

# INSTALLATION INSTRUCTIONS WINCH MOUNTING KIT

Part Number: 70825

• Application: Kawasaki Brute Force 650 4x4 and 650i 4x4

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.

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

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:

AWARNING signals a hazard that could cause serious injury or death, if you do not follow recommendations. ACAUTION 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.

# **A** WARNING

#### INJURY HAZARD

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

- 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 and operation.
- □ Always perform regular inspections and maintenance on the winch, winch mount and related hardware.
- **Never** operate this **WARN** product with damaged or missing parts.

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

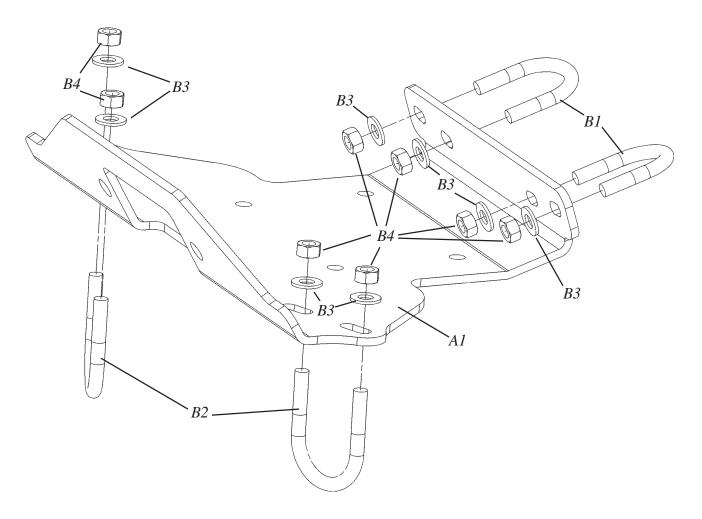
	Notice					
	Equipment Damage					
	<b>Always</b> refer to the Installation and Specification Guide, supplied in the winch kit, for all wiring schematics and specific details on how to wire this WARN product to your vehicle.					
Read installation and operating instructions thoroughly.						

# I. BEFORE YOU BEGIN

This kit includes mounting plate, hardware, and instructions for installing the winch wiring contactor.

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### III. PARTS LIST

<u>Ref</u>	<u> Part #</u>	Qty	<u>Description</u>
A1	70854	1	Winch Mounting Plate
A2	63583	1	Contactor Mounting Plate
B1	60870	2	5/16-18 x 1-1/4" x 1-3/4" U-bolt
B2	61262	2	5/16-18 x 1-1/2" x 2-3/16" U-bolt
В3	1324	8	5/16" Flat Washer
B4	2002	8	5/16-18 Lock Nut
B5	31209	2	1/4-20 x 1-1/4" x 2-1/4" U-bolt
B6	1320	4	1/4" Flat Washer
B7	1321	4	1/4" Lock Washer
B8	1322	4	1/4-20 Nut

# IV. TOOLS REQUIRED

- Ratchet - 7/16" Socket - 1/2" Socket
- 7/16" Box Wrench
- 1/2" Box Wrench
- Phillips Screwdriver

# V. 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)

#### VI. INSTALLATION

Note: Pictures are of a Brute Force 650

**1.** Rotate the winch mounting plate (A1) sideways and slide it into position beneath the radiator shroud, Figure 1.

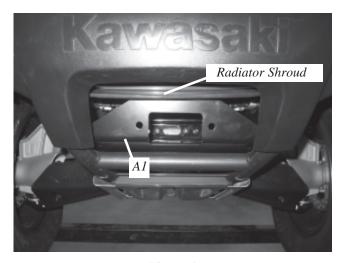


Figure 1

2. Remove the four screws securing the side plastic shield to the left side of the ATV (referenced from the sitting on the seat in the riding position), Figure 2. Carefully pull the shield away from the bike to allow room.

Note: Skip this step if mounting winch on 650i.

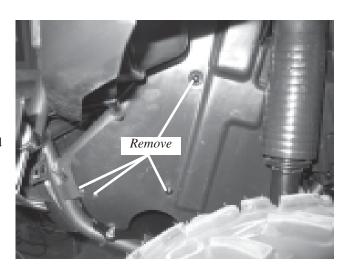


Figure 2

**3.** Slide the winch into place, Figure 3. Make sure that the clutch side of the winch is facing the left side of the ATV.



Figure 3

#### INSTALLATION CONT.

**4.** Fasten the winch to the mounting plate (A1) with the four 5/16-18 x 1" bolts supplied in the winch fastener kit. Rotate the mounting plate upward if additional room is necessary, Figure 4. Tighten down the winch bolts to the recommended torque value.

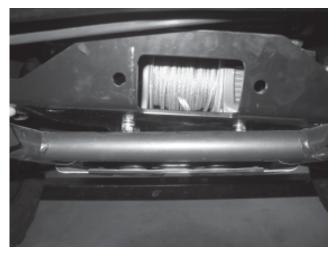


Figure 4

**5.** Fasten the roller fair lead to the mounting plate using the 3/8" hardware found in the winch fastener kit, Figure 5.



Figure 5

**6.** Place the four u-bolts (B1 and B2) around the vehicle frame and through the mounting plate, Figure 6. Use the washers (B3) and lock nuts (B4) to fasten the u-bolts, and tighten to the recommended torque value.

Re-install the guard using the screws that were removed in step 2.

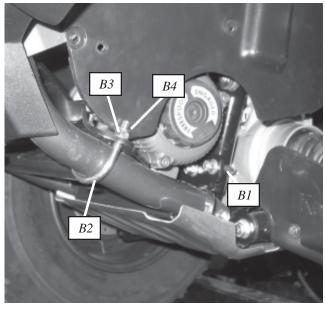


Figure 6

#### INSTALLATION CONT.

The following instructions are for mounting the wiring contactor.

- **7.** Remove the seat from the ATV. Disconnect the battery cables and remove the battery from the battery compartment.
- 8. Place the contactor mounting plate (A2) into position on the frame tube just below the battery compartment, Figure 7. Attach with the two 1/4-20 u-bolts (B5), flat washers (B6), lock washers (B7), and nuts (B8).

**NOTE:** The contactor will attach to the bracket utilizing one of the legs on each of the u-bolts. When attaching the bracket to the frame tube, only use the upper leg of the u-bolt to hold the bracket in place. Only tighten finger tight at this time.

9. Place the contactor on to the bracket (A2) and attach using a flat washer (B6), Lock washer (B7), and nut (B8), Figure 8.

**NOTE:** The contactor will attach to the bracket utilizing one of the legs on each of the u-bolts.

10. After attaching the contactor to the bracket, attach all the wiring to the contactor and route wires to appropriate locations on the ATV (see installation manual that came with the winch). Rotate the contactor and bracket into a position so the wiring will not interfere with any moving parts or anything that may become to hot. Tighten the u-bolts around the frame tube to 5 - 6 lb. ft.

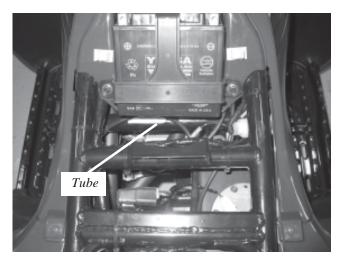


Figure 7



Figure 8

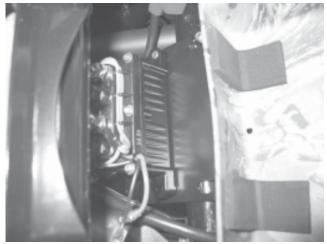


Figure 9

# **A** WARNING

READ THE VEHICLE'S OPERATOR MANUAL, WINCH OPERATOR MANUAL, AND ALL WARNING LABELS PRIOR TO OPERATION OF ATV AND WINCH.

#### THE WINCH MOUNTING PLATE INSTALLATION IS NOW COMPLETE.

- Assemble winch to mounting plate, using hardware found in winch kit.
- Wire winch according to instructions found in winch kit.

#### PROCEED TO SECTION TITLED "MAINTENANCE/CARE".

## **A** WARNING

FAILURE TO SECURELY TIGHTEN ALL BOLTS ON THE WINCH PLATE, WINCH, AND FAIRLEAD CAN RESULT IN PRODUCT FAILURE WHICH MAY RESULT IN VEHICLE DAMAGE AND OPERATOR INJURY OR DEATH. DOUBLE CHECK THAT ALL BOLTS ARE SECURELY TIGHTENED PRIOR TO USE.

#### VII. MAINTENANCE/CARE

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

#### **A** WARNING

PERFORM REGULAR INSPECTIONS ON THE WINCH, WINCH MOUNT, AND RELATED HARD-WARE. NEVER OPERATE THE WINCH WITH DAMAGED OR MISSING PARTS. FAILURE TO FOLLOW THIS WARNING MAY CAUSE VEHICLE DAMAGE AND OPERATOR INJURY OR DEATH.