

# VIPER PLOW SYSTEM / Honda Rancher 350/400 MA11117

Thank you for purchasing the premium VIPER PLOW system. You now have a top-of-theline plow system to using for shoving aside snow and dirt with the use of your ATV. Please note the following instructions and heed all warnings.

#### WARNING!!!

# SEVERE INJURY OR DEATH MAY RESULT IF YOU IGNORE ANY OF THE FOLLOWING.

- -Read the Plow Operator's Manual, the Winch Operator's Manual, and all warning labels before operating.
- -Operate ATV at a walking speed with the blade installed. Do Not exceed 5mph (8 km/h) even with the blade up.
- -Plow Cautiously, impact with a hidden or stationary object may cause the ATV to stop suddenly or go out of control.
- --Do Not operate the ATV on slopes greater than  $10^{\circ}$  with the plow installed.
- -Do Not stand or ride on the plow.
- Stay clear of moving parts and joints. Keep others away when operating or adjusting plow.
- -Inspect the plow mechanism, fasteners, cable, and adjustments before operating. Replace all worn or damaged parts before operating.
- -Lower the plow to the down position before leaving the ATV unattended.



# **PARTS LIST**

1 3/8-16 x 1" Hex Bolt

6 5/16" Nylock Nut

2 Hex Bolt, 5/16-18 x 3/4"

2 1/4" Nylock Nut

1 3/8" Nylock Nut

2 Hex Bolt, 5/16-18 x 1-3/4"

1 Frame Mount, Plow, Rancher

2 U-Bolt, 5/16-18 x 1-1/4" (Fastenal: 42018)

#### **CAUTION**

USE EXTREME CAUTION WHEN DRILLING THROUGH THE SKIDPLATE. EVERY EFFORT HAS BEEN MADE TO ENSURE THAT THE HOLE POSITIONS ON THE CROSSMEMBER WILL NOT ALLOW THE DRILL BIT TO CONTACT ANYTHING ELSE ON THE BIKE. BUT VARIATIONS IN MANUFACTURING AND INSTALLATION MAY CHANGE THAT. KEEP AWAY ALL HANDS AND LIMBS THAT MAY BE IN THE PATH OF THE ROTATING BIT. ONLY DRILL THROUGH THE SKIDPLATE AND NOTHING ELSE ON THE BIKE. NOT **DOING SO MAY** SERIOUSLY DAMAGE/INJURE THE BIKE AND OPERATOR.

## **CAUTION**

FAILURE TO TIGHTEN THE MOUNTING BRACKET BOLTS MAY CAUSE SERIOUS DAMAGE TO YOUR PLOW MOUNT AND BIKE. BE SURE TO TIGHTEN THEM SNUGGLY.

# **Plow Mount Assembly:**

**Note:** Depending on the ATV model it may be necessary to remove the plastic skid plate for installation of plow mount plate. Fasten the frame bracket to the bottom side of the ATV's frame tubes as shown in Figure 1.

For 2001 or older model Ranchers, attach the frame bracket using the two 5/16" holes in the rear that should line up with the holes in the frame gussets. Secure the bracket to the frame with two 5/16-18 x 3/4" Bolts and 5/16" Nylock nuts.

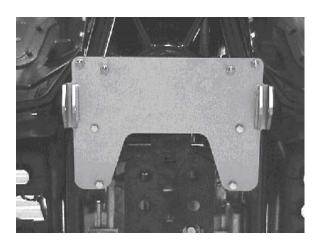


Figure 1

For 2002 or newer models, attach the mount using the center slots. Before you can attach the mount, you will have to drill through the skidplate as shown in Figure 2. Using a 5/16" drill bit, drill through the existing holes on the bike located on the inside of the tubing and near the front of the bike. Attach the bike to the chassis using two 5/16-18 x 1-3/4" Bolts and 5/16" Nylock nuts.





## Figure 2

Install both U-Bolts over the top of the frame tubes and into the frame bracket (Fig. 3). Use a 1/2" socket and ratchet to secure the U-Bolts with 5/16" Nylock nuts. *Do not over tighten the U-Bolts as this can bend the frame bracket*.

Tighten all fasteners to the following specifications.

**Torque 5/16" Bolts: 11 ft-lb (15 N-m)** 



Figure 3

#### **Plow Installation:**

- 1. Slide the plow into position with the tubes under the ATV. Lift the end of the tube assembly into position so the holes in the tube wings line up with the 3/8" holes in the frame brackets (Figure 2).
- 2. A Phillips head screwdriver may be used to align the holes. Insert both 3/8" pins and hook the retaining clips on the ends of the pins to secure the plow to the ATV.
- The plate should now be a permanent part of your ATV and will not interfere with clearance. The plow can be easily attached and detached on the welded u-bolt with the clevis hook on a winch or a manual lift assembly.

Plow mount installation is now complete.

