

VEHICLE UNDERCARRIAGE INSTALLATION INSTRUCTIONS

CHEVROLET K1500 AVALANCHE (2002-2003)
CHEVROLET K1500 TAHOE (2000-2003)
CHEVROLET K1500 SUBURBAN (2000-2003)
CHEVROLET K1500 SILVERADO (1999-2004)
GMC K1500 YUKON (2000-2003)
GMC K1500 YUKON XL (2000-2003)
GMC K1500 SIERRA (1999-2004)

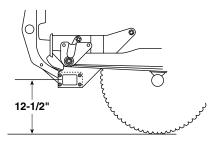
UNDERCARRIAGE PART NO. 30087 HARDWARE KIT PART NO. 61194

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.

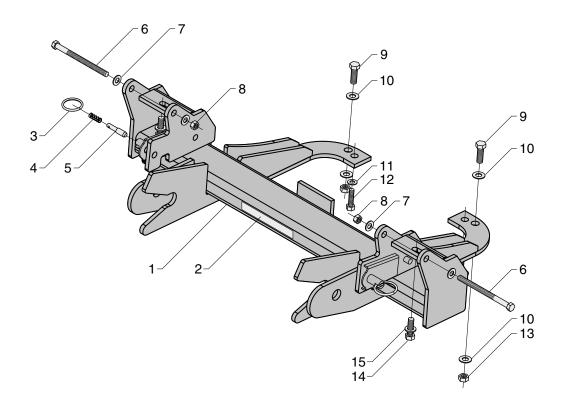
FAILURE TO COMPLY WITH THE ABOVE WARNINGS MAY RESULT IN SERIOUS INJURY OR DEATH.

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.

- Begin the assembly by removing the PLASTIC BUMPER FASCIA mounted to the bottom of the bumper. For the Avalanche, remove the entire plastic bumper. Disconnect the fog lamp electrical harnesses prior to removing the bumper. Note: The bumper fascia/bumper will need to be permanently removed or notched to accommodate the undercarriage assembly. Also, should your vehicle have frame rail mounted tow hooks, these will need to be removed to facilitate the undercarriage installation.
- 2. Remove the two metric bolts and washers from the REAR SPLASH GUARD MOUNT in the truck frame crossmember and discard. Align the front mount holes on the PUSH BEAM WELDMENT with the tow hook mount holes on the truck frame rail. *Note: Use a hydraulic floor jack to help facilitate the installation procedure.*
- 3. Replace the tow hooks inside of the truck frame rail and align the holes in the hooks with those in the truck frame and push beam weldment. Secure the hooks and the undercarriage to the truck frame with two 7/16"-14 x 6" bolts, four 7/16" washers and top lock nuts. Finger tighten the fasteners until all undercarriage parts are in place.
- 4. Next, align the PUSH BEAM WELDMENT SUPPORT ARMS with the holes in the truck frame crossmember. Position one 1/2" washer and 1/2"-13 x 1-1/2" bolt through the access hole in the crossmember, splash guard and outside hole in the support arm. Secure both bolts with one 1/2" washer and top lock nut.
- 5. Secure the splash guard to the crossmember with two M10-1.5 x 40 bolts and M10 washers. The bolts will locate to the inside holes on the push beam support arms. *Note: The holes in the crossmember are threaded, eliminating the need for new hardware.*
- 6. Finish securing the undercarriage to the truck frame by placing two M12-1.75 x 40 bolts with washers through the center tow hook mount on the undercarriage. The bolts will tighten into the tow hook threads.
- 7. 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.
- 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.

Complete the assembly by plugging 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 LIST								
Ref. No.	Part No.	Qty.	Part Description					
N/A	30087	1	Assembly, Undercarriage: Nos: 1-15					
1	30072	1	Push Beam Weldment					
2	61128	1	Decal, Push Beam, 1-1/2" x 9"					
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	61249	2	Screw, Hex Head Cap, 7/16"-14 x 6" Grade 8, YZ					
7	61162	4	Washer, SAE Mil-Carb High-Strength, 7/16", 59/64" O.D., 15/32" I.D., YZ					
8	61154	2	Nut, Top Lock, 7/16"-14 Grade C, Z					
9	61055	2	Screw, Hex Head Cap, 1/2"-13 x 1-1/2" Grade 8, YZ					
10	61026	4	Washer, 1/2", SAE Mil-Carb High-Strength, 1-1/16" O.D., 17/32" I.D., YZ					
11	61251	2	Washer, Flat, M10 I.D., 21 O.D., Z					
12	61250	2	Screw, Hex Head Cap, M10-1.5 x 40 Grade 8.8, Z					
13	61020	2	Nut, Top Lock, 1/2"-13 Grade C, Z					
14	61069	2	Screw, Hex Head Cap, M12-1.75 x 40 Grade 8.8, Z					
15	61070	2	Washer, Flat, M12 I.D., 24 O.D., Z					
N/A	61194	1	Kit, Hardware - Undercarriage P/N 30087: Nos. 6-15					

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 ADAPTER KIT GUIDE

	VEHICLE APPLICATION	HEADLIGHT CONNECTOR(S)	HEADLIGHT DESCRIPTION	HEADLIGHT NUMBERS	HEADLIGHT ADAPTER KIT
2003 2003 2003 2003-2004 2003 2003 2003-2004	CHEVROLET K1500 AVALANCHE CHEVROLET K1500 TAHOE CHEVROLET K1500 SUBURBAN CHEVROLET K1500 SILVERADO GMC K1500 YUKON GMC K1500 YUKON XL GMC K1500 SIERRA	HB3/HB4	QUAD COMPOSITE HALOGEN BULB	H9005, H9006	62013
2002 2000-2002 2000-2002 1999-2002 2000-2002 2000-2002 1999-2002	CHEVROLET K1500 AVALANCHE CHEVROLET K1500 TAHOE CHEVROLET K1500 SUBURBAN CHEVROLET K1500 SILVERADO GMC K1500 YUKON GMC K1500 YUKON XL GMC K1500 SIERRA	нвз/нв4	QUAD COMPOSITE HALOGEN BULB	Н9005, Н9006	62014

Note: Headlight adapter kits are not included with vehicle undercarriage mounts. All headlight adapter 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	SAE J429 - Grade 5			Nominal	SAE J429 - Grade 8		
Thread	Clamp Loads (lbs.)	Tightening Torque		Thread	Clamp Loads	Tightening Torque	
Size		"Lubricated"	"Dry"	Size	(lbs.)	"Lubricated"	"Dry"
1/4-20	2,000	75 in-lbs	100 in-lbs	1/4-20	2,850	107 in-lbs	143 in-lbs
5/16-18	3,350	157 in-lbs	210 in-lbs	5/16-18	4,700	220 in-lbs	305 in-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 MPaMinimum Tensile Strength: 1040 MPa
- Core Hardness Rockwell (min.): C32, (max.): C39
- Minimum Yield Strength: 940 MPa

Diameter		Metric Class 8.8		Diameter	Metric Class 10.9		
(millimeters)	Clamp Loads (Newton)	Tightening Torque		(millimeters)	Clamp Loads	Tightening Torque	
		"Lubricated"	"Dry"		(Newton)	"Lubricated"	"Dry"
5	6177	4.63 N-m	6.18 N-m	5	8840	6.63 N-m	8.84 N-m
6	8743	7.87 N-m	10.5 N-m	6	12512	11.3 N-m	15.0 N-m
7	12570	13.2 N-m	17.6 N-m	7	17990	18.9 N-m	25.2 N-m
8	15921	19.1 N-m	25.5 N-m	8	22784	27.3 N-m	36.5 N-m
10	25230	37.8 N-m	50.5 N-m	10	36105	54.1 N-m	72.2 N-m
12	36670	66.0 N-m	88.0 N-m	12	52475	94.5 N-m	125 N-m
14	50025	105 N-m	140 N-m	14	71587	150 N-m	200 N-m
16	70650	170 N-m	226 N-m	16	97732	235 N-m	313 N-m
18	86400	233 N-m	311 N-m	18	119520	323 N-m	430 N-m
20	110250	330 N-m	441 N-m	20	152513	458 N-m	610 N-m

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 Bilizzard Corporation is not responsible for any loss, claim or damages arising therefrom. Bilizzard 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. Bilizzard Corporation makes no representations or warranties, express or implicit, in connection with the information.