

# **B32188** UNDERCARRIAGE KIT

**Dodge Durango** 

2004 -

Parts List and Installation Instructions

## **A** CAUTION

Read this document before installing the snowplow.

#### A CAUTION

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

#### SAFETY DEFINITIONS

# **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 LABEL

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

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



LOWER BLADE WHEN VEHICLE IS PARKED.

REMOVE BLADE ASSEMBLY BEFORE PLACING VEHICLE ON HOIST.

DO NOT EXCEED GVWR OR GAWR INCLUDING BLADE AND BALLAST.

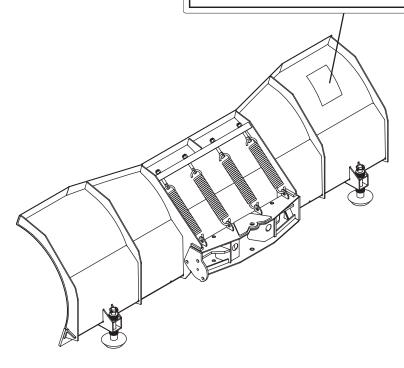


READ OWNER'S MANUAL BEFORE OPERATING OR SERVICING SNOWPLOW.

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

PLOWING SPEED SHOULD NOT EXCEED 10 MPH.

SEE YOUR SALES OUTLET FOR 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.

#### **A WARNING**

Remove blade assembly before placing vehicle on hoist.

#### **A** CAUTION

See your BLIZZARD® outlet for application recommendations.

#### **A** CAUTION

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.

#### 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 deadly carbon monoxide (CO) gas. Breathing this gas, even in low concentrations, could 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**



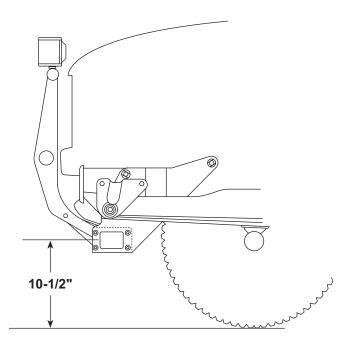
# Grade Identification for Metric-Grade 10.9 Bolt

Metric Class 8.8 Torque Values				Metric Class 10.9 Torque Values				
Diameter	Clamp Loads	Tightening Torque		Diameter	Clamp Loads	Tightening Torque		
(mm)	(lbs)	"Lubricated"	"Dry"	(mm)	(lbs)	"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. Disconnect all lamp harnesses and then remove the grille assembly and bumper.

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

- 2. Position the driver's side hanger plate (Item 7) on the outside of the frame behind the washer fluid/engine coolant reservoir. Attach the hanger plate to the frame with the clamp (Item 8). Secure the clamp with the cap screws (Item 13) and washers (Item 10) from the outside of the frame with the washers (Item 10) and locknuts (Item 15) on the inside of the frame. Finger tighten the fasteners until all undercarriage parts are in place.
- Attach the driver's side hanger plate to the pushbeam (Item 1) with cap screws (Item 17), washers (Item 14) and locknuts (Item 15).

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

 Attach the passenger's side hanger plate (Item 6) to the pushbeam with additional cap screws (Item 17), washers (Item 14) and locknuts (Item 15).

NOTE: Align the bottom of each hanger plate square with the pushbeam.

- 5. Align the pushbeam support arm mount holes with the holes in the cross member. The top of the passenger's side hanger plate should be flush with the top of the octagonal frame and the holes in the plate should be positioned in the middle of the frame face.
- 6. Level the pushbeam with the floor and tighten the pushbeam hardware according to the torque chart. Mark the hole locations, three for the passenger side hanger plate and one rear hole for the driver's side hanger plate, on the frame.

#### **A** CAUTION

Use caution not to pinch, cut or drill through any wires or hoses running along the frame rails.

- 7. Remove the undercarriage and drill the pilot holes with an 11/16" bit through the outside of the frame wall, only, in the marked locations.
- Reinstall the undercarriage and secure the support arms to the cross member with cap screws (Item 9), washers (Item 10) and retainer & nuts (Item 12).

NOTE: The retainer & nuts need to be inserted through the access holes at each end of the cross member.

 Position the nut plate (Item 11) into the passenger's side frame and align it with holes drilled in the frame. Secure with cap screws (Item 9) and washers (Item 10).

NOTE: The flat stock will not interfere with the bumper.

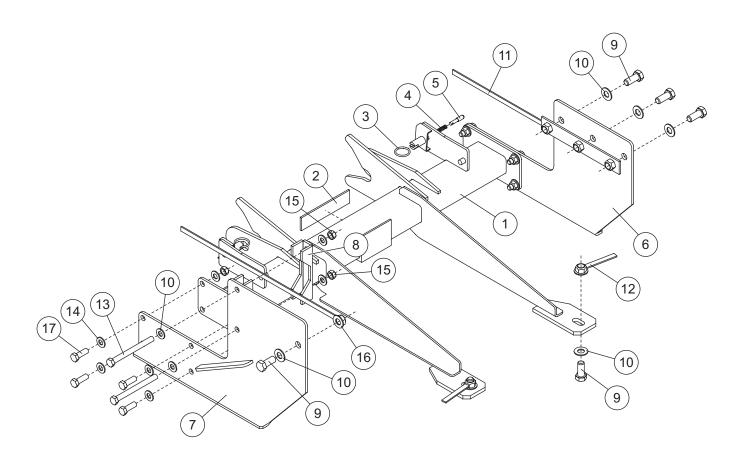
 With the driver's side hanger plate clamped in place, position the nut plate (Item 16) into the frame aligned with the drilled hole. Secure with cap screw (Item 9) and washer (Item 10).

NOTE: The flat stock will not interfere with the bumper.

- 11. Tighten hanger plate hardware according to the torque chart.
- 12. Replace the bumper and grille assembly, notching bumper fascia to fit. Reconnect the lamp harnesses.

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

# **UNDERCARRIAGE PARTS LIST**



B32188 Undercarriage Kit								
Item	Part	Qty	Description	Item	Part	Qty	Description	
1	B32194	1	Pushbeam	6	B32190	1	Hanger Plate – PS	
2	B63162	1	Decal, Pushbeam	7	B32189	1	Hanger Plate – DS	
3	B61309	2	Split Ring, 1.48 O.D	8	B32203	1	Clamp – DS	
4	B61000	2	Compression Spring	ns	B61549	1	Hardware Kit	
5	B40079	2	A-Frame Latch Pin					
B61549 Hardware Kit								
9	80239	6	5/8-11 x 1-1/2 Hex Cap Screw G8	14	90572	16	1/2 Hardened Flat Washer	
10	90576	10	5/8 Hardened Flat Washer	15	90593	10	1/2-13 Hex Locknut GC	
11	B32195	1	Nut Plate	16	B32197	1	Nut Plate	
12	B31112	2	Retainer & Nut	17	67240	8	1/2-13 x 1-1/2 Hex Cap Screw G8	
13	B61584	2	1/2-13 x 5-1/2 Hex Cap Screw G8					
	G = Grade						ns = not shown	



Blizzard Snowplows 23199 Airpark Blvd. Calumet, MI 49913 www.blizzardplows.com

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

Copyright © 2006 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.

April 5, 2006 Lit. No. B64111, Rev. 00