



INSTALLATION INSTRUCTIONS

POWER PIVOT UTV/ATV

Part Number: 103840 & 103810

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.

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Clackamas, OR USA 97015-8903, 1-503-722-1200, FAX: 1-503-722-3000
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⚠ 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.
- **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.
- **Never** overtighten u-bolt nuts. Overtightening may cause damage to vehicle frame.

Read installation and operating instructions thoroughly.

NOTES

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TOOLS REQUIRED

- Metric wrenches and sockets

TORQUE SPECIFICATIONS

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

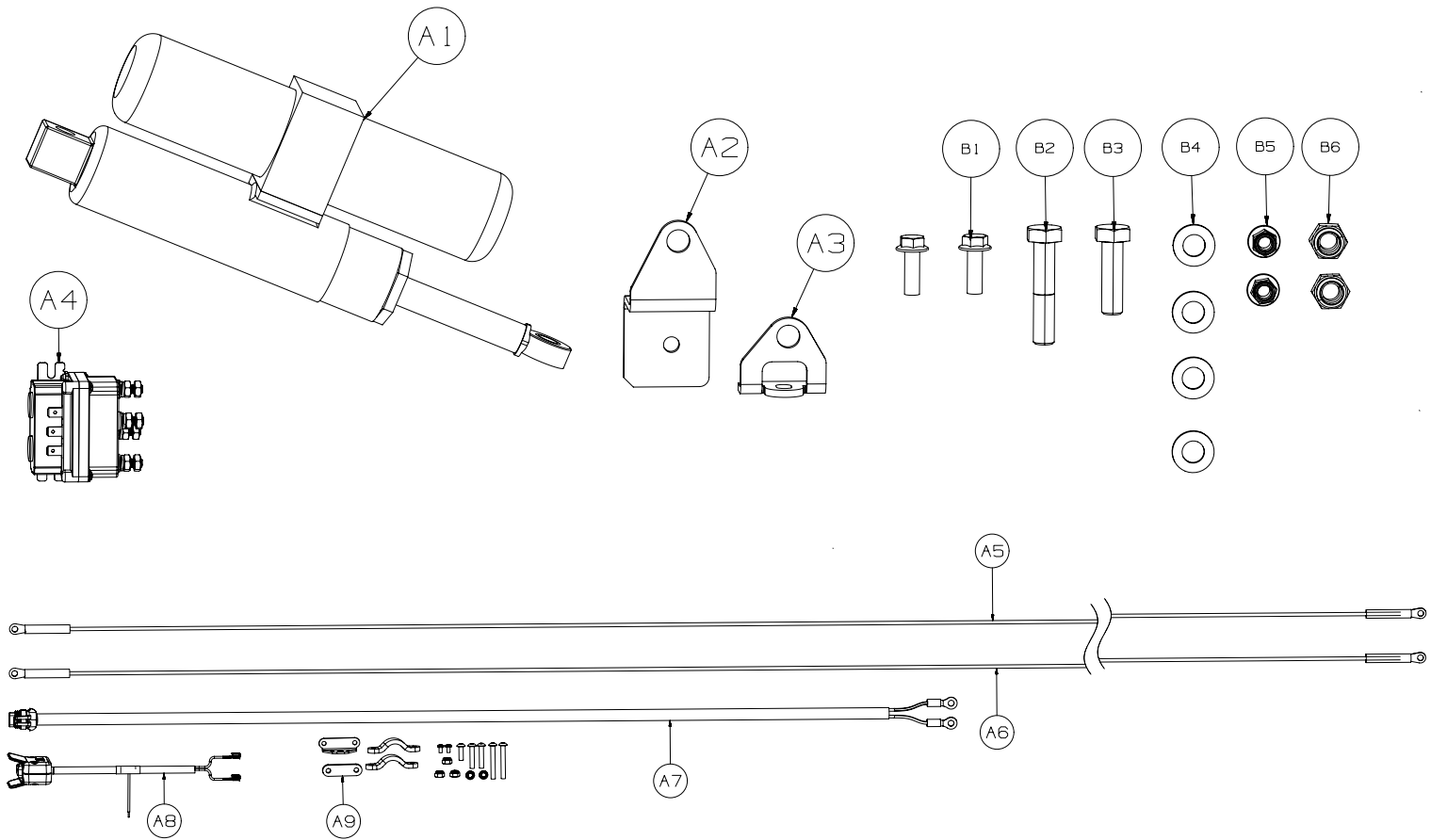
NOTICE: *Torque does not apply to u-bolts.*

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

PARTS LIST

ATV PARTS LIST

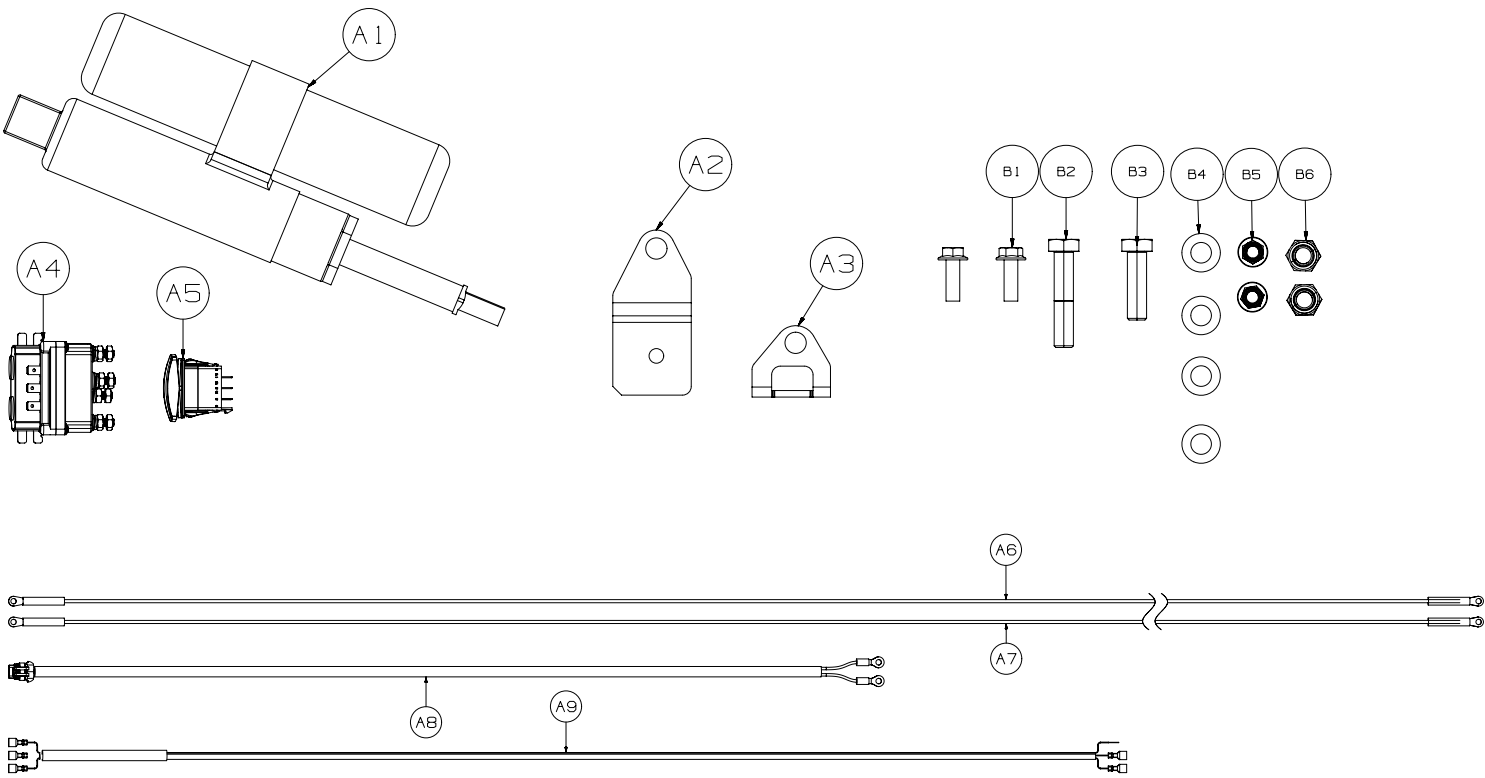
A1	103811	POWER PIVOT ACTUATOR	B1	79583	BOLT FLANGE HD M10 X 1.5 X 30MM
A2	103806	TOP BRACKET PLOW PIVOT	B2	109127	BOLT M14-2.0 X 70MM
A3	103807	LOWER BRACKET POWER PIVOT	B3	109129	BOLT M14-2.0 X 50MM
A4	96870	CONTACTOR KIT	B4	109131	FLAT WASHER M14
A5	109298	CABLE ASSY RED 96IN	B5	87166	NUT FLANGE M10 X 1.5
A6	109297	CABLE ASSY BLACK 96IN	B6	109130	HEX NUT LOCKING M14-2.0
A7	103834	WIRE HARNESS POWER PIVOT			
A8	109296	POWER PIVOT ROCKER SWITCH			
A9	107571	SWITCH MOUNTING KIT			



PARTS LIST

UTV PARTS LIST

A1	103811	POWER PIVOT ACTUATOR	B1	79583	BOLT FLANGE HD M10 X 1.5 X 30MM
A2	103806	TOP BRACKET PLOW PIVOT	B2	109127	BOLT M14-2.0 X 70MM
A3	103807	LOWER BRACKET POWER PIVOT	B3	109129	BOLT M14-2.0 X 50MM
A4	96870	CONTACTOR KIT	B4	109131	FLAT WASHER M14
A5	109299	POWER PIVOT DASH SWITCH	B5	87166	NUT FLANGE M10 X 1.5
A6	109298	CABLE ASSY RED 96IN	B6	109130	HEX NUT LOCKING M14-2.0
A7	109297	CABLE ASSY BLACK 96IN			
A8	103834	WIRE HARNESS POWER PIVOT			
A9	103837	WIRE HARNESS 3 PIN POWER PIVOT			



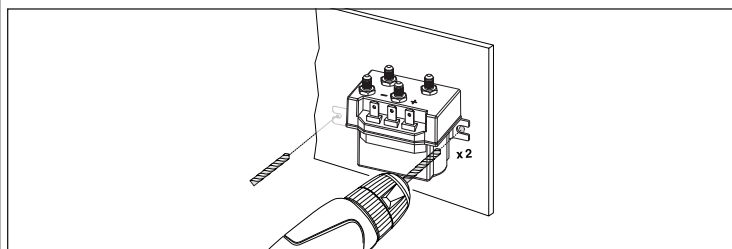
INSTALLATION INSTRUCTIONS

PREPARATION:

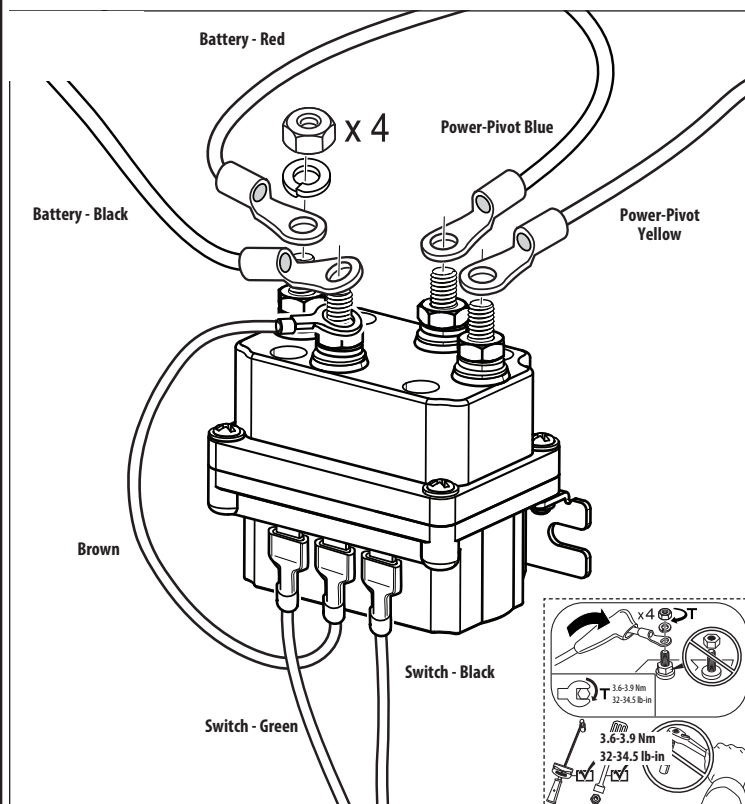
- Place the vehicle on a secure and level surface.
- Set the parking brake.
- Clean mount surfaces before installation.
- Remove hood panels.
- **DISCONNECT BATTERY.**

Contactor mounting and pre-wiring

1. Verify battery connections are disconnected.
2. From under hood, locate a suitable contactor mounting location. Ensure the selected location will not collect or retain water and the mounting of the contactor will not block drain holes. The exact location will vary depending on the ATV/UTV. **NOTE: Be sure the contactor mounting location can be reached easily by the switch and power-pivot wiring.**
3. Position the contactor in the desired location, mark the locations of the mount holes. Using a drill bit slightly smaller than the diameter of the mounting bolts, drill out the holes.



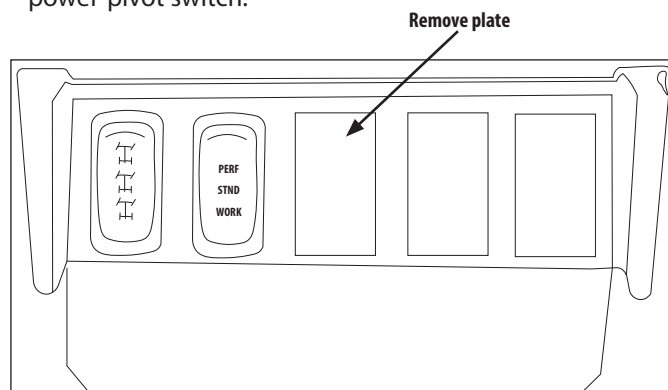
4. Pre-wire the power-pivot wire harness, switch wire harness and battery wiring to the contactor, for easier accessibility.



5. Mount contactor in location where you previously drilled holes using hardware included with contactor.
6. Route battery cables toward battery, switch harness wiring toward dash or handlebars and power-pivot wiring toward plow, but do not connect at this time.
7. Zip tie wiring along the way to keep wires tidy and out of the way of moving parts and sharp edges. **NOTE: Make sure the rocker switch wiring does not impede the movement of the handle bars.**

UTV Power-Pivot Dash Switch Installation

8. Remove one knock out panel in the dash and install the power-pivot switch.



NOTE: If you do not have an extra knock out panel, find a space in your dash and carefully cut a hole for your switch.

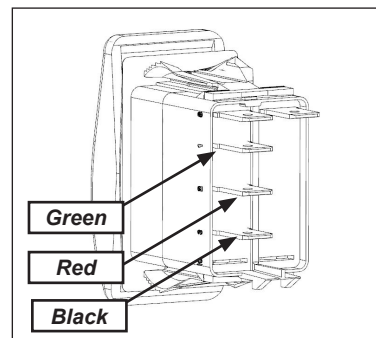
⚠ WARNING Use extreme care when cutting and trimming.

NOTE: Before you cut, verify the switch wire length will reach from the contactor to the power-pivot switch connections easily.

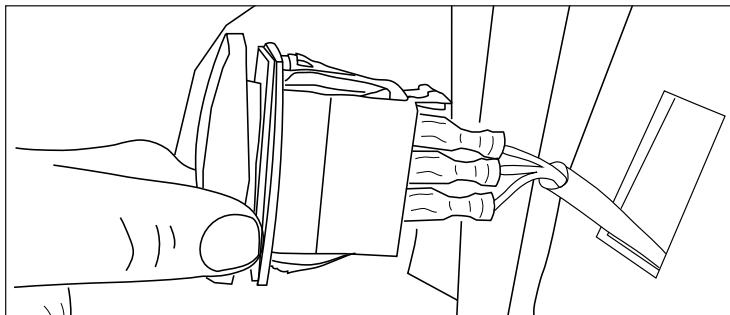
9. Route the switch harness connectors towards power-pivot switch opening in the dashboard.
10. Feed switch connectors through the power-pivot switch opening in the dashboard.

NOTE: Make sure to route wires/cables away from the drive shaft, Away from sharp edges, heat and moving parts.

11. Plug the three (green, red and black) spade terminals, from the switch wire harness, into the power-pivot dash switch plug as shown.



12. Tuck switch wiring back through dash switch hole and snap the power-pivot switch in place.



ATV Power-Pivot Rocker Switch Installation

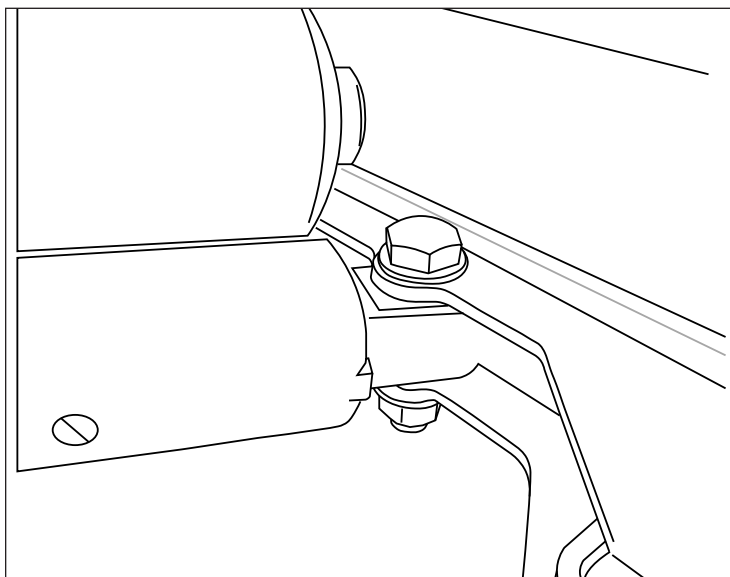
13. Mount the power-pivot rocker switch using switch mounting kit included. *TIP: Suggested location: next to the winch rocker switch, but you may choose any desired location as long as the wiring from the contactor can reach easily.*

NOTE: The arrows on the switch indicate the direction of the plow blade pivot. If your blade pivots the opposite direction of the indicated switch direction, you will need to swap places of the green and black wires on the contactor.

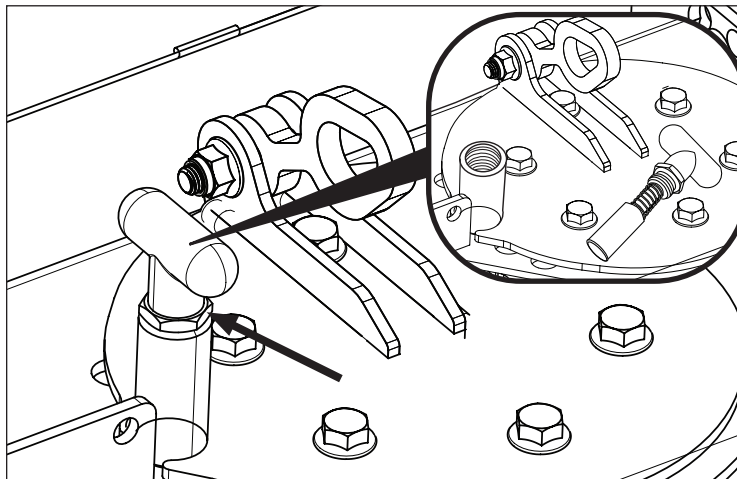


Mount power-pivot

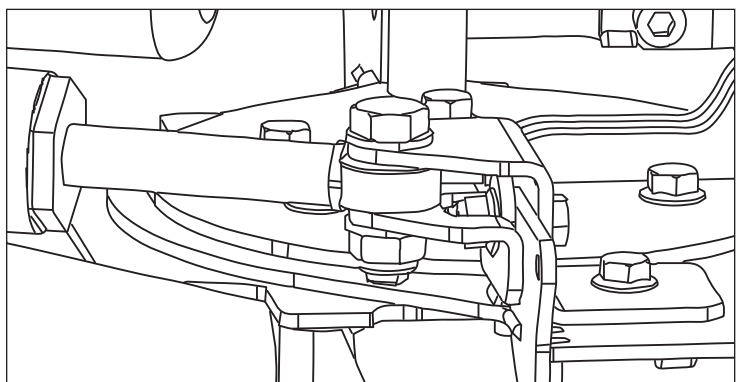
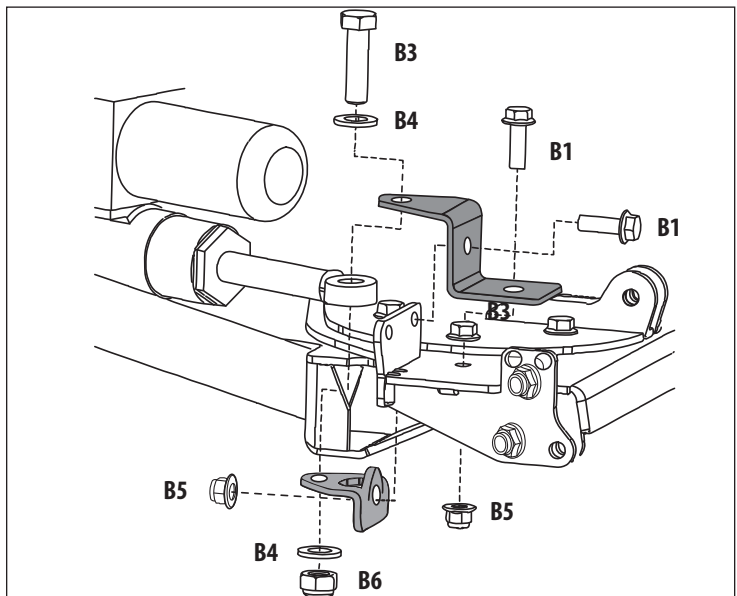
14. Using the M14 bolt (B2), washer (B4) and lock nut (B6), mount your power-pivot actuator to your push tubes, starting with the cylinder end of the actuator.



15. Using a 7/8 wrench, unfasten the t-latch handle nut. Pull straight out to remove the t-latch handle completely from the push tube. **NOTE: Store t-latch handle in case you want to reuse at a later time.**



16. Install the front actuator brackets AND the front of the cylinder to the swivel base as shown.



17. Connect your push tube assembly to the vehicle plow mount (following plow mount instructions).
18. Connect the power-pivot harness to the power-pivot motor pigtail. Use zip ties to manage any excess wire and keep the wire harness/pigtail from getting pinched.



19. Using the winch, move the plow up and down to make sure there are no pinch points.
20. Reinstall battery connections.

⚠ WARNING Always connect red (+) power cable ONLY to the positive (+) terminal of the battery.

⚠ WARNING Always connect black ground (-) power cable ONLY to the negative (-) terminal of the battery.

21. First, attach the winch power (red) cable to the positive (+) battery terminal. Second, attach the winch (black) cable to the negative (-) battery terminal. Tighten securely.

SYSTEM CHECK/VERIFY POWER-PIVOT OPERATION:

1. Check fasteners and make sure they are tight and to proper torque.
2. Verify all electrical wiring to all components are correct and tight.
3. Verify there is no exposed/bare wiring, terminals or cable insulation damage.
4. Test power-pivot control operation.
If power-pivot is operating in the opposite direction as indicated on the switch, revisit wiring section and confirm wiring is correct.

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.

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.

