



INSTALLATION INSTRUCTIONS

PLOW MOUNT KIT

Part Number: 87190

Application: 2012+ Honda Foreman 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.

TABLE OF CONTENTS

Tools Required.....	page 2
Torque Specifications.....	page 2
Parts List.....	page 3
Installation.....	page 4-8
Tips/Troubleshooting.....	page 9
Maintenance/Care.....	page 9

NOTES

Note: If a Warn winch mount is installed it does not need to be removed to install this plow mount.

Note: Loosening the factory front tube guard bolts may aid in installation of this kit. Be sure to Re-tighten factory bolts when installation is complete.

BEFORE YOU BEGIN

- Before beginning plow mount installation, allow the engine and exhaust system to cool and disconnect the negative cable from the battery.

TOOLS REQUIRED

- Ratchet and Torque wrench
- Sockets: 10mm, 12mm, 13mm, 17mm
- Wrenches: 10mm, 12mm, 13mm, 17mm
- 5mm Hex Wrench
- Screwdrivers: Slotted, Phillips
- Sidecutters, Saw or Utility knife

TORQUE SPECIFICATIONS

6mm - 13 N-m (10 ft-lb)

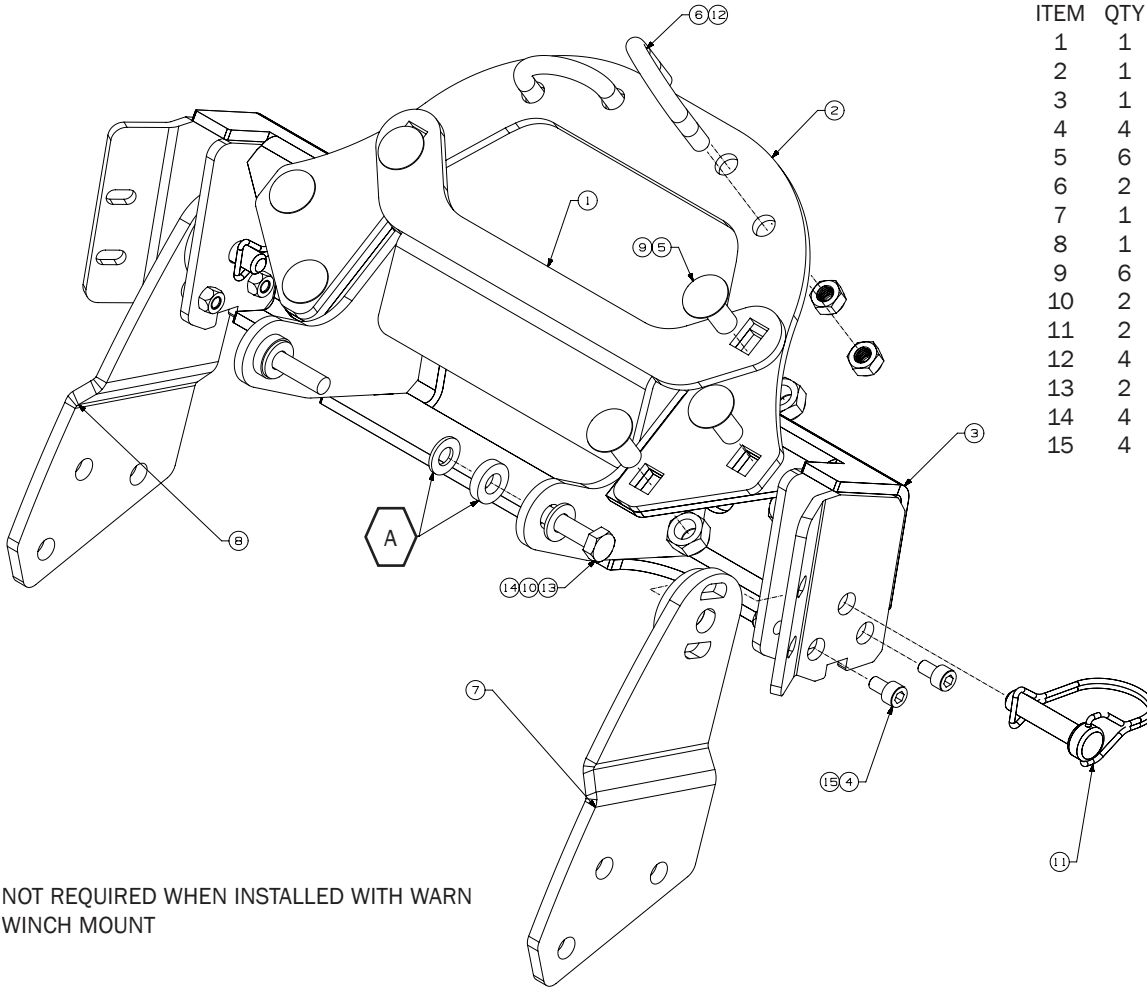
8mm bolts - 16 N-m (12 ft-lb)

8mm U-bolts - 13 N-m (10 ft-lb)

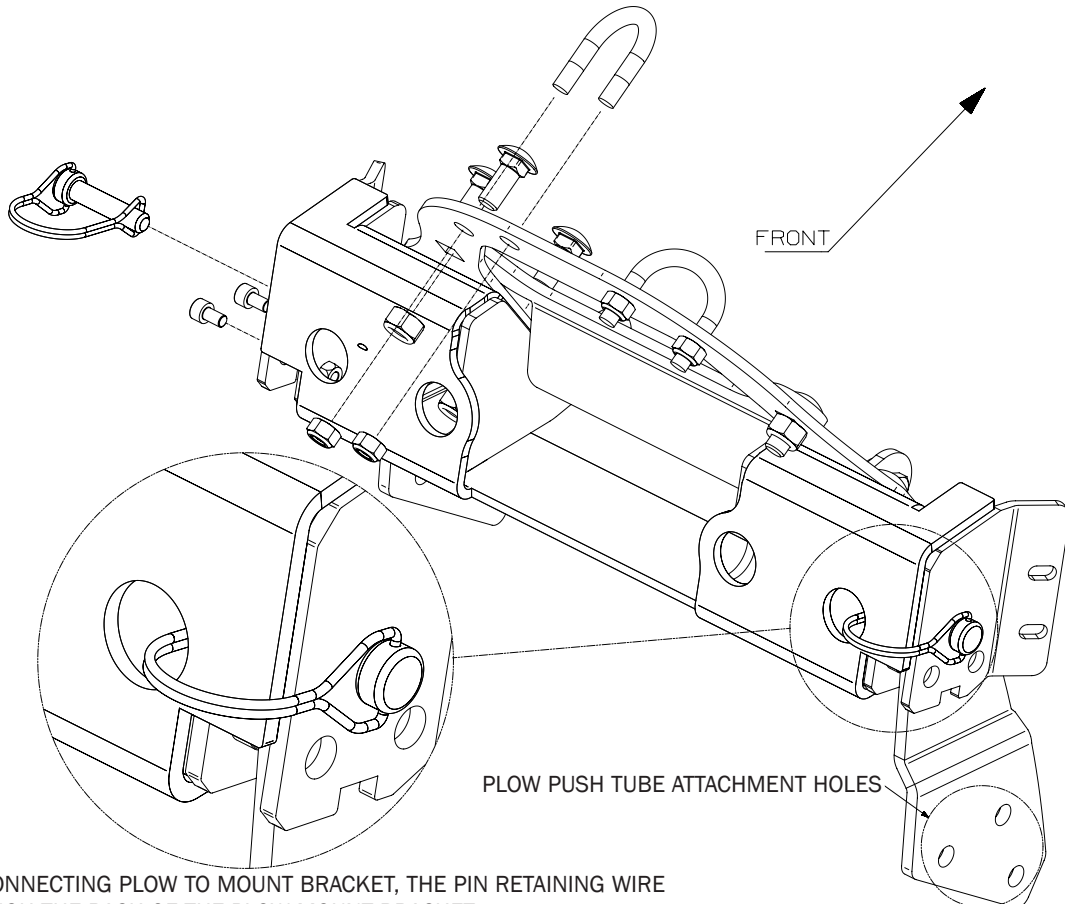
10mm bolts - 47 N-m (35 ft-lb)

PARTS LIST

ITEM	QTY	NAME
1	1	PLATE
2	1	BRACKET
3	1	PLOW MOUNT BRACKET
4	4	6 MM SOCKET HEAD BOLT
5	4	10 MM CARRIAGE BOLT
6	2	8 MM U-BOLT
7	1	LEFT MOUNT TAB
8	1	RIGHT MOUNT TAB
9	6	10MM NUT
10	2	8 MM BOLT
11	2	PIN
12	4	8 MM NUT
13	2	SPACER
14	4	8 MM WASHER
15	4	6 MM NUT



A NOT REQUIRED WHEN INSTALLED WITH WARN WINCH MOUNT



PLOW PUSH TUBE ATTACHMENT HOLES

NOTE: WHEN CONNECTING PLOW TO MOUNT BRACKET, THE PIN RETAINING WIRE INSTALLS THROUGH THE BACK OF THE PLOW MOUNT BRACKET

INSTALLATION INSTRUCTIONS

1. Remove front 6mm bolts and clip pins from plastic guards.



2. Partially remove bottom plastic guard and remove two lower factory front tube bolts.



3. Remove A-arm plastic guard.



4. Install plate over front differential and behind frame tubes. Fasten using 8mm U-bolt. Do not tighten.



5. Install bracket in front of frame tubes. Fasten to plate using 10 mm carriage bolts and nuts. Do not tighten.





6. Install plow mount bracket under frame. Fasten to frame and plate using 8mm bolts and 10mm carriage bolts and nuts. Do not tighten.

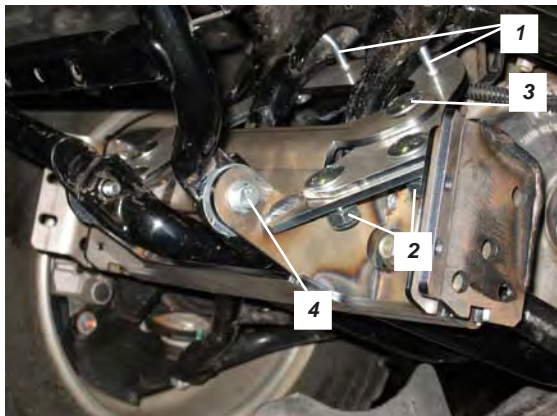
Note: If installing with the Warn winch mount, remove and discard the u-bolts that attach the winch mount to the frame.



7. When a winch mount is not installed, the plow mount bracket will need to be fastened to the frame using a spacer and washer.



8. Tighten bolts to recommended torque specifications listed on page 4 and in the order shown.



9. Install 6mm socket head bolts and nuts.

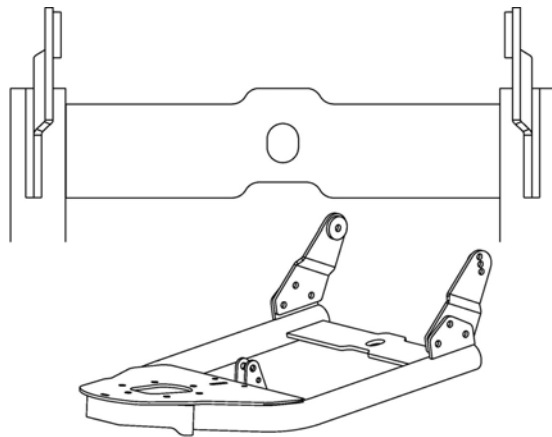


10. Lift lower plastic guard up against the lower plow mount bracket and mark plastic for trimming. Trim plastic as required for clearance. Re-attach lower plastic guards using bolts and clips removed in step 1-3.



11. Install mount tabs onto inside of push tube assembly flanges. Pucks need to be facing inward and away from plow blade. Fasteners are included in the push tube kit.

12. Reconnect battery ground.



Operation:

1. Stage the plow assembly on level solid ground. See Plow operator guide “Installing the Plow” for more information.
2. SLOWLY drive the vehicle up to the plow assembly with the vehicle as square to the plow as possible.
3. Turn off the vehicle and set the parking brake. Lift the plow mount flange end of the push tube assembly up to the plow mount on the vehicle. Insert the plow mount flange into the plow mount.
4. Double check that the plow is fully engaged with the plow mount, resting on the two lower ¼” socket bolt heads.
5. With both alignment pucks seated into the plow mount the retaining pins can be inserted. Once inserted the retaining clips on the pins can be clipped through the hole in the back of the plow mount bracket. See Plow operator guide “Installing the Plow” for more Information. The parts list view shown at the beginning of this document shows the pin location details for this application.
6. Attach the winch line to the push tube assembly through the rope guide as described in the Plow operators guide, or attach the electric plow lift.
7. Turn the ignition switch to ON, and operate the winch or electric lift to lift and lower the plow. The plow is now ready for operation. Read the Plow Operators Guide before operating plow.



TROUBLE SHOOTING

- Avoid engaging or removing the plow from the vehicle on uneven, sloped, or soft ground. Doing so may misalign the plow mount and make it difficult for proper engagement and disengagement of the retaining pins.
- If you are having trouble getting an alignment puck into the plow mount, it may need some simple adjustment. Ensure that the plow and vehicle are sitting level. Ensure that the plow base is in the center latched position.
- After using the plow, the winch cable may begin to tangle around the drum. To fix this, pull off the plow assembly and free spool the cable out of the winch. Once the tangled cable is pulled off the drum, switch the winch out of free spool and winch the cable neatly back around the drum. Do NOT grab the cable or winch hook, instead use the winch hook strap provided with your winch and follow the guidelines as described in the winching guide.

MAINTENANCE / CARE

- Inspect all metal parts on the plow, plow mount, and related hardware prior to each use. Replace all parts that appear rusted or deformed.
- 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 must be replaced.
- 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.
- See Warn Plow Operators Guide for more information.

WARNING

Failure to perform regular inspections and maintenance on the plow, plow mount, winch, and related hardware may result in vehicle damage and operator injury or death.

If you are having problems with your plow, please follow the steps below:

1. Reference the installation instructions for tips or notes.
2. Contact the dealer where you purchased the kit.
3. Call an authorized WARN Service Center from the warranty sheet included in the kit. Please have the following information available before calling; part number (listed on front of instructions), date of purchase, and make, model, and model year of ATV.
4. Contact WARN customer service at 1-800-543-9276 or www.warn.com. Again, please have the following information available before calling; part number (listed on front of instructions), date of purchase, and make, model, and model year of ATV.

The following replacement parts are available for purchase:

Part #	Description	Notes
71493	Quick Release Pin kit	2x 35136

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