2303 MOUNT KIT PERSONAL PLOW

Toyota Tundra

2000 - 06

Installation Instructions

A CAUTION

Read this document before installing the snowplow.

A CAUTION

See your sales outlet/Web site for specific vehicle application recommendations before installation. The Kit Selection Guide/Selection List 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/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.



LOWER BLADE WHEN VEHICLE IS PARKED

DO NOT EXCEED GVWR OR GAWR INCLUDING BLADE

REMOVE BLADE ASSEMBLY BEFORE PLACING VEHICLE ON HOIST.

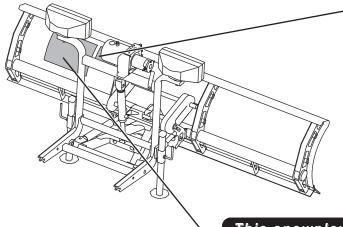
CAUTION

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.



This snowplow is for personal/homeowner use only. ATTACH INSTRUCTIONS 1. Make certain both connecting 3. Twist both connecting pins to 4. Loosen one iack handle and slide jack sleeve down below jack retainer. Remove jack and retighten jack handle. Repeat release spring tension, then push **plow gear** toward vehicle pins are fully retracted. 2. Drive vehicle slowly to completely so connecting pins fully insert attachment arms into engage holes in attachment arms. for other jack and store them. receiver assembly slots. Connect all electrical cables from vehicle to snowplow. Plow Gear

- 5. Back vehicle away from snowplow.
- 6. See Owner's Manual for proper
- 3. While pushing **plow gear** toward vehicle to release **connecting pin** tension, pull **connecting pin** out on one side and twist pin handle to keep pin retracted. Repeat procedure for other connecting

4. Disconnect all electrical cables Read *Owner's Manual* for Complete In

- Put blade on ground using LOWER/ FLOAT on snowplow control. Leave control ON and in FLOAT.
 - Attach jacks. Loosen jack handle, put jack on ground, and raise jack sleeve until fully engaging jack retainer. Tighten jack handle. Repeat for other jack.

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TACH

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.

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.

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 in use. The control indicator light will turn off.

A WARNING

Remove blade assembly before placing vehicle on hoist.

A CAUTION

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

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.

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 -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

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.

Recommended Fastener Torque Chart (ft-lb)			
Size	SAE Grade 2	SAE Grade 5	SAE 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.			

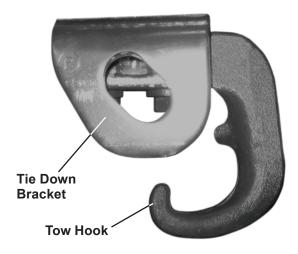
INSTALLATION INSTRUCTIONS

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

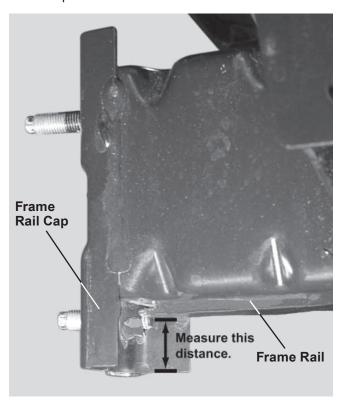
- Remove the plastic outer bumper. Retain the fasteners.
- 2. Carefully pull the foam filler off the steel bumper.
- 3. Detach the cooling tube from the steel bumper, then remove the bumper from the vehicle.
- Locate the fasteners that held the steel bumper onto the frame. Separate the threaded studs from the locknuts, and reinstall the studs into the vehicle frame. Retain the locknuts.
- 5. On models with separate, removable splash guards, remove the guards and cut them according to the photo below. After cutting, reattach the splash guards to the vehicle.



6. Remove the tow hook and tie down brackets from the underside of the frame. The shorter pair of fasteners will be reused during this installation. The longer pair of fasteners should be retained with the tow hook and tie down brackets for reinstallation if the snowplow mount is removed.



7. On the inside of the frame, measure the distance from the bottom of the frame rail to the bottom of the frame rail cap. If this distance is 1-1/4", use the provided frame spacers between the mount and the vehicle frame. If this distance is 1", do not use the spacers.



- 8. Place a spring lock washer and a flat washer onto each cap screw provided with the kit and set them aside.
- 9. Slide the front of the mount onto the threaded studs in the vehicle frame. Align the holes in the rear of the mount with the tie down bracket holes in the bottom of the frame.
- 10. Using the cap screws and washers from Step 8 and the shorter pair of the tie down bracket fasteners, attach the rear of the mount to the vehicle frame. If appropriate, be sure to use the spacers between the mount and the frame as described in Step 7. Hand tighten the fasteners.
- 11. Reinstall the steel bumper using the locknuts retained in Step 4. Reattach the cooling tube to the bumper.
- 12. Tighten all fasteners according to the torque chart.
- 13. Place the foam filler back onto the steel bumper, and reinstall the plastic outer bumper.

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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