

# **31103**

## **MOUNT KIT**

**Ford F-650 2WD Diesel Only**  
**International 4000 Series 2WD**

**2008 - 15**  
**2008 - \_\_**

### **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.

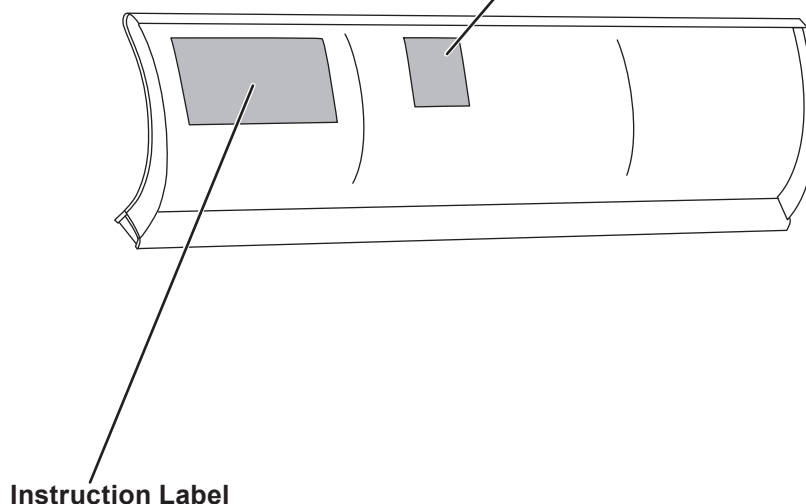
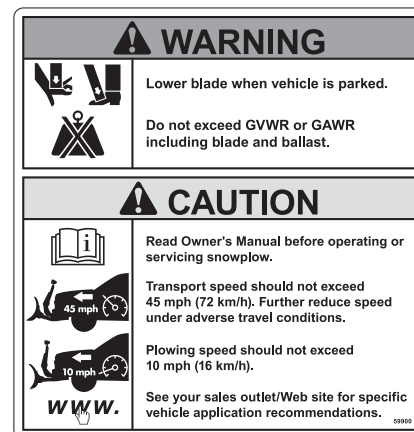
**NOTE:** Indicates a situation or action that can lead to damage to your snowplow and vehicle or other property. Other useful information can also be described.

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

## TORQUE CHART

### CAUTION

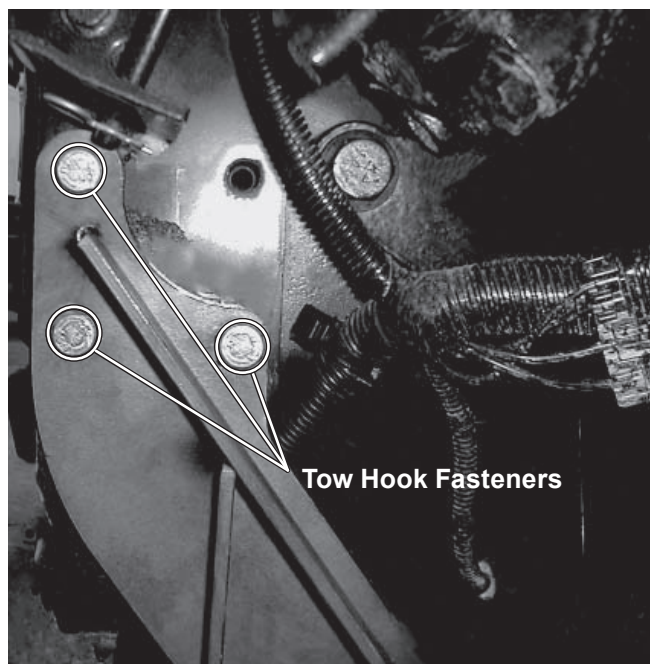
Read instructions before assembling. Fasteners should be finger tight until instructed to tighten according to the torque chart. Use standard methods and practices when attaching snowplow, including proper personal protective safety equipment.

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 front bumper by removing the four fasteners from the front of the bumper. Retain the fasteners for bumper reinstallation.
2. If vehicle is equipped with tow hooks, remove the driver-side tow hook. Retain tow hook and fasteners for reinstallation if snowplow is removed. If the vehicle is not equipped with tow hooks, remove the three cap screws on the driver's side of the vehicle as shown in photo below.

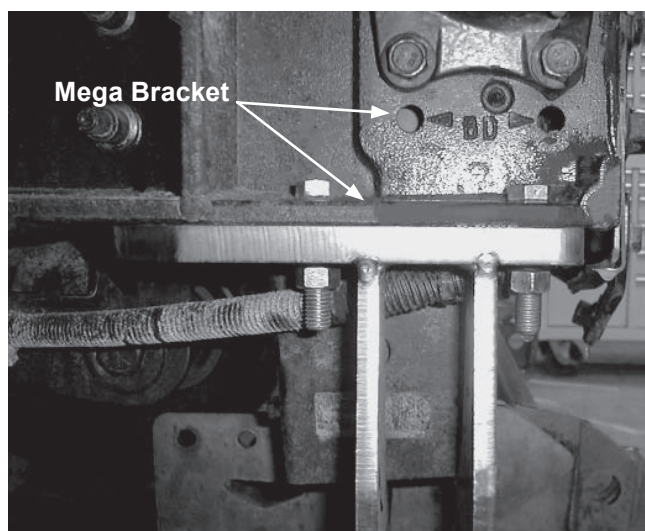


3. Align the three holes of the driver-side pushplate with the holes in the bumper brackets, and attach the pushplate with three M12 x 50 mm cap screws and M12 lock washers. Align the two slotted holes in the passenger-side mount with the holes in the mega bracket and insert 1/2" x 2-1/2" cap screws. Tighten the fasteners so that all surfaces are in full contact, but do not torque.

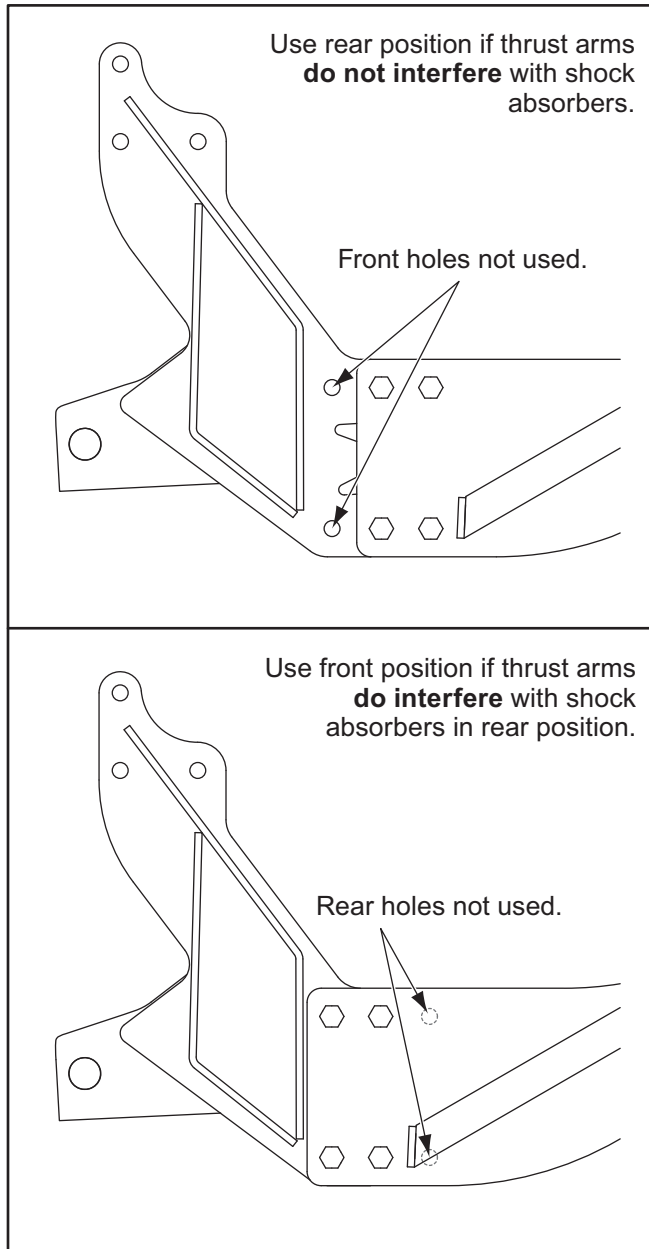
### **⚠ CAUTION**

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

Use the rear hole in the mount as a guide to drill a 1/2" hole through the mega bracket. Fasten with 1/2" x 2-1/2" cap screw. On level ground, check the distance from the ground to connecting arm hole on both the driver's and passenger's side. Use 1/2" washers placed between the mount and the mega bracket to shim the passenger's side down if needed, making sure that the 1/2" cap screws pass through the shim washers. Loosen all fasteners on the front of the mount so they are hand tightened only.



4. Align one of the thrust arms with the pushplate in the rear position *if it does not interfere with the shock absorber*. If the thrust arm does interfere in the rear position, use the front position. (See illustration below.) Ensure that the ABS cable is not pinched by the thrust arm.

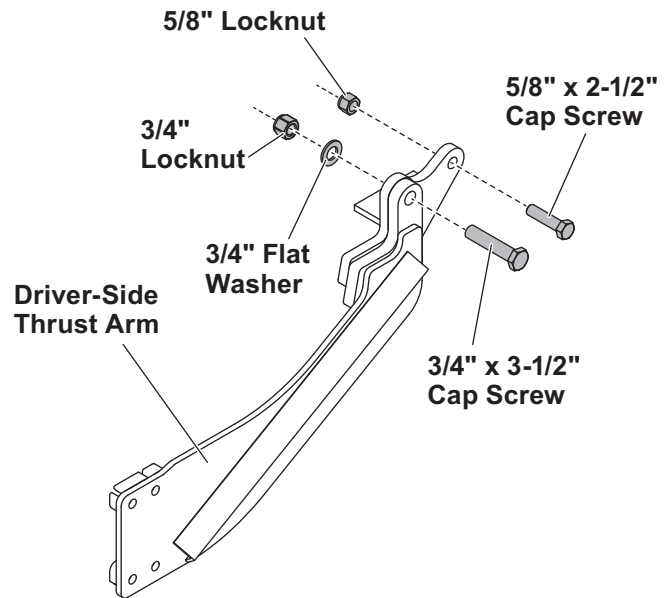


5. Insert four 1/2" x 2-1/2" cap screws through the thrust arm and pushplate. Place a 1/2" locknut on each cap screw, and hand tighten.
6. Repeat Steps 4 and 5 on the opposite side of the vehicle.

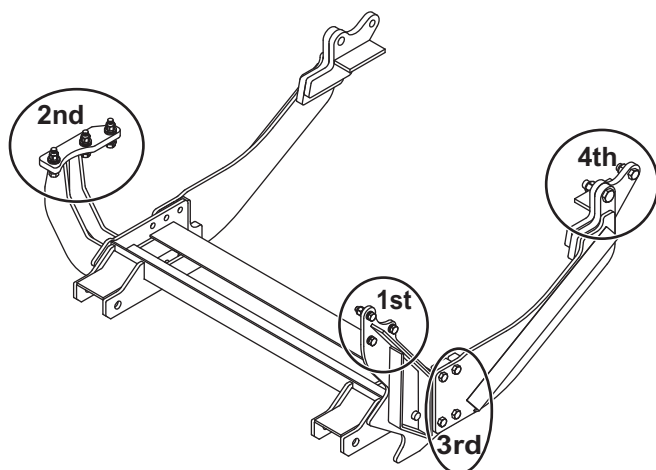
### ⚠ CAUTION

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

7. Using a floor jack, lift the mount tight against the frame, and clamp the locators at the rear of the thrust arms to the bottom of the frame rails. Using the holes in one of the thrust arms as guides, drill one 3/4" and one 5/8" hole in the side of the frame rail. Insert one 3/4" x 3-1/2" cap screw and one 5/8" x 2-1/2" cap screw through the thrust arm and the holes in the frame. Place a 3/4" washer on the 3/4" cap screw against the inner frame surface. Place a locknut on each cap screw, and hand tighten. Repeat on opposite side of vehicle.



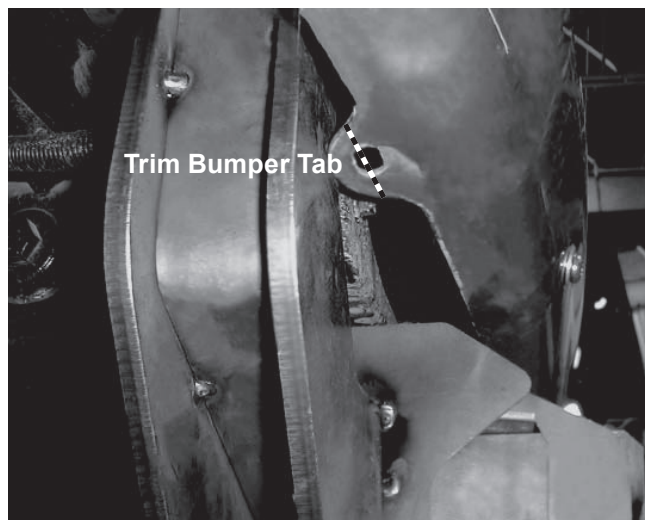
8. Keeping the jack and clamps in place and starting at the front of the mount, tighten the three M12 cap screws on the driver's side followed by the three 1/2" fasteners going through the mega bracket on the passenger's side. Then tighten the eight 1/2" cap screws fastening the thrust arms to the front pushplate and finishing with the two 5/8" cap screws and two 3/4" cap screws. Tighten all fasteners according to the torque chart.



**Tighten fasteners in sequence shown.**

9. Check clearances between the assembled truck mount and any wires, hoses, and brake lines. Use the provided anti-chafing material when clearances are inadequate to prevent contact during normal vehicle operation.

10. The bumper tab on the passenger's side of the vehicle may interfere on some models. This tab will need to be trimmed back to allow for reinstallation of the bumper. Alternately, the bumper can be spaced forward using 1/2" washers. Reinstall the bumper using the original fasteners.



**NOTE: After five to ten hours of snowplow usage, retorque all pushplate 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.

**Printed in U.S.A.**

---