

31271

MOUNT KIT

**Ford Super Duty F-350/450
Diesel Dual Rear Wheel Pickup**

2020—__

Installation Instructions

▲ CAUTION

Read this document before installing the snowplow.

▲ CAUTION

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

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.

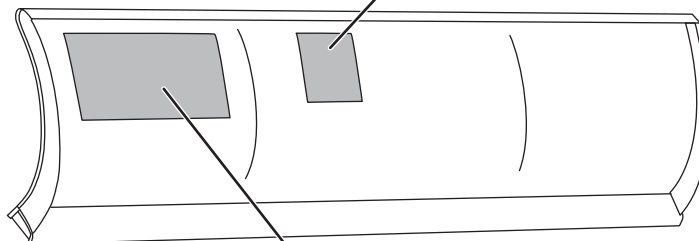
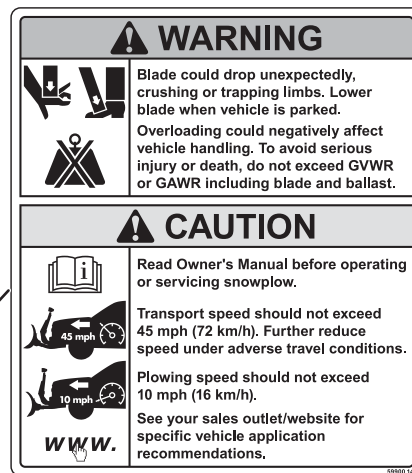
NOTE: Indicates a situation or action that can lead to damage to your snowplow and vehicle or other property. Other useful information can also be described.

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.

Warning/Caution Label



Instruction 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.

⚠ WARNING

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.

⚠ WARNING

The driver shall keep bystanders clear of the blade when it is being raised, lowered, or angled. Do not stand between vehicle and 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 online selection system 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.

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

⚠ 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)		Size	Torque (ft-lb)	
	 Grade 5	 Grade 8		 Grade 5	 Grade 8
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

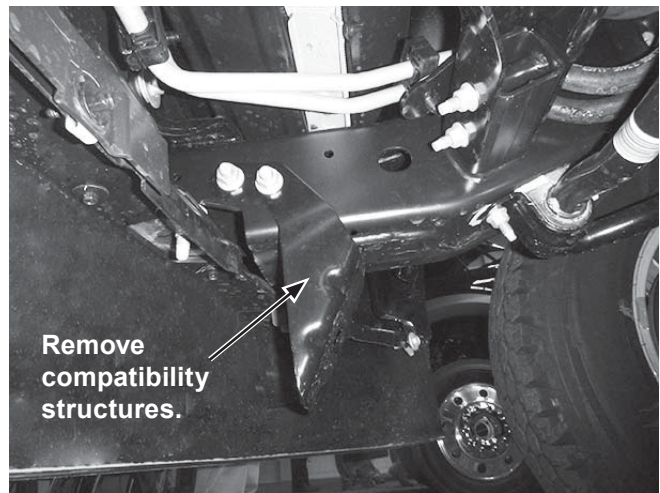
Metric Fasteners Class 8.8 and 10.9					
Size	Torque (ft-lb)		Size	Torque (ft-lb)	
	 Class 8.8	 Class 10.9		 Class 8.8	 Class 10.9
M6 x 1.00	7.7	11.1	M20 x 2.50	325	450
M8 x 1.25	19.5	26.9	M22 x 2.50	428	613
M10 x 1.50	38.5	53.3	M24 x 3.00	562	778
M12 x 1.75	67	93	M27 x 3.00	796	1139
M14 x 2.00	107	148	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.

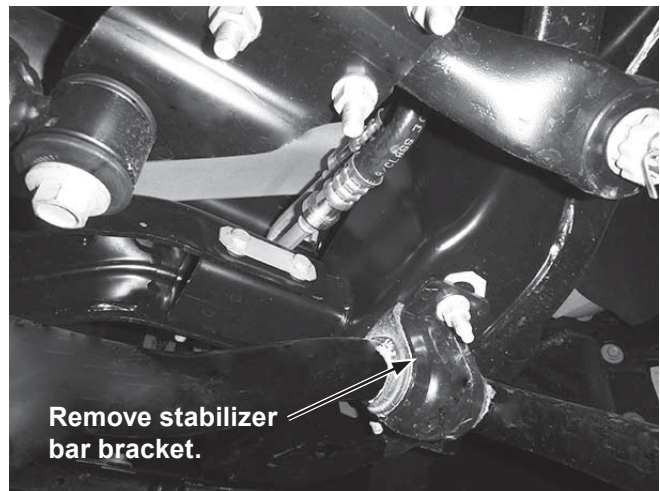
INSTALLATION INSTRUCTIONS

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

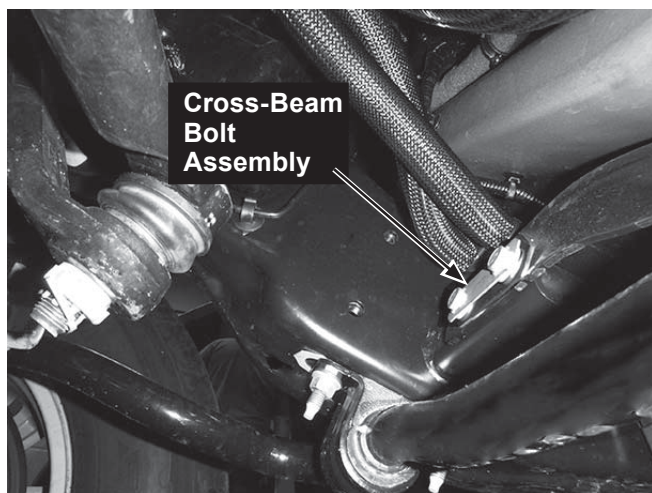
1. Remove the air dam and bumper. Retain the fasteners for reinstallation.
2. Remove compatibility structures, if equipped. Retain for reinstallation if the snowplow mount is removed from the vehicle.



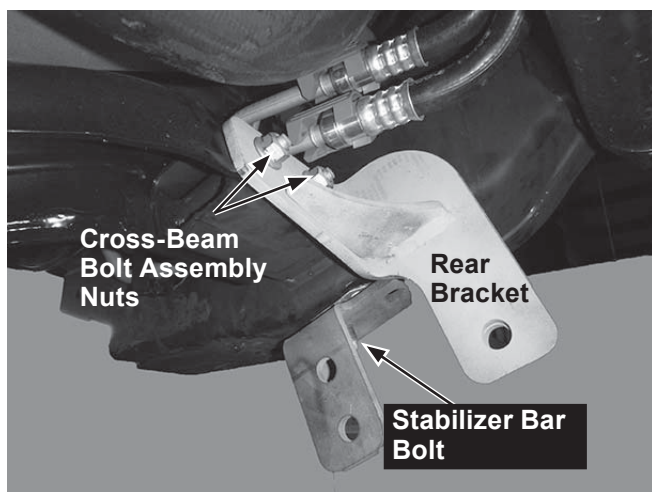
3. Remove the stabilizer bar brackets and locknuts and retain for reinstallation later in this procedure.



4. On the passenger's side, remove the locknuts from the cross-beam bolt assembly.

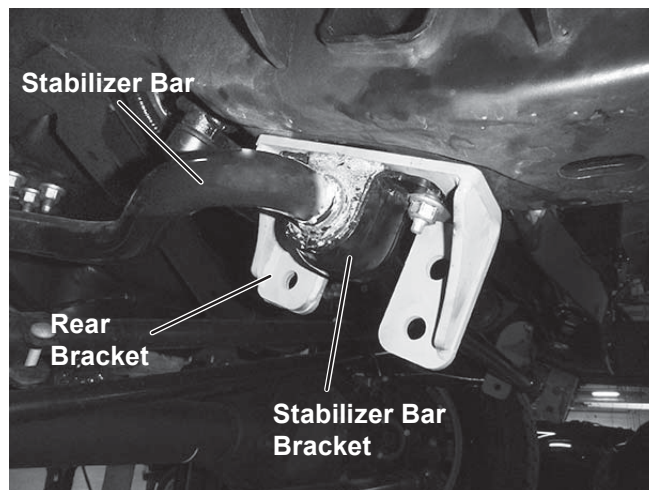


5. Position the rear bracket over the cross-beam bolt assembly as shown. Ensure that the stabilizer bar bolts protrude through the rear bracket. Secure the rear bracket with the fasteners removed in Step 4. If there are hoses close to the cross-beam bolt assembly, remove the cross-beam bolt assemblies and reinstall from the bracket side. Secure them with the locknuts on the front side of the cross beam.

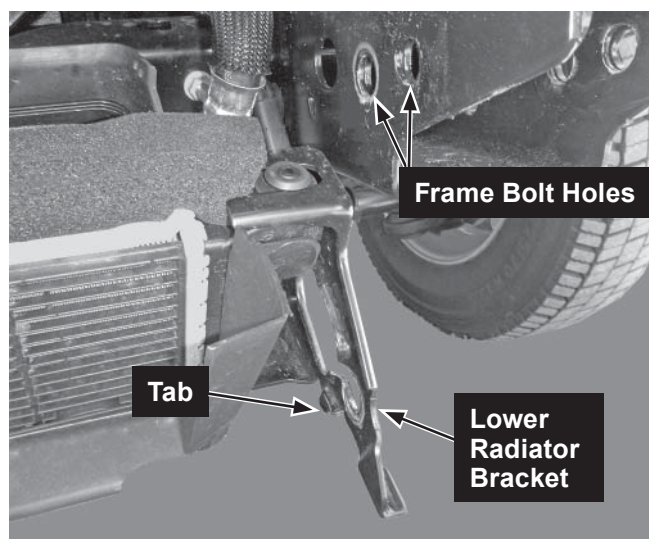


6. Repeat Steps 4 and 5 for the driver's side.

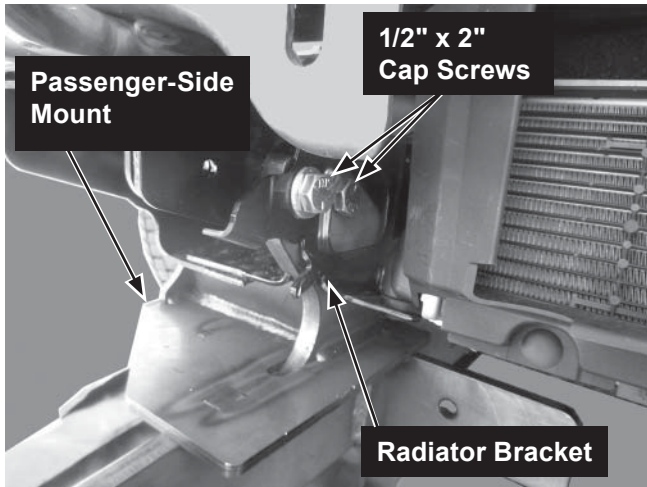
7. Replace the stabilizer bar and install the stabilizer bar brackets over the rear brackets as shown. Secure with the stabilizer bar locknuts removed in Step 3.



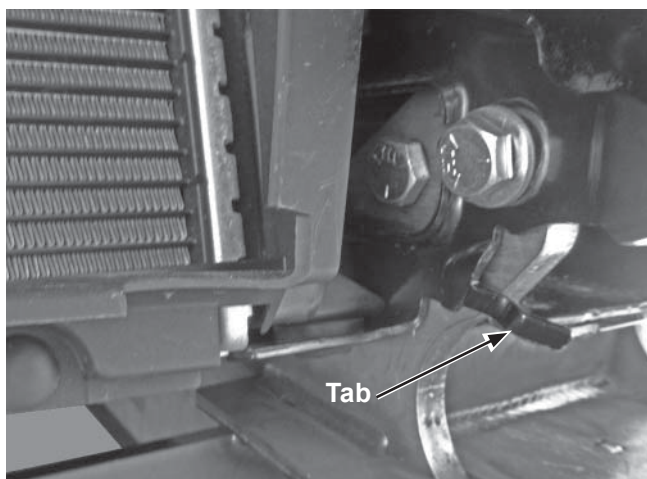
8. Remove the four fasteners that secure the lower radiator bracket to the frame. Retain for reinstallation if the mount is removed. Straighten the bracket tabs as shown.



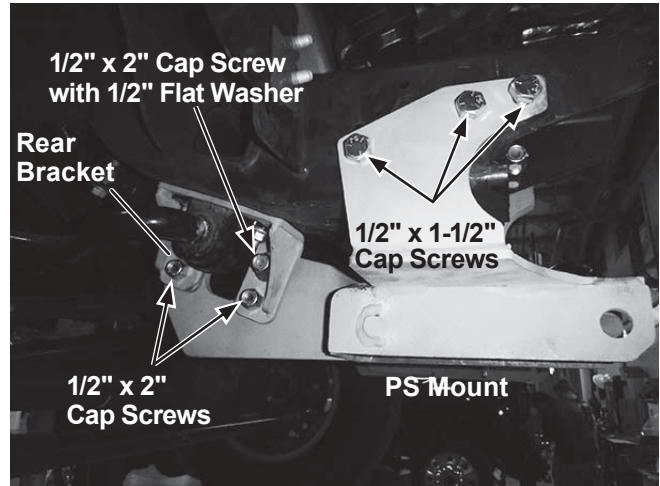
- Lift the passenger-side mount into place against the frame as shown. Position the radiator bracket against the mount.



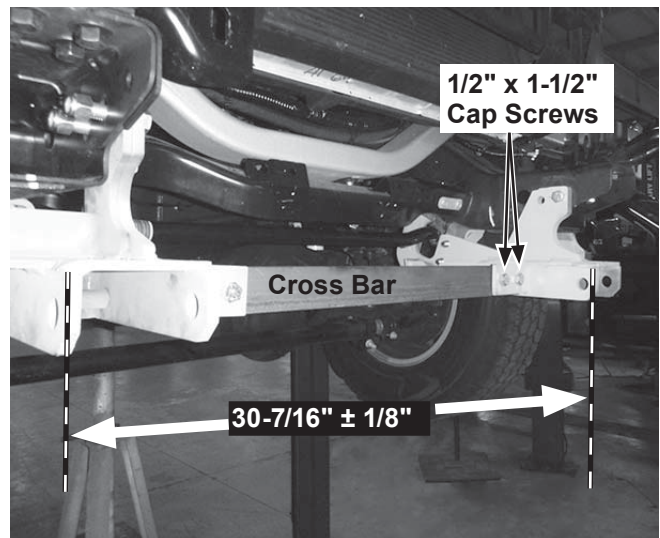
- Place a washer on one 1/2" x 2" cap screw and install through the front bolt hole of the radiator bracket, the passenger-side mount, and into the frame.
- Install a second 1/2" x 2" cap screw through the radiator bracket window, the passenger-side mount bolt hole, and into the frame. Secure both cap screws with 1/2" washers and 1/2" locknuts on the inside of the frame.
- Repeat Steps 9 to 11 on the driver's side. The radiator bracket may need to slide toward the center of the vehicle to allow clearance for the driver-side mount.
- With both mounts installed, bend the radiator bracket tabs over the mount plates.



- Insert three 1/2" x 1-1/2" cap screws through the mount holes against the outer frame surface. Secure with 1/2" locknuts and 1/2" flat washers on the inside of the frame.

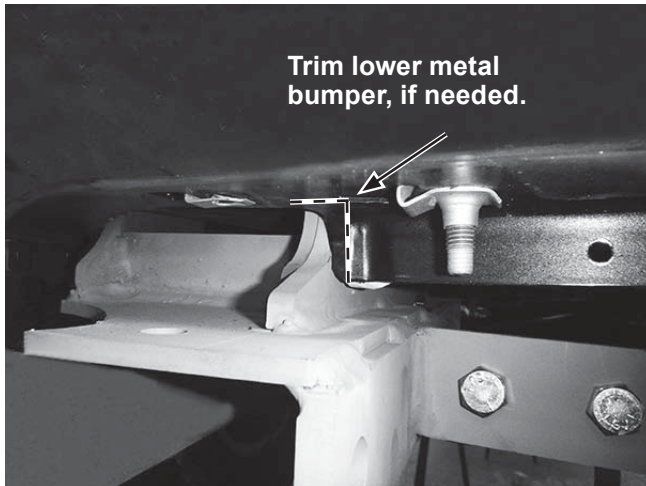


- Connect the mount to the rear brackets using three 1/2" x 2" cap screws and 1/2" locknuts, using a 1/2" washer for the upper forward hole, as shown.
- Repeat on the driver's side.
- Position the cross bar on the inner tabs of the mount as shown and secure with four 1/2" x 1-1/2" cap screws and 1/2" locknuts.



- Check that the distance between the U-brackets is 30-7/16" ± 1/8". Adjust if necessary and tighten the cross bar fasteners.

19. Tighten all fasteners according to the torque chart.
20. Position the bumper. It may be necessary to trim the bumper to clear the mounts.



21. Notch the lower plastic section of the bumper to allow clearance for the U-brackets. Reinstall the bumper using the original fasteners.

NOTE: Installation of the headlamp harnesses may require removal of the grille, which is easier if the bumper is off the vehicle. Do not reattach the bumper until the headlamp harness installation is complete.

22. Check clearances between the installed snowplow mount and any vehicle wires, hoses, and brake or cooling lines. Reposition and secure any interfering vehicle components to ensure at least 3/16" clearance, taking into account any possible movement of the vehicle components during normal operation.

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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