

Date of the inspection : _____



Inspector : _____

Serial number : _____

INSPECTION FORM - MINIDOZERS (STANDARD MODELS)

Before beginning the inspection

- For a better understanding, read the form from cover to cover before beginning the inspection. Doing so will help prepare the material and tools needed for each step.
- To perform some of the tests of this form, the batteries must be fully charged. Make sure that they have been charged before beginning the inspection.

Instructions

- Take as many pictures as possible to document the work done.
- For more help on disassembling the Minidozer, refer to the Operator's Manual and the Repair Manual.
- Make sure to identify the position of the components before removing them from the assembly.
- When maintenance or a reparation is necessary, refer to the Repair Manual.

MINIDOZER - RECOMMENDED MAINTENANCE SCHEDULE										
MAINTENANCE DESCRIPTION	AFTER FIRST 75 HOURS (NEW MACHINE ONLY)	BEFORE EACH LIFTING OF THE MACHINE	BEFORE EACH USE	EVERY MONTH OR 160 HOURS	EVERY 1½ MONTH OR 250 HOURS	EVERY 3 MONTHS OR 500 HOURS	EVERY 6 MONTHS OR 1000 HOURS (ALL MODELS)	EVERY 6 MONTHS OR 1000 HOURS (ALUMINUM SMELTER ONLY)	EVERY YEAR OR 2000 HOURS	4000 HOURS
REPLACE HYDRAULIC FILTER	X									
INSPECT MINIDOZER (INCLUDING STRUCTURAL BOLTS) PER SECTION 3.10 OF OPERATOR'S MANUAL		X					X			
CLEAN MACHINE OF DUST AND DEBRIS			X							
VERIFY HYDRAULIC FLUID LEVEL			X							
VERIFY HYDRAULIC SYSTEM FOR LEAKS			X							
LUBRICATE THE LIFTING ARM AND BUCKET PIVOTS			X							
LUBRICATE THE ROLLING BEARINGS			X							
VERIFY TRACKS FOR EXCESSIVE WEAR AND REPLACE THEM IF NECESSARY			X							
VERIFY AND ADJUST TRACK TENSION			X							
VERIFY FOR LOOSE FASTENERS			X							
CLEAN THE BATTERY POLES				X						
VERIFY THE BATTERY CONNECTORS				X						
REPLACE HYDRAULIC FILTER					X					
VERIFY AND GREASE THE ROAD WHEELS					X					
CHANGE HYDRAULIC FLUID						X				
PERFORM MOTOR ROTATION WITH REBUILT MOTORS								X		
VERIFY SAFETY DECALS AND REPLACE IF NECESSARY									X	
REPLACE HYDRAULIC FLUID TANK GASKET									X	
CHANGE GEARBOX OIL										X

Procedure

General state of the machine

1. If the maintenance log and the daily visual inspection log are available, take a look at it to see if abnormal situations occurred since the last preventive maintenance.
2. Before performing any operation on the machine, take pictures of its original state.
 - a. Front side ☐
 - b. Rear side ☐
 - c. Left side ☐
 - d. Right side ☐
 - e. Hydraulic compartment (without cover) ☐
 - f. Electric compartment (without cover) ☐
 - g. Battery compartment (without cover) ☐
 - h. Left traction module ☐
 - i. Right traction module ☐
 - j. Other loose components (if applicable) ☐
3. Examine the machine for broken or missing parts (including the safety decals and the options / accessories). Refer to the packing slip (if applicable) and the pictures below. Note your observations below.





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4. Using air jet and vacuum, clean the machine from dust, mud, etc.

General operation

5. In the electric compartment, place all the circuit breakers in the “ON” position.

6. On the control panel, pull the emergency stop.

7. Verify if the instruments of the control panel turn on.

k. Voltmeter ☐ Functional ☐ Non-functional

l. BDI / Hourmeter ☐ Functional ☐ Non-functional

8. Log the remote controller to the machine (refer to the Operator’s Manual for more information).

9. Verify the motor controller status lights, if they are flashing, contact Movex Innovation.

a. Hydraulic motor status light (left) ☐ ON ☐ OFF ☐ Flashing

b. Left traction status light (center) ☐ ON ☐ OFF ☐ Flashing

c. Right traction status light (right) ☐ ON ☐ OFF ☐ Flashing

10. Verify each function of the remote controller. Also verify the lights / alarm associated to the movement.

a. Front movement ☐ Functional ☐ Non-functional

i. Amber lights (Ø2.5’’) ☐ Functional ☐ Non-functional

ii. Alignment ☐ Aligned ☐ Misaligned

b. Rear movement ☐ Functional ☐ Non-functional

i. Red lights (Ø2.5’’) ☐ Functional ☐ Non-functional

ii. Back-up alarm ☐ Functional ☐ Non-functional

iii. Alignment ☐ Aligned ☐ Misaligned

c. Left and right rotation ☐ Functional ☐ Non-functional

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|---------------------------------------|-------------------------------------|---|
| d. Hydraulic mast upward movement | ☐ Functional | ☐ Non-functional |
| i. Lower hydraulic status light | ☐ Functional | ☐ Non-functional |
| e. Hydraulic mast downward movement | ☐ Functional | ☐ Non-functional |
| i. Upper hydraulic status light | ☐ Functional | ☐ Non-functional |
| f. Hydraulic bucket upward movement | ☐ Functional | ☐ Non-functional |
| i. Left hydraulic status light | ☐ Functional | ☐ Non-functional |
| g. Hydraulic bucket downward movement | ☐ Functional | ☐ Non-functional |
| i. Right hydraulic status light | ☐ Functional | ☐ Non-functional |

Batteries

11. Verify the batteries connections.
12. Disconnect all the battery cables and clean the batteries poles if required.

Drivetrain

13. Secure the Minidozer on blocks to be able to rotate the tracks freely.
14. Inspect the tracks.
15. Using the remote controller, rotate the tracks (frontward and rearward) to verify if there are any abnormal noises and verify the general state of the bearings.
16. After the inspection (step 15), verify the following, if necessary, based on the observations and on the maintenance schedule:
 - a. Remove and inspect the drive wheels bearings.
 - b. Remove and inspect the bearing supports.
 - c. Remove and inspect the drive wheel (including its keyway).
 - d. Remove and inspect the key.
 - e. Remove the motor-gearbox assemblies from the traction modules.
 - f. Remove and inspect the drive shaft (including the keyseat).
 - g. Remove the road wheels assemblies from the traction modules.

- h. Verify each road wheel to make sure they can rotate correctly. Identify the ones that are hard to rotate. Their bearings will have to be changed.
- i. Lubricate the road wheels.
- j. Remove and inspect the tension wheel (including the bearing and the tension arm).
- k. Remove and inspect the tension spring.
- l. Remove and inspect the tension screw and the tension nut.
- m. Separate the motor from the gearbox. (For SS model only)
 - i. For the M models, inspect the electric motors.
 - ii. For the AL models, perform the permutation of the electric motors (actual ones with the new or rebuilt ones).
- n. Reassemble the traction modules and attach them to the Minidozer.
- o. Adjust the track tension (repeat for both traction module).
- p. For the next steps, leave the Minidozer on the blocks.
- q. Replace the hydraulic fluid.

Hydraulic system

17. Verify if the hydraulic system has any leaks.

a. Hoses (rigid and flexible) and fittings	☐ Correct	☐ Leak
b. Valves	☐ Correct	☐ Leak
c. Manifold	☐ Correct	☐ Leak
d. Manometer	☐ Correct	☐ Leak
e. Sight level gauge	☐ Correct	☐ Leak
f. Cylinders	☐ Correct	☐ Leak
g. Oil filter	☐ Correct	☐ Leak
h. Pump	☐ Correct	☐ Leak

18. Verify the maximum pressure operation by activating the relief valve. The pressure should be set to 2100 psi (14479 kPa). If not, refer to the troubleshooting section of the repair manual.

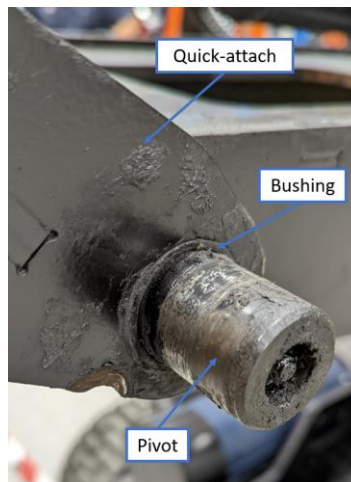
a. Measured value : _____

19. To verify if there is any internal leakage, refer to the maintenance log or discuss with the operator. If the bucket and / or the mast cannot hold their position, investigate using the Repair Manual to find the defective component.

Pivots and lubrication

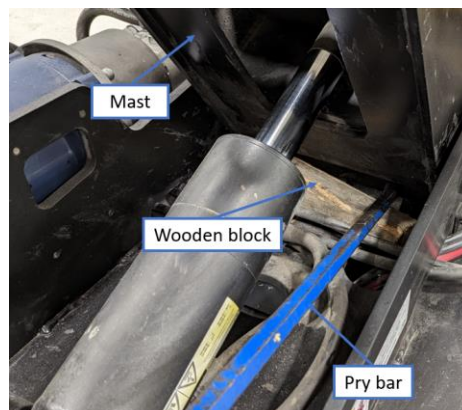
20. Remove the bucket from the quick-attach plate.

21. Inspect the 2 bushings located on the quick-attach plate (see picture below).



22. Raise the mast to its maximum.

23. Using a pry bar and a wooden block as a pivot (if necessary), try to pull up the base of the mast to see if the bushings are worn. See the picture below for more details.



24. Replace the loose bushings.

25. Following the steps described in the Operator's Manual, grease all the pivots and both rolling bearings.
26. Reinstall the bucket on the machine.
27. Remove the blocks from under the machine and lower it to the ground.

Battery charger

28. Switch all the circuit breakers to the OFF position.
29. Unplug the battery packs (1 for the 27 models and 2 for the 48 models).
30. Plug the battery packs into the battery charger.
31. Verify the following:

- a. Minidozer M-27 / AL-27

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| i. Amp indicator | ☐ Functional | ☐ Non-functional |
| ii. Fans | ☐ Functional | ☐ Non-functional |

- b. Minidozer M-48 / AL-48

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|------------------|-------------------------------------|---|
| i. Status lights | ☐ Functional | ☐ Non-functional |
| ii. Fans | ☐ Functional | ☐ Non-functional |

Accessories (if equipped)

Working lights

32. Using the remote controller, activate the light switch.

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| a. Front | ☐ Functional | ☐ Non-functional |
| b. Rear | ☐ Functional | ☐ Non-functional |

Camera system

33. On the monitor, activate the communication.
34. Using the Auxiliary switch, verify the camera / monitor.

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| a. Front | ☐ Functional | ☐ Non-functional |
| b. Rear | ☐ Functional | ☐ Non-functional |