

PLOW ANGLE CONTROL KIT

P/N 2889051



POLARIS®

Application

For use with the Glacier Pro Plow System P/N 2879103 on the below listed models
MY09 and newer full size Ranger 500, 700 & 800 models
MY13 and newer Ranger 900 models

Before you begin, read these instructions twice and check to be sure all parts and tools are accounted for. Please retain these installation instructions for future reference and parts ordering information.

IMPORTANT: The following instructions contain details required to install the contents of this kit and it should be used as a supplement to the plow system installation instructions. The plow control (PN 2879227) is required for this kit and it is recommended that the plow control be installed in the vehicle prior to installing the angle kit. Please read the following instructions carefully prior to installation because some applications may require additional hardware.

This Kit Includes:

<u>Qty</u>	<u>Part Description</u>	<u>Part Number</u>
1.....	Hardware Kit	2204892
1.....	Harness-Plow	2412369
1.....	Harness-Plow Control	2412370
1.....	Angle Cylinder	2415813
2.....	Momentary Switch	4011501
5.....	Panduit Straps	7080492
1.....	Rivet	7621472
1.....	Routing Clip	7670102



Tools Required:

Torx Driver Set
Side Cutter

Metric Socket Set
Needle Nose Pliers

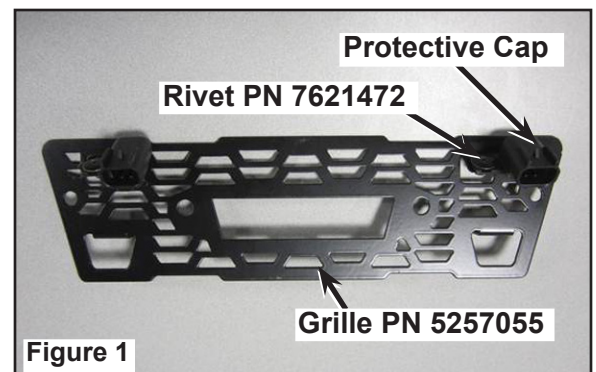
Rivet Tool

APPROXIMATE ASSEMBLY TIME (R&R): 45 minutes

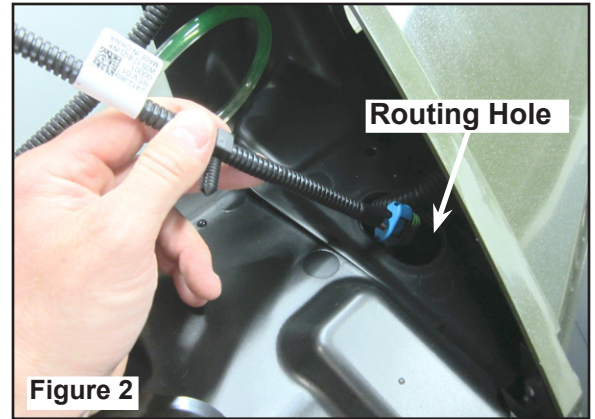
IMPORTANT: For your safety, and to ensure a satisfactory installation, perform all installation steps correctly in the sequence as shown on the attached instructions.

INSTALLATION INSTRUCTIONS FOR RANGER 900 MODELS

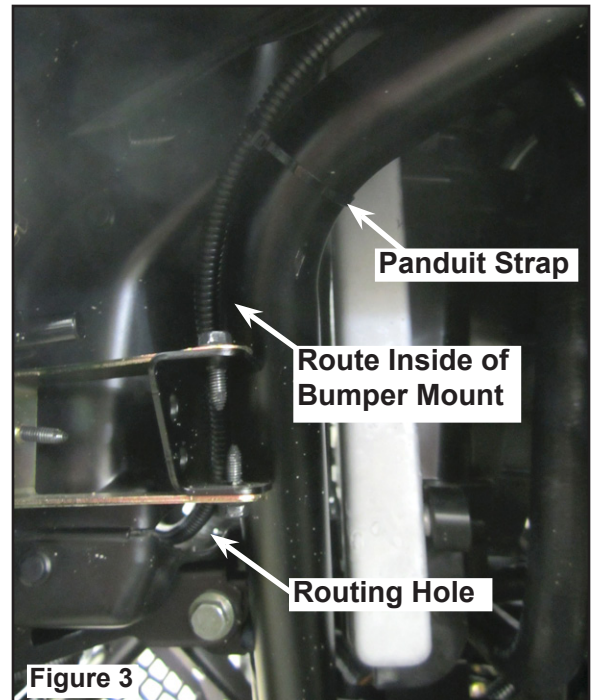
1. Open the passenger side seat, remove the storage compartment and disconnect the battery prior to starting this installation.
2. Remove the center hood section from the machine and determine if the unit has 6 gage power and ground cables going to the accessory block. If the unit does not already have power and ground cables going to the accessory block the wire kit (PN 2879388) should be installed at this time. Do not connect the wires to the battery until installation of the angle kit is complete.
3. Use a T-40 Torx bit to remove the plastic grille insert from the bumper retaining hardware for reuse. Take note that the fairlead will also need to be removed if a winch was previously installed on the unit.
4. Remove the protective cap from the harness (PN 2412369) and secure it to the left hand side of the grille (PN 5257055) with the rivet (PN 7621472) as shown in Figure 1. The grille (PN 5257055) can be found in the mount kit (PN 2879106).



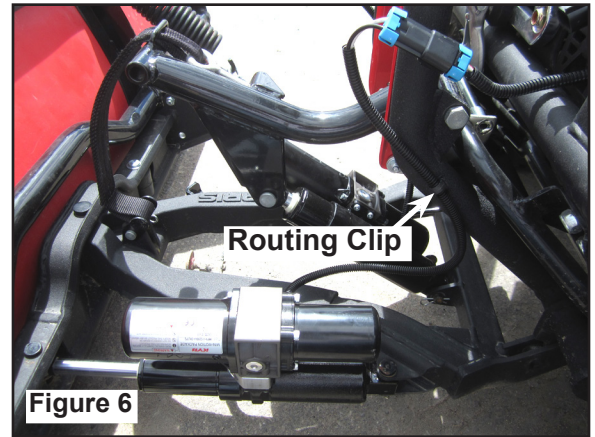
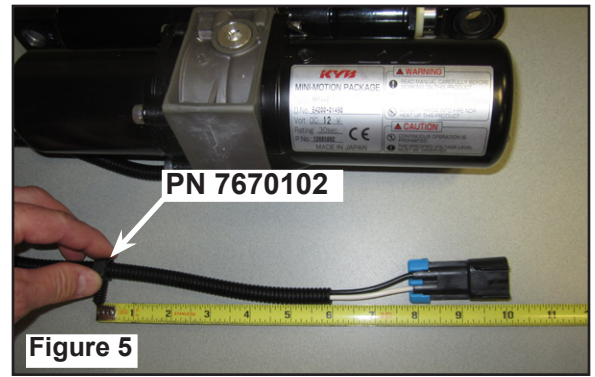
5. Follow the below instructions for proper wire routing:
- Route the plug of the harness (PN 2412369) through the left hand routing hole found under the hood of the unit as shown in Figure 2.



- From under the left hand fender route the cable along the top of the main frame tube passing the plug through the routing hole provided on the lower left hand side of the radiator shroud as shown in Figure 3.
- From the front of the unit the harness plug should be routed through the left hand bumper opening and pass through the left hand side of the grille insert (PN 5257055). The routing clip on the harness (PN 2412369) should be secured into the locating tab on the grille as shown in Figure 4.
- Install the new grille insert at this time using the hardware that was removed in Step 3. If a winch fairlead was removed in the previous steps it should also be reinstalled.
- Attach the red power and black ground leads of the harness (PN 2412369) to the corresponding leads on the accessory block at this time. The accessory block is located under the hood on the RH side.
- The white plug on the plow harness should be attached to the plow control harness that was previously installed in the unit and labeled "Angle Control".
- Use one of the panduit straps provided in this kit to secure the plow control harness to the main frame near the front bend as shown in Figure 3.
- Check to make sure all connections are secure and use the remaining panduit straps (PN 7080492) to secure the harness as necessary. Take care to position the relays and circuit breaker in an area where they will not be damaged during operation.

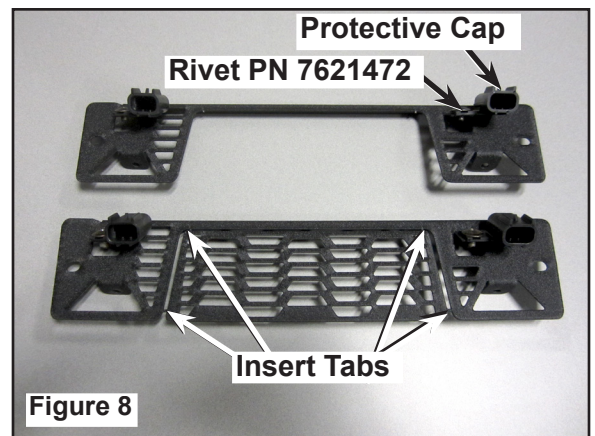


6. Install the clip (PN 7670102) to the harness of the angle cylinder (PN 2415813), 10" from the end of the plug as shown in Figure 5.
7. Remove the two pins securing the stock angle locking arm to the plow system and remove the assembly at this time. Take note that it may be necessary to remove the plow springs and rotate the blade forward in order to remove the front pin.
8. Install the cylinder (PN 2415813) to the plow system using the new hardware provided in this kit. Refer to Figure 6 for proper orientation. If the plow springs were removed in the previous step they should be reinstated at this time.
9. The power wires for the angle unit should exit the cylinder to the inside of the plow system and the routing clip that was installed in Step 6 should now be pushed into the ¼" hole on the left hand side of the mid frame as shown in Figure 6.
10. Reconnect the battery and reinstall the storage compartment and hood that were removed in Steps 1 and 2 at this time.
11. Attach the plow system to the unit and connect the angle cylinder to the plow control harness.
12. Check operation to make sure the angle system works properly. Check all wire routings to make certain wires are free to move during plow installation and removal.
13. When plow system is removed from the unit the plow control wires should be connected to the cap installed on the grille in Step 4 to prevent moisture and debris from entering the plug as shown in Figure 7.



INSTALLATION INSTRUCTIONS FOR FULL SIZE RANGER 500, 700 & 800 MODELS

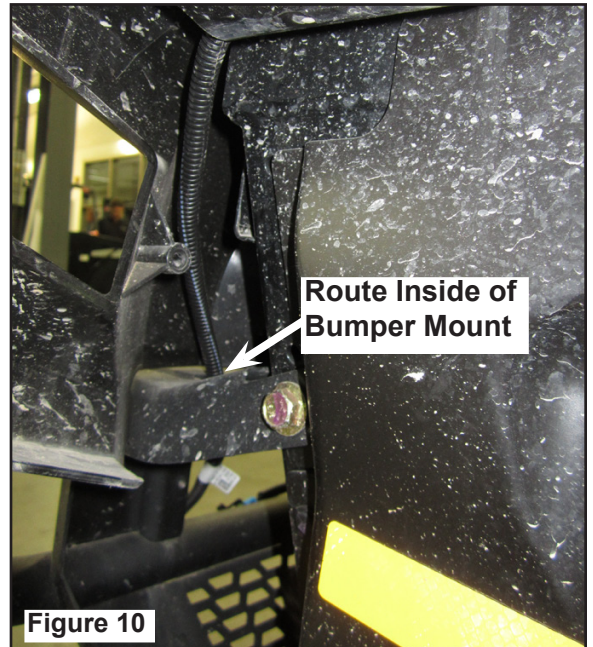
1. Open center hood panel and disconnect the battery prior to starting this installation.
2. Use a T-27 Torx bit to remove the stock grille insert from the bumper at this time retaining hardware for reuse.
3. Remove the protective cap from the harness (PN 2412369) and secure it to the left hand side of the grille (PN 5257056) with the rivet (PN 7621472) as shown in Figure 8. The grille (PN 5257056) can be found in the mount kit (PN 2879105). If the unit has a winch the insert will need to be removed from the grille by clipping the tabs as shown.



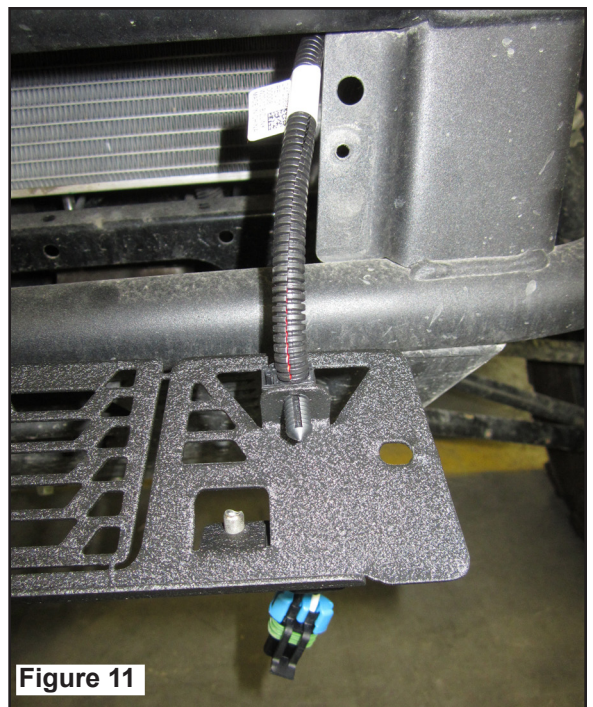
4. Follow the below instructions for proper wire routing:
- a. Route the plug of the harness (PN 2412369) through the gap between the hood liner and the front bumper fascia on the left hand side as indicated in Figure 9.



- b. From under the left hand fender route the cable to the inside of the bumper to where the grille insert was removed as shown in Figure 10.



- c. From the front of the unit the harness plug should be routed through the left hand side of the bumper opening and pass through the left hand side of the grille insert (PN 5257056). The routing clip on the harness (PN 2412369) should be secured into the locating tab on the grille as shown in Figure 11.



- d. Install the new grille insert at this time using the hardware that was removed in Step 2.
 - e. Attach the red power and black ground leads of the harness (PN 2412369) to the corresponding leads on the accessory block at this time. The accessory power block can be found secured to the dash support just left of the battery.
 - f. The white plug on the plow harness should be attached to the plow control harness that was previously installed in the unit and labeled "Angle Control".
 - g. Pull excess wire to the top side of the hood liner and secure cables as necessary with the provided panduit straps (PN 7080492). Take care to position the relays and circuit breaker in an area where they will not be damaged during operation.
5. Install the clip (PN 7670102) to the harness of the angle cylinder (PN 2415813), 10" from the end of the plug as shown in Figure 5.
 6. Remove the two pins securing the stock angle locking arm to the plow system and remove the assembly at this time. Take note that it may be necessary to remove the plow springs and rotate the blade forward in order to remove the front pin.
 7. Install the cylinder (PN 2415813) to the plow system using the new hardware provided in this kit. Refer to Figure 6 for proper orientation. If the plow springs were removed in the previous step they should be reinstalled at this time.
 8. The power wires for the angle unit should exit the cylinder to the inside of the plow system and the routing clip that was installed in Step 5 should now be pushed into the $\frac{1}{4}$ " hole on the left hand side of the mid frame as shown in Figure 6.
 9. Reconnect the battery at this time.
 10. Attach the plow system to the unit and connect the angle cylinder to the plow control harness.
 11. Check operation to make sure the angle system works properly. Check all wire routings to make certain wires are free to move during plow installation and removal.
 12. When plow system is removed from the unit the plow control wires should be connected to the cap installed on the grille in Step 3 to prevent moisture and debris from entering the plug as shown in Figure 7.