



MFT-ADT-INSP/RSP-5

SPECIALTY HAULAGE SOLUTIONS FOR CONSTRUCTION AND MINING

SCHEDULED/SPECIAL INSPECTIONS & RECOMMENDED SUPPORT PARTS



MEGA CORP.®

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TABLE OF CONTENTS

	Page
Section 1 Definitions and Abbreviations	1-1
Section 2 Scheduled Maintenance Inspections	2-1
Section 3 Recommended Support Parts	3-1

TABLE OF CONTENTS

SECTION 1

Definitions and Abbreviations

Contents

Manual Usage.....	1-1	Safety Messages.....	1-2
Warning, Caution And Notes	1-1	Abbreviations.....	1-4
Use Of Shall, Will, Should And May.....	1-1	MFT General Overview (Typical)	1-5

MANUAL USAGE

This technical manual only contains information required to support and service the MFT. See the appropriate Maintenance and Operators Manual for specific chassis system information and maintenance procedures. If your system is not covered in this manual please contact MEGA Corp. Product Support Group at:

US toll free: 1-800-345-8889

Direct: 1-505-345-2661 or visit our website at www.megacorpinc.com for more detailed contact information.

The exact location of the hazards and description of the hazards are reviewed in this section. All personnel working on or operating the MFT must become familiarized with all the safety messages.

WARNING

Due to the nature of these processes, ensure that all safety information, warnings and instructions are read and understood before any operation or any maintenance procedures are performed. Some procedures take place with heavy components and at moderate heights, ensure proper safety procedures are maintained when performing these actions. Failure to use and maintain proper safety equipment and procedures will cause injury, death or damage to equipment.

WARNING, CAUTION AND NOTES

The following definitions are found throughout the manual and apply as follows:

WARNING

Operating procedures and techniques, which could result in personal injury and/or loss of life if not carefully followed.

CAUTION

Operating procedures and techniques, which could result in damage to equipment if not carefully followed.

NOTE

Operating procedures and techniques that are considered essential to emphasize.

USE OF SHALL, WILL, SHOULD AND MAY

Shall and **Will** – Used when application of a procedure is mandatory.

Should – Used when application of a procedure is recommended.

May - Used to indicate an acceptable or suggested means of accomplishment.

SECTION 1

Definitions and Abbreviations

SAFETY MESSAGES

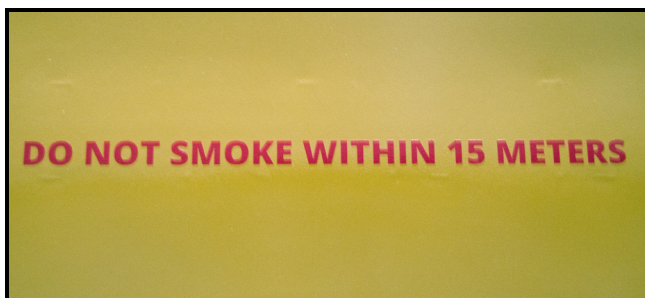
There are several specific safety messages on this machine. The exact location of the hazards and description of the hazards are reviewed in this section. All personnel working on or operating the machine must become familiarized with all the safety messages.

Make sure that all of the safety messages are legible. Clean the safety messages or replace the safety messages if you cannot read the words. Replace the illustrations if the illustrations are not legible. When you clean the safety messages, use a cloth, water and soap. Do not use solvent, gasoline or other harsh chemicals to clean the safety messages. Solvents, gasoline or harsh chemicals could loosen the adhesive that secures the safety messages. Loose adhesive will allow the safety messages to detach.

Replace any safety message that is damaged or missing. If a safety message is attached to a part that is replaced, install a new safety message on the replacement part.

FLAMMABLE MATERIALS (1)

This safety label is located on the LH, RH, and Rear sides of the fuel tank.

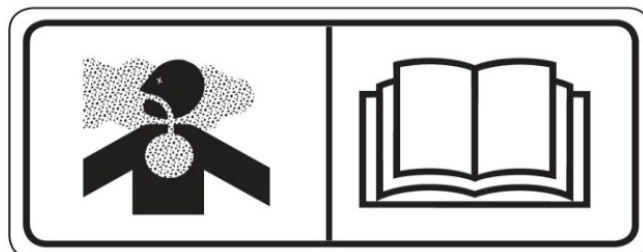


WARNING

Fuel Tank contains hazardous, flammable liquids and gas. Do not allow smoking, matches, open lights, fire, or sparks within 15 meters (50 feet) of the fuel tank. Failure to follow proper safety procedures will result in serious injury or death.

TOXIC GAS HAZARD (2)

This safety label is located on the side of the tank and at large access covers.

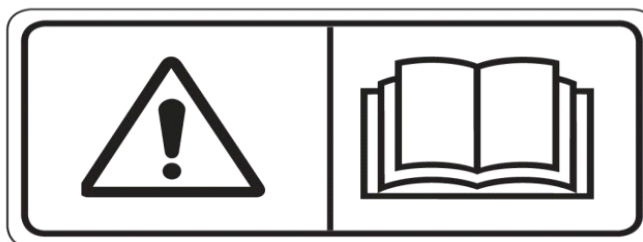


WARNING

Cutting or welding operation on the inside of the tank can cause the accumulation of toxic gases. Read and understand instructions and warnings in the Maintenance Manual. Failure to provide proper ventilation or breathing apparatus while conducting these operations may result in serious injury or death.

DO NOT OPERATE (3)

This safety label is located in the operator's cab and in the fuel dispensing compartment at the rear of the MFT.



WARNING

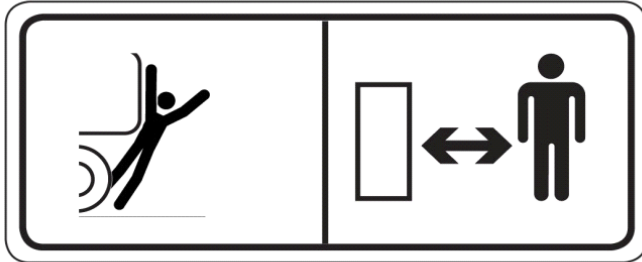
Do not operate the machine unless you have read and understand the instructions and warnings in the Operator and Maintenance Manual. Failure to follow instructions or heed the warnings could result in serious injury or death.

SECTION 1

Definitions and Abbreviations

BACKING RUNOVER HAZARD (4)

This safety label is located in the operator's cab and at the rear of the machine.



⚠ WARNING

The vehicle is equipped with a back-up alarm. Alarm must sound when operating this vehicle in reverse. Failure to maintain a clear view in the direction of travel could result in serious injury or death.

FALL HAZARD (5)

This safety label is located at the top of the fuel tank.

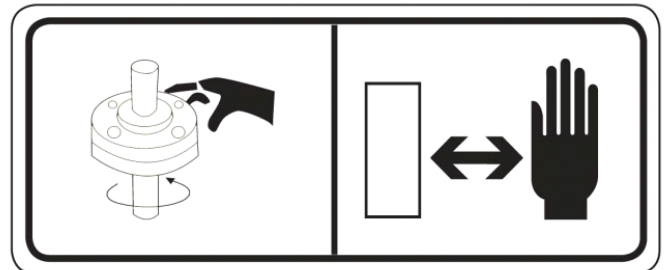


⚠ WARNING

Do not walk on the top of tank without fall arrest PPE. Serious injury or death could occur from a fall.

ROTATING SHAFT (6)

This safety label is located at the rear of the machine, in the fuel pump and hose reel cabinets.

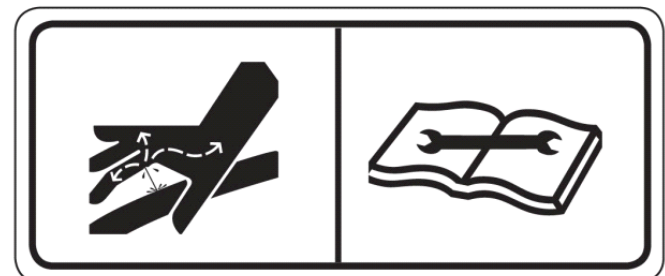


⚠ WARNING

Do not place your hand or tools within pump bell while pump is rotating and/or pressure held within the motor supply hose. Refer to the Operator and Maintenance Manual for the procedures to operate and maintain the pump. Failure to follow proper procedures could result in serious injury.

HIGH PRESSURE MOTOR (7)

This safety label is located at the rear of the machine, in the hose reel cabinet.



⚠ WARNING

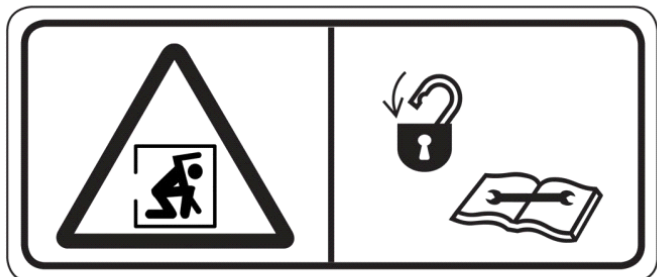
Hydraulic motor and supply lines contain oil under high pressure. Improper removal and repair procedures could cause severe injury. To remove or repair, instructions in the Maintenance Manual must be followed.

SECTION 1

Definitions and Abbreviations

CONFINED SPACE (8)

This safety label is located near the fuel tank access covers and top vent cover.



WARNING

Do not enter confined spaces without following established site specific procedures. Failure to follow proper safety procedures will result in serious injury or death.

ABBREVIATIONS

cc – Cubic Centimeters

cSt – centistokes

CCW – Counter Clockwise

CW - Clockwise

fl. oz. – Fluid Ounce

FT - Feet

FPM – Feet Per Minute

GPM – Gallons Per Minute

IN/SQ FT – Inches per Square Feet

KM-H – Kilometers Per Hour

Kg – kilograms

Kpa - Kilopascals

l – liters

lpm – Liters per minute

LT – Left as viewed from the operator's position
facing forward

m - meters

MPH – Miles Per Hour

MFT - Mega Fuel Tank

Nm – Newton meters of torque

psi - pounds per square inch

psig - pounds per square inch gage

RPM – Revolutions Per Minute

RT – Right as viewed from the operator's position
facing forward

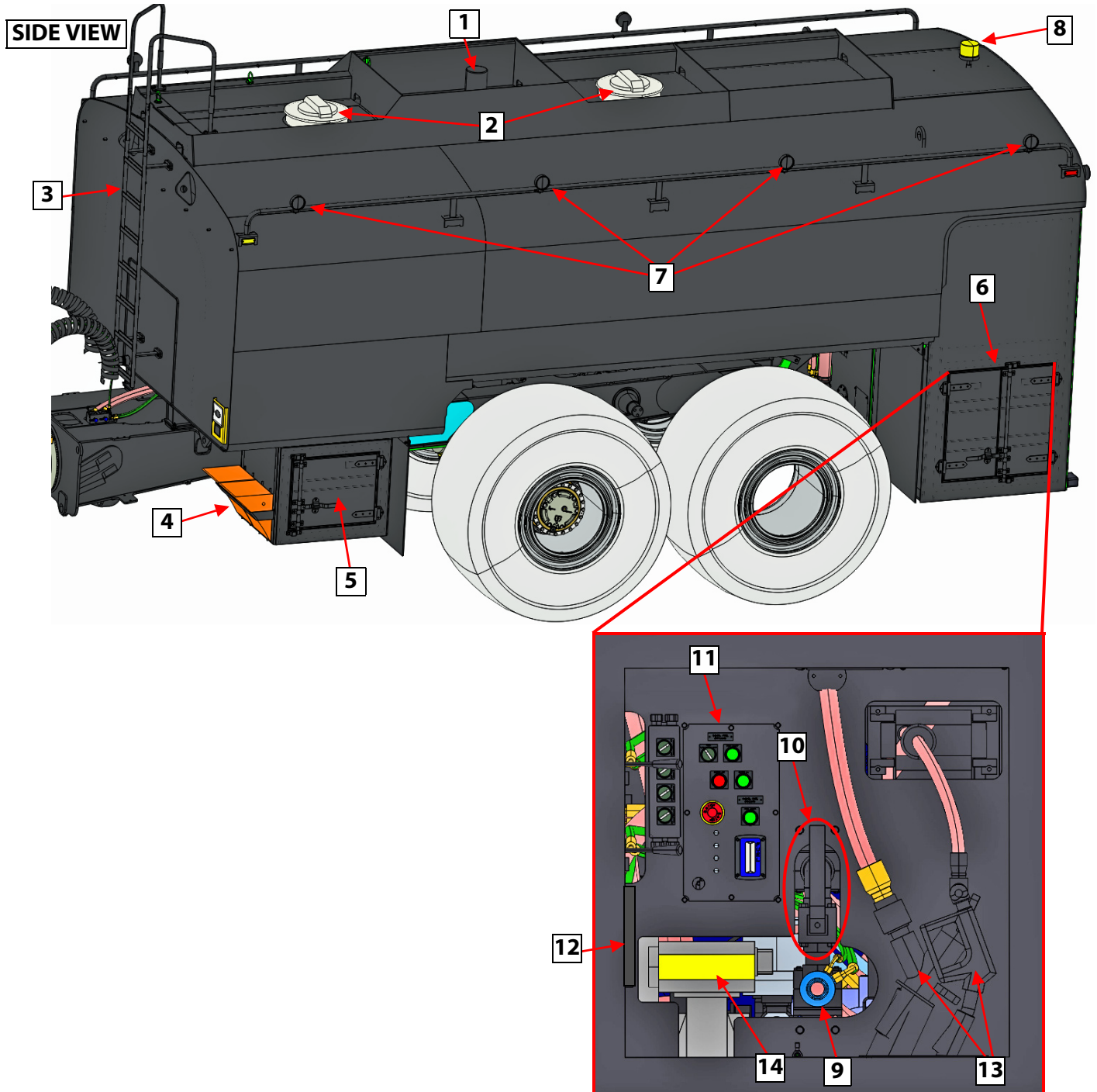
SQ FT – Square Feet

VDC – Volts, Direct Current

SECTION 1

Definitions and Abbreviations

MFT GENERAL OVERVIEW (TYPICAL)



- 1** Desiccant Vacuum Filter
- 2** Access Covers
- 3** Ladder
- 4** Wheel Chocks
- 5** Storage Compartment
- 6** Fuel On-loading & Dispensing Compartment
- 7** Work Lights

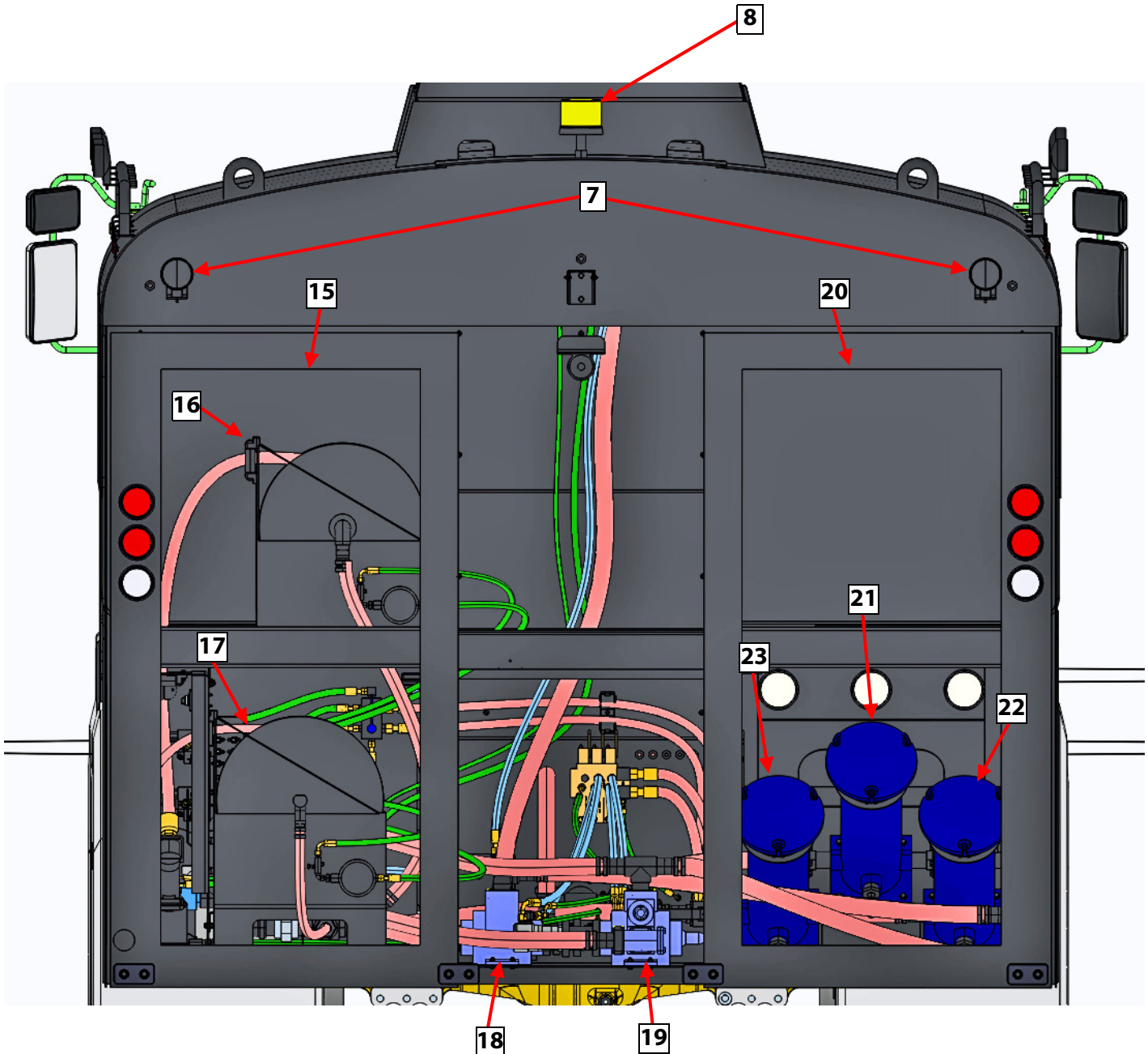
- 8** Beacon
- 9** On-load Receiver
- 10** On-load Valve
- 11** Operator Controls Panel
- 12** Grounding Reel
- 13** Fuel Dispensing Nozzles
- 14** Fuel Meter Register

SECTION 1

Definitions and Abbreviations

MFT GENERAL OVERVIEW (TYPICAL)

REAR VIEW



- | | | | |
|-----------|---------------------|-----------|---------------------------|
| 7 | Work Lights | 19 | On-loading Pump |
| 8 | Beacon | 20 | Fuel Filter Cabinet |
| 15 | Hose Reel Cabinet | 21 | On-Loading Fuel Filter |
| 16 | High Flow Hose Reel | 22 | Dispensing Fuel Filter #1 |
| 17 | Low Flow Hose Reel | 23 | Dispensing Fuel Filter #2 |
| 18 | Dispensing Pump | | |

SECTION 2

Scheduled Maintenance Inspections

Contents

Description	2-1	Fuel Nozzles	2-2
MFT Structure	2-1	Fuel Meter	2-3
Control System	2-2	Fuel Pumps and Filters	2-3

DESCRIPTION

This section establishes scheduled maintenance inspections of the installed MFT at the designated frequencies. Performing these inspections will identify potential system discrepancies and allow preventative maintenance to be performed before a component or system is rendered totally inoperative.

Users may consider increasing the frequency of scheduled inspections for severe duty applications and harsh environmental conditions.

		FREQUENCY				
STEP	MFT STRUCTURE	250 HRS (BI-WEEKLY)	500 HRS (MONTHLY)	1,000 HRS (QUARTERLY)	2,500 HRS (SEMI-ANNUALLY)	5,000 HRS (ANNUALLY)
1	Visually inspect tank exterior for damage and evidence of leaks. Repair as required.	X				
2	Check all lights (turn signal, brake, strobe, back-up, parking, clearance, and work) for proper operation. Replace lights as required.	X				
3	Check body pad and guides for cracks, security and damage. Repair or replace as required.				X	
4	Check filler port for security and damage. Repair as required. Inspect the desiccant vent and the breather filter for clogging.	X				
5	Hose Reel Cabinet, Storage Cabinets, doors, and hardware for security and damage. Check door seals for wear and tearing. Replace if required.		X			
6	(If Equipped) Oil Cooler, hosing, and cabling for damage and security.		X			

SECTION 2

Scheduled Maintenance Inspections

		FREQUENCY				
STEP	CONTROL SYSTEM	250 HRS (BI-WEEKLY)	500 HRS (MONTHLY)	1,000 HRS (QUARTERLY)	2,500 HRS (SEMI-ANNUALLY)	5,000 HRS (ANNUALLY)
1	Check all electrical cables for security and damage.	X				
2	Disconnect, clean and coat Deutsch connector junctions with Dielectric grease					X
3	Check all hydraulic solenoids and hosing for security and leaks.	X				
4	Check all operator control functions for proper operation. Repair and replace control components as required.		X			
5	Check hose reels for security, mounting, and leaks.	X				
6	Unreel the entire length of hoses, pressurize hoses and check hoses for security, wear, and leaks.			X		
7	Unreel grounding wire and check for condition & security.			X		

		FREQUENCY				
STEP	FUEL NOZZLES	250 HRS (BI-WEEKLY)	500 HRS (MONTHLY)	1,000 HRS (QUARTERLY)	2,500 HRS (SEMI-ANNUALLY)	5,000 HRS (ANNUALLY)
1	Inspect the nozzle spouts for wear, deformation, and leakage. Check for broken trigger springs. Replace as required.	X				
2	Verify that the splash-fill nozzle has a minimum flow rate of 5 GPM. Verify that the Wiggins fast-fill nozzle has a minimum flow rate of 25 GPM. Perform shut-off test.			X		
3	Verify that the nozzle spout retaining screws are present and tight. Tighten if necessary.	X				
4	Lubricate the nozzle with a few drops of oil where the main valve stem extends through the nozzle body. Do not use grease.		X			
5	Check vapor reservoir to ensure that its quantity is not above the sight gauge level. If so, drain as required.		X			

SECTION 2

Scheduled Maintenance Inspections

		FREQUENCY				
STEP	FUEL METER	250 HRS (BI-WEEKLY)	500 HRS (MONTHLY)	1,000 HRS (QUARTERLY)	2,500 HRS (SEMI-ANNUALLY)	5,000 HRS (ANNUALLY)
1	Remove and thoroughly flush the fuel meter with a compatible liquid. To flush the meter, remove the drain plug on the front and rear covers and flush the product from the front and rear covers. Re-fill the meter immediately with a compatible liquid or oil misting.				X	
2	Ensure that all fasteners and bolts are torqued to the appropriate torque. Inspect all fasteners to ensure that they are not bent, rusted, or have pulled threads.		X			

		FREQUENCY				
STEP	FUEL PUMPS AND FILTERS	250 HRS (BI-WEEKLY)	500 HRS (MONTHLY)	1,000 HRS (QUARTERLY)	2,500 HRS (SEMI-ANNUALLY)	5,000 HRS (ANNUALLY)
1	Lubricate the ball bearings and the hydraulic motor couplings (if equipped) every three months at minimum as follows: A. Remove the grease relief fittings from the bearing covers or hydraulic motor adapter B. Apply grease with a hand gun until grease begins to escape from the grease relief fitting port C. Replace the grease relief fittings. DO NOT over-grease pump bearings. Over-greasing will cause seal failure, and under-greasing will cause bearing failure. If auto-lubrication systems are used, the system must be adjusted to match the pump requirements.			X		
2	Inspect and clean pump strainers to avoid pump starvation.		X			
3	Disassemble the pump as detailed in the MFT Maintenance Manual. Clean pump shaft thoroughly and inspect for nicks and burrs. Inspect all components for damage and wear. Replace as required.					X
	Inspect fuel on-loading and dispensing filter gauges while flowing fuel. If the gauges read greater than 40 PSI, replace the filters.	X				

SECTION 2
Scheduled Maintenance Inspections

SECTION 3

Recommended Support Parts

Contents

Description	3-1	Hose Reel Systems.....	3-2
Structure.....	3-1	Fuel Pump System	3-2
Control System Parts Group	3-1		

DESCRIPTION

This section contains a listing of recommended support parts that should be available in the supply warehouse. The tables are categorized by specific sub-system of the MFT. Ensure MFT serial numbers and actual component part numbers are checked before ordering any parts. Once parts are issued from warehouse stock ensure depleted quantities are replenished to keep the recommended support parts package at 100%.

Several support parts are designated as a "**Quick Change Component**" (**QCC**) and should be used to minimize repair time of an operational MFT. Broken assemblies can be repaired by maintenance repair facilities and later returned to the supply warehouse as a serviceable part.

A. STRUCTURE		
PART DESCRIPTION	PART NO.	QTY
1. Exterior Work Lights	305305	2
2. Light, LED Auxiliary, 750 Lumens	307532	2
3. Light, LED Clearance, Red (Small)	306116	2
4. Light, LED Clearance, Yellow (Small)	306117	2
5. Light, LED Brake/Tail, Red	305049	1
6. Pigtail, LED Brake/Tail Light	305377	1
7. Grommet, LED Brake/Tail Light	305376	1
8. Beacon, Amber	307296	1
9. Unloading Door Assembly w/Hardware	049661SPARE	1
10. Complete Manhole Cover **QCC	306833	2
11. Grounding Reel **QCC	306828	1

B. CONTROL SYSTEM PARTS GROUP		
PART DESCRIPTION	PART NO.	QTY
1. Complete Control Valve Assembly	307459	1
2. Hose Reel (Manual Hydraulic Valve)	306765	1
3. Fuel Level Indicator (Large)	049881	1
4. Fuel Level Indicator (Small)	305967	1
5. Fuel Level Sensor	303822	2
6. Jet Sensor	307618	1

SECTION 3

Recommended Support Parts

C. HOSE REEL SYSTEMS		
PART DESCRIPTION	PART NO.	QTY
1. Hose Reel, 1 inch, Complete Assembly **QCC	307395	1
2. Hose Reel, 1.5 inch, Complete Assembly **QCC	307392	1
3. Complete 1 inch Fuel Hose w/Ends	049703-1	1
4. Complete 1.5 inch Fuel Hose w/Ends	049704-1	1
5. Nozzle, 2" Wiggins **QCC	301067	1
6. Receiver, On-load	307620	1
7. Nozzle, 1" Splash Fill **QCC	306907	1
8. Swivel, 1 inch, Splash Fill Nozzle	306937	1

D. FUEL PUMP SYSTEM		
PART DESCRIPTION	PART NO.	QTY
1. Drive Motor, Fuel Pump	307118	1
2. Pump, Fuel	306824	1
3. Coupling, Hydraulic Motor, (Fuel Pump)	306825	2
4. Inlet Screen/Strainer, Fuel Pump	307462	2
5. Gasket, Fuel Pump Strainer	307461	2
6. Safety Valve, Fuel	304513	1
7. Valve, 3-way	307430	1
8. Flow Sensor, On-loading, Assembly	049948	1

E. FUEL FILTRATION SYSTEM		
PART DESCRIPTION	PART NO.	QTY
1. Filter, 30 Micron	307429	24
2. Filter, 10 Micron (if equipped)	307244	8
3. Desiccant Vacuum Filter	307463	8

If your system is not covered in this manual or are having difficulties locating the necessary components please contact MEGA Corp. Product Support Group at:

US Toll Free: 1-800-345-8889 or

Direct: 1-505-345-2661 or visit our website at www.megacorpinc.com for more detailed contact information.