

3249

MOUNT KIT

Ford SD 250/350/450/550

2004

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.

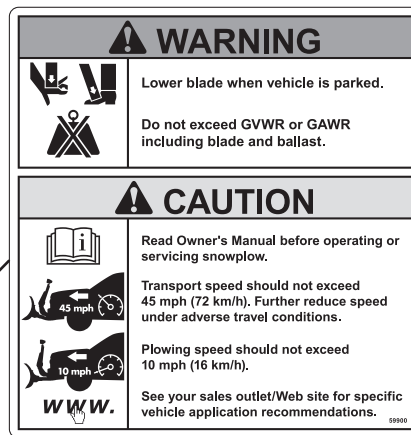
NOTE: Indicates a situation or action that can lead to damage to your snowplow and vehicle or other property. Other useful information can also be described.

WARNING/CAUTION & INSTRUCTION LABELS

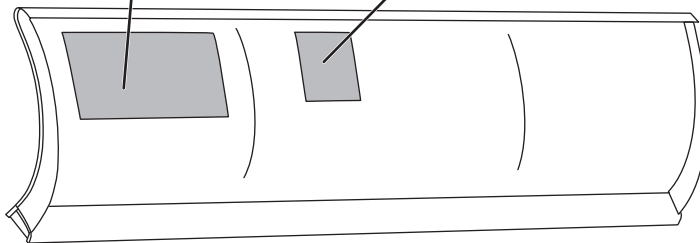
Become familiar with and inform users about the warning and instruction labels on the back of the blade.

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

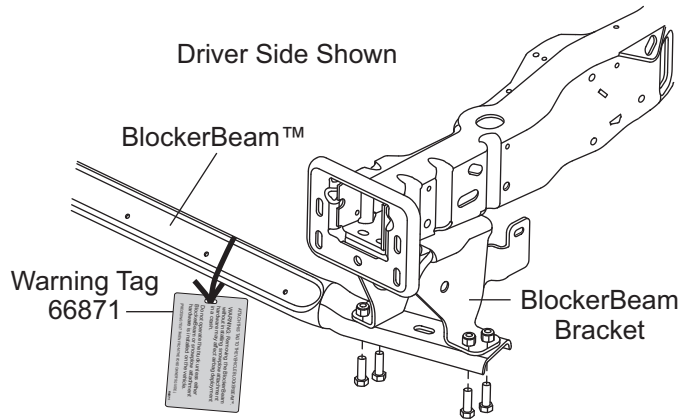
NOTE: For easier assembly and installation, vehicle and all snowplow components should be on a smooth, level, hard surface, such as concrete.

1. Remove the front bumper.

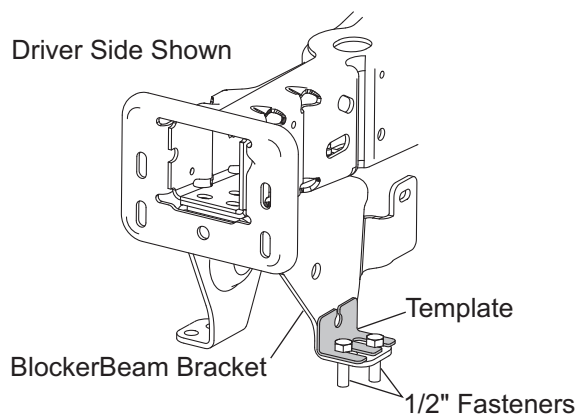
⚠ WARNING

Removing the BlockerBeam™ without installing snowplow attachment hardware may affect air bag deployment in a crash. Do not operate the truck unless either the BlockerBeam or the snowplow attachment hardware is installed on the vehicle.

2. Remove the four fasteners on each side from the BlockerBeam™ support brackets and remove the beam. Affix tag 66871 using the cable tie provided. Beam must be transferred when vehicle is sold or traded.



- Place template on BlockerBeam bracket. Push vertical surface of template tight to vehicle leg of bracket. Insert two 1/2" fasteners through template slots and Blocker Beam bracket holes. Align template as shown below.



- Use template to mark and drill a 5/8" hole through each vertical leg of both BlockerBeam brackets.

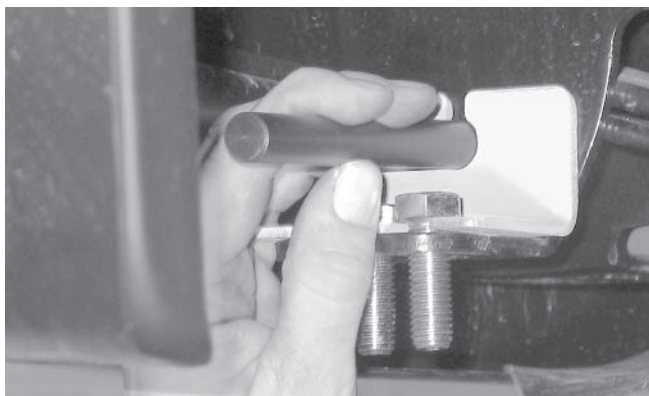


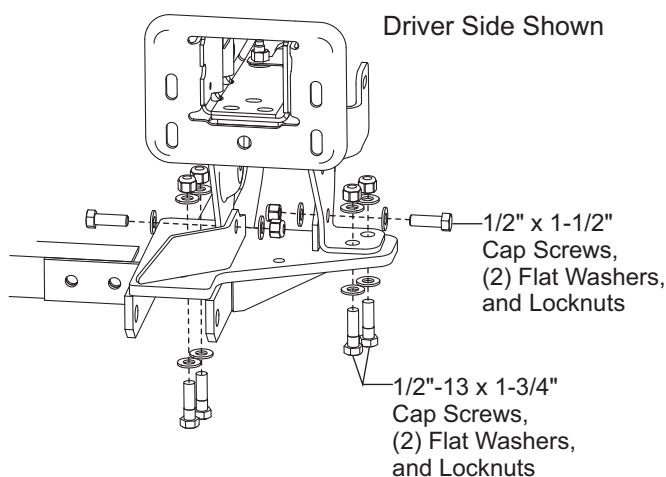
Photo 1

(See Photo 1.)

- Starting with the driver-side mount, position the rear section in place by fitting the mount between the leaf springs and the frame. On some vehicles it will be necessary to jack up the frame slightly to gain more clearance between the frame and the

springs. Check for and eliminate any interference with Ford nut retainers on bottom of frame.

- Once the rear section is in place, rotate the front section of the mount into place and loosely attach front of mount to BlockerBeam brackets using four 1/2"-13 x 1-3/4" cap screws, flat washers, and locknuts and four 1/2" x 1-1/2" cap screws, flat washers, and locknuts through the cross-drilled holes in the BlockerBeam bracket. (See diagram below.)



- For all vehicles with swaybar bracket:** Loosely attach rear of mount to swaybar bracket using 1/2" x 1-1/2" cap screws, one flat washer on top of swaybar bracket and one on bottom of mount slotted hole, and locknuts.

For all vehicles without swaybar bracket:
Proceed to step 8.

- Repeat step 2-6 on passenger side.
- Loosely attach cross bar between both mounts using four 1/2" x 1-1/2" cap screws and locknuts.
- Attach rear of mount.

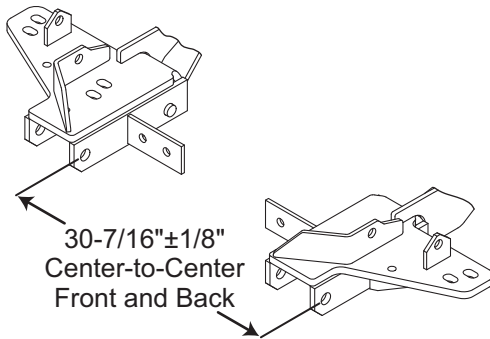
For all vehicles with swaybar bracket: With the rear of the mount seated against both the side and bottom of the frame, mark and drill two 9/16" holes

through the side of the frame using mount holes as guides. Fasten using two 1/2" x 1-1/2" cap screws with handles, washers and locknuts.

For all vehicles without swaybar bracket: With the rear of each mount seated against both the side and the bottom of the frame, mark and drill two 9/16" holes through bottom of frame using mount holes as guides. To facilitate drilling, remove mounts and drill smaller pilot holes to start. Place a bushing between the mount and frame, centered over the rear hole. Fasten loosely using two 1/2" x 1-1/2" cap screws with handles, washers and locknuts.

Mark and drill two 9/16" holes through the side of the frame using mount holes as guides. Fasten loosely using two 1/2" x 1-1/2" cap screws with handles, washers and locknuts.

11. Measure the center-to-center distance at the front and rear of the U-brackets. It must be 30-7/16"±1/8". (See diagram below.) While mount is loose, adjust mount on the vehicle until this dimension is attained. Once the dimension is correct, tighten the four fasteners that attach the cross bar to the driver-side and passenger-side mounts. Next, tighten the eight vertical blocker beam bracket fasteners, followed by the vertical swaybar bracket fasteners. Double check the center-to-center distance and, if correct, tighten all remaining fasteners.



12. Use the anti-chafing material and cable ties to tie up cooling lines on the driver side, forward of the front-most radiator. It is important to provide sufficient clearance between all portions of the cooling lines and the driver-side mount.
13. Reinstall front bumper.
14. Attach front of rubber air deflector that was originally attached to the BlockerBeam to the bottom of the air dam with the four provided cable ties. (See Photo 3.)

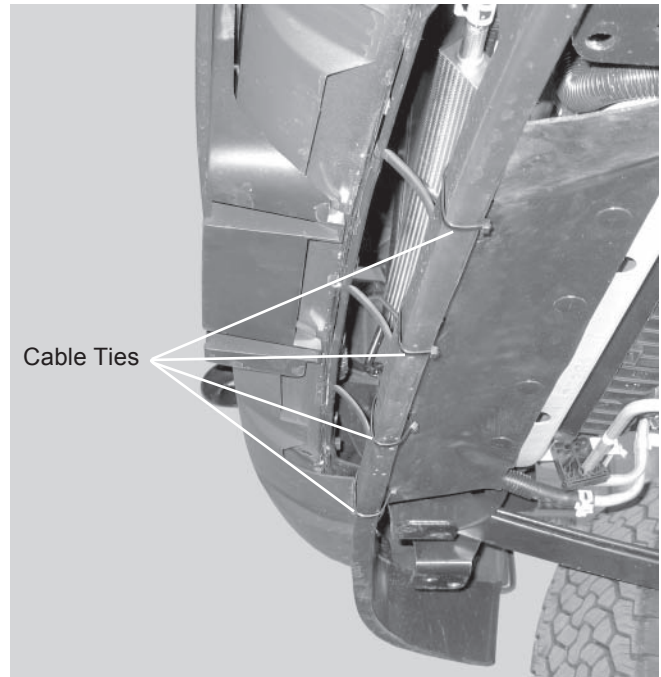


Photo 3

15. On driver side, slide the rear notch of the receiver over the pin at the rear of the mount U-bracket. Rotate the front of the receiver upward into the mount U-bracket until the holes in the mount line up with the hole through the receiver. Insert the receiver pin into the holes of the mount and receiver and align the hole in the receiver pin with the stud on the receiver. Insert the pin until the hairpin cotter can be inserted through the hole in the receiver stud. (See Photo 4.)

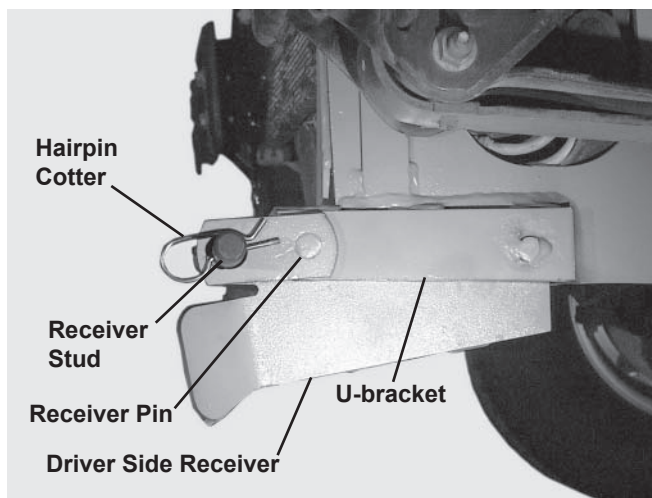


Photo 4

16. Repeat Step 15 on passenger side.

NOTE: After five to ten hours of snowplow usage, retorque all attachment 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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