



INSTALLATION INSTRUCTIONS

PLOW MOUNTING KIT

Part Number: 80545
Application: Polaris Sportsman XP

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

INJURY 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:**
 - 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 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.

▲ CAUTION
Moving Parts Entanglement Hazard
Failure to observe these instructions could lead to minor or moderate injury.
<input type="checkbox"/> Always take time to fully read and understand the installation and Operations Guide included with this product. <input type="checkbox"/> Never operate this product if you are under 16 years of age. <input type="checkbox"/> Never operate this product when under the influence of drugs, alcohol or medications.
Read installation and operating instructions thoroughly.

NOTICE
Equipment Damage
<input type="checkbox"/> 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. <input type="checkbox"/> Never overtighten the j-bolt to the bracket. Doing so will pinch the winch cable against the bracket, damaging the cable. <input type="checkbox"/> 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.

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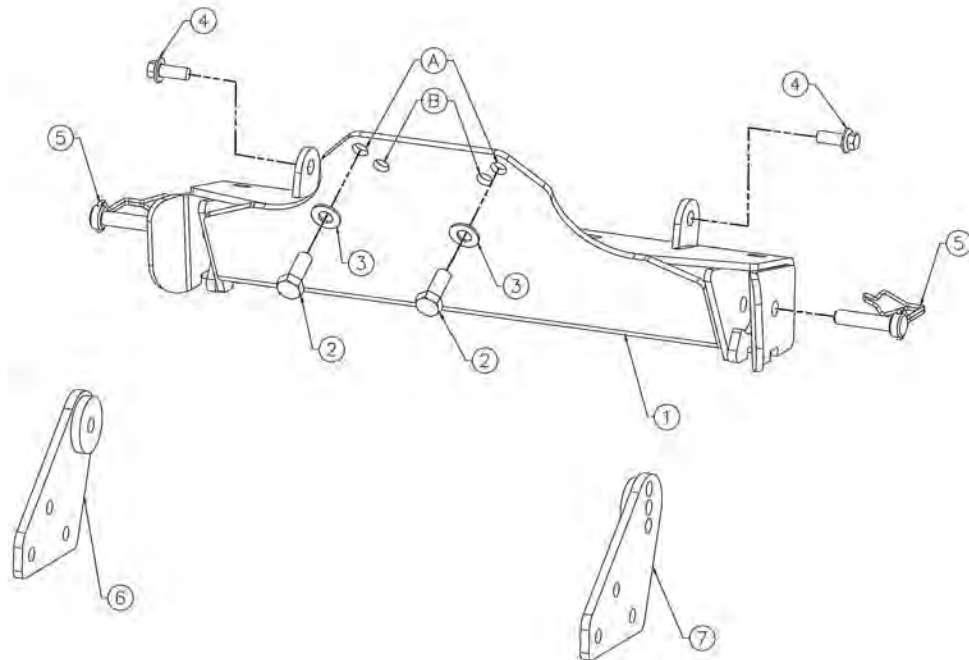
II. TOOLS REQUIRED

- 3/8" Ratchet with 3-1/2" extension
- Sockets: 10mm, 13mm, 16mm
- Wrenches: 13mm, 16mm, 17mm

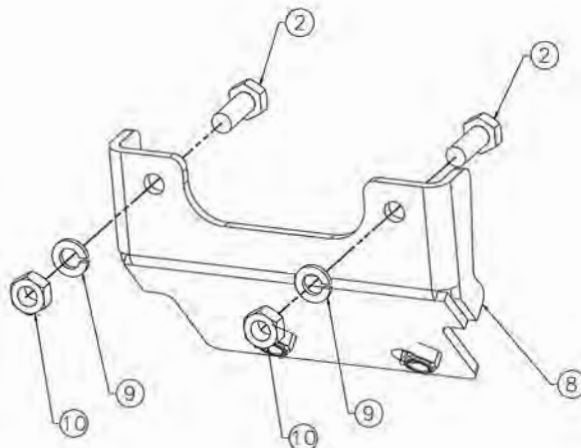
IMPORTANT: This kit requires either a Polaris or WARN winch mount to be installed. It cannot be mounted if a winch mount has not been installed on the vehicle

III. PARTS LIST

<u>Ref</u>	<u>Description</u>	<u>Qty</u>
1	Plow Mount	1
2	M10-1.50 x 25mm Hex Bolts	4
3	Flat Washer 3/8"	2
4	Capscrew M8-1.25 x 20mm	2
5	Plow Retaining Pin	2
6	Plow Tab RH	1
7	Plow Tab LH	1
8	WARN Winch Mount Adapter Brkt.	1
9	Lock Washer M10	2
10	Nut M10x1.50	2



Use Holes (A) if mounted with a Polaris Brand Winch Mount.
Use Holes (B) if mounted with a WARN Brand Winch Mount.



IV. INSTALLATION (*Polaris Winch Mount*)

Note: The Polaris winch mount (Figure 1) already has mounting holes underneath the fairlead rollers and does not need the adapter bracket.

1. If using the Polaris winch mount, loosen the bolts securing the mount to the vehicle (Figure 2) so the winch mount is loosely attached. Remove the lower skid pan bolts. These will not be used in this kit.

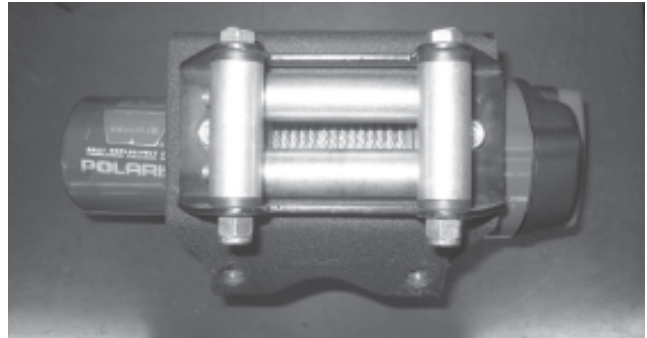


Figure 1

2. Place the plow mount under the vehicle such that the tabs fit around the frame cross bar that the lower skid pan bolts thread into. Secure with two M8x20mm capscrews supplied and a 13mm socket (Figure 3). Do not tighten these.

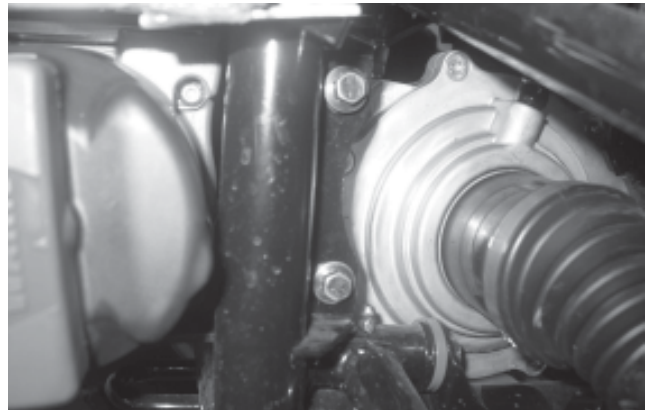


Figure 2

Note: It may be necessary to line one side up first, applying inward pressure on the skid plate mounting tabs to fit in between the plow mount tabs and around the cross tubing.

3. Secure the plow mount to the winch mount. Use a 16mm socket with two M10x25mm bolts with 3/16" flat washers (Figure 4). Do not tighten all the way.



Figure 3

Note: It may be necessary to rotate the winch mount upward for the mounting holes to line up with the plow mount holes. Make sure the lower M8x20mm bolts are not tight, as it will make this step difficult.

4. Tighten the two lower M8x20mm bolts to 20 N-m (15 ft-lbs). Tighten the two plow mount to winch mount M10x25mm bolts to 25 N-m (18.5 ft-lbs). Tighten the four winch mount to frame bolts to 20 N-m (15 ft-lbs).
5. Finally install the plow mounting tab to your Plow Tube Assembly. Install these loosely on the plow with the fasteners provided with the plow. Tighten the fasteners after the plow is assembled and installed in the mount according to the plow assembly instructions.

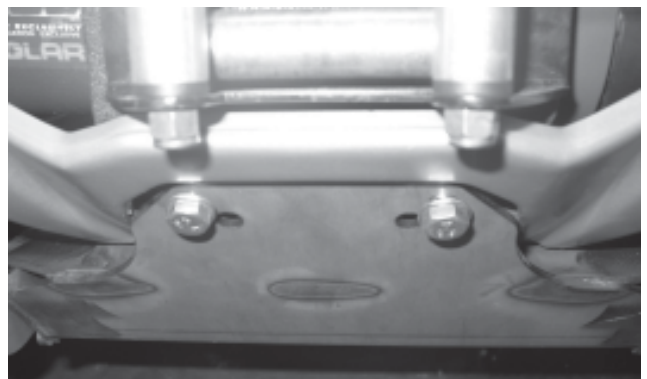


Figure 4

IV. INSTALLATION (WARN Winch Mount)

1. Remove the front skid plate (Figure 5). Use a 13mm socket to remove the four bolts securing the front skid pan to the front bumper.
2. Remove the WARN winch mount. Use a 13mm socket and a 13 mm wrench to loosen the four bolts/nuts that secure the WARN winch mount to the frame (Figure 6).

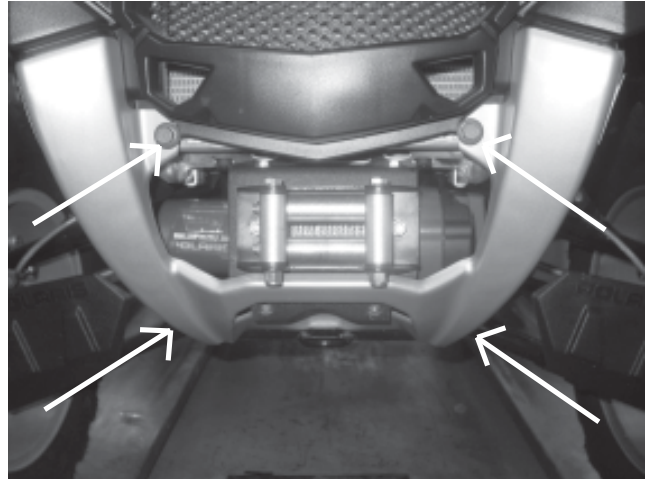


Figure 5

⚠ CAUTION

Once the winch mount is freed from the mount it can fall from the vehicle. To prevent personal injury and damage to the winch and its mount, remove the top two bolts/nuts but only remove the nuts on the bottom, leave the two bolts in the mounting holes. Hold the winch mount with one hand, then remove the last two bolts.

3. Remove the hook by pulling the cotter pin from the clevis pin. Remove the fairlead from the WARN winch mount. Use a 16mm socket with a 17mm wrench to loosen the two M10x1.5x20mm bolts that secure the fairlead to the winch mount. These bolts will be replaced by longer fasteners provided in this kit.
4. Place two M10x1.5x25mm bolts through the back of the face of the WARN winch mount (Figure 7). Then place the WARN winch mount adapter bracket on the face of the winch mount feeding the bolts through the mounting holes on the bracket. (Figure 8)

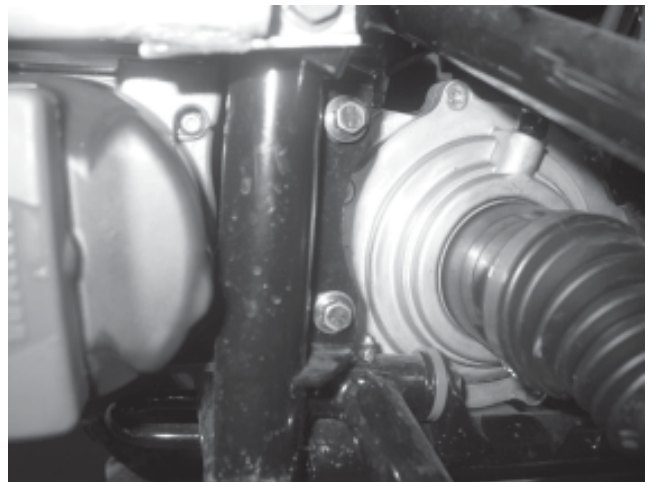


Figure 6

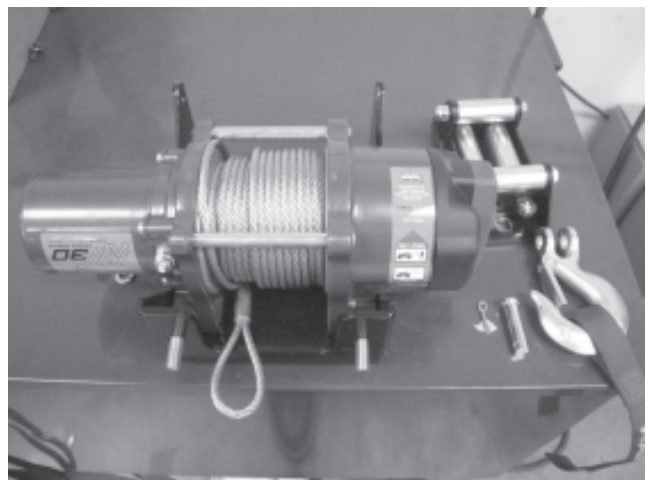


Figure 7

INSTALLATION CONT.

5. Place the fairlead over the adapter bracket, feeding the bolts through the mounting holes on the fairlead. Tighten two lock washers with two M10 nuts using a 16mm socket and 17mm wrench. Install the hook by placing the clevis pin through the hook and securing with cotter pin. (Figure 9)

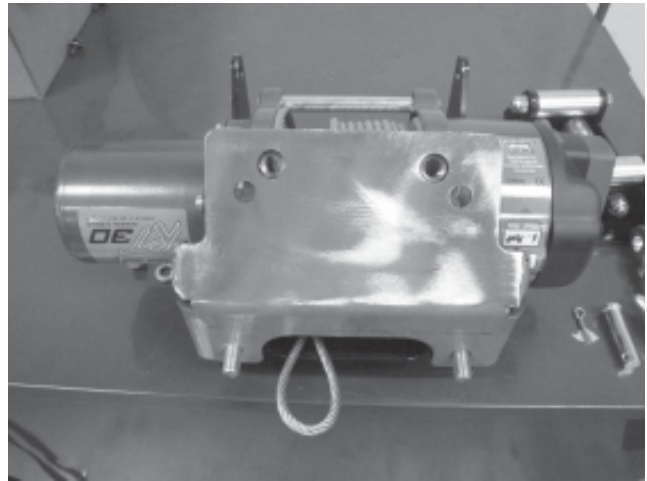


Figure 8

6. Place the WARN winch mount back on the vehicle mounting tabs and secure with bolts taken off in step 2. Do not tighten bolts all the way. The winch mount needs to move slightly to install the plow mount. (Figure 10)

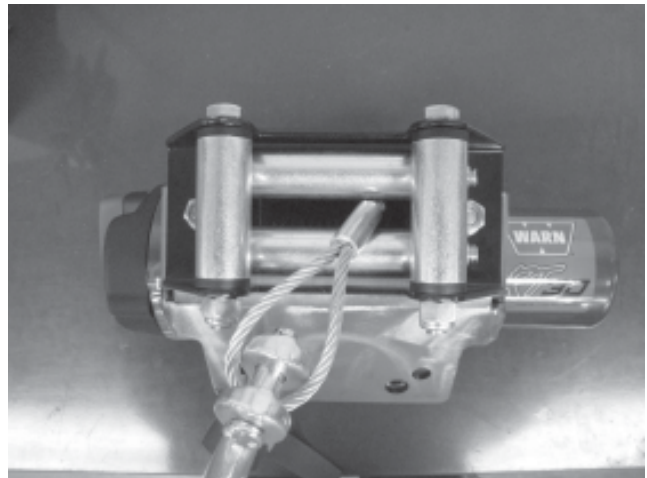


Figure 9

7. Secure the front skid plate to the frame using only the upper bolts, the lower bolts will not be used in this kit. The front of the winch mount may have to be rotated upward to get the skid plate holes to line up with the frame.

8. Loosen the bolts securing the mount to the vehicle (Figure 10) so the winch mount is loosely attached. Remove the lower skid pan bolts. These will not be used in this kit.

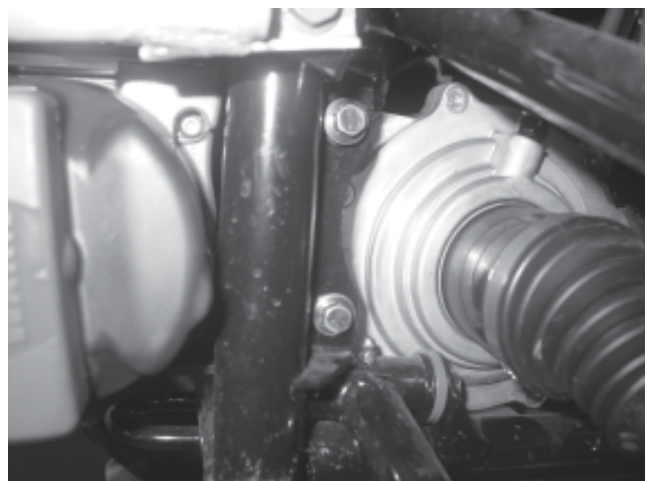


Figure 10

INSTALLATION CONT.

- Place the plow mount under the vehicle such that the tabs fit around the frame cross bar that the lower skid pan bolts thread into. Secure with two M8x20mm capscrews supplied and a 13mm socket (Figure 11). Do not tighten these.

Note: It may be necessary to line one side up first, applying inward pressure on the skid plate mounting tabs to fit in between the plow mount tabs and around the cross tubing.

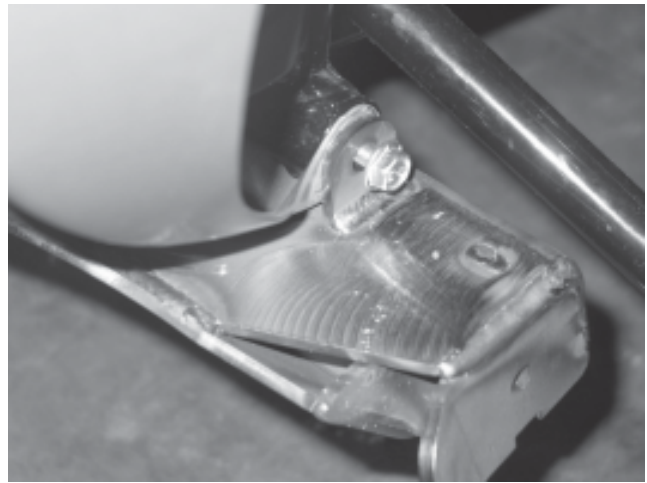


Figure 11

- Secure the plow mount to the winch mount. Use a 16mm socket with two M10x25mm bolts with 3/16" flat washers (Figure 12). Do not tighten all the way.

Note: It may be necessary to rotate the winch mount upward for the mounting holes to line up with the plow mount holes. Make sure the lower M8x20mm bolts are not tight, as it will make this step difficult.

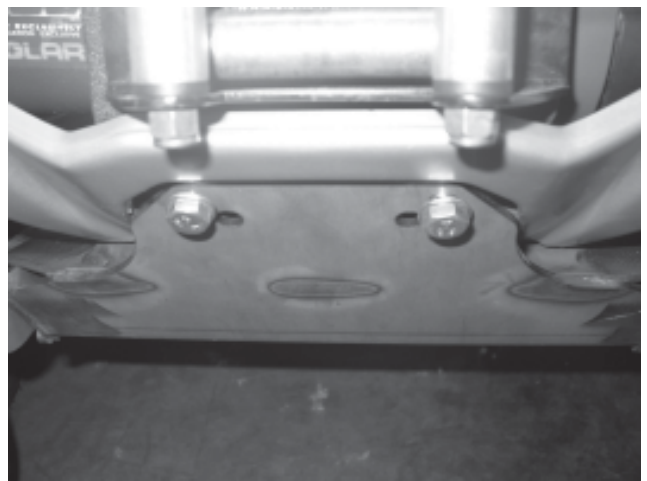


Figure 12

- Tighten the two lower M8x20mm bolts to 20 N-m (15 ft-lbs). Tighten the two plow mount to winch mount M10x25mm bolts to 25 N-m (18.5 ft-lbs). Tighten the four winch mount to frame bolts to 20 N-m (15 ft-lbs).

- Finally install the plow mounting tab to your Plow Tube Assembly, see Figure 13. Install these loosely on the plow with the fasteners provided with the plow. Tighten the fasteners after the plow is assembled and installed in the mount according to the plow assembly instructions.

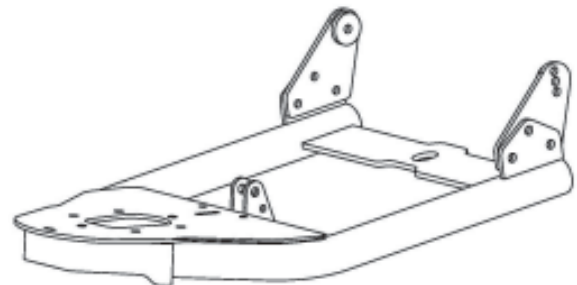


Figure 13

V. 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.