



# **VEHICLE UNDERCARRIAGE INSTALLATION INSTRUCTIONS**

**CHEVROLET C3500 HD CHASSIS CAB (1991-2002)**  
**CHEVROLET C3500 (1988-2000)**  
**GMC C3500 HD CHASSIS CAB (1991-2001)**  
**GMC C3500 (1988-2000)**

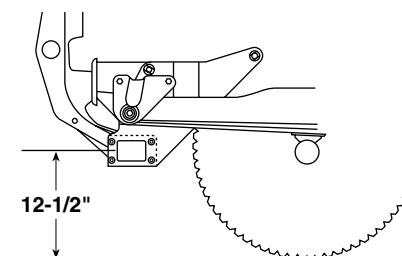
**UNDERCARRIAGE PART NO.**  
**30071**  
**HARDWARE KIT PART NO.**  
**61160**

**SEE REVERSE FOR ADDITIONAL INSTALLATION INSTRUCTIONS**

# UNDERCARRIAGE 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.**

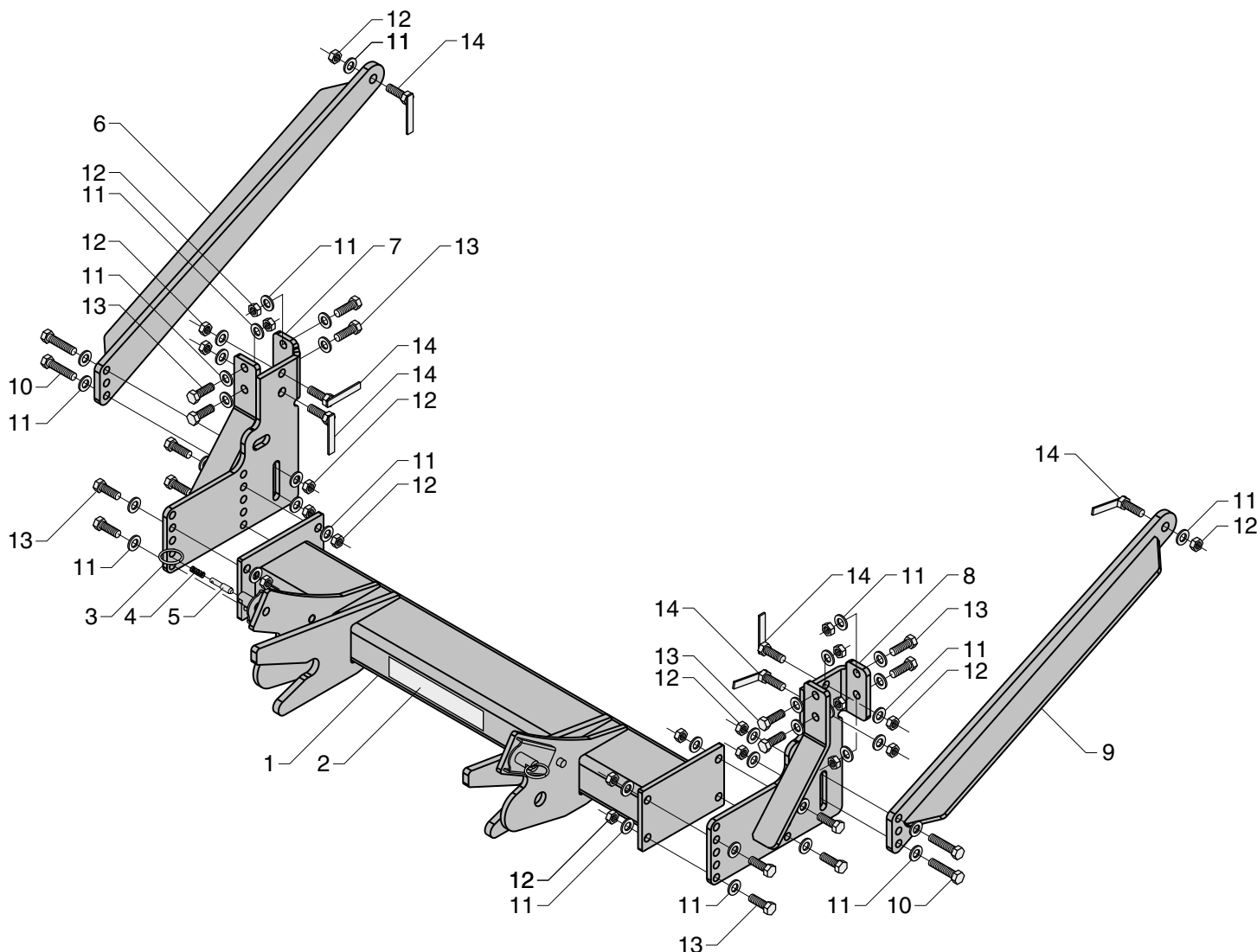


**CAUTION:** If your vehicle is equipped with oversize tires, they may come into contact with the undercarriage hanger plates when turning the vehicle.

The problem may be resolved by setting the steering stops on the vehicle. If this does not correct the problem, the original tires will need to be installed on the vehicle.

1. Begin the assembly by removing both M12-1.75 x 35 (8.8 Gr.) bolts with washers and flanged nuts from the rear mount of each bumper support bracket. Discard all hardware.
2. Next, position the driver's side HANGER PLATE on the outside of the truck frame rail and into the core support mount on the frame. *Note: The cut-out in the hanger plate fits over the leaf spring clamp bolt.* Align the holes from the bumper support bracket mount to those on the hanger plate and secure using two 1/2"-13 x 1-1/2" bolts, four 1/2" washers and 1/2" top lock nuts. Secure two additional 1/2"-13 x 1-1/2" bolts with washers and top lock nuts opposite the bumper support mount hardware. Finger tighten the fasteners until all undercarriage parts are in place.
3. Complete the hanger plate installation by installing two 1/2"-13 x 1-1/2" bolts with welded tabs through the middle mount holes. Attach a thin gauge wire to each screw and position the wire through the opening in the frame at the spring shackle bolt. Pull the wire and hex cap screw through the bottom mount hole in the frame and hanger plate. Secure the cap screw with one 1/2" washer and 1/2" top lock nut. Repeat the same procedure for the top mount hole.
4. Repeat steps #2 & #3 to install the passenger's HANGER PLATE.
5. Mount the PUSH BEAM to each hanger plate using four 1/2"-13 x 1-1/2" bolts, eight 1/2" washers and four 1/2" top lock nuts.
6. Align the hole in the DRIVER'S SIDE PUSH BEAM SUPPORT ARM to the mount hole on the frame in front of the vehicle shock mount. Secure the support arm by positioning a 1/2"-13 x 1-1/2" bolt with welded tab through the opening in the frame at the spring shackle bolt. Pull the wire and bolt through the mount hole in the frame and support arm. Secure the bolt with one 1/2" washer and top lock nut. Next, align the holes in the support arm to the rear mount slot on the hanger plate. Secure the plates using two 1/2"-13 x 2-1/4" bolts with four 1/2" washers and 1/2" top lock nuts.
7. Repeat step #6 to install the passenger's side PUSH BEAM SUPPORT ARM.
8. Once the undercarriage has been positioned and all hardware is in place, proceed to tighten all top lock nuts. Reference the chart on page 4 for maximum bolt torque.
9. 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 HEAD-LIGHT to the light tower with the hardware kit provided.

Complete the assembly by plugging the connectors from the snowplow head-lights into the connectors on the vehicle wire harness. Adjust both lights with the plow in the raised position.



### UNDERCARRIAGE PARTS LIST

Ref. No.	Part No.	Qty.	Part Description
N/A	30071	1	<b>Assembly, Undercarriage: Nos: 1-14</b>
1	30070	1	Push Beam Weldment 3 x 5 x 37
2	61085	1	Decal, Push Beam, 2-1/4" x 13-7/8"
3	61309	2	Ring, Standard Split, 1-1/4" O.D., 1-1/16" I.D., SS
4	61000	2	Spring, Compression, 0.94" O.A.F.L. x 0.36" O.D., 0.029" Wire DIA., SS
5	40079	2	Pin, 3/8" DIA. x 1-3/4", SS
6	30063	1	Support Arm, Push Beam, Passenger's Side
7	30064	1	Hanger Plate, Passenger's Side
8	30065	1	Hanger Plate, Driver's Side
9	30067	1	Support Arm, Push Beam, Driver's Side
10	61054	4	Screw, Hex Head Cap, 1/2"-13 x 2-1/4" Grade 8, YZ
11	61026	46	Washer, SAE Mil-Carb High-Strength, 1/2", 1-1/16" O.D., 17/32" I.D., YZ
12	61020	26	Nut, Top Lock, 1/2"-13 Grade C, Z
13	61055	16	Screw, Hex Head Cap, 1/2"-13 x 1-1/2" Grade 8, YZ
14	61151	6	Screw, Hex Head Cap with Welded Tab, 1/2"-13 x 1-1/2" Grade 8, YZ
N/A	61160	1	<b>Kit, Hardware - Undercarriage P/N 30071: Nos. 10-14</b>

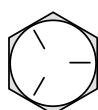
*Note: The reference numbers listed identify parts shown in the illustration above. These numbers are specific to this illustration only. Always review the part number given for proper component identification. Blizzard Corporation reserves the right, under its Continuous Improvement Policy, to change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

# HEADLIGHT CONVERSION HARNESS GUIDE

VEHICLE APPLICATION	HEADLIGHT CONNECTOR(S)	HEADLIGHT DESCRIPTION	HEADLIGHT NUMBERS	CONVERSION HARNESS
1991-2002 CHEV. C3500 HD CHASSIS CAB	2B/2D	DUAL RECTANGULAR HEADLAMP	H6054, HP6054	62220
1988-2000 CHEVROLET C3500	HB3/HB4	QUAD COMPOSITE HALOGEN BULB	H9005, H9006	62223 OR 62224
1991-2001 GMC C3500 HD CHASSIS CAB				
1988-2000 GMC C3500	LF/UF	QUAD LOW PROFILE RECT. HALOGEN	H4701, H4703	62225

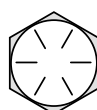
Note: Headlight conversion harness kits are not included with undercarriage mounts. All headlight conversion harness kits sold separately.

## TORQUE SPECIFICATIONS



### Grade Identification Marking for J429 - Grade 5 Bolt

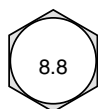
- Material: Medium carbon steel: quenched and tempered
- Minimum Proof Strength: 85,000 psi
- Minimum Tensile Strength: 120,000 psi
- Core Hardness Rockwell (min.): C25, (max.): C34
- Minimum Yield Strength: 92,000 psi



### Grade Identification Marking for J429 - Grade 8 Bolt

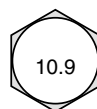
- Material: Medium carbon alloy steel: quenched and tempered
- Minimum Proof Strength: 120,000 psi
- Minimum Tensile Strength: 150,000 psi
- Core Hardness Rockwell (min.): C33, (max.): C39
- Minimum Yield Strength: 130,000 psi

Nominal Thread Size	SAE J429 - Grade 5			Nominal Thread Size	SAE J429 - Grade 8		
	Clamp Loads (Pounds)	Tightening Torque			Clamp Loads (Pounds)	Tightening Torque	
		“Lubricated”	“Dry”			“Lubricated”	“Dry”
1/4-20	2,000	6.25 ft-lbs	8.34 ft-lbs	1/4-20	2,850	8.92 ft-lbs	11.93 ft-lbs
5/16-18	3,350	13.25 ft-lbs	17.5 ft-lbs	5/16-18	4,700	18.35 ft-lbs	25.44 ft-lbs
3/8-16	4,950	23 ft-lbs	31 ft-lbs	3/8-16	6,950	32.5 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	482.5 ft-lbs	640 ft-lbs	1-8	54,540	680 ft-lbs	900 ft-lbs



### Grade Identification Marking for Metric - Grade 8.8 Bolt

- Material: Medium carbon steel: quenched and tempered
- Minimum Proof Strength: 580 MPa
- Minimum Tensile Strength: 800 MPa
- Core Hardness Rockwell (min.): C22, (max.): C32
- Minimum Yield Strength: 640 MPa



### Grade Identification Marking for Metric - Grade 10.9 Bolt

- Material: Low carbon alloy steel: quenched and tempered
- Minimum Proof Strength: 830 MPa
- Minimum Tensile Strength: 1040 MPa
- Core Hardness Rockwell (min.): C32, (max.): C39
- Minimum Yield Strength: 940 MPa

Diameter (millimeters)	Metric Class 8.8			Diameter (millimeters)	Metric Class 10.9		
	Clamp Loads (Pounds)	Tightening Torque			Clamp Loads (Pounds)	Tightening Torque	
		“Lubricated”	“Dry”			“Lubricated”	“Dry”
5	1,389	3.42 ft-lbs	4.56 ft-lbs	5	1,987	4.89 ft-lbs	6.52 ft-lbs
6	1,965	5.81 ft-lbs	7.80 ft-lbs	6	2,812	8.34 ft-lbs	11.07 ft-lbs
7	2,826	9.74 ft-lbs	12.99 ft-lbs	7	4,044	13.95 ft-lbs	18.60 ft-lbs
8	3,579	14.10 ft-lbs	18.82 ft-lbs	8	5,121	20.15 ft-lbs	26.94 ft-lbs
10	5,672	27.90 ft-lbs	37.27 ft-lbs	10	8,116	39.92 ft-lbs	53.28 ft-lbs
12	8,243	48.71 ft-lbs	64.94 ft-lbs	12	11,796	69.74 ft-lbs	92.25 ft-lbs
14	11,246	77.49 ft-lbs	103.32 ft-lbs	14	16,092	110.70 ft-lbs	147.60 ft-lbs
16	15,882	125.46 ft-lbs	166.79 ft-lbs	16	21,970	173.43 ft-lbs	231.00 ft-lbs
18	19,423	171.95 ft-lbs	229.52 ft-lbs	18	26,868	238.37 ft-lbs	317.34 ft-lbs
20	24,784	243.54 ft-lbs	325.46 ft-lbs	20	34,284	338.00 ft-lbs	450.18 ft-lbs

**Disclaimer:** All torque values included in the charts above are advisory only, and their use by anyone is entirely voluntary. Reliance on the contents for any purpose by anyone is the sole risk of that person and Blizzard Corporation is not responsible for any loss, claim or damages arising therefrom. Blizzard Corporation has made an effort to present the above contents accurately, but we do not guarantee its completeness or validity. This information is subject to change at any time, without notice. Blizzard Corporation makes no representations or warranties, express or implied, in connection with the information.