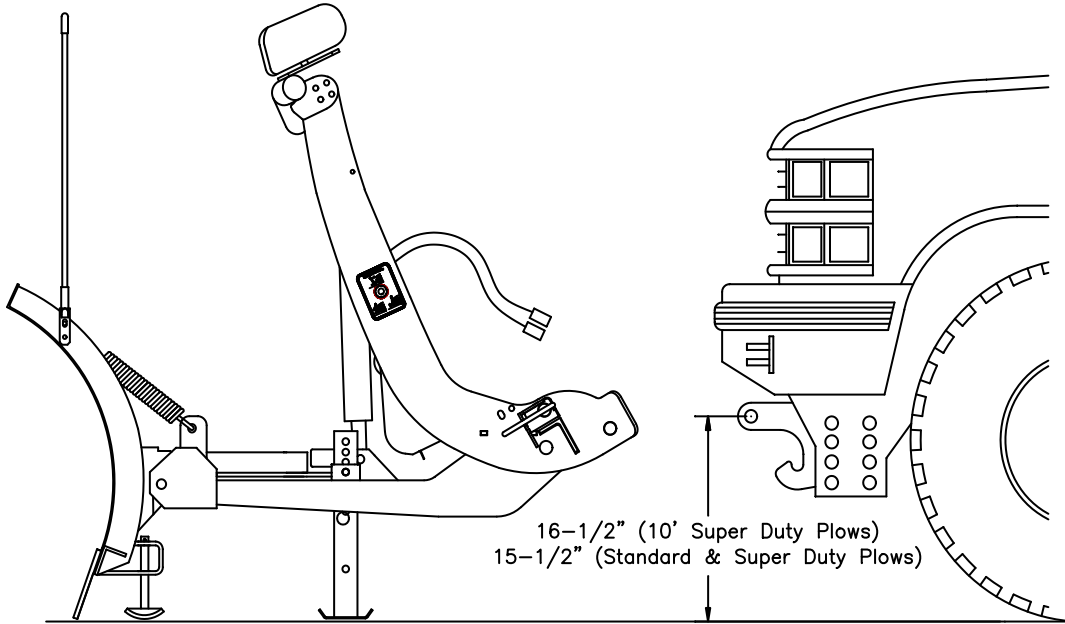


Figure 2

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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.