



INSTALLATION INSTRUCTIONS ATV FRONT PLOW MOUNT KIT

Part Number: 86142

Application: KYMCO MXU 500

GENERAL SAFETY PRECAUTIONS

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

IMPACT AND MOVING PARTS ENTANGLEMENT 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:
 - o Across any sharp edges.
 - o Through or near moving parts.
 - o 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.

Read installation and operating instructions thoroughly.

WARN INDUSTRIES, INC. 12900 S.E. Capps Road,
Clackamas, OR USA 97015-8903, 1-503-722-1200, FAX: 1-503-722-3000
Customer Service: 1-800-543-9276
Dealer Locator Service: 1-800-910-1122
International Sales/ Customer Service: 1-503-722-3008
International Fax: 1-503-722-3005

⚠ 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

- 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.
- Never overtighten the j-bolt to the bracket. Doing so will pinch the winch cable against the bracket, damaging the cable.
- 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.

BEFORE YOU BEGIN

This kit is compatible with WARN's line of ATV winches. Winch sold separately. Please read WARN's Winching Technique Guide provided with the winch prior to use of this product.

TABLE OF CONTENTS

Parts List.....	3
Tools Required.....	3
Torque Specifications.....	3
Installation.....	4-7
Maintenance/Care.....	7

TOOLS REQUIRED

- Ratchet
- Sockets: 13mm
- Drive extension and u-joint
- 16, 17 mm End Wrench

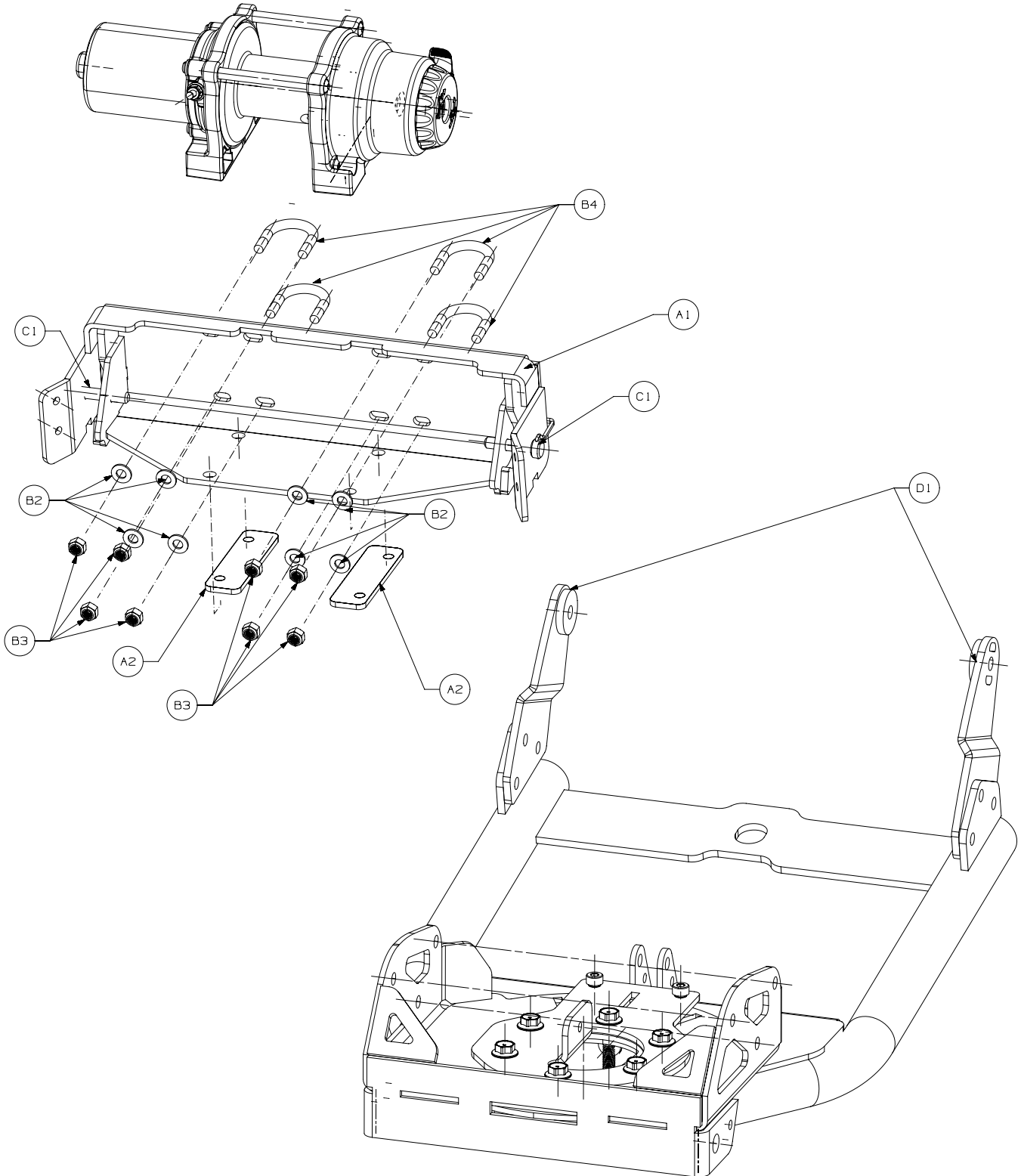
TORQUE SPECIFICATIONS

Please use the recommended torque specifications when assembling this product unless otherwise specified in the instructions.

1/4, 6mm	8 lb. ft. (10.8 N-m)
5/16, 8mm	17 lb. ft. (22.5 N-m)
3/8,10mm	30 lb. ft. (40.7 N-m)
7/16, 11mm	50 lb. ft. (67.8 N-m)
1/2, 12mm	75 lb. ft. (101.7 N-m)

PARTS LIST

Reference	Part Number	Qty	Description
A1	86146	1	Plow Mount Weldment
A2	80206	2	Spacer Plate
B1	79413	4	U-bolt, M8 x 1.25
B2	1324	8	5/16" flat washer
B3	22491	8	M8 x 1.25 lock nut
C1	79712	2	3/8" Safety Retaining Clip
D1	79340	1	RH Bolt On Offset Weldment
D2	79341	1	LH Bolt On Offset Weldment



KYMCO FRONT PLOW MOUNT INSTALLATION

1. Remove the four bolts that secure the front fascia plastic, as shown in figure 1.

NOTE: Make sure there are no other accessories installed on vehicle.



Figure 1

2. Lay the front plow mount right over the factory winch mount as shown in figure 2.

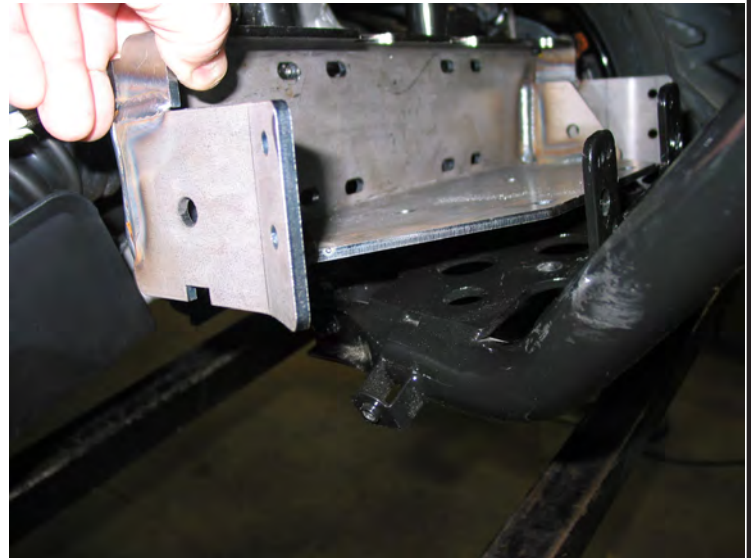


Figure 2

NOTE: Make sure that you have installed the spacers under the mounting plate that were supplied in the kit. See Figure 2B.

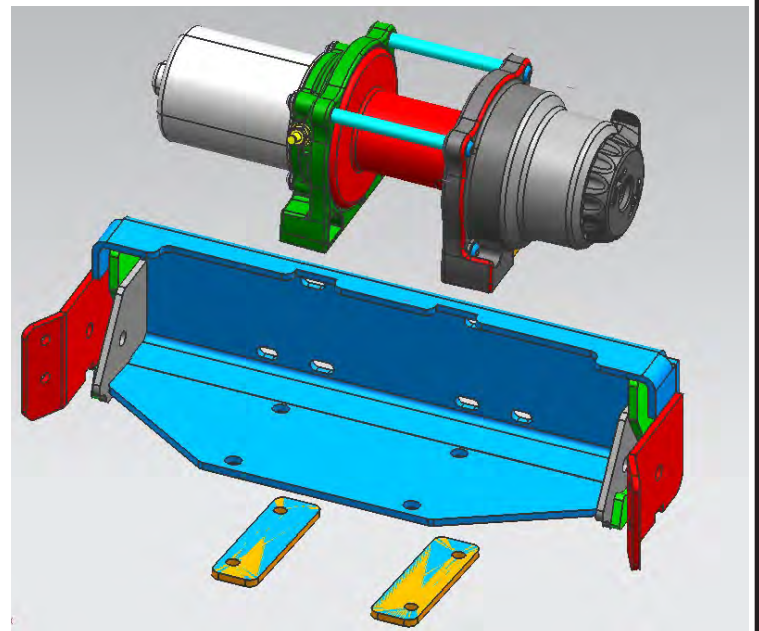


Figure 2B

INSTALLATION INSTRUCTIONS

3. Install the supplied u-bolts, washers and locknuts around the vertical frame tubes and through the mount. Center the winch mounting holes in the plow mount with the factory winch mount holes in the plate before you tighten. See figure 3.



Figure 3

4. Install the winch fairlead at this time. Notice that this plow fairlead has the larger roller on the bottom. If you choose not to use this fairlead and use the one that comes with the winch, your winch cable may rub on your front plastic.



Figure 4

5. Once you have installed the plow mount and the roller fairlead, you may now place the winch between the bumper frame and the mount. Do not drop into place yet. See figure 5.



Figure 5

6. Attach the yellow and blue power leads to the winch before dropping into place. Make sure to use the black terminal protective covers on the cables. Tighten the leads to the winch at this time. See figure 6.



Figure 6

7. Note that as you are dropping the winch into place that the terminal covers are in place and the winch cable is started through the fairlead. This makes the installation easier. See figure 7.



Figure 7

8. If you haven't already install the winch hook now as shown in figure 8.



Figure 8

9. You are now ready to put the plastic back on your vehicle. You must first trim the lower edge in order to make clearance for the plow and to reinstall the fastener. See figure 9.

The front plow mount installation is now complete. Proceed to section entitled "Maintenance/Care".



Figure 9

10. The finished kit should look like the picture in figure 10.



Figure 10

NOTE: You must trim plastic for engagement of plow arms into plow mount. See Figure 11.



Figure 11

⚠ WARNING

- **READ THE VEHICLE'S OPERATOR MANUAL, WINCH OPERATOR MANUAL, AND ALL WARNING LABELS PRIOR TO OPERATION OF ATV AND WINCH.**
- **PERFORM REGULAR INSPECTIONS ON THE PLOW, PLOW MOUNT, AND RELATED HARDWARE. NEVER OPERATE THE PLOW WITH DAMAGED OR MISSING PARTS. FAILURE TO FOLLOW THIS WARNING MAY CAUSE VEHICLE DAMAGE AND OPERATOR INJURY OR DEATH.**
- **FAILURE TO SECURELY TIGHTEN ALL BOLTS ON THE PLOW MOUNT, 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.**

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.

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.

