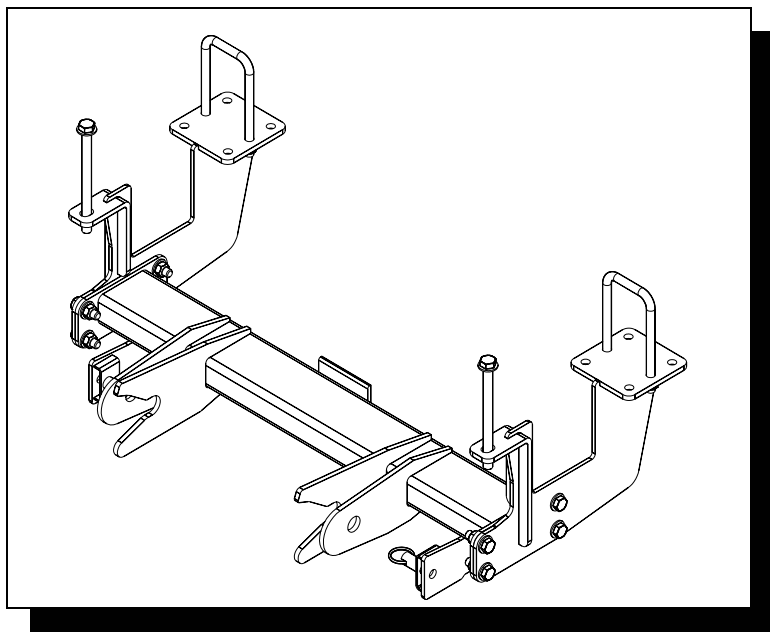


# **BLIZZARD®** **SNOWPLOWS**

## UNDERCARRIAGE INSTALLATION INSTRUCTIONS



UNDERCARRIAGE **30174**

HARDWARE KIT **61666**

FOR MODELS:

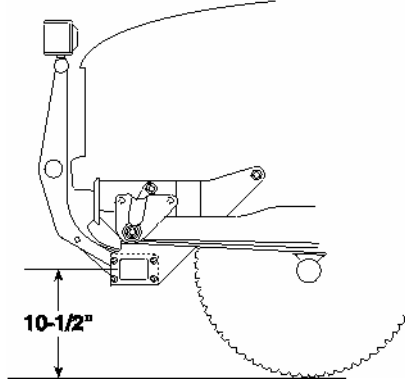
*CHEVROLET TRAILBLAZER (2002-2005)*

*GMC ENVOY (2004-2005)*

## 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 10-1/2" from the center of the push beam to level ground. DO NOT exceed 12-1/2" 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.

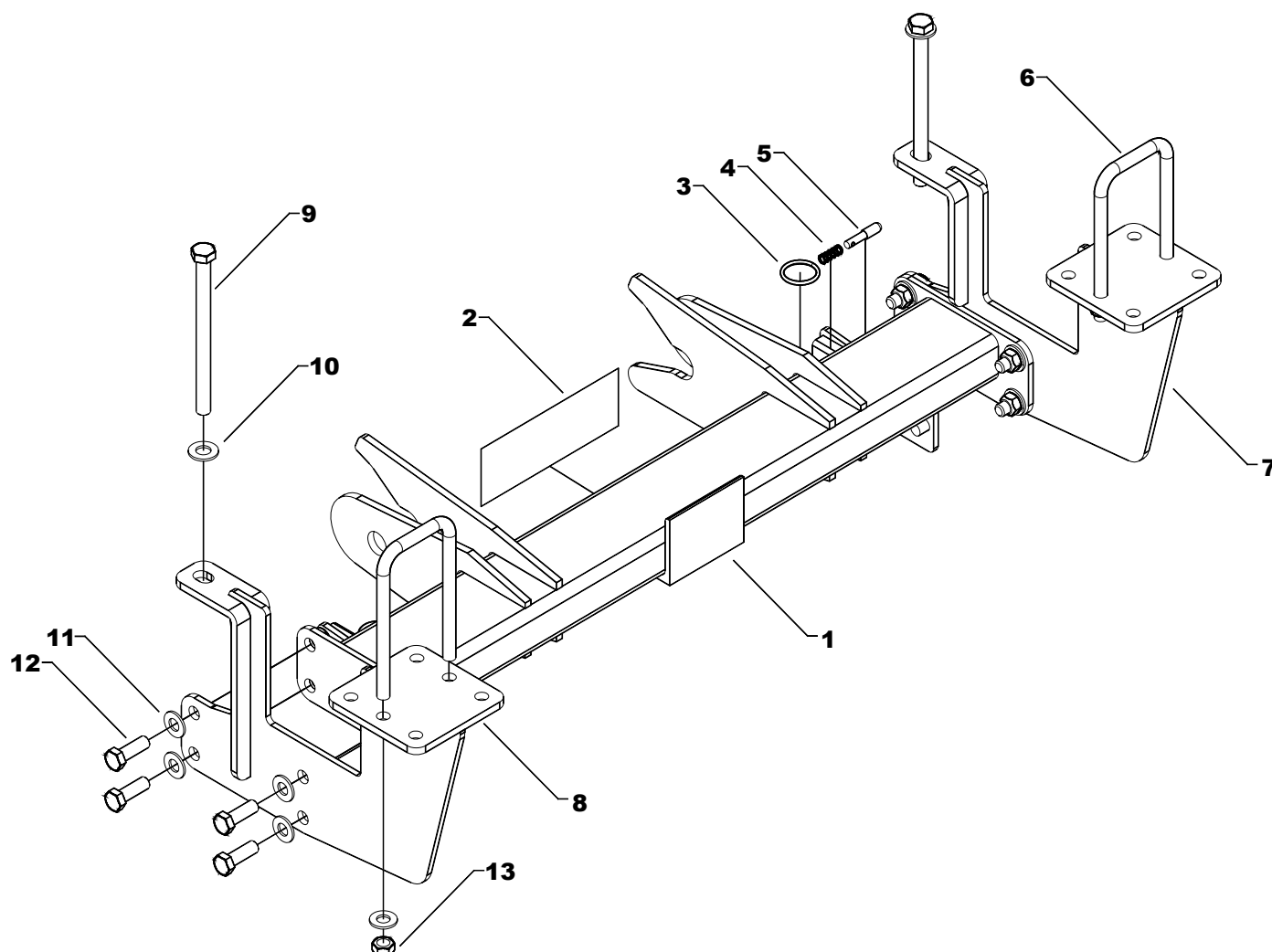
FAILURE TO COMPLY WITH THE ABOVE WARNINGS MAY RESULT IN SERIOUS INJURY OR DEATH.



**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 necessary.

1. Temporarily remove the grille and permanently remove the airdam.
2. Disconnect the fog lamp wiring if applicable and then remove the plastic bumper cover from the bumper.
3. Remove the bolts that attach the bumper from the end of the frame rails.
4. Install the hanger plates (**Ref 7 & 8**). *Note: On the drivers side make sure not to pinch the power steering hoses and airbag sensor wire. The top plate on the rear of the hanger plate must install above the hoses.* Loosely install the u-bolt (**Ref 6**) with washers (**Ref 11**) and nuts (**Ref 13**) thru the top rear plate and use the bumper bolt temporarily to hold the front of the hanger plate in position. Finger tighten the fasteners until all undercarriage parts are in place.
5. Install the pushbeam (**Ref 1**) square with the bottom of the hanger plates and secure with bolts (**Ref 12**), washers (**Ref 11**) and nuts (**Ref 13**). Tighten pushbeam hardware to torque specifications.
6. Using a floor jack, apply pressure to the center of the pushbeam and remove the front bumper bolts from the hanger plates.
7. Reinstall the bumper, bottom lip first, and then stretch top lip over the bumper onto the mounting holes. Secure hanger plates and bumper to frame rails with new bolts (**Ref 9**) and washers (**Ref 10**).
8. Tighten hanger plate hardware according to torque specifications.
9. Reinstall the plastic bumper cover and grille. Reconnect the fog lamp wiring if applicable.
10. 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.
11. Mount each **Plow Headlight** to the light tower with the hardware kit provided. 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         |
|-----|-------|-----|-----------------------------------------------|---------------|
| -   | 30174 | 1   | Asm, Undercarriage                            | INCLUDES 1-13 |
| -   | 61666 | 1   | Kit, Hardware GM UC                           | INCLUDES 9-13 |
| 1   | 30175 | 1   | Weldment, Push Beam 2 X 4 X 32.50             |               |
| 2   | 63162 | 1   | Decal, Push Beam 1-1/2" x 6-1/2"              |               |
| 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   | 61667 | 2   | U-bolt, .5 Dia. X 6.72                        |               |
| 7   | 30218 | 1   | Hanger Plate Weldment, Right Side Trailblazer |               |
| 8   | 30219 | 1   | Hanger Plate Weldment, Left Side Trailblazer  |               |
| 9   | 61477 | 2   | Screw, M14 x 2 x 180mm HHCS                   |               |
| 10  | 61059 | 2   | Washer, 9/16" SAE Hardened                    |               |
| 11  | 61026 | 20  | Washer, 1/2" USS Hardened                     |               |
| 12  | 61055 | 8   | Screw, 1/2-13 x 1-1/2" UNC HHCS               |               |
| 13  | 61020 | 12  | Nut, 1/2-13 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 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 |
|--------------------------------------------------------|---------------------|-----------------------------------|-------------------|--------------------|
| 2004-2005 CHEVROLET TRAILBLAZER<br>2004-2005 GMC ENVOY | HB3/HB4             | QUAD<br>COMPOSITE<br>HALOGEN BULB | H9005, H9006      | 62230              |
| 2002-2003 CHEVROLET TRAILBLAZER                        |                     |                                   |                   | 62223 OR 62224     |

*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

| SAE J429 – Grade 5  |                   |                   |            | SAE J429 – Grade 8  |                   |                   |            |
|---------------------|-------------------|-------------------|------------|---------------------|-------------------|-------------------|------------|
| Nominal Thread Size | Clamp Loads (lbs) | Tightening Torque |            | Nominal Thread Size | 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

| Metric Class 8.8 |                      |                   |            | Metric Class 10.9 |                      |                   |            |
|------------------|----------------------|-------------------|------------|-------------------|----------------------|-------------------|------------|
| Diameter (mm)    | Clamp Loads (Pounds) | Tightening Torque |            | Diameter (mm)     | 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 |