

SERIAL #: _____
ENGINE #: _____

M72

Mitsubishi

OWNERS

MANUAL

WARNING

- If operated improperly, this machine may cause serious injury or death.
- Do not wear loose clothing when operating this machine, as it may become entangled in the equipment.
- Stay clear of all moving parts when the machine is running.
- ALWAYS confirm the machine is OFF and properly secured before servicing.
- ALWAYS wear safety glasses, sound protection (ear plugs), hand protection (gloves), and steel-toed boots when operating this machine.
- NEVER stand in water while operating this machine (ELECTRIC MODEL).
- ALWAYS use properly grounded power cords (ELECTRIC MODEL).
- Power cords should ALWAYS be the proper wire gauge for each particular application (ELECTRIC MODEL).
- ALL extension cords should be plugged into a “ground fault interrupter” (ELECTRIC MODEL).
- NEVER use extension cords that are in any way damaged, frayed or cut (ELECTRIC MODEL).
- ALWAYS use the proper cutting RPM as specified by your blade manufacturer.
- ALWAYS shut off the machine before changing the blade (UNPLUG ELECTRIC MODEL before changing the blade).
- Ensure proper position and security of ALL safety guards before operating this machine.
- ALWAYS inspect the machine before use for safe operation.
- FIRE HAZARD! Inspect for any leaking fluids (gas, oil and etc.) prior to operation of this machine.

WARNING Continued

- DO NOT attempt to off-load any piece of equipment on uneven ground of any degree of slope. DO NOT leave equipment unattended on uneven ground. Injury or death may occur.

**THIS EQUIPMENT SHOULD NOT BE OPERATED BY ANYONE UNDER
THE AGE OF 18.**

LIMITED WARRANTY

WARRANTY:

Morley Equipment Company warrants that at the time of shipment, the product manufactured by Morley Equipment Company and sold hereunder shall be free from defects in material and workmanship.

WARRANTY ADJUSTMENTS:

Morley Equipment Company agrees to repair or furnish any faulty component within 30-days from date of purchase, provided the machine is operated and maintained in accordance with Morley Equipment Company owner's and engine manuals and operating instructions.

One (1) year warranty on major components (such as engine, drive motors, hydraulic pump, hydraulic motor and etc.) with an authorized service facility. If examinations by Morley Equipment Company prove a defect within warranty, receipt verifying purchase date and serial numbers are required to obtain adjustment.

No product will be accepted for return or replacement without prior authorization by Morley Equipment Company. Products returned are addressed to:

Morley Equipment Company
41161 Sandalwood Circle, Murrieta, CA 92562
(951) 894-5558

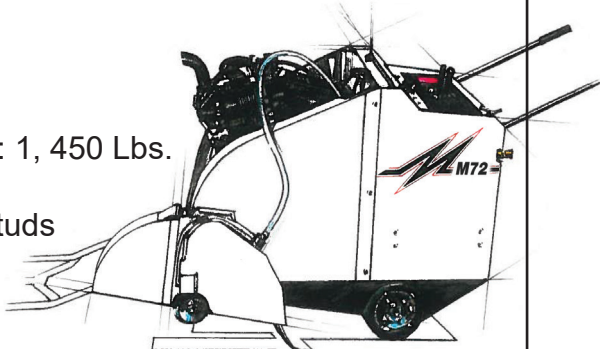
EXCLUSIONS FROM WARRANTY:

This warranty does not extend to any product supplied by Morley Equipment Company which has been subjected to misuse, neglect, accident, improper installation or used in violation of instructions provided by Morley Equipment Company.

M72 SAW INFORMATION

- This manual provides the basic instructions for the operation and maintenance of the M72 concrete saw. All saw manuals are also available for download on our website at www.morleysaws.com. An Engine Manual is also provide with each saw.

ENGINE:	Mitsubishi 2.4 Ltr., Gas
Drive Unit:	Hydrostatic Transmission
Water Pump:	Self-priming Electric (Optional)
Spindle:	Single Speed: 1-7/16", 3 speed: 1-1/2"
Arbor Size:	1" with 5/16" Keys
Blade Capacity:	14" to 48" Diameter
Depth Control:	Hydraulic Raise/Lower, Depth Gauge and Locking Stop
Fuel Capacity:	7-Gallons
Weight:	Single Speed: 1310 Lbs., 3 Speed: 1, 450 Lbs.
Length:	53"
Width:	35-inch w/Quick Detach Spindle Studs
Height:	46"



OPTIONAL EQUIPMENT

- 3-Speed Gearbox
- Night Light
- Bladeguards – Comes with 20" standard. 16", 26", 30", 36", 42", 48" optional.
- Electric Water Pump

- The new machine was test-run before leaving Morley Equipment Company, however, check all fluid levels before operation.

3. **LUBRICATION/SERVICE CHART**

ITEM	CHECK	LUBRICANT
Hydrostatic Drive (F/R)	Monthly	20W-50 Motor Oil
Air Filter	Weekly	Service as required
Hydraulic Pump (R/L)	Monthly	ATF
Spindle Bearings	Daily	Grease
Pivot Axle	Weekly	Grease
Front Wheels	Weekly	Grease
Radiator	Daily	Check coolant levels
Gear Box	Monthly	85W 140 gear oil

4. To adjust belts:
Loosen two locking nuts on turnbuckle. Rotate the turnbuckle to tension belts. Do not over tighten. Re-tighten locking nuts.

CONTROL OPERATING INSTRUCTIONS

1. **WATER SUPPLY:** Connect the water supply to the inlet fitting, and open the water valve to control the flow.
2. **RAISE/LOWER:** By pulling back the Raise/Lower lever, a handle activates a hydraulic pump to raise the saw. Push the lever forward to lower the saw. You can control the lowering speed by opening the valve gradually. For adjusting the handle assembly, see Raise/Lower Valve Adjustment page.
3. **SPEED CONTROL:** The Forward/Reverse lever determines forward and reverse speeds, with a “neutral” position in between. By pushing the speed control lever forward, the saw will move forward at variable speeds. Pulling the lever back does the same in reverse.
4. **BLADE FITTING:** Remove spindle nut with provided blade wrench. On the right hand side of the machine is the reverse thread. Install blade and tighten nut with wrench and hammer provided. Ensure blade guard is secure before starting.
5. **STARTING THE ENGINE:** See Engine Manual.
6. **POSITIONING THE SAW:** This is a rear-pivot saw. It's designed to be maneuvered on the rear wheels. Position the handlebars to suit the operator. Pushing down on the handlebars will lift the front wheels off the ground, allowing you to maneuver the saw left or right.
7. **CUTTING:** Lay out the cuts using a chalk line or string and paint. Align your pointer guide with the blade, pointer guides do not come aligned from the factory. When aligned and positioned, turn on the water and lower the saw to desired cut depth, then drive the saw forward to a comfortable cutting speed. It is recommended to step-cut - i.e. take several passes to reach desired depth. If step-cutting, return the saw to the original insertion point and lower the blade to the secondary depth and repeat the cut.

- 8. CLEANING:** The entire saw should be thoroughly washed weekly or as required. Use caution when cleaning near the electrical components. Be sure to clear any debris -dust, slurry, etc. - out of the radiator's cooling fins as required.
- 9. STORAGE:** Always lubricate the saw after cleaning. A fine coat of WD40 will help remove future slurry.
- 10. CALIBRATION:** Always check alignment. The spindleshaft and rear axles must be aligned to insure the saw travels straight and the blade moves parallel to the rear wheels.
- 11. REPLACEMENT PARTS:** All replacement parts must be ordered from Morley Equipment Company or an authorized distributor to effect Warranty. Please supply saw Model and Serial Number if possible when ordering parts.
- 12. QUESTIONS AND CONCERNS:** Should you have any questions relative to the operation or servicing of your equipment, do not hesitate to contact **Morley Equipment (951) 894-5558**, or Email us at **morleyequipco@gmail.com**. A parts list for the saw is also available on-line at **www.morleysaws.com**

M72 PARTS LIST

PARTS#	REQUIRED	DESCRIPTION
--------	----------	-------------

SPINDLESHAFT ASSEMBLY

5108-72	1	Spindleshaft
1101-72	2	Pillow-block Bearing
1113-72	2	5" Inner Collar
1114-72	2	5" Outer Collar
1104-72	1	Left-hand Nut
1105-72	1	Right-hand Nut
1108-72	1	Sheave 9-Groove
1107C-72	1	Bushing - 2012/ 1 & 1/2"
1120-72	1	Key - 3/8"
1121-72	2	Key - 5/16"
4120-72	9	3VX 500 Belt
1118-72	1	Left-hand Spindle Stud
1119-72	1	Right-hand Spindle Stud

FRONT AXLE ASSEMBLY

5100-72	1	Weldment
2101-72	2	Axle - 1"
3004-72	2	Front Wheel - 8 x 2.5"
2103-72	2	Collar - 1"
20002-72	2	Pillow Block Bearing - 1 & 1/4"
2105-72	2	Pin - 5/8 x 4"
2106-72	1	Depth Gauge, Cable, and Spring

HYDRAULIC RAISE/LOWER ASSEMBLY

3100-72	1	Pump Motor
3101-72	1	Flow Control Valve
3102-72	1	Hydraulic Cylinder
3103-72	1	Raise/Lower Assembly
3106-1	1	Solenoid

PART#	REQUIRED	DESCRIPTION
--------------	-----------------	--------------------

HYDROSTATIC DRIVE ASSEMBLY

4100-72	1	Pump
4101-72	2	Wheel Motor
4102-72	1	Positraction Manifold
4001-72	2	Wheel Hub - 1 & 1/4"
3001-72	2	Rear Wheel - 10" x 3"
4105-72	1	Filter Assembly
4106-72	1	Hydrostatic Oil Filter
4107-72	1	Reservoir - Plastic
4201-72	1	Forward/Reverse Lever Assembly
4114-72	1	42" Drive Cable
41010-72	2	Cable End - Ball Joint
4121-72	1	3VX375 Belt
4112-72	1	Wheel Motor Bracket
4002-72	1	Hydrostatic Drive Pump Bracket

POINTER ASSEMBLY

5101-72	1	3" Pointer Wheel
5102-72	2	Delrin Bushing
5103-72	2	Pointer Cable
5104-72	1	Lift Cable
5113-72	1	Pointer Weldment
5112-72	2	Pointer Adjuster

FRAME CONSOLE

6100-72	1	Mainframe
6101-72	1	Console
6102-72	1	Belt Guard - Left Side
6103-72	1	Belt Guard - Right Side
6105-72	1	Back Cover
6106-72	1	Fan Guard - Right Side
3022-72	2	Handle Bar
3026-72	2	Locking T-Handle
6122-72	1	Fuel Tank – 7-Gallon
6119-72	1	Fuel Tank Cap
2118-72	1	Upper Depth Stop Rod
2111-72	1	Lower Depth Stop Rod

FRAME CONSOLE Continued:

PART#	REQUIRED	DESCRIPTION
--------------	-----------------	--------------------

6124-72	2	Fuel Tank Hold-down Strap
---------	---	---------------------------

ENGINE

7112-72	1	Mitsubishi 2.4 Ltr., Gas
7129-72	1	Bellhousing - Outer
7131-72	1	Output Shaft/Drive Assembly
20001-72	2	Bearing - 6210
7102-72	1	Shaft
7724-72	1	BoWex Male Coupler
7102E-72	1	BoWex Female Coupler
7103-72	1	Air Filter
7104-72	2	Air Filter Element
4183-72	2	2" 90° Air Filter Hose
7154-72	1	Air Filter Bracket

COOLING SYSTEM

7776-72	1	Radiator
7702-72	1	Fan Blade
1111-72	1	Fan Belt — 3VX 425
7713-72	1	Idle Pulley Spring
7710-72	1	Idler Pulley

BLADEGUARD ASSEMBLY

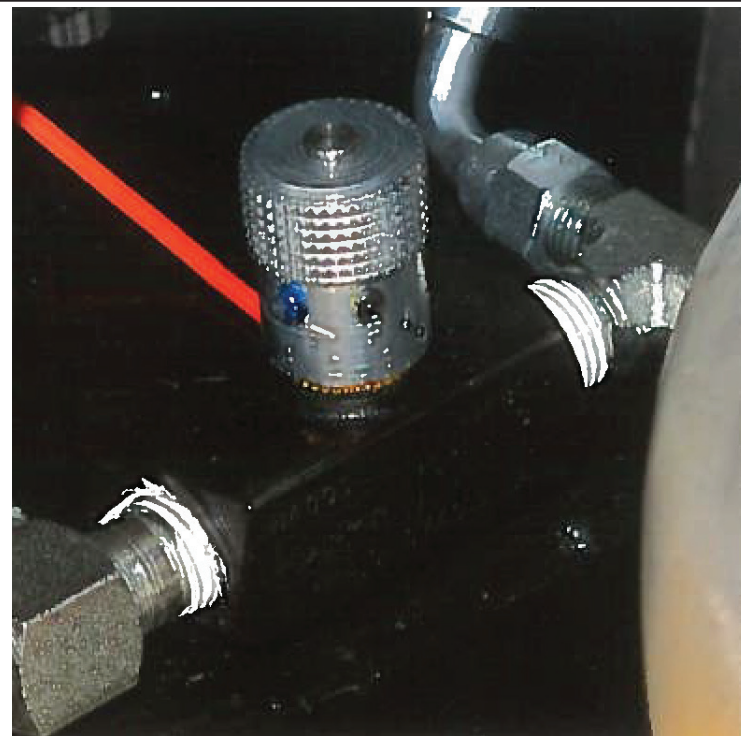
8100-72	1	Water Distribution Block w/Hose Fittings
8181-72	2	Outlet Water Hose - 1/4"
8102-72	1	Inlet Water Hose - 1/2"
9110-72	1	Water Valve
8104-72	1	Mud Flap

BLADEGUARD ASSEMBLY Continued:

PART#	REQUIRED	DESCRIPTION
8105-72	1	20" Bladeguard
8106-72	1	26" Bladeguard
8107-72	1	30" Bladeguard
8108-72	1	36" Bladeguard
7002-72	1	42" Bladeguard
7004-72	1	48" Bladeguard

CONSOLE

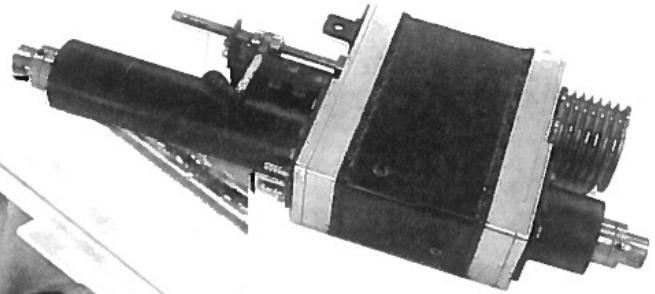
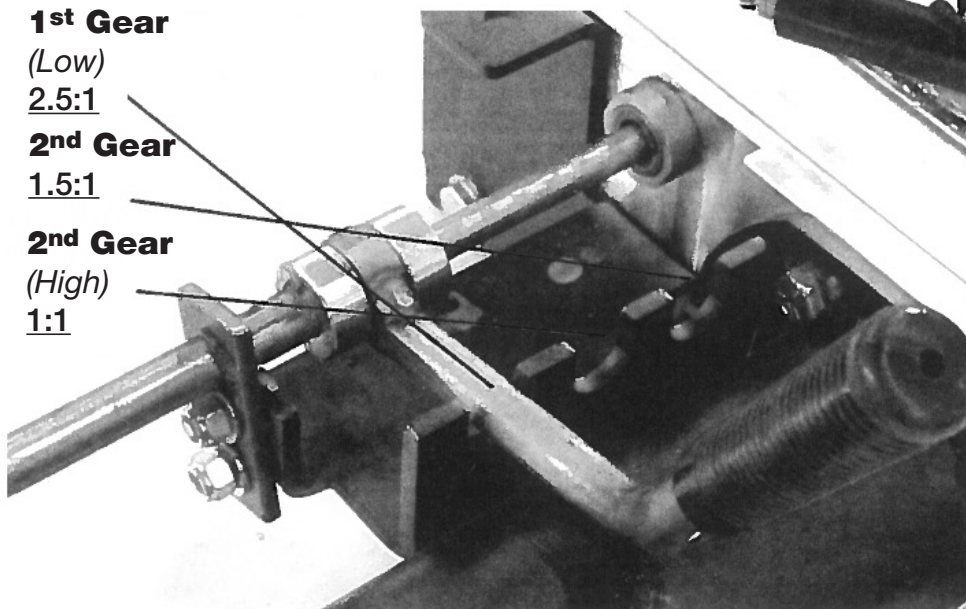
9124-72	1	Tachometer
9101-72	1	Emergency Shutoff Switch
9106-72	1	Ignition Switch
9117-72	1	Throttle Switch
9104-72	1	Engine Service Indicator Light
9113-72	1	Upper Console Sticker
9113-72	1	Lower Console Sticker



RAISE FLOW CONTROL VALVE

Inside the rear access panel on the lower left is a needle valve (left photo) that allows you to adjust the raising speed imparted by the Raise/Lower Lever. Your saw comes with the raise speed pre-set at the factory. This valve allows you to reset the speed to suit your needs.

M72 3-SPEED GEARBOX OPERATION



SPINDLESHAFT SPEED W/3 SPEED GEARBOX

M72 MITSUBISHI

ENGINE RPM	2600	2700	2800 Optimum	2900	3000
SPINDLESHAFT SPEED – rpm*					
1 st GEAR (Low Gear)	1155	1200	1244	1289	1333
2 nd GEAR	1733	1800	1867	1933	2000
3 rd GEAR (High Gear)	2600	2700	2800	2900	3000

GEAR SELECTION

To change gears, move the gear selector lever while slightly rotating the spindleshaft. This allows the gears to mesh properly. Never change gears with the engine running. The Chart to the left, lists the spindleshaft speeds in each of the three gears – 1st Gear, Lower Gear – 2.25:1; 2nd Gear–1.5:1; and 3rd Gear, High Gear – 1:1.

LUBRICATION:

85W-140 Multi-Purpose Gear Oil or the equivalent.

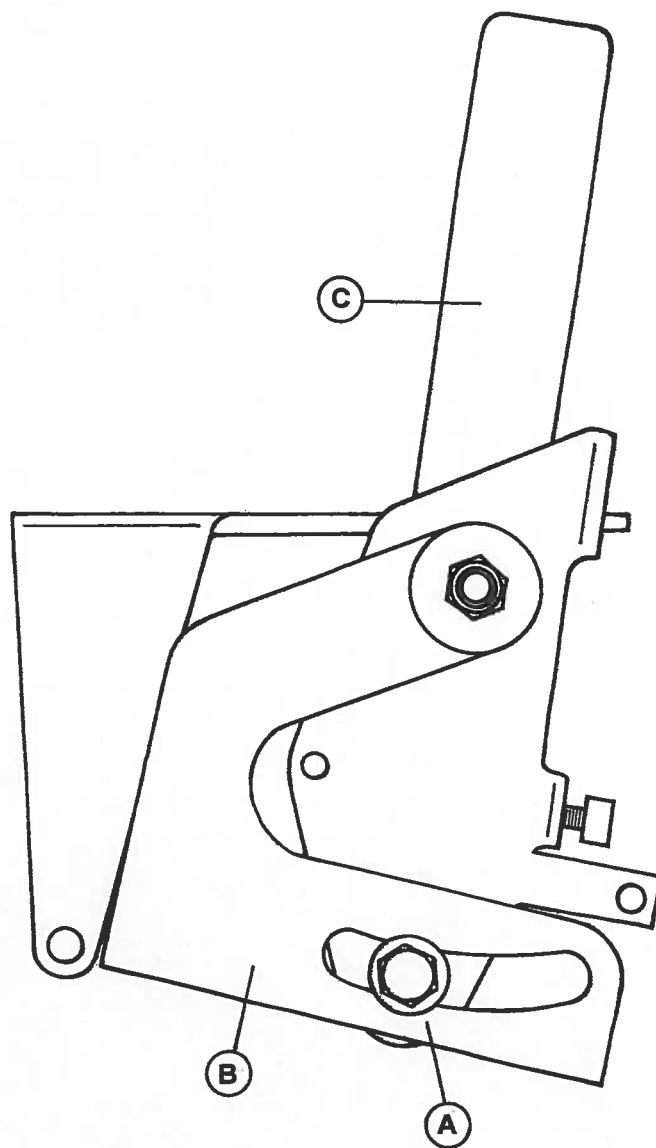
*Always defer to the blade manufacturer's suggested rpm for safety and best blade performance.

M72 MITSUBISHI BELT GUIDE

	DRIVE BELTS	FAN BELT	PUMP BELT
3-SPEED	3VX500 (9)	3VX425	3VX375

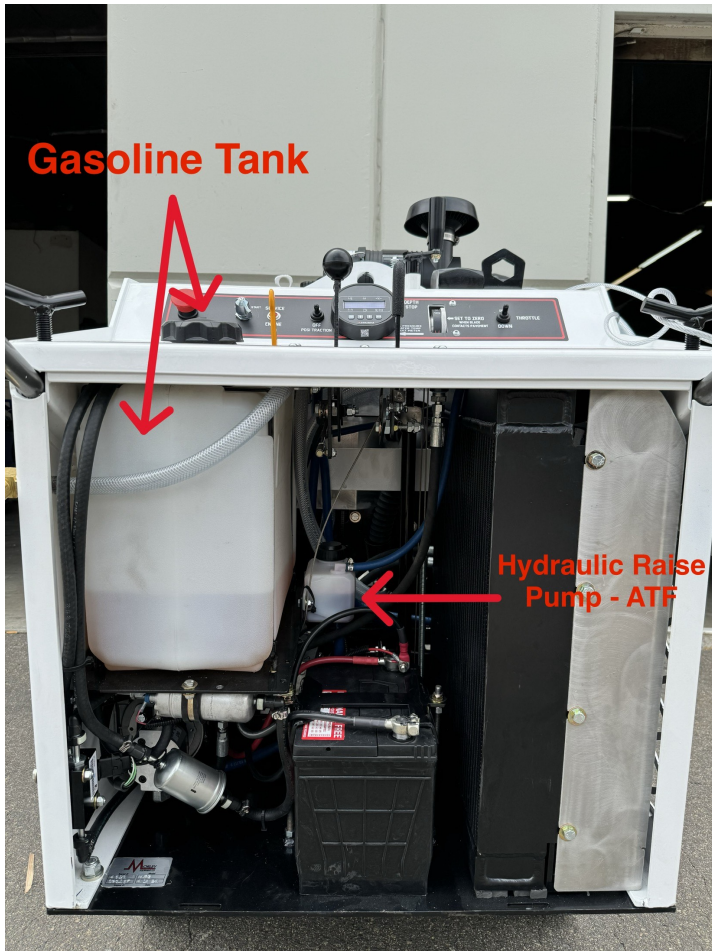
RAISE/LOWER VALVE ADJUSTMENT

From time to time your Raise/Lower Assembly may need some minor adjustments. If your saw creeps down when the R/L Lever is returned to it's "neutral" position after being raised, the needle valve is not closing completely.



Needle valves wear over time. To adjust the valve to keep it from dropping, loosen the 5/16" bolt and nut (A) with two half inch wrenches. Rotate the arm (B) forward slightly, and re-tighten (A).

M-72 Tank Information



Gasoline Tank

Located top left when standing at the operating controls.

Use unleaded gasoline.

Hydraulic Raise Pump Fluid Tank

Located to the right of the gasoline tank, above the battery.

Use standard automatic transmission fluid.

Coolant Overflow Tank

Located at the top far-left side of the machine, behind the operating controls.

DO NOT FILL THIS TANK.

Coolant Inline Filler Cap

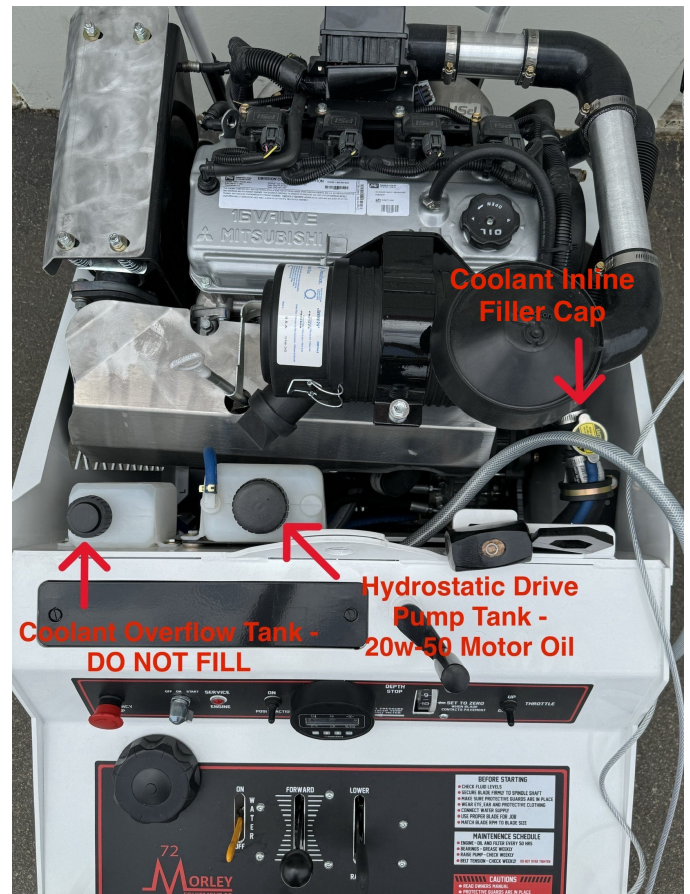
Located on the right side of the machine, behind the operating controls.

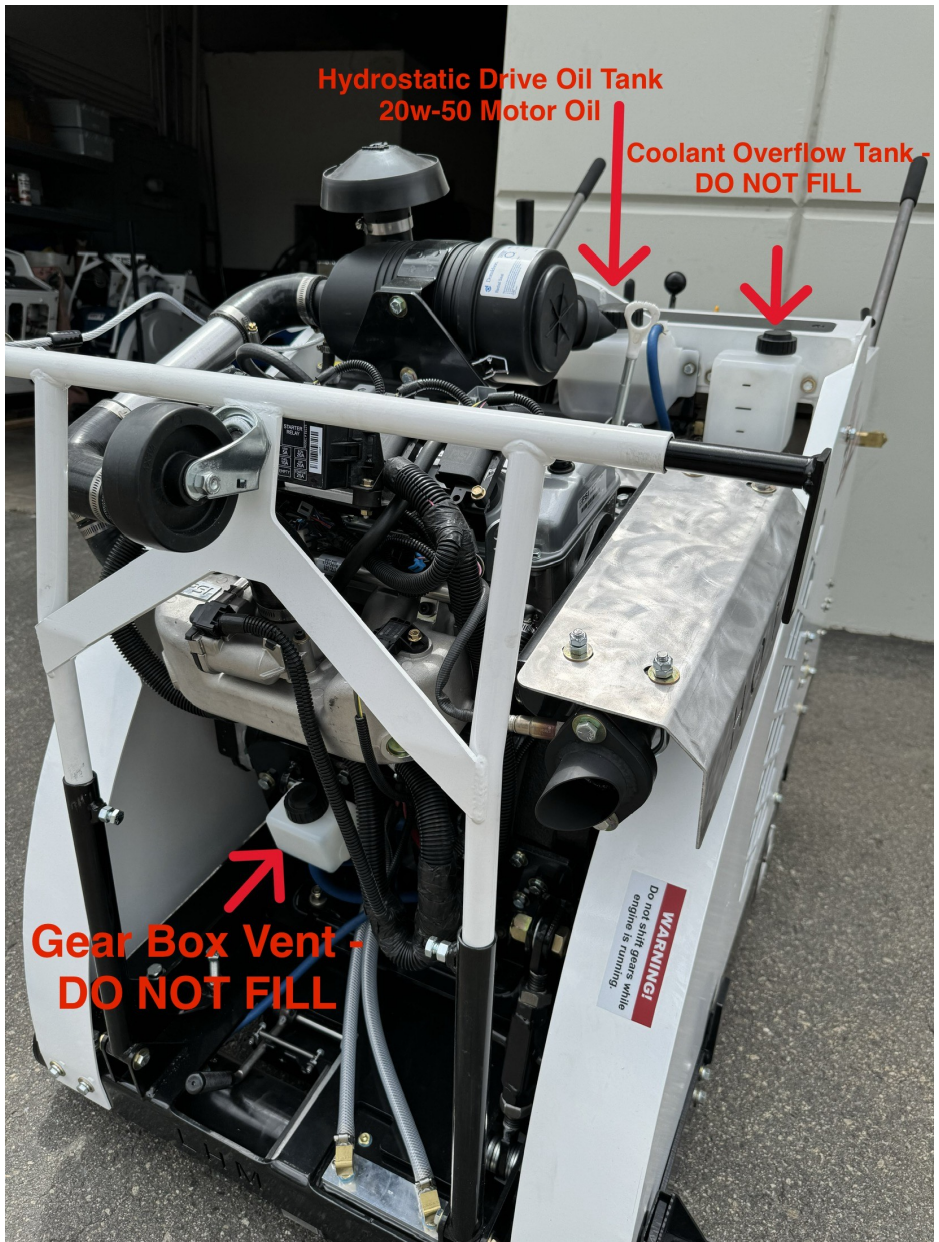
Use conventional coolant.

Hydrostatic Drive Oil Pump Tank

Located slightly left of center behind the operating controls.

Use 20w-50 motor oil.





Hydrostatic Drive Oil Tank
20w-50 Motor Oil

Coolant Overflow Tank -
DO NOT FILL

Gear Box Vent -
DO NOT FILL

Alternate view of Hydrostatic Drive Oil Pump and Coolant Overflow Tanks.

Gear Box Venting Tank

Located at the front of the machine above the gear box. This tank is for catching excess gear oil from the gear box.

DO NOT FILL THIS TANK.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
2022 MODEL YEAR
CERTIFICATE OF CONFORMITY
WITH THE CLEAN AIR ACT

**OFFICE OF TRANSPORTATION
AND AIR QUALITY
ANN ARBOR, MICHIGAN 48105**

Certificate Issued To: Power Solutions International, Inc.
(U.S. Manufacturer or Importer)
Certificate Number: NPSIB2.40GLP-001

Effective Date:
08/02/2021
Expiration Date:
12/31/2022


Byron J. Bunker, Division Director
Compliance Division

Issue Date:
08/02/2021
Revision Date:
N/A

Manufacturer: Power Solutions International, Inc.

Engine Family: NPSIB2.40GLP

Mobile/Stationary Certification Type: Mobile and Stationary

Fuel : Natural Gas (CNG/LNG)
Gasoline (up to and including 10% Ethanol)
LPG/Propane

Emission Standards :

Mobile Part 1048
HC + NOx (g/kW-hr) : 2.7
NMHC + NOx (g/kW-hr) : 2.7
CO (g/kW-hr) : 4.4
Stationary Part 1048
HC + NOx (g/kW-hr) : 0.8
NMHC + NOx (g/kW-hr) : 0.8
CO (g/kW-hr) : 20.6

Emergency Use Only : N

Pursuant to Section 213 of the Clean Air Act (42 U.S.C. section 7547) and 40 CFR Part 1048, 1065, 1068, and 60 (stationary only and combined stationary and mobile) and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following nonroad engines, by engine family, more fully described in the documentation required by 40 CFR Part 1048 and produced in the stated model year.

This certificate of conformity covers only those new nonroad spark-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 1048 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 1048. This certificate of conformity does not cover nonroad engines imported prior to the effective date of the certificate.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068.20 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Part 1048. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Part 1048.

This certificate does not cover large nonroad engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.