

# **Operator Manual**

**Fuel Lube Truck Off Road Articulated** 



Curry Supply Co., 1477 Degol Industrial Drive, Hollidaysburg, PA 16648

YOUR JOBS. OUR TRUCKS.



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# **SECTION 1**

# **Introduction & Safety Messages**

### **CONTACT US**

**Curry Supply Company** 

1477 DeGol Industrial Drive, Hollidaysburg, PA 16648

service@currysupply.com CurrySupply.com

Parts 800.567.5127 Warranty Service 800.345.2829

### **MANUAL USAGE**

This Operators Manual contains information to safely operate more than (1) configuration of "Curry Supply Off-Road Articulated Lube Trucks". The parts shown may not reflect the exact configuration on your truck. "Custom" style trucks may have parts not listed. If your system is not covered in this manual, please contact Curry Supply Company support at 800-345-2829 or service@currysupply.com.

All personnel working on or operating the machine must become familiar with the following safety messages.

Due to the nature of these processes, ensure that all safety information, warnings, and instructions are read and understood before any operation or maintenance procedures are performed.

This manual does not supersede any local, state, or federal laws.

### **SAFETY MESSAGES**

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

### **WARNING**

**OPERATING PROCEDURES AND TECHNIQUES** COULD RESULT IN PERSONAL INJURY OR LOSS OF LIFE IF NOT FOLLOWED CORRECTLY

#### CAUTION

OPERATING PROCEDURES AND TECHNIQUES WHICH COULD RESULT IN DAMAGE TO EQUIPMENT IF NOT FOLLOWED CORRECTLY.

### **NOTE**

OPERATING PROCEDURES AND TECHNIQUES THAT ARE CONSIDERED ESSENTIAL TO EMPHASIZE.





#### **WARNING**

IMPROPER USE OF EQUIPMENT
COULD CAUSE SERIOUS INJURY OR
DEATH. PLEASE READ AND
UNDERSTAND ALL INSTRUCTIONS.



### **WARNING**

WHEN OPERATING OR WORKING
ON THE UNIT, KEEP HANDS AND
BODY PARTS CLEAR OF PINCH
POINTS.



### **WARNING**

CONTACT WITH LIVE
ELECTRICAL CIRCUITS COULD
DAMAGE EQUIPMENT OR CAUSE
INJURY.



#### WARNING

MOVING PARTS CAN CRUSH AND CUT. KEEP HANDS, FEET, HAIR, AND LOOSE CLOTHING AWAY FROM MOVING PARTS.



### **CAUTION**

ADVERSE WEATHER CONDITIONS
CAN CAUSE EQUIPMENT DAMAGE.
WHENEVER POSSIBLE, PERFORM
MAINTENANCE INDOORS.



#### WARNING

ALWAYS WEAR THE PROPER PPE WHILE OPERATING THE UNIT.



#### WARNING

DO NOT OPERATE THE UNIT WHILE INTOXICATED OR EXTREMELY EXHAUSTED.



#### WARNING

DO NOT WALK ON TOP OF THE VEHICLE. FALLING FROM VEHICLE CAN RESULT IN SERIOUS INJURY.



### CAUTION

DRAIN ALL WATER DAILY DURING FREEZING TEMPERATURES. FREEZING WATER CAN RESULT IN DAMAGE TO EQUIPMENT.



### WARNING

THE VEHICLE IS EQUIPPED WITH A BACK-UP ALARM. ALARM MUST SOUND WHEN OPERATING THIS VEHICLE IN REVERSE.



### WARNING

ALWAYS WEAR YOUR SAFETY
BELT WHILE DRIVING THE VEHICLE.
IF VEHICLE TIPS, STAY BUCKLED
AND INSIDE OF CAB AREA.





# **SECTION 2**

# **System Descriptions**

### **SIDE VIEW OF TRUCK**



**REAR VIEW OF TRUCK** 



FRONT VIEW OF TRUCK



The truck shown in the pictures has a Curry Supply Company body on a Volvo chassis. This Operator's Manual provides information on how to safely operate more than one version of the "Curry Supply Company Fuel Lube Off Road Articulated" truck. The truck shown may not exactly match your truck's configuration. "Custom" trucks may have different parts that aren't listed here. If your system isn't covered in this manual, please contact Curry Supply Co. Support at 800–345–2829 or service@currysupply.com.

# **EQUIPMENT**

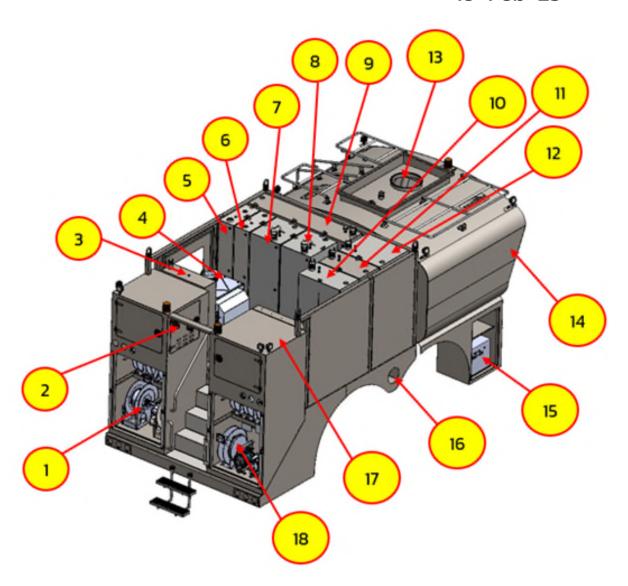
Trucks are manufactured with various equipment combinations. Find more information about these components by clicking the links in the following table. If unsuccessful finding the information needed, call Curry Supply Company at 1-800-345-2829.





| Equipment                   | Manufacturer                     | Web Link                      |  |
|-----------------------------|----------------------------------|-------------------------------|--|
| Truck                       | Caterpillar                      | 745C Articulated Truck        |  |
|                             | Volvo                            | A25D & A30D Articulated Truck |  |
| Remote Engine               | Motorenfabrik Hatz GmbH & Co. KG | 4H5OTIC                       |  |
| Compressor                  | Atlas Copco Airpower n.v.        | LE7-10UVB 8115460019          |  |
| Pump Sliding Vane           | Blackmer                         | TXD2A_TXD2.5A                 |  |
| Dry Disconnect              | Banjo Corp                       | DM100SS_DM150SS_DM200SS       |  |
| Digital Meter               | Flowline Inc.                    | <u>LI23</u>                   |  |
| Liquid Level Transmitter    |                                  | LU80                          |  |
| Product Dispensing Meter    | Graco Inc.                       | EM8_EM20_IM20                 |  |
| Product Dispensing Valve    |                                  | SDV15_XDV20                   |  |
| Grease Dispense Valve       |                                  | Proshot 309032                |  |
| Diaphragm Pump              |                                  | Husky 1590                    |  |
|                             |                                  | Husky 1050A                   |  |
|                             |                                  | <u>Husky 515</u>              |  |
| Piston Pump                 |                                  | Fire-Ball 425                 |  |
| Lube Equipment – Couplers,  |                                  | Lube Equipment                |  |
| Adapters, Nozzles & Z-      |                                  |                               |  |
| Swivels                     |                                  |                               |  |
| Meter Register Fuel         | Veeder-Root                      | 7886 & 7887 Register          |  |
| Strainer Fuel Meter         | Liquid Controls Group            | Model A2342                   |  |
| Air & Vapor Eliminator Fuel |                                  | Model M-7-1                   |  |
| Meter                       |                                  |                               |  |
| Compartment Heater          | DAS Companies, Inc.              | RoadPro 12-Volt Ceramic       |  |
| Beacon/Strobe Light         | Federal Signal Corporation       | Spire 100 LED Beacon          |  |
| Reels                       | Hannay Reels, Inc.               | N700 Series                   |  |
|                             |                                  | N800 Series                   |  |
|                             |                                  | N7500 Series Power Rewind     |  |

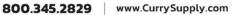




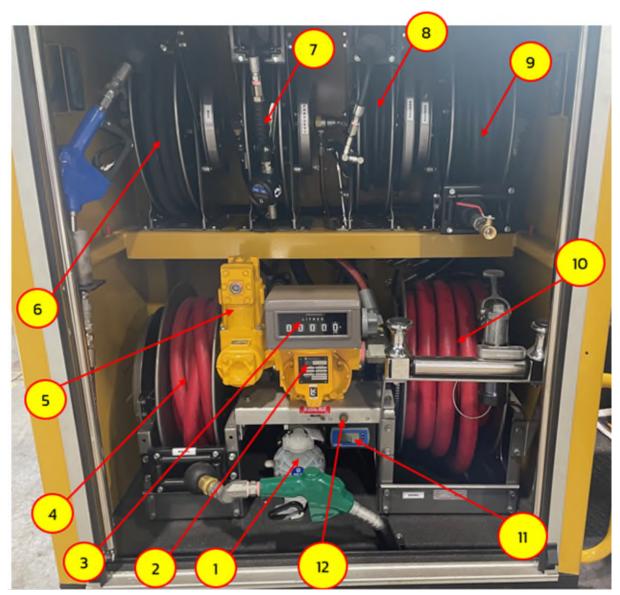
- 1. Driver's Side Rear Compartment
- 2. Air Compressor Compartment
- 3. Hydraulic Fluid Reservoir (70 Gal)
- 4. Remote Engine
- 5. DEF Product Tank (100 Gal)
- 6. Antifreeze Product Tank (100 Gal)
- 7. Owner's Choice Product Tank #5 (200 Gal)
- 8. Owner's Choice Product Tank #4 (200 Gal)
- 9. Waste/Used Oil Tank (400 Gal)

- 10. Owner's Choice Product Tank #3 (200 Gal)
- 11. Owner's Choice Product Tank #2 (200 Gal)
- 12. Owner's Choice Product Tank #1 (300 Gal)
- 13. Fuel Tank 16" Manway Lid
- 14. 4,000 Gallon Fuel Tank
- 15. Waste/Used Filter Box
- 16. Grease Fill Port
- 17. Electronics, Air Regulators & Batteries
- 18. Passenger Side Rear Compartment





### **DRIVER SIDE REAR COMPARTMENT**



- Diaphragm Pump for DEF Dispensing
- **Meter Drive** 2.
- 3. Fuel Dispensing Meter
- 4. 1" Low Flow Fuel Hose on Spring Return Reel
- 5. Air & Vapor Eliminator
- 6. DEF Dispensing Hose & Reel
- 7. Owner's Choice Prod #1 Dispensing Hose on Spring Return Reel
- 8. Grease Dispensing Hose w/ Proshot Tip on Spring Return Reel

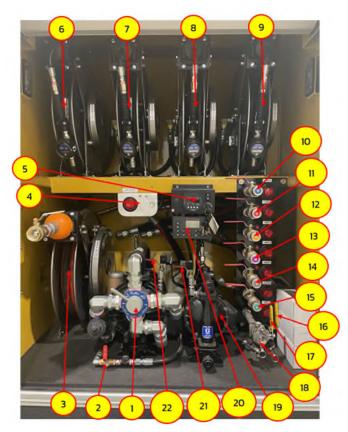
- 9. Grease Dispensing Hose w/ Ball Valve Tip on Spring Return Reel
- 10. 1-1/2" High Flow Fuel Hose on Electric Return Reel
- 11. Fuel Tank Level Meter
- 12. Power Switch for Electric Return Reel

### **NOTE**

A COMPARTMENT HEATER IS MOUNTED TO THE TOP OF THE COMPARTMENT NOT VISIBLE IN THIS PICTURE.



### PASSENGER SIDE REAR COMPARTMENT



- 3-way valve for waste oil
- 2. Ball valve for waste oil filter box
- 3. 1-1/4" hose on spring return hose for waste oil
- 4. Waste Tank Full Indicator Light & **Compartment Heaters switch**
- 5. Remote Engine Ignition Switch
- 6. Owner's Choice Product 2 Dispense Hose on Spring Return Reel
- 7. Owner's Choice Product 3 Dispense Hose on Spring Return Reel
- 8. Owner's Choice Product 4 Dispense Hose on Spring Return Reel
- 9. Owner's Choice Product 5 Dispense Hose on Spring Return Reel
- 10. Owner's Choice Product 1 Tank Fill Port

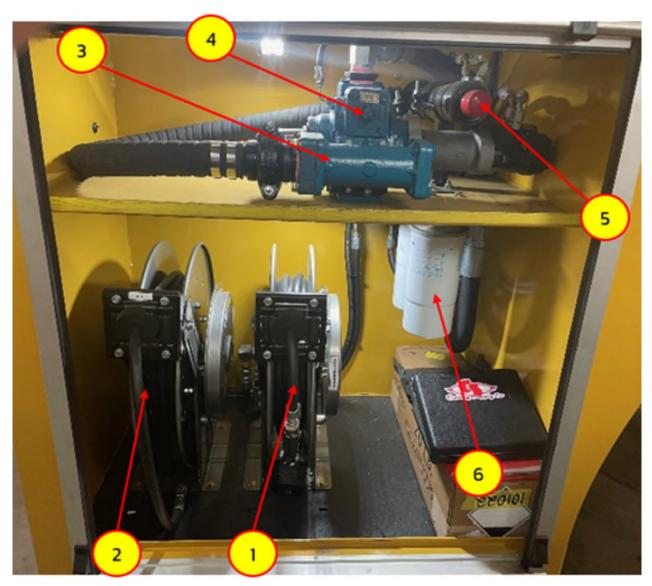
- 11. Owner's Choice Product 2 Tank Fill Port
- 12. Owner's Choice Product 3 Tank Fill Port
- 13. Owner's Choice Product 4 Tank Fill Port
- 14. Owner's Choice Product 5 Tank Fill Port
- 15. Antifreeze Tank Fill Port
- 16. Ball Valve
- 17. Ball Valve
- 18. DEF Tank Fill Port with dry disconnect valve
- 19. Diaphragm Pump
- 20. Control Panel
- 21. Ball Valve
- 22. Ball Valve

### **NOTE**

A COMPARTMENT HEATER IS MOUNTED TO THE TOP OF THE COMPARTMENT NOT VISIBLE IN THIS PICTURE.



# **DRIVER SIDE LOWER COMPARTMENT**



- 1. Antifreeze Dispense Hose on Spring Return
- 2. Air Dispense Hose on Spring Return Reel
- 3. Fuel Strainer

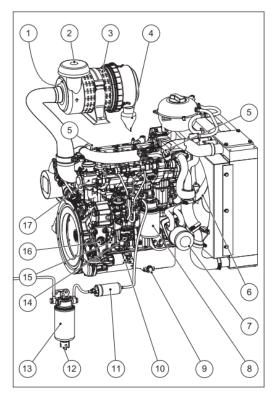
- 4. Fuel Pump
- 5. Fuel Fill Tank Port
- 6. Fuel Filters

### **NOTE**

THIS COMPARTMENT IS NOT HEATED.

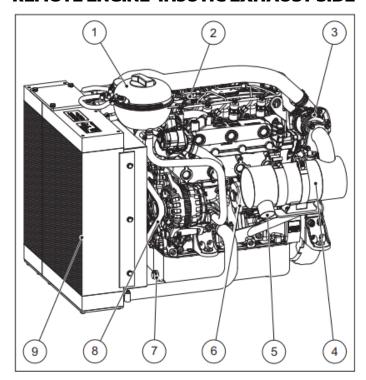


### **REMOTE ENGINE 4H5OTIC INTAKE SIDE**



- Intake opening for combustion air
- Rain cap 2.
- 3. Air filter (optional)
- Dust discharge valve
- Lifting eyes 5.
- 6. Fan
- Oil Filter 7.
- 8. Fuel Fine Filter
- 9. Side oil drain screw
- 10. Starter (low mounting position)
- 11. Electric fuel pump
- 12. Drain plug on fuel prefilter
- 13. Fuel prefilter
- 14. Engine type plate
- 15. Dipstick
- 16. Oil filter plug, bottom
- 17. Crankcase ventilation

### **REMOTE ENGINE 4H5OTIC EXHAUST SIDE**



- Expansion tank for coolant
- 2. Oil filter plug, top
- 3. Turbocharger
- 4. Oxidation catalytic converter
- 5. Exhaust outlet
- 6. Starter (high mounting position)
- 7. Oil drain screw, front
- 8. Poly v belt
- 9. Cooler



### **PASSENGER SIDE FRONT LOWER**



Used oil filters may be placed in this box to drain. The waste oil collected in the box may be pumped to the waste oil tank using the controls at the rear of the truck.

### **NOTE**

THIS COMPARTMENT IS NOT HEATED.

### AIR DRAIN VALVE



Located in the compartment ascending the rear steps on the left This valve must be closed for the air tank to build pressure. Open this valve daily to drain water from the system.

### **GRACO METER**



Some of the fluid dispensing hoses have a meter that shows the amount of fluid passing through the meter. It can display gallons, quarts, pints and liters.

### **PASSENGER SIDE LOWER**



Fill port for the grease tank.



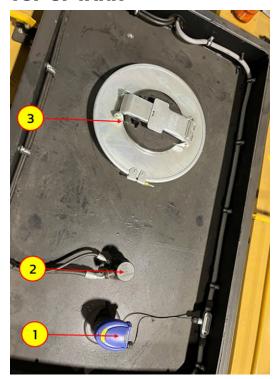
# **BALL VALVES**



To open the valve, move the handle in line with the tube/hose.

To close the valve, move the handle 90° with the tube/hose.

# **TOP OF TANK**



- 1. Liquid Level Transmitter
- 2. Level Sensor Nozzle Shut-off and Vent
- 3. 20" Manway



# **SECTION 3**

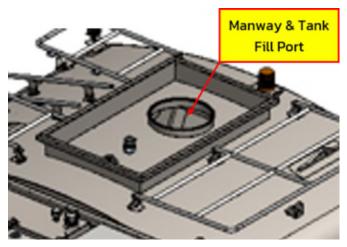
# **Normal Operations**

This section provides the vehicle operator with step-by-step operating procedures for the installed systems.

Prior to any operation, please perform a walk around inspection of the vehicle. Check specifically for any leaks or broken hoses.

# TANK FILLING OPERATIONS Diesel Overhead Tank Fill

 Ensure the tank fill opening is clear of obstruction.



Pull the tank under a fill station. Place the vehicle in park/nuetral and apply the emergency brake. 3. Unlatch the maway lid and insert the fill hose.



 In the passenger side rear compartment, turn the ignition switch to "CRANK" to start the remote engine. The display will appear.





- Begin filling the tank while watching the tank 3. With your palm on the handle and your fill gauge on the display,. fingers on the pullback handle, pull it towards you until the locking dogs lock in the open position. (Figure 1).
- 6. Turn the fuel source off when the tank is full.
- 7. Turn the ignition switch to "OFF".

### **Diesel Fast Tank Fill**

In the lower driver side compartment, take the cap off the reciever port.



2. Attach the wiggins system fuel nozzle to the intake, ensuring that it is locked on before filling with fuel.





Figure 1

4. To check if it is opened, look to see if the dogs are locked and are outisde of the inside diameter of the front assembly. (figure 2A (open) figure 2B (closed).



Figure 2A

Figure 2B



- 5. Push the nozzle all the way onto the reciever until the pullback handle snaps forward.
- 6. Lock the nozzle onto the reciever by lifting up the actuator handle (figure 3).



Figure 3

- 7. Fill the tank to the desired fuel level and then turn off the fuel source. If filling the tank full, a valve will shut off preventing overflow.
- 8. Disconnect the wiggins system by reversing steps 3 through 6 and reinstall the cap on the wiggins port.

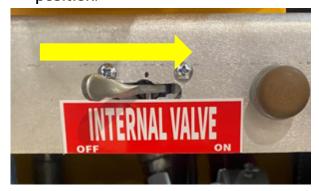
### **DISPENSE OPERATIONS**

### **DIESEL FUEL**

1. Turn the ignition switch to "CRANK", located in the passenger side rear compartment. The remote engine will start and the display will appear.



2. In the rear driver side compartment, move the internal valve switch to the "ON" position.





# 3. At the front driver side of the tank, move the "EMERGENCY SHUT OFF" to the "ON"

position.



### **NOTE**

IF EITHER OF THESE SWITCHES ARE "OFF", DIESEL FUEL OPERATIONS WILL STOP.

4. Press the "DIESEL FUEL" button on the control panel. A light embedded in the button will turn on.



## 19-Feb-25

5. Select the appropriate fuel reel based on the type of nozzle needed for the application (Wiggins or standard).



6. Begin dispensing fuel while watching the gallons meter and level indicator. Fill to the desired level.





 When finished, turn off the diesel fuel button on the control panel, reel in the hose, and move the internal valve switch to the "OFF" position.

### **NOTE**

THE 1-1/2 INCH HIGH-FLOW HOSE REEL IS EQUIPPED WITH AN ELECTRIC MOTOR RETURN. PUSH THE BUTTON TO RETRACT THE HOSE.



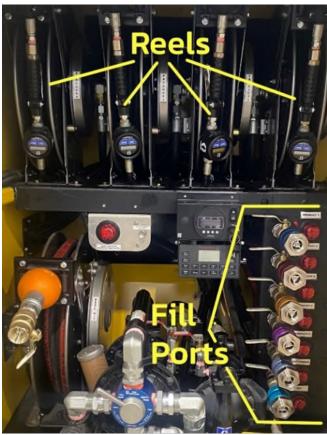
8. Turn the ignition switch to "OFF".

### **FILLING PRODUCT TANKS**

 Turn the ignition switch to "CRANK", located in the passenger side rear compartment. The remote engine will start and the display will appear.



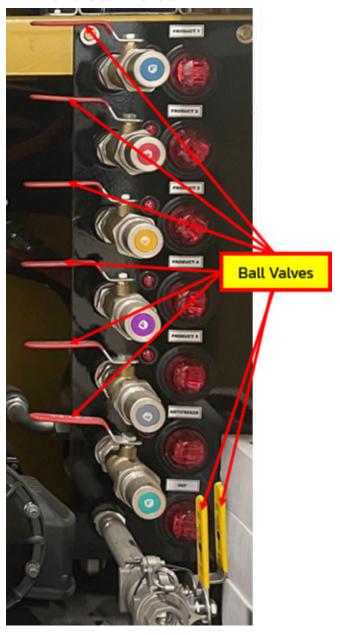
 Locate the product reels and fill ports in the rear passenger side compartment. Fill ports are different colors and labeled indicating the product in each tank.



Push the hose connection onto the corresponding port.



4. Open the ball valve of the selected product port and fill the tank. The light will turn on when the tank is full.



- 5. Once complete, turn off the ball valve & detach the fill hose.
- 6. Turn the ignition switch to "OFF".

### **DISPENSING METER**



Press the "RESET" key to wake up the display and clear the previous quantity before dispensing fluid. The digital display goes blank after one minute of non-use. To wake the display, press the "TOTAL" key or run fluid through the meter. The meter can be adjusted to display different units of measurement:

- a. Pints (PTS)
- b. Quarts (QTS)
- c. Gallons (GAL)
- d. Liters (L)

To change the unit of measure, press the "TOTAL" & "RESET" keys together. All the segments of the digital display illuminate for 6 seconds. The software revision displays for 2 seconds. The meter goes blank and the volume unit blinks. The meter is now in Setup Mode. Release the "TOTAL" & "RESET" keys. Repeatedly press the "TOTAL" key to change the unit of measure. When the desired unit appears, press the "RESET" key to save the selection.

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The meter is factory set to display "CAL" when the meter must be calibrated. To calibrate the meter, refer to page 10 of the meter manual. The manual may be obtained by clicking the link in section two of this manual.

Replacement of the meter battery may be found on page 12 in the same manual.

### **DISPENSING PRODUCTS:**

 Turn the ignition switch to "CRANK", located in the passenger side rear compartment. The remote engine will start and the display will appear.



 Select the product reel on the control panel (Prod 1, Prod 2, etc.). When the button is pushed, a light embedded in the button will turn on, and the output will change from 0 to 1.



3. Pull the product reel hose to the desired location.



4. The meter display will show the amount of product passing through the meter. Push the reset button to set it to zero (note: the meter may display gallons, quarts, pints and liters. Refer to the "DISPENSING METER" procedure to switch between scales).





5. Open the no drip nozzle by turning it counterclockwise until it stops.



6. Push the black thumb lock on the handle and then squeeze the trigger to begin the flow of product.



- 7. When finished, close the no drip nozzle and retract the hose back onto the reel.
- 8. Push the button on the control panel to turn off the power to the product reel. The light will turn off.
- 9. Turn the ignition switch to "OFF".

### **DISPENSING ANTI-FREEZE**

1. Turn the ignition switch to "CRANK", located in the passenger side rear compartment. The remote engine will start and the display will appear.



2. Locate and select the reel labeled "Anti-Freeze", in the driver side lower compartment.





 Locate the diaphragm pump (the one without the 3-way valve) in the rear passenger side compartment and turn the ball valve to the open position.



 On the control panel, push the "ANTI-FREEZE" button. The light embedded in the button will turn on.



5. Extend the hose from the reel, open the no drip nozzle, and dispense the anti-freeze.



- When the dispensing is complete, close the nozzle and retract the hose back onto the reel.
- On the control panel, push the "ANTI-FREEZE" button. The light embedded in the button will turn off.
- 8. Close the ball valve.
- 9. Turn the ignition switch to "OFF".

#### **FILLING DEF TANK**

 Turn the ignition switch to "CRANK", located in the passenger side rear compartment. The remote engine will start and the display will appear.





2. Locate the DEF dry disconnect ball valves on the lower right side of the rear passenger side compartment.



- 3. Connect the fill hose using the cam and groove fittings that are provided.
- 4. Open both ball valves. When the tank is full, the "DEF" light will turn on.
- 5. Close both ball valves.
- 6. Turn the ignition switch to "OFF".

### **DISPENSING DEF FLUID**

1. Turn the ignition switch to "CRANK", located in the passenger side rear compartment. The remote engine will start and the display will appear.



2. Turn on the DEF diaphragm pump by pressing the "DEF" button on the control board.







3. Locate and extend the hose on the reel labeled "DEF" (upper left side in driver side rear compartment) and begin pumping.



- When pumping is complete, retract the hose.
- Turn the DEF pump off on the control panel.
- 6. Turn the ignition switch to "OFF".

### **WASTE TANK**

### **SUCKING WASTE OIL AND FILLING WASTE TANK**

Turn the ignition switch to "CRANK", located in the passenger side rear compartment. The remote engine will start and the display will appear.



2. Locate the 3-way valve in the lower portion of the passenger side rear compartment. Descriptions on the valve are in reference to the waste tank on the truck. "FILL TANK" will pull into the tank. "EMPTY TANK" will expel from the tank. To fill the tank, turn the handle to "FILL TANK".



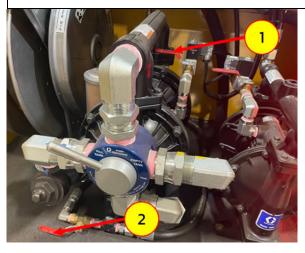


6. Open the ball valve on the end of the hose and suck up the waste oil into the tank.



### **NOTE**

IF SUCKING THE WASTE OIL FROM THE WASTE FILTER BOX, CLOSE BALL VALVE 1 AND OPEN BALL VALVE 2.

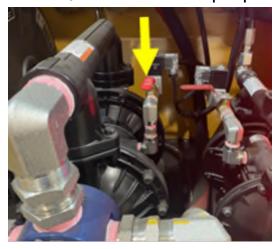


# NOTE

THIS LIGHT WILL ILLUMINATE WHEN THE WASTE OIL TANK IS FULL.



Locate the ball valve to the right of the diaphragm pump (by the anti-freeze ball valve) and turn it to the open position.



 Locate the "WASTE OIL" button on the control panel and turn it on. A light embedded in the button will turn on.



5. Extend the hose on the reel labeled "WASTE".



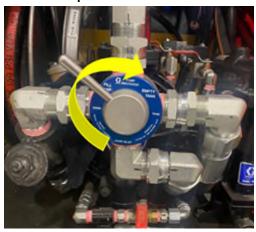
- 7. When complete, retract the hose and return the ball valve to the closed position.
- 8. Press the "WASTE OIL" button on the control panel to turn the waste oil diaphragm pump off.
- 9. Turn the ignition switch to "OFF".

#### **EMPTYING WASTE TANK**

1. Turn the ignition switch to "CRANK", located in the passenger side rear compartment. The remote engine will start and the display will appear.



2. Locate the 3-way valve in the passenger rear compartment. Turn the handle to the "EMPTY TANK" position.



3. Locate the "WASTE OIL" ball valve and turn it to the open position.



4. Press the "WASTE OIL" button on the control panel. The waste oil diaphragm pump will turn on and the light embedded in the button will illuminate.

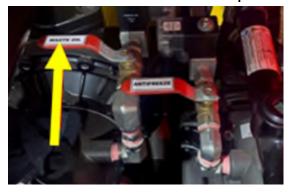


5. Pull the hose to the designated area and open the ball valve at the end of the hose to begin emptying the contents of the waste oil tank.





- 6. When the tank is empty, close the hose ball valve, turn off the waste oil diaphragm pump by pressing "WASTE OIL" on the control panel, and retract the hose onto the reel.
- 7. Return the diaphragm pump "WASTE OIL" ball valve back to the closed position.



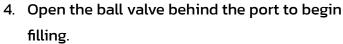
### **GREASE TANK**

### **FILLING GREASE TANK**

Locate the grease fill port on the passenger side of the truck, above the rear axle.



- 2. Remove the cap from the fill port.
- 3. Attach the fill-hose using a cam and groove fitting.





- 5. When finished, turn the ball valve back to the closed position.
- 6. Remove the fill-hose.
- 7. Replace the fill port cap.

### **DISPENSING GREASE**

1. Turn the ignition switch to "CRANK", located in the passenger side rear compartment. The remote engine will start and the display will appear.





2. Press the "GREASE" button on the control panel to turn on the pump. The light embedded in the button will turn on.



3. Locate the grease hoses in the driver's side rear compartment.



- 4. Choose the reel with the pro-shot nozzle or the ball valve (depending on which is needed).
  - **Proshot**



**Ball Valve** 



5. Dispense the grease. Either pull the trigger on the Proshot hose or open the ball valve on the other hose. When complete, release the trigger on the Proshot hose or turn the ball valve to off on the other hose. Retract the hose.

- 6. Press the "GREASE" button on the control panel to turn off the pump.
- 7. Turn the ignition switch to "OFF".

### **AIR TANK**

### **DISPENSE AIR**

1. Turn the ignition switch to "CRANK", located in the passenger side rear compartment. The remote engine will start and the display will appear.



2. Press the "AIR COMP" button on the control panel to turn on the air compressor. The light embedded in the button will turn on.





Locate the reel labeled "AIR" in the lower driver's side compartment.



- Pull the hose from the reel to the desired location and insert the desired air dispensing fitting into the chuck at the end of the hose.
- 5. Dispense the air.
- 6. When finished, retract the hose.
- 7. Turn off the air compressor by pressing the "AIR COMP" button on the control panel.
- 8. Turn the ignition switch to "OFF".

### **COMPARTMENT HEATING**

 Turn the ignition switch to "CRANK", located in the passenger side rear compartment. The remote engine will start and the display will appear.



 Locate the compartment heater knob in the rear passenger side compartment, next to the "FULL WASTE OIL" warning light. Pull the knob out to turn on the heaters.



### NOTE

THE TWO REAR COMPARTMENTS ARE THE ONLY HEATED COMPARTMENTS.

- When the desired heat is obtained, turn the compartment heaters off.
- 4. Turn the ignition switch to "OFF".



### **LIGHTS**

1. Turn the ignition switch to "RUN". The remote engine does not need to be running, however, if using the lights for an extended time, run the engine to prevent the batteries from depleting.



- 4. Press the button again to turn the light off.
- 5. Turn the ignition switch to "OFF".

2. Locate the control panel in the rear passenger side compartment.



3. Turn on the desired lights by pushing the corresponding button on the control panel. A light embedded in the button will indicate power to the light. Lights are labeled (left flood, rear flood, comp't lights, and right flood) on the control panel.



# Section 4

# Maintenance and Lubrication

Due to numerous jobs and purposes, varying environments and climates, and importance to safety, routine maintenance is highly recommended. Regular maintenance keeps the trucks functioning correctly and at optimum efficiency. The following tasks can help prevent breakdown and keep the truck on the job.

#### **NOTE**

FOR THE MOST ACCURATE MAINTENANCE FOR A SPECIFIC CHASSIS SYSTEM. REFER TO THE PRODUCT SPECIFIC USER MANUAL.

### **DAILY SAFETY MAINTENANCE**

Tires – Check for proper inflation and tread depth.

Brake System – Routine inspections on brake pads and calipers for safe operation.

Lights - Check all lights are working and functioning correctly.

Fluids - Check that the engine oil, coolant, Hydraulic fluid, and wiper fluid are all at the right levels.

Hoses - Check for leaks and cracks, and make sure everything is securely fastened.

### **HYDRAULIC FLUID**

FIRST 50 HOURS OF OPERATION

Replace the fluid and filter.

### **DAILY**

Check the fluid level daily before use. Fill with fluid that meets specification ISO VG 68. The filter must be rated for 10 micron.



### TRUCK BODY COMPARTMENTS

#### **DAILY**

- Ensure the doors latch securely.
- Insert the key into each door and turn to lock. Ensure the doors do not open.
- Insert the key into each door and turn to unlock. Ensure the doors open.

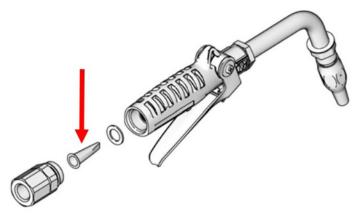
### **MONTHLY**

- Lubricate the hinges with white lithium spray lubricant.
- Spray the door locks with lock lubricant.



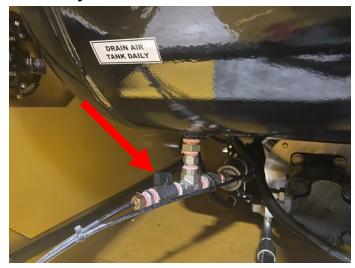
### **DISPENSING UNIT STRAINER**

Clean as needed.



### **AIR DRAIN VALVE**

Drain daily and after each use.



### **TANK AIR BREATHER**

### **ANNUALLY**

Located on top of each product tank. The breather is inside the product cap. Inspect using forced air through the filter. Replace if air does not freely move through the filter.



### **DIAPHRAGM PUMP**

### **EACH USE**

- Check all hoses for wear or damage and replace as necessary.
- Check all threaded connections are tight and leak-free.

### **EVERY 500 HOURS OR MONTHLY**

remove the hose from the pump air inlet and add two drops of machine oil to the air inlet.

### CAUTION

DO NOT OVER-LUBRICATE THE PUMP. OIL IS EXHAUSTED THROUGH THE MUFFLER, WHICH COULD CONTAMINATE THE FLUID SUPPLY OR OTHER EQUIPMENT. EXCESSIVE LUBRICATION CAN ALSO CAUSE THE PUMP TO MALFUNCTION.



### **AS NEEDED**

- Flush the pump often enough to prevent the fluid from drying or freezing in the pump.
   Use a compatible solvent.
- Always flush the pump and relieve the pressure before storing it for any length of time.

### **REMOTE ENGINE**

#### **WARNING**

ONLY PERFORM MANINTENACE WORK WHEN ENGINE IS SWITCHED OFF.

#### **WARNING**

PROTECT THE STARTING KEY FROM UNAUTHORIZED ACCESS.

#### WARNING

DISCONNECT THE NEGATIVE BATTERY TERMINAL.

#### WARNING

WHEN THE MANINTENANCE WORK HAS BEEN COMPLETED, ENSURE THAT ALL TOOLS ARE REMOVED FROM THE MACHINE.

Instructions to perform the following tasks can be found in the manufacturer's operating manual. A link to this manual can be found in section two of this manual.

### **DAILY**

- Check the oil level.
- Check the intake area of the combustion air.
- Check the cooler fins from contamination and clean if necessary.
- Check the cooling system.

### AFTER THE FIRST 50 OPERATING HOURS

- Change the engine oil & filter.
- Check the screw connections.

### **EVERY 500 OPERATING HOURS (OR ANNUALLY)**

- Diagnosis of engine management to be performed by trained technicians. The engine control module continuously evaluates the engine-relevant data during operation. The service technician can extract and evaluate the data.
- Update engine control unit to be performed by trained technicians. The unit can only be updated using diagnostic software.
- Clean the engine.
- Check the anti-freeze concentration.
- Clean the radiator fins.
- Change the engine oil and filter.
- Check the poly v belt.
- Change the oil separator of the crankcase ventilation.
- Check the screw connections.
- Change the fuel prefilter.
- Change the fuel line filter.
- Drain the charge air cooler.
- Change the air filter cartridges.
- Drain the water separator.



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### **EVERY FOUR YEARS**

Change the coolant.

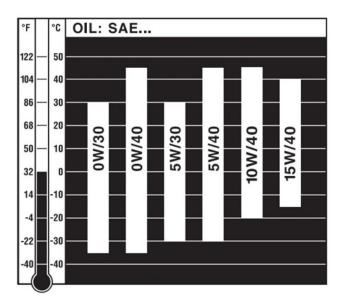
### **EVERY 3,000 OPERATING HOURS**

Replace the poly V belts

### **EVERY 4,000 OPERATING HOURS**

Clean the main radiator of the exhaust gas recirculation (ECR) to be performed by trained technicians.

Select the recommended viscosity of oil depending on the ambient temperature at which the remote engine will be operated.



The recommended oil is ACEA E9 for engines with diesel oxidation catalyst (DOC).

The recommended oil is ACEA E6, E7 or E9 for engines without DOC.

### CAUTION

UNSUITABLE ENGINE OIL CONSIDERABLY REDUCES ENGINE SERVICE LIFE. ONLY USE THE RECOMMENDED OIL WITH THE CORRECT VISCOSITY.

The recommended remote engine coolant is Mitan Alpine C40, Alpine C12+. Alternate coolants can be found in the Hatz manual (see web link to the manual in section two).

### WINTERIZING/FREEZE PREVENTION

Frozen water inside of the system can lead to considerable damage. To prevent damage please consider the following:

Air Compressor Tank – Drain the air compressor tank as much as possible.





# Section 5 **Schematics**

Schematics may be found on the Curry Supply Company product support web page. Click the link below for quick access.

https://currysupply.com/product-support/





# **SECTION 6**

# **Troubleshooting**

| PROBLEM  | POSSIBLE CAUSE   | REMEDIES   |  |  |
|--|--|--|--|--|
| The compartment key will not insert into the lock. | Shield is blocking insertion of the key.   | Slide shield out of the way with the tip of the key while pushing the key into the lock. |  |  |
|  | The lock is full of ice.   | Spray lock with de-ice spray.  |  |  |
|  | The key is the wrong one for the lock.   | Use the correct key.   |  |  |
| No response from                                   | The remote engine is not running.  | Start the engine.  |  |  |
| hydraulic controls                                 | Low hydraulic oil.   | Add hydraulic oil.   |  |  |
|  | Relief valve is set too low.   | Call Curry Supply Company for service 800.345.2829.                                      |  |  |
|  | Pinched pressure or return hydraulic line.                                       | Repair or replace.   |  |  |
|  | Defective hydraulic pump.  | Call Curry Supply Company for service 800.345.2829.                                      |  |  |
|  | Pressure compensated pump set too low.   | Call Curry Supply Company for service 800.345.2829.                                      |  |  |
| The hydraulic system is overheating.               | The main system relief valve is set too low or is open because of contamination. | Call Curry Supply Company for service 800.345.2829.                                      |  |  |
|  | The hydraulic system operating pressure is too high.                             | Call Curry Supply Company for service 800.345.2829.                                      |  |  |





| Slow hydraulic            | Valve spools are not fully open.           | Call Curry Supply Company for        |  |
|---------------------------|--|--------------------------------------|--|
| operations.               |  | service 800.345.2829.                |  |
|                           | Oil is too heavy or cold.                  | Replace oil to correct viscosity for |  |
|                           |  | operating range temperature.         |  |
|                           | Low hydraulic oil.                         | Add oil.                             |  |
|                           | System operating pressure or               | Call Curry Supply Company for        |  |
|                           | main system relief set too low.            | service 800.345.2829.                |  |
|                           | Dirt or foreign matter in hydraulic        | Call Curry Supply Company for        |  |
|                           | system, filters valves, etc                | service 800.345.2829.                |  |
|                           | Pinched pressure or return hydraulic line. | Repair or replace.                   |  |
|                           | Excessive leakage in pump or               | Call Curry Supply Company for        |  |
|                           | control valve due to wear.                 | service 800.345.2829.                |  |
| Diaphragm pump cycles     | Worn check valve balls, seats or           | Replace.                             |  |
| at stall or fails to hold | O-rings.                                   |                                      |  |
| pressure at stall.        | Air valve is stuck or dirty.               | Disassemble and clean air valve.     |  |
| Diaphragm pump will       |  | Use filtered air.                    |  |
| not cycle, or cycles once | Check valve ball severely worn             | Replace ball and seat.               |  |
| and stops.                | and wedged in seat or manifold.            |                                      |  |
|                           | Dispensing valve clogged.                  | Relieve pressure and clear valve.    |  |
|                           |  |                                      |  |
|                           |  |                                      |  |
|                           |  |                                      |  |
|                           |  |                                      |  |
| Diaphragm Pump            | Clogged suction line.                      | Clean or replace.                    |  |
| operates erratically.     | Sticky or leaking balls.                   | Clean or replace.                    |  |
|                           | Diaphragm ruptured.                        | Replace.                             |  |
|                           | Restricted exhaust.                        | Remove restriction.                  |  |
|                           |  |                                      |  |
|                           |  |                                      |  |
|                           |  |                                      |  |
|                           |  |                                      |  |
|                           |  |                                      |  |





| Air bubbles in hydraulic fluid from the diaphragm pump. | Suction line is loose.  Diaphragm is ruptured.                                 | Tighten.  Replace.                                  |  |
|---|--|---|--|
|   | Loose inlet manifold, damaged seal between manifold and seat, damaged O-rings. | Tighten manifold bolts or replace seats or O-rings. |  |
|   | Loose diaphragm shaft bolt.  | Tighten or replace.                                 |  |
|   | Damaged O-ring.  | Replace.  |  |
| Dispensing meter display does not wake                  | Electronic control is malfunctioning.  | Replace electronic control.                         |  |
| up or displays<br>unintelligent characters.             | Batteries are depleted within the meter unit.                                  | Replace battery.                                    |  |
| Slow or no fluid flow.                                  | Strainer within dispensing meter unit clogged.                                 | Clean or replace strainer.                          |  |
|   | Pump pressure is low.  | Increase pump pressure.                             |  |
|   | Shut off valve is not fully open.  | Fully open shut off valve.                          |  |
|   | Foreign material is jammed in the meter element.                               | Call Curry Supply Company for service 800.345.2829. |  |



# **SECTION 7**

# **Warranty & Proprietary Information**

Curry Supply Company warrants products designed and manufactured by Curry Supply Company to be free from defects in material and workmanship under proper use and maintenance. Products must be installed and operated in accordance with Curry Supply's written instructions and capacities. All warranty periods will begin on the in-service date as defined in this document. This warranty shall cover the following Curry Supply Products:

|  | 1 Year | 2 Years | Variable |
|--|--------|---------|----------|
| On Road Water / Flatbed / Crash Attenuator / Lube Skid           |        |         |          |
| Curry Manufactured Components                                    |        | ✓       |          |
| Paint Coverage on Curry Manufactured Parts                       | ✓      |         |          |
| Parts  | ✓      |         |          |
| Repair Labor   | ✓      |         |          |
| Off Road / Dump / Industrial Carrier / Vacuum / Winch / Railroad |        |         |          |
| Tank   | ✓      |         |          |
| Tank Exterior Paint Coverage                                     | ✓      |         |          |
| Parts  | ✓      |         |          |
| Repair Labor   | ✓      |         |          |
| Mechanics  |        |         |          |
| Body (Refer to Manufacture Warranty)                             |        |         | ✓        |
| Crane (Refer to Manufacture Warranty))                           |        |         | ✓        |
| Paint Coverage (Refer to Manufacture Warranty)                   |        |         | ✓        |
| Parts (Refer to Manufacture Warranty)                            |        |         | ✓        |
| Repair Labor (Refer to Manufacture Warranty)                     |        |         | ✓        |
| Lube   |        |         |          |
| Body (Refer to Manufacture Warranty)                             | ✓      |         |          |
| Tanks (Refer to Manufacture Warranty)                            |        |         | ✓        |
| Parts  | ✓      |         |          |
| Repair Labor   | ✓      |         |          |
| Paint Coverage   | ✓      |         |          |
| Utility Lift   |        |         |          |
| Body (Refer to Manufacture Warranty)                             |        |         | ✓        |
| Lift (Axion)   |        |         | ✓        |
| Parts  | ✓      |         |          |
| Repair Labor   | ✓      |         |          |
| Body Paint Coverage  | ✓      |         |          |



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### **Definitions**

**Curry Supply Manufactured Components/Structures** – Includes any structural weldment or load bearing support structure manufactured by Curry Supply Company.

**Rust Through on Curry Supply Components/Structures** – Rust Through is defined as a hole in the metal caused by corrosion. Excluded is corrosion caused by external caustics, including but not limited to improper cleaning material, road salt and other chemicals left on the structure for extended periods of time.

Paint Coverage on Curry Supply Manufactured Parts – Curry Supply guarantees that exterior paint will not fail in terms of adhesion, blistering or unreasonable loss of color or gloss for a 1-year period. Excluded is damage such as chips, dents, scratches, tank interior coating, and corrosion due to caustic chemicals (e.g. Brine Solution / Leachate) and dirt build-up. Regular cleaning and maintenance of the product to remove external factors is expected to keep this warranty in force.

**Vendor Supplied Components/Structures** – Products purchased by Curry Supply from outside vendors. These items shall be covered by the warranty offered by the respective manufacturer only. Curry Supply does not obligate itself to any such warranty.

### **Warranty Process**

Curry Supply's obligation under this warranty is limited to, and the sole remedy for any such defect shall be the repair and/or replacement (at Curry Supply's option) of the unaltered part and/or component in question. Curry Supply after-sales service personnel must be notified by telephone, email, or letter of any warranty applicable damage within fourteen (14) days of its occurrence. If possible, Curry Supply will ship the replacement part within 24 hours of notification by the most economical, yet expedient, means possible. Expedited freight delivery will be at the expense of the owner.

Warranty claims must be submitted and shall be processed in accordance with Curry Supply's established warranty claim procedure. Curry Supply after-sales service personnel must be contacted prior to any warranty claim. A return materials authorization (RMA) may be issued to the claiming party prior to the return of warranty parts. Parts returned without prior authorization will not be recognized for warranty consideration. All damaged parts must be returned to Curry Supply freight prepaid; freight collect returns will be refused. Freight reimbursement of returned parts will be considered as part of the warranty claim.



### **Warranty Repair**

Warranty service will be performed by any Curry Supply factory, Curry Supply mobile technician, Curry Supply authorized service partner, or by the affected owner. At the time of requesting warranty service, Curry Supply after-sales service personnel will verify date of delivery of the product. The owner shall be obligated to pay for any overtime labor requested of the servicing company by the owner, any field service call charges, and any towing and/or transportation charges associated with moving the equipment to the designated repair/service provider.

All obligations of Curry Supply and its service providers shall be voided if someone other than an authorized Curry Supply provider performs other than routine maintenance service without prior written or verbal approval from Curry Supply. In the case repair work is performed on a Curry Supply-manufactured product, original Curry Supply parts must be used to keep the warranty in force. The warranty may also be voided if the product is modified or altered in any way not approved, in writing, by Curry Supply.

### **Warranty Limitations/Responsibilities**

This warranty covers only defective material and workmanship. It does not cover depreciation or damage caused by normal wear and tear, accident, mishap, untrained operators, or improper or unintended use. The owner has the obligation of performing routine care and maintenance duties as stated in Curry Supply's written instructions, recommendations, and specifications. Any damage resulting from owner/operator failure to perform such duties shall void the coverage of this warranty. The owner will pay the cost of labor and supplies associated with routine maintenance.

The only remedies the owner has in connection with the breach or performance of any warranty on the Curry Supply product specified are those set above. In no event will Curry Supply, or any company affiliated with Curry Supply, be liable for business interruptions, costs of delay, or for any special, indirect, incidental, or consequential costs or damages. Such costs may include, but are not limited to, loss of time, loss of revenue, loss of use, wages, salaries, commissions, lodging, meals, towing, hydraulic fluid, or any other incidental cost.

All products purchased by Curry Supply from outside vendors shall be covered by the warranty offered by that respective manufacturer only. Curry Supply does not participate in, or obligate itself to, any such warranty.





Curry Supply reserves the right to make changes in design or improvement upon its products without imposing upon itself the same upon its products theretofore manufactured.

This warranty will apply to all Curry Supply manufactured components/structures and upfit workmanship shipped from Curry Supply's factory. The warranty is for the use of the original owner only and is not transferable without prior written permission from Curry Supply.

**Curry Supply After-Sales Contact Information:** 

Phone: (800) 345-2829

Email: service@currysupply.com

Mailing Address: 1477 DeGol Industrial Drive, Hollidaysburg, PA 16648

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED. INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. REMEDIES UNDER THIS WARRANTY ARE LIMITED TO THE PROVISION OF MATERIAL AND SERVICES. AS SPECIFIED HEREIN, CURRY SUPPLY COMPANY IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

EXCEPT AS STATED, THERE IS NO WARRANTY, EXPRESS OR IMPLIED, IN CONNECTION WITH THE DESIGN, MANUFACTURE, SALE OR USE OF THE MACHINERY, ACCESSORIES, EQUIPMENT AND PARTS SOLD BY CURRY SUPPLY CO. CURRY SUPPLY COMPANY'S LIABILITY ON ITS WARRANTY SHALL IN NO. EVENT EXCEED THE COST OF THE ITEM OF SALE.



For technical help or parts, please have the serial number available and call our customer service 800.345.2829

