

NAVSUP PUBLICATION 538 SIXTH REVISION

MHE INSPECTION FORM

DATE	REGISTRATION NO. (USN)	MHE CLASS (see table 4-1)
------	------------------------	---------------------------

POWERED MHE TO BE CHECKED DAILY BY OPERATOR

NOTES

1. USE THIS FORM WHEN INSPECTING MHE BEFORE AND AFTER OPERATION.
MARK APPROPRIATE COLUMNS TO INDICATE SATISFACTORY OR UNSATISFACTORY CONDITIONS.
2. NOT APPLICABLE INSPECTION PROCEDURES MAY BE OBLITERATED FOR THAT PARTICULAR MHE CLASS.
3. IF DEFECTS ARE FOUND, REMOVE MHE FROM SERVICE, NOTIFY IMMEDIATE SUPERVISOR AND RETAIN FORM UNTIL REPAIRS ARE MADE.
4. IF NO DEFECTS ARE FOUND:
 - (A) INITIAL OPERATOR: SIGN AND DATE FORM. ATTACH TO MHE.
 - (B) LAST OPERATOR: MAINTAIN FORM IN ACCORDANCE WITH LOCAL PROCEDURES.

SHIFT HOUR-METER READING	
END	
START	
DIFF.	

5. THIS FORM IS NOT AVAILABLE IN THE SUPPLY SYSTEM.
REPRODUCTION OF THIS FORM FROM THIS MANUAL IS AUTHORIZED.

		START		FINISH		
		SAT	UNSAT	SAT	UNSAT	
1	Tires and Rims					1
2	Engine Oil, Fluid Levels and Belts					2
3	Radiator Coolant Level (check when cool only)					3
4	Battery					4
5	Access Covers					5
6	Fuel System					6
7	Unusual Engine Noises					7
8	Lights					8
9	Horn					9
10	Hoist					10
11	Tilt and Side Shift					11
12	Transmission/Clutch					12
13	Directional Controls					13
14	Brake System					14
15	Gauges/Meters					15
16	Fire Extinguisher (if applicable)					16
17	Operator Restraint System (e.g., Seat Belts)					17
18	Forks					18
19	Fork Positioning Locks and Stops					19
20	Fork Safety Chains					20
21	Overhead Guard and Load Backrest					21
22	Ground Straps/Static Conductive Tires/Wheels					22
23	Structural Cracks/Broken Weldments					23
24	Mandatory Markings					24

ADDITIONAL OPTIONAL (NON-MANDATORY) INSPECTION REQUIREMENTS MAY BE INCLUDED HERE:

AREA	INITIAL OPERATOR'S SIGNATURE	LAST OPERATOR'S SIGNATURE
------	------------------------------	---------------------------

SEE REVERSE SIDE FOR INSPECTION CRITERIA PROCEDURES

NAVSUP PUBLICATION 538

MHE Inspection Form - Inspection Criteria

1. Tires and Rims. Inspect tires for excessive wear and damage. Remove foreign material from tire treads. Reject tires for illegible or missing markings or labels. Reject pneumatic tires when the tire tread has worn down to the tread wear mark or if fabric is exposed through the sidewall. Inspect the rims for dents, bends, and cracks. Refer to figure 8-7 for examples of solid rubber tire defects and the probable causes.
2. Engine Oil, Fluid Levels and Belts. Check engine oil, hydraulic, transmission and brake fluid levels. If low, add oil/fluid to raise the level to the full mark. Inspect engine belts for cracks, wear, damage, nicks or cuts, and proper tension. Always inspect floor/deck under MHE for any fluid puddles.
3. Radiator Coolant Levels. CAUTION: Do not check radiator coolant level when engine is hot. Check the radiator coolant level, if low, add coolant to the full mark.
4. Battery. Inspect battery cables for damage, cuts and abrasions. Verify cables are securely fastened to connector lugs and are free of corrosion, verdigris, arcing, pitting, exposed conductor material, and loose connections. Electric trucks have color coded battery indicator power band indicating remaining charge level. Charge battery when indicator drops into yellow zone (when under load; e.g., by tilting mast back against stop and check indicator). WARNING: For internal combustion start batteries, do not jump start battery with an eye cell indicator that appears yellow or clear (low fluid level) which may result in rupture.
5. Access Covers. Inspect all access covers (e.g., battery or engine) for loose, missing, broken, or corroded covers. Ensure latches snugly secure covers when fastened.
6. Fuel System. Visually inspect the entire fuel system assembly for any leaks or any abnormal odors. Where accessible, inspect the fuel tank or gas cylinder for leakage, denting, bulging, corrosion, pitting, gouges not exposed to fire, or evidence of rough usage. Valves are protected from physical damage.
7. Unusual Engine Noises. Start engine. Should any unusual noises be noted with the engine running, turn off MHE, reject and discontinue this check.
8. Lights. Check that the headlights, brake lights, and any other installed lights are working. All lights must operate properly for night work.
9. Horn. Depress the horn push button to verify that the horn is operating properly.
10. Hoist and Lowering Control. Raise and lower the lifting assembly to verify the lifting assembly controls operate smoothly. Inspect all hoses for cracked coverings, wear, bulges or leaks. Verify all fittings are free of cracks or leaks. Inspect for loose or binding (i.e., dry/not lubricated, frozen or rusted) chains. Inspect hose and cable reel guards, as applicable, for breaks, bends or chafing.
11. Tilt and Side Shift. Tilt forward and backward to verify the tilt operates smoothly. Operate side shift to verify the carriage moves immediately and smoothly to the left and the right. Verify all hoses are serviceable and that these fittings are free of cracks or leaks. For any additional accessory controls installed on the MHE; verify proper operation with the manufacturer's recommendations.
12. Transmission/Clutch. Verify that the transmission/clutch operates smoothly with no unusual noises. Where applicable, test the neutral start switch on most fuel-powered MHE. Verify that the parking brake is set and that no one is in front of or behind the MHE. A periodic check can be made by attempting to start the engine with the directional control lever in either the forward or reverse position. If the engine starts, the MHE shall be rejected.
13. Directional Controls. Shift directional controls into forward, neutral and reverse directions to verify the MHE operates properly and smoothly. Figure 8-8 shows a typical example of the directional controls. Ensure steering operation functions smoothly.
14. Brake System Check. With the parking brake engaged, attempt to drive MHE forward by applying a moderate amount of power to the MHE and verify that it does not move. Visually inspect that no fluid is leaking from the brake system. Check the service brakes to verify they stop the MHE smoothly and evenly without pulling or binding. Where applicable, check the dead-man brake or travel control disconnect device for proper operation.
15. Gauges/Meters. Where applicable, inspect the following:
 - a. Warning Indicators. With the engine running at normal operating temperature, check the oil pressure gauge (figure 8-9) for normal operating pressure. If any warning indicator lights signal a malfunction, the MHE shall be rejected until repaired.
 - b. Coolant Temperature Gauge. With the engine running at normal operating temperature, check that the gauge is indicating within the proper indicating range.
 - c. Fuel Gauge. Check the fuel gauge for proper reading. On types LP and CN MHE, the mechanical-type fuel gauge may be mounted directly on the gas tank. Dual-fueled MHE shall not be operated unless the gasoline fuel tank is at least 1/4 full. Electric powered types should be in "green" power range.
 - d. Voltmeter/Ammeter. With the engine running, check the voltmeter/ammeter to verify that its in the green range when the engine is running at least 550 rpm.
 - e. Hourmeter. Verify that the hourmeter (figure 8-10) is registering while the engine is running.
 - f. Weight Scales. With forks elevated, and no load, verify that the weight scales read zero. Adjust accordingly.
16. Fire Extinguisher. When equipped, visually inspect the extinguisher cylinder for dents. Check that the gauge is registering in the green (if so equipped) and check that the wire seal has not been broken. Verify periodic checks are current. Check nozzle and hose for defects. Reject extinguisher if not serviceable. Replace rejected extinguishers.
17. Operator Restraint System. If MHE is equipped with an operator restraint system (e.g., seat belt) it shall be inspected to verify that they fully extend out, can be properly secured, and fully retract back. Additionally, they shall not exhibit any evidence of the following discrepancies: (a) nicks or cuts (figure 8-11, view A), (b) frayed webbing (figure 8-11, view B), (c) holes (figure 8-11, view C), and (d) broken or worn retractor (figure 8-11, view D).
18. Forks. Visually examine the forks for surface cracks, including under the heel of the forks. Verify that blade and shank are straight, properly installed, and fork tips are even. Verify that load ratings of forks match MHE load rating. Surface cracks appearing on the forks shall be cause for rejection until forks are repaired or replaced.
19. Fork Positioning Locks/Stops. Verify the fork positioning locks/stops secure each fork in position. Verify forks are securely engaged to the carriage.
20. Fork Safety Chains. Verify the presence and operation of fork safety chains (equipped on units with folding forks) and associated locking pins.
21. Overhead Guards and Load Backrest. Inspect all welds and hardware. Verify that overhead guard, load backrest and hardware is in place and all structural members are secured.
22. Ground Straps or Static Conductive Tires/Wheels. For EE type MHE, verify the presence of two ground straps and that they touch the floor/deck or two conductive tires/wheels. For EX type MHE, verify the presence of two conductive tires/wheels.
23. Structural Cracks/Broken Weldments. Inspect all external weldments for structural cracks or defects. Reject MHE until repaired or replaced.
24. Mandatory Markings. Verify the following is clearly and properly marked: (a) safe working load (SWL) and vehicle weight (VW) on both sides, and except for pallet trucks, in view of operator, (b) operator controls, (c) manufacturer's nameplate/label, (d) accredited laboratory (UL, FM) certification, (e) for tow tractors, the drawbar pull rating (DBP) on both sides and rear, and (f) for ammunition and explosives handling only, the MHE Safety Certification marking (figure 5-9). Reject if the above markings are missing, illegible, expired or incorrect. All other required markings that are rejected shall be recorded on the MHE Inspection Form, but is not a cause for removal from service.