

# B30186-1 UNDERCARRIAGE KIT

**GM Colorado/Canyon** 

2004 -

Parts List and Installation Instructions

#### **A** CAUTION

Read this document before installing the snowplow.

# **A** CAUTION

See your BLIZZARD® outlet/Web site for specific vehicle application recommendations before installation. The Undercarriage Selection Guide has specific vehicle and snowplow requirements.

#### SAFETY DEFINITIONS

#### **A** WARNING

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious personal injury.

#### **A** CAUTION

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTE: Indicates a situation or action that can lead to damage to your snowplow and vehicle or other property. Other useful information can also be described.

# WARNING/CAUTION & INSTRUCTION LABELS

Become familiar with and inform users about the warning and instruction labels on the back of the blade.

NOTE: If labels are missing or can not be read, see your sales outlet.

# **Warning and Caution Label**



LOWER BLADE WHEN VEHICLE IS PARKED.

DO NOT EXCEED GVWR OR GAWR INCLUDING BLADE AND BALLAST.

REMOVE BLADE ASSEMBLY BEFORE PLACING VEHICLE ON HOIST.



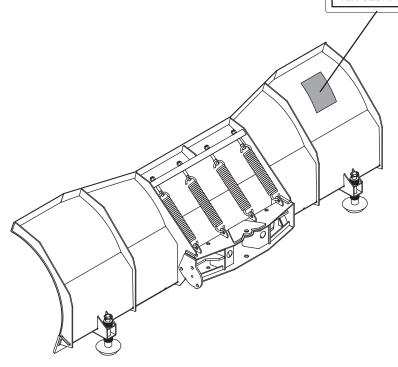
# **CAUTION**

READ OWNER'S MANUAL BEFORE OPERATING OR SERVICING SNOWPLOW.

TRANSPORT SPEED SHOULD NOT EXCEED 45 MPH. FURTHER REDUCE SPEED UNDER ADVERSE TRAVEL CONDITIONS.

PLOWING SPEED SHOULD NOT EXCEED 10 MPH.

SEE YOUR SALES OUTLET/WEB SITE FOR SPECIFIC VEHICLE APPLICATION RECOMMENDATIONS.



#### SAFETY PRECAUTIONS

Improper installation and operation could cause personal injury, and/or equipment and property damage. Read and understand labels and the Owner's Manual before installing, operating or making adjustments.

#### **A** WARNING

Lower blade when vehicle is parked.
Temperature changes could change hydraulic pressure, causing the blade to drop unexpectedly or damaging hydraulic components. Failure to do this could result in serious personal injury.

#### **A WARNING**

The driver shall keep bystanders clear of the blade when it is being raised, lowered or angled. Do not stand between the vehicle and the blade or within 8 feet of a moving blade. A moving or falling blade could cause personal injury.

#### **A** WARNING

Keep hands and feet clear of the blade and A-frame when mounting or dismounting the snowplow. Moving or falling assemblies could cause personal injury.

#### **A** WARNING

Do not exceed GVWR or GAWR including the blade and ballast. The rating label is found on the driver-side vehicle door cornerpost.

#### **WARNING**

To prevent accidental movement of the blade, always turn the ON/OFF switch to OFF whenever the snowplow is not is use. The control indicator light will turn off.

#### **A** WARNING

Remove blade assembly before placing vehicle on hoist.

#### **A** CAUTION

Refer to the Undercarriage Selection Guide for minimum vehicle recommendations and ballast requirements.

#### PERSONAL SAFETY

- Remove ignition key and put the vehicle in park or in gear to prevent others from starting the vehicle during installation or service.
- Wear only snug-fitting clothing while working on your vehicle or snowplow.
- Do not wear jewelry or a necktie, and secure long hair
- Wear safety goggles to protect your eyes from battery acid, gasoline, dirt and dust.
- Avoid touching hot surfaces such as the engine, radiator, hoses and exhaust pipes.
- Always have a fire extinguisher rated BC handy, for flammable liquids and electrical fires.

#### FIRE AND EXPLOSION

#### **A** WARNING

Gasoline is highly flammable and gasoline vapor is explosive. Never smoke while working on vehicle. Keep all open flames away from gasoline tank and lines. Wipe up any spilled gasoline immediately.

Be careful when using gasoline. Do not use gasoline to clean parts. Store only in approved containers away from sources of heat or flame.

#### **VENTILATION**

#### **A WARNING**

Vehicle exhaust contains lethal fumes. Breathing these fumes, even in low concentrations, can cause death. Never operate a vehicle in an enclosed area without venting exhaust to the outside.

# **TORQUE SPECIFICATIONS**

# **TORQUE CHART**

#### **A** CAUTION

Read instructions before assembling.
Fasteners should be finger tight until instructed to tighten according to the torque chart. Use standard methods and practices when attaching snowplow including proper personal protective safety equipment.



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



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

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



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



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

<u> </u>	ade identificatio	ii ioi miotilo Oli	ade 0.0 Bon	Stade lacitation for metric Grade 10.3 Box					
Metric Class 8.8 Torque Values				Metric Class 10.9 Torque Values					
Diameter	Clamp Loads	Tightening Torque		Diameter	Clamp Loads	Tightening Torque			
(mm)	(lb)	"Lubricated"	"Dry"	(mm)	(lb)	"Lubricated"	"Dry"		
5	1,389	3 ft-lb	5 ft-lb	5	1,987	5 ft-lb	7 ft-lb		
6	1,965	6 ft-lb	8 ft-lb	6	2,812	8 ft-lb	11 ft-lb		
7	2,826	10 ft-lb	13 ft-lb	7	4,044	14 ft-lb	19 ft-lb		
8	3,579	14 ft-lb	19 ft-lb	8	5,121	20 ft-lb	27 ft-lb		
10	5,672	28 ft-lb	37 ft-lb	10	8,116	40 ft-lb	53 ft-lb		
12	8,243	49 ft-lb	65 ft-lb	12	11,796	70 ft-lb	92 ft-lb		
14	11,246	77 ft-lb	103 ft-lb	14	16,092	111 ft-lb	148 ft-lb		
16	15,882	125 ft-lb	167 ft-lb	16	21,970	173 ft-lb	231 ft-lb		
18	19,423	172 ft-lb	229 ft-lb	18	26,868	238 ft-lb	317 ft-lb		
20	24,784	244 ft-lb	325 ft-lb	20	34,284	338 ft-lb	450 ft-lb		

# UNDERCARRIAGE INSTALLATION

NOTE: For easier assembly and installation, vehicle and all snowplow components should be on a smooth, level, hard surface, such as concrete.

 Disconnect all lamp wiring. Remove the grille assembly and bumper from the vehicle. The grille assembly is attached with easily removable clips and the bumper is attached with two upper and two side fasteners. Fasteners will be used for reinstallation.

NOTE: The plastic bumper fascia will need to be permanently removed or notched to accommodate the undercarriage assembly.

 Remove the skid plate. Skid plate cannot be used when undercarriage is installed, but retain skid plate and fasteners for reinstallation if snowplow is removed.

NOTE: Remove rear skid plate fasteners before front skid plate fasteners to prevent the skid plate from falling and possibly breaking.

 Permanently remove all tow hook fasteners, if applicable. The tow hooks will be reinstalled using new hardware.

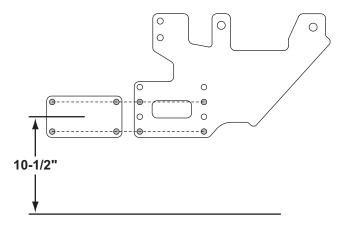
- 4. Position each hanger plate (Item 6 and 7) on the outside of the truck frame rail and around the front body mount. Secure top rear hole with cap screws (Item 12), washers (Item 13) and locknuts (Item 14). Finger tighten the fasteners until all undercarriage parts are in place.
- Secure the hanger plates and tow hooks to the frame. Use the front hole on each hanger plate and the lower tow hook mount hole for cap screws (Item 11), washers (Item 9) and locknuts (Item 10).

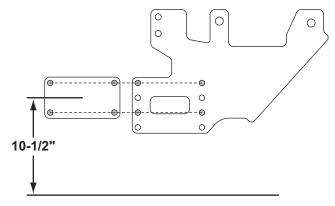
NOTE: It may be necessary to ream out tow hook holes for the cap screws to properly install.

 Secure the middle hole of each hanger plate with a cap screw (Item 12), washer (Item 13) and locknut (Item 14).

# **UNDERCARRIAGE INSTALLATION**

7. Align four holes on each side of the pushbeam with the holes in the hanger plates. Choose the set of holes that will bring the pushbeam closest to the dimension shown in the following illustration.



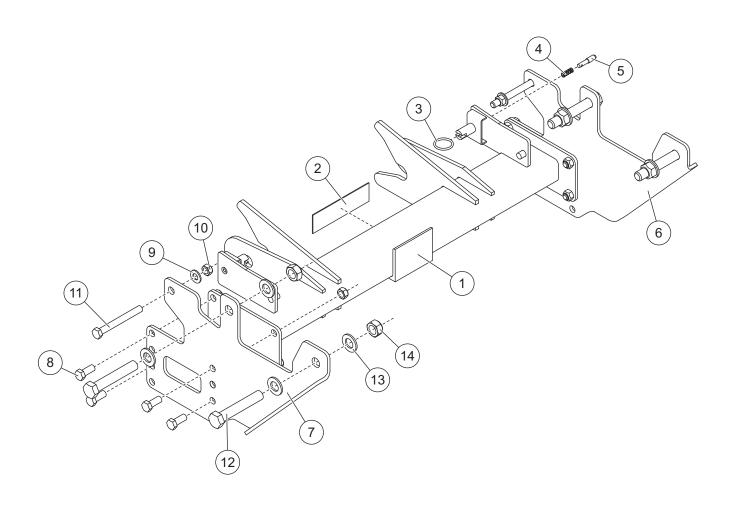


- Mount the pushbeam (Item 1) square with the bottom of each hanger plate using cap screws (Item 8) and locknuts (Item 10). Tighten the pushbeam hardware according to the torque chart.
- 9. Level the pushbeam with the floor and tighten the hanger plate hardware.

NOTE: Be careful not to cause permanent "crush" damage to the frame tube. The top locknut will hold this set tension, which is sufficient for this application.

 Replace the grille assembly and bumper using the existing hardware, notching bumper fascia to fit. Reconnect lamp wiring and verify each is working properly.

NOTE: After five to ten hours of snowplow usage, retorque all undercarriage assembly fasteners.



	B30186-1 Undercarriage Kit								
ltem	Part	Qty	Description	Item	Part	Qty	Description		
1	B30187	1	Pushbeam	5	B40079	2	A-Frame Latch Pin		
2	B63162	1	Decal, Pushbeam	6	B30190	1	Hanger Plate – PS		
3	B61309	2	Split Ring, 1.25 OD	7	B30189	1	Hanger Plate – DS		
4	B61000	2	Compression Spring SS	ns	B61534	1	Hardware Kit		
B61534 Hardware Kit									
8	90210	8	1/2-13 x 1-1/2 Hex Cap Screw G5	12	90294	4	3/4-10 x 4-1/2 Hex Cap Screw G5		
9	90572	2	1/2 Hardened Flat Washer	13	63575	8	3/4 Hardened Flat Washer		
10	91335	10	1/2-13 Hex Locknut GB	14	91338	4	3/4-10 Hex Locknut GC		
11	90109	2	1/2-13 x 4-1/2 Hex Cap Screw G5						
G = Grade SS = Sta		nless St	eel		ns = not shown				



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