

64500 MOUNT KIT

Ford F-150 4X4

2004 - 08

Installation Instructions

⚠ CAUTION

Read this document before installing the snowplow.

⚠ CAUTION

See your sales outlet/Web site for specific vehicle application recommendations before installation. The online selection tool 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.

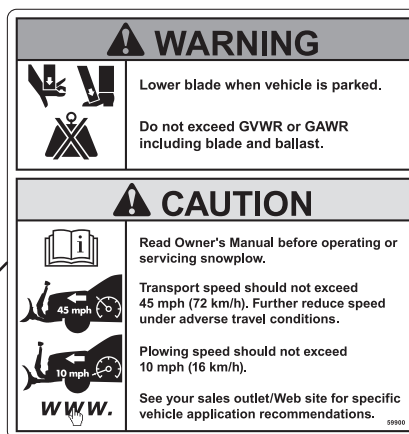
NOTE: Indicates a situation or action that can lead to damage to your snowplow and vehicle or other property. Other useful information can also be described.

WARNING/CAUTION & INSTRUCTION LABELS

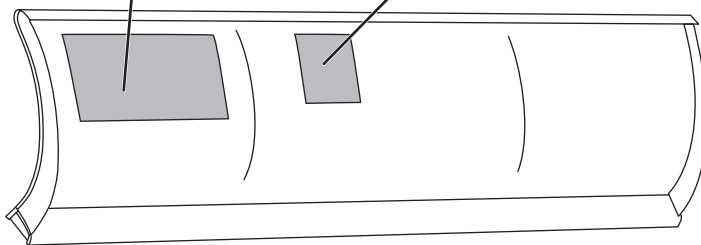
Become familiar with and inform users about the warning and instruction labels on the back of the blade.

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 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 online selection tool 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 |

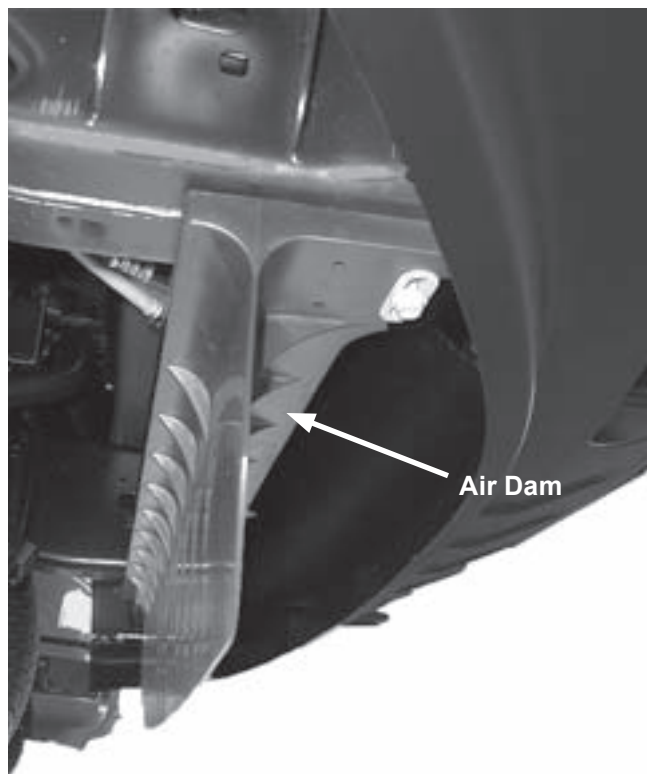
These torque values apply to fasteners except those noted in the instructions.

INSTALLATION INSTRUCTIONS

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

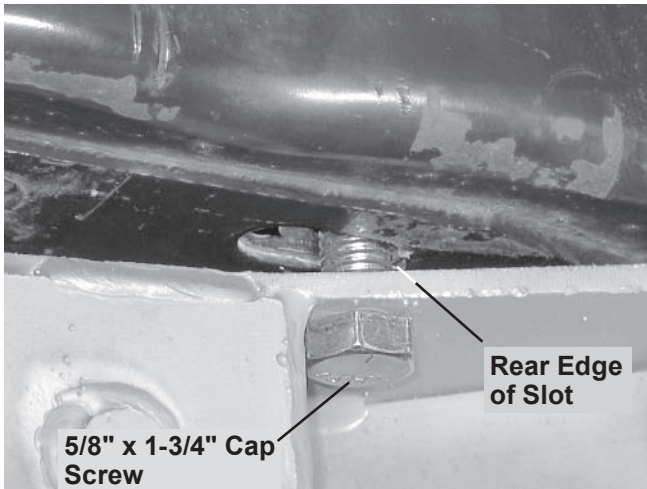
Not all fasteners provided will be used for this installation.

- Detach the rubber splash shield at the bottom edge of the bumper by removing the three plastic fasteners. From the top surface of the bumper, remove the five metric cap screws which fasten the plastic trim, hood-release handle and grille bumper. Also remove the hood-release cable support. Remove the tow hooks from the vehicle frame and save the parts for reinstallation if mount is removed from the vehicle.
- Remove the air dam (pictured), if equipped. Retain for owner.



- If necessary, remove the skid plate and save the parts for reinstallation if mount is removed from the vehicle.
- Disconnect the fog lamp harness connections if so equipped.

- Remove four nuts (two on each side of vehicle) from the back surface of the bumper brackets. Slide the bumper forward to remove.
- Place the driver-side mount against the vehicle frame rail and attach by inserting a 5/8" x 1-3/4" cap screw through the 11/16" diameter hole in the top surface of the mount and against the rear edge of the slot in the bottom wall of the frame rail.

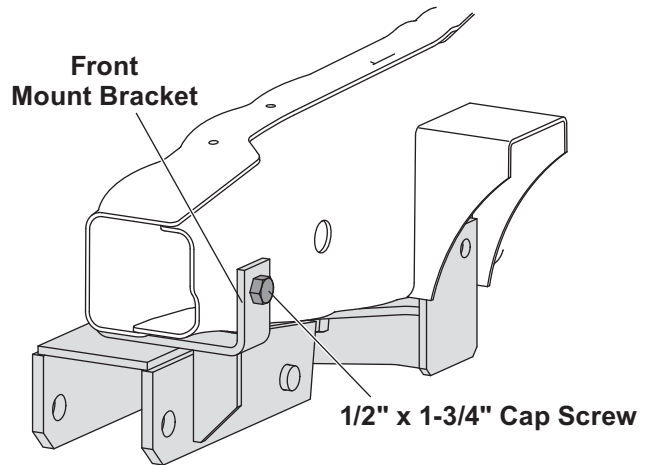


Secure with a hardened washer and locknut from within the frame rail. Do not tighten. Verify the mount is tight against the frame rail by using a C-clamp to hold the front of the mount to the front of the frame rail.

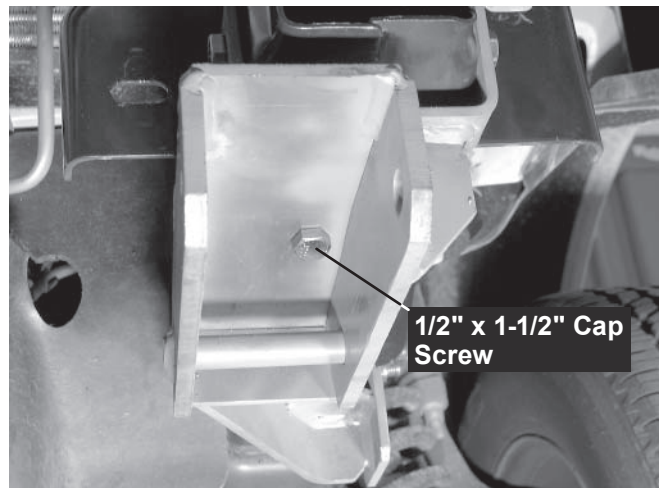
⚠ CAUTION

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

- Using the front mount bracket as a template, drill a 1/2" hole through the outer and inner side walls of the frame rail. Insert a 1/2" x 1-3/4" cap screw through hole in each side of mount, frame rail side wall and spacer. Secure with a hardened washer and locknut from within the frame rail. Tighten the 5/8" fasteners installed in Step 1.



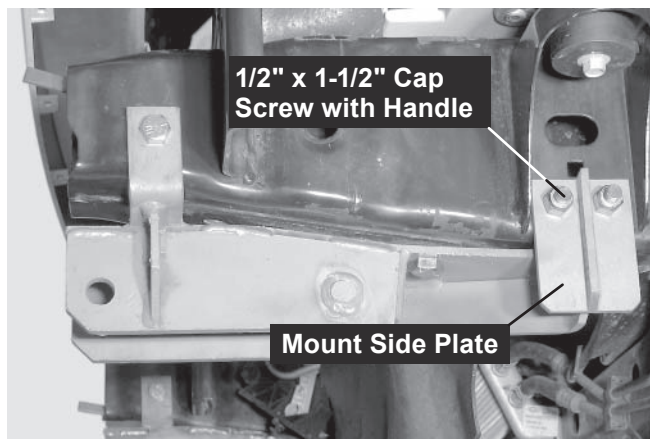
- Using the 9/16" diameter hole in the top surface of the mount as a template, drill a 1/2" hole through the bottom wall of the frame rail and insert a 1/2" x 1-1/2" cap screw. Secure with hardened washer and locknut from within the frame rail.



⚠ CAUTION

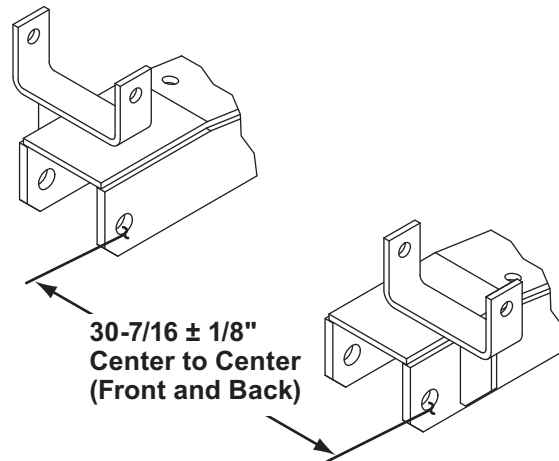
Use caution not to pinch, cut or drill through any wires or hoses running along the frame rail.

9. Using the 9/16" diameter holes in the mount side plate as a template, drill 1/2" holes through the side wall of the frame rail. Insert a 1/2" x 1-1/2" cap screw with handle and hardened washer from within the frame rail through each hole and secure with locknut.



10. Repeat for the passenger's side.

11. Check U-bracket alignment per illustration below. Loosen fasteners and realign as necessary.



12. Tighten all fasteners according to the torque chart.

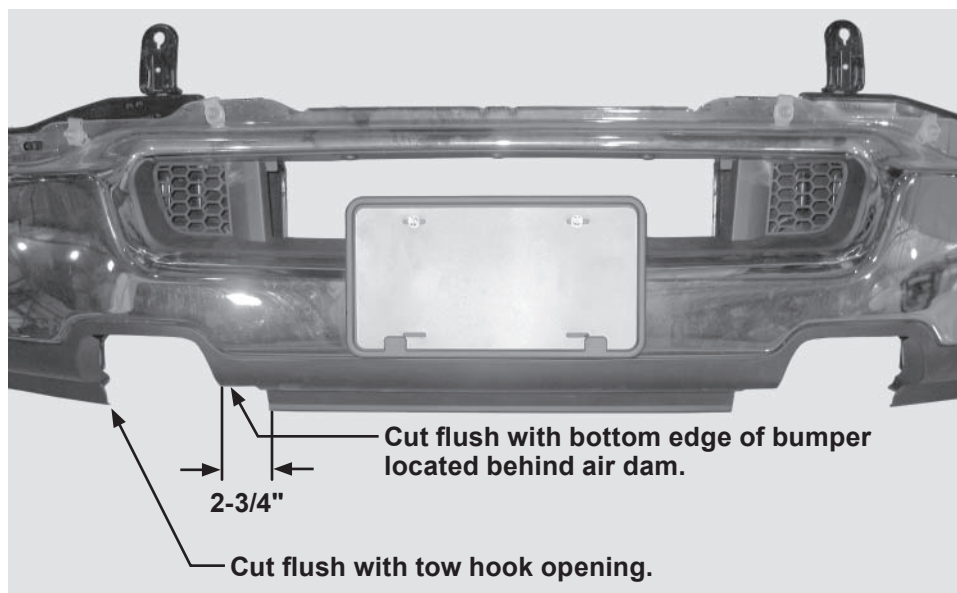
13. The air deflector will require notching for clearance of mount receivers, or it may be removed from vehicle. If deflector is removed from vehicle, save deflector and fasteners for reinstallation in the event the snowplow mount is removed from vehicle.

Use a box cutter or saw to cut the bumper fascia as shown. Use sand paper to smooth rough edges.

14. Reinstall bumper to original position using existing fasteners.
15. Reconnect fog lamp harness connectors if so equipped.

16. Reattach rubber splash shield at bottom edge of bumper and, at top surface of bumper, reinstall four metric hex cap screws, plastic trim, hood-release handle and grille bumper. Reinstall the hood-release cable support.

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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