



INSTALLATION INSTRUCTIONS PLOW MOUNTING KIT

Part Number: 79605

Application: Yamaha Grizzly 660

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

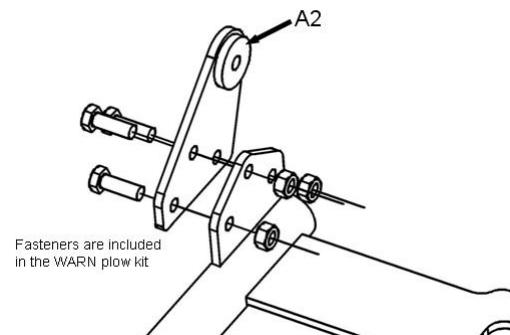
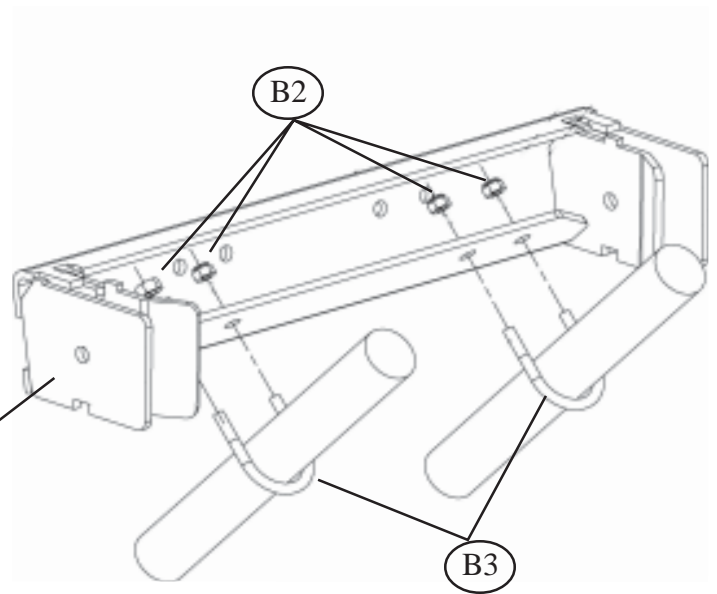
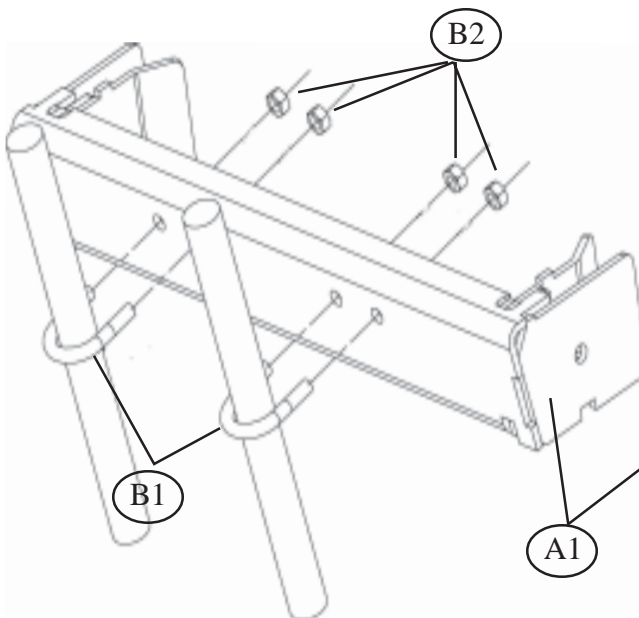
- RATCHET
- 10mm SOCKET
- 7/16" WRENCH
- 1/2" SOCKET

IV. 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)
7/16	50 lb. ft. (67.8 N-m)
1/2	75 lb. ft. (101.7 N-m)

IV. PARTS LIST

<u>Reference</u>	<u>Part Number</u>	<u>Qty</u>	<u>Description</u>
A1	82630	1	PLOW MOUNT
A2	79225	1	BOLT ON FLANGE RH
A3	79226	1	BOLT ON FLANGE LH (NOT SHOWN)
B1	79604	2	U-BOLT M8-1.25 X 35mm X 48.5mm
B2	66129	4	M8-1.25 HEX FLANGE HD NUT
B3	79413	2	U-BOLT M8-1.25 X 31mm X 40mm
C1	79712	2	CLIP RETAINING PIN (NOT SHOWN)



V. INSTALLATION

1. Remove front skid with 10mm socket (fig. 1). If needed remove winch and winch plate with front skid.

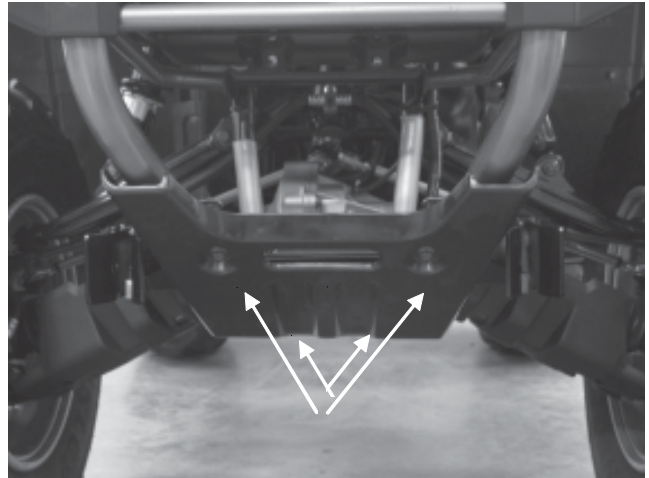


Figure 1

2. Slide plow mount into the side opening of the ATV (fig. 2).



Figure 2

3. Align mount accordingly to figure 3. Mount should sit flush with the front and rear frame rails

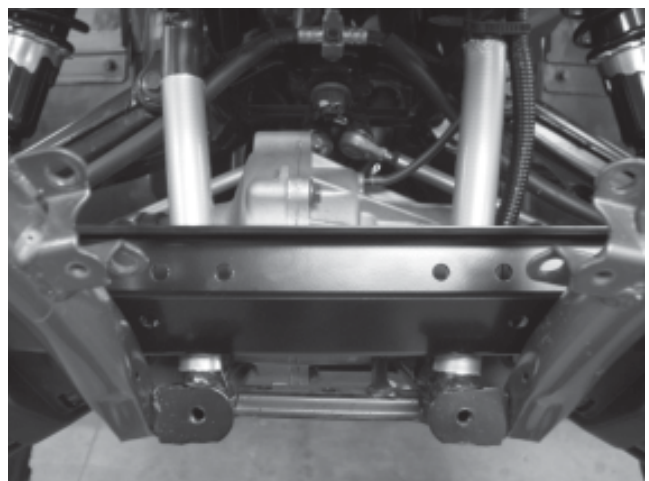


Figure 3

INSTALLATION CONT.

4. Connect the back of the mount to the rear frame rails using the provided u-bolts (B1), and M8 flange hex nuts (B2). Do not tighten completely (fig. 4).

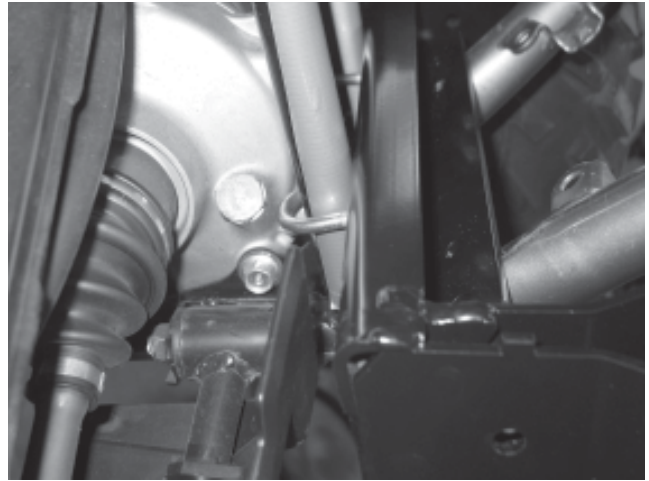


Figure 4

5. Connect the front of the mount to the front frame rails using the provided u-bolts (B3), and M8 flange hex nuts (B2). Do not tighten completely (fig. 5).

6. Go back and tighten all u-bolts to the recommended torque specifications. Start with the back u-bolts first. Reinstall winch and winch plate if needed.

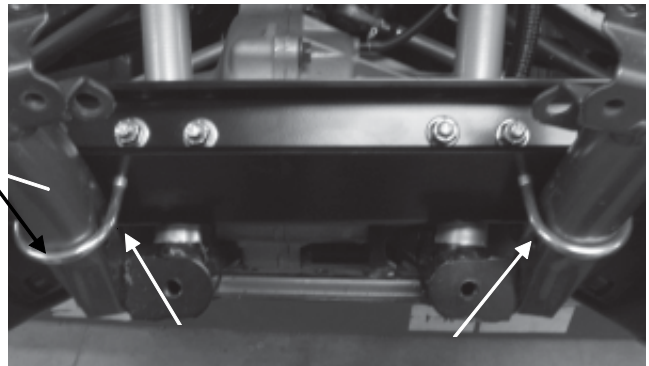


Figure 5

7. Bolt on the left and right flanges (A2 & A3) to the WARN plow push tubes. Installation hardware can be found in the WARN plow kit. See page 3 for correct orientation, the flanges should bolt to the out side of the tube flanges with pucks facing inward.

8. Align the bolt on flanges that are now attached to the plow to the plow mount alignment tabs (fig. 6).



Figure 6

INSTALLATION CONT.

9. Lift the plow push tubes into the plow mount by locating the puck of the bolt on flanges (A2 & A3) to the cradles of the plow mount (fig. 7). Push retaining pins through the plow mount alignment tabs and lock the clips in place.

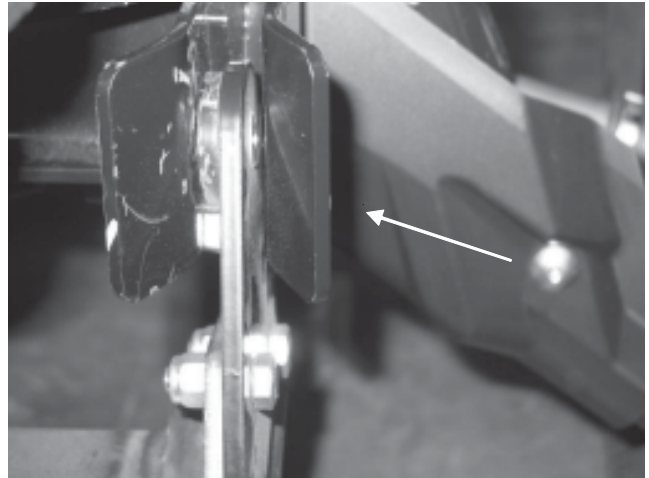


Figure 7

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.