



INSTALLATION INSTRUCTIONS

PLOW MOUNTING KIT

PART NUMBER: 83170

APPLICATION: 2006-2007 Hawkeye and
2008+ Sportsman 300/400

Your safety, and the safety of others, is very important. To help you make informed decisions about safety, we have provided installation and operating instructions and other information on labels and in this guide. This information alerts you to potential hazards that could hurt you or others. It is not possible to warn you about all potential hazards associated with this product, you must use your own good judgment.

CARELESS INSTALLATION AND OPERATION CAN RESULT IN SERIOUS INJURY OR EQUIPMENT DAMAGE. READ AND UNDERSTAND ALL SAFETY PRECAUTIONS AND OPERATING INSTRUCTIONS BEFORE INSTALLING AND OPERATING THIS PRODUCT.

This guide identifies potential hazards and has important safety messages that help you and others avoid personal injury or death. **WARNING** and **CAUTION** are signal words that identify the level of hazard. These signal words mean:

▲WARNING signals a hazard that *could* cause serious injury or death, if you do not follow recommendations. **▲CAUTION** signals a hazard that *may* cause minor to moderate injury, if you do not follow recommendations.

This guide uses **NOTICE** to call attention to important mechanical information, and **Note**: to emphasize general information worthy of special attention.

▲ WARNING

INJURY HAZARD

Failure to observe these instructions could lead to severe injury or death.

- Always Read the Plow Operator's Manual, the Winch Operator's Manual and all warning labels before operating.
- Always use extreme caution when drilling on any vehicle. Make sure that all fuel lines, brake lines, electrical wires, and other objects are not punctured or damaged when/if drilling on the vehicle. Thoroughly inspect the area to be drilled (on both sides of material) prior to drilling, and relocate any objects that may be damaged. Failure to inspect the area to be drilled may result in vehicle damage, electrical shock, fire or personal injury.
- Always wear safety glasses when installing this kit. A drilling operation will cause flying metal chips. Flying chips can cause eye injury.
- Always use extreme caution when cutting and trimming during fitting.
- Always remove jewelry and wear eye protection.
- Never lean over battery while making connections.
- Never route electrical cables:
 - Across any sharp edges.
 - Through or near moving parts.
 - Near parts that become hot.
- Always insulate and protect all exposed wiring and electrical terminals.
- Always install terminal boots as directed in installation instructions.
- Always use appropriate and adequate care in lifting components into place.
- Always insure components will remain secure during installation and operation.
- Always tighten all nuts and bolts securely, per the installation instructions.
- Always operate the vehicle at a walking speed with the blade installed. Never exceed 5 mph (8 km/h), even with blade up.
- Always plow cautiously, impact with hidden or stationary object may cause the vehicle to stop suddenly or go out of control.
- Never operate the vehicle on slopes greater than 10 degrees with the plow installed.
- Never stand or ride on the plow.
- Always stay clear of moving parts and joints. Always keep others away when operating or adjusting plow.
- Always perform regular inspections and maintenance on the plow mechanism, fasteners, cable and related hardware.
- Always replace all worn or damaged parts before operating.
- Never operate this WARN product with damaged or missing parts.
- Always drive slowly over bumpy and rough terrain. Driving at speeds that cause the plow to bounce while in the up position can cause the winch to back-drive, causing the plow to work its way down. This may result in the plow impacting a stationary object and cause damage to the vehicle and operator injury or death.
- Always drive at speeds such that the plow does not bounce and be aware of the plow position while driving at all times.
- Always be aware that the purpose of the j-bolt is to break the connection between the plow and the winch, to prevent serious damage to the ATV if the plow is raised too high. The plow blade will drop suddenly if the j-bolt breaks, so always be sure there are no bystanders when you raise and lower the plow.
- Never raise the top of the plow above the headlights of the ATV, as it may damage the vehicle and plow.
- Always replace a deformed or broken j-bolt with the spare j-bolt included in the kit.

⚠ CAUTION
Moving Parts Entanglement Hazard
Failure to observe these instructions could lead to minor or moderate injury.
<input type="checkbox"/> Always take time to fully read and understand the installation and Operations Guide included with this product. <input type="checkbox"/> Never operate this product if you are under 16 years of age. <input type="checkbox"/> Never operate this product when under the influence of drugs, alcohol or medications.
Read installation and operating instructions thoroughly.

Notice
Equipment Damage
<input type="checkbox"/> ALWAYS REFER TO THE INSTALLATION AND SPECIFICATION GUIDE, SUPPLIED IN THE WINCH KIT, FOR ALL WIRING SCHEMATICS AND SPECIFIC DETAILS ON HOW TO WIRE THIS WARN PRODUCT TO YOUR VEHICLE. <input type="checkbox"/> Never overtighten the j-bolt to the bracket. Doing so will pinch the winch cable against the bracket, damaging the cable. <input type="checkbox"/> Always put the end of the actuator cable through the slot in the Termination Bracket. Terminating the cable through any other hole in the bracket will cause the bracket to not function properly and will drastically reduce the life of the actuator cable.
Read installation and operating instructions thoroughly.

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II. TOOLS REQUIRED

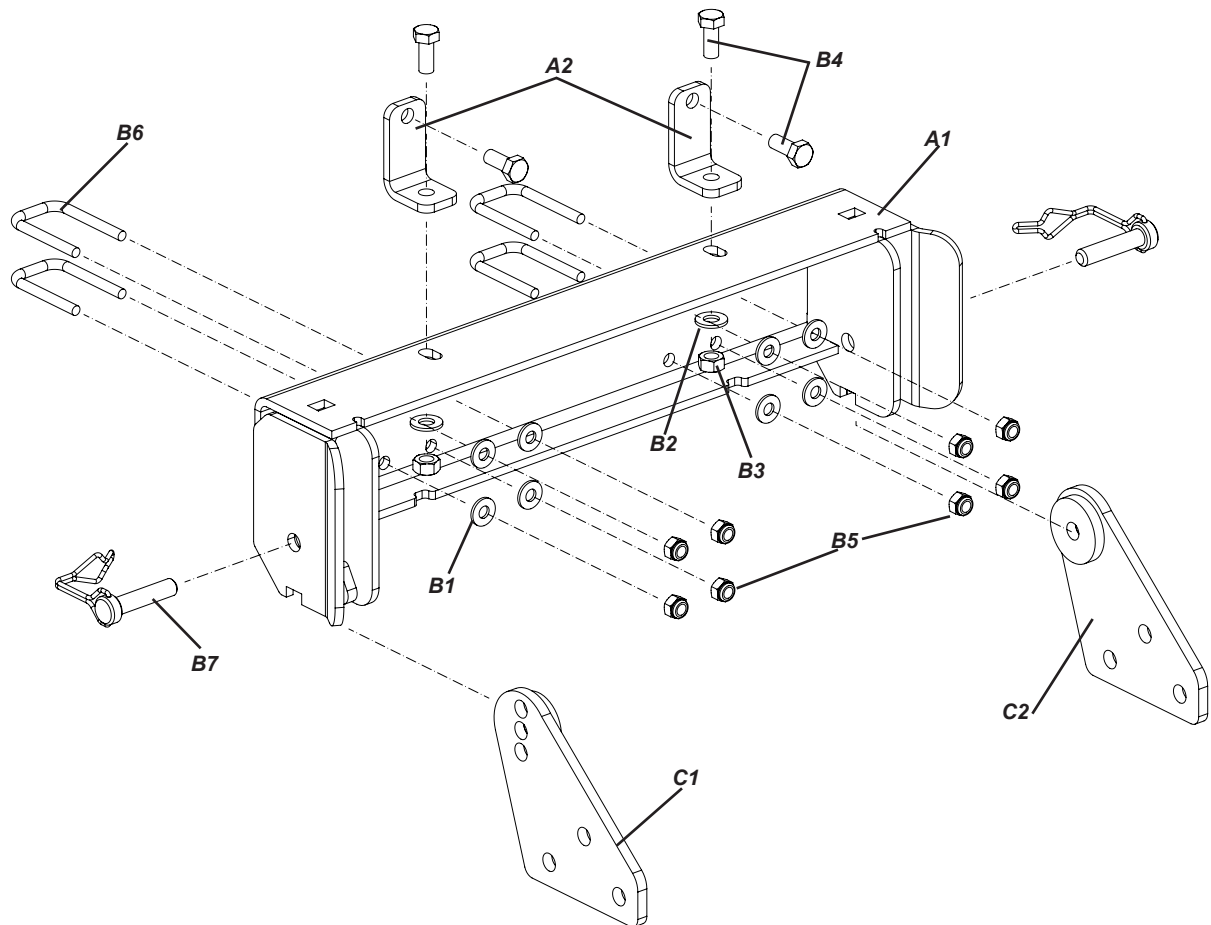
- 3/8" Ratchet
- TB40 Torx Wrench or Socket
- 7/16", 1/2" Deep Socket
- 1/2" Wrench

III. TORQUE SPECIFICATIONS

1/4	8 lb. ft. (10.8 N-m)
5/16	17 lb. ft. (12.5 N-m)
3/8	30 lb. ft. (40.7 N-m)

IV. PARTS LIST

<i>Reference</i>	<i>Description</i>	<i>Qty</i>
A1	Bracket Assembly - Plow Mount	1
A2	L-Bracket	2
B1	1/4" Flat Washer	8
B2	5/16" Flat Washer	2
B3	5/16" Nylock Nut	2
B4	5/16-18x3/4 Hex Capscrew	4
B5	1/4" Nylock Nut	8
B6	1/4-20x1x2 U-bolt	4
B7	L-Clip Retaining Pin	2
C1	Plow Mounting Tab - RH	1
C2	Plow Mounting Tab - LH	1



V. INSTALLATION

Remove the Front Lower Bumper

1. Use a 1/2" socket, ratchet, and TB40 torx bit to remove the front lower section of the bumper (Figure 2).

Use the top M8 torx bolts to temporarily hold the front grill and head lights in position while installing the mount.



Figure 2

Remove the bottom two radiator Guard Bolts

Use a 1/2" socket and ratchet to remove the radiator guard bolts.

Install the small L brackets as shown in Figure 3 with the bolts removed from the guard. Use the longer bolts supplied in this kit if the plow mount is being installed with a winch mount.

Leave the bolts loose so that the brackets can be moved as needed to attach plow mount.

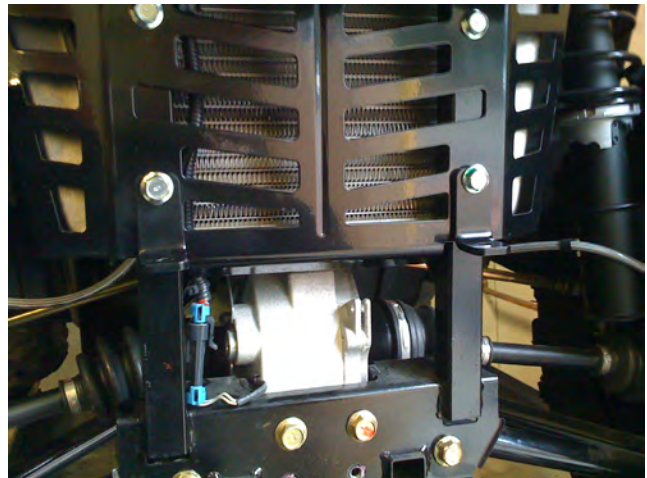


Figure 3

Secure Plow Mount to L Brackets

Use the 5/16" bolts supplied in this kit to secure the plow mount to the L brackets (Figure 4).

Tighten the 5/16" bolts so that there is no gap between the Plow Mount and L brackets. Do not tighten these bolts at this time.

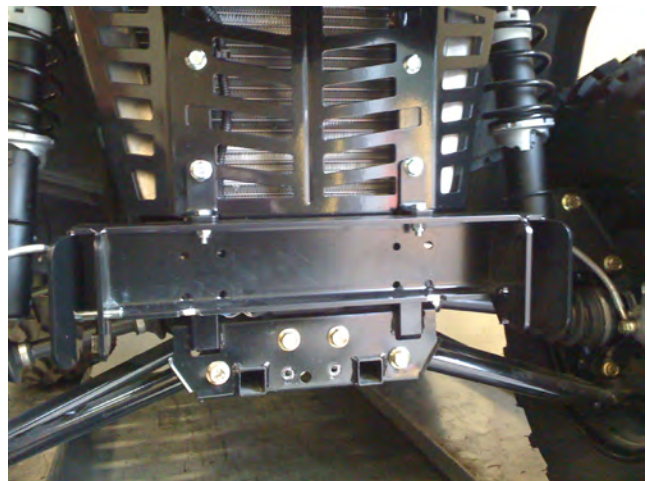


Figure 4

INSTALLATION Continued

Install the 1/4" U-Bolts

There may be a wire zip tie securing a wire plug to the frame. Remove this zip tie to install the mount. Install a new zip tie as needed after the plow mount is secured to the frame.

Install the 1/4" square U-Bolts with the washers and lock nuts (Figure 5).

Use the 7/16" socket to secure the 1/4" nuts on the U-Bolts. Torque the nuts at this time to the specification in the torque chart.



Figure 5

Secure all Fasteners and Install Bumper

Torque the 5/16" bolts to secure the L brackets to the frame and the plow mount. Torque the bolts at this time to the specification in the torque chart.

Remove the 5/16" Torx bolts used to temporarily secure the grill. Install the lower front bumper and torque the bolts (Figure 6).



Figure 6

Install the Plow Mounting Tabs

Use the M10 bolts supplied with the plow to secure the Plow Mounting Tabs supplied in this kit to the plow. These tabs must be installed with the locating pucks toward the center of the plow and mounted to the inside of the plow mounting flanges (Figure 7).

Make sure that the plow and the vehicle are on flat level surface with the vehicle wheels straight. Place the plow in the mount so that the locating pucks are resting in the mount cradle. Install the retaining pins.

Tighten the fasteners securing the tabs to the tube assembly. Torque to 3/8" specification or specification provided with the plow assembly instruction.

Install lifting mechanism at this time. Lift and lower the plow to insure that it will move freely in the mount.



Figure 7

Installation is complete.

VI. MAINTENANCE/CARE

- Inspect all metal parts on the plow, plow mount, and related hardware. Replace all parts that appears rusted or deformed prior to use.
- Inspect all nuts and bolts on the plow, plow mount, and related hardware prior to each use. Tighten all nuts and bolts that appear to be loose. Stripped, fractured, or bent bolts or nuts need to be replaced immediately.
- Check all cables prior to use. Replace cables that are worn or frayed.
- Check all moving and rotating parts. Remove debris that may inhibit the part from moving freely.