



30269-1

UNDERCARRIAGE KIT

Ford Super Duty F-250/350/450/550 2008 - ____

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.

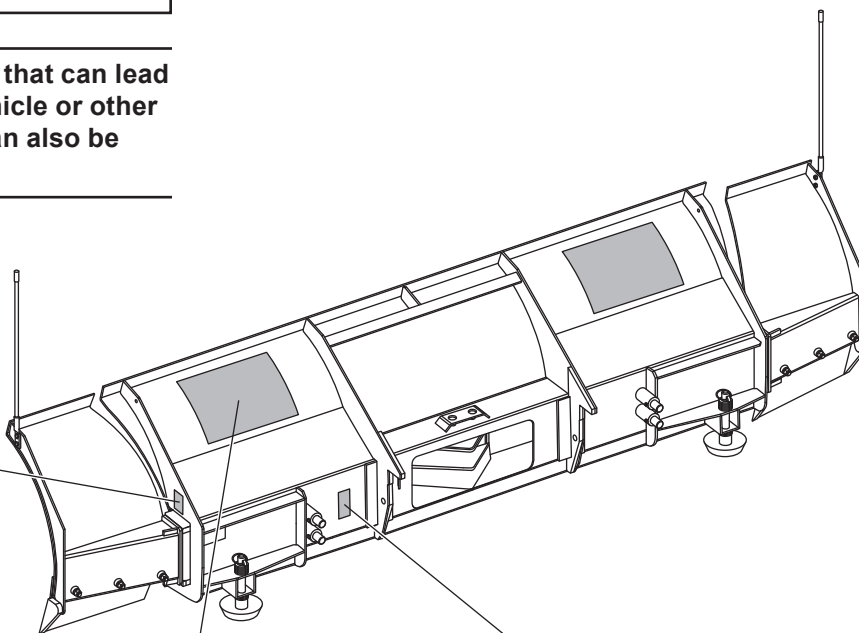
WARNING/CAUTION & INSTRUCTION LABELS

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.



POWER PLOW® and SPEEDWING™ Blades Only (both sides)



ATTACH	⚠ WARNING: Keep fingers away from snowplow and truck attachment points. POWER HITCH™ arm raises behind undercarriage pushbeam.	DETACH
<ol style="list-style-type: none"> 1. Slowly drive vehicle forward to engage mount adapter into A-frame. 2. Turn power switch to center or "OFF" position. 3. Plug in electrical harnesses. 4. Push and hold power switch RIGHT and push UP and hold arm/blade operation switch, Arm will engage mount adapter and pull snowplow towards vehicle. 5. Install both hitch pins. Hitch pin is fully engaged when pin handle is against the pin guide plate. 6. While holding power switch RIGHT, push DOWN and hold arm/blade operation switch, Arm will disengage mount adapter to relieve tension on the stand. 7. Pull and raise the stand until the stand pin seats into upper hole on the A-frame. 8. Turn power switch to left or "Flowing" position. 	<p>ATTACH - Steps 2, 4, 6 & 8 DETACH - Steps 2, 3, 5 & 7</p> <p>ATTACH - Step 5 DETACH - Step 6</p>	<ol style="list-style-type: none"> 1. Lower snowplow onto ground with blade straight. Turn plow control in cab to "OFF" position. 2. Turn power switch to center or "OFF" position. 3. While holding the power switch RIGHT, push DOWN and hold the arm/blade operation switch, Arm will disengage mount adapter to relieve tension on the stand. 4. Pull and lower the stand until stand pin seats into lower hole on the A-frame and stand and light tower side plates contact. 5. Push and hold power switch RIGHT and push UP the arm/blade operation switch. Arm will engage mount adapter and pull snowplow tightly to vehicle. 6. Remove both hitch pins. 7. While holding power switch RIGHT, push DOWN and hold arm/blade operation switch to fully lower arm. 8. Unplug electrical harnesses.

POWER HITCH™

Read Owner's Manual for Complete Instructions.

U.S. Patents 5,420,480; 5,638,615; 5,899,007; 6,178,669; 6,253,470; 6,276,076; 6,393,737; 6,408,549; 6,412,199; 6,442,877; 6,615,513; 7,134,227; RE 35,700; CAN Patents 2,060,425; 2,194,922; 2,220,763; 2,250,506; 2,355,145; 2,358,354; 2,460,190; and other patents pending.

BLIZZARD

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 ON/OFF switch to 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 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.

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TORQUE SPECIFICATIONS

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

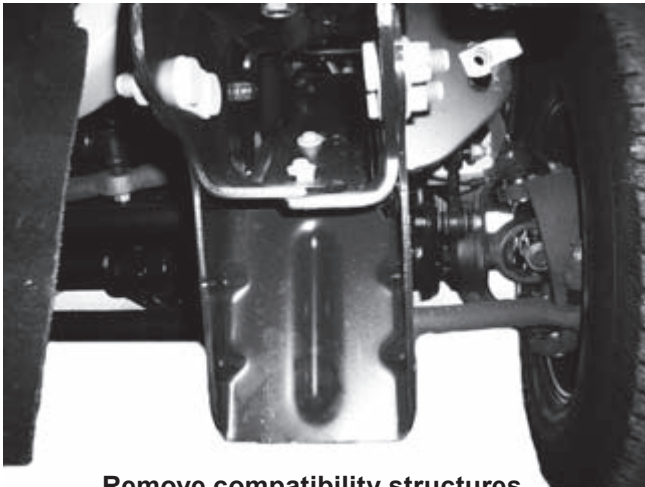
Metric Class 8.8 Torque Values				Metric Class 10.9 Torque Values			
Diameter (mm)	Clamp Loads (lb)	Tightening Torque		Diameter (mm)	Clamp Loads (lb)	Tightening Torque	
		"Lubricated"	"Dry"			"Lubricated"	"Dry"
5	1,389	3 ft-lb	5 ft-lb	5	1,987	5 ft-lb	7 ft-lb
6	1,965	6 ft-lb	8 ft-lb	6	2,812	8 ft-lb	11 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

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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.

1. Remove the air dam and bumper. Retain the fasteners for later installation.
2. Remove compatibility structures, if equipped. Retain them for reinstallation if the snowplow mount is removed.

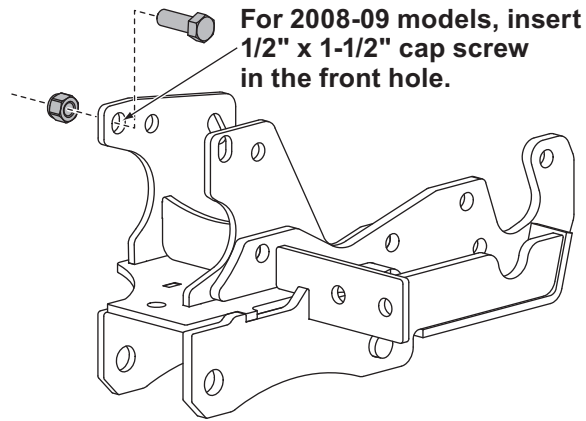


3. Remove the metal sway bar brackets and retain for reinstallation later in this procedure.
4. Completely remove the sway bar fasteners and bolt clips from the keyholes in the truck frame. Retain the fasteners and clips for future reinstallation if the mount kit is removed from the vehicle.

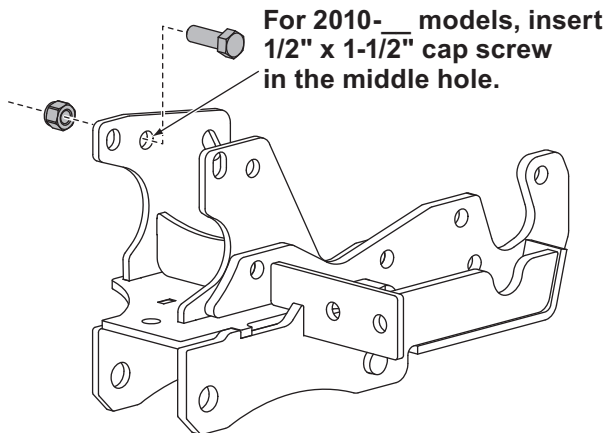
5. Place a spacer inside the passenger's side of the truck frame with the slots closest to the center of the vehicle. Insert a 7/16" x 2-1/2" cap screw down through a 7/16" flat washer, the spacer, the truck frame **(and a washer on F-450 and F-550 installations only)**.
6. Position the passenger-side rear bracket so the cap screw goes through the appropriate hole. Then place the sway bar in position and align the sway bar bracket so the fastener is in the correct hole. Attach a 7/16" locknut and hand tighten.
7. Insert a second 7/16" x 2-1/2" cap screw through a washer, the spacer, truck frame, **(a washer on F-450 and F-550 installations only)**, rear bracket and sway bar bracket. Attach a 7/16" locknut and hand tighten.
8. Insert a 1/2" x 1-1/2" cap screw and 1/2" washer into the truck frame and out through the front hole in the rear bracket. Attach a 1/2" locknut and hand tighten.
9. Position the passenger-side mount so that the rear hole is aligned with the rear hole in the bracket. Insert a 1/2" x 1-1/2" cap screw through the hole in the mount and rear bracket, attach a 1/2" locknut and hand tighten.
10. Rotate the mount up against the truck frame. Insert a 1/2" x 1-1/2" cap screw into the inner rear hole at the front of the mount and through the truck frame. Attach a 1/2" washer and locknut on the inside of the truck frame and hand tighten.
11. Insert a 1/2" x 1-1/2" cap screw and 1/2" washer into the inner front hole in the passenger-side mount. Attach a 1/2" locknut on the inside of the truck frame and hand tighten.
12. Insert a 1/2" x 1-1/2" cap screw and 1/2" washer into the truck frame and out through the outer rear hole in the mount. Attach a 1/2" washer and locknut and hand tighten.

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UNDERCARRIAGE INSTALLATION

13. **For 2008–09 Model Years:** Insert a 1/2" x 1-1/2" cap screw into the truck frame and out through the outer front hole in the mount. Attach a 1/2" locknut and hand tighten.



For 2010–__ Model Years: Insert a 1/2" x 1-1/2" cap screw into the truck frame and out through the outer middle hole in the mount. Attach a 1/2" locknut and hand tighten.



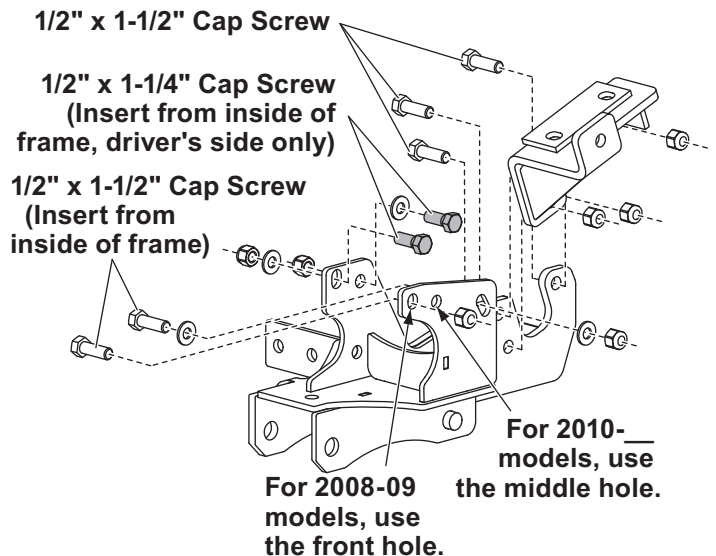
14. Install two more cap screws through the holes in the mount and rear bracket. Attach locknuts to fully secure the rear bracket to the mount. Hand tighten fasteners.

⚠ CAUTION

Diesel equipped vehicles must use supplied 1/2" x 1-1/4" cap screws between frame and intercooler to prevent intercooler damage during assembly and use.

15. Repeat steps 5–9 on the driver's side.

16. Rotate the mount up against the truck frame. Insert a 1/2" x 1-1/4" cap screw and 1/2" washer into the truck frame and out through the inner rear hole at the front of the mount. Attach a 1/2" locknut and hand tighten.



17. Insert a 1/2" x 1-1/4" cap screw into the truck frame and out through the inner front hole in the driver-side mount. Attach a 1/2" washer and 1/2" locknut, and hand tighten.
18. Insert a 1/2" x 1-1/2" cap screw and 1/2" washer into the truck frame and out through the outer rear hole in the mount. Attach a 1/2" washer and locknut and hand tighten.
19. **For 2008–09 Model Years:** Insert a 1/2" x 1-1/2" cap screw into the truck frame and out through the outer front hole in the mount. Attach a 1/2" locknut and hand tighten.

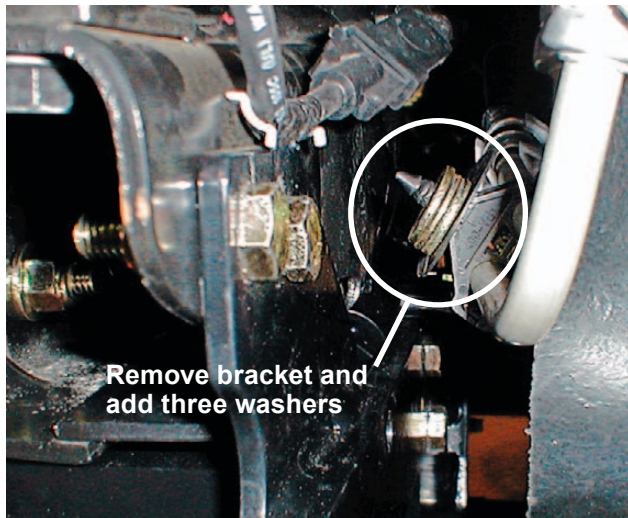
For 2010–__ Model Years: Insert a 1/2" x 1-1/2" cap screw into the truck frame and out through the outer middle hole in the mount. Attach a 1/2" locknut and hand tighten.

20. Install two more 1/2" x 1-1/2" cap screws through the holes in the mount and rear bracket. Attach locknuts to fully secure the rear bracket to the mount. Hand tighten fasteners.
21. Install the cross bar using four 1/2" x 1-1/2" cap screws and 1/2" locknuts. Hand tighten fasteners.
22. Fully tighten rear bracket fasteners according to the torque chart.

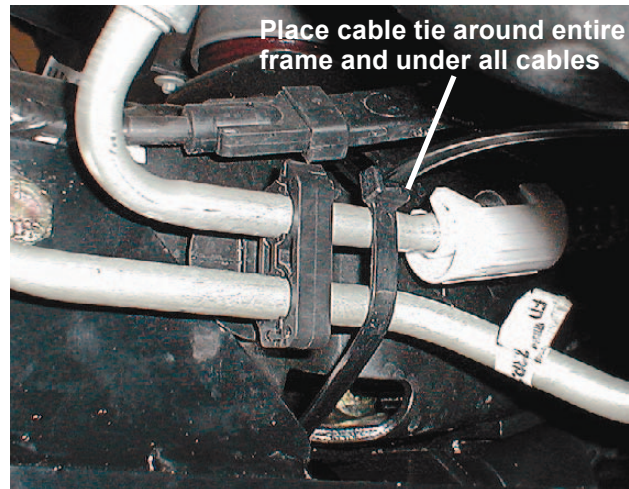
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UNDERCARRIAGE INSTALLATION

23. Make sure the mounts are tight up against the truck frame. Fully tighten the fasteners securing the mount to the truck frame and rear bracket according to the torque chart.

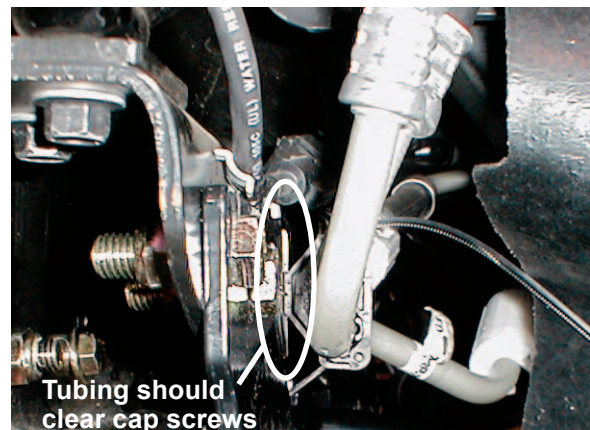
24. Remove the plastic bracket holding the metallic cooling lines from the passenger side of the truck frame. Stack three 1/2" washers over the bracket fastener.



25. Reinsert the fastener into the original hole to hold its position. Wrap the cable tie around the entire frame and tubing behind the bracket. Do not wrap cable tie over any other wires or tubes, or go inside the truck frame.

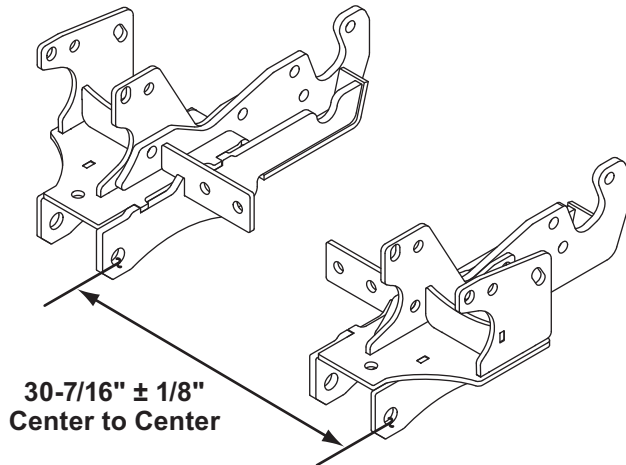


26. Tighten the cable tie until it is snug, taking care not to crimp tubing. Trim excess length.



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UNDERCARRIAGE INSTALLATION

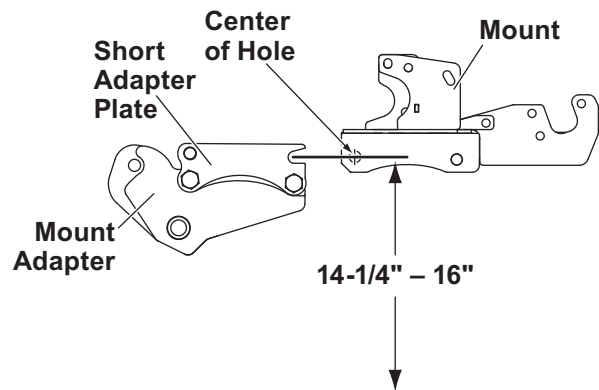
27. Check for a U-bracket distance of $30\text{--}7\frac{1}{16}" \pm \frac{1}{8}"$. Take a second measurement farther back on the mounts to ensure that they are parallel. If the U-bracket distance is not within $30\text{--}7\frac{1}{16}" \pm \frac{1}{8}"$, then $\frac{1}{2}"$ flat washers may be used to shim one or both mounts in the appropriate direction to obtain the desired dimension. Tighten all fasteners according to the torque chart after achieving the appropriate dimensions.



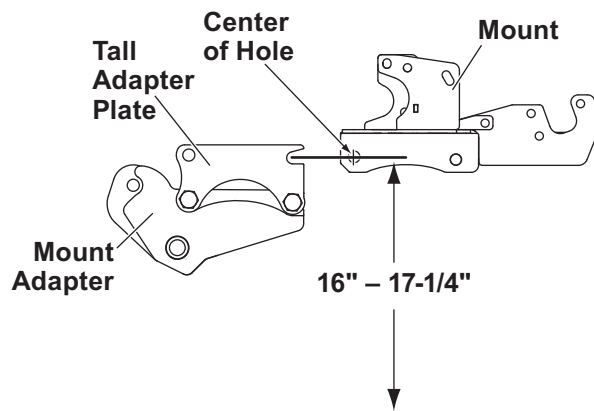
28. Reattach the bumper with original fasteners.
29. If the air dam does not clear the U-brackets, notch as needed.
30. With the vehicle on level ground, measure from the ground to the center of the hole on the U-bracket side plate on the mount.

The height of the mount should be $14\text{--}1\frac{1}{4}"$ or less from the center of the U-bracket hole to level ground. If the measured height is $14\text{--}1\frac{1}{4}"$ or less, no height adjustment adapter plates are needed. If the mount is higher than $14\text{--}1\frac{1}{4}"$, the appropriate adapter plates need to be attached to the mount adapter. (The mount adapter comes packaged with the blade crate assembly.)

If the measured height is $14\text{--}1\frac{1}{4}"\text{--}16"$, install the short height adjustment adapter plates as described.



If the measured height is $16"\text{--}17\text{--}1\frac{1}{4}"$, install the tall height adjustment adapter plates as described.

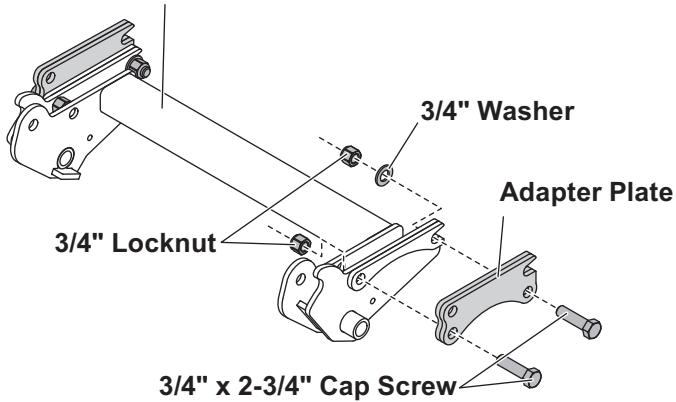


MOUNT ADAPTER INSTALLATION

Install adapter plates as follows:

1. Position the 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.

Mount Adapter



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.

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



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