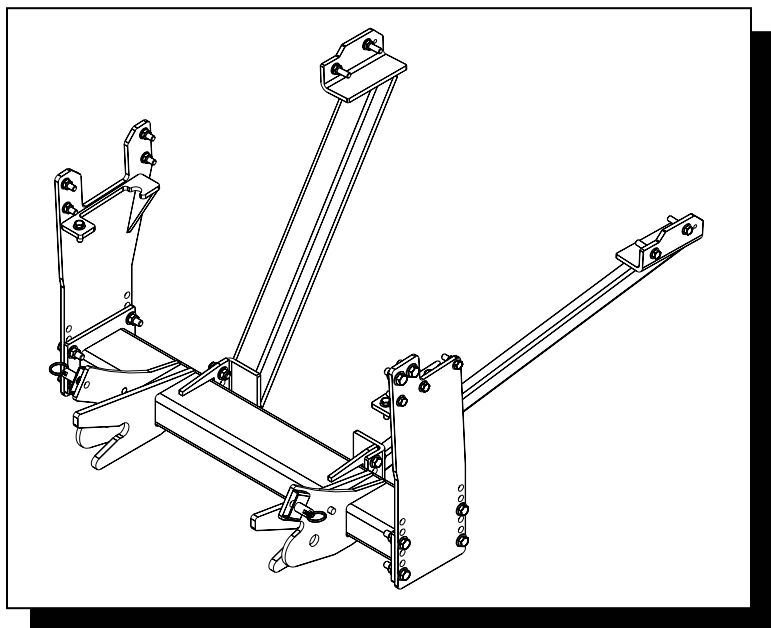


BLIZZARD[®] **SNOWPLOWS**

UNDERCARRIAGE INSTALLATION INSTRUCTIONS



UNDERCARRIAGE **33010**

HARDWARE KIT **61484**

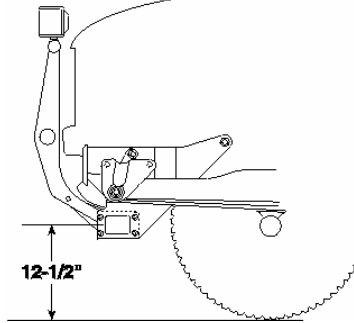
FOR MODELS:

MITSUBISHI FUSO FG (1999-2003)

INSTALLATION INSTRUCTIONS



A label identifying the undercarriage assembly part number and push beam part number is applied to the rear of the push beam



The recommended push beam height for this undercarriage assembly is 12-1/2" from the center of the push beam to level ground. DO NOT exceed 14-1/2" in height for this undercarriage.

WARNING: Always perform vehicle undercarriage installations with the keys removed from the vehicle's ignition. Properly tag the ignition switch to alert others work is being performed on the vehicle.

Most newer trucks are equipped with driver and passenger's side air bags. DO NOT remove, disable, or reposition any sensory equipment related to the safe operation of the air bags.

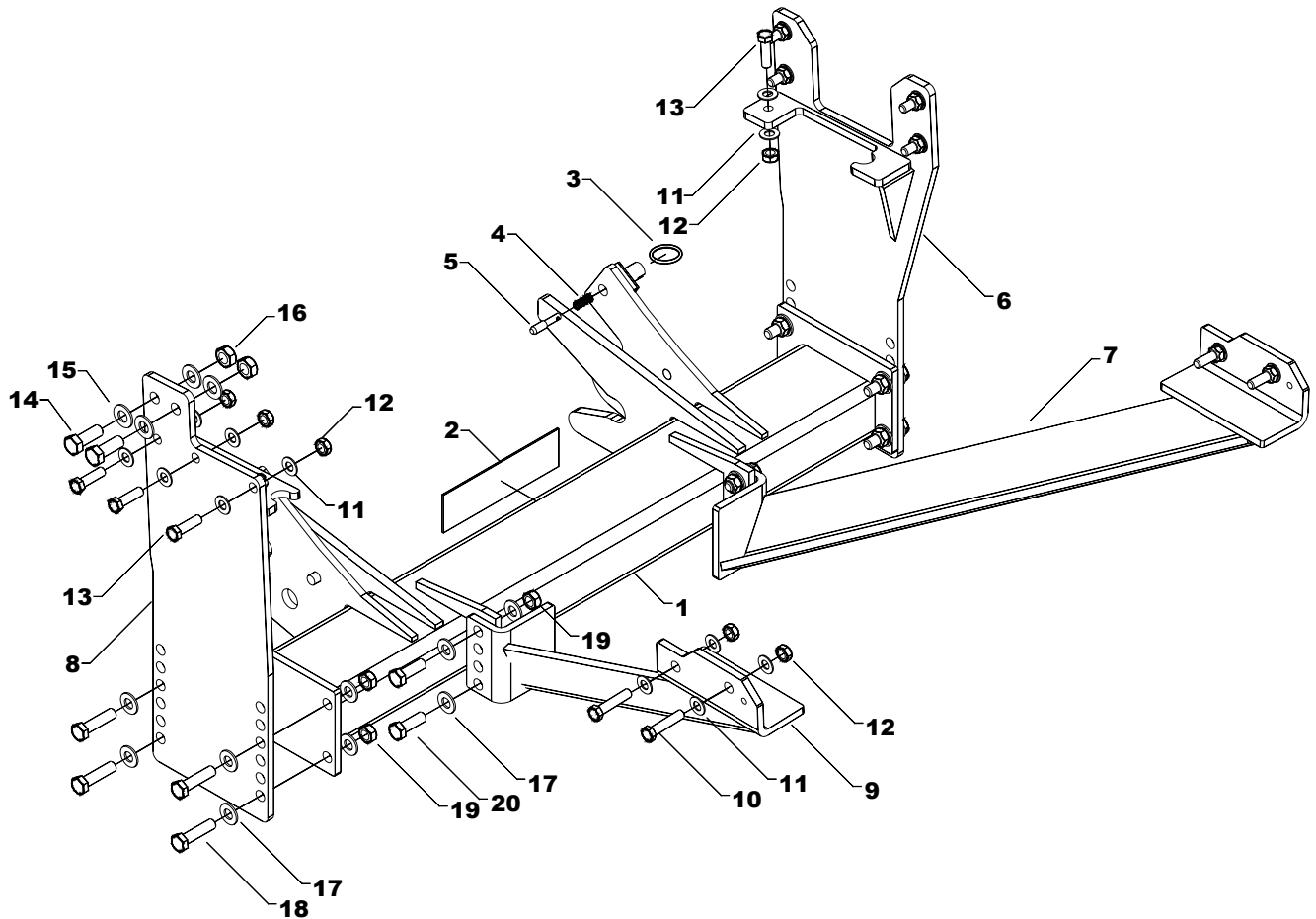
ALWAYS follow the vehicle manufacturer's recommendations for installing snowplowing equipment.

FAILURE TO COMPLY WITH THE ABOVE WARNINGS MAY RESULT IN SERIOUS INJURY OR DEATH.

CAUTION: If your vehicle is equipped with oversize tires, they may come into contact with the undercarriage hanger plates when turning the vehicle. Adjust steering stops if possible.

1. Align drivers hanger plate (**Ref 8**) to the holes on the outside of the truck frame rail. Secure the top two holes with bolts (**Ref 14**), washers (**Ref 15**) and nuts (**Ref 16**). Secure the three middle holes with bolts (**Ref 13**) washers (**Ref 11**) and nuts (**Ref 12**). Position two bolts (**Ref 13**), washers (**Ref 11**) and nuts (**Ref 12**) through the horizontal support into the bottom of the frame rail. Finger tighten the fasteners until all undercarriage parts are in place.
2. Remove the front AC Condenser mount bracket, if applicable, to access the hole on the passenger side of the truck frame rail. *NOTE: It may be necessary to slot both holes on the AC bracket approximately 1/2" toward the truck frame.*
3. Align the holes in the passenger side hanger plate (**Ref 6**) with the holes in the front of the truck frame rail. *NOTE: The hanger plate will be positioned between the AC bracket and the truck frame rail. The plate will also be positioned around the welded tow hook.* Reposition the AC bracket over the two front holes in the hanger plate and secure with bolts (**Ref 13**), washers (**Ref 11**) and nuts (**Ref 12**). Secure the rear holes in the plate with bolts (**Ref 14**), washers (**Ref 15**) and nuts (**Ref 16**.) Position one bolt (**Ref 13**), washers (**Ref 11**) and nut (**Ref 12**) through the horizontal support into the bottom of the frame rail. Use the original hardware to reinstall the bracket to the AC Condenser.
4. Mount the push beam (**Ref 1**) square with the bottom of each hanger plate using bolts (**Ref 18**), washers (**Ref 17**) and nuts (**Ref 19**). Torque the pushbeam hardware according to specifications.
5. Position the support arms (**Ref 7 & 9**) on the outside of the mounting brackets on the rear of the push beam. Secure each arm with bolts (**Ref 20**), washers (**Ref 17**) and nuts (**Ref 19**). Remove the brake line support bracket and the bolt located in front of the bracket and discard hardware. Drill out both holes to accept 7/16" diameter bolts. *NOTE: Use caution when drilling into the frame, additional hydraulic or electrical lines may be located on the interior of the frame rails.* The arms will be positioned against the truck frame rail and the front brake line support bracket. *NOTE: It may be necessary to mount support arms under the plastic guard mounts.* Secure arm, brackets and plastic guards with bolts (**Ref 10**), washers (**Ref 11**) and nuts (**Ref 12**).
6. Level the pushbeam with the floor and tighten the hanger plate hardware according to torque specifications
7. Position the **Light Tower** into the mount pockets on the push beam. Each pocket has a lock pin that secures both light tower arms. Pull out and twist each ring handle to temporarily unlock the pins. Place the light tower into the pockets and relock the pins. Mount each **Plow Headlight** to the light tower with the hardware kit provided. *NOTE: Remove the light tower from the undercarriage when servicing the vehicle's engine. The vehicle is equipped with a tilt nose cab which will contact the light tower when moved forward.*
8. Plug the connectors from the snowplow headlights into the connectors on the vehicle wire harness. Adjust both lights with the plow in the raised position.

UNDERCARRIAGE PARTS



REF	PN	QTY	DESCRIPTION	NOTES
-	33010	1	Asm, Undercarriage	INCLUDES 1-20
-	61484	1	Kit, Hardware Mitsubishi UC	INCLUDES 10-20
1	33011	1	Weldment, Push Beam 3 x 5 x 36-3/4"	
2	63161	1	Decal, Push Beam 2-1/4" x 9-3/4"	
3	61309	2	Ring, Standard Split, 1-1/4" O.D., 1-1/16" I.D., SS	
4	61000	2	Spring, Draw Latch Lock Pin	
5	40079	2	Pin, 3/8" DIA. x 1-3/4" SS	
6	33012	1	Plate, Passenger Side Hanger	
7	33026	1	Arm, Passenger Side Pushbeam Support	
8	33013	1	Plate, Driver Side Hanger	
9	33027	1	Arm, Driver Side Pushbeam Support	
10	61483	4	Screw, 7/16-14 x 2" HHCS Gr8 YZ	
11	61162	28	Washer, 7/16" SAE Hardened YZ	
12	61154	14	Nut, 7/16-14 Top Lock Z	
13	61459	10	Screw, 7/16-14 x 1-1/2" HHCS Gr8 YZ	
14	61056	2	Screw, 9/16-12 x 1-1/2" HHCS Gr8 YZ	
15	61059	4	Washer, 9/16" SAE Hardened	
16	61058	2	Nut, 9/16-12 Top Lock Z	
17	61026	24	Washer, 1/2" SAE Hardened	
18	61018	8	Screw, 1/2-13 x 2" HHCS Gr8 YZ	
19	61020	12	Nut, 1/2-13 Top Lock Z	
20	61055	4	Screw, 1/2-13 x 1-1/2 HHCS GR8 YZ	

Note: The reference numbers listed identify parts shown in the illustration above. These numbers are specific to this illustration only. Always review the part number given for proper component identification. Blizzard Corporation reserves the right, under its Continuous Improvement Policy, to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications.

HEADLIGHT CONVERSION HARNESS GUIDE

VEHICLE APPLICATION	HEADLIGHT CONNECTOR	HEADLIGHT DESCRIPTION	HEADLIGHT NUMBERS	CONVERSION HARNESS
1999-2003 MITSUBISHI FUSO FG	2B/2D	DUAL RECTANGULAR/ DUAL ROUND HEADLAMP	6014, H6024, H6059, 6052, H6054, HP6054	62220
	1A/2A	QUAD RECTANGULAR HEADLAMP	4651, 4652, H4651, H4656, H4662	62227

Note: Headlight conversion harness kits are not included with vehicle undercarriages. All headlight conversion harness kits sold separately.

TORQUE SPECIFICATIONS (For reference only)



Grade Identification Marking for J429-Grade 5 Bolt



Grade Identification Marking for J429-Grade 8 Bolt

Nominal Thread Size	SAE J429 – Grade 5			Nominal Thread Size	SAE J429 – Grade 8		
	Clamp Loads (lbs)	Tightening Torque			Clamp Loads (lbs)	Tightening Torque	
		“Lubricated”	“Dry”			“Lubricated”	“Dry”
1/4-20	2,000	6 ft-lbs	8 ft-lbs	1/4-20	2,850	9 ft-lbs	12 ft-lbs
5/16-18	3,350	13 ft-lbs	18 ft-lbs	5/16-18	4,700	18 ft-lbs	25 ft-lbs
3/8-16	4,950	23 ft-lbs	31 ft-lbs	3/8-16	6,950	32 ft-lbs	44 ft-lbs
7/16-14	6,800	37 ft-lbs	50 ft-lbs	7/16-14	9,600	53 ft-lbs	70 ft-lbs
1/2-13	9,050	57 ft-lbs	75 ft-lbs	1/2-13	12,800	80 ft-lbs	107 ft-lbs
9/16-12	11,600	82 ft-lbs	109 ft-lbs	9/16-12	16,400	115 ft-lbs	154 ft-lbs
5/8-11	14,500	113 ft-lbs	151 ft-lbs	5/8-11	20,300	159 ft-lbs	211 ft-lbs
3/4-10	21,300	200 ft-lbs	266 ft-lbs	3/4-10	30,100	282 ft-lbs	376 ft-lbs
7/8-9	29,435	321 ft-lbs	430 ft-lbs	7/8-9	41,550	454 ft-lbs	606 ft-lbs
1-8	38,600	482 ft-lbs	640 ft-lbs	1-8	54,540	680 ft-lbs	900 ft-lbs



Grade Identification Marking for Metric-Grade 8.8 Bolt



Grade Identification Marking for Metric-Grade 10.9 Bolt

Diameter (mm)	Metric Class 8.8			Diameter (mm)	Metric Class 10.9		
	Clamp Loads (Pounds)	Tightening Torque			Clamp Loads (Pounds)	Tightening Torque	
		“Lubricated”	“Dry”			“Lubricated”	“Dry”
5	1,389	3 ft-lbs	5 ft-lbs	5	1,987	5 ft-lbs	7 ft-lbs
6	1,965	6 ft-lbs	8 ft-lbs	6	2,812	8 ft-lbs	11 ft-lbs
7	2,826	10 ft-lbs	13 ft-lbs	7	4,044	14 ft-lbs	19 ft-lbs
8	3,579	14 ft-lbs	19 ft-lbs	8	5,121	20 ft-lbs	27 ft-lbs
10	5,672	28 ft-lbs	37 ft-lbs	10	8,116	40 ft-lbs	53 ft-lbs
12	8,243	49 ft-lbs	65 ft-lbs	12	11,796	70 ft-lbs	92 ft-lbs
14	11,246	77 ft-lbs	103 ft-lbs	14	16,092	111 ft-lbs	148 ft-lbs
16	15,882	125 ft-lbs	167 ft-lbs	16	21,970	173 ft-lbs	231 ft-lbs
18	19,423	172 ft-lbs	229 ft-lbs	18	26,868	238 ft-lbs	317 ft-lbs
20	24,784	244 ft-lbs	325 ft-lbs	20	34,284	338 ft-lbs	450 ft-lbs