

B32157 UNDERCARRIAGE KIT

1984 - 01 Jeep Cherokee Jeep Wagoneer 1984 - 93 Jeep Comanche 1986 - 92

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.

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.

A 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

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 | (lbs) | "Lubricated" | "Dry" | Thread Size | (lbs) | "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



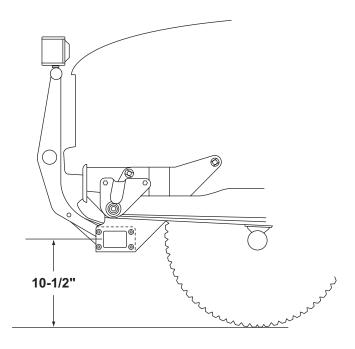
Grade Identification for Metric-Grade 10.9 Bolt

| orado idonimidadon non modino orado dio Don | | | | \$ 0.440 1401111101110 0.440 1010 2011 | | | | | |
|---------------------------------------------|----------------------|-------------------|------------|----------------------------------------|-------------|-------------------|------------|--|--|
| Metric Class 8.8 Torque Values | | | | Metric Class 10.9 Torque Values | | | | | |
| Diameter (mm) | Clamp Loads (lbs) | Tightening Torque | | Diameter | Clamp Loads | Tightening Torque | | | |
| | | "Lubricated" | "Dry" | (mm) | (İbs) | "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 10-1/2" from the center of the pushbeam to level ground. DO NOT exceed 12-1/2" 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 the bumper. Remove the bumper mount brackets from outside the frame and discard hardware.
- 2. Align the holes in the plates (Item 8) on the inside of the frame with the two front holes for the bumper mount bracket. Position the hanger plates (Item 6 & 7) between the frame and the bumper mount bracket on the outside of the frame. Secure the bolting plates on the inside of the frame, and hanger plates and bumper mount brackets on the outside of the frame, with cap screws (Item 18), washers (Item 12) and locknuts (Item 13). Finger tighten the fasteners until all undercarriage parts are in place.
- Position cap screws (Item 14) and washers (Item 12) through the remaining rear hole in the bumper mount brackets.

NOTE: Each hole contains a welded nut on the inside of the truck frame rail.

 Align carriage bolts (Item 16) with the square holes, at the back side of the hanger plates, with the holes in the frame and secure with washers (Item 10) and locknuts (Item 17).

- Insert cap screw with handles (Item 9) with washers (Item 10 & 11) into the end of the frame and out through the bottom, front hole in the frame. Secure with washers (Item 10) and locknuts (Item 17).
- Position cap screws (Item 14) and washers (Item 12) through the rear hanger plate mount holes located under the frame.

NOTE: Each hole contains a welded nut on the inside of the truck frame rail.

 Mount the pushbeam (Item 1) square with the bottom of each hanger plate and secure using cap screws (Item 15), washers (Item 10) and locknuts (Item 17).

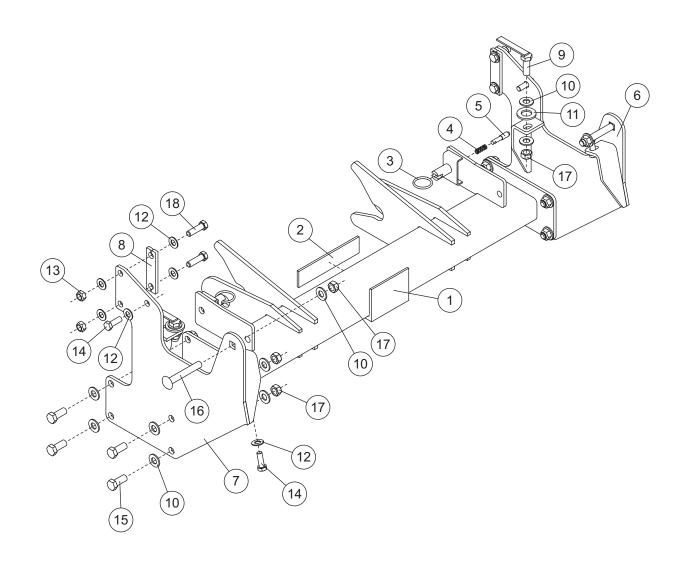
NOTE: Use a floor jack to help facilitate the installation procedure.

Torque the pushbeam hardware according to the torque chart.

- 8. Level the pushbeam with the floor and tighten the hanger plate hardware according to the torque chart.
- 9. Replace the bumper.

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

UNDERCARRIAGE PARTS LIST



| B32157 Undercarriage Kit | | | | | | | | |
|--------------------------|--------|--------------|------------------------------|------|--------|----------------|------------------------------------|--|
| Item | Part | Qty | Description | Item | Part | Qty | Description | |
| 1 | B32154 | 1 | Pushbeam | 5 | B40079 | 2 | A-Frame Latch Pin | |
| 2 | B63162 | 1 | Decal, Pushbeam | 6 | B32158 | 1 | Hanger Plate – PS | |
| 3 | B61309 | 2 | Split Ring, 1.25 OD | 7 | B32156 | 1 | Hanger Plate – DS | |
| 4 | B61000 | 2 | Compression Spring SS | ns | B61463 | 1 | Hardware Kit | |
| B61463 Hardware Kit | | | | | | | | |
| 8 | B32151 | 2 | Bolting Plate | 13 | 90353 | 4 | 7/16-14 Hex Locknut GB | |
| 9 | B61151 | 2 | 1/2-13 x 1-1/2 Hex Cap Screw | 14 | B61460 | 4 | M10 x 1.50 x 30 Hex Cap Screw G8.8 | |
| | | | with Handle | 15 | 90665 | 8 | 1/2-13 x 1-1/4 Hex Cap Screw G8 | |
| 10 | 90572 | 22 | 1/2 Hardened Flat Washer | 16 | B61418 | 2 | 1/2-13 x 3-1/2 Carriage Bolt G8 | |
| 11 | 63575 | 2 | 3/4 Hardened Flat Washer | 17 | 90593 | 12 | 1/2-13 Hex Locknut GC | |
| 12 | 29232 | 12 | 7/16 Hardened Flat Washer | 18 | 90177 | 4 | 7/16-14 x 1-1/2 Hex Cap Screw G5 | |
| G = Grade | | ade SS = Sta | SS = Stainless Steel | | | ns = not shown | | |



Blizzard P.O. Box 245038 Milwaukee, WI 53224-9538 www.blizzardplows.com

A DIVISION OF DOUGLAS DYNAMICS, L.L.C.

Copyright © 2007 Douglas Dynamics, L.L.C. All rights reserved. This material may not be reproduced or copied, in whole or in part, in any printed, mechanical, electronic, film or other distribution and storage media, without the written consent of Blizzard. Authorization to photocopy items for internal or personal use by Blizzard outlets or snowplow owner is granted.

Blizzard reserves the right under its product improvement policy to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications used. Blizzard or the vehicle manufacturer may require or recommend optional equipment for snow removal. Do not exceed vehicle ratings with a snowplow. Blizzard offers a limited warranty for all snowplows and accessories. See separately printed page for this important information. The following is a registered (®) trademark of Douglas Dynamics, L.L.C.: BLIZZARD®.

Printed in U.S.A.

Lit. No. B64110, Rev. 01 October 15, 2007