September 1, 2022 Lit. No. 41599, Rev. 03

2015–

31563 MOUNT KIT PERSONAL PLOW

Colorado/Canyon

Installation Instructions

Read this document before installing the snowplow.

See your sales outlet/website for specific vehicle application recommendations before installation. The online selection system 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.

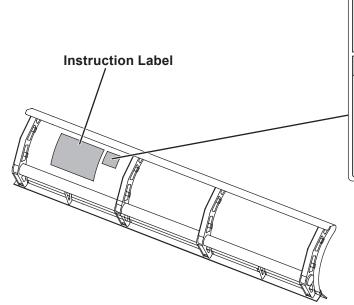
NOTE: Indicates a situation or action that can lead to damage to your snowplow and vehicle or other property. Other useful information can also be described.

WARNING/CAUTION & INSTRUCTION LABELS

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

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

Warning/Caution Label





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.

Lower the 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.

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 control OFF whenever the snowplow is not in use. The power indicator light will turn OFF.

Remove blade assembly before placing vehicle on hoist.

A CAUTION

Refer to the online selection system for minimum vehicle recommendations and ballast requirements.

PERSONAL SAFETY

- Remove the 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, text messaging devices, pagers, or two-way radios.

VENTILATION

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.

NOISE

Airborne noise emission during use is below 70 dB(A) for the snowplow operator.

VIBRATION

Operating snowplow vibration does not exceed 2.5 m/s² to the hand-arm or 0.5 m/s² to the whole body.

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					
Inch Fasteners Grade 5 and Grade 8					
Size	Torque (ft-lb)			Torque (ft-lb)	
	Grade 5	Grade	Size	Grade 5	
1/4-20	8.4	11.9	9/16-12	109	154
1/4-28	9.7	13.7	9/16-18	121	171
5/16-18	17.4	24.6	5/8-11	150	212
5/16-24	19.2	27.3	5/8-18	170	240
3/8-16	30.8	43.6	3/4-10	269	376
3/8-24	35.0	49.4	3/4-16	297	420
7/16-14	49.4	69.8	7/8-9	429	606
7/16-20	55.2	77.9	7/8-14	474	669
1/2-13	75.3	106.4	1-8	644	909
1/2-20	85.0	120.0	1-12	704	995
Metric Fasteners Class 8.8 and 10.9					
Size	Torque (ft-lb)			Torque (ft-lb)	
	Class 8.8	Class 10.9	Size	Class 8.8	Class 10.9
M6 x 1.00	7.7	11.1	M20 x 2.50	325	450
M8 x 1.25	19.5	26.9	M22 x 2.50	428	613
M10 x 1.50	38.5	53.3	M24 x 3.00	562	778
M12 x 1.75	67	93	M27 x 3.00	796	1139
M14 x 2.00	107	148	M30 x 3.50	1117	1545
M16 x 2.00	167	231	M33 x 3.50	1468	2101
M18 x 2.50	222	318	M36 x 4.00	1952	2701
These torque values apply to fasteners except those noted in the instructions.					

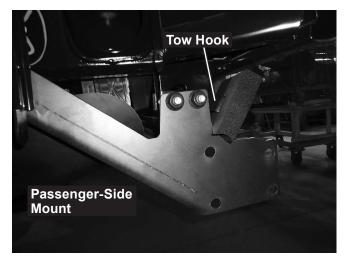
INSTALLATION INSTRUCTIONS

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

1. Notch the lower plastic air dam as shown below.

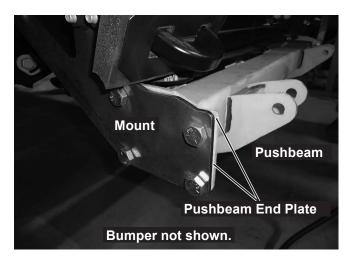


2. Remove the tow hook fasteners. Leave the tow hook in place. Position the passenger-side mount as shown below, with the inner surface of the mount against the tow hook.



- 3. Reuse the tow hook fasteners to loosely secure the mount. Do not tighten fasteners at this time.
- 4. Repeat on the driver's side.

 Position the pushbeam as shown, so that the pushbeam end plates are square to the driver-side and passenger-side mounts. Install four 1/2" x 1-1/4" cap screws as shown, and secure with 1/2" locknuts on both sides. Tighten the pushbeam fasteners only according to the torque chart.

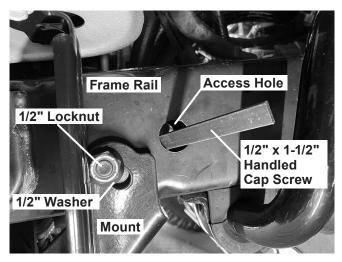


- Measure the distance between the rear hole of the receiver plate (located on the rear of the pushbeam) and the ground. If this exceeds 11-1/2", install the accessory Height Adapter Plate Kit (PN 77555) to ensure optimum plowing performance.
- 7. Using a floor jack, lift the mount assembly tightly into the tow hook cavities. Make sure that the bent flanges on both mounts come into contact with the vehicle frame. Position both tow hooks so that they are parallel to each other. Tighten the tow hook fasteners according to the torque chart.
- 8. Determine whether the vehicle frame rail has a pre-drilled hole located near the access hole. If it does, skip to Step 10.

NOTE: Model years 2022 and newer include a pre-drilled hole in the frame rail, adjacent to the access hole, and do not require a hole to be drilled in Step 9.

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

- 9. Using the **lower** end of the slot at the rear end of each mount as a guide, drill a 17/32" hole in each frame rail. *The mount pictured in Step 10 shows fasteners in the upper end of the slot. This mount has not yet been lifted tightly into place.*
- 10. Install a 1/2" x 1-1/2" handled cap screw on each side from the inside of the frame rail and through the frame hole, using the access hole to maneuver the handled cap screw into place. Secure each handled cap screw with a 1/2" washer and 1/2" locknut on the outside of the mount.



- 11. Tighten all fasteners according to the torque chart.
- 12. Attach the snowplow receivers and the snowplow to the mounts. Check the clearance between the plastic air dam and the trim. Adjust if necessary.

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.

Printed in U.S.A.