



INSTALLATION INSTRUCTIONS

PLOW MOUNTING KIT

Part Number: 70737

Applications: 2007+ Suzuki King Quad 450; 2009+ Suzuki King Quad 500;
2005+ Suzuki King Quad 700; 2008+ Suzuki King Quad 750

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. PARTS LIST

<u>Part Number</u>	<u>Qty</u>	<u>Description</u>
69556	1	Plow Mount
62845	1	J-Bolt Bracket
69552	1	Mounting Hardware Kit

III. TOOLS REQUIRED

- Ratchet
- 9/16" Wrench
- 9/16" Socket
- 1/2" Socket
- 7/16" Socket
- 10mm Socket
- Drill & 11/32" Drill Bit

IV. FASTENER TORQUE SPECIFICATIONS

1/4 & M6	8 lb. ft. (10.8 N-m)
3/8 & M10	30 lb. ft. (40.7 N-m)
7/16	50 lb. ft. (67.8 N-m)
1/2	75 lb. ft. (101.7 N-m)
5/16 U-Bolt	11 lb. ft. (14.9 N-m)

V. INSTALLATION

1. Install the plow mount using the fastener configurations as shown in Figure 1.
 - A. 3/8" Bolt, 3/8 Nylock Nut
 - B. J-Bolt, 1/4" Nut
 - C. 5/16" x 2.0" U-bolt, 5/16" Nylock Nut

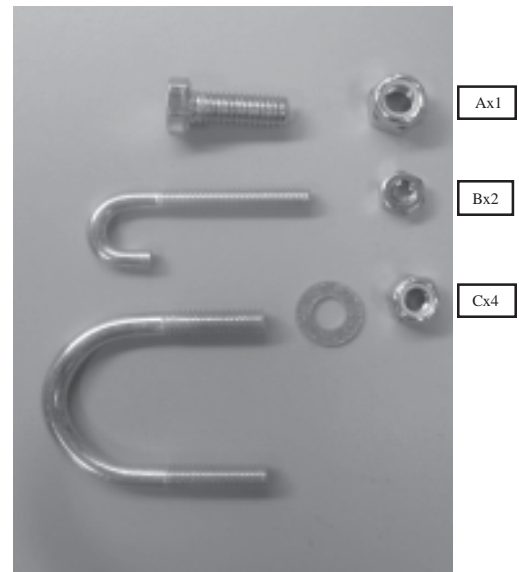


Figure 1

2. To install the plow mount to the underside of the vehicle, remove the factory skid plate. This will require the use of a 10mm socket, as shown in Figure 2.

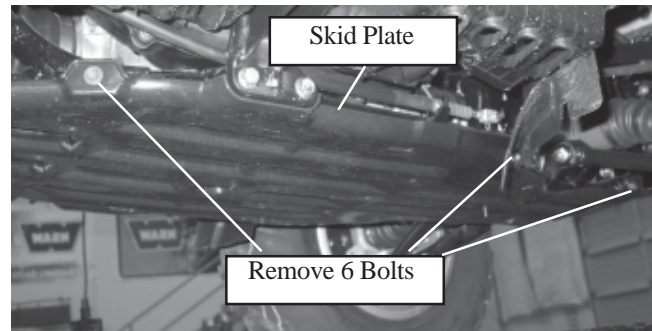


Figure 2

3. Once the skid plate is removed. Use the plow mount as a template for holes to be drilled, as shown in figure 3.

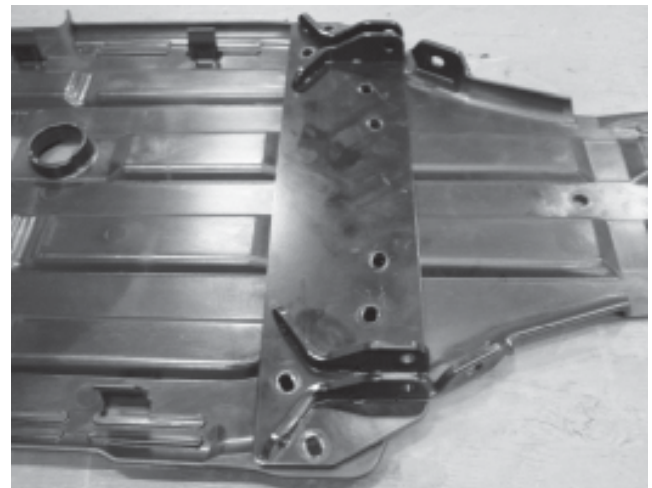


Figure 3

INSTALLATION CONT.

4. Place the plow mount 6" in front of the circular hole in the skid plate, as shown in figure 4.

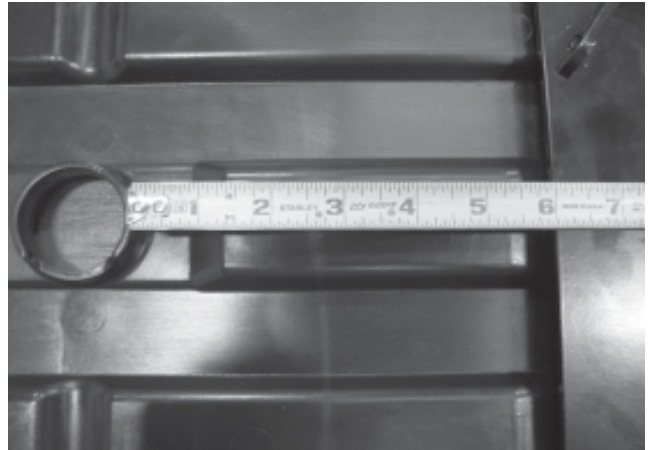


Figure 4

5. Place the edge of the plow mount $\frac{3}{16}$ " away from the edge of the skid plate. The opposing edge of the plow mount will hang partially over the edge of the skid plate. Make sure the plow mount is perpendicular to the skid plate. Mark all hole locations on the skid plate by scribing the plastic with a sharp object. Using a $\frac{11}{32}$ " drill bit, drill through the skid plate, as shown in figure 5.

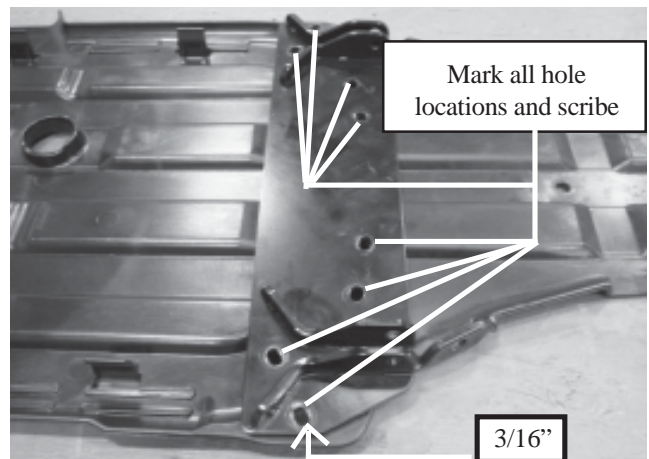


Figure 5

6. Reinstall the skid plate with the six fasteners removed in step 2. Install the plow mount with the provided fasteners by placing the U-Bolts over the frame with the threaded ends protruding through the plow mount. Attach the $\frac{5}{16}$ " washers and nuts as shown in Figure 6. It is important that all fasteners are loosely installed until final assembly. It may be necessary to slot the hole locations on the skid plate for the U-Bolts to line up with the skid plate. The picture shown is from the rear of the bike looking forward.

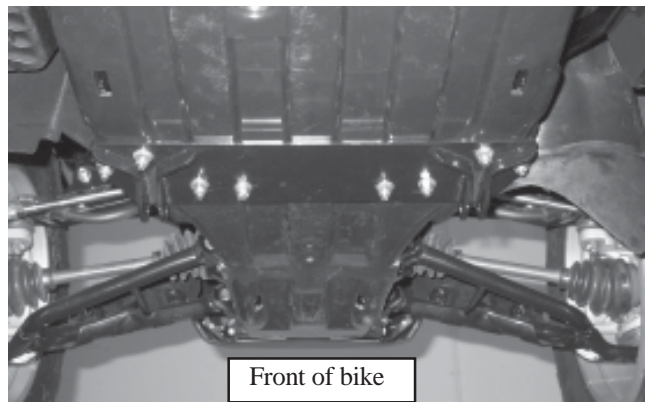


Figure 6

7. Tighten all fasteners securely. Torque $\frac{5}{16}$ " bolts to 11 ft. lbs.

INSTALLATION CONT.

8. If you haven't already done so, assemble the plow per the instructions included in the plow kit. Attach the plow to the mount using the pins provided in the plow kit.
9. If using a winch to operate the plow, install the J-Bolt bracket (62845) to the cross-member of the plow.

Note: If using a winch to operate your plow, proceed to step 10. If using an electric actuator, or manual lift to operate your plow, please refer to the instructions that came with the manual lift kit.

10. Run the winch cable through the roller fairlead and down to the plow. Attach through the end of the winch cable around the end of the J-Bolt. Slide the threaded end of the J-Bolt (C) through the round holes in the bracket. The open end of the J-Bolt will fit into one of the slotted holes.

Note: If you have a hook on the end of your winch cable, simply move the hook out of the way when attaching the cable to the J-Bolt.

11. Attach the 1/4" nut and washer to the end of the J-Bolt. The J-Bolt should be tightened until the open end drops down into the slot. Do not over tighten the J-Bolt as this may pinch and damage the cable. The completed assembly will look as shown in Figure 8.

Plow installation with a winch is now complete. The assembled product should look like Figure 9. Skip the rest of this section and move to the next section titled "Maintenance/Care".

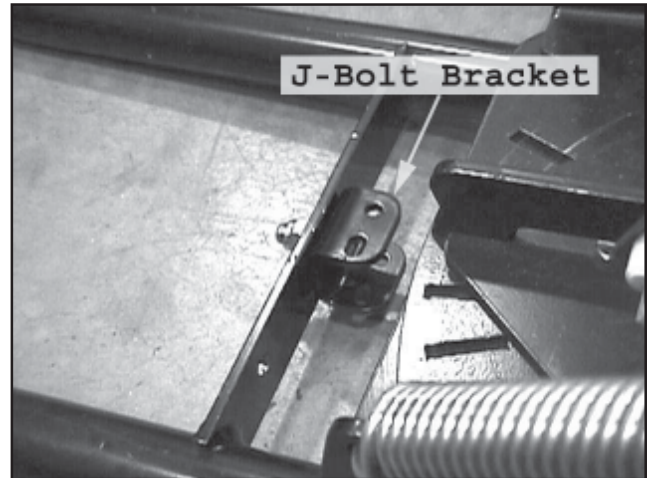


Figure 7

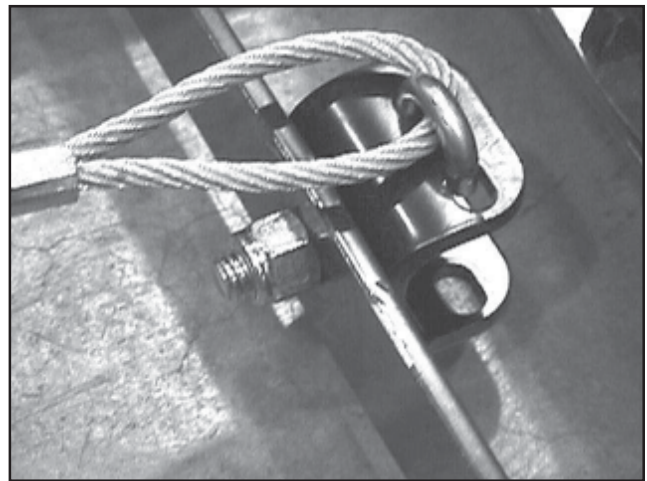


Figure 8



Figure 9

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.

VII. TROUBLE SHOOTING

Trouble	Inspection	Diagnosis	Action
Difficulty getting bolts to line up with holes in chassis.	A. Check that the side slots in skidpan align with the hole and nut in the chassis.	1. Make sure the skidpan slots aligns with the hole when the mount is not compressed against it.	1. Adjust and move the skidpan while compressing the plow mount against it until the skidpan slots align with the hole.
		2. Make sure the skidpan slots align with the hole when the U-bolts are put through the skidpan.	2. Increase the diameter or slot the holes drilled through the skidpan until the skidpan slots align with the holes.
Difficulty getting plow pins through the plow and plow mount.	A. Check the alignment of the plow mount holes in relation to the plow holes.	1. Make sure the plow and vehicle are both on a flat non-sloping surface.	1. Move the plow and vehicle to a flat non-sloping surface.
		2. Make sure the plow holes align perfectly with the plow mount holes.	2. Place a smaller diameter rod (such as a drill bit) through the holes and align the two. Once the two are aligned, hold the plow in place and put the plow pin through the two holes.
The electric actuator cable will not rotate within the termination bracket.	A. Check the termination of the actuator cable.	1. Make sure the cable is in the slot of the termination bracket, the cylindrical pin is attached to the cable, and the termination bracket is attached such that it leans toward the plow blade.	1. Mount the bracket to the plow crossmember on the plow blade side angling toward the blade. Slide the end of the actuator cable through the termination bracket slot. Slide the cylindrical pin over the end of the cable and terminate with a 1/4" nut (D). The completed assembly should look like Figure 12.