

BOSS PRODUCTS
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**1999 - 2004 MITSUBISHI FG
RT3 UNDERCARRIAGE
MOUNTING INSTRUCTIONS
(PART NO. LTA04775)**

PUSHING THE EDGE

MSC04774-6

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 - 2004 MITSUBISHI FG RT3 UNDERCARRIAGE MOUNTING INSTRUCTIONS

The mounting procedure outlined below covers 1999-2004 MITSUBISHI FG 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 (6) bolts securing the bumper brace to the frame. Remove the front bumper. Position the PUSH BEAM SUPPORT PLATES (Ref. 2R and 2L, Fig. 1) to the front frame rails of the truck. Using (11) HDW01728 1/2-13x1-1/2 GR5 bolts, and (11) HDW01748 1/2-13 NYL INS nuts, fasten the PUSH BEAM SUPPORT PLATES in place. Using a 9/16" drill, drill out the corresponding truck frame hole locations. There should be 3 existing 7/16" holes on the left hand side and 2 existing 7/16" holes on the right hand side that will need to be drilled out to accept the 1/2" fasteners. Fasteners should only be finger tight.

2. Fasten the PUSH BEAM ASSEMBLY (Ref. 1, Fig. 1) to the PUSH BEAM SUPPORT PLATES using (8) HDW01728 1/2-13x1-1/2 GR5 bolts and (8) HDW01748 1/2-13 NYL INS nuts provided. Again, leave all fasteners only finger tight.

NOTE: The proper height adjustment for the PUSH BEAM ASSEMBLY is approximately 15-1/2" from the ground to the center of the PUSH BEAM pin-receiving hole (See Figure 2).

3. Install the SUPPORT ANGLES (Ref. 4, Fig. 1) to the PUSH BEAM SUPPORT PLATES (Ref. 2R & 2L, Fig. 1) using (4) HDW01728 1/2-13x1-1/2 GR5 bolts and (4) HDW01748 1/2-13 NYL INS nuts provided. Next, mark and drill the corresponding holes in the trucks front upper crossmember. Using (4) HDW01728 1/2-13x1-1/2 GR5 bolts and (4) HDW01748 1/2-13 NYL INS nuts, bolt the SUPPORT ANGLES to the front crossmember.

4. Position the ANGLE BRACKET (RH) (Ref. 3R, Fig. 1) as shown in Figure 1 and attach to the PUSH BEAM ASSEMBLY (Ref. 1, Fig. 1) using the (2) HDW01728 1/2-13x1-1/2 GR5 bolts

and (2) HDW01748 1/2-13 NYL INS nuts. Unbolt the front brake line support bracket and forward most splash guard attachment bolt. After making sure the PUSH BEAM ASSEMBLY is level, raise the frame mount end of the ANGLE BRACKET (RH) up to the frame. Using a 9/16" drill, drill out the existing corresponding brake line support bracket hole and front splash guard frame hole, then attach the ANGLE BRACKET (RH), front brake line support bracket, and splash guard to the frame using (2) HDW01728 1/2-13x1-1/2 GR5 bolts and (2) HDW01748 1/2-13 NYL INS nuts as provided.

NOTE: Use caution when drilling out existing frame holes. Watch carefully for lines that run on the interior of the frame rails.

5. Position and secure the other ANGLE BRACKET (LH) (Ref. 3L, Fig. 1) in the same manner as the ANGLE BRACKET (RH).

6. Re-check that the PUSH BEAM ASSEMBLY is level. Finally tighten all fasteners to the torque specified in Figure 3.

7. Re-Install the bumper using the (6) bolts and nuts removed in step 1. Tighten fasteners to the torque specified in Figure 3.

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. Re-tighten all fasteners after 2 hours of plowing.

NOTE: When installing the HEADLIGHT ADAPTER MSC04599, refer to HEADLIGHT ADAPTER MANUAL, MSC04749, for proper installation procedures.

1999 - 2004 MITSUBISHI FG RT3 UNDERCARRIAGE INSTALLATION PROCEDURE

REF. NO.	DESCRIPTION	PART NO.	QTY.
1	Push Beam Assembly	PBA04776	1
2R	Push Beam Support Plate (RH)	PBA04780	1
2L	Push Beam Support Plate (LH)	PBA04783	1
3R	Angle Bracket (RH)	LTA04790	1
3L	Angle Bracket (LH)	LTA04793	1
4	Support Angle	PBA04779	2
	FASTENER KIT, MITSUBISHI, FG, 99-04	HDW04799	1
Includes:			
A	HHCS, 1/2-13 x 1-1/2 NC GR5 PLT	HDW01728	35
B	NUT, 1/2-13, NYL INS, ZN	HDW01748	35
C	BOLT, 3/8 x 1 BATTERY	HDW01762	1
D	SPACER, BATTERY BOLT	HDW01763	1

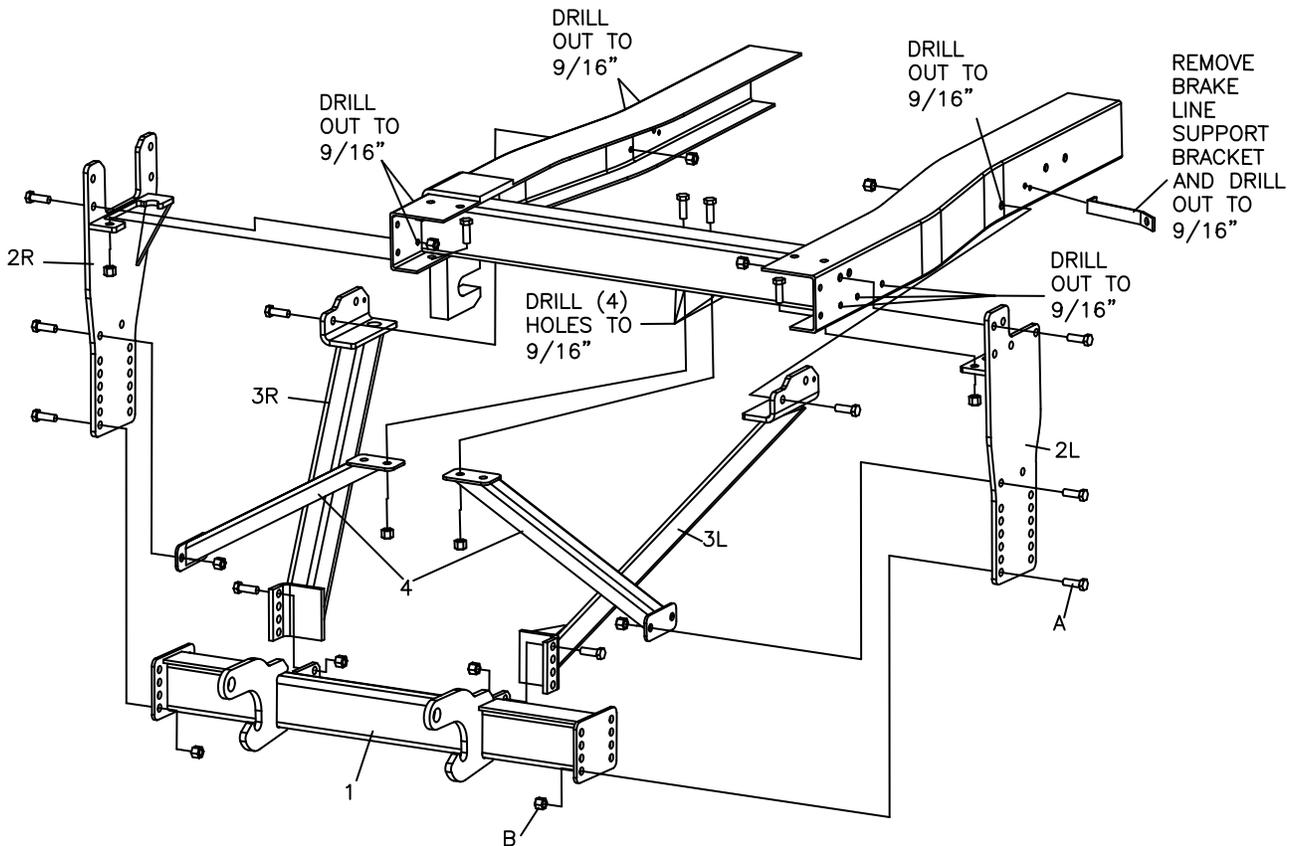


Figure 1

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RECOMMENDED PUSHBEAM HEIGHT

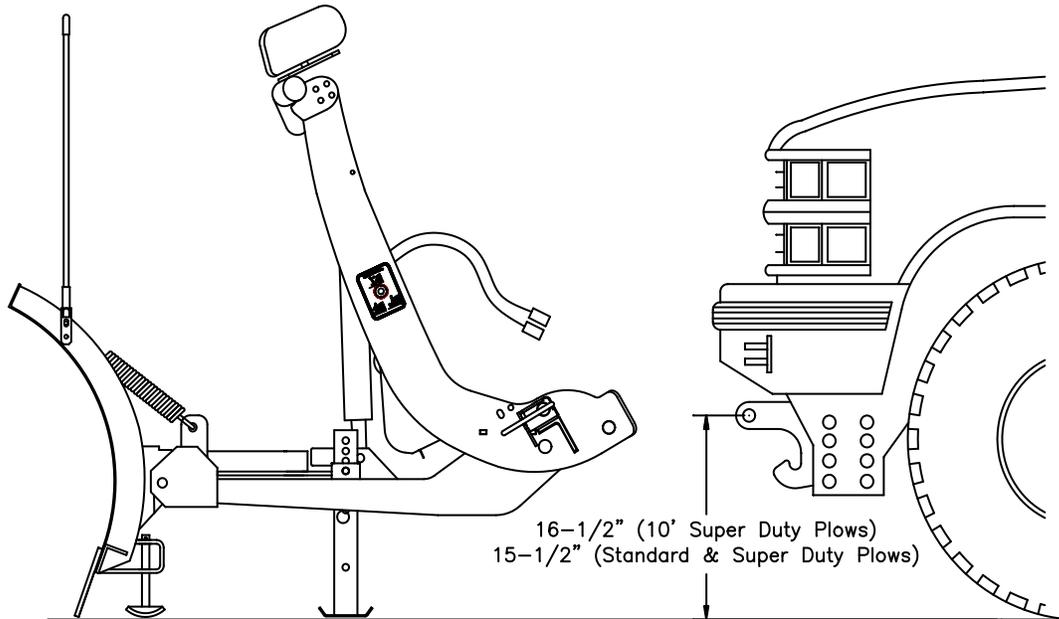


Figure 2

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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.