



**MLT45-CAT745-INSP/RSP-5**

*SPECIALTY HAULAGE SOLUTIONS FOR CONSTRUCTION AND MINING*

## **SCHEDULED/SPECIAL INSPECTIONS & RECOMMENDED SUPPORT PARTS**



**MEGA CORP.®**

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# SECTION 1

## Definitions and Abbreviations

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### MANUAL USAGE

This technical manual only contains information required to support and service the MLT. 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](http://www.megacorpinc.com) for more detailed contact information.

Descriptions of the hazards are reviewed in this section. All personnel working on or operating the machine 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)

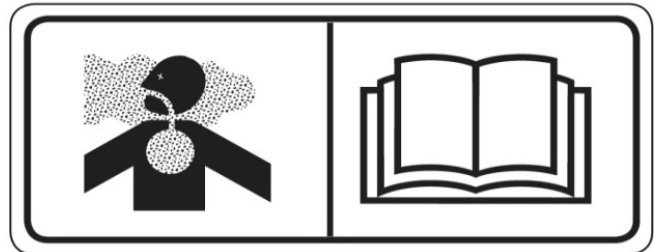
##### DO NOT SMOKE WITHIN 15 METERS



**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 enclosure and at large access covers.

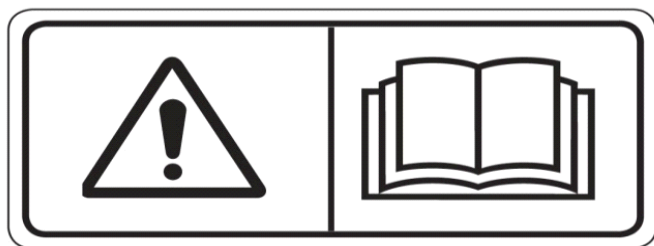


##### WARNING

**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 product-dispensing area at the rear of the unit.



##### WARNING

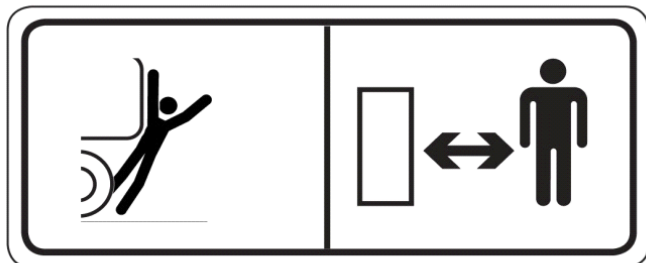
**Do not operate the machine unless you have read and understand the instructions and warnings in the Operator and Maintenance Manual. Failure to follow instructions or heed the warnings could result in serious injury or death.**



## SECTION 1

### Definitions and Abbreviations

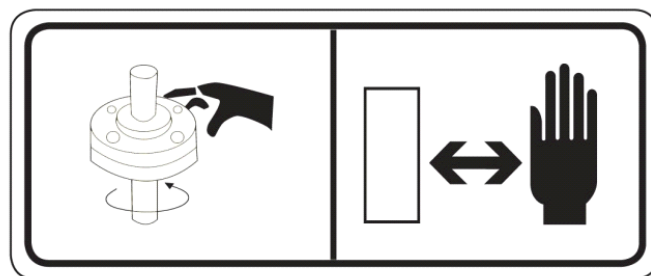
#### BACKING RUNOVER HAZARD (4)



#### **⚠ 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.

#### ROTATING SHAFT (6)



#### **⚠ WARNING**

Do not place your hand or tools in pump or reel housings while rotating and/or pressure is 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.

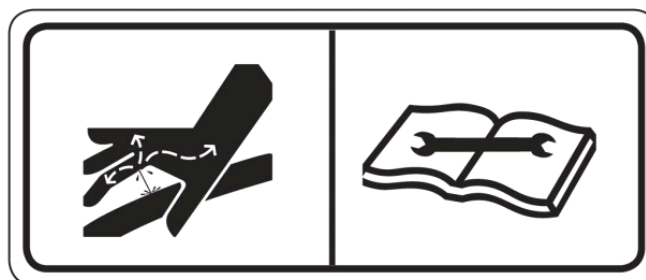
#### FALL HAZARD (5)



#### **⚠ WARNING**

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

#### HIGH PRESSURE MOTOR (7)



#### **⚠ WARNING**

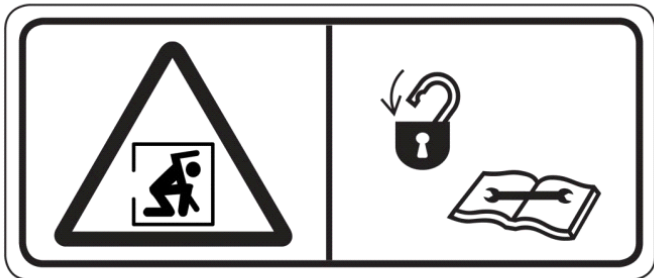
Hydraulic motor and supply lines contain oil under high pressure. Improper removal and repair procedures could cause severe injury. To remove or repair, instructions in the Maintenance Manual must be followed.

## 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.**

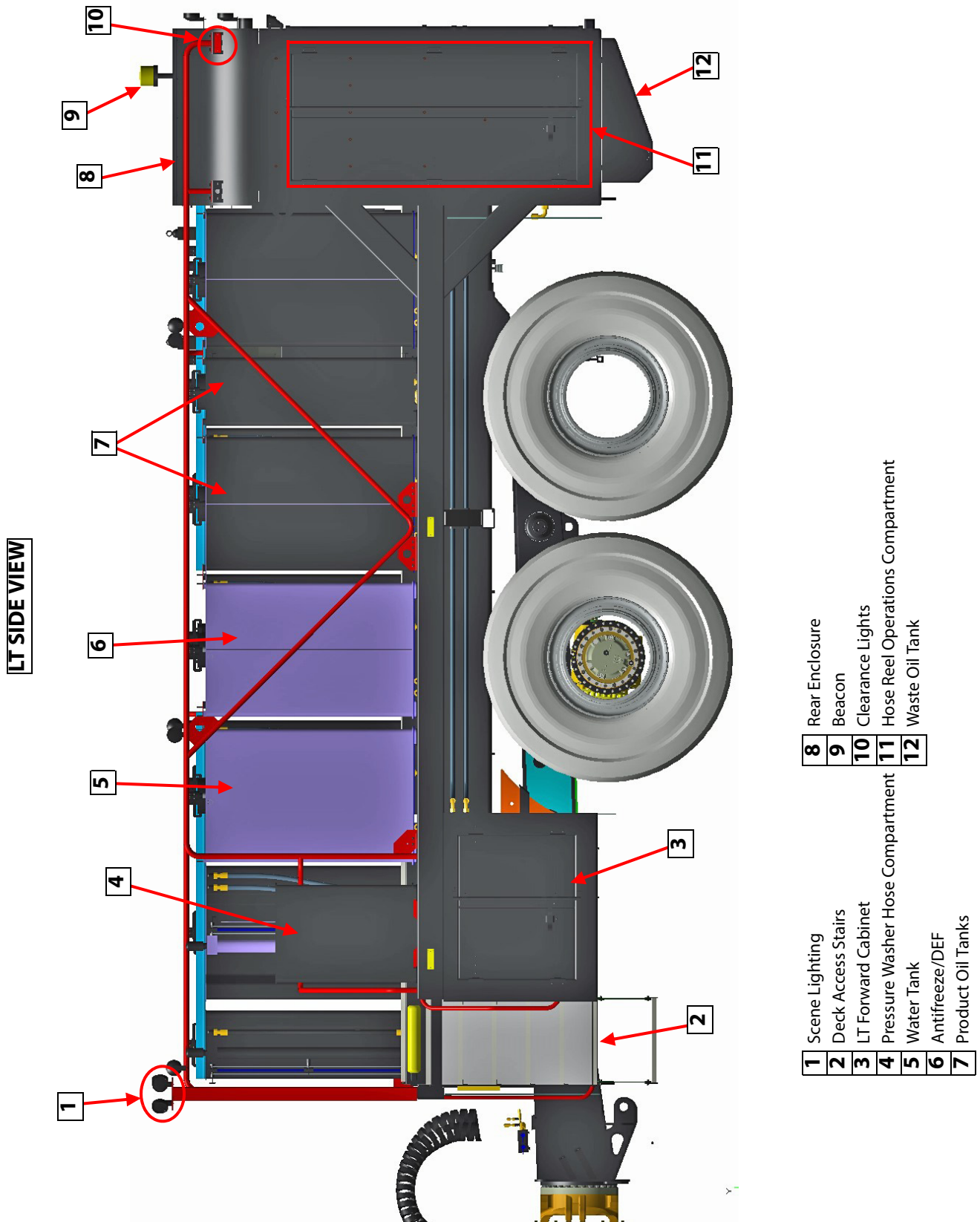
#### ABBREVIATIONS

AC – Alternating Current  
cc – Cubic Centimeters  
cSt – centistokes  
CCW – Counter Clockwise  
CW – Clockwise  
fl. oz. – Fluid Ounce  
FT – Feet  
ft-lbs – Foot-pounds of torque  
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  
MLT – Mega Fuel & Lube  
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

### MLT40 GENERAL OVERVIEW (TYPICAL)

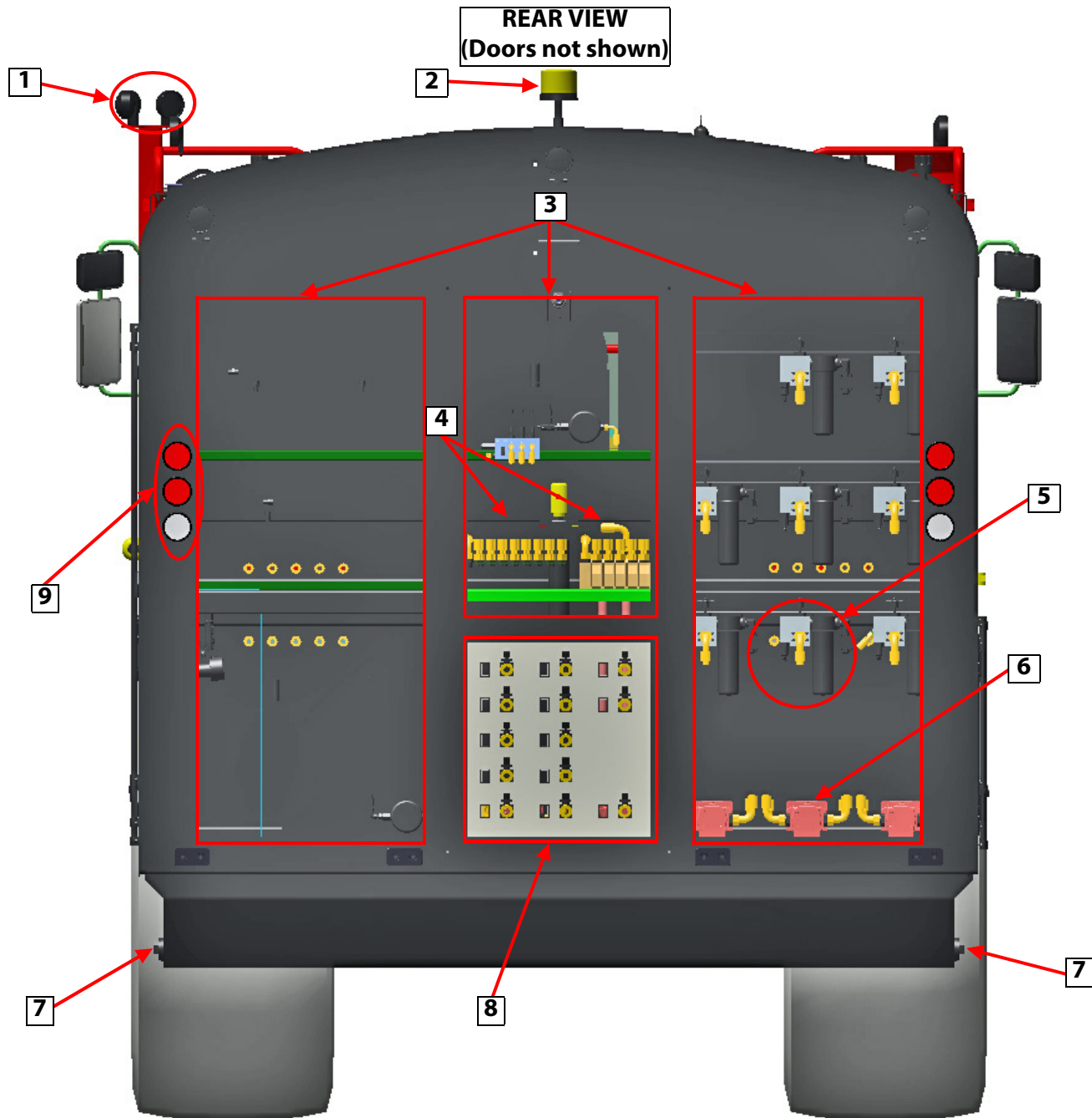




## SECTION 1

### Definitions and Abbreviations

#### MLT40 GENERAL OVERVIEW (TYPICAL)

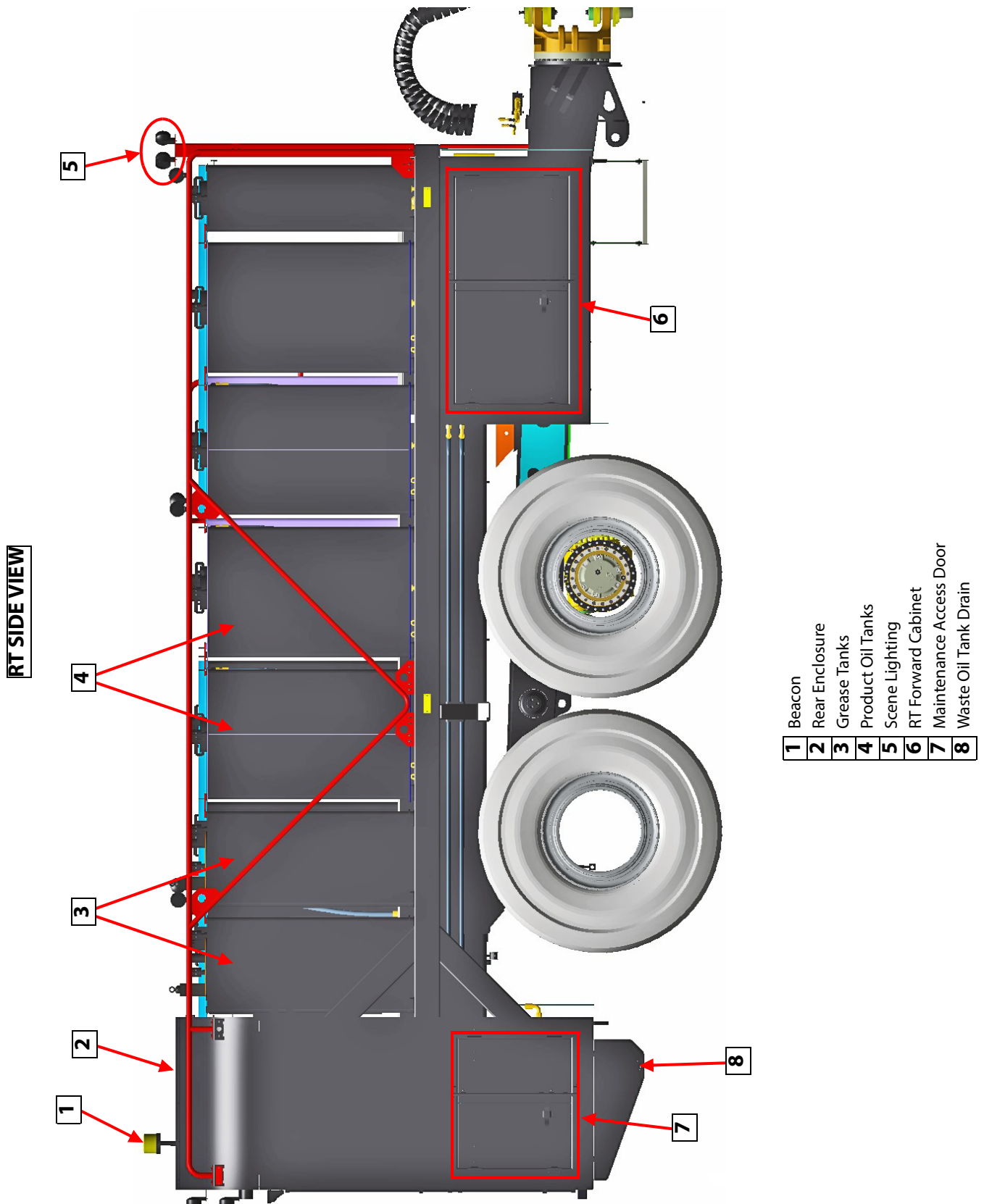


- |   |   |
|---|---|
| 1 | Scene Lighting                            |
| 2 | Beacon                                    |
| 3 | Maintenance Access Doors                  |
| 4 | Hydraulic Control Valves                  |
| 5 | Product Filters & Relief Valve Assemblies |
| 6 | Product Pump and Motor Assemblies         |
| 7 | Waste Oil Tank Drain                      |
| 8 | Central Service Station                   |
| 9 | Stop/Turn/Backup Tail Lights              |

## SECTION 1

### Definitions and Abbreviations

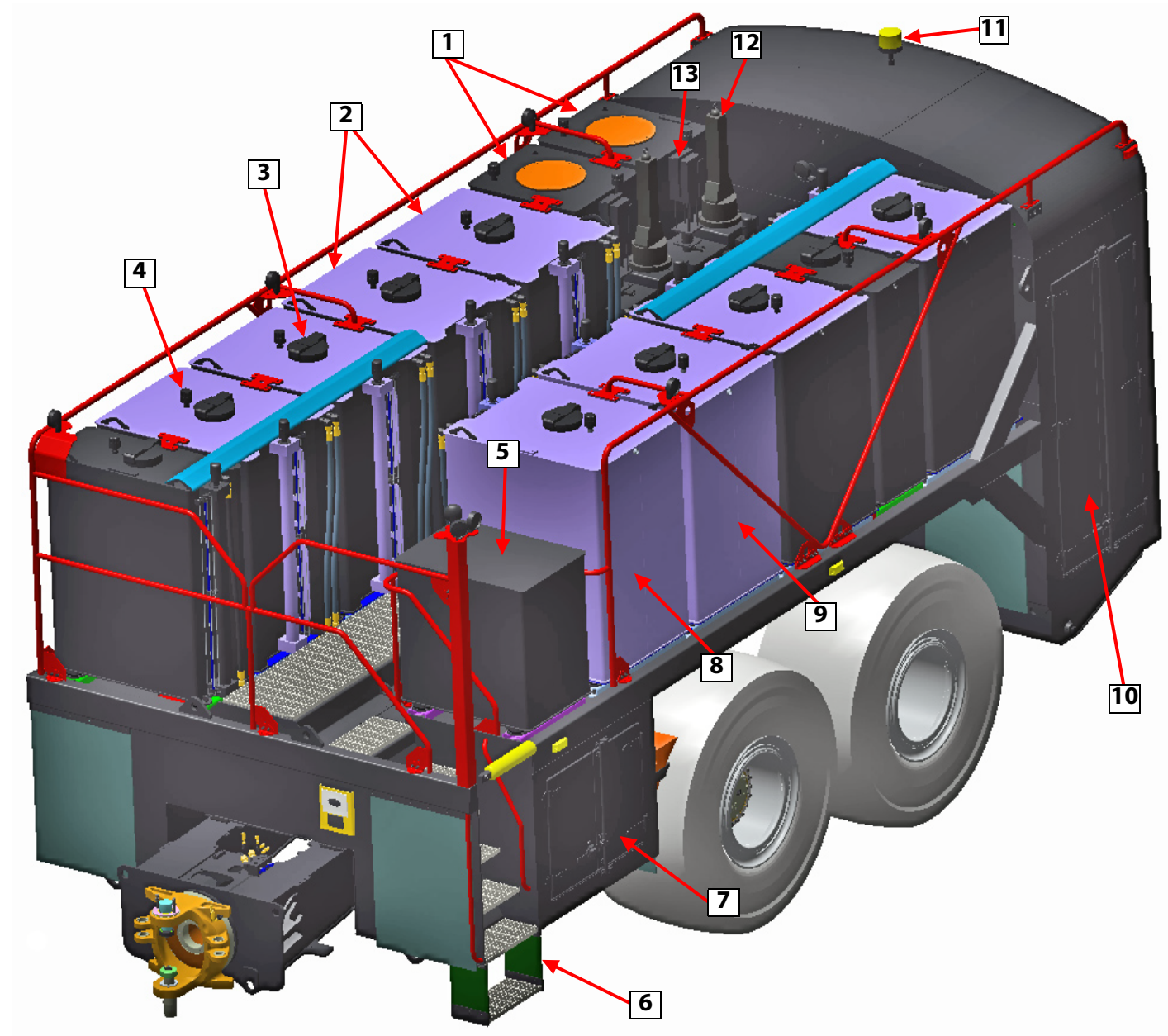
#### MLT40 GENERAL OVERVIEW (TYPICAL)



## SECTION 1

### Definitions and Abbreviations

#### MLT40 GENERAL OVERVIEW (TYPICAL)



- 1** Grease Tanks
- 2** Product Tanks
- 3** Product Tank Access Cover
- 4** Product Tank Breather
- 5** Pressure Washer Hose Reel Compartment
- 6** Deck Access Stairs

- 7** LT Forward Cabinet
- 8** Water Tank
- 9** Antifreeze/DEF Tank
- 10** Hose Reel Operation Compartment
- 11** Beacon
- 12** HVLV Grease Pump
- 13** HPLV Grease Pump

## SECTION 2

### Scheduled Maintenance Inspections

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#### DESCRIPTION

This section establishes scheduled maintenance inspections of the installed MLT 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	MLT 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			
7	Check upper and lower decks for obvious leaks. All harnesses and hosing for damage, security, and leaks.		X			
8	Inspect the tank and visual sight gauges for damage, security of mounting, and leaks. Check hosing, fittings, electrical harnesses, access covers, and breather filters for any damage and leaks.		X			
9	The drive line support bearing on the underside of the MLT frame must be manually greased.			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	For the spring rewind hose reels, lubricate the air motor with a few drops of a detergent SAE #10 automotive oil directed into one of the air motor ports every 3-4 months for normal operation. Lubricate more frequently if hose reel is used in severe conditions or used with high frequency.			X		
8	Inspect the cab control box, mounting, and electrical harness for damage and security.		X			
9	Inspect all compartment lighting and controls for damage and security.		X			

		FREQUENCY				
STEP	PRODUCT DISPENSING GUNS	250 HRS (BI-WEEKLY)	500 HRS (MONTHLY)	1,000 HRS (QUARTERLY)	2,500 HRS (SEMI-ANNUALLY)	5,000 HRS (ANNUALLY)
1	Check for damage, security, and leaks. Ensure that the hose "stop ball" is positioned properly and is secured.		X			
2	(Electrical Digital Nozzles) Replace battery.					X



## SECTION 2

### Scheduled Maintenance Inspections

		FREQUENCY				
STEP	PRODUCT DISPENSING PUMPS AND FILTERS	250 HRS (BI-WEEKLY)	500 HRS (MONTHLY)	1,000 HRS (QUARTERLY)	2,500 HRS (SEMI-ANNUALLY)	5,000 HRS (ANNUALLY)
1	Inspect drive and pump assemblies for damage, security, and leaks. Inspect hose connections and couplings for security and leaks.		X			
2	Check the filler assemblies and the solenoid banks for damage, security, and leaks. Inspect all harnesses for obvious damage and chaffing.	X				
3	Inspect the diaphragm pump for damage, security, and leaks		X			

		FREQUENCY				
STEP	CENTRAL SERVICE STATION	250 HRS (BI-WEEKLY)	500 HRS (MONTHLY)	1,000 HRS (QUARTERLY)	2,500 HRS (SEMI-ANNUALLY)	5,000 HRS (ANNUALLY)
1	Inspect all ball valve and couplings for damage, security, and leaks.		X			
2	Check level gauges, indicator lights, and compartment lights for damage and security.		X			

		FREQUENCY				
STEP	AIR COMPRESSOR	BI-WEEKLY (250 HRS)	MONTHLY (500 HRS)	QUARTERLY (1000 HRS)	SEMI-ANNUAL (2500 HRS)	ANNUALLY (5000 HRS)
1	Check oil level. Oil level must be at the top of the red circle of sight-glass. The minimum oil level is at the lower part of the red circle.	X				
2	Drain condensate from air receiver or pulsation damper.	X				
2	Test the safety valve using the procedures outlined in the MLT Maintenance Manual.			X		
3	Inspect air filter for damage and dirt. Clean the filter chamber and cover with a clean damp cloth. Replace yearly or as required.			X		
4	Change blow-off silencer, if equipped. Change oil.		X			
5	Replace check valve or unloader. Replace valve discs.					X

## SECTION 2

### Scheduled Maintenance Inspections

		FREQUENCY				
STEP	HEATING SYSTEM	BI-WEEKLY (250 HRS)	MONTHLY (500 HRS)	QUARTERLY (1000 HRS)	SEMI-ANNUAL (2500 HRS)	ANNUALLY (5000 HRS)
1	Check exterior heating packages and hosing for damage, security, and leaks.		X			
2	Remove the heating unit cover. Inspect all components, wiring, and hosing for damage, security, and chaffing.			X		
3	Inspect product tank heating loops and associated hosing for damage and leaks.		X			
4	Inspect glycol expansion tank for damage, security, leaks, and servicing. Ensure system is purged of air.		X			
5	Inspect compartment heat exchangers and heating elements for security and leaks. Check thermostats for damage and security.		X			

## SECTION 3

### Recommended Support Parts

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#### 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 MLT. Ensure MLT 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 MLT. Broken assemblies can be repaired by maintenance repair facilities and later returned to the supply warehouse as a serviceable part.

A. CONTROL SYSTEM PARTS GROUP		
PART DESCRIPTION	PART NO.	QTY
1. Pressure Sensor (air & product dispensing)		1
2. 5 Station PVG w/Adapters	049779	1
3. 8 Station PVG w/Adapters	049780	1
4. Manifold, Solenoid Valve, Air, 1/2 NPT, 24 VDC	050341	1
5. Valve, 4 way, 1 inch NPT (Waste Oil)	307465	1
6. Dirt Alarm Kit	307984	2
7. Base, Relay, Distribution Box	301847	1
8. Relay, 24 VDC, 10 Amp	307367	2
9. Solenoid Driver	305078	2
10. Power Connector, 60 Amp, 24 VDC	307367	1
11. Push Button Circuit Breaker, 10 Amp	307533	2
12. Push Button Circuit Breaker, 15 Amp	307534	1
13. Push Button Circuit Breaker, 30 Amp	307833	1
14. Shut-off Valve, On-loading		1

B. ON-LOADING SERVICE CENTER PARTS GROUP		
PART DESCRIPTION	PART NO.	QTY
1. Coil, 24 VDC, H16	307233	2
2. Valve, Solenoid, 2W, Poppet	307246	2
3. Display, Product Tank Level, Small	049426	2
4. Display, Level #2, 1.13" x 1.88"	307253	2
5. Cover, 20 mil, Small	307266	4

## SECTION 3

### Recommended Support Parts

<b>C. LIGHTS PARTS GROUP</b>		
<b>PART DESCRIPTION</b>	<b>PART NO.</b>	<b>QTY</b>
1. Exterior Work Lights	305305	4
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. Interior Work Lights	307532	4

<b>D. OPERATOR CONTROLS PARTS GROUP</b>		
<b>PART DESCRIPTION</b>	<b>PART NO.</b>	<b>QTY</b>
1. Switch, 3 Position, Reel	307371	2
2. Switch, Push Button, Green	307542	4
3. Switch, Push Button, Red	307738	2
4. Switch, Lights	307543	4
5. Switch, Emergency Shut-Off	307373	2
6. Display, Product Level, Small	050481	3
7. Contact Block, Normal Open	307544	4
8. Contact Block, Normal Closed	307545	2

<b>E. PRODUCT PUMPS PARTS GROUP</b>		
<b>PART DESCRIPTION</b>	<b>PART NO.</b>	<b>QTY</b>
1. Pump, Product Dispensing, 20 GPM	307236	1
2. Pump, Diaphragm, 1 inch	307238	1
3. Relief Valve, Product Pump <b>**QCC</b>	049308	1
4. Pressure Transmitter, Product Pump Control	306915	2
5. Relief Valve, 350 PSI, Product Pump Control	307225	1
6. Solenoid Valve, Product Pump Control	307226	2
7. Coil, Product Pump Control	307227	2

<b>F. FILTRATION PARTS GROUP</b>		
<b>PART DESCRIPTION</b>	<b>PART NO.</b>	<b>QTY</b>
1. Filter, Cartridge, 25 Micron Element, Pop-up Indicator Assembly	307234	1
2. Filter Element, 25 Micron		10
3. O-ring, Filter Base		3

## SECTION 3

### Recommended Support Parts

#### G. GREASE PUMPS PARTS GROUP

PART DESCRIPTION	PART NO.	QTY
1. Gasket, Grease Tank Cover	049820-07	2
2. Air Motor, HPLV	307328	1
3. Grease Pump, HPLV	307241	1
4. Grease Pump, HVLP	307476	1
5. O-ring, HPLV Grease Pump Seal to Tank	307365	2
6. Valve, Cartridge, HVSP-10, Normal Open	307467	1

#### H. PRESSURE WASHER PARTS GROUP

PART DESCRIPTION	PART NO.	QTY
1. 48 inch Lance, Molded Grip	307488	2
2. Trigger, Gun (without Lance)	307487	2
3. Nozzle, 4 Pack	307492	2
4. High Pressure Pump, Hydraulic Driven	307482	1
5. Hose, 50 ft, 3/8 inch Diameter	307484	1

#### I. PRODUCT TANKS

PART DESCRIPTION	PART NO.	QTY
1. Switch, Product Level	307250	2
2. Sight Glass, Product Level	307247	2
3. Breather, Product Tank	307269	6
4. Rubber Cushion, Product Tank	049420-01	4
5. Vent, Fill, 10 inch, CST **QCC	307270	
6. Manhole, 20 inch, Vented **QCC	306833	
7. Filter, Tank Vent	307249	15
8. Rubber Gasket, Grease Tank	049420-03	1
9. Rubber Cushion, Grease Tank	049420-01	4
10. Gasket, Cover Plate, Grease Pump	049423	1
11. Pressure Differential Gauge	307505	1
12. Tank Bushing, Rubber	049878	8

#### J. AIR COMPRESSOR PARTS GROUP

PART DESCRIPTION	PART NO.	QTY
1. Air Compressor, Complete	306820	1
2. Regulator, Air	306822	1
3. Motor, Hydraulic Air Compressor **QCC	307869	1
4. Bracket, Air Compressor Motor	048284	2
5. Adapter, Hydraulic Air Compressor	306854	1
6. Solenoid PVEH, 24 VDC, Deutsch	307115	1
7. Vibration Isolator	306971	4
8. Coupling, Drive, M300M3510	306855	1
9. Coupling, Drive, M300M1316C	306856	1
10. Insert 370N	306857	2



## SECTION 3

### Recommended Support Parts

<b>K. PNEUMATIC SOLENOID CONTROL ASSEMBLY</b>		
<b>PART DESCRIPTION</b>	<b>PART NO.</b>	<b>QTY</b>
1. Air Filter, 3/4 inch NPT, Gauge, Auto Drain	307438	1
2. Solenoid Valve, Air, 1/2 inch NPT, 24 VDC	307439	1
3. Pneumatic Regulator, 1/2 inch NPT	307760	1
4. Pneumatic Regulator, 3/4 inch NPT	307761	1
5. Pneumatic Regulator, 3/4 inch PT	307765	1
6. Gauge, 2" x 1/4" NPT, 1-160 PSI	307766	1
7. Muffler, 1/2 inch	307441	2

<b>L. HOSE REEL SYSTEMS</b>		
<b>PART DESCRIPTION</b>	<b>PART NO.</b>	<b>QTY</b>
8. Hose Reel, Waste, 1 inch, Complete Assembly <b>**QCC</b>	307395	1
9. Hose Reel, Air/Low Pressure Oil, 1/2 inch <b>**QCC</b>	307919	1
10. Hose Reel (Manual Hydraulic Valve) <b>**QCC</b>	306765	1
11. Hose Reel, Spring Rewind	307418	1
12. Manifold, Hose Reel Assembly	050362	1
13. Receiver, On-load	307620	1
14. Pressure Reducing Valve, Hydraulic, PRV12-10 <b>**QCC</b>	307106	
15. Valve, SV10-34-05	307228	1
16. Coil, R16-24D-20W-02	307229	2
17. Valve, SV10-24-02	307230	1

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](http://www.megacorpinc.com) for more detailed contact information.