LIT. NO. 63097 Troubleshooting Guide April 1, 2000

UniMount® OWNER'S MANUAL Troubleshooting Guide Only

WESTERN® Snowplows

CONDITION	POSSIBLE CAUSE	CORRECTION
Motor does not run.	 No power to the motor relay. No ground to the motor relay. Motor relay does not operate. Poor connections on snowplow battery cables. Motor is worn or damaged. Pump is seized. 	 Repair or replace wiring, cab control or harness fuse. Repair wiring or connections. Replace motor relay. Clean and verify cable connections. Repair or replace motor. Replace pump.
Motor will not shut off.	 Motor relay is shorted. Vehicle wiring has a short. Cab control is malfunctioning. Open ground circuit. 	 Replace motor relay. Repair the wiring. Repair or replace cab control. Repair ground.
Motor operates properly, but plow raises slowly, partially, not at all, and/or angles instead.	 There is excess weight on the A-frame and quadrant. Hydraulic fluid level is incorrect. Quill is adjusted in too far. Lift ram packing nut is not adjusted properly. Pump filter is clogged. Pump relief pressure is low. Pump and/or pump O-ring are damaged. Motor rpm is low. Vehicle battery is weak. Cartridge valve coils are not activating properly. Cartridge valves are contaminated or are sticking. Cartridge valves are damaged. 	 Remove built-up snow and ice or after-market accessories (excess weight). Fill with recommended fluid. Turn quill out. Adjust lift ram packing nut. Clean or replace filter and flush and refill the system. Adjust the pump relief screw. Replace pump and/or pump O-ring. Repair motor, electrical connections, or wiring. Replace battery and check charging system. Repair or replace coils, wiring, or cab control. Clean or replace valve. Find the cause of contamination. Flush and refill system. Replace cartridge valves.
Snowplow will not stay in RAISED position or lowers by itself.	 Cartridge valves are contaminated or are sticking. Cartridge valves are damaged. There are shorts or open connections in the wiring. 	 Clean or replace valves. Find the cause of contamination. Flush and refill system. Replace cartridge valves. Repair wiring.
Snowplow will not lower, lowers slowly, or will not float.	 Incorrect hydraulic fluid for the temperature. Quill is adjusted in too far. Lift ram packing nut is not adjusted properly. Cartridge valve coils are not activating properly. Cartridge valves are contaminated and are sticking. Cartridge valves are damaged. 	 Use recommended oil. Turn quill out. Loosen lift ram packing nut. Repair or replace coils, wiring or cab control. Clean or replace valves. Find the cause of contamination. Flush and refill system. Replace cartridge valves.

CONDITION	POSSIBLE CAUSE	CORRECTION
Motor operates properly, but blade will not angle or angles slowly.	 Incorrect hydraulic fluid for the temperature. There is binding between A-frame and quadrant. Angle cylinder packing nut is not adjusted properly. Pump filter is clogged. Pump relief pressure is low. Pump and/or pump O-ring are damaged. Motor rpm is low. Cartridge valve coils are not activating properly. Cartridge valves are contaminated and are sticking. 	 Use recommended oil. Repair or replace damaged parts. Loosen angle cylinder packing nut. Clean or replace filter and flush and refill the system. Adjust the pump relief screw. Replace pump and/or pump O-ring. Repair motor, electrical connections, or wiring. Repair or replace coils, wiring, or cab control. Clean or replace valves. Find the cause of contamination. Flush and refill system.
Motor operates properly, but plow angles wrong way, one way only, or raises instead.	 Angle cylinder hoses are reversed. Cartridge valve coils are not activating properly. Cartridge valves are contaminated and are sticking. 	 Correct hose installation. Repair or replace coils, wiring, or cab control. Clean or replace valves. Find the cause of contamination. Flush and refill system.
Blade will not hold side-to- side position.	 Spool poppet valve is worn, damaged, or contaminated. Cushion valves are contaminated. Cushion valves are damaged, missing parts, or out of adjustment. 	 Clean or replace worn or damaged parts. Find the cause of contamination. Flush and refill system. Clean and adjust cushion valves. Find cause of contamination. Flush and refill system. Replace damaged or missing parts, or adjust cushion valves.
Oil leaks from hydraulic power unit.	 There is external damage to housing. There are loose pipe plugs or fittings. Base lug is loose or the base lug O-ring is damaged. Lift ram packing nut is loose. Lift ram packing is worn or damaged. Motor seal or gasket is damaged. Valve manifold is loose or the manifold O-rings are damaged. 	 Repair or replace housing. Tighten pipe plugs or fittings. Tighten base lug. Replace base lug O-ring. Tighten lift ram packing nut. Replace packing. Replace motor seal or gasket. Tighten valve manifold. Replace manifold O-rings.

CONDITION	POSSIBLE CAUSE	CORRECTION
Oil leaks from angle cylinders.	 Angle ram packing nut is loose. Angle ram packing is worn or damaged. Hydraulic fittings or hoses are loose or damaged. 	 Tighten angle ram packing nut. Replace packing. Repair or replace hydraulic fittings or hoses.
Snowplow wire harness fuse blows.	 Motor relay is shorted. There are shorts in the wiring. 	Replace motor relay. Repair the wiring.
Vehicle fuse blows.	 Circuit is overloaded. There are shorts in the wiring. 	Refer to vehicle's owner's manual for recommended after-market electrical application. Repair the wiring.
There is excessive load on vehicle electrical system while using snowplow.	 Lift or angle cylinder packing nuts are not adjusted properly. Quill is adjusted in too far. Motor is worn or damaged. Pump is binding or damaged. Vehicle battery is weak. Battery charging system is inefficient. 	 Tighten lift or angle cylinder packing nuts. Adjust quill out. Repair or replace motor. Replace pump. Install recommended battery. Repair vehicle charging system.
Vehicle battery loses charge when snowplow is not being used.	 Battery is weak or worn out. Electrical wiring installation is incorrect. Wires are shorted or grounded. 	 Install recommended battery. Review and correct wiring installation. Check and repair the wiring.
Snowplow headlamps operate irregularly or not at all.	 Bulbs are burned out or corroded. Wiring is incorrect and electrical connections are corroded. Light relay(s) do not operate. There are shorts or open wiring. 	 Replace bulbs. Clean the contacts. Check and repair wiring. If electrical connections are corroded, clean connections. Replace relay(s). Check and repair wiring.
Vehicle headlights operate irregularly or not at all.	 Wiring is incorrect and electrical connections are corroded. Light relay(s) do not operate. There are shorts or open wiring. DRL's Only: Parking brake is on. DRL's Only: Power is interrupted. 	 Check and repair wiring. If electrical connections are corroded, clean connections. Replace relay(s). Check and repair wiring. Release parking brake. Turn light and/or ignition switch on and off to cycle the circuitry.