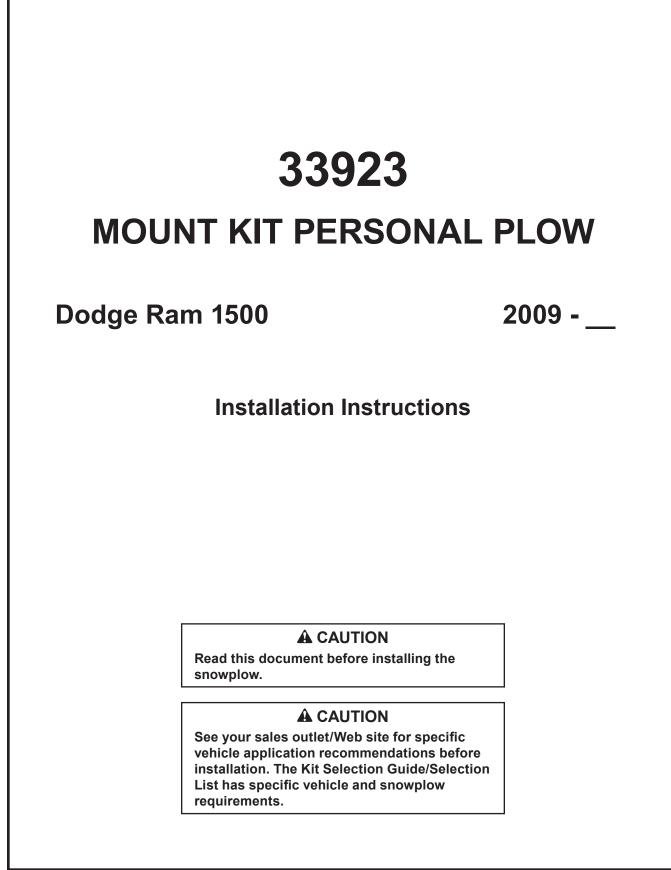
November 15, 2008 Lit. No. 40942, Rev. 00





#### 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.

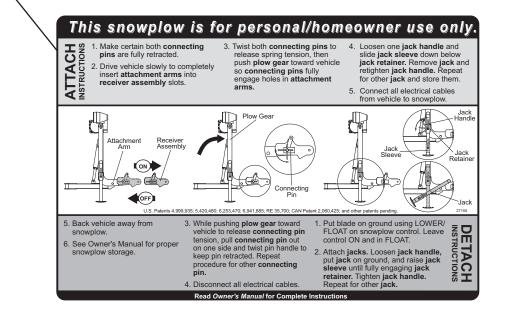
NOTE: Indicates a situation or action that can lead to damage to your snowplow and vehicle or other property. Other useful information can also be described.

# WARNING/CAUTION & INSTRUCTION LABELS

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

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





# 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.

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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 removing the snowplow. Moving or falling assemblies could cause personal injury.

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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 in use. The control indicator light will turn off.

# A WARNING

Remove blade assembly before placing vehicle on hoist.

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Refer to the Kit Selection Guide/Selection List 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

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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.

# **CELL PHONES**

A driver's first responsibility is the safe operation of the vehicle. The most important thing you can do to prevent a crash is to avoid distractions and pay attention to the road. Wait until it is safe to operate Mobile Communication Equipment such as cell phones or two-way radios.

# 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 CHART**

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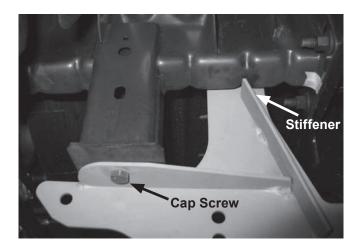
Read instructions before assembling. Fasteners should be finger tight until instructed to tighten according to the torque chart. Use standard methods and practices when attaching snowplow including proper personal protective safety equipment.

Recommended Fastener Torque Chart (ft-lb)			
Size	SAE Grade 2	Grade 5	Grade 8
1/4-20 5/16-18 3/8-16 3/8-24 7/16-14 1/2-13 9/16-12 5/8-11 3/4-10 7/8-9 1-8	6 11 19 24 30 45 66 93 150 150 220	9 18 31 46 50 75 110 150 250 378 583	13 28 46 68 75 115 165 225 370 591 893
Metric Grade 8.8 (ft-lb)			
Size	Torque	Size	Torque
M 6 M 8 M 10	7 17 35	M 12 M 14 M 16	60 95 155
These torque values apply to fasteners except those noted in the instruction.			

# INSTALLATION INSTRUCTIONS

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

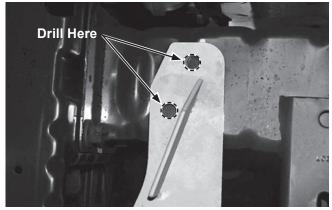
- 1. Remove the bumper.
- 2. Remove the tow hooks. Retain the fasteners. Save the tow hooks for reinstallation if the mounts are removed in the future.
- 3. Place the passenger-side mount up against the frame. Insert a M12 x 35 cap screw up through the mount hole, into the truck frame and hand tighten.



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

4. Push the mount plate tight up against the frame. Make sure the stiffener is pressed tight up against the frame. Using the holes on the mount plate as a guide, drill 17/32" holes through the frame.



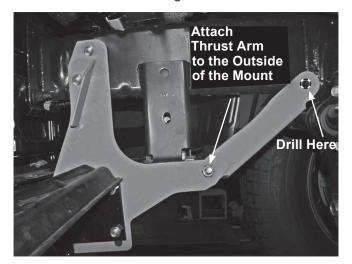
5. Insert two 1/2" x 1-1/2" cap screws and 1/2" flat washers into the inside of the truck frame and out through the drilled holes. Attach a 1/2" locknut to each cap screw and hand tighten.

6. Attach the thrust arm to the outside of the mount using a cap screw and locknut. Hand tighten the fastener.

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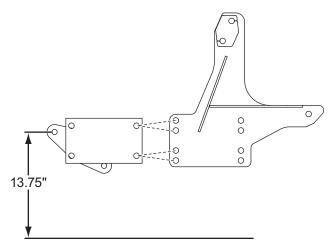
Use caution not to pinch, cut or drill through any wires or hoses running along the frame rails.

7. Rotate the thrust arm up until it hits the truck frame. Using the hole in the thrust arm as a guide, drill a 17/32" hole through the frame.



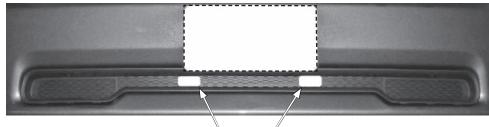
- 8. Attach a washer to the cap screw with handle. Insert it through the frame and through the rear hole. Attach a locknut and hand tighten.
- 9. Repeat steps 3–8 for the driver's side.

10. Align the four holes in each side of the pushbeam with the holes in the mount plates. Choose the set of holes that will bring the pushbeam closest to the dimension shown below.



- 11. Attach the pushbeam to the mounts, using four cap screws and locknuts per side.
- 12. Fully tighten all fasteners according to the torque chart. When the cap screw with handle is tightened, make sure that the handle is rotated so that it is tight against the frame.

- 13. Remove the air dam from the bumper.
- 14. Modify the plastic bumper insert for placement of the electrical connections. Cut the holes in the insert large enough for the electrical connector to fit through. One option for the insert modification is shown below.



Cut holes in bumper insert for electrical connections.

- 15. Reattach the bumper.
- 16. Modify the air dam as shown below. Reattach the air dam to the bumper.



Cut slots in air dam as shown.

17. Use cable ties to strap the loose portion of the air dam to the pushbeam.

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

The company 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. This equipment manufacturer or the vehicle manufacturer may require or recommend optional equipment for snow removal. Do not exceed vehicle ratings with a snowplow. The company offers a limited warranty for all snowplows and accessories. See separately printed page for this important information.

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