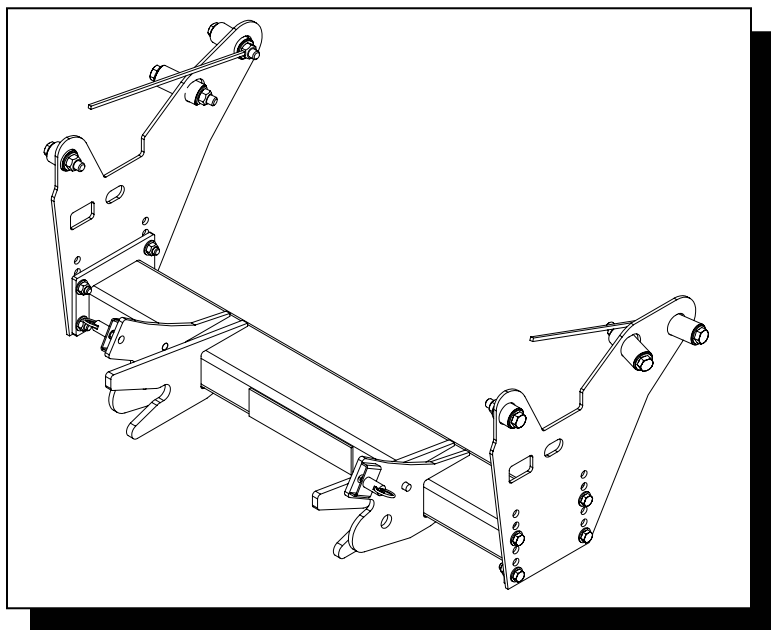


BLIZZARD® **SNOWPLOWS**

UNDERCARRIAGE INSTALLATION INSTRUCTIONS



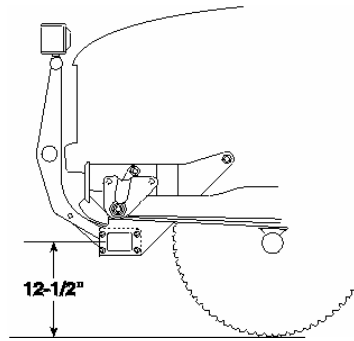
UNDERCARRIAGE **31041**

HARDWARE KIT **61157**

FOR MODELS:

FORD F-250/F-350 PICKUP (1980-1991)

INSTALLATION INSTRUCTIONS



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.

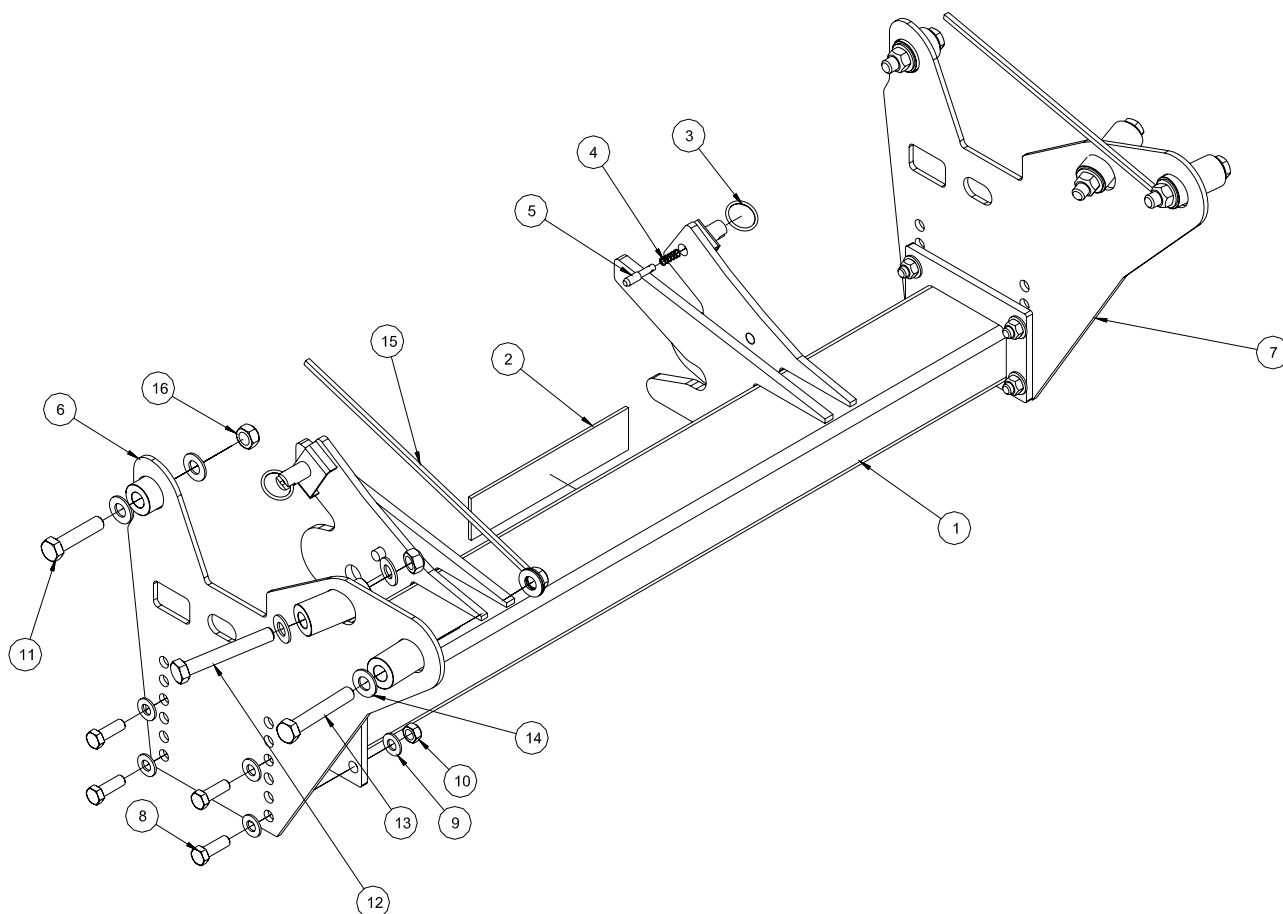
Most newer trucks are equipped with driver and passenger's side air bags. DO NOT remove, disable, or reposition any sensory equipment related to the safe operation of the air bags.

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.

1. Remove the front bumper. Remove the bumper mounting plates from the frame.
2. Align each hanger plate (**Ref 6 & 7**) with the holes on the outside of the truck frame rail. Insert bolts (**Ref 13**) and washers (**Ref 14**) through the rear hole in the hanger plate and secure with rodnuts (**Ref 15**) inside the frame. Finger tighten the fasteners until all undercarriage parts are in place.
3. Position the hanger plate cutouts over the spring shackle bolt and leaf spring clamp mounts. Align the front mounting hole on the plate with the hole in the truck frame. Secure the front hole in the plates with bolts (**Ref 11**), washers (**Ref 14**) and nuts (**Ref 16**).
4. Insert bolts (**Ref 12**), washers (**Ref 14**) and nuts (**Ref 16**) through the middle mounting hole in each plate.
5. Mount the pushbeam (**Ref 1**) square with the bottom of each hanger plate using bolts (**Ref 8**), washers (**Ref 9**) and nuts (**Ref 10**). Torque the pushbeam hardware according to specifications.
6. Level the pushbeam with the floor and tighten the hanger plate hardware according to torque specifications
7. Replace the bumper with original hardware.
8. 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.
9. 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
-	31041	1	Asm, Undercarriage	INCLUDES 1-16
-	61157	1	Kit, Hardware UC	INCLUDES 8-16
1	31045	1	Weldment, Push Beam 3 X 5 X 41.63	
2	63161	1	Decal, Pushbeam 2-1/4" x 9-3/4"	
3	61309	2	Ring, Standard Split, 1.48" O.D	
4	61000	2	Spring, Draw Latch Lock Pin	
5	40079	2	Pin, 3/8" DIA. x 1-3/4" SS	
6	31042	1	Plate, Hanger Passenger's Side	
7	31043	1	Plate, Hanger Driver's Side	
8	61055	8	Screw, 1/2-13 x 1-1/2 HHCS GR8 YZ	
9	61026	16	Washer, 1/2" SAE Hardened	
10	61020	8	Nut, 1/2-13 Top Lock Z	
11	61061	2	Screw, 5/8-11 x 2-3/4 HHCS GR8 YZ	
12	61065	2	Screw, 5/8-11 x 4-1/2 HHCS GR8 YZ	
13	61155	2	Screw, 5/8-11 x 4 HHCS GR8 YZ	
14	61064	10	Washer, 5/8" SAE Hardened	
15	61161	2	Rodnut, 5/8-11 Top Lock w/ 14" Sq. Stk & washer	
16	61063	4	Nut, 5/8-11 Top Lock Z	

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 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
1980-1991 FORD F-250 PICKUP 1980-1991 FORD F-350 PICKUP	2B/2D	DUAL RECTANGULAR HEADLAMP	H6054, HP6054	62220
	HB1	DUAL RECTANGULAR COMPOSITE HALOGEN	9004, H9004	62221

Note: Headlight conversion harness kits are not included with 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