



# **B30014**

## **UNDERCARRIAGE KIT**

### **Model 720LT**

**GM K1500**  
**All New**

**2007 - \_\_**  
**2014 - \_\_**

### **Parts List & Installation Instructions**

**⚠ CAUTION**

Read this document before installing the snowplow.

**⚠ 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

## SAFETY DEFINITIONS

### ⚠ WARNING

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious personal injury.

### ⚠ 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 and instruction labels on the back of the blade.

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

### Crush Hazard Label



### Multiple Pinch Points Label



### POWER PLOW™ & SPEEDWING™ Blades Only (both sides)

### Instruction Label

#### ATTACH

- Slowly drive vehicle forward to engage mount adapter into A-frame.
- Move power switch to center or "OFF" position.
- Plug in electrical harnesses.
- Push and hold power switch RIGHT and push UP and hold armblade operation switch. Arm will engage mount adapter and pull snowplow toward vehicle.
- Rotate and release hitch pin. Hitch pin is fully engaged when pin handle is against the pin guide plate.
- Repeat Step 5 on passenger's side. Rotate and release hitch pin. Hitch pin is fully engaged when pin handle is against the pin guide plate.
- While holding power switch RIGHT, push DOWN and hold armblade operation switch. Arm will disengage mount adapter to relieve tension on the stand.
- Pull stand handle up. Stand will lift off ground. Pull stand pin out. Rotate stand up until stand pin seats into upper hole. Pin must lock into upper A-frame hole.
- Repeat Step 8 on passenger's side. Pull stand handle up. Stand will lift off ground. Pull stand pin out. Rotate stand up until stand pin seats into upper hole. Pin must lock into upper A-frame hole.
- Move power switch to left or "Plowing" position.

#### ⚠ WARNING

Keep fingers away from snowplow and truck attachment points. POWER HITCH™ 2 arm raises behind undercarriage pushbeam.

#### DETACH

- Lower snowplow onto ground with blade straight. Turn snowplow control in cab OFF.
- Move power switch to center or "OFF" position.
- While holding the power switch RIGHT, push DOWN and hold the armblade operation switch. Arm will disengage mount adapter to relieve tension on the stand.
- Pull stand pin out. Rotate stand down until stand pin seats into lower A-frame hole. Push down on top of shoe. Shoe will be on the ground.
- Repeat Step 4 on passenger's side. Pull stand pin out. Rotate stand down until stand pin seats into lower A-frame hole. Push down on top of shoe. Shoe will be on the ground.
- Push and hold power switch RIGHT and push UP the armblade operation switch. Arm will engage mount adapter and pull snowplow tightly to vehicle.
- Rotate and pull hitch pin. Rotate hitch pin into retracted position.
- Repeat Step 7 on passenger's side. Rotate and pull hitch pin. Rotate hitch pin into retracted position.
- While holding power switch RIGHT, push DOWN and hold armblade operation switch to fully lower arm.
- Unplug electrical harnesses.

Read Owner's Manual for complete instructions.

U.S. patents 5,420,480; 5,638,618; 5,899,007; 6,178,969; 6,253,470; 6,276,076; 6,393,737; 6,408,549; 6,412,199; 6,442,877; 6,615,513; 7,134,227; 7,400,656; 7,430,521; 7,737,576; CAN patents 2,800,425; 2,184,922; 2,229,783; 2,259,598; 2,353,145; 2,356,354; 2,552,933; and other patents pending.

### Warning/Caution Label

#### ⚠ WARNING

Lower blade when vehicle is parked.

Do not exceed GVWR or GAWR including blade and ballast.

#### ⚠ CAUTION

Read Owner's Manual before operating or servicing snowplow.

Transport speed should not exceed 45 mph (72 km/h). Further reduce speed under adverse travel conditions.

Plowing speed should not exceed 10 mph (16 km/h).

See your sales outlet/Web site for specific vehicle application recommendations.

# SAFETY

## 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.**

### 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.**

### 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.**

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

### WARNING

**Remove blade assembly before placing vehicle on hoist.**

### CAUTION

**Refer to the Undercarriage Selection Guide 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

### 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

### 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 SPECIFICATIONS

## 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/s<sup>2</sup> to the hand-arm or 0.5 m/s<sup>2</sup> to the whole body.

## TORQUE CHART

### ⚠ 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 Thread Size	Clamp Loads (lb)	Tightening Torque		Nominal Thread Size	Clamp Loads (lb)	Tightening Torque	
		"Lubricated"	"Dry"			"Lubricated"	"Dry"
1/4-20	2,000	6 ft-lb	8 ft-lb	1/4-20	2,850	9 ft-lb	12 ft-lb
5/16-18	3,350	13 ft-lb	18 ft-lb	5/16-18	4,700	18 ft-lb	25 ft-lb
3/8-16	4,950	23 ft-lb	31 ft-lb	3/8-16	6,950	32 ft-lb	44 ft-lb
7/16-14	6,800	37 ft-lb	50 ft-lb	7/16-14	9,600	53 ft-lb	70 ft-lb
1/2-13	9,050	57 ft-lb	75 ft-lb	1/2-13	12,800	80 ft-lb	107 ft-lb
9/16-12	11,600	82 ft-lb	109 ft-lb	9/16-12	16,400	115 ft-lb	154 ft-lb
5/8-11	14,500	113 ft-lb	151 ft-lb	5/8-11	20,300	159 ft-lb	211 ft-lb
3/4-10	21,300	200 ft-lb	266 ft-lb	3/4-10	30,100	282 ft-lb	376 ft-lb
7/8-9	29,435	321 ft-lb	430 ft-lb	7/8-9	41,550	454 ft-lb	606 ft-lb
1-8	38,600	482 ft-lb	640 ft-lb	1-8	54,540	680 ft-lb	900 ft-lb



### 8.8 Grade Identification for Metric-Grade 8.8 Bolt



### 10.9 Grade Identification for Metric-Grade 10.9 Bolt

Metric Class 8.8 Torque Values				Metric Class 10.9 Torque Values			
Diameter (mm)	Clamp Loads (lb)	Tightening Torque		Diameter (mm)	Clamp Loads (lb)	Tightening Torque	
		"Lubricated"	"Dry"			"Lubricated"	"Dry"
5	1,389	3 ft-lb	5 ft-lb	5	1,987	5 ft-lb	7 ft-lb
6	1,965	6 ft-lb	8 ft-lb	6	2,812	8 ft-lb	11 ft-lb
7	2,826	10 ft-lb	13 ft-lb	7	4,044	14 ft-lb	19 ft-lb
8	3,579	14 ft-lb	19 ft-lb	8	5,121	20 ft-lb	27 ft-lb
10	5,672	28 ft-lb	37 ft-lb	10	8,116	40 ft-lb	53 ft-lb
12	8,243	49 ft-lb	65 ft-lb	12	11,796	70 ft-lb	92 ft-lb
14	11,246	77 ft-lb	103 ft-lb	14	16,092	111 ft-lb	148 ft-lb
16	15,882	125 ft-lb	167 ft-lb	16	21,970	173 ft-lb	231 ft-lb
18	19,423	172 ft-lb	229 ft-lb	18	26,868	238 ft-lb	317 ft-lb
20	24,784	244 ft-lb	325 ft-lb	20	34,284	338 ft-lb	450 ft-lb

# UNDERCARRIAGE INSTALLATION

## INSTALLATION INSTRUCTIONS

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

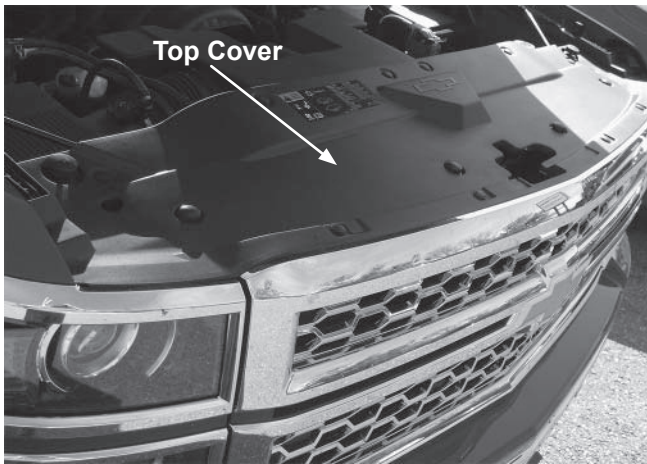
### Bumper Removal Instructions

**On 2013 and older truck models only:**

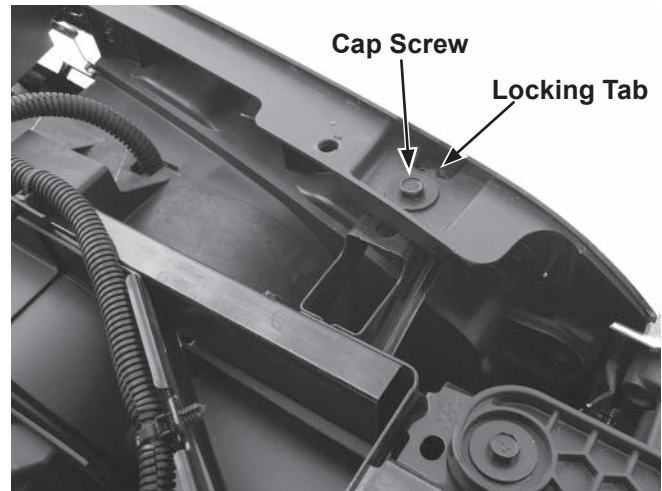
1. Remove the bumper. Retain fasteners.
2. Remove the splash shield. Retain fasteners.
3. Continue to Mount Installation Instructions on page 7.

**On 2014 and newer truck models only:**

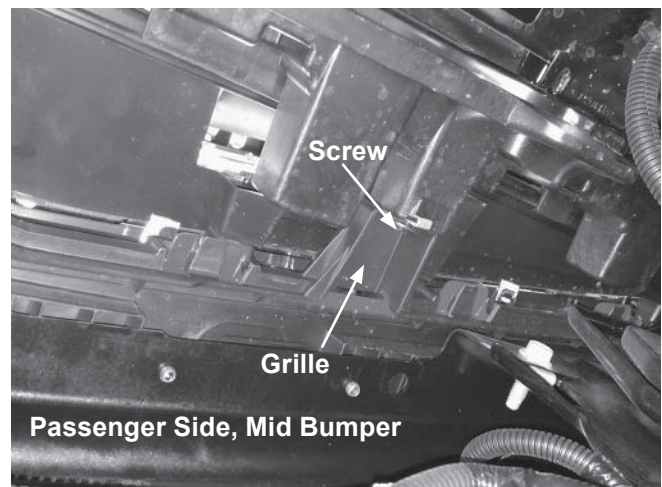
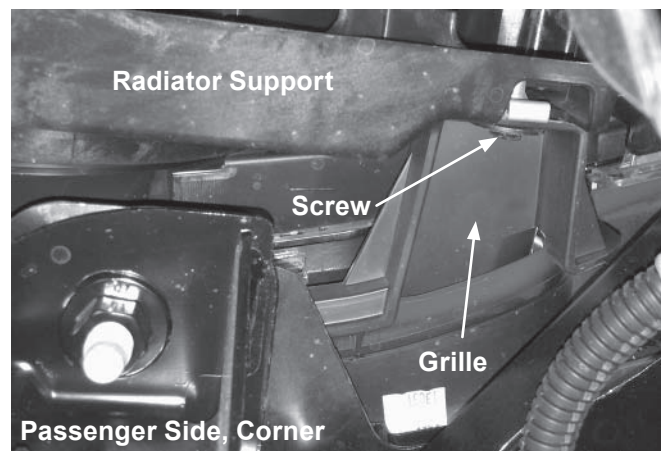
1. Remove plastic top cover (shown below) from the front of the engine compartment.



2. Remove the four cap screws and release the locking tabs located along the top of the grille.



3. Remove the four screws attaching the grille to the radiator support.





## UNDERCARRIAGE INSTALLATION

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4. Remove the two bumper cover screws located on the inside of each front wheel well. If the vehicle is equipped with fender trim, it will need to be displaced in order to access the screws.



6. Pull the bumper cover assembly forward to disengage grille tabs and remove the grille.
7. Remove the four main bumper fasteners and the single fastener securing the bumper ends to the outer bumper supports. Remove the bumper.

5. Release the hidden locking tabs on each side of the vehicle and pull the bumper cover outward.



## UNDERCARRIAGE INSTALLATION

### Mount Installation Instructions

1. Remove the air dam from the lower plastic portion of the bumper. Retain air dam and fasteners for future use if hanger plates are removed from vehicle.
2. Remove the lower plastic portion of the bumper from the vehicle. Retain fasteners.
3. Remove the splash shield. Retain fasteners.
4. On the passenger side of the vehicle, remove the front tow hook locknut. Align the front hole in the passenger-side hanger plate with the front tow hook cap screw, then reinstall the tow hook locknut to attach the hanger plate to the truck frame.

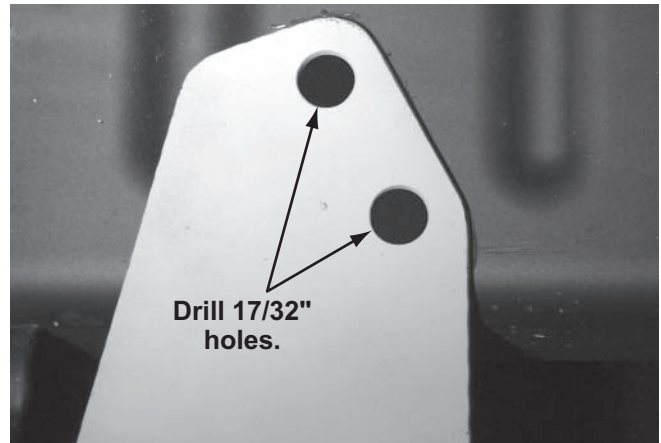


5. Rotate the passenger-side hanger plate back, and push it tight up against the bottom of the frame. Clamp the hanger plate in place against the frame.

### **⚠ CAUTION**

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

6. Using the holes in the passenger-side hanger plate as guides, drill three 17/32" holes into the frame.



7. Insert two 1/2" x 1-1/4" cap screws with handles and 1/2" flat washers into the inside of the truck frame and out through the rear drilled holes. Attach a 1/2" locknut to each cap screw and hand tighten.
8. Completely remove the passenger-side tow hook. Retain fasteners.
9. Insert one 1/2" x 1-1/4" cap screw and 1/2" flat washer into the front of the truck frame and out through the rear hole in the front arm of the hanger plate. Attach a 1/2" locknut, and hand tighten.

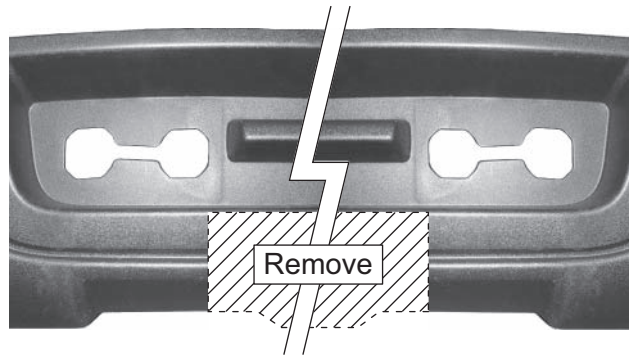
## UNDERCARRIAGE INSTALLATION

10. Reinstall the passenger-side tow hook using the original fasteners. Remove the clamp from the hanger plate.
11. On the driver side of the vehicle, completely remove and retain the tow hook fasteners.
12. Align the front holes in the driver-side hanger plate with the tow hook holes in the truck frame. Reinstall the tow hook fasteners, attaching both the tow hook and the driver-side hanger plate to the truck frame.
13. Make sure the driver-side hanger plate is tight up against the bottom of the frame. Clamp the hanger plate in place against the frame.
14. Using the holes in the driver-side hanger plate as guides, drill two 17/32" holes into the frame.
15. Insert two 1/2" x 1-1/4" cap screws with handles and 1/2" flat washers into the inside of the truck frame and out through the rear drilled holes. Attach a 1/2" locknut to each cap screw and hand tighten. Remove the clamp from the hanger plate.
16. Align four holes on each side of the pushbeam with the holes in the hanger plates. Choose the set of holes that will bring the pushbeam closest to the dimension shown in the following illustration.
17. Attach the pushbeam to the hanger plates using eight 1/2" x 1-1/4" cap screws. Place a 1/2" locknut on each cap screw, and fully tighten according to the torque chart.
18. Push the hanger plates tight up against the truck frame, then fully tighten the fasteners securing the hanger plates and tow hooks to the frame rails according to the torque chart.
19. Reattach the splash shield using the original fasteners.

### Bumper Notch Instructions

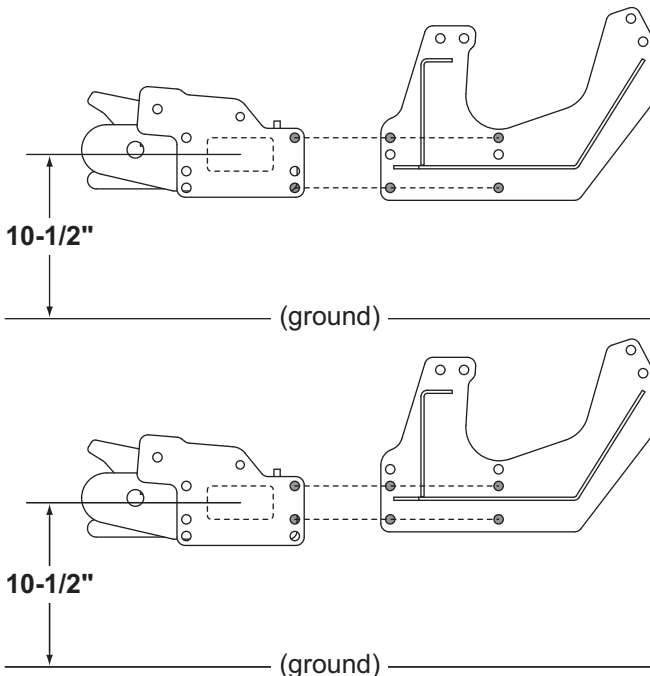
**On 2013 and older truck models only:**

20. If the lower plastic portion of the bumper does not clear the pushbeam, notch as needed.



21. Reattach the lower plastic portion of the bumper using the original fasteners.

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



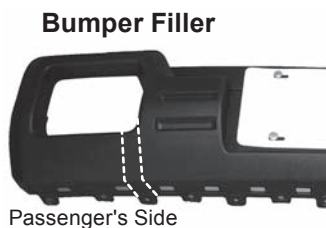
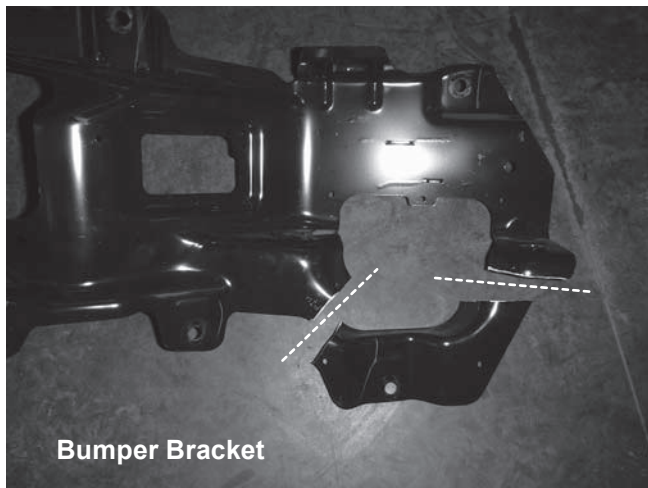
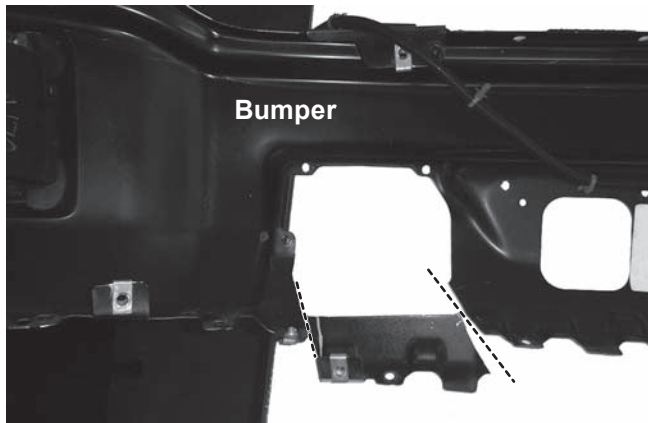


**On 2014 and newer truck models only:**

1. Remove the bumper brackets and bumper filler from the main bumper assembly. Depending on your vehicle make, notch each side of the bumper, bumper bracket, and bumper filler according to the cut lines as shown.

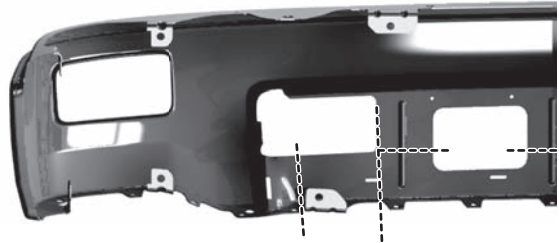
All depictions are of driver-side bumper parts, except where noted.

**GMC Vehicles:**

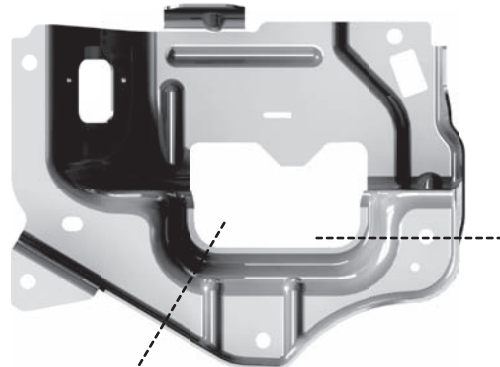


**Chevy Vehicles:**

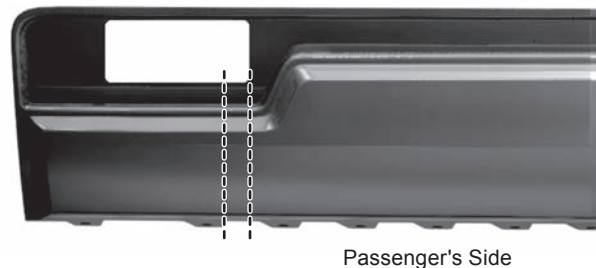
**Bumper**



**Bumper Bracket**



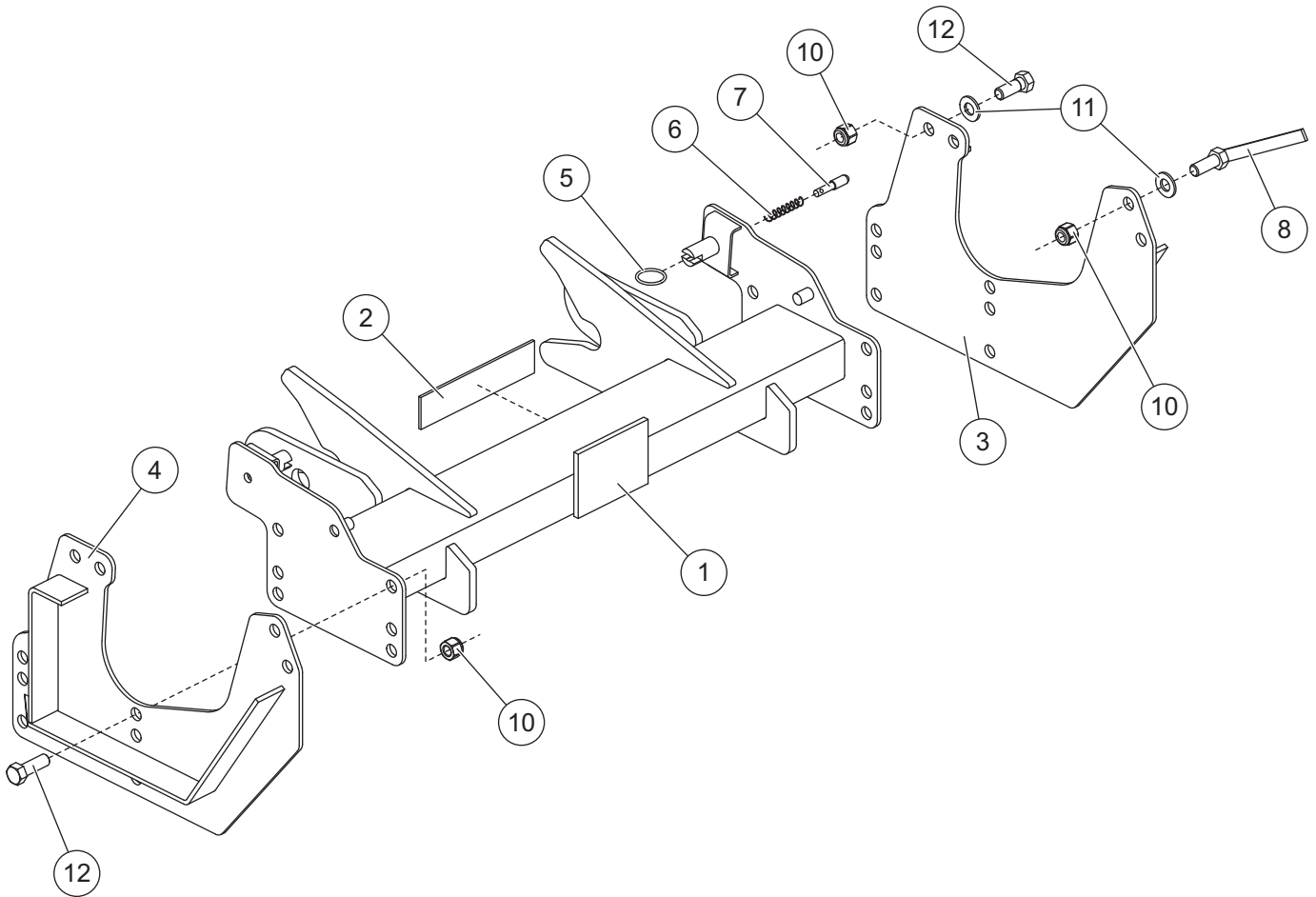
**Bumper Filler**



2. Reassemble and reinstall the bumper using the original fasteners.
3. The mid section of Chevy bumper fillers will need to be either secured rearward or trimmed to clear the mount pushbeam.

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

# UNDERCARRIAGE PARTS LIST



B30014 Undercarriage Kit							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	B30238	1	Pushbeam – 720LT	6	B61000	2	Compression Spring
2	B63162	1	Pushbeam Decal	7	B40079	2	A-Frame Latch Pin
3	29494	1	Hanger Plate – PS	8	21316	4	1/2-13 x 1-1/4 Hex Cap Screw G5 with Handle
4	29496	1	Hanger Plate – DS	ns	B30230	1	Hardware Kit
5	B61309	2	Split Ring, 1.25 OD				
B30230 Hardware Kit							
10	91335	13	1/2-13 Hex Locknut GB	12	90575	9	1/2-13 x 1-1/4 Hex Cap Screw G5
11	90572	5	1/2 Hardened Flat Washer				
ns = not shown				G = Grade			





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