

# 31243

## MOUNT KIT PERSONAL PLOW

Ford Sport Trac

2007–10

### 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.

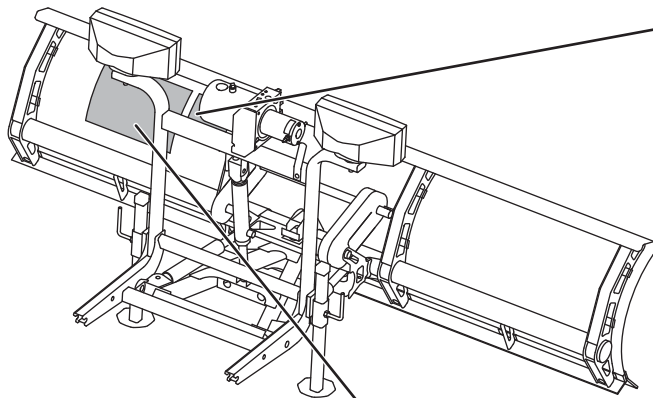
**⚠ CAUTION**  
 Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

**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/caution 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**

<b>⚠ WARNING</b>	
	Lower blade when vehicle is parked.
	Do not exceed GVWR or GAWR including blade and ballast.
<b>⚠ CAUTION</b>	
	Read Owner's Manual before operating or servicing snowplow.
	Transport speed should not exceed 45 mph (72 km/h). Further reduce speed under adverse travel conditions.
	Plowing speed should not exceed 10 mph (16 km/h).
	See your sales outlet/website for specific vehicle application recommendations.

**Instruction Label**

***This snowplow is for personal/homeowner use only.***

<b>ATTACH INSTRUCTIONS</b>	<ol style="list-style-type: none"> <li>1. Make certain both <b>connecting pins</b> are fully retracted.</li> <li>2. Drive vehicle slowly to completely insert <b>attachment arms</b> into <b>receiver assembly</b> slots.</li> <li>3. Twist both <b>connecting pins</b> to release spring tension, then push <b>plow gear</b> toward vehicle so <b>connecting pins</b> fully engage holes in <b>attachment arms</b>.</li> <li>4. Loosen one <b>jack handle</b> and slide <b>jack sleeve</b> down below <b>jack retainer</b>. Remove <b>jack</b> and retighten <b>jack handle</b>. Repeat for other <b>jack</b> and store them.</li> <li>5. Connect all electrical cables from vehicle to snowplow.</li> </ol>
<ol style="list-style-type: none"> <li>5. Back vehicle away from snowplow.</li> <li>6. See Owner's Manual for proper snowplow storage.</li> </ol>	<ol style="list-style-type: none"> <li>3. While pushing <b>plow gear</b> toward vehicle to release <b>connecting pin</b> tension, <b>pull connecting pin</b> out on one side and twist pin to keep pin retracted. Repeat procedure for other <b>connecting pin</b>.</li> <li>4. Disconnect all electrical cables.</li> </ol>
	<ol style="list-style-type: none"> <li>1. Put blade on ground using <b>LOWER/FLOAT</b> on snowplow control. Leave control <b>ON</b> and in <b>FLOAT</b>.</li> <li>2. Attach <b>jacks</b>. Loosen <b>jack handle</b>, put <b>jack</b> on ground, and raise <b>jack sleeve</b> until fully engaging <b>jack retainer</b>. Tighten <b>jack handle</b>. Repeat for other <b>jack</b>.</li> </ol>

U.S. patents 6,941,685; 7,400,058; 7,737,576; and other patents pending.

Read Owner's Manual for complete instructions.

## 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 the 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

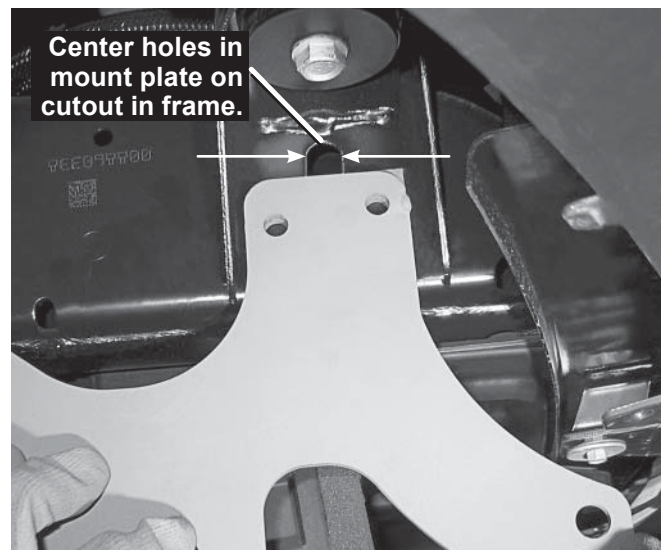
Metric Fasteners Class 8.8 and 10.9					
Size	Torque (ft-lb)		Size	Torque (ft-lb)	
	Class 8.8	Class 10.9		Class 8.8	Class 10.9
M6 x 1.00	7.7	11.1	M20 x 2.50	325	450
M8 x 1.25	19.5	26.9	M22 x 2.50	428	613
M10 x 1.50	38.5	53.3	M24 x 3.00	562	778
M12 x 1.75	67	93	M27 x 3.00	796	1139
M14 x 2.00	107	148	M30 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, the vehicle and all snowplow components should be on a smooth, level, hard surface, such as concrete.

1. Remove the air dam from the front of the vehicle. Retain the air dam for later reinstallation.
2. Push the passenger-side mount plate tight up against the bottom of the frame. Then align the mount plate so the holes in the mount plate are centered on the cutout in the frame.

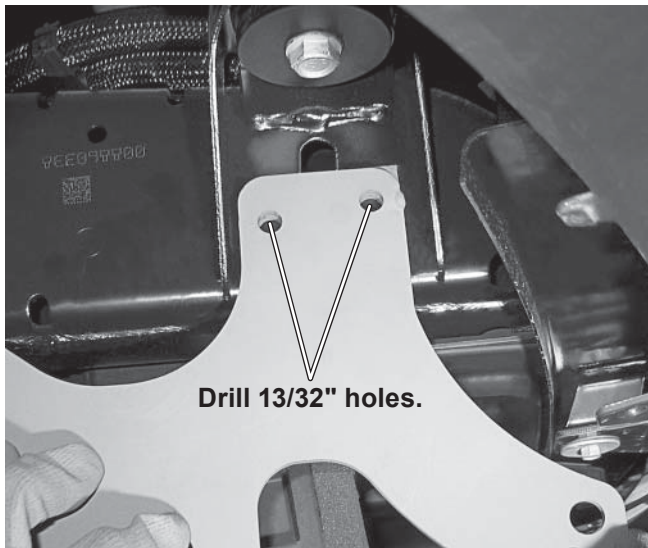


3. Mark the centers of the two holes on the frame and remove the mount plate.

**⚠ CAUTION**

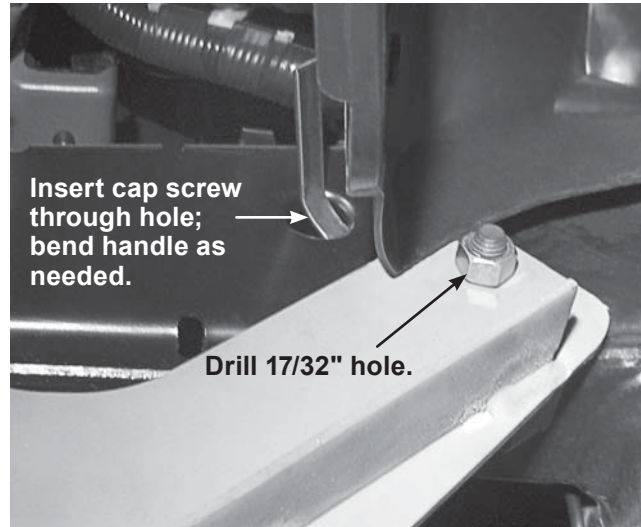
Use caution not to pinch, cut, or drill through any wires or hoses running along the frame rails.

- Using the center marks, drill two 13/32" holes through the outer wall of the frame.



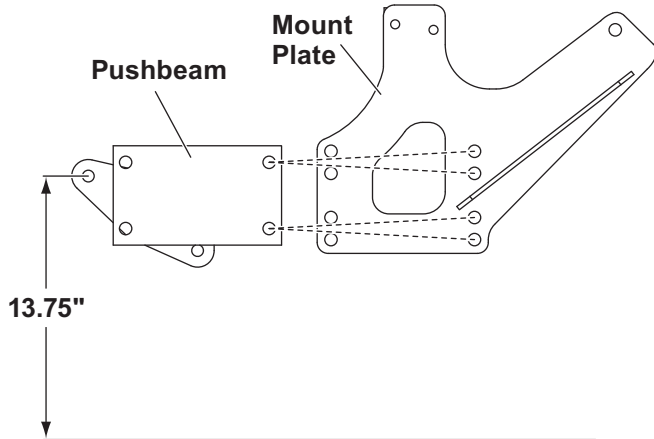
- Place a 3/8" washer on each of the two 3/8" x 1-1/4" cap screws with handles. Insert a cap screw into the frame and out through both the drilled holes in the frame and the holes in the mount plate.
- Attach a 3/8" locknut to each cap screw, and hand tighten.

- Push the mount plate tight up against the bottom of the frame. Using the rear hole in the mount plate as a guide, drill a 17/32" hole through the outer wall of the frame.



- Insert a 1/2" x 1-1/4" cap screw with handle and a 1/2" washer into the frame and out through both the drilled hole and the rear hole in the mount plate.
- Attach a 1/2" locknut to the cap screw and hand tighten.
- Bend or cut the ends of the cap screw handles protruding out from the frame to improve appearance and to avoid interference with vehicle components.
- Repeat Steps 2–10 for the driver-side mount plate.

12. Align the four holes in each side of the pushbeam with the holes in the mount plates. Measure the distance between the pushbeam and the ground, as shown below, to choose which set of holes to use for installing the pushbeam. Choose the set of holes that will bring the pushbeam closest to the dimension shown.



13. Attach the pushbeam to the mount plates using eight 1/2" x 1-1/2" cap screws (four on each end). Place a 1/2" locknut on each cap screw, and fully tighten according to the torque chart.

14. Measure the distance between the pushbeam rear hole and the ground. If it exceeds 11-1/2", install the accessory Height Adapter Plate Kit (PN 77555) to ensure optimum plowing performance.
15. Fully tighten the fasteners according to the torque chart, securing the mount plates to the frame rails.
16. Reattach the air dam.

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

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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.