



# INSTALLATION INSTRUCTIONS BUMPER WINCH MOUNTING KIT

Part Number: 90794

Application: Polaris Ranger 400, 500, 800 HO 2012+

## 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 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 ever operate this WARN product with damaged or missing parts.

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 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.

Read installation and operating instructions thoroughly.

## **BEFORE YOU BEGIN**

Always take time to fully read the Instructions in order to understand operations.

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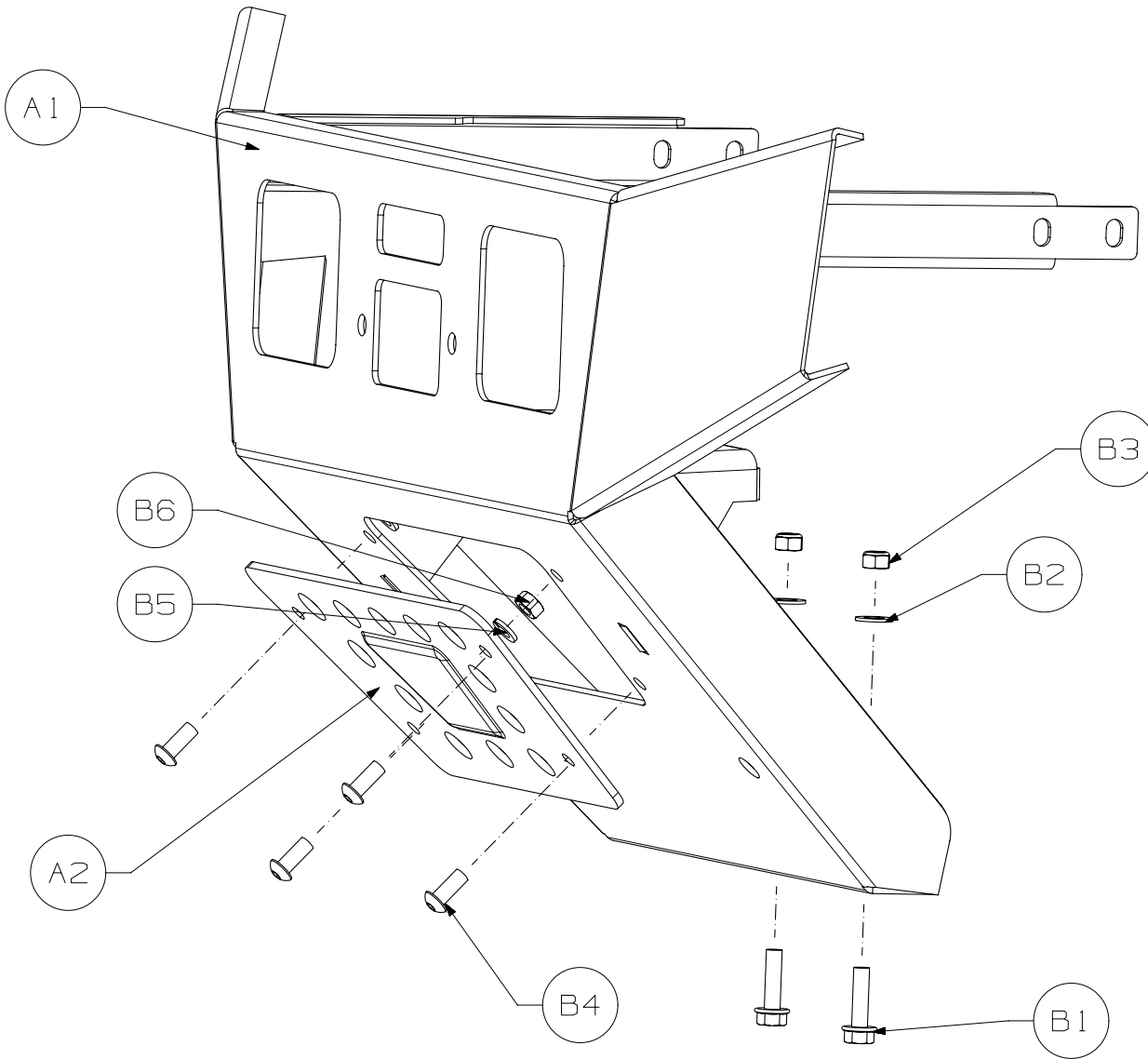
## **TORQUE SPECIFICATIONS**

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

FASTENER SIZE	FASTENER TORQUE	
	lb-ft	(N.m)
1/4"	8	(11)
5/16"	17	(23)
3/8"	30	(40)
7/16"	48	(66)
1/2"	74	(100)
9/16"	106	(144)
5/8"	148	(200)
3/4"	269	(364)
M4	(2)	3
M5	(4.5)	6
M6	(7.5)	10
M8	(18)	25
M10	(37)	50

## PARTS LIST

Qty	Part Number	Qty	Description
A1	90584	1	Weldment Skid Plate
A2	83622	1	Grill Plate
B1	64110	2	Hex Head Flange Bolt
B2	29926	2	Flat Washer
B3	22491	2	Lock Nut
B4	65348	4	Button Head Screws
B5	1402	4	Lock Washer
B6	2079	4	Hex Nut



## TOOLS REQUIRED

- Metric Wrenches
- Metric Sockets

## INSTALLATION INSTRUCTIONS

1. Remove the factory front bumper by Removing the bottom three 13mm hex Head screws at the bottom of the bumper. See Figure 1.



Figure 1

2. Remove the two 13mm hex head screws from each side of bumper that attach the bumper to the frame. Retain the frame bracket screws as you will use them to reattach the new bumper.



Figure 3

3. Attach the fairlead roller to the front face of the bumper, before installing the winch. You may install the winch after you have installed the roller fairlead, (not shown in figure 3). Use the fasteners supplied in the winch kit to attach both the fairlead roller and winch. Don't forget to remove the long screw on the bottom of the winch before installing. See winch mounting instruction manual.



Figure 3

4. After fairlead and winch are attached, raise the bumper and slide into position. Use the screws that you removed from the factory bumper to reattach the arms of the new bumper to the frame of the Ranger. Do not tighten!



Figure 4

5. Figure Use the 8mm hardware supplied in your bumper hardware kit, to attach the lower portion of the bumper to the underside of the vehicle.

**NOTE: Do not attach the grill plate until you have done this step.**

There should be three holes on the front underside of your Ranger. Align the bumper slotted holes with the hole in the Ranger frame and stick your bolt through from the underside. Place your flat washer and thread your lock nuts on to the bolts by reaching through the grill hole. You may tighten all upper and lower hardware after this step is complete.

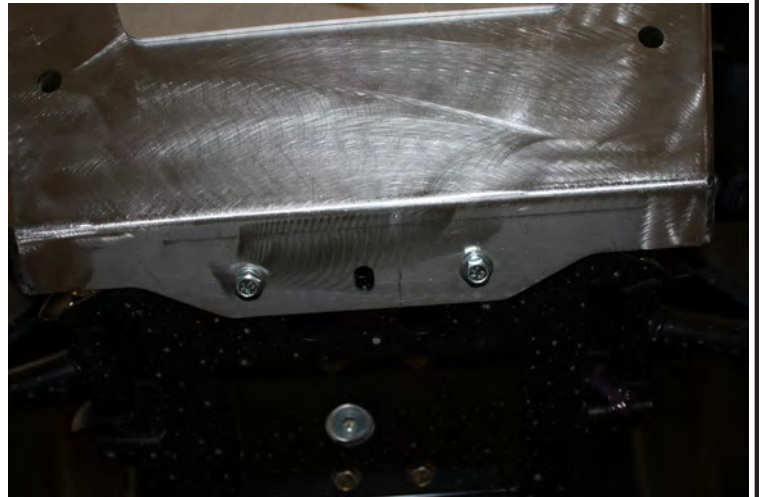


Figure 5

6. Attach the grill plate to the front or back side of your bumper at this time using the hardware supplied in the bumper kit. Also attach your winch hook if you haven't done this yet as well. The two open holes in the lower portion of the bumper are for a front plow mount if desired.



Figure 6



## 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.

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