# Madvac Maintenance Guide

Model LN50 / LR50

# Service Intervals

## Daily or 8 Hours

- 1. Check the engine oil level. Add as required.
- 2. Check the engine coolant level. Add as required.
- 3. Check the fuel level. Add as required.
- 4. Check the air restriction indicator. Blow out filter only if indicator is in the red.
- 5. Open the engine air cleaner evacuator valve to get rid of large particles of dust and dirt.
- 6. Wipe the inside of the air cleaner, clean with a cloth if it is dirty or wet.
- 7. Clean and empty the container and change the bag.
- 8. Check the vacuum hose for hose for holes or damages. Repair or replace as necessary.
- 9. Check for oil or coolant leaks. Retighten or repair as required.

# Weekly or 50 hours

- 1. Grease the power steering pivot points.
- 2. Grease the up/down cylinder pivot points.
- 3. Grease the vacuum fan (grease the zerk on the bottom surface or the container).
- 4. For the LR50 only, grease the universal joint.
- 5. For LR50 only, grease the in/out cylinder.
- 6. Check the oil level in the hydraulic reservoir. Add as required. Do not overfill.
- 7. Check the engine air cleaner element. Clean or replace as required.
- 8. Check and clean the engine compartment.
- 9. Check the fuel line and the clamps (refer to engine manual).
- 10. Lubricate the throttle and emergency/park brake control cables.
- 11. Check the fan/alternator belt tightness (refer to engine manual).
- 12. Check the tightness of the parking brake cables. Adjust if it is slack.

# 100 Hours

1. Replace the fuel cartridge (refer to the engine manual).

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## 200 Hours

- 1. Change the hydraulic Oil filter.
- 2. Check the radiator hoses and clamps (refer to the engine manual)
- 3. Check the intake air line. Repair or replace if damaged.

# 400 Hours or annually (whichever comes first)

- 1. Change the engine oil and filter (refer to engine manual).
- 2. Change the hydraulic oil and filter.
- 3. Replace the hydraulic suctions strainers (gear pump and hydrostatic pump).
- 4. Replace the hydrostatic pump filter (sooner if traction control is slow responding).
- 5. Replace the engine air cleaner element.
- 6. Replace the fan/alternator belt.
- 7. Grease all grease points.

## Every Two Years

- 1. Change the radiator coolant (refer to engine manual).
- 2. Replace the radiator hoses and clamp bands.
- 3. Replace the battery.
- 4. Replace the fuel lines and clamp bands.



See t	the Lubrification and Maintenance section for the details of service.					Action Codes:			CK= Checked C= Change CL= Clean L= Lubricate		
	Hours:										
	Serviced by:						٠.		ļ.		
	8 hours or Daily										
СК	Hydraulic Oil or Coolant Leak		1	Т	T -		1	1	T	T:	_
CK	Engine Oil Level	+		†	<del> </del>		<del></del>	<del></del>	+	<del> </del> -	٠
CK	Engine Coolant Level		_	-		-		<del> </del>	+-		-
CK	Fuel Level	1		<del> </del>		-		-	-		$\dashv$
CL	Engine Air Cleaner Evacuator Valve				<del></del>	-	-	<del> </del>			
CL	Engine Air Cleaner Element	-			-		+	<b></b>	<del> </del>	+-	-
CK	Air Restriction Indicator	_		-	-	+			1		-
CL	Clean Container & Change Bag	+	-	<b>-</b>	+		<del> </del>	<del>                                     </del>	-	<del></del>	ᅦ
CK	Vacuum Hose	1	<del>- </del>	+-				<del>  .</del>	1.	-	-
								1			
L	Weekly or 50 hours Power Steering Pivot Points	<b>_</b>		Т		1				<u> </u>	<del></del> 1
L	Up/down cylinder Plvot Points	ļ		<del>-</del>	<b>_</b>	<del></del>		ļ	-	<u> </u>	_
<u>L</u>	Vacuum Fan Zerk	1	-	<del> </del>	<del>                                     </del>		-	<u> </u>	<u> </u>		_
CK	Hydraulic Oil Level			-	ļ			-	<b>}</b>	<del> </del>	4
CK	Engine Air Cleaner Element		<del> </del>			<del></del>	<b> </b>	ļ	<b></b>		4
CL	Engine Compartment	-l <u>'</u>	-	<del> </del>	<del>                                     </del>	<del> </del>	<del> </del>	<u> </u>			4
CK	Fuel Line & Clamps	-	<u> </u>	ļ	<del></del>		ļ	ļ	<del> </del>	<del> </del>	_
L	Control Cables	<del>                                     </del>	<del> </del> -	1	<del> </del>	1	-	ļ	<u> </u>	<del> </del>	4
CK	Fan/alternator belt	-	<del> </del>	ļ	-	<u> </u>	<u> </u>	ļ		<del>                                     </del>	4
CK			<b>_</b>	<u> </u>	<u> </u>	ļ	-	ļ		<b>_</b>	_
	Parking Brake Adjustment	<del></del>	-		<u> </u>	<u> </u>	ļ	<u> </u>	<u> </u>	<u> </u>	4
L	LR50 only, Universal Joint on Actuator	. <b> </b>	<u> </u>	ļ	ļ	_	ļ	<u> </u>		ļ	
<u>L</u>	LR50 only, In/out Cylinder	ــــــــــــــــــــــــــــــــــــــ			<u> </u>	<u> </u>			·		
-	100 hours		•		:	• 1					
Ç	Fuel Filler Cartridge				Ţ		1			T	٦
	200 hours	<u></u>		<u>.l</u>			***************************************		l		!
С	Hydraulic Oil Filter	-	T :	<del></del>	· · · · · ·	1		· ·	<u></u>	<del></del>	٦
СK	Radiator hoses and clamp		<del> </del>			<del> </del>				<del>                                     </del>	-
CK	Intake Air Line	<del> </del>	<b> </b>		<u> </u>	<u> </u>		<u>:</u>		<u> </u>	-
			<u> </u>	<u></u>	<u></u>	<u> </u>	٠	<u> </u>	· · · · · ·		Ţ
	400 hours or Annually (Whichever comes first)		•						: 		
C	Engine Oil and Filter								-		]
C	Hydraulic Oil and Filter										
С	Hydrostalic Pump Filter								,		1
CL.	Engine Air Cleaner Element										
С	Fan/alternator belt										
<u> </u>	All Grease Points										1
j	Every two years					,					-
C	Radiator Coolant	<b> </b>			-			1			7
C	Radiator Hoses and Clamps	-									ľ
С	Battery	<u> </u>						<del> </del>			1
C	Fuel Lines and Clamps	<del> </del>				···					١.,
Ĉ.	Intake Air Line					<i>.</i>			· · · · · · · · · · · · · · · · · · ·		1

### MAINTENANCE

ONLY THE MAINTENANCE JOBS AUTHORIZED IN THIS INSTRUCTIONS MANUAL MAY BE CARRIED OUT BY THE USER. ALL OTHER OPERATIONS ARE FORBIDDEN.

#### **RUNNING IN**

The first 50 hours of actual operation of the pump are the running-in period. During this period, regularly check the consumption of disposable oil, the discharge temperature and the wear of the vanes. Vane wear should be minimum or negligible. If it is excessive, wear must be checked at regular frequent intervals and the phenomenon should be notified to an authorized dealer. In any case, replace the vanes when wear is 5 mm or more (see page 12).

It is forbidden to use a pump with more than 5 mm vane wear.

Failure to follow this warning relieves the manufacturer of all responsibility.

## PERIODIC CHECKS

Periodic checks and maintenance of the machinery are recommended:

#### Several times a day:

Check the maximum temperature at discharge.

#### Daily:

Check the vacuum and the pressure during operation.

#### Dally

Check the level of the disposable oil.

#### Weekly:

Clean the filtering elements of all the filters.

#### Weekly:

Check the safety valve.

### Monthly (or every 100 working hours):

Check vane wear.

## Every 300 workings hours

No maintenance of the non-return valve is necessary.

We recommend an initial check after 300 hours of operation. The valve must be checked for oil carbon deposit, and depending on its condition, the interval for the next check must be fixed. The layer of carbon oil must not exceed % inch in thickness.

#### **ATTENTION**

Sealing and sliding surfaces must be free from oil carbon deposits so that the function of the non-return valve is preserved; brief period of free suction is suggested before switching off the pumps.

#### IMPORTANT:

The times indicated refer to normal working conditions. For harsh conditions, decrease the intervals for each operation.

Keep the pump clean in order to allow better cooling.