



B30071

UNDERCARRIAGE KIT

| | |
|-------------|-----------|
| GM C3500 HD | 1991 - 02 |
| GM C3500 | 1988 - 00 |

Parts List and Installation Instructions

⚠ CAUTION

Read this document before installing the snowplow.

⚠ 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

SAFETY DEFINITIONS

WARNING

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

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.

SAFETY

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.

⚠ 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.

⚠ 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.

⚠ 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.

⚠ 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 in use. The control indicator light will turn off.

⚠ WARNING

Remove blade assembly before placing vehicle on hoist.

⚠ 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

⚠ 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

⚠ 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

⚠ 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 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 for Metric–Grade 8.8 Bolt



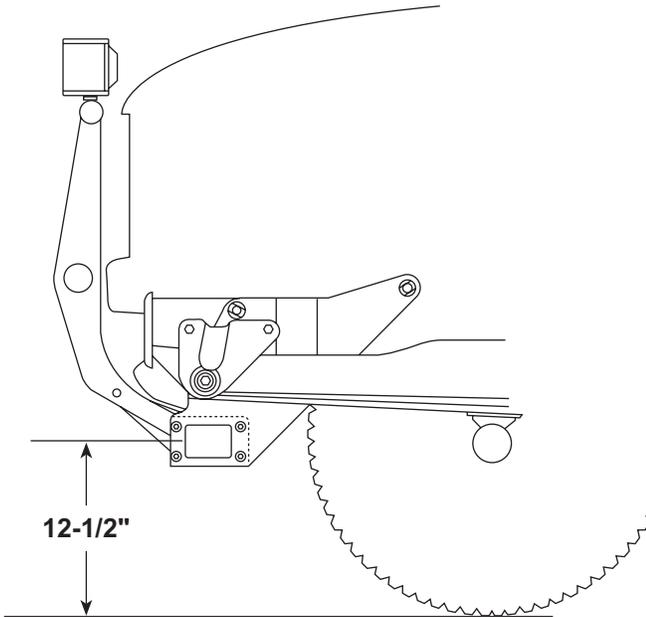
Grade Identification for Metric–Grade 10.9 Bolt

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

PUSHBEAM

PUSHBEAM HEIGHT

The recommended pushbeam height for this undercarriage assembly is 12-1/2" from the center of the pushbeam to level ground. DO NOT exceed 14-1/2" in height for this undercarriage.



UNDERCARRIAGE INSTALLATION

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

1. Remove and discard the fasteners from the rear mount of each bumper support bracket.
2. Position the driver-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 cap screw.

Align the holes from the bumper support bracket mount to those on the hanger plate and secure using two 1/2" x 1-1/2" cap screws, four 1/2" washers and 1/2" locknuts. Hand tighten.

Secure two additional 1/2" x 1-1/2" cap screws with washers and locknuts opposite the bumper support mount hardware. Hand tighten.

3. Complete the hanger plate installation by installing two 1/2" x 1-1/2" cap screws with handles through the middle mount holes. Attach a thin gauge wire to each cap screw and position the wire through the opening in the frame at the spring shackle bolt. Pull the wire and cap screw through the bottom mount hole in the frame and hanger plate. Secure the cap screw with a 1/2" washer and 1/2" locknut. Repeat the same procedure for the top mount hole.
4. Repeat Steps 2–3 to install the passenger-side hanger plate.
5. Mount the pushbeam to each hanger plate using four 1/2" x 1-1/2" cap screws, eight 1/2" washers and four 1/2" locknuts.

6. Align the hole in the driver-side pushbeam support arm to the mount hole on the frame in front of the vehicle shock mount.

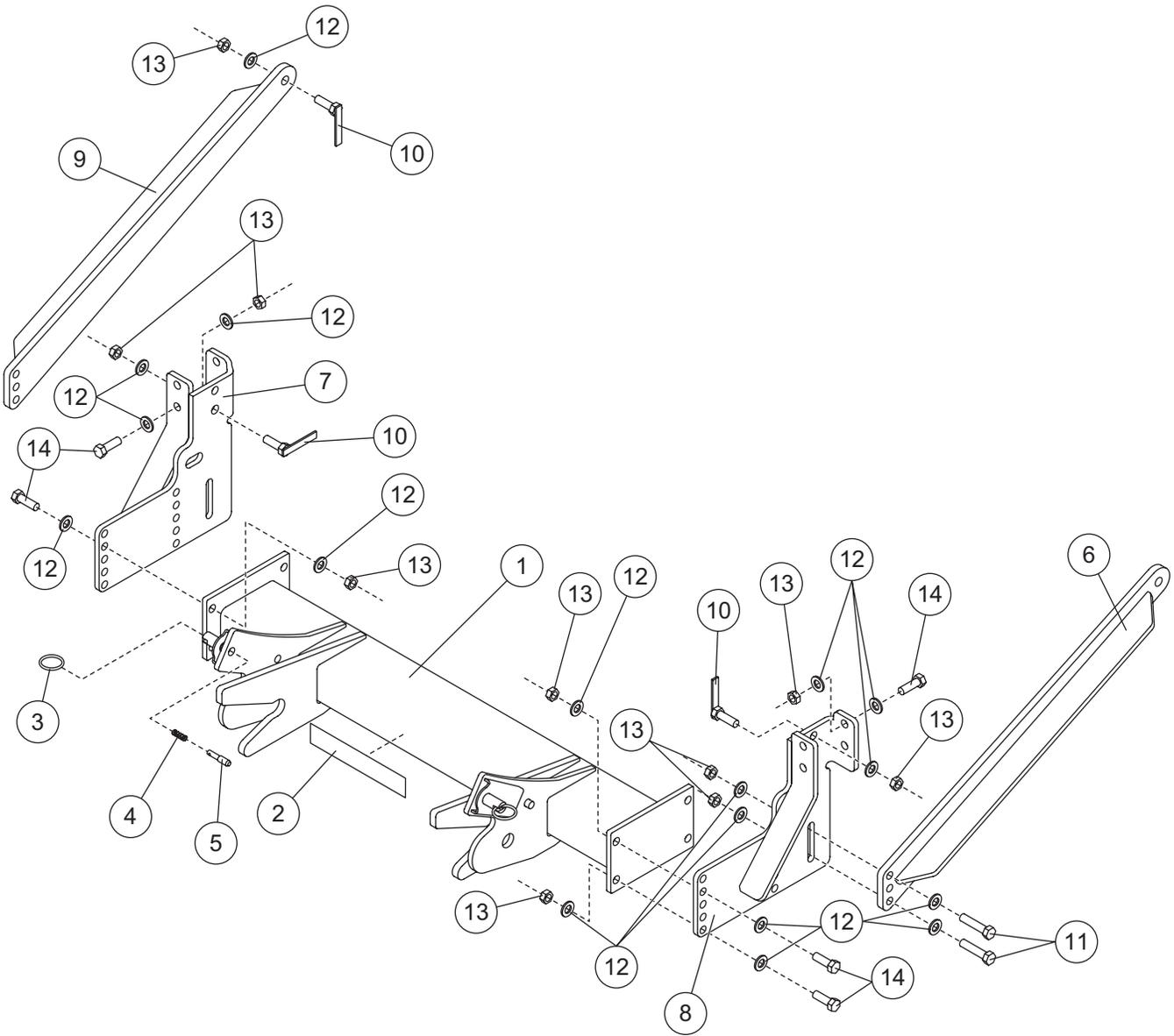
Secure the support arm by positioning a 1/2" x 1-1/2" cap screw with handle through the opening in the frame at the spring shackle bolt. Pull the wire and cap screw through the mount hole in the frame and support arm. Secure the cap screw with one 1/2" flat washer and locknut.

Align the holes in the support arm with the rear mount slot on the hanger plate. Secure the plates using two 1/2" x 2-1/4" cap screws with four 1/2" washers and two 1/2" locknuts.

7. Repeat Step 6 to install the passenger-side support arm.
8. Once the undercarriage has been positioned and all hardware is in place, fully tighten all fasteners according to the torque chart.

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

UNDERCARRIAGE PARTS LIST



| B30071 Undercarriage Kit | | | | | | | |
|---------------------------------|--------|-----|---|------|--------|-----|---------------------------------|
| Item | Part | Qty | Description | Item | Part | Qty | Description |
| 1 | B30070 | 1 | Pushbeam | 6 | B30063 | 1 | Support Arm, Pushbeam – DS |
| 2 | B63161 | 1 | Decal, Pushbeam | 7 | B30127 | 1 | Hanger Plate – PS |
| 3 | B61309 | 2 | Split Ring, 1.25 OD | 8 | B30128 | 1 | Hanger Plate – DS |
| 4 | B61000 | 2 | Compression Spring SS | 9 | B30067 | 1 | Support Arm, Pushbeam – PS |
| 5 | B40079 | 2 | A-Frame Latch Pin | ns | B61160 | 1 | Hardware Kit |
| B61160 Hardware Kit | | | | | | | |
| 10 | B61151 | 6 | 1/2-13 x 1-1/2 Hex Cap Screw G8 with Handle | 12 | 90572 | 46 | 1/2 Hardened Flat Washer |
| 11 | B61054 | 4 | 1/2-13 x 2-1/4 Hex Cap Screw G8 | 13 | 90593 | 26 | 1/2-13 Hex Locknut GC |
| | | | | 14 | 67240 | 16 | 1/2-13 x 1-1/2 Hex Cap Screw G8 |
| | | | G = Grade | | | | SS = Stainless Steel |
| | | | | | | | ns = not shown |



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