April 1, 2014 Lit. No. 41606, Rev. 02



69982

UNDERCARRIAGE KIT

GM K2500/2500HD/3500/3600 Silv/Sierra 2011 - ___ GM C3500/3600 Silv/Sierra 2011 -

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

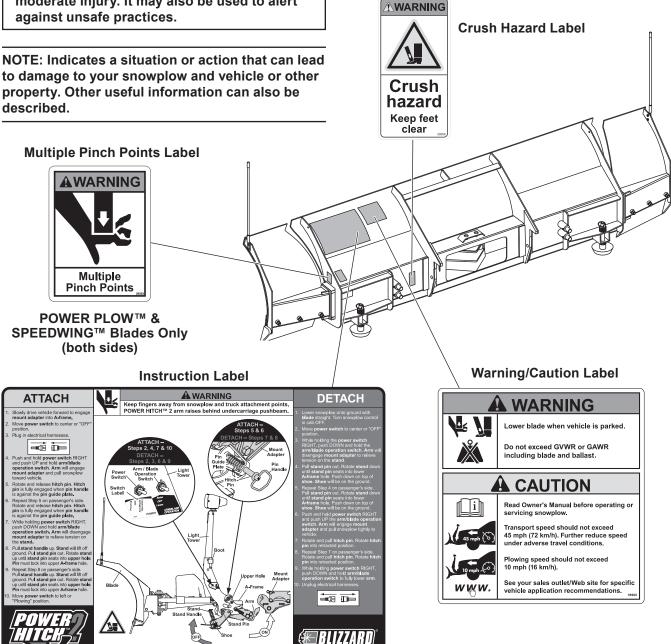
Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert

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 and instruction labels on the back of the blade.

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.

A WARNING

Lower the blade when the 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.

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.

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 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

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.

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

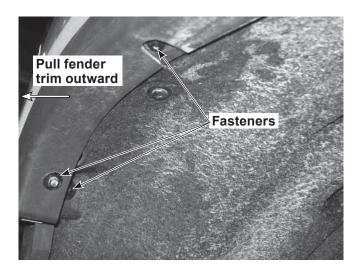
INSTALLATION INSTRUCTIONS

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

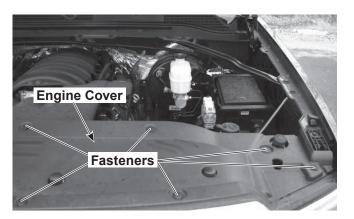
Headlamp Removal 2015 and Newer Trucks Only

Fender Trim Preparation 2015 and Newer Trucks Only

 If the vehicle is equipped with fender trim, remove the two fasteners attaching the fender trim to the driver-side wheel well. Remove the one fastener located to the side of the fender as shown. Pull the fender trim away from the vehicle body.



2. Remove the engine compartment cover by removing the twelve outer fasteners, six of which are pointed out below.



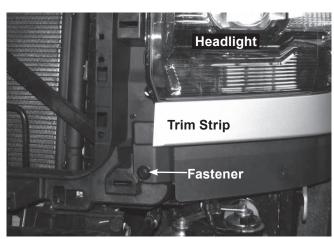
- 3. Remove the grille fasteners and pull out the grille.
- 4. Remove the bumper fasteners and pull off the bumper.

Headlamp Trim Removal 2015 and Newer Trucks Only

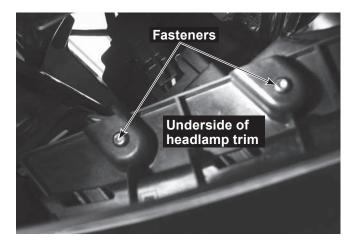
5. In order to remove the headlamp, the plastic trim strip below it must be removed first. Remove the fasteners hidden behind the plastic trim piece and the wheel well fender.



6. Remove the fastener to the side of the plastic trim piece. Remove the trim piece.



7. Remove the two fasteners on the underside of the headlamp trim.

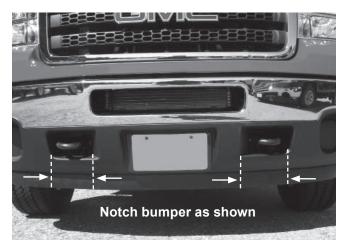


8. The headlamp is held in place by four fasteners. Remove the two fasteners on the top of the headlamp, as well as the fasteners on the side and the front.

For 2015 and newer trucks, install the isolation module at this time. Refer to the electrical harness installation instructions for details.

Bumper Notch Instructions 2011–2014 Trucks Only

1. Remove the tow hooks. Notch the lower plastic portion of the bumper to fit, as shown below.



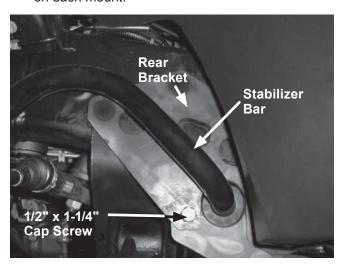
Undercarriage Installation Instructions All Vehicles

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

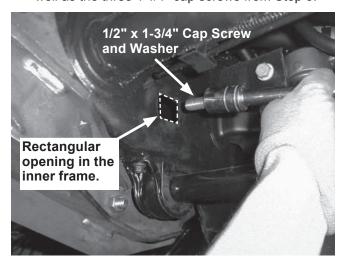
 Beginning with the passenger-side mount, align the forward mount holes with tow hook holes in frame. Reinstall the tow hook and fasteners and tighten according to the torque charts provided. Repeat on the opposite side.

UNDERCARRIAGE INSTALLATION

 Position the rear brackets around the front stabilizer bar as shown in the photo below.
 Loosely attach the rear brackets to the mounts using three 1/2" x 1-1/4" cap screws and locknuts on each mount.



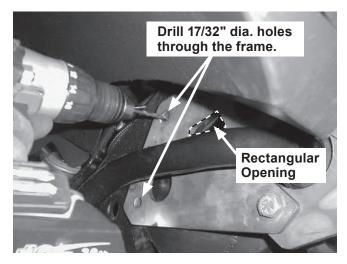
3. Insert a 1/2" x 1-3/4" cap screw and washer through the rectangular opening in the inner surface of the frame, through the frame and the rear bracket. Secure loosely with a 1/2" locknut. Adjust the position of the rear brackets upwards as far as possible and secure the 1-3/4" fastener, as well as the three 1-1/4" cap screws from Step 3.



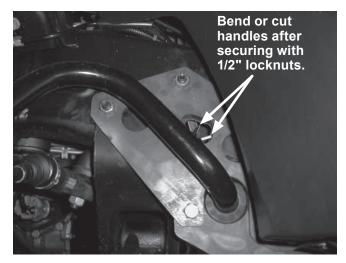
A CAUTION

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

4. On the passenger's side, drill two 17/32" diameter holes through the vehicle frame using the rearmost 9/16" holes in the brackets as guides.

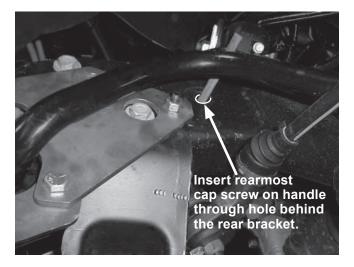


Insert two cap screws with handles and washers through the rectangular opening in the rear bracket and through the previously drilled holes in the vehicle frame. Secure with 1/2" locknuts. Bend or cut the handles so that they do not interfere with the range of motion of the front stabilizer bar.



UNDERCARRIAGE INSTALLATION

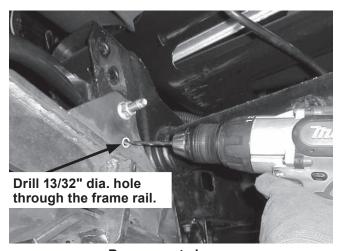
Repeat this process on the driver's side, noting that the rearmost cap screw on handle must be inserted through the round hole behind the rear bracket as shown. Bend or cut the handles so that they do not interfere with the range of motion of the front stabilizer bar.



A CAUTION

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

5. Using the 7/16" hole on the front of the mounts as a guide, drill a 13/32" diameter hole through the frame rail. Insert a 3/8" x 1" cap screw through the drilled hole and secure with a 3/8" locknut and washer.



Bumper not shown.

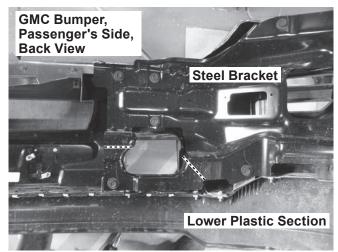
Bumper Notch Instructions Continued

2011-2014 Trucks Only

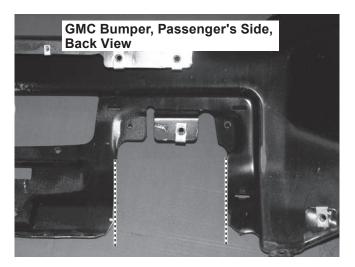
 Use the off-truck portion of the snowplow to determine any additional trimming of the lower bumper valence required to clear all snowplow components when attaching/detaching the snowplow from the vehicle.

2015 and Newer GMC Trucks Only

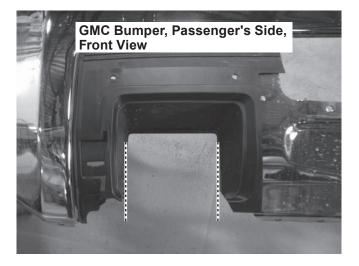
 Remove the lower plastic portion of the bumper.
 Remove the large steel bracket and cut along the steel portion of the bumper as shown below.



2. Notch to create an opening in the tow hook cavity in the steel portion of the bumper.

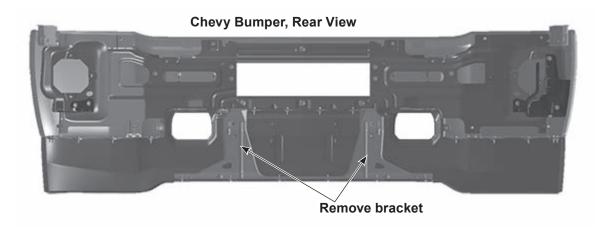


3. Remove the plastic portion of the bumper and notch as shown below.

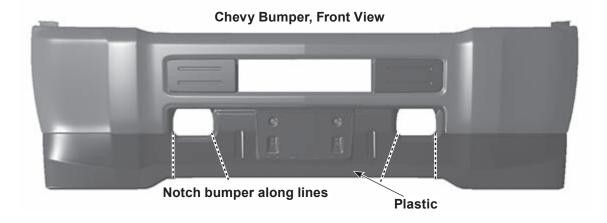


2015 and Newer Chevy Trucks Only

1. Remove the bracket on the back of the bumper as shown.



2. Notch the plastic portion of the bumper as shown.



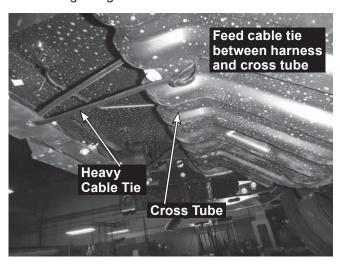
All 2015 and Newer Vehicles

1. Reinstall the bumper.

A CAUTION

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

 Tie Back the lower, plastic portion of the bumper to the cross tube using cable ties, as shown below. Holes can be drilled in the plastic splash pan to allow the cable ties around the cross tube. Run the cable ties underneath the harness running along the tube.

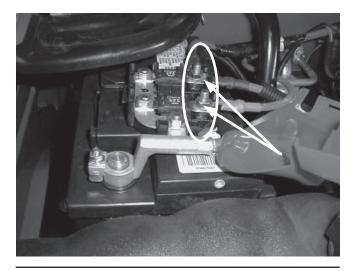


3. Reinstall the grille and headlamp trim.



Electrical Installation

If the vehicle is equipped with fused battery studs, the plow battery cables should <u>not</u> be attached to the fused side (shown below).



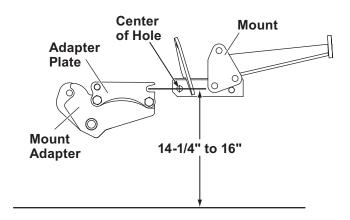
NOTE: After five to ten hours of snowplow usage, retorque all mount assembly fasteners.

MOUNT ADAPTER MEASUREMENT

With the vehicle on level ground, measure from the ground to the center of the hole on the U-bracket side plate of the mount.

The height of the mount should be 14-1/4" or less from the center of the U-bracket hole to level ground. If the measured height is 14-1/4" or less, no mount adapter height adjustment is required.

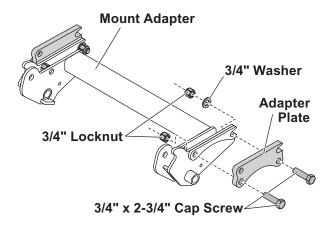
If the measured height is 14-1/4" to 16", install the short height adjustment adapter plates to the mount adapter as described. (The mount adapter comes packaged with the blade crate assembly.)



MOUNT ADAPTER INSTALLATION

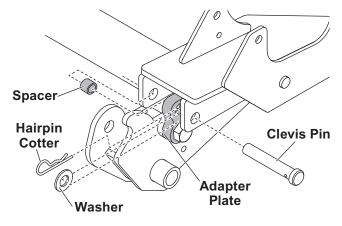
If adapter plates are required, install as follows:

 Position an adapter plate against the driver's side portion of the mount adapter as shown. Insert a 3/4" x 2-3/4" cap screw through the lower front adapter plate hole and through the appropriate hole on the mount adapter. Secure with a locknut.



- 2. Insert a cap screw through the rear adapter plate hole, through the slot on the mount adapter and through a washer. Secure with a locknut.
- 3. Repeat for the passenger's side. Tighten all fasteners according to the torque chart.

When positioning the mount adapter between the undercarriage brackets, insert a spacer between the adapter plate and the inner side plate of the undercarriage as shown.



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



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