June 21, 2007 Lit. No. 29706, Rev. 01

29614

MOUNT ADAPTER KIT

Ford Super Duty F250/350/450/550

Converts 2004 Late Model Mounts to 1999 - 04 Early Mounts

Parts List & Installation Instructions

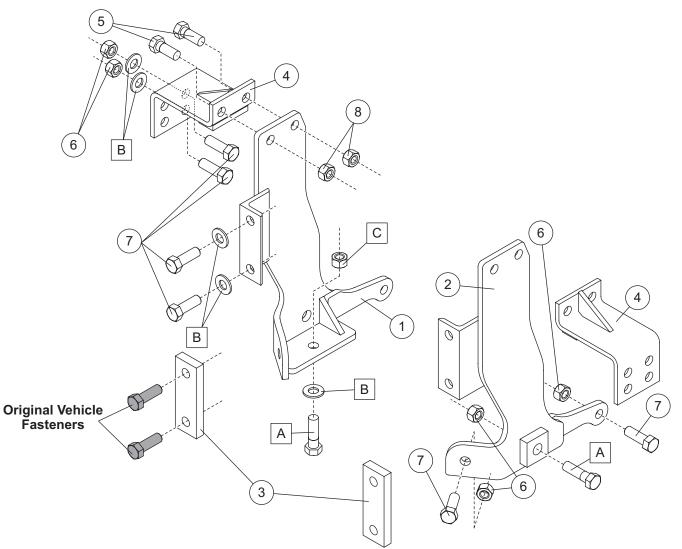
A CAUTION

Read this document before installing the snowplow.

See your sales outlet/Web site for specific vehicle application recommendations before installation. The Kit Selection Guide/Selection List has specific vehicle and snowplow requirements.

A DIVISION OR SUBSIDIARY OF DOUGLAS DYNAMICS, L.L.C.

PARTS LIST



29614 Mount Adapter Kit								
Item	Part	Qty	Description	ltem	Part	Qty	Description	
1	29611	1	Adapter Bracket – PS	4	22289	2	Bracket	
2	29612	1	Adapter Bracket – DS	ns	29613	1	Bolt Bag 29614	
3	29707	2	Shim					
29613 Bolt Bag 29614								
5	90575	2	1/2-13 x 1-1/4 Hex Cap Screw G5	7	90210	6	1/2-13 x 1-1/2 Hex Cap Screw G5	
6	91335	6	1/2-13 Top Ring Hex Locknut GB	8	90355	2	1/2-13 Hex Locknut GB	
	ns = not shown					G = Grade		

Ford Super Duty F250/350/450/550 2004 Late*							
Item	Part	Qty	Description	ltem	Part	Qty	Description
Α	90101	4	1/2-13 x 1-3/4 Hex Cap Screw G5	С	91335	2	1/2-13 Top Ring Hex Locknut GB
В	90572	14	1/2 Hardened Flat Washer				
* These items are packaged in the Mount Kit for the Ford Super Duty F250/350/450/550 2004 Late. They are not included with this Adapter Kit.							

SAFETY DEFINITIONS

A WARNING

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious personal injury.

A 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.

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.

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 can result in serious personal injury.

A 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.

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.

Do not exceed GVWR or GAWR including blade and ballast. The rating label is found on driver-side vehicle door cornerpost.

A WARNING

To prevent accidental movement of the blade, always turn the ON/OFF switch to OFF whenever the snowplow is not in use. The control indicator light will turn off.

A WARNING

Remove blade assembly before placing vehicle on hoist.

Refer to the Kit Selection Guide/Selection List 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.

3

FIRE AND EXPLOSION

A WARNING

Gasoline is highly flammable and gasoline vapor is explosive. Never smoke while working on a vehicle. Keep all open flames away from gasoline tanks 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.

VENTILATION

A 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.

TORQUE CHART

A CAUTION

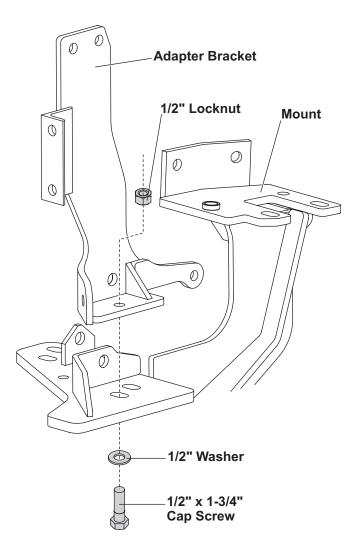
Read instructions before assembling. Fasteners should be finger tight until instructed to tighten according to the torque chart. Use standard methods and practices when attaching snowplow including proper personal protective safety equipment.

Recommended Fastener Torque Chart (FtLb.)							
Size	SAE Grade 2	Grade 5	Grade 8				
1/4-20 5/16-18 3/8-16 3/8-24 7/16-14 1/2-13 9/16-12 5/8-11 3/4-10 7/8-9 1-8	6 11 19 24 30 45 66 93 150 150 220	9 18 31 46 50 75 110 150 250 378 583	13 28 46 68 75 115 165 225 370 591 893				
Metric Grade 8.8 (FtLb.)							
Size	Torque	Size	Torque				
M 6 M 8 M 10	7 17 35	M 12 M 14 M 16	60 95 155				
These torque values apply to fasteners except those noted in the instruction.							

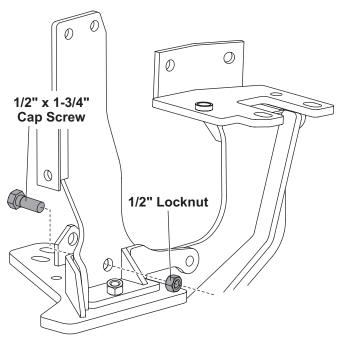
INSTALLATION INSTRUCTIONS

This installation requires fasteners from both the adapter kit bolt bag and the mount kit bolt bag. Because this is an adapter kit, not all of the fasteners will be used.

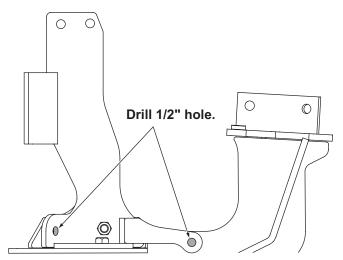
 Insert a 1/2" x 1-3/4" cap screw up through a 1/2" washer, the front slot in the passenger-side mount and the hole in the base of the passenger-side adapter bracket. Attach a 1/2" locknut and hand tighten.



 Insert a 1/2" x 1-3/4" cap screw through the side of the mount and through the hole in the adapter bracket. Attach a 1/2" locknut and hand tighten. With bracket tight up against bent mount piece, fully tighten both fasteners.



 Using the two remaining holes in the adapter bracket as a guide, drill two 1/2" holes in the mount. Insert 1/2" x 1-1/2" cap screw through each hole, attach 1/2" locknuts and fully tighten.

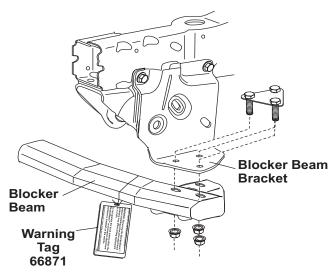


4. Repeat steps 1–3 for the driver side.

A WARNING

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

Driver Side Shown



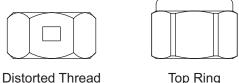
- 5. Vehicles equipped with BlockerBeam: Remove the three fasteners on each side from the beam support bracket and remove the beam. Reattach all fasteners to the beam and affix tag 66871 using the cable tie provided. Beam must be transferred when vehicle is sold or traded.
- 6. Remove bumper by first detaching rubber flap and any electrical cords attached to bumper (vehicles with fog lamps and diesels). Remove the bumper fasteners and slide bumper forward until it is clear of the tow hooks. Remove and discard the two thin plates hanging from the bumper mounts.
- 7. 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.

A CAUTION

To avoid damaging A/C condensers, use care when installing mounts on vehicles with air conditioning. Heads of bolts should be on the inside, with nuts on the outside of 22289 bracket, to increase clearance with condenser.

 Once the rear section is in place, rotate the front section of the mount into place and loosely secure by attaching a bracket (22289) with two 1/2" x 1-1/4" cap screws and 1/2" distortedthread locknuts.



Distorted Thread Locknut

Top Ring Locknut

Heads of bolts should be on the inside, when vehicle is equipped with A/C condenser. Slide mount rearward to accomplish this. Loosely attach front of mount to bumper plate on frame using 1/2" x 1-1/2" cap screws, 1/2" flat washers and 1/2" locknuts.

 For F-250, F-350, and all other vehicles with swaybar bracket: Loosely attach rear of mount to swaybar bracket using 1/2" x 1-3/4" cap screws, one 1/2" flat washer on top of swaybar bracket and one on bottom of mount slotted hole, and 1/2" locknuts.

For F-450, F-550, and all vehicles without swaybar bracket: Proceed to step 10.

10. Repeat steps 7–9 on the passenger side.

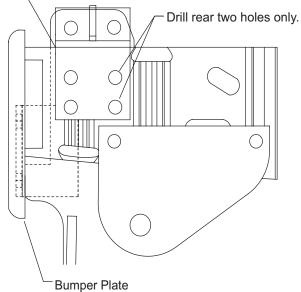
NOTE: It is not always necessary to jack the frame up for additional clearance between the leaf springs and frame on the passenger side.

11. Loosely attach cross bar between both mounts using 1/2" x 1-1/2" cap screws and 1/2" locknuts.

BlockerBeam is an unregistered (™) trademark of the Ford Motor Company.

12. With the mount fit snugly into position, clamp the brackets (22289) to the top surface of the frame. Make sure the bracket is flush with the top frame surface and the shim welded to the bracket is flush with the smaller boxed frame section. Tighten the fasteners at the front of the mount where it meets the bumper plate. These fasteners should now be toward the tops of the slotted holes in the bumper plate.

Clamp Bracket (22289) flush with top surface of frame before drilling bracket holes through side of frame.



13. Attach rear of mount.

For F-250, F-350, and all other vehicles with swaybar bracket: With the rear of the mount fit snugly against both the side and bottom of the frame, tighten fasteners running through swaybar bracket. Mark and drill two 17/32" holes through the side of the frame using mount holes as guides. Fasten securely using two 1/2" x 1-1/2" cap screws with handles, 1/2" flat washers and 1/2" locknuts.

NOTE: To ensure a snug fit, loosen the swaybar bracket fasteners before tightening the cap screws with handles, then retighten the bracket fasteners. For F-450, F-550, and all vehicles without swaybar bracket: With the rear of each mount fit snugly 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. Holes must be drilled at an angle. Place a bushing between the mount and frame, centered over the rear hole. Fasten securely using two 1/2" x 1-1/2" cap screws with handles, 1/2" flat washers and 1/2" locknuts. Mark and drill two 17/32" holes through the side of the frame using mount holes as guides. Fasten securely using two 1/2" x 1-1/2" cap screws with handles, 1/2" flat washers and 1/2" locknuts.

14. Drill the two rear holes in the brackets (22289) and fasten using 1/2" x 1-1/2" cap screws, 1/2" flat washers and 1/2" locknuts. Tighten all fasteners according to the torque chart.

NOTE: Front holes in bracket (22289) are not used at any time.

15. Use the 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.

NOTE: Use anti-chafing material in those situations where sufficient clearance cannot be obtained.

16. Place 1/2" shims in place to space the bumper forward of the frame. Reinstall bumper and reattach any rubber flaps or electrical cords removed during bumper removal.

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

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