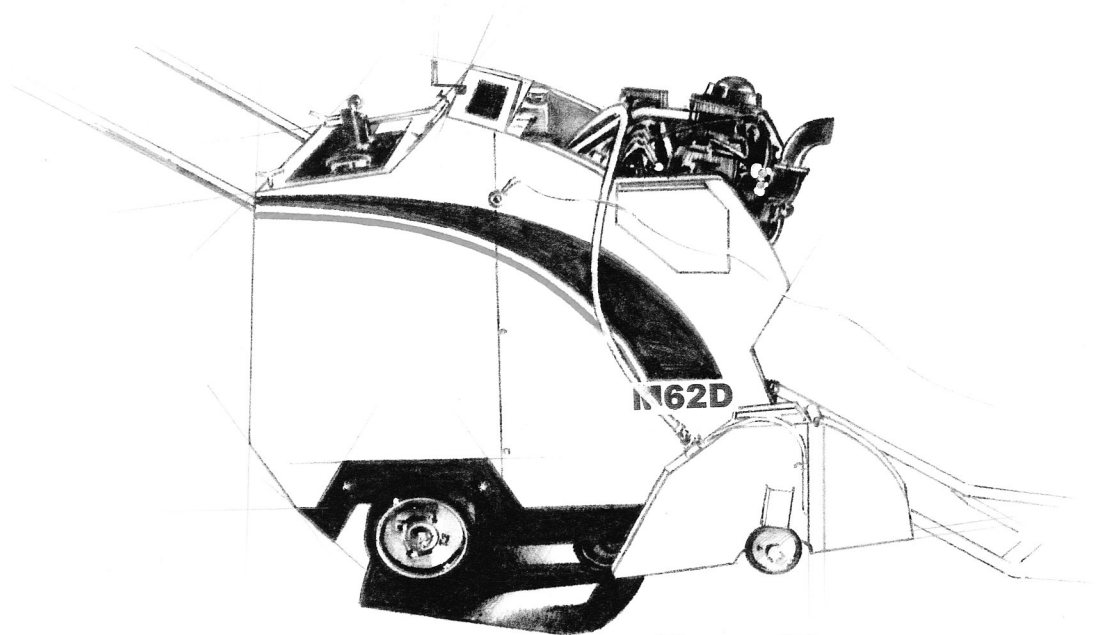


**MORLEY**

EQUIPMENT CO



# **M62 DIESEL OWNERS MANUAL**

41161 Sandalwood Circle • Murrieta, CA 92562

PHONE: (951) 894-5558 • FAX: (951) 894-5051 • WEBSITE: [www.morleysaws.com](http://www.morleysaws.com)

# **WARNING**

- If operated improperly, this machine may cause serious injury.
- Do not wear loose clothing when operating this machine as it may become entangled in the equipment.
- Stay clear of all moving parts when this machine is running.
- DO NOT work on this machine while it running and NOT properly secured.
- 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 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 specified by your blade manufacturer.
- ALWAYS shut off the machine before changing the blade (UNPLUG ELECTRIC MODEL).
- Insure proper position and security of ALL safety guards before operating this machine.
- ALWAYS inspect machine before use for safe operation.
- FIRE HAZARD! Inspect for any leaking fluids (gas, oil and etc.) 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.**

- DO NOT jump-start a dead battery on this machine. The process of jump-starting a discharged (dead) battery can, under certain conditions, result in a battery explosion from the ignition of hydrogen gas, resulting in injury or death.

---

## **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 Owners and Engine Manuals and Operating Instructions.

If examination by Morley Equipment Company proves a defect within Warranty, receipt verifying purchase date and serial number are required to obtain Adjustment. One year Warranty on major components (such as engine, drive motors, hydraulic pump, hydraulic motor and etc.) with an authorized service facility. See Owners Manual for Warranty from the manufacturer of that product.

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.

# **SAW INFORMATION**

1. This Manual provides the basic instructions for the operation and maintenance of the M62-D concrete saw. An Engine Manual is also provide with each saw.

2. **M62 WATERCOOLED DIESEL:**

<b>ENGINE:</b>	Perkins 404D-22T Watercooled Diesel - 62hp		
<b>Drive Unit:</b>	Hydrostatic Transmission		
<b>Water Pump:</b>	Self-priming Electric (Optional)		
<b>Spindle:</b>	1-1/2"		
<b>Arbor Size:</b>	1" with 5/16-inch Keys		
<b>Blade Capacity:</b>	14" to 48" Diameter		
<b>Depth Control:</b>	Hydraulic Raise/Lower, Depth Gauge and Locking Stop		
<b>Fuel Capacity:</b>	7 Gallons		
<b>Weight:</b>	1,310 lbs.-single speed / 1,450 lbs.-3 speed		
<b>Length:</b>	53"		
<b>Width:</b>	35" w/ Quick Detach Spindle Studs		
<b>Height:</b>	46"		
 <b>OPTIONAL EQUIPMENT:</b>			
	1. 3-Speed Gearbox	3. Night Light	
	2. Bladeguards: 26, 30, 36, 42, 48"	4. Electric Water pump	

1. The new machine was test-run before leaving Morley Equipment Company, however, the engine should be checked with the Engine Manual so that the correct routine is followed at all times. Check all fluid levels. This is very important during the initial running-in of the engine as specified in the Engine Manual.

4. **LUBRICATION/SERVICE CHART**

<b>ITEM</b>	<b>CHECK</b>	<b>LUBRICANT</b>
Hydrostatic Transmission	Monthly	20W-50 Motor Oil
Air Filter	Weekly	Service as required
Hydraulic Pump	Monthly	ATF
Spindle Bearings	Daily	Grease
Pivot Axle	Weekly	Grease
Front Wheels	Weekly	Grease
Radiator	Daily	Squirt debris out of cooling fins

5. To adjust belts:

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

## **CONTROL OPERATING INSTRUCTIONS**

1. **WATER SUPPLY:** Connect the water supply to the "inlet hose (1/2")," open the water valve and make sure that the "outlet (1/4)" hoses mounted in the bladeguard are free of obstructions. Blow out the water lines before operation in freezing conditions.

2. **RAISE/LOWER:** By pulling back the Raise/Lower lever a momentary switch activates an electric-over-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 accompanying instruction.

3. **SPEED CONTROL:** The Forward/Reverse lever determines forward and reverse speeds. 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:** Raise the saw to accommodate your choice of blades - 14" to 48". Lift off the bladeguard with engine off. Remove the spindle nut with the spindle nut wrench provide with the saw and then the outer blade collar. Inspect both collars so they will seat flush with the blade. Place blade on spindleshft and align with collar pin in inner collar, now replace outer collar and spindle nut - tighten by striking spindle nut wrench with provided hammer and finally, replace bladeguard.

5. **STARTING THE ENGINE:** This should be done as explained in the Engine Manual.

6. **POSITIONING THE SAW:** The saw may be maneuvered in several ways. Position the handle bars to suit the operator's leverage (Note: this is a rear-pivot saw). The independent drive motors, that function as a differential, allow the saw to be rotated by lifting the front wheels off the ground by pushing down on the handle bars and

## **CONTROL OPERATING INSTRUCTIONS Continued:**

the saw on the rear wheels in the desired direction, left or right, and positioning for the next cut. The saw may also be positioned by using the "wheel-borrow" approach - lift the rear wheels and rotate to the desired position using the front wheels to pivot the saw.

7. **CUTTING:** Lay out the cuts using a chalk line or string and paint. Use the pointer guide as your saw cut "gun site." Bring the engine to the blade manufacturer's recommended RPM. Position the saw to initiate the cut. When aligned and positioned, turn-on the water and lower the saw to desired cut depth, then move the saw forward to a comfortable cutting speed - don't "labor" the blade. Water amount is an acquired science - ask your blade manufacturer for recommendations. Reading the slurry is your key to cost-effective cutting - just the right amount of water is needed for cutting speed and blade life (a blade's accumulated inch-feet cut). It is recommended to step-cut - take several passes to reach desired depth - this also benefits blade life. Once the chalked-out cut has been completed, return the Forward/Reverse lever to the "neutral" position and using the Raise/Lower lever, raise the saw out of the cut. If step-cutting, return the saw to the original insertion point and lower the blade to the secondary depth and repeat the cut, then raise the blade as before and position the saw for the next cut.
8. **CLEANING:** The entire saw should be thoroughly washed weekly or as needed depending on use. Use caution to prevent water from association with the gas tank and electric system. WD40 works well as a water dispersant. Be sure to squirt any debris - dust, slurry, etc. - out of the radiator's cooling fins.
9. **STORAGE:** Always lubricate the saw after cleaning.
10. **CALIBRATION:** Always check alignment. The spindleshft 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 to effect Warranty. Always supply Model and serial number when ordering parts.
13. **QUESTIONS AND CONCERNS:** Should you have any questions relative to the operation or servicing your equipment, do not hesitate to contact Morley Equipment Company at (951) 894-5558; or Email us at [morleyequipco@gmail.com](mailto:morleyequipco@gmail.com). An M-62 Parts List is also available at: [www.morleysaws.com](http://www.morleysaws.com)

# M62D PARTS LIST

## SPINDLESHAFT ASSEMBLY

PART#	REQUIRED	DESCRIPTION
1112-62D	1	Spindleshaft
1101-62D	2	Pillow-block Bearing
1113-62D	2	Inner Collar
1114-62D	2	Outer Collar
1104-62D	1	Left-hand Nut
1105-62D	1	Right-hand Nut
1115-62D	1	Sheave
1116-62D	1	Bushing
1108-62D	1	Key - 3/8"
1109-62D	2	Key - 5/16"
1117-62D	9	3VX 520 Belt (3-Speed)
3030-62D	1	Left-hand Spindle Stud
3030-62D	1	Right-hand Spindle Stud

## FRONT AXLE ASSEMBLY

2100-62D	1	Weldment
2101-62D	2	Axle - 1-inch
2102-62D	2	Wheel - 8 X 2.5"
2103-62D	2	Collar - 1"
2104-62D	2	Pillow-block Bearing - 1 1/4"
2105-62D	2	Pin - 5/8 x 4"
2106-62D	1	Depth Gauge, Cable, Spring

## HYDRAULIC RAISE/LOWER ASSEMBLY

3100-62D	1	Pump Motor
3101-62D	1	Flow Control Valve
3102-62D	1	Hydraulic Cylinder
3103-62D	1	Needle Valve, Raise/Lower Handle Assembly Solenoid
3104-62D	1	



**M62  
DIESEL  
OWNERS  
MANUAL**

## HYDROSTATIC DRIVE ASSEMBLY

<b>PART#</b>	<b>REQUIRED</b>	<b>DESCRIPTION</b>
4100-62D	1	Pump
4101-62D	2	Drive Motor
4102-62D	1	Positraction Manifold
4103-62D	2	Wheel Hub
4104-62D	2	Wheel - 10 x 3"
4105-62D	1	Filter Assembly
4106-62D	1	Filter
4107-62D	1	Reservoir - Plastic
4108-62D	1	Forward/Reverse Friction Lever Assembly
4109-62D	1	Drive Cable
4110-62D	2	Cable End - Ball joint
4116-62D	2	3VX 350 Belt
4112-62D	1	Wheel Motor Bracket
4117-62D	1	Hydrostatic Drive Pump Bracket

## POINTER ASSEMBLY

5101-62D	1	3" Caster
5102-62D	2	Delrin Bushing
5103-62D	2	Pointer Ends
5104-62D	1	Lift Cable Pointer
5106-62D	1	Weldment

## FRAME CONSOLE

6117-62D	1	Mainframe
6118-62D	1	Console
6119-62D	1	Belt Guard - Left Side
6120-62D	1	Belt Guard - Right Side
6121-62D	1	Air Intake - Rear
6106-62D	1	Air Exhaust - Right Side
6108-62D	2	Handlebar
6109-62D	2	Locking T-Handle
6122-62D	1	Fuel Tank - 7-Gallon
6123-62D	1	Fuel Tank Cap
6126-62D	1	Depth Stop Rod Assembly
6127-62D	1	Depth Stop Handle Assembly



**FRAME CONSOLE Continued:**

<b>PART#</b>	<b>REQUIRED</b>	<b>DESCRIPTION</b>
6124-62D	2	Fuel Tank Hold-down Strap
6125-62D	1	Fuel Filter (Perkins)

**ENGINE**

7112-62D	1	Perkins 404D-22T Diesel
7113-62D	1	Bellhousing - Outer Plate
7114-62D	1	Output Shaft/Drive Assembly
7102-62D-A	2	Bearing - Output/Drive Assembly
7115-62D-B	1	Shaft - Output/Drive Assembly
7102-62D-D	1	Bowex Male Coupler Output/Drive Assembly
7116-62D-E	1	BoWex Female Coupler Output/Drive Assembly
7103-62D	1	Air Filter
7104-62D	2	Air Filter Elements
7117-62D	1	Hose - 90-Degree Elbow – 2" - 1-5/8" Reducer
7119-62D	1	Air Filter Bracket
7110-62D	1	Murphy Switch - Overheat Reset Switch

**COOLING SYSTEM**

7123-62D	1	Fan Shaft
7120-62D	1	Radiator
7121-62D	1	Fan Blade
7122-62D	1	Fan Belt – 3VX 425
7114-62D	1	Spring Idler Pulley

**BLADEGUARD ASSEMBLY**

8100-62D	1	Water Distribution Block W/ Hose Fittings
8181-62D	2	Outlet Water Hose - 1/4"
8102-62D	1	Inlet Water Hose - 1/2"

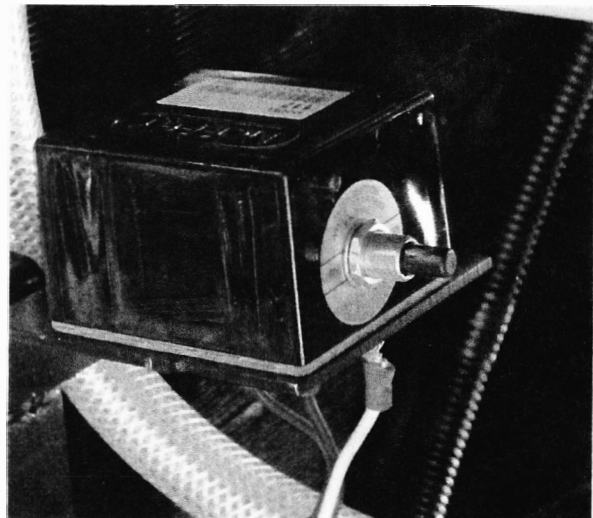
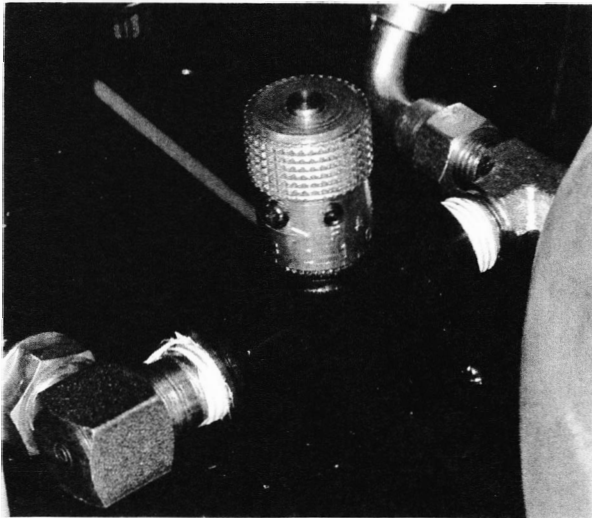
## **BLADEGUARD ASSEMBLY Continued**

<b>PART#</b>	<b>REQUIRED</b>	<b>DESCRIPTION</b>
8103-62D	1	Water Valve
8104-62D	1	Mud Flap
8105-62D	1	20" Bladeguard
8106-62D	1	26" Bladeguard
8107-62D	1	30" Bladeguard
8108-62D	1	36" Bladeguard

## **CONSOLE**

9101-62D	1	Emergency Shutoff Switch - Ignition
9107-62D	1	Tachometer/Hour Meter
9108-62D	1	Start Toggle Switch w/Preheat detent
9109-62D	1	Push/Pull Engine Speed Control Cable
9110-62D	1	Temperature Gauge
9111-62D	1	Amp Indicator Light
9112-62D	1	Oil Pressure Indicator Light
9113-62D	1	Upper Console Sticker
9115-62D	1	Lower Console Sticker

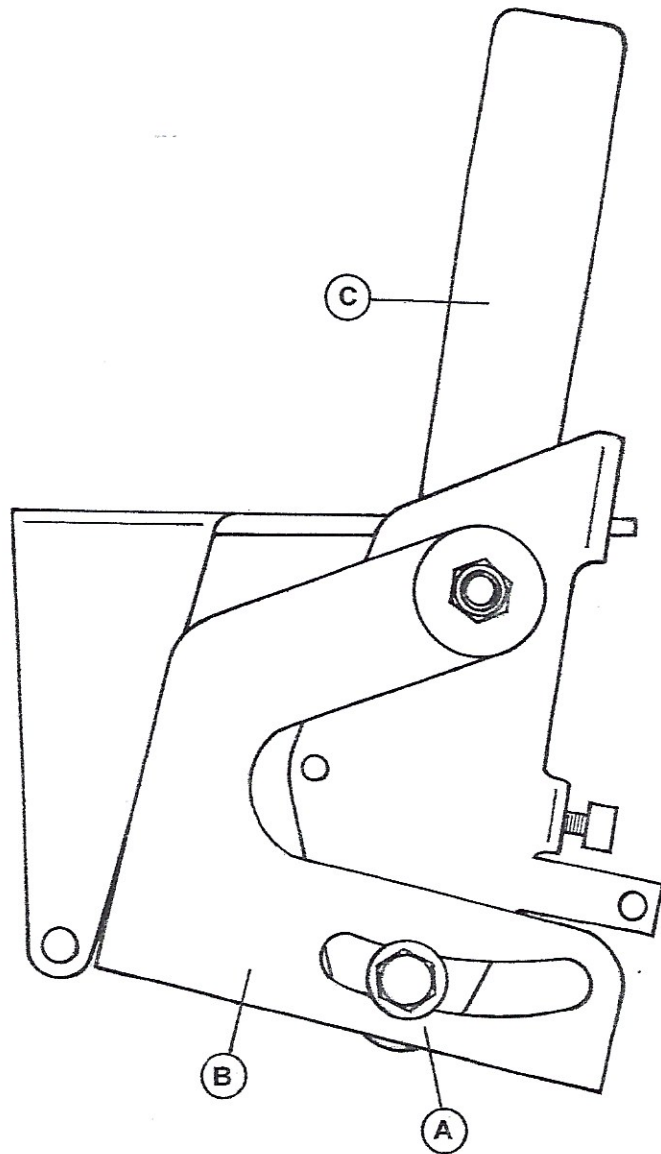
### **Raising speed adjustment Valve and engine restart Murphy Switch**



Just inside the right front side panel 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. Inside the rear access panel on the left side is a Murphy Switch (right photo) that prevents engine overheating. When the Temperature Gauge senses excessive engine heat, the magnetic "trip" switch shuts off the fuel supply, killing the engine. When the engine has cooled sufficiently, hit this reset button and the engine will restart.

# RAISE/LOWER VALVE ADJUSTMENT

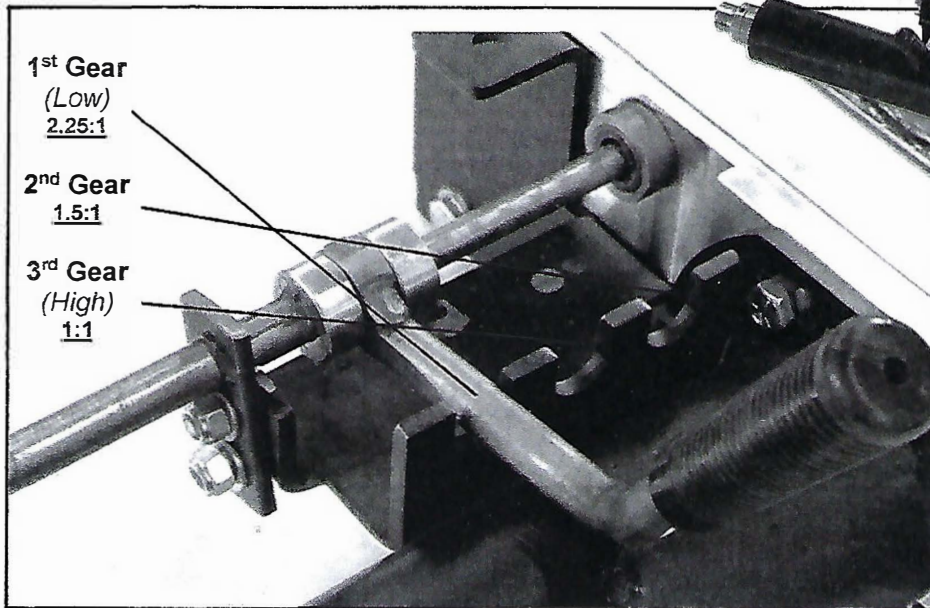
From time to time your Raise/Lower Assembly may need some minor adjustments. If your saw creeps down when the R/L Lever is returned to its "neutral" position after being raised, the needle valve is not closing completely. The following adjustment is an easy fix:



Needle valves are known to take a "set" after continued use, meaning the stops (open/close) change slightly so the R/L Lever (C) doesn't completely close the valve or open the valve when the Lever reaches its stops. Opening the valve to lower the saw is not the issue, it's the valve not closing completely that presents the problem.

By loosening this 7/16-inch nut (A) you can rotate the adjusting arm (B) to close the needle valve. Once that adjustment has been made, tighten the nut. Now, when the R/L Lever is pulled all the way back as the saw is raised and a spring then returns the Lever back to its original "neutral" position, the saw will no longer creep down.

# M62D 3-Speed Gearbox Operation



## 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 – 1<sup>st</sup> Gear, Low Gear – 2.25:1; 2<sup>nd</sup> Gear – 1.5:1; and 3<sup>rd</sup> Gear, High Gear – 1:1.

## LUBRICATION:

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

## SPINDLESHAFT SPEED w/3-SPEED GEARBOX

### M62D PERKINS DIESEL

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

\*Always defer to the blade manufacturers' suggested rpm for safety and best blade performance.

## M62D PERKINS DIESEL BELT GUIDE

	DRIVE BELTS	FAN BELT	PUMP BELT
<b>3-SPEED</b>	3VX520(9)	3VX425	3VX350
<b>SINGLE SPEED</b>	3VX500(9)	3VX425	3VX350