

Due to continuous product development some of the details shown in this manual may differ from your equipment. We reserve the right to change the contents of the manual without notification.

Shipping Papers and Information

In addition to this operators manual, a packet containing IMPORTANT INFORMATION has been enclosed with your Melter.

The follow *Manufacturer's Documents* are included for the follow parts:

- a) Engine
- b) Material Pump
- c) Burner

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IMPORTANT: This manual contains the basic information required to operate, maintain and repair the CIMLINE ME3 you have purchased. The use of this manual insures accurate adjustments, operation and proper lubrication of your equipment. Please keep a copy with the machine.

Any parts orders or service problems relating to CIMLINE equipment should be directed to the CIMLINE Parts Department at either (763) 694-2665 or (877) 841-0848. When ordering parts, please have the following information available.

CIMLINE ME3 Serial Number:

Engine Manufacturer:

Model Number:

Engine Model (H.P.):

Hydraulic Pump Number:

CONTACTING CIMLINE

At Cimline, impressing the customer is one of our core values. We want to make sure you are covered for any general or technical questions you may have on your new CIMLINE equipment. Please use the following information to get the support you need if this manual does not provide the answers you are looking for.

Cimline Dealer Network:

Your local dealer is always your first point of contact when looking for parts, maintenance, technical support, warranty information or answers to your questions. No one should know you and your business better than your local dealer, and they should always be the first call you make when looking for answers to your questions.

CIMLINE Local Dealer Name:

CIMLINE Local Dealer Phone Number:

CIMLINE Sales:

Toll Free: (877) 841-0848 • Telephone: 763-694-2665 • Fax: 866-557-1971
Corporate Headquarters: 2601 Niagara Lane N, Plymouth, Minnesota 55447
www.cimline.com

Any parts orders or service problems relating to CIMLINE equipment should be directed to your local dealer FIRST.

CIMLINE Customer Care and Technical Service:

CIMLINE Technical Service is available Monday - Friday during normal business hours.
Toll Free: (877) 841-0848 • Telephone: 763-694-2665 • Fax: 866-553-7765
www.cimline.com • Email: customercareorders@plymouthind.com

CIMLINE Parts and Warranty Items:

Toll Free: (800) 328-3874 • Telephone: 763-694-2638 • Fax: 866-553-7765
www.cimline.com • Email: customercareorders@plymouthind.com

Personal Safety

OPERATOR MUST READ AND UNDERSTAND ENTIRE OPERATORS MANUAL BEFORE PROCEEDING.
THIS PAGE ONLY PROVIDES AN OVERVIEW OF SAFETY INFORMATION

WARNING

The melter operates at elevated temperature which can cause burns. Operator and anyone working in close proximity to hot materials must always wear protective clothing.

Required clothing includes:



Gloves with wristlets • Heavy leather boots or shoes • Face shield
 • Long sleeve shirt with sleeves rolled down and cuffs buttoned
 • Long pants with no cuffs

GENERAL OPERATION SAFETY:

- Perform a DOT pre-trip inspection before towing.
- Never go under trailer with out first stabilizing trailer.
- Never touch material expelled by melter while still hot.
- Do not operate without safety cover on hose.
- Never leave machine unattended while it is running.
- Keep material door closed at all times except when adding material.
- Always use pin with swivel jack.
- Never use a damaged swivel jack.
- Never stand on any part of the machine.
- Load melter from ground level.
- Do not touch exhaust stacks or mufflers.

Signal Words in Manual:

The signal words **DANGER**, **WARNING** and **CAUTION**, are used to identify levels of hazard seriousness.

DANGER

DANGER! Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING! Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION! Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE: Is used to address practices not related to personal injury.

Trailer Safety

Operating this machine requires workers to perform work behind the trailer, it is critical to perform the work safely. Communication between the tow vehicle driver and worker is critical. Worker and tow vehicle driver must stay in communication, use an audible device or visual signals to communicate. A worker must never ride on the trailer or position him or herself between the tow vehicle and trailer when the tow vehicle is running. Tow vehicle driver must always be aware of workers position.

Only use a tow vehicle that is equipped with an electronic brake control system and has the appropriate towing capacity. The best means for determining the vehicle's towing capacity is to read the vehicle owner's manual. The owner's manual will provide detailed instructions and limitations, usually accompanied by tips for safe towing. If the owner's manual has been misplaced, most manufacturers provide free downloadable copies on their website. Towing with an undersized tow vehicle can cause the trailer to tow improperly, potentially causing loss of control. Overloading can also cause unintended failures to tow vehicle.

The weight of your trailer listed in this manual is for the base model without any additional accessories or the weight of the sealant. The weight of your trailer will vary, weigh your machine to determining your Gross Vehicle Weight (GVW). Scales are sometimes available to use at state highway weigh stations, refuse transfer stations and commercial truck stops.

Trailer Stabilizing Procedure



WARNING

Going under the trailer puts a person at risk of severe injury or death. Follow procedure below to stabilize trailer before going under the trailer

Method #1 Hitch to Vehicle.

Park both the tow vehicle and trailer on a flat level surface. Place tow vehicle in park and remove keys.

Method #2 Unhitched.

Park trailer on a level surface. Place wheel blocks in front of and behind wheels on both sides of the trailer. Inspect your jack thoroughly for damage or abnormal wear, especially if it was subjected to abnormal load or shock. *[If damaged do not use, replace jack.]* Use the jack to decouple trailer from tow vehicle. After raising the hitch coupler, crib, block, or otherwise secure



WARNING

BREATHING DIESEL ENGINE EXHAUST EXPOSES YOU TO CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. ALWAYS START AND OPERATE THE ENGINE IN A WELL-VENTILATED AREA. IF IN AN ENCLOSED AREA, VENT THE EXHAUST TO THE OUTSIDE. DO NOT MODIFY OR TAMPER WITH THE EXHAUST SYSTEM. DO NOT IDLE THE ENGINE EXCEPT AS NECESSARY.

FOR MORE INFORMATION GO TO WWW.P65WARNINGS.CA.GOV/DIESEL.

Wheels

Wheel Selection

When specifying or replacing your trailer wheels it is important that the wheels, tires, and axles are properly matched. The following characteristics are extremely important and should be thoroughly checked when replacement wheels are considered:

1. **Bolt Circle.** Wheels have many bolt circle variations and some are so close that it could be possible to attach an inappropriate wheel that does not match the axle hub.
2. **Capacity.** Wheel load capacity should match tire and trailer max. load ratings.
3. **Offset.** The relationship of the center line of the tire to the hub face of the axle should match any replacement. Failure to match offset may result in reducing the carrying capacity of your axle.
4. **Rim Contour.** Replacement wheels should be direct replacements to match the rim contour

Inspection

All the components of your suspension system should be visually inspected for signs of wear, damage, or loose fasteners at least every 6,000 miles. When replacing or tightening loose fasteners, consult the torque chart for correct torque values. Worn spring eye bushing or sagging or broken springs should be replaced.

WARNING

Use only rim contours suggested by manufacturer. Failure to use correct rim contour may cause dramatic separation of tire and wheel and could cause serious injury or death. Attempting to modify or repair a wheel can cause unsafe conditions that may result in an explosion. Air pressure on a weakened or cracked rim can cause serious injury or death.

Torque Requirements

It is extremely important to apply and maintain proper wheel mounting torque on your trailer axle. Torque wrenches assure the proper amount of torque is being applied to a fastener. Use no other

WARNING

Proper and accurate torque must be maintained to prevent wheels from loosening, studs from cracking and/or breaking or other possible hazardous breakage resulting in serious injury or death.

Be sure to use only the fasteners matched to the cone angle of your wheel (usually 60° or 90°) The proper procedure for attaching your wheels is as follows:

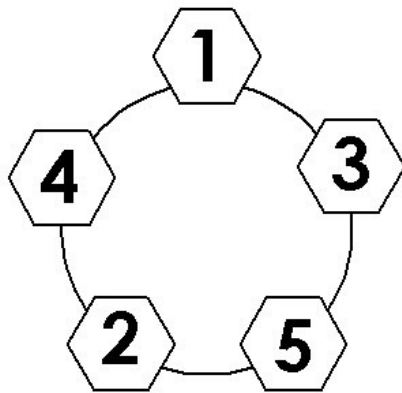
1. Start all bolts or nuts by hand to prevent cross threading.
2. Tighten bolts or nuts in the following sequence.
3. Tightening fasteners should be done in stages. Follow the recommended sequence, tighten fasteners per wheel torque requirements diagram (see next page).
4. Wheel nuts/bolts should be torqued before first road use and after each wheel removal. Check and re-torque after the first 50 miles and again at 100 miles. A periodic check during regular service is recommended.

Wheels

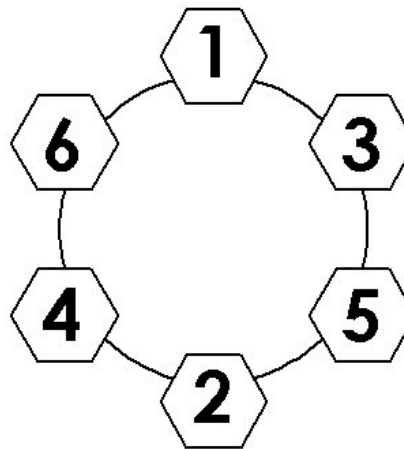
Wheel Sizes

14" - 15" - 16" - 16.5" x 6.75"

NOTE: All torque in ft-lb

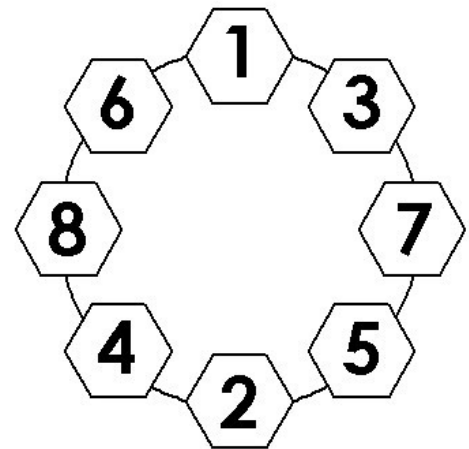


1st Stage
20-25



Torque Sequence
2nd Stage
50-80

3rd Stage
90-120



LUG TIGHTENING SEQUENCE CHART

TIRES

Prior to mounting tires onto wheels, be sure the rim size and contour are approved by the Tire and Rim Association Yearbook or the Tire Manufacturers Catalog in the United States and Recreational Vehicle Running Gear Certification - CSA CAN3 in Canada. Use only Tires, Rims and Wheels complying with CMVTSS 109 and CVMTSS110; or CMBTSS 119 and CMVTSS 120. In addition, confirm that the tire will carry the rated load. If the load is not evenly distributed on all tires, use the tire rated for the heaviest wheel position. The Rubber Manufacturers Association or the tire manufacturers guidelines should be consulted for mounting procedures. Tire inflation pressure is the most important factor in tire life. Tire pressure should always be what is recommended by the manufacturer for the load. Always check pressure cold before operation. **DO NOT** bleed air from tires when they are hot. Check inflation pressure weekly during use to insure maximum tire and tread life. The following tire wear diagnostic chart will help you pinpoint the causes and solutions of tire wear problems.

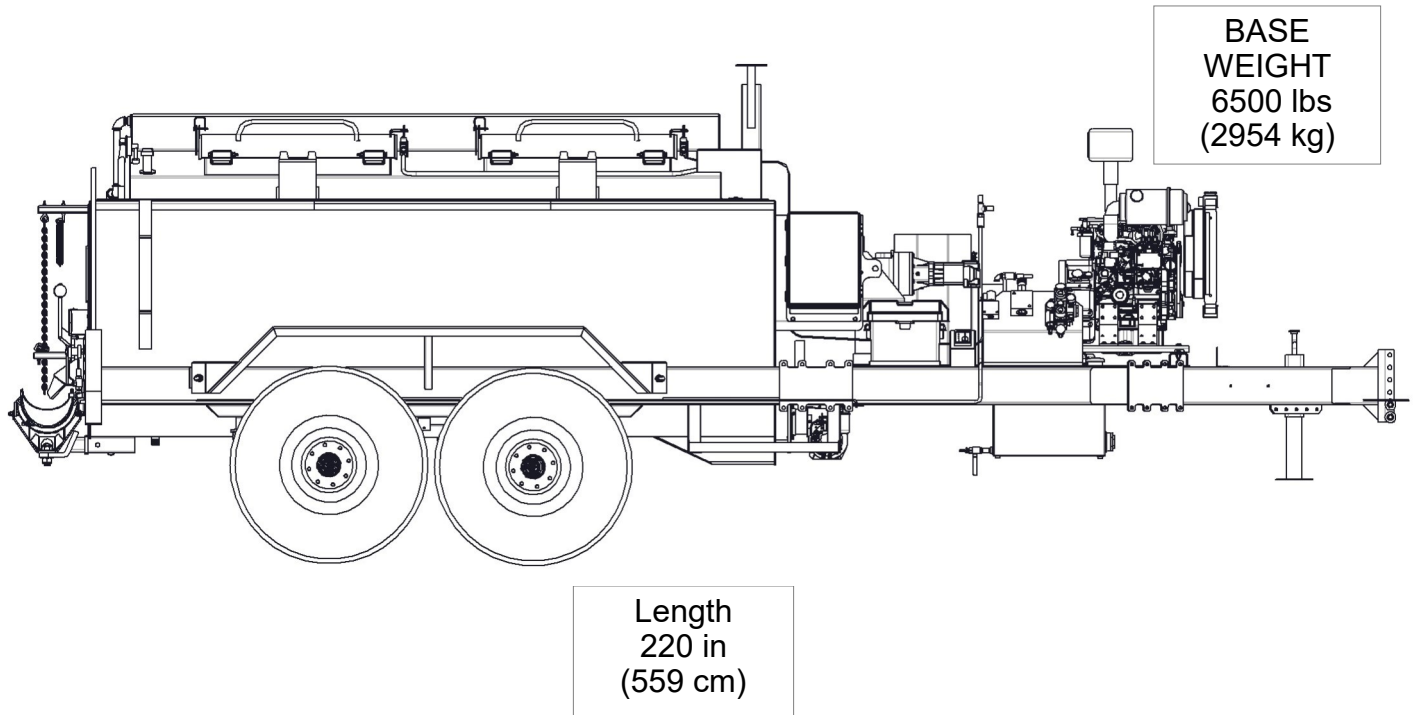
NOTE: Tire wear should be checked frequently because once a wear pattern becomes firmly established in a tire it is difficult to stop, even if the underlying cause is corrected.

PROBABLE CAUSE

CORRECTIVE ACTION

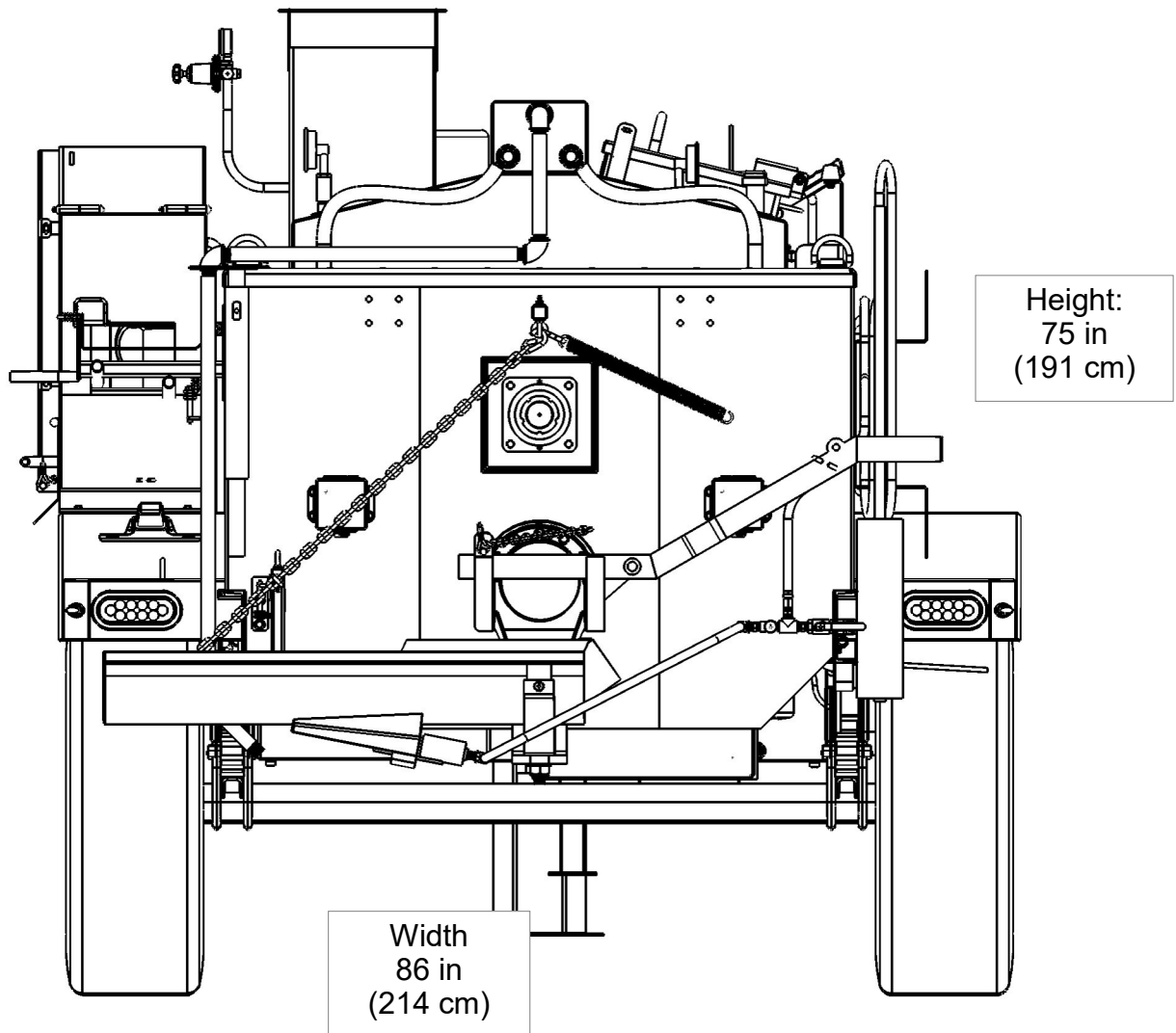
CENTER WEAR	Over-inflation	Adjust pressure to particular load per tire catalog.
EDGE WEAR	Under-inflation	Adjust pressure to particular load per tire catalog.
SIDE WEAR	Loss of camber or overloading	Make sure load doesn't exceed axle rating. Align at alignment shop or service center.
TOE WEAR	Incorrect toe-in	Align at alignment shop or service center.
CUPPING	Out-of-balance	Checking bearing adjustment and balance tires.
FLAT SPOTS	Wheel lockup & tire skidding	Avoid sudden stops if possible and adjust brakes.

Weight and Dimensions



**WEIGHT AND DIMENSIONS ARE FOR BASE UNIT WITHOUT OPTIONS
WEIGHT LISTED DOES NOT INCLUDE MATERIAL WEIGHT.**

Weight and Dimensions



Mixing Tank Size	Maximum Tank Sealant Capacity
350 Gallons	260 Gallons



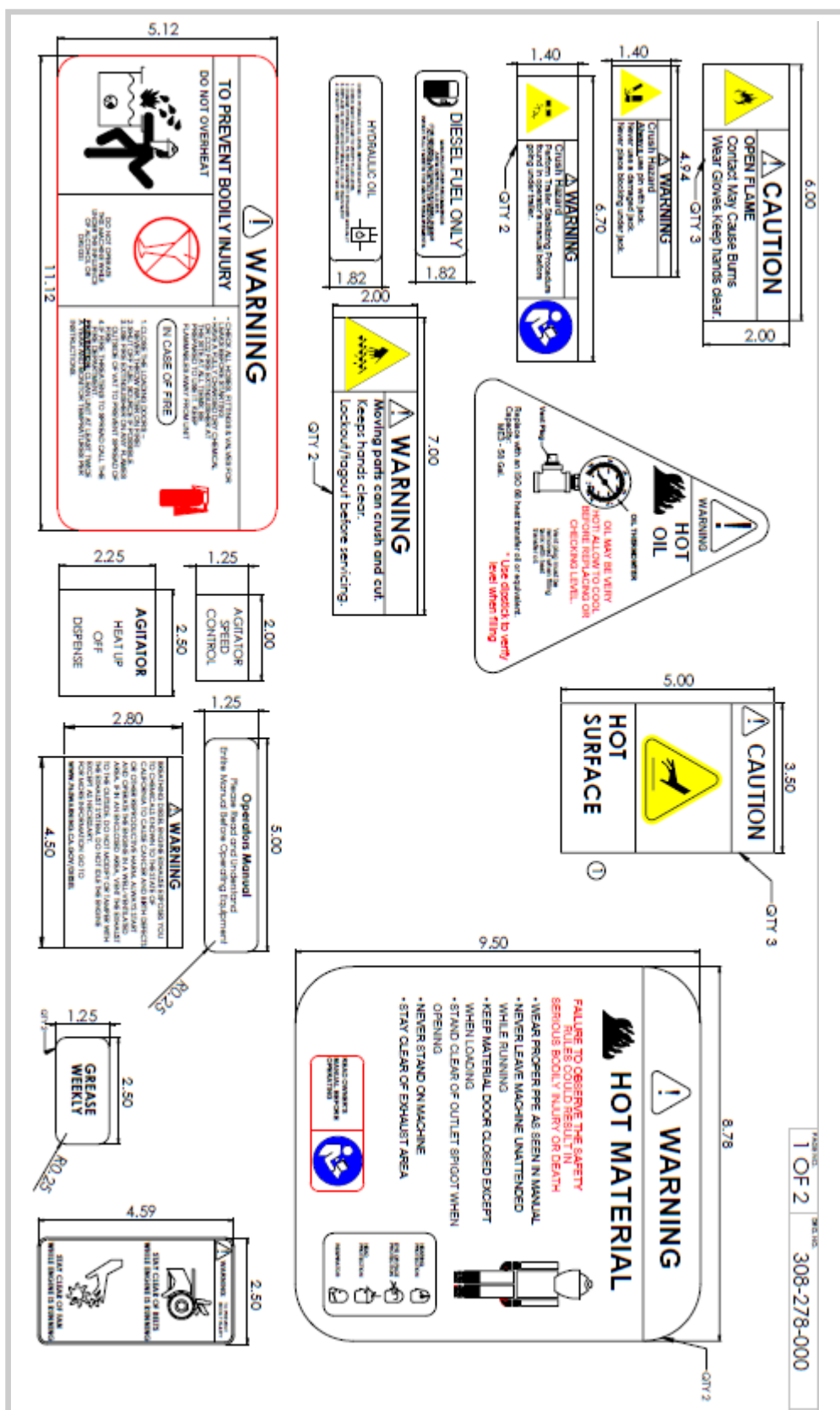
WARNING

***To maintain safe operation of trailer,
do not fill tank more than 75% of tank size***

Product specification may change without notice.
Images contained in this manual may differ from the actual product

Replacement Labels

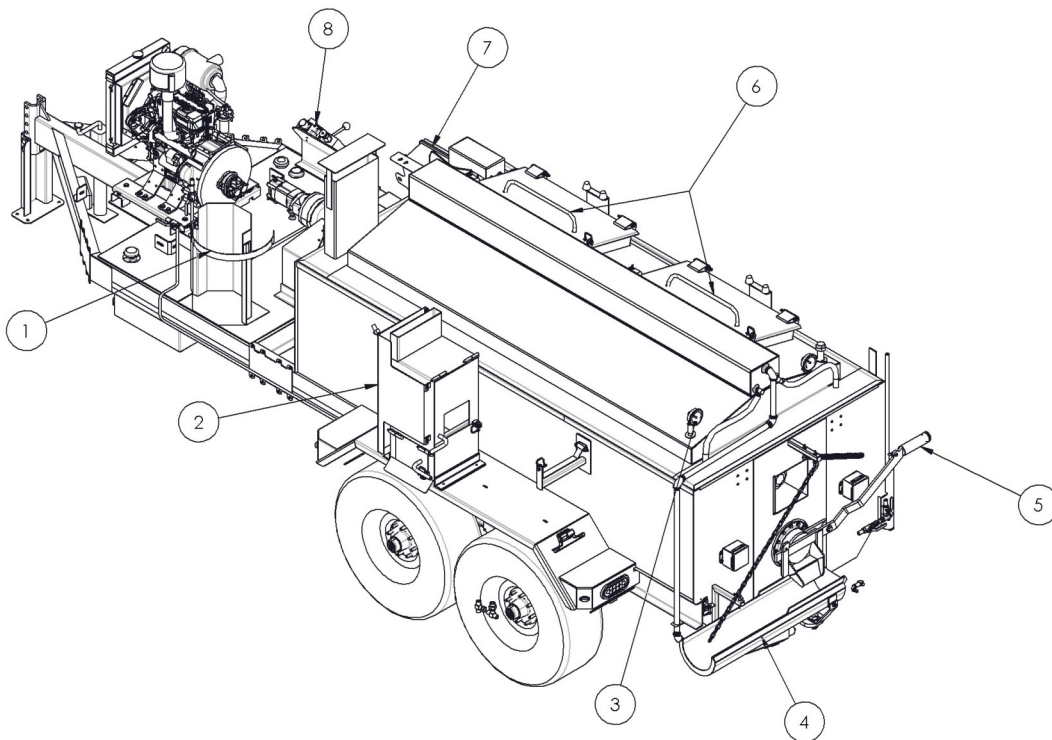
Inspect your labels and replace any damaged. Contact your dealer to order replacement labels.
Part #: 308-278-000



Melter Feature Overview

NOTE: This general outline will only familiarize you with the machine. Read through the entire manual before putting this machine into operation.

- 1) **Propane Tank Mount:** Propane Tank mount for heated tool box, handheld torch, and heated trough.
- 2) **Heated Tool Cabinet:** Cabinet for mastic application tools that is heated with a propane burner.
- 3) **Oil Level Dipstick And Temperature Gauge:** Allows you to monitor the amount of Heat Transfer Oil in the tank. Displays the heat transfer oil temperature.
- 4) **Mastic Trough:** Mastic is dispensed from the chute, chute angle can be adjusted. The Trough is heated with a propane burner.
- 5) **Mastic Gate:** Controls the mastic to flow or stop.
- 6) **Loading Door:** Place the material on safety door to load the melting tank.
- 7) **Control Panel:** The main control panel is used to monitor the temperature of the material, heat transfer oil, and battery voltage of machine use.
- 8) **Hydraulics Control:** Hydraulic and Agitation Control.



Base model shown

Your model may included additional options or variations.

Control Panels

Main Control Panel

The control panel is used to operate the melter control system. All controls are located within the cover.



877-841-0848

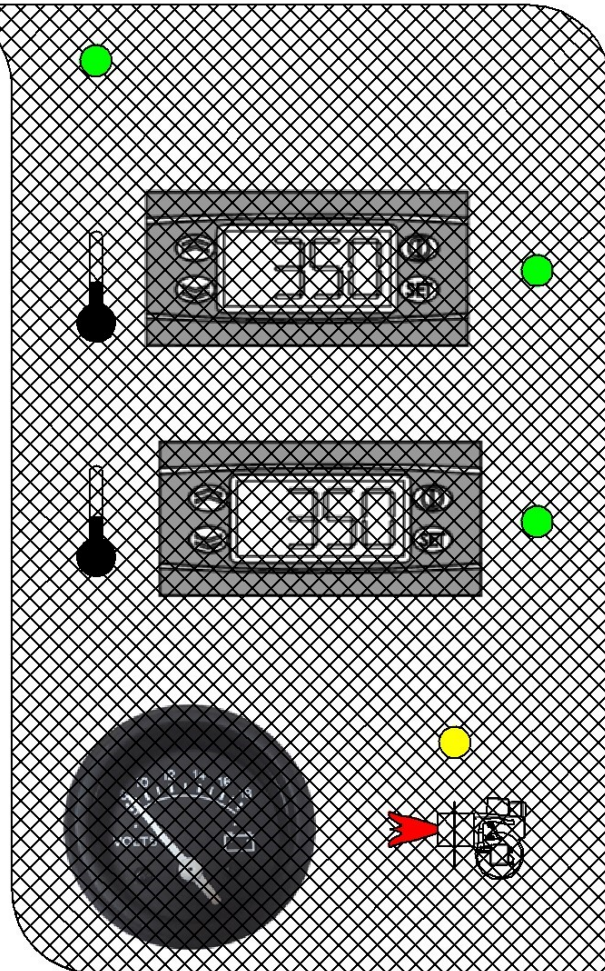
START UP:

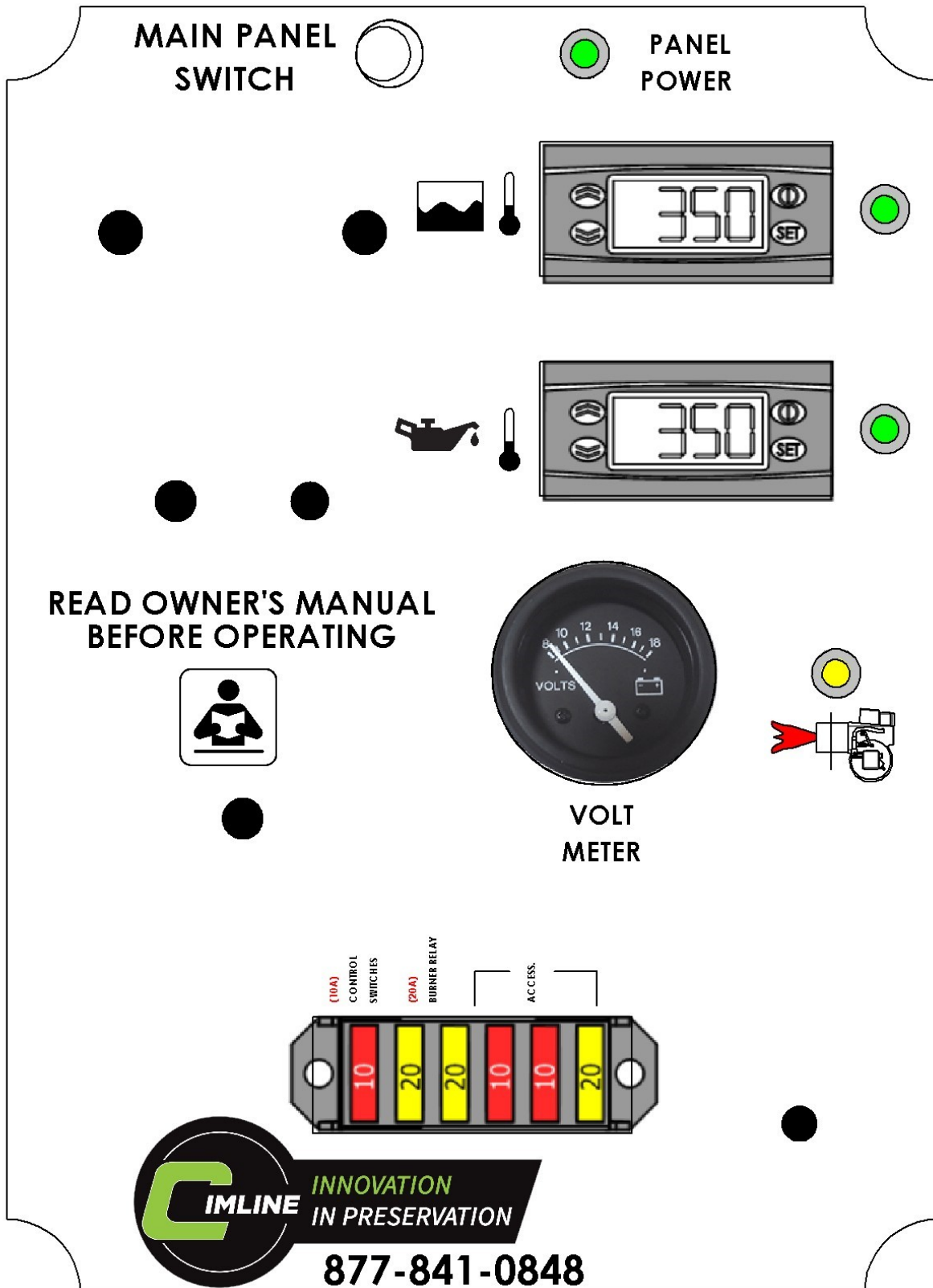
1. TURN KEY TO START ENGINE
2. VERIFY MAIN PANEL SWITCH IS ON WITH PANEL POWER LIGHT
3. WHEN THE BOTTOM GREEN "OIL" LIGHT IS ILLUMINATED, TURN ON AGITATOR TO "FORWARD" POSITION
4. WHEN ALL GREEN LIGHTS ARE ILLUMINATED, TURN ON AGITATOR TO "REVERSE" POSITION; UNIT IS READY FOR USE

COOLDOWN PROCEDURE:

1. TURN AGITATOR TO "FORWARD" POSITION
2. TURN OFF MAIN PANEL SWITCH
3. LET MACHINE COOLDOWN FOR 15 MINUTES
4. TURN ENGINE OFF

**READ OWNER'S MANUAL
BEFORE OPERATING**



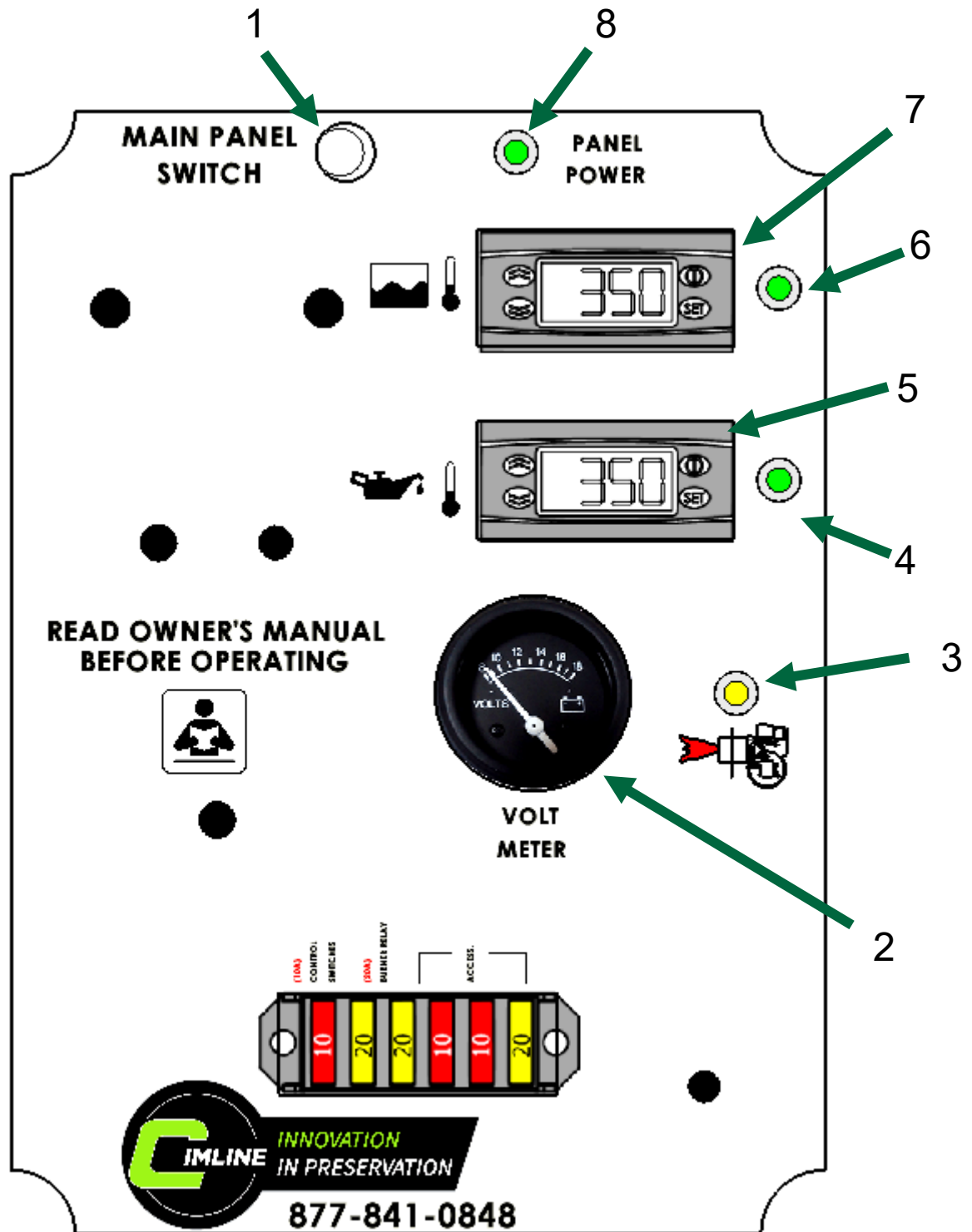


Inside the Main Control Panel box is a Sub Control Panel.
See the next page for detailed explanation of use.

Sub Control Panel Controls and Their Functions

- 1) **Main Panel Switch On/Off:** When this switch is on, the control panel is on. This means the two controllers which controls the burner are on along with the voltmeter.
- 2) **Volt Meter:** This voltmeter displays the voltage of the battery while the control panel is on.
- 3) **Diesel Burner LED (Yellow):** This LED indicates that the Diesel Burner is on.
- 4) **Heat Transfer Oil LED (Green):** This LED indicates that the Heat Transfer Oil has reached the preset temperature. This indicates that you can turn the agitator on.
- 5) **Oil Temperature Controller:** The controller for your CIMLINE ME3 melter has been factory set to run ISO Grade 68 heat transfer oil.
- 6) **Material LED (Green):** This LED indicates that the Material has reached the preset temperature.
- 7) **Material Temperature Controller:** The control system on your CIMLINE ME3 melter has been factory set to run the most common types of materials. See page 17 to override settings.
- 8) **Panel Power LED (Green):** This LED indicates that the control panel is on.

Sub Control Panel Controls and Their Functions



Melter Start Up

Load Material into Empty Tank

All material must be clean. Keep all foreign matter out of melting tank.

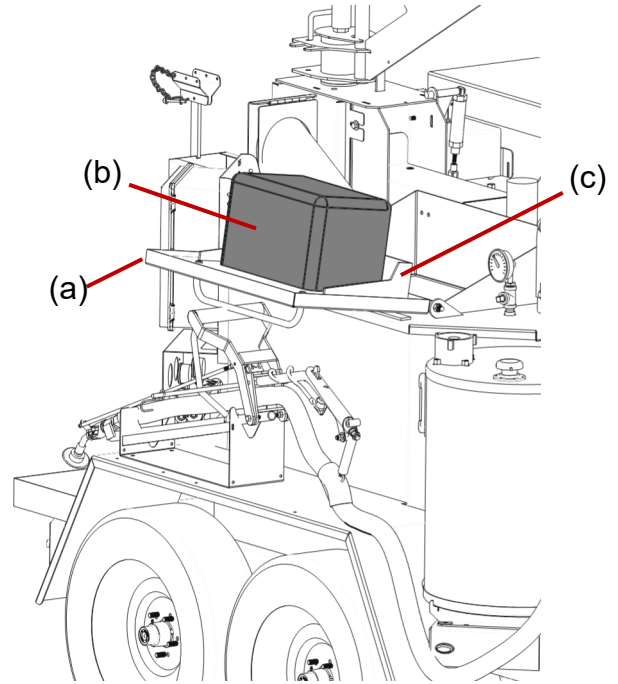
- 1) Open the material door (a) and place the block of material (b) on the open door against the holder (c).
- 2) Push door to the closed position.

WARNING

TO AVOID CONTACT WITH HOT SEALANT DO NOT DROP MATERIAL INTO THE MELTER WITH DOOR OPEN.

LOADING OPERATOR MUST WEAR PROTECTIVE CLOATHING COVERED ON PAGE 4.

LOAD MATERIAL FROM GROUND ONLY. NEVER CLIMB ON THE TRAILER TO LOAD.

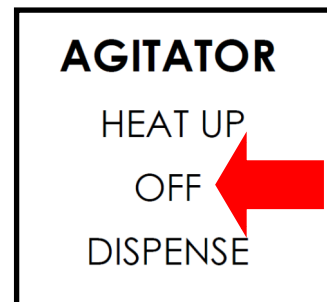


1. SETUP:

- A) Set Control Panel Main Switch to “On”, this is shown by the LED “Panel Power” when the engine is running.
- B) Ensure the agitator is set to the “Off” position. This is the middle position of the spool valve.



**PANEL
POWER**



2. START ENGINE:

- A) Turn key on engine control to “1”
- B) Allow 3-5 seconds to heat glow plugs
- C) Turn key to “2”



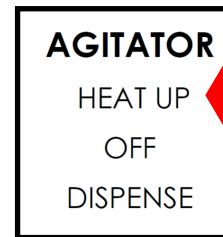
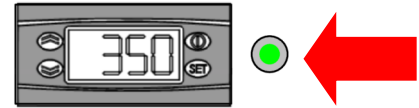
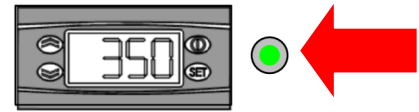
Melter Start Up

3. MELTER PREPERATION

A) Wait for **the two** indicator lights (**GREEN** lights) to turn on.

B) Turn Agitator to the “**HEAT UP**” position.

**DO NOT OPERATE MACHINE IF DOOR
ACTIVATED AGITATOR STOP IS NOT
WORKING**



4. SETTING AGITATOR SPEED

Wait for material to reach desired temperature



A) Ensure the Agitator is in the “**Heat Up**” position

B) Slowly adjust the Speed Control knob until Agitator is spinning at desired speed.

C) A slower agitator speed is recommended.

DO NOT ROTATE AGITATOR AT GREATER THAN 20 RPM to ensure proper mixing. Agitator speed can be observed by looking at the love joy coupling.



CAUTION

Use caution when in proximity to flowing hot material. This includes proper face and skin protection.

5. Propane Burner Controls

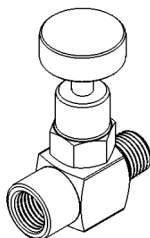
A) Open Propane Tank and set regulator to 15 PSI.

B) Open ball valves for tool box and heated chute burners on propane system.

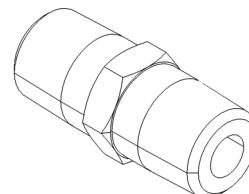
C) Slowly open needle valves near propane orifices and light propane burners on heated chute and heated toolbox.

D) Adjust propane flow on needle valve until desired flame size is reached.

Needle Valve
(P#: 121163)



Propane Orifice
(P#: 156392)



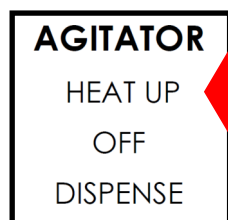
APPLYING MASTIC

With Start Up procedure complete, you are ready to begin sealing

- A) Turn Agitator to the **“DISPENSE”** Position
- B) Open Material Gate at rear of machine.
- C) Let material flow onto heated chute.
- D) Scrape material from chute into Desired Tool.

Cool Down Procedure

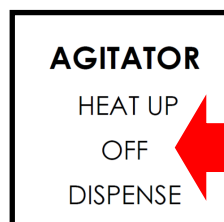
- A) Close the 2 propane needle valves (Near the Tool Box Heater and trough), 3 ball valves (2 at the propane tank and the 3rd at the back of the machine on the passenger side), and close the propane tank.
- B) Set Control Panel Main Panel switch to **“OFF”**. Indicated by the Panel Power LED being unpowered.
- C) Put the agitator into the **“Heat Up”** position.
- D) Let machine run for 15 to 30 minutes..
- E) Put the Agitator Directional Switch to the **“OFF”** position.



**PANEL
POWER**

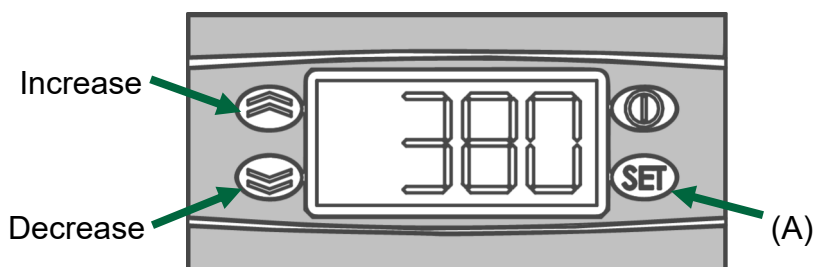
Shut Down Procedure

- A) Shut Engine off by turning key to **“0”**
- B) Set Control Panel Main Panel switch to **“ OFF ”**.
- C) Put the Agitator Directional Switch to the **“OFF”** position.
- D) Ensure all valves are closed going to the tool box and trough burners.



Modifying Sealant Temperature Control Settings

The Sealant Temperature Control on your CIMLINE ME3 Melter has been factory set to run the most common types of mastics. These mastics have an application temperature of 380° F (193° C) With some mastics, it may be require a change to the controller to achieve the appropriate application temperature. To achieve this, open the control box and alter the Material Temperature Controller (top controller) by following the directions below.

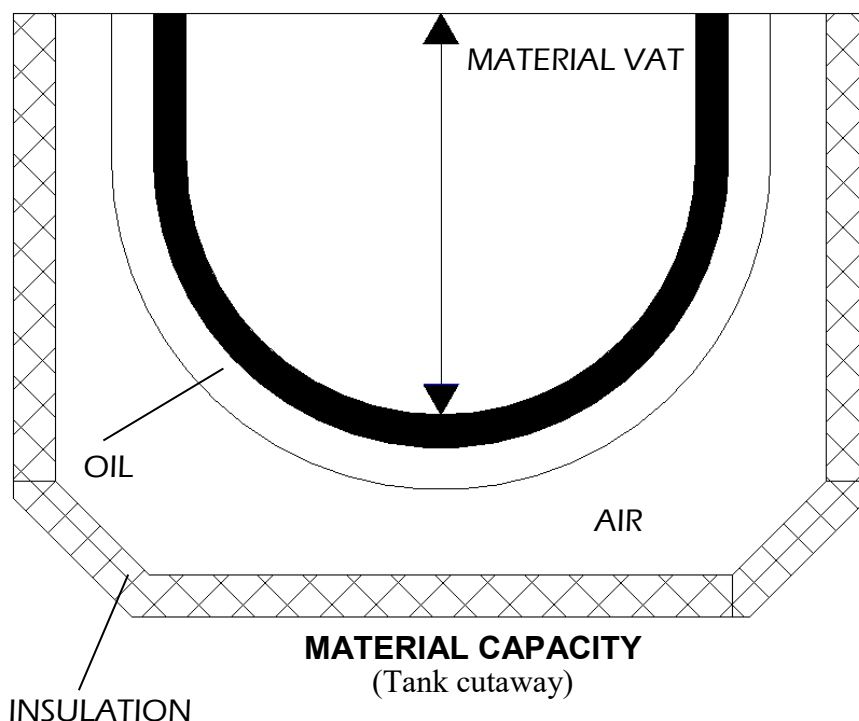


- 1) Press the SET button.
- 2) SP1 is displayed.
- 3) Press the SET button.
- 4) Current Temperature is displayed.
- 5) Use the arrow buttons to change to the desired temperature.
- 6) Press the SET button.
- 7) Let the controller time out. Your controller will now be changed and the updates will be saved.

Material Tank Capacity

The amount of material can be calculated by measure the depth of material in the tank.

Material Depth (in)	Material In Tank (Gal)
2	9.0
4	25.9
6	44.8
8	116.1
10	131.4
12	145.8
14	156.8
16	173.3
18	202.3
20	230.4
22	258.6
24	286.8
26	315.0
28	343.2



Heat Transfer Oil Specifications

ISO Grade 68 Heat transfer Oil Specification

To insure maximum safety and performance, CIMLINE recommends you purchase your oil through CIMLINE. CIMLINE Heat Transfer Oil can be ordered in bulk quantities. Contact your CIMLINE dealer to order.

There are many different types of Heat Transfer Oils on the international marketplace. It is critical that you use the proper oil to prevent poor performance, oil flashing, or auto-ignition. To conform to most government bids and to supply a readily available product, ISO Grade 68 Heat Transfer Oil specifications listed.

ISO VG#	68
Pour Point	10° F (12° C)
Flash Point	485° F (252° C)
Density	7.27 lb/gal (4.22 kg/L)
Viscosity CsT @ 40C	62

NOTICE

Using Heat Transfer Oil that does not meet CIMLINE Heat Transfer Specification is cause for a voided warranty

Reference information

ISO GRADE - Is a viscosity index (ability to flow/thickness). An ISO Grade 68 oil can be an engine oil, hydraulic oil, etc. The manufacturer uses different additives to make the oil conform to different applications. **YOU MUST CLARIFY** with the supplier that the oil is to be used in a heat transfer system to avoid any potential problems. Oil is also available from CIMLINE in 5 and 30 gallon(19 and 114L) containers for ship-out.

FLASH POINT - Test in which an open container of oil is heated until an open flame will flash when passed over the fumes.

FIRE POINT - Same test as the flash point except the oil is heated until the gasses will start a fire.

AUTO IGNITION POINT - The point at which fumes will burst into flame when exposed to air.

NOTE: CIMLINE Melter/Applicators use an expansion tank, when the oil heats up and expands, it flows into the expansion tank. The expansion tank is cooler since it is not insulated and is surrounded by outside airflow. The only exposure the hot oil has to the atmosphere is through a 3/4" vent/overflow pipe. This is done so the oil in the tank can run higher than the flash point. Only the lower temperature oil fumes are exposed to the atmosphere.

Fluid and Components Specifications

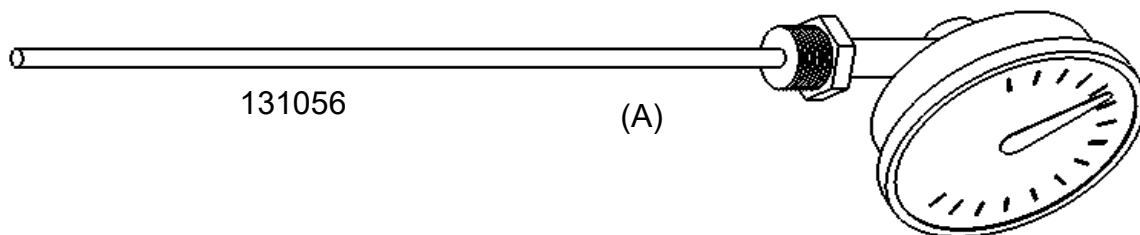
	ME3
Hydraulic Reserve Capacity	15 Gallons (114L)
Hydraulic Oil Type	Conoco MV32 or equiv
Diesel Fuel Capacity	30 Gallons (114L)
Diesel Fuel Type	ASTM D975 No.2
Heat Transfer Oil Capacity	58 Gal. (80L)
Heat Transfer Oil Type	See Specs. On Previous page.
Agitation Drive Relief Setting	1500 PSI (76 bar)

NOTICE

Only the oil specified or equal may be used in this system.
(Always check your local and state regulations before disposal).

NOTE: A dipstick (A) is provided for checking heat transfer oil level when cold. For oil level see Page 23.

This is a petroleum based product. CIMLINE recommends that you do not mix oil brands. Mixing any oils (Engine oil, transmission fluid, etc.) adversely affects each manufacturers formula.



ME3 Maintenance And Troubleshooting

MAINTENANCE AND TROUBLESHOOTING:

ME3 Maintenance - Schedule

ME3 Maintenance - Key Components

ME3 Maintenance - Changing Heat Transfer Oil

ME3 Maintenance - Hydraulic Oil Servicing

ME3 Maintenance - Tank Burner

ME3 Maintenance - Trouble Shooting Guide

23

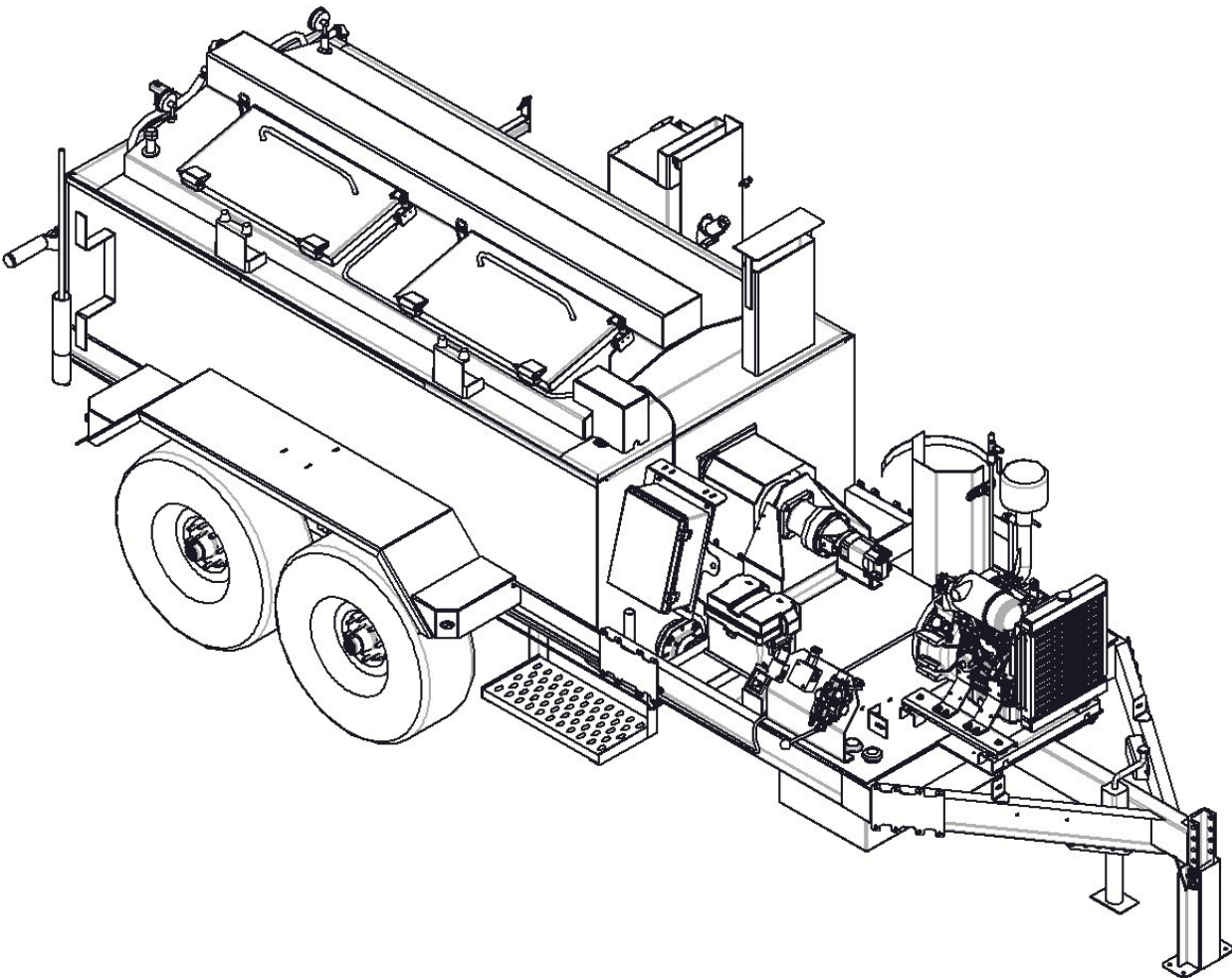
24

25

26-27

28-31

32



ME3 Maintenance - Schedule

MAINTENANCE OPERATION	DAILY	25 HRS.	100 HRS.	200 HRS.	500 HRS./ YEARLY
CHECK ENGINE FUEL LEVEL	X				
CHECK ENGINE AND HEAT TRANSFER OIL	X				
CHECK HYDRAULIC OIL (ADD IF LOW)	X				
CHECK ENGINE AIR CLEANER	X				
GREASE AGITATOR BEARINGS		X			
CLEANOUT MATERIAL SYSTEM		X			
INSPECT AND CLEAN COOLING SYSTEM/RADIATOR			X		
INSPECT AGITATOR PACKING GLAND			X		
INSPECT PROPANE SYSTEM AND ORIFICES			X		
SERVICE AIR CLEANER ELEMENT/GASGETS				X	
INSPECT BURNER NOZZLE, ELECTRODE AND HEAD POS. (ADJUST IF NECESSARY)				X	
CHANGE ENGINE OIL AND OIL FILTER				X	
REPLACE FUEL FILTER				X	
INSPECT DIESEL BURNER ELECTRIC EYE (CLEAN IF DIRTY)					X
GREASE WHEEL BEARINGS					X
INSPECT STARTER MOTOR					X
REPLACE HYDRAULIC OIL					X
REPLACE HYDRAULIC RETURN FILTER					X
REPLACE HYDRAULIC SUCTION STRAINER					X
REPLACE BURNER NOZZLE					X
CHANGE HEAT TRANSFER OIL					X
CHANGE DIESEL FUEL FILTER					X
FLUSH RADIATOR AND REPLACE FLUID					X
REPLACE GEARBOX OIL					X

ME3 Maintenance - Key Components

Engine

The operation and life of the engine depends on you and your operator. Do not start engine until the engine precheck is complete. The engine precheck consists of checking the oil, the fuel level, the hydraulic oil level and the air filter. For more details about your engine please refer to the Engine Operator Maintenance Manual and Warranty provided with your Melter applicator.

NOTE: When breaking in a new Melter, CIMLINE recommends running the engine for one hour with no load prior to actual use on the job.

Air Cleaner

Due to the dusty conditions that can be created by road work, it is essential to check the engine air cleaner element daily. Remove element and shake out the accumulated dust and dirt. Wipe out dirt from inside cover and from housing. Reference engine manual for washing instructions. CIMLINE recommends stocking replacement filters.

Fuel

Use high quality detergent oil of API (American Petroleum Institute) service class CC or CD grade. Select the viscosity based on the air temperature at the time of operation. Reference your engine manual for other recommendations.

Burner

This machine has a single burner. There are several items that need to be inspected periodically on the burner. These items include the burner nozzle, electrode and head position, and the electric eye.

Gear Box

This machine has a high gear ratio gear box for the agitator. This gear box has a machine grade oil that needs to be replaced periodically. The first oil change is after **50 Hours of Use**. After the initial oil change the gear box needs it's oil replaced every 1000 hours. The Gear box uses a 80W110 Oil.



CAUTION

CONTACT WITH LINING MAY CAUSE SKIN OR EYE IRRITATION, WEAR LONG SLEEVE, GLOVES, AND GOGGLES WHEN INSPECTING LINING.

ME3 Maintenance - Changing Heat Transfer Oil

HEAT TRANSFER OIL LONGEVITY:

The regular interval for changing heat transfer oil is once annually or every 500 hours. If the time frame between heat transfer oil changes is not known a significant difference in temperature from the digital oil controller readout and the analog gauge may mean the oil has reached it's service life and is due to be changed. Oil that is not changed regularly can cause numerous problems including; slow start-up times, incorrect controller temperature readings, oil crystalizing inside the vessel and damage to the heat sensing probes.



DANGER

Going under the trailer puts a person at risk of serious injury or death. Follow procedure in the manual to stabilize trailer before going under the trailer.



WARNING

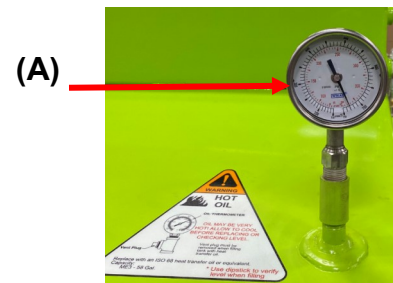
The melter operates at elevated temperatures which can cause burns. Be sure the heat transfer oil is cool before performing maintenance.

NOTICE

Using oil that does not meet CIMLINE Heat Transfer Oil specification is cause for a voided warranty.

CHANGING/REPLACEMENT OF HEAT TRANSFER OIL:

- 1) Remove the dipstick (A) and fill cap (B) of the HTO tank.
- 2) Drain from the bottom of the vessel (under the trailer) through the 3/4" pipe cap (E). Use two wrenches to remove the drain cap, you do not want the pipe to come unscrewed, just the cap on the end of the pipe.
- 3) Replace the 3/4" drain plug (E) and refill with the correct amount of heat transfer oil as stated on page 21 by pouring through the tank fill cap (B).
- 4) Replace the tank fill cap, and check for the proper heat transfer oil level using the dipstick.



(B)



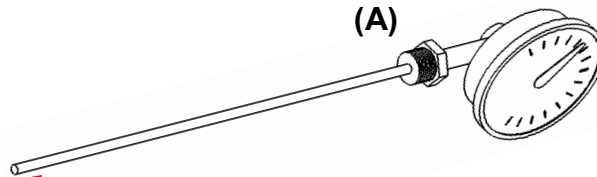
CHECKING HEAT TRANSFER OIL LEVEL:

NOTE: Use dipstick (A) as provided for checking heat transfer oil level when cold.

(E)



(A)



ME3 OIL LEVEL - OIL MUST BE AT, OR JUST ABOVE, THE END OF THE PROBE

NOTICE

Do not operate machine when heat transfer oil is below the marking line or significant damage to machine can occur.

ME3 Maintenance - Hydraulic Oil Servicing

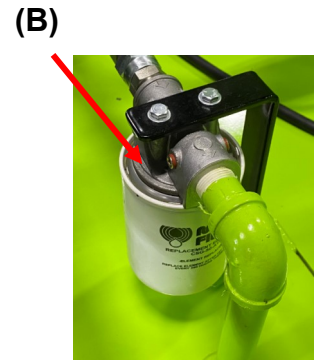
SERVICING THE HYDRAULIC OIL:

- 1) Open the Hydraulic tank filler cap (A).
- 2) Unscrew and remove the Hydraulic tank drain plug from the bottom of the tank. Be prepared to capture nearly 15 gallons of fluid while the reservoir tank drains.
- 3) Spin off the return filter cartridge (B) and inspect for metal shavings and/or unusual debris.
- 5) Unscrew and remove the suction strainer (C) from the front of the tank and replace.
- 6) Apply pipe thread tape and an appropriate amount of thread sealant to the threads of the suction strainer (C) and any other pipe threads in this assembly. The hydraulic JIC compression type connections do not require thread tape or sealant.
- 7) Tighten all the components of the suction strainer (C) and related hydraulic connections and leak test them before filling the tank completely with hydraulic oil.

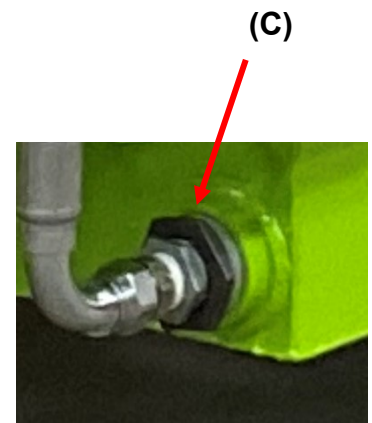


WARNING The melter operates at elevated temperatures which can cause burns. Be sure the hydraulic oil is cool before performing maintenance.

- 8) Reassemble the return filter assembly in reverse of the disassembly instructions being careful to not drop the filter cup O-ring (B) into the tank while replacing the filter cup (A) into the return filter base.
- 9) Spin on a new filter cartridge (B).
- 10) Fill the tank using high quality Conoco MV32 or equivalent hydraulic oil. The maximum capacity of the hydraulic tank is 15 gallons, but the actual fill level of hydraulic oil is between 12 and 13 gallons. Do not fill the tank higher than the 2" above the bottom of the filler cap filter.



	PART #	DESCRIPTION
(A)	152044	Hydraulic Tank Filler Cap
(B)	172695	Element - Return Filter
(C)	172186	Suction Strainer
	171631	Hydraulic Tank Sight Gauge



NOTICE

Using oil that does not meet CIMLINE hydraulic oil specification is cause for a voided warranty.

ME3 Maintenance - Hydraulic Oil Servicing

HYDRAULIC OIL LONGEVITY:

The regular interval for changing hydraulic oil, replacing the return filter and recirculation strainer is once annually or every 500 hours. Hydraulic oil that is not changed regularly can cause numerous problems including; poor or sluggish control operation, incorrect pressure readings and damage to the hydraulic actuators and pumps.

The operation and life of the hydraulic system depends on you and your operators. Do not start engine until the engine pre-check is complete which should include the inspection of hydraulic oil level and the overall hydraulic system.

HYDRAULIC OIL:

Use high quality Conoco MV32 or equivalent hydraulic oil. CIMLINE recommends that you do not mix oil brands. Mixing any oils (Engine oil, hydraulic oil, etc.) adversely affects each manufacturers formula. The maximum capacity of the hydraulic reserve tank is 15 gallons (125L).

HYDRAULIC OIL CAPACITY:

The maximum capacity of the hydraulic tank is 15 gallons, but the actual fill level of hydraulic oil is between 12 and 13 gallons. Do not fill the tank higher than the 2" above the bottom of the filler cap filter.



DANGER

Going under the trailer puts a person at risk of serious injury or death. Follow procedure in the manual to stabilize trailer before going under the trailer.



WARNING

The melter operates at elevated temperatures which can cause burns. Be sure the hydraulic oil is cool before performing maintenance.

NOTICE

Using oil that does not meet CIMLINE Hydraulic Oil specification is cause for a voided warranty.

ME3 Maintenance - Tank Burner

TANK BURNER:

Have your equipment inspected at regular intervals by a qualified service agency to assure continued proper operation. The burner should be adjusted using dedicated combustion test equipment. Failure to properly set the burner could result in inefficient operation, equipment damage and/or conditions that could potentially cause severe personal injury, death or substantial property damage.



Professional Service Required: Incorrect installation, adjustment, and use of this burner could result in severe personal injury, death, or substantial property damage.

OWNER SERVICE AND MAINTENANCE

Daily:

Check the area around your burner/equipment to make sure:

- A. Nothing is blocking the burner inlet air openings.
- B. Air ventilation openings are clean and unobstructed and the exhaust is not crusted.
- C. No combustible materials are stored near the equipment.

Beckett Corp. ADC 12V Tank Burner

Capacity: Firing rate 0.75 - 2.50 GPH, Input 105,000 - 350,000 Btu/h

Fuel: (USA) No.1 or No.2 diesel fuel

Electrical: Power Supply 13.5Vdc, Operating load w/igniter on 15amps, w/igniter off 8-10amps

Pump: Outlet pressure 140psi

Regular Service/Maintenance:

- A. The following components/assemblies should be checked/adjusted/replaced on a regular basis. See page 38 for more information and the tank burner parts exploded view.
- B. Replace the diesel fuel supply line filter. The line filter cartridge must be replaced to avoid contamination of the pump and nozzle.
- C. Inspect the diesel supply system. All fittings should be leak-tight.
- D. Verify the nozzle is the one originally specified by CIMLINE and always replace the nozzle with one having the exact specifications from CIMLINE.
- E. Clean and inspect the electrodes for damage, replacing any that are cracked or chipped.
- F. Check electrode tip settings. Replace electrodes if tips are rounded.
- G. Inspect the igniter spring contacts. Clean or replace if corroded.
- H. Clean the cad cell (electric eye), if applicable.
- I. Inspect all gaskets including the igniter base plate gasket. Replace any that are damaged or missing.
- J. Clean the blower wheel, air inlet, air guide, retention head and static plate of any dirt, asphalt or other material.
- K. Check motor current. The amp draw should not exceed the nameplate rating. Check all wiring for loose connections or damaged insulation.
- L. Check the pump pressure and cutoff function.
- M. Check ignition system for proper operation.
- N. Inspect the exhaust system for soot accumulation or other restriction.

Extended Down Time:

If the equipment will be stored for an extended period of time, insure that the fuel tank is full and add a fuel stabilizer to the tank.

ME3 Maintenance - Tank Burner

TANK BURNER TROUBLESHOOTING:

Oil burners that are designed for use on road maintenance equipment are built to take temperature extremes, vibration, and rough handling. When performing the following troubleshooting steps, we assume that the oil burner motor and ignition transformer operate continuously and the oil solenoid valve, which controls oil flow, is cycled by the equipment controls. We also assume that there is power to the burner and fuel in the tank.

Symptom	Possible Cause
Fuel Not Igniting	<p>If the burner is not igniting, the burner motor, drive coupling, and fuel pump are operating and fuel is flowing to the nozzle through the solenoid valve, check the following possibilities.</p> <p>Check the air shutter adjustment. If it is opened too far, the flow of air may prevent the arc from reaching the fuel spray. This may appear as a white vapor exhaust from the heater. The ignition system may have failed to supply an adequate arc to ignite the fuel. Check the battery and charging system to insure a continuous supply of 12 to 16 volts DC (15 amps). Check the electrodes for wear and damage. Insure that the electrodes are adjusted properly.</p>
No Flame	<p>If there is no flame, the burner motor and igniter operate continuously and the oil solenoid valve is functional, check the following possibilities.</p> <p>Check for a plugged fuel nozzle. If the coil on the solenoid valve is actuating, insure the valve is opening and closing properly. Check for sufficient fuel pressure. Pressure is 140 psig with valve energized. Check the pump pressure. Check for air in fuel lines. Check burner for broken motor coupling. If the coupling is broken check pump rotation prior to replacing the coupling. Check for contaminated fuel and/or partially plugged fuel filter.</p>
Motor Not Operating	<p>If the blower motor is not operating, check the following possibilities.</p> <p>Check voltage at the motor to insure that switches and relays, in line with the motor, are operating properly. Check pump and motor shaft operation. They should work freely without binding.</p>
No Fuel Spray	<p>If the blower motor is operating, there is fuel in the tank, but oil does not spray out the end of the nozzle, check the following possibilities.</p> <p>Check for a broken or stripped coupling between the pump and the motor. Check the pump output for fuel. Check operation of the fuel valve. Check for a plugged fuel nozzle. Check for air in the fuel line. Check for fuel contamination or plugged filter.</p>
Fluctuation Or No Pump Pressure	<p>If the pump pressure, as determined by a pressure gauge, is erratic or does not exist, check the following possibilities.</p> <p>Check motor rotational speed. Low rpm can cause erratic or no pump pressure. Check for a broken or worn motor coupling. Check that the pump turns freely. Check for air leaks in the lines. Check for fuel froth at the bleed point. Check voltage at the motor. Check for fuel contamination or partially plugged filter.</p>
Slow Motor Rotation	<p>If the blower motor is not operating at the rpm's listed on the nameplate, check the following.</p> <p>Check the supply voltage to the motor. Check for free operation of the motor shaft and pump assembly.</p>

ME3 Maintenance - Tank Burner

Igniter Maintenance:

The igniter assembly does not require any adjustments beyond making sure the springs and the burner electrode rods make solid contact when the igniter is in the closed position. The sealing surfaces of the gaskets should be checked and replaced at the first signs of any damage or deterioration. Clean any dirt or residue from the porcelain bushings, springs, and baseplate.

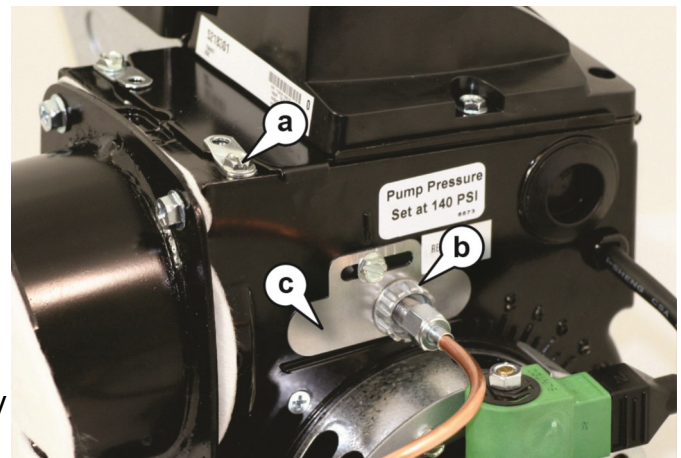
The simplest way to check igniter operation is by supplying voltage to the input and checking to see whether an arc is produced. Check by either looking or listening to see if there is an arc across the electrodes while the burner is running and the igniter is energized.

The igniter must be grounded to the burner before checking the following. To check the igniter, ensure all power to the burner is off and use an ohmmeter to check the resistance between the two springs. The meter should read between .480 - .580 ohm.

The igniter should be replaced if the meter indicates an open circuit, or the spring-to-spring resistance exceeds the .480 - .580 ohm range by more than 10%.

Servicing Nozzle Assembly:

- A. Before proceeding, turn off power to the burner.
- B. Disconnect the diesel fuel connector tube from the nozzle line.
- C. Loosen the two screws securing the igniter retaining clips (a) and rotate both clips to release the igniter baseplate. Then tilt the igniter back on its hinge.
- D. Remove the splined nut (b).
- E. Remove the nozzle line assembly from the burner, being careful not to damage the electrodes or insulators while handling. To ease removal of short assemblies, it may be necessary to loosen the escutcheon plate (c). Reset to the edge of the label.
- F. To replace the nozzle assembly, reverse the above steps.

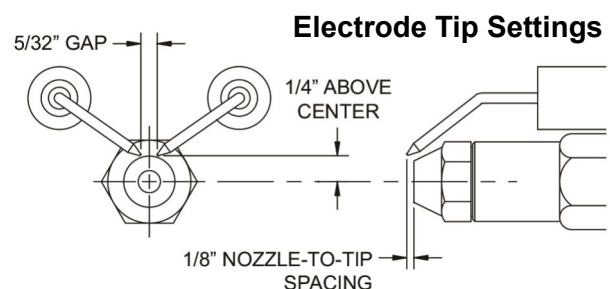


Replacing The Burner Nozzle:

- A. Use rubber gloves and avoid touching the new nozzle with your bare fingers. The oils in your skin can adversely affect the operation of the new nozzle.
- B. Remove the plastic cover protecting the nozzle adapter threads.
- C. Place a 3/4" open-end wrench on the nozzle adapter. Insert the nozzle into the adapter and finger tighten with your gloved hand. Finish tightening with a 5/8" open-end wrench.
- D. Verify that the electrode tip settings comply with the diagram below.

Check/Adjust Electrodes:

- A. Check the electrode tip settings.
- B. Adjust if necessary to comply with the dimensions shown.
- C. To adjust, loosen the electrode clamp screw and slide/rotate electrodes as necessary.
- D. Securely tighten the clamp screw when finished.



ME3 Maintenance - Tank Burner

Primary Controller:

The Beckett ADC tank burner motor is used to drive the blower and pump. The rotational speed of the motor is determined by the voltage supplied and the load placed on the motor. Pump pressure and air settings are the main factors affecting the motor load. The ignition transformer converts battery DC voltage into a high voltage spark to ignite the fuel. The pump and solenoid valve are used to control the flow of fuel from the reservoir to the nozzle.

The tank burner has a control circuit to reduce current draw on the charging system by turning the igniter off after a flame has been established. This circuit controls ignition transformer operation based on a signal from a light sensing cad cell (electric eye). When light hits the cell the control will sense a decrease in resistance across the sensor. As long as sufficient light is reaching the cell eye, the igniter will remain off. If light is removed from the sensor, the igniter will turn on until light is again sensed by the cad cell.

Air Supply Set-up:

The tank burner is set up properly from the factory.

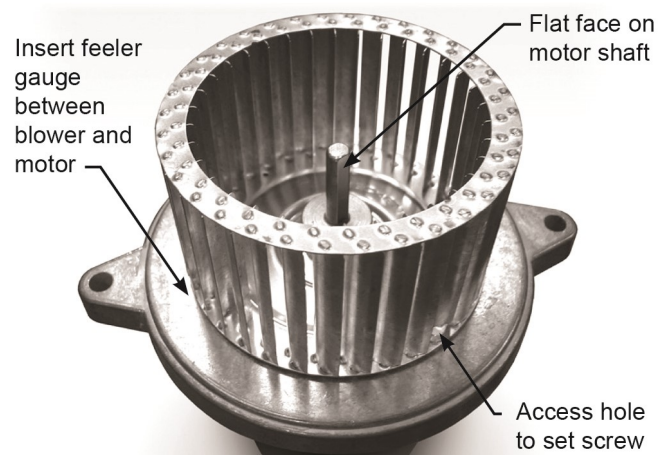
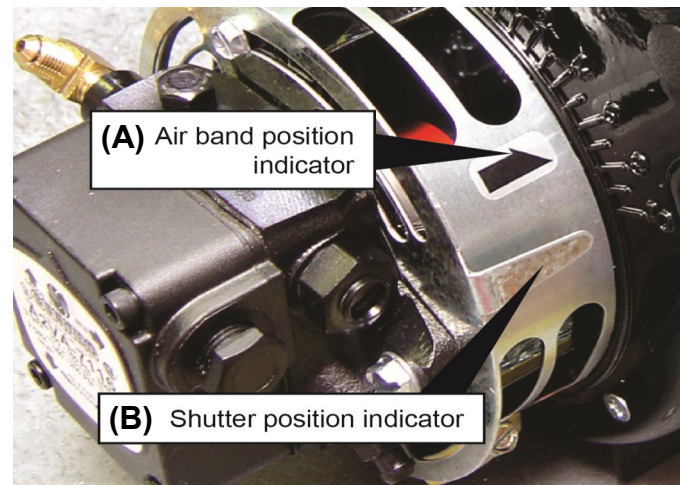
Air Band Position (A) should be set to 1

Shutter Position (B) should be set to 6

Motor, Blower Wheel and Coupling Replacement:

See page 48 for the tank burner parts exploded view

- A. Before servicing, turn off and/or disconnect all power to the burner.
- B. Disconnect the burner motor wires.
- C. Remove the bolts securing the motor to the burner housing.
- D. Remove the motor, coupling, and blower wheel.
- E. Loosen the set screw on the blower wheel to slide the existing wheel off the shaft.
- F. Slide the new blower wheel onto the old shaft and/or slide the old blower wheel onto the new motor shaft.
- G. Place a .030" (1/32" \pm 1/64") feeler gauge between the blower wheel and the motor housing.
- H. Slide the blower wheel toward the motor until it contacts the feeler gauge.
- I. Rotate the blower wheel until the setscrew is centered on the flat of the motor shaft. Tighten the setscrew to secure the wheel.
- J. Slide the motor coupling on the motor shaft, then install the motor on the burner housing. Ensure that the motor coupling fits between the motor shaft and the pump shaft inside the housing. Tighten the motor retaining screws. Reconnect the wires.

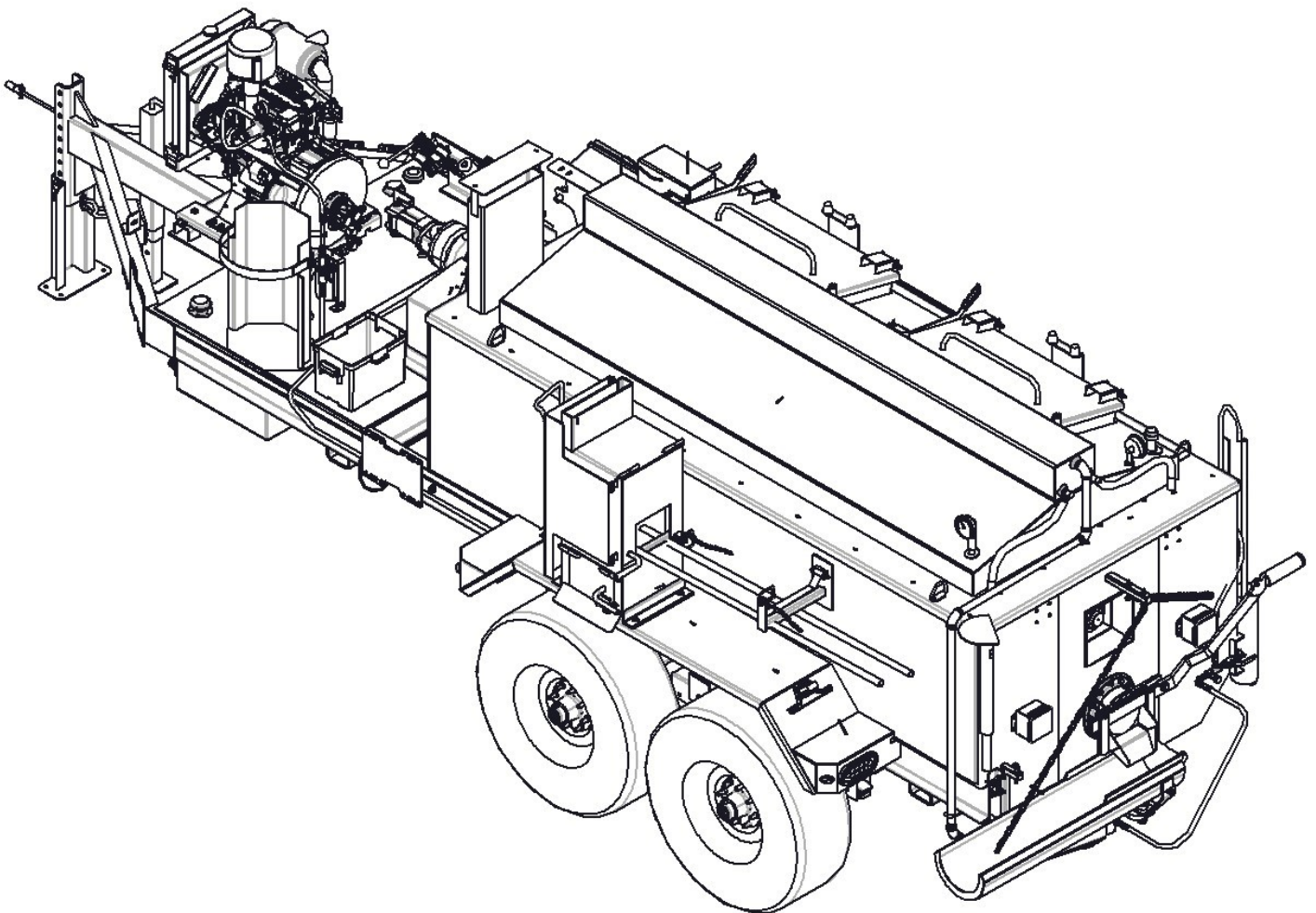


Trouble Shooting Guide

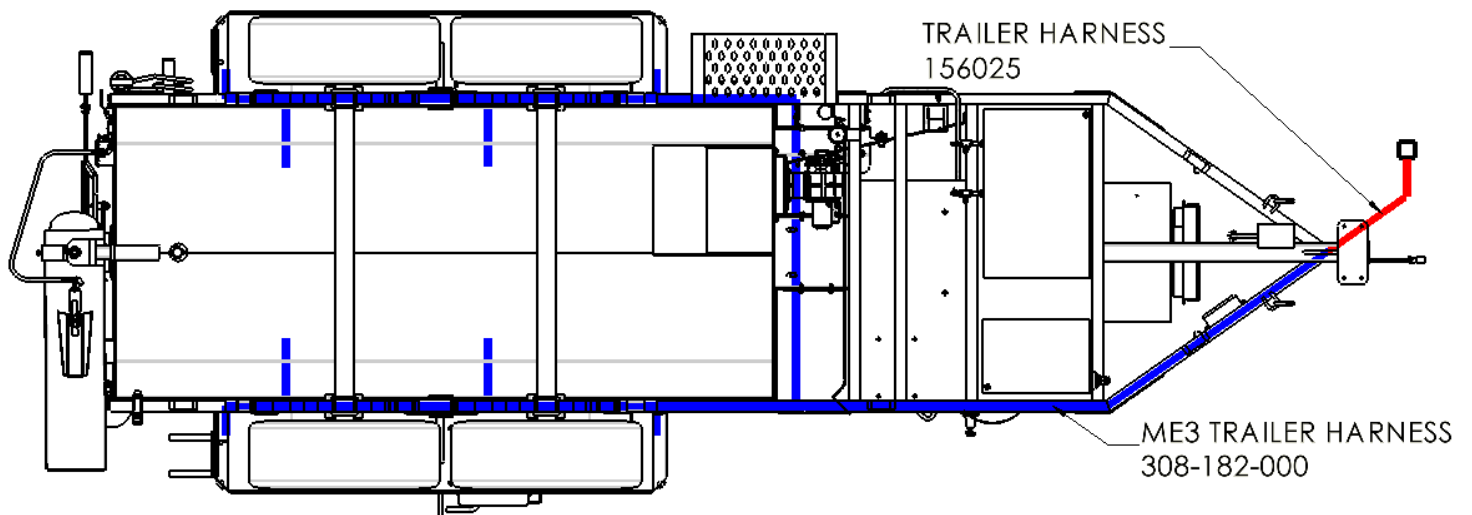
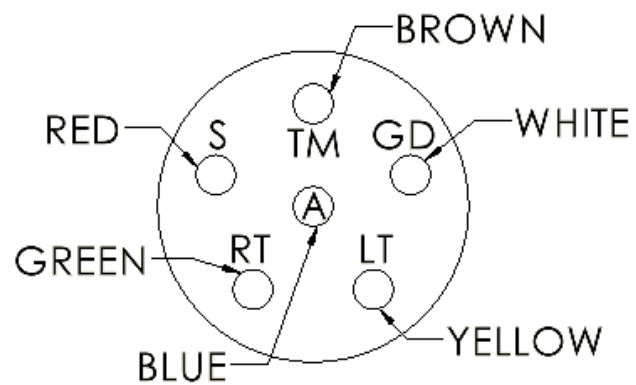
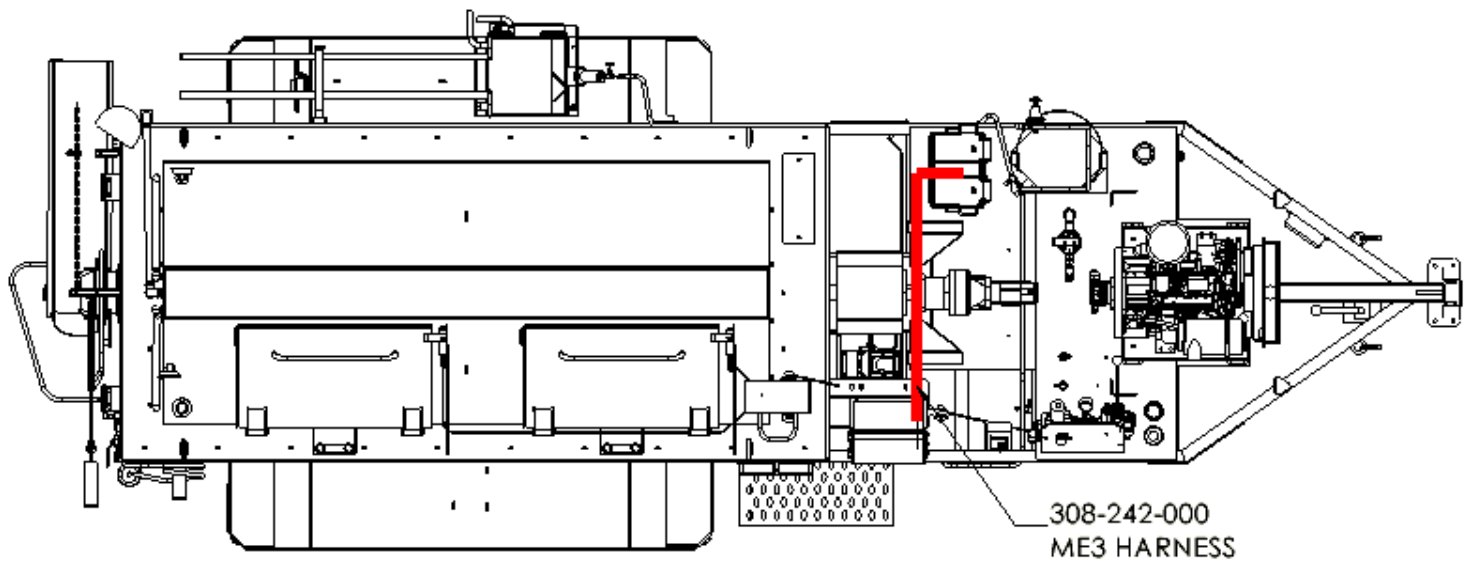
Problem	Cause	Solution
Burner will not ignite	Fuse burned out.	Check fuse.
	Burner relay inoperative	Check for 12VDC at relay.
	Primary control fuse.	Check fuse.
	Thermocouple(s) inoperative.	Replace thermocouple(s).
Agitator will not rotate	Fuse burned out.	Check fuse.
	Sealant material not hot enough.	Allow material to heat longer.
	Too many biscuits added at one time	Continue heat up and reverse agitation to break biscuits free.
	Low hydraulic oil level.	Check oil level.
	Worn agitator motor.	Replace motor.
Sealant heat up time slow	Burner orifice clogged.	Remove orifice and clean.
	Heat transfer oil is worn out.	Check oil level. Replace if necessary.
	Too much old material on tank walls.	Clean material tank.

PARTS AND ASSEMBLY DRAWINGS:

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ME3 Main Wiring Harness	35
ME3 Control Panel Wiring Diagram and Parts	36-38
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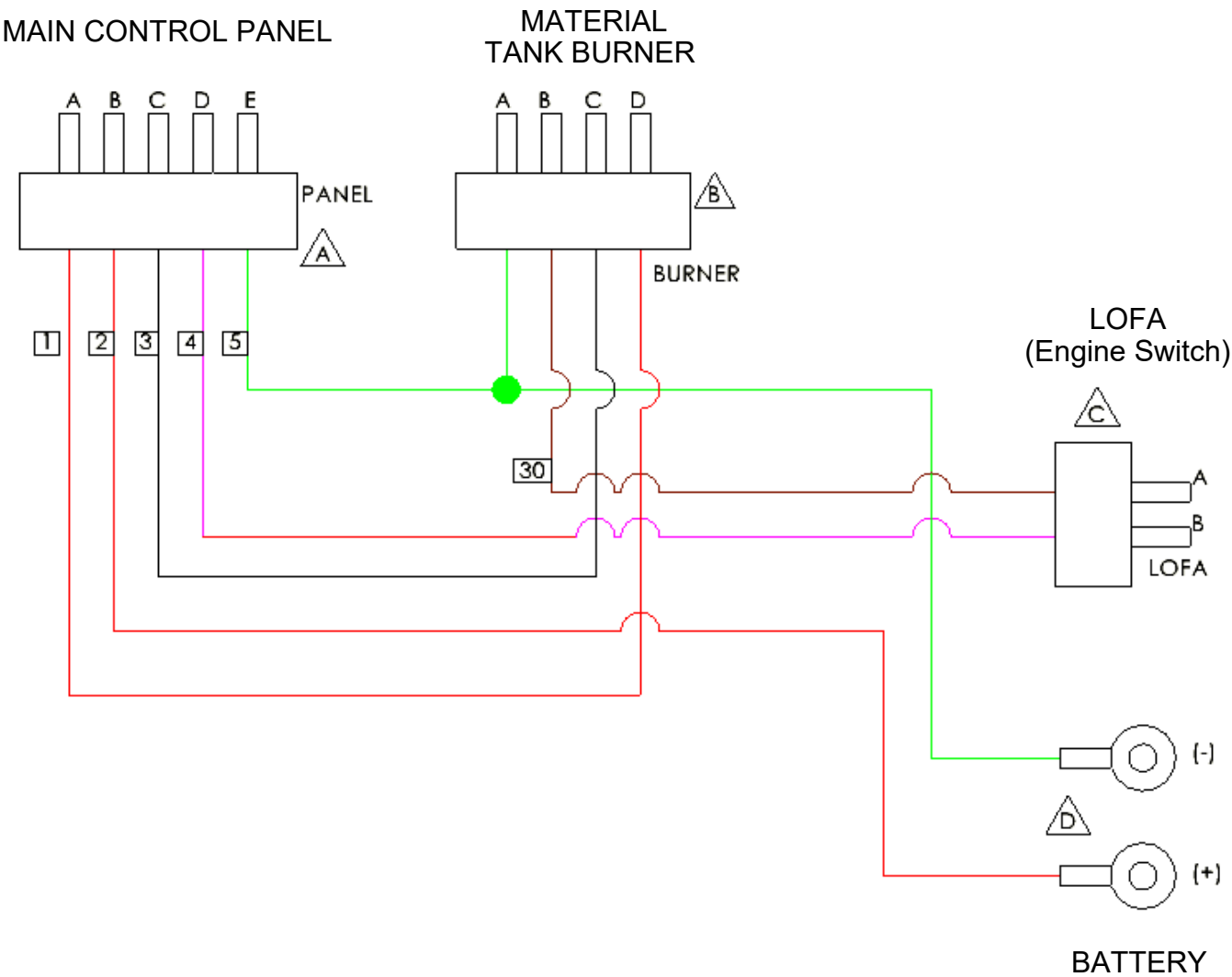
Trailer Wiring Diagram



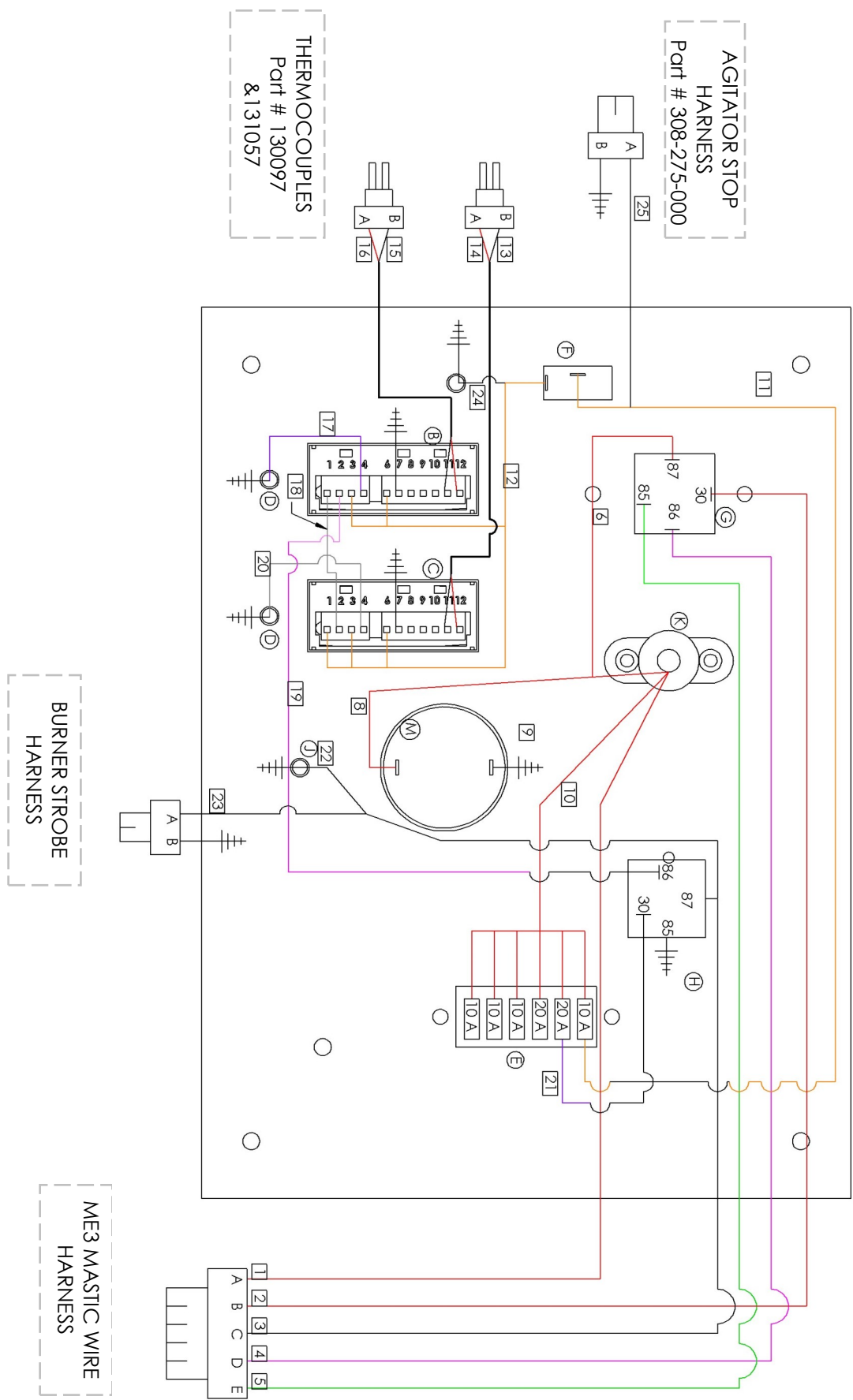
Main Wiring Diagram

ME3 MAIN HARNESS - PN 308-242-000
Wiring diagram

#	DESCRIPTION	COLOR
1	BURNER POWER	RED/BLACK STRIPE
2	BATTERY (+)	RED
3	BURNER ENABLE	WHITE
4	MICROPANEL ASSC.	PINK
5	BATTERY(-)	GREEN/YELLOW STRIPE
30	BURNER ERROR	BROWN

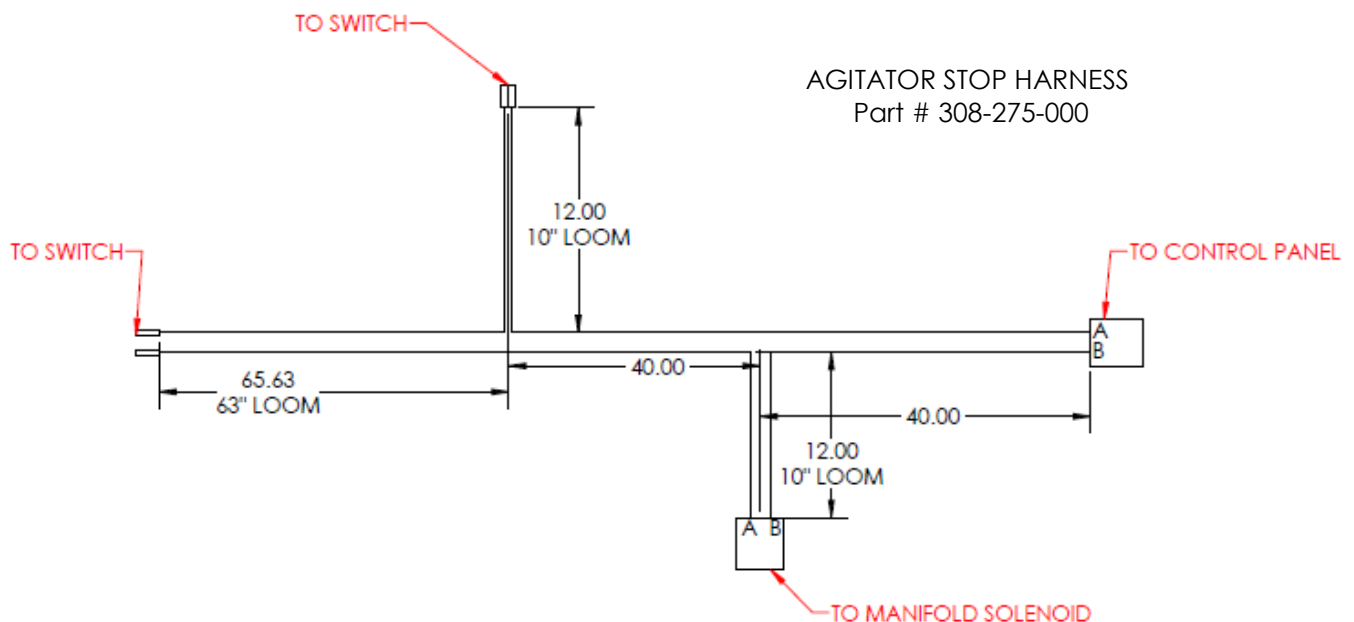


ME3 Control Panel Wiring Diagram



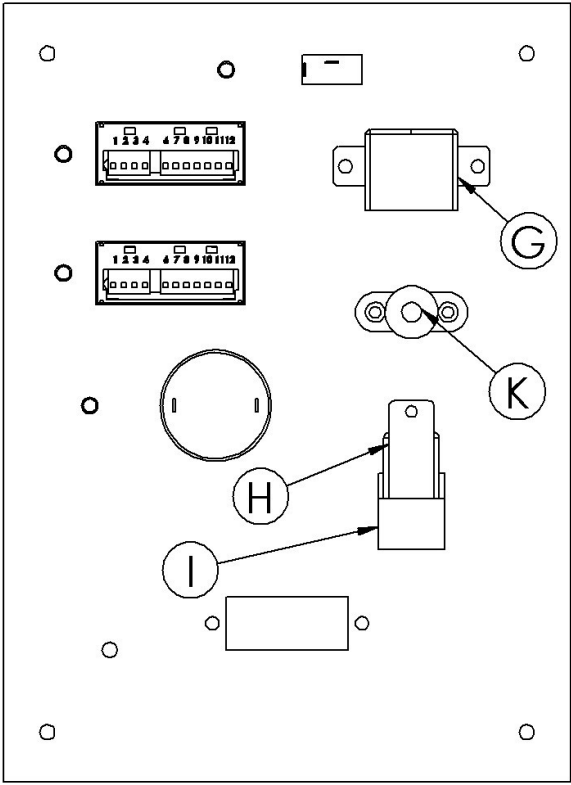
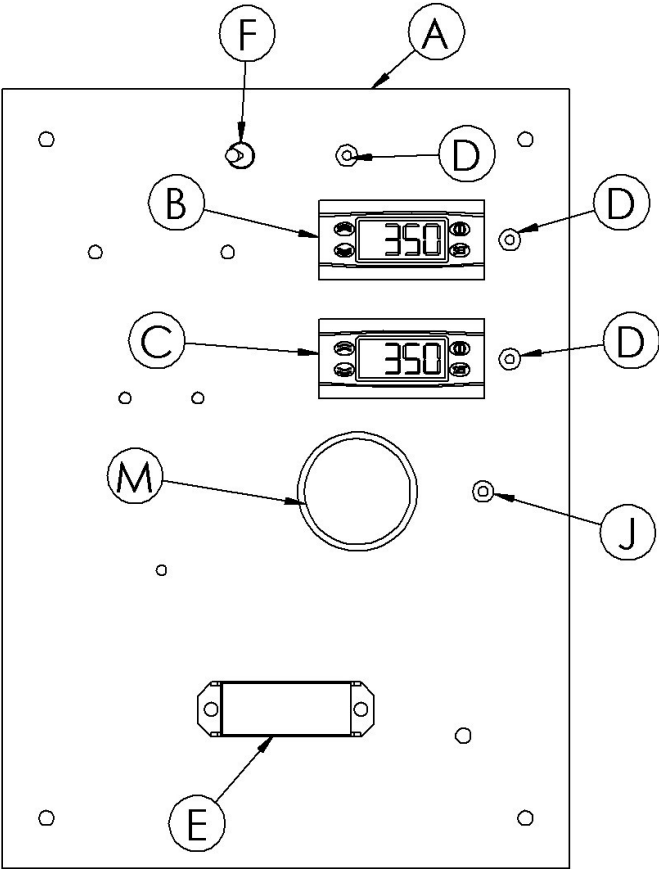
ME3 Control Panel Wiring Diagram

NUMBER	COLOR	FUNCTION	AWG WIRE GAUGE
1	RED/BLACK STRIPE	BURNER POWER	14
2	RED/BLACK STRIPE	BATTERY (+)	12
3	WHITE	BURNER ENABLE	16
4	PINK	MICROPANEL ACCESSORY INPUT	16
5	GREEN/YELLOW STRIPE	BATTERY (-)	16
6	RED/BLACK STRIPE	ACCS. RELAY OUTPUT	16
8	RED/BLACK STRIPE	RELAY PANEL LUG TO VOLTMETER	16
9	GREEN/YELLOW STRIPE	GROUND (ALL GROUND SYMBOLS ON DRAWINGS)	16
10	RED/BLACK STRIPE	RELAY PANEL LUG TO FUSE	16
11	ORANGE	FUSE TO PANEL SWITCH	16
12	ORANGE	PANE SWITCH TO CONTROLLERS	16
13	WHITE	MATERIAL CONTROLLER TO MATERIAL TEMP	16
14	RED/BLACK STRIPE	MATERIAL CONTROLLER TO MATERIAL TEMP	16
15	WHITE	OIL CONTROLLER TO OIL TEMP	16
16	RED/BLACK STRIPE	OIL CONTROLLER TO OIL TEMP	16
17	PURPLE	MATERIAL CONTROLLER TO LED	16
18	GRAY	OIL CONTROLLER TO MATERIAL CONTROLLER	16
19	PINK	MATERIAL CONTROLLER TO BURNER RELAY	16
20	GRAY	OIL CONTROLLER TO LED	16
21	PURPLE	FUSE TO BURNER RELAY	16
22	WHITE	BURNER RELAY TO LED	16
23	WHITE	TO BURNER STROBE	16
24	ORANGE	PANEL SWITCH TO LED	16
25	WHITE	PANEL SWITCH TO AGITATOR STOP	16



Sealant Control Panel

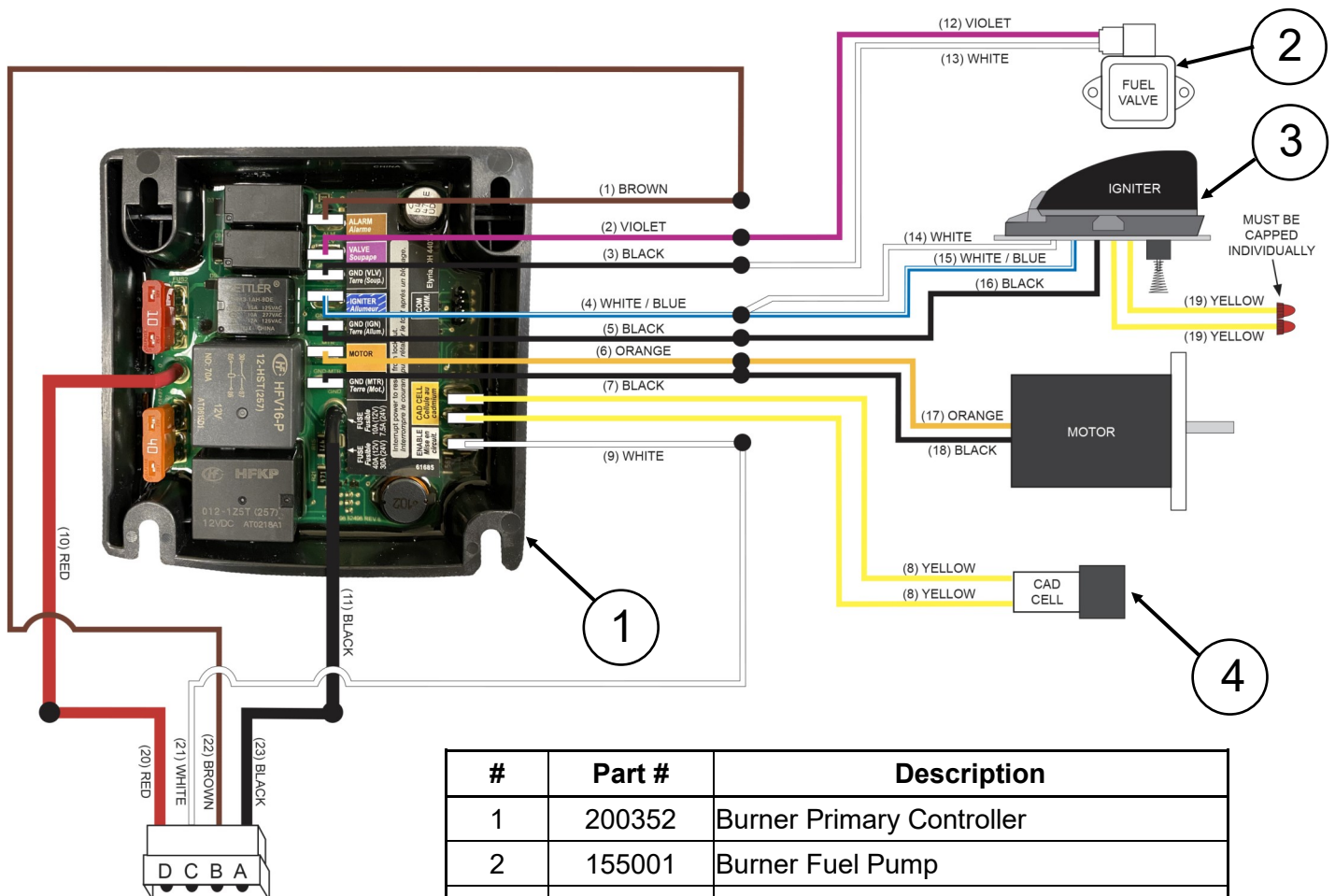
#	Part #	Description
A	308-240-004	PLATE - ME3 CONTROL PANEL
B	200597	CONTROLLER MATERIAL
C	200596	CONTROLLER OIL
D	130625	GREEN LED LIGHT
E	130831	FUSE BLOCK
F	130227	SWITCH SPDT
G	130222	PANEL RELAY
H	130113	BURNER RELAY
I	153870	RELAY BASE
J	130624	AMBER LED LIGHT
K	130831	LUG
M	131036	VOLTMETER
*	161891	CIMLINE QR CODE



Burner Internal Wiring Diagram

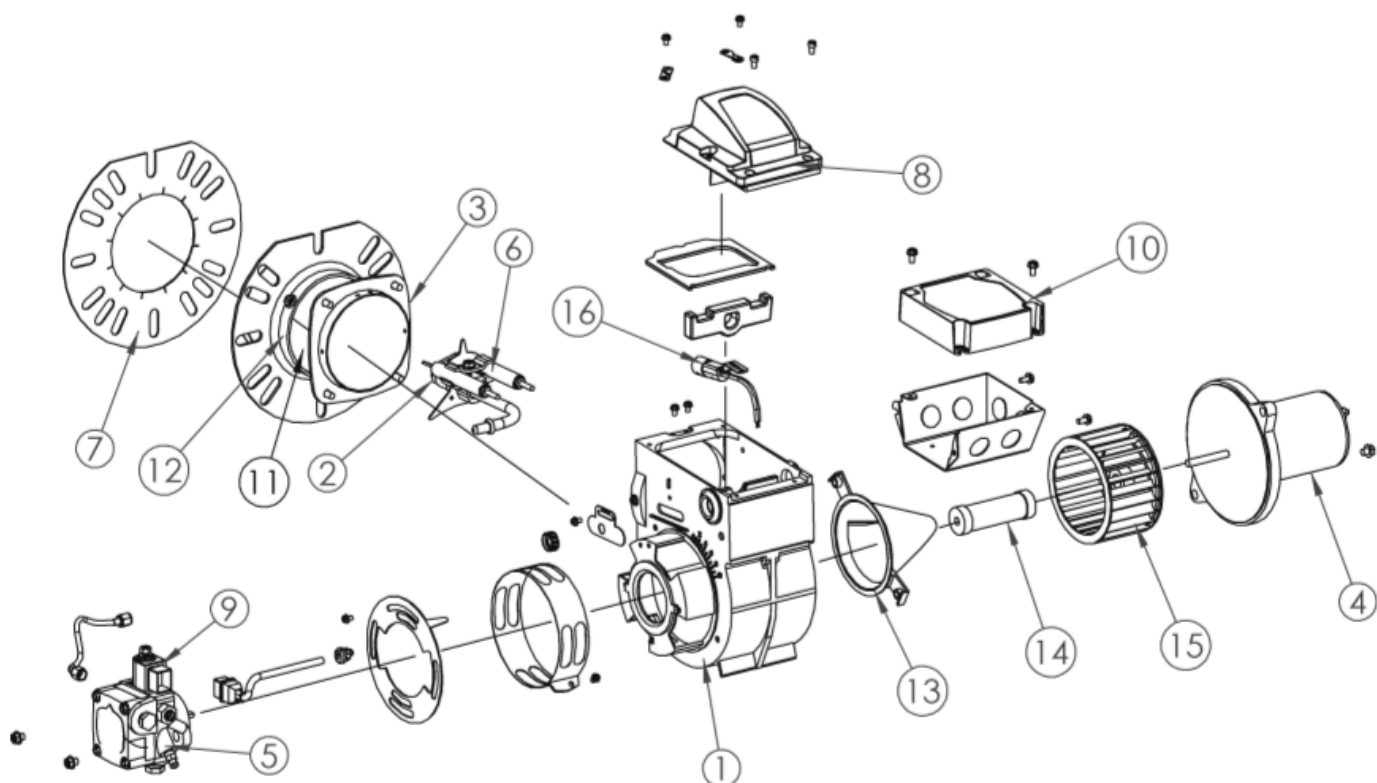
#	COLOR	DESCRIPTION
1	Brown	Alarm To Controller
2	Violet	Fuel Valve To Controller
3	Black	Fuel Valve Ground To Controller
4	Wht/Blu	Igniter To Controller
5	Black	Igniter Ground To Controller
6	Orange	Motor To Controller
7	Black	Motor Ground To Controller
8	Yellow	Cad Cell To Controller (x2)
9	White	Control Circuit Enable To Controller
10	Red	12V (+) Input To Controller
11	Black	Ground (-) To Controller

#	COLOR	DESCRIPTION
12	Violet	Fuel Valve Input Lead
13	White	Fuel Valve Ground Lead
14	White	Secondary Igniter Input Lead
15	Wht/Blu	Primary Igniter Input Lead
16	Black	Igniter Ground Lead
17	Orange	Motor Input Lead
18	Black	Motor Ground Lead
19	Yellow	Not Used (Capped Individually) X2
20	Red	12V (+) Power (Wiring Harness)
21	White	Burner Enable (Wiring Harness)
22	Brown	LOFA Alarm (Wiring Harness)
23	Black	Ground From Relay (Wiring Harness)



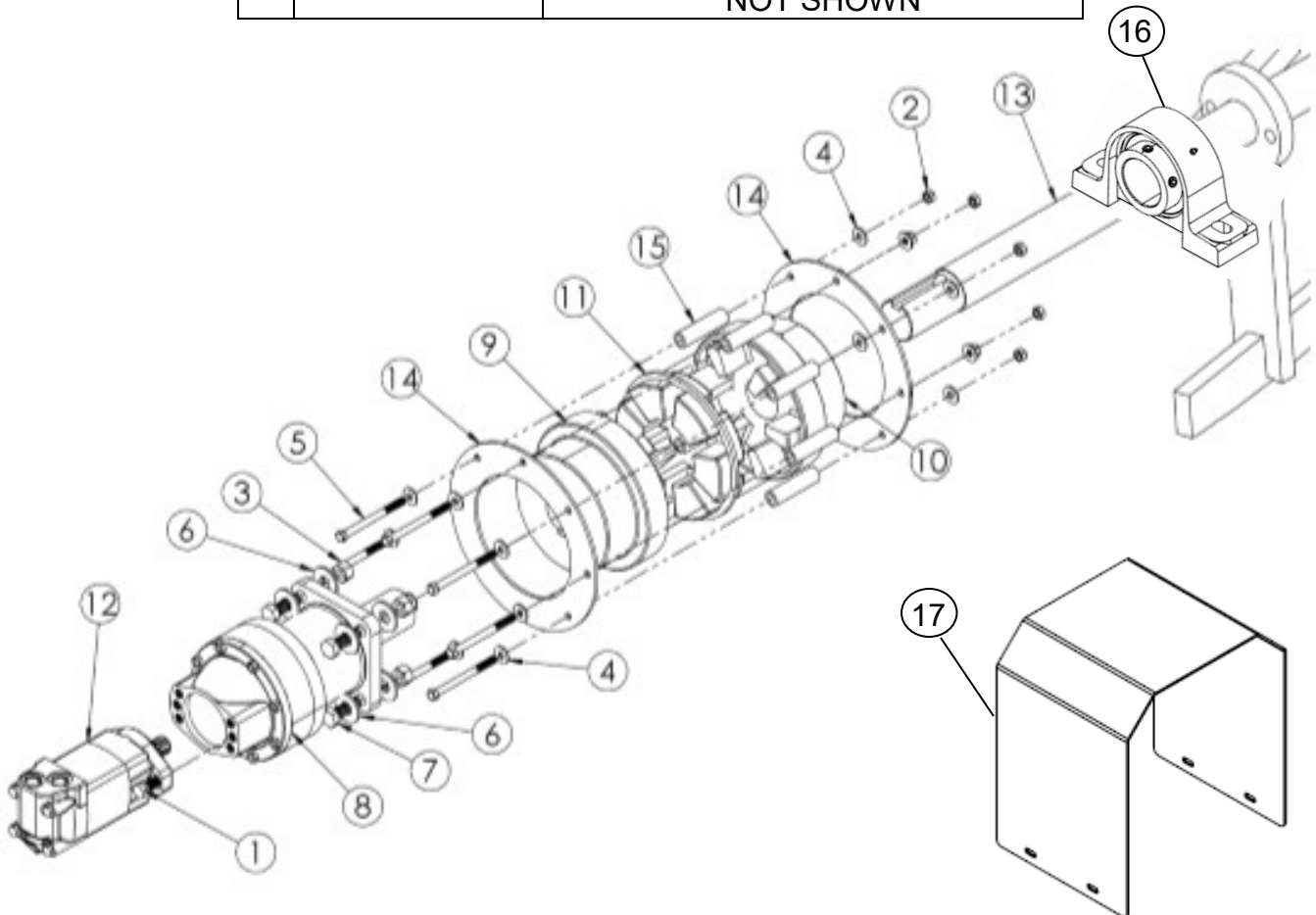
Oil Burner Parts List

#	PART #	DESCRIPTION
1	200666	BURNER ME3
2	156404	NOZZLE, 2.00 GPH X 80B
3	153505	SQUARE PLATE , GASKET
4	152191	MOTOR, OIL BURNER
5	155001	PUMP, OIL
6	152106	ELECTRODE ROD/INS ASSY
7	152128	GASKET, BURNER FLANGE
8	152173	IGNITION TRANSFORMER ASSY.
9	152200	OIL VALVE
10	200352	PRIMARY CONTROL ASSY
11	120443	AIR TUBE
12	120466	BURNER HEAD TUBE
13	152398	AIR INLET GUIDE
14	152399	COUPLING
15	152466	BLOWER WHEEL
16	152105	ELECTRIC EYE ASSY
*	130166	FUEL PRESSURE GAUGE
		* NOT SHOWN



Agitation System Parts List

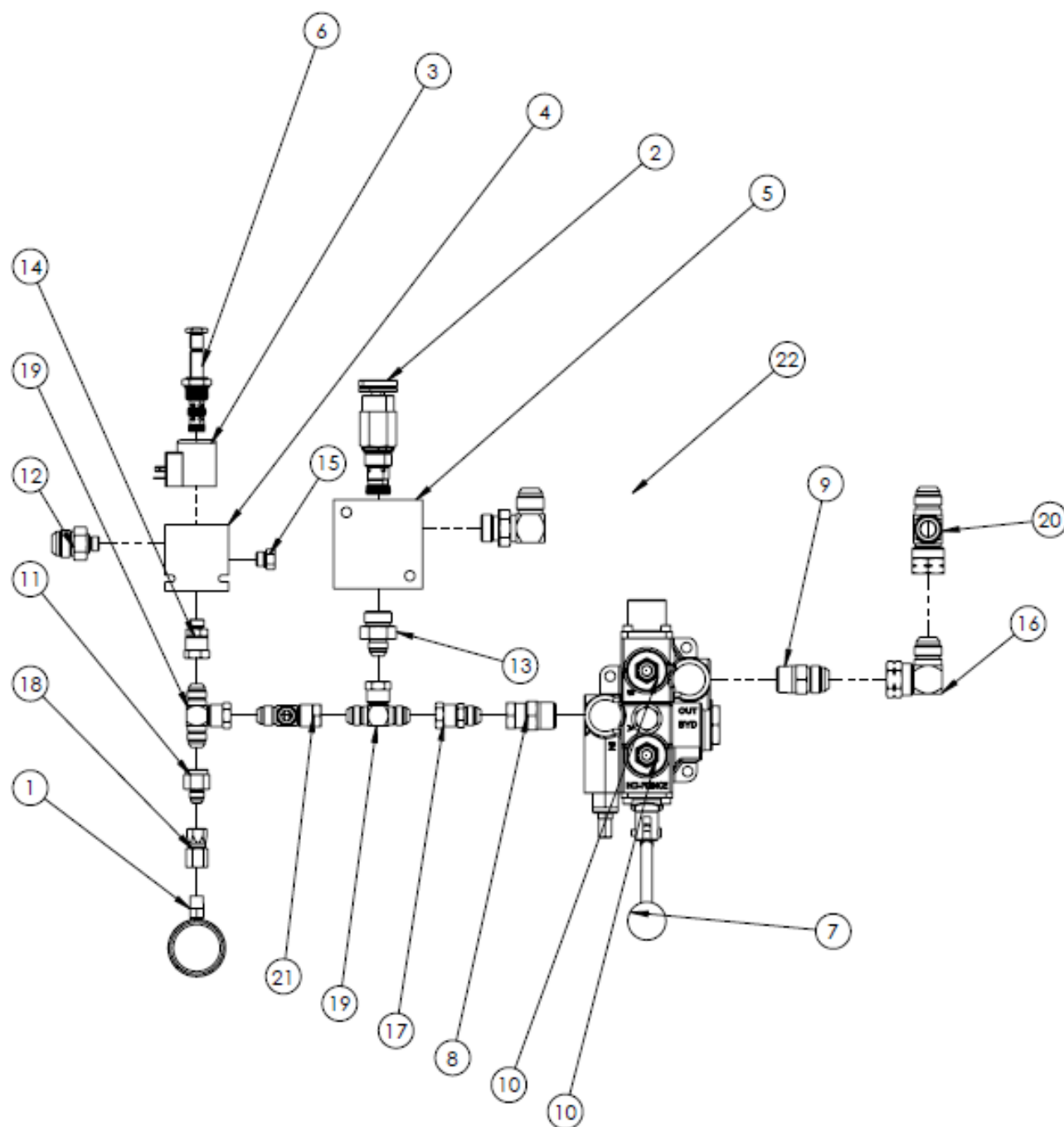
#	Part #	Description
1	100031	HHCS .5 X 1.25
2	100069	NUT-HEX .38
3	100072	5/8-11 HEX NUT
4	100126	WASHER-FLAST .38
5	100380	HHCS .38 X 4.5 PLN
6	100459	.625 FLAT WASHER
7	100858	HHCS 5/8 X 1 3/4
8	111946	GEARBOX
9	111947	COUPLING 2.25 DIA KEYED
10	111948	COUPLINE 2.38
11	111949	COUPLING INSERT
12	172687	HYRAULIC MOTOR
13	111950	AGITAOR BEARING
14	308-138-000	PLATE - COUPLER SUPPORT
15	308-139-000	TUBE - COUPLER
16	111950	PILLOW BLOCK BEARING 2.5
17	308-251-004	BEARING SHIELD
*	156443	1/2 " PACKING ROPE - FRONT
*	156444	3/8 " PACKING ROPE - REAR
		* NOT SHOWN



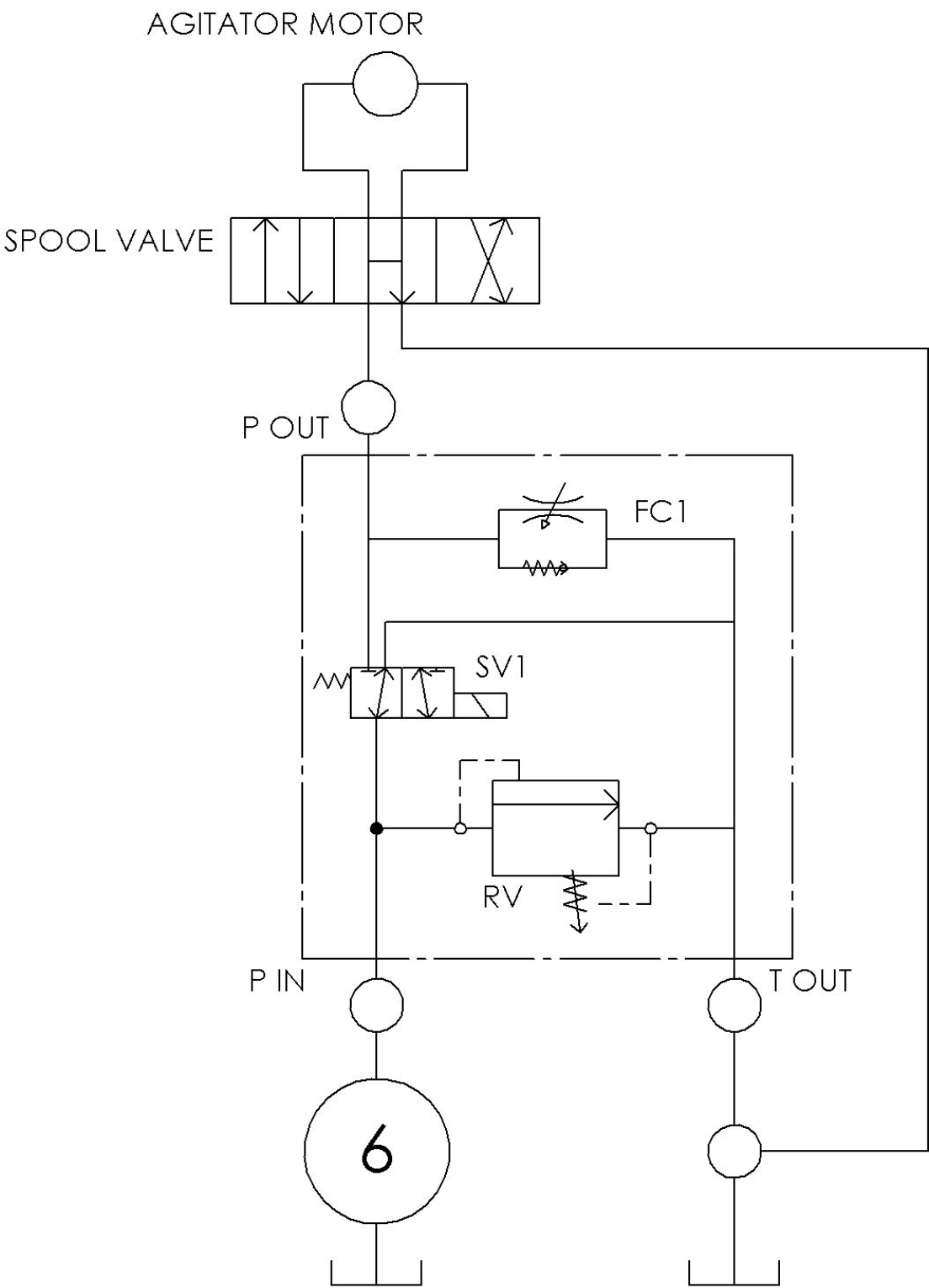
Mastic Hydraulic Manifold Components

#	Part #	Description	QTY.
1	171597	PRESSURE GAUGE	1
2	172689	HYD SPEED CONTROL	1
3	172690	SOLENOID	1
4	172691	VALVE HOUSING	1
5	172692	SOLENOID HOUSING	1
6	172693	HYD SPINDLE	1
7	172694	3 WAY HYDRAULIC CONTROL VALVE	1
	308-239-000	HYD HOSE KIT	1
8		12MP X 8FJS, STR	1
9		12MJ X 12MP, STR	1
10		8MJ X 8MP, STR	2
11		8FJ X 6MJ, STR	1
12		12MJ X 6MB, STR	1
13		8MJ X 12MB, STR	1
14		6MB X 8FJS, STR	1
15		6MB PLUG	1
16		12MJX 12FJS, 90 ELBOW	1
17		8MJ X 8FJS, STR	1
18		4FP X 6FJS, STR	1
19		8MJ X 8FJS X 8MJ, TEE	2
20		12FJS X 12MJ X 12MJ, TEE	1
21		8FJS X 8MJ X 8MJ, TEE	1
22		12MJ X 12MB, 90 ELBOW	1

Mastic Hydraulic Manifold Components



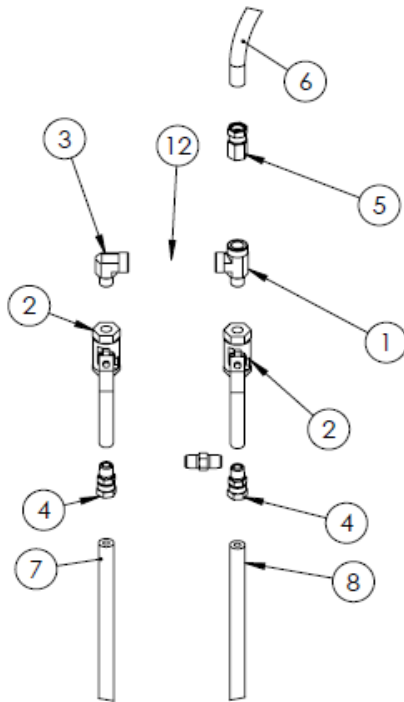
Hydraulic Schematic



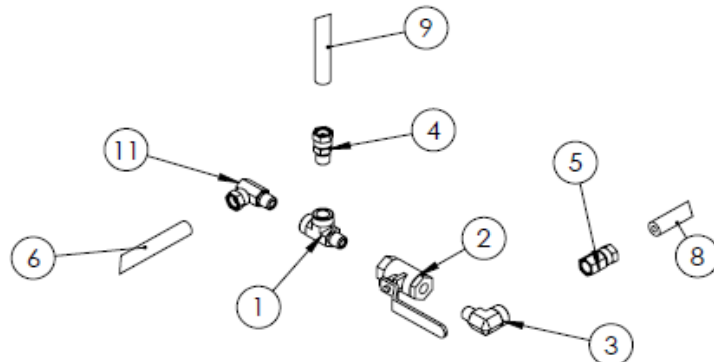
LP Component Breakdown

#	Part #	Description	QTY.
	308-238-000	LP HOSE KIT	1
1		TEE, RUN, 4FP X 4MP X 4FP	2
2	120085	VALVE-BALL .25 NPT	3
3		ELBOW, 90, 4MP X 4FP	2
4		SWIVEL - 4MP X 4FP	3
5		SWIVEL - 4MP X 4MP	4
6	40 LP HOSE	40"-7132-2534-101HY-4-4-101HY-4-4	2
7	115 LP HOSE	104"-7132-2534-101HY-4-4-101HY-4-4	1
8	192 LP HOSE	192"-7132-2534-101HY-4-4-101HY-4-4	1
9	120 LP HOSE	120"-7132-2534-101HY-4-4-101HY-4-4	1
10		ELBOW, 90, 4MP HOSE X 4FP	1
11		ELBOW, 90, 4FP HOSE X 4MP	1
12		NIPPLE - HEX- 4MP- 4MP	1
*	130006	REGULATOR	1

*** NOT SHOWN**



FRONT OF MACHINE

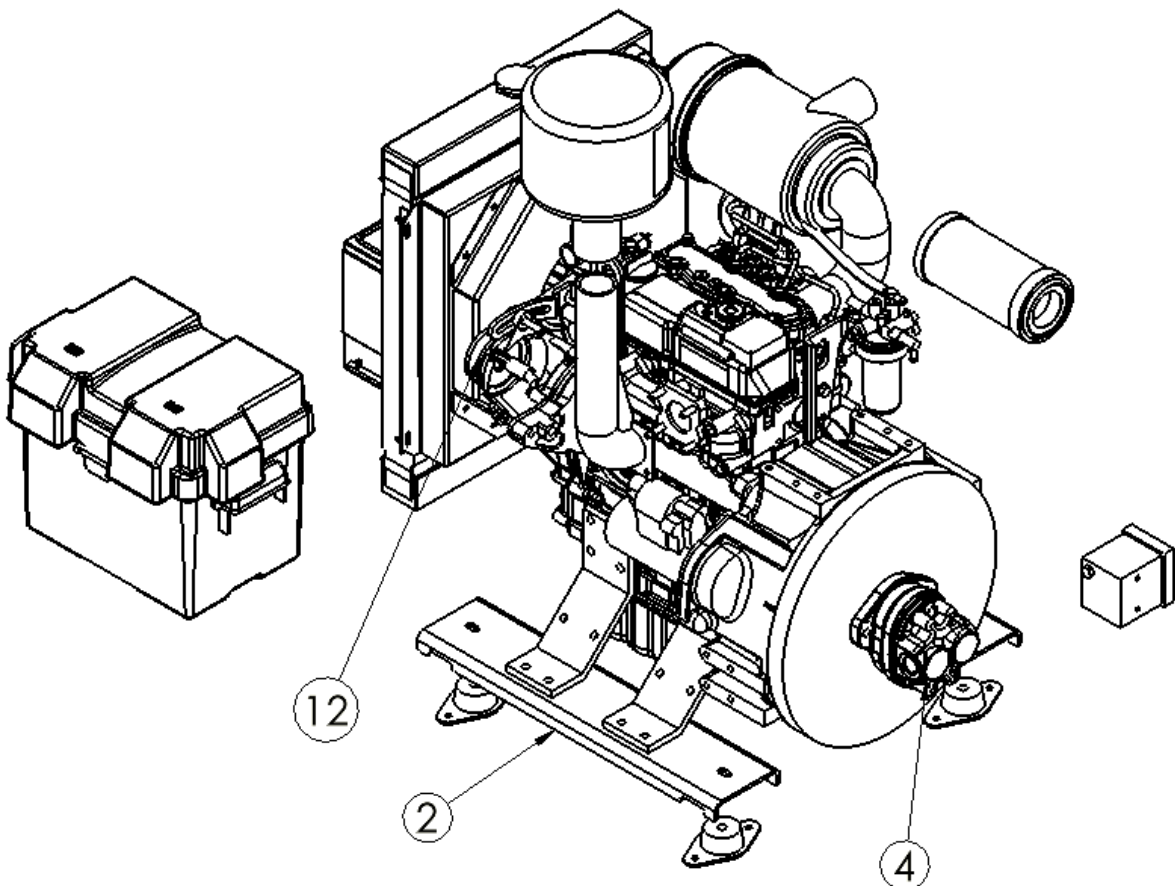


BACK OF MACHINE

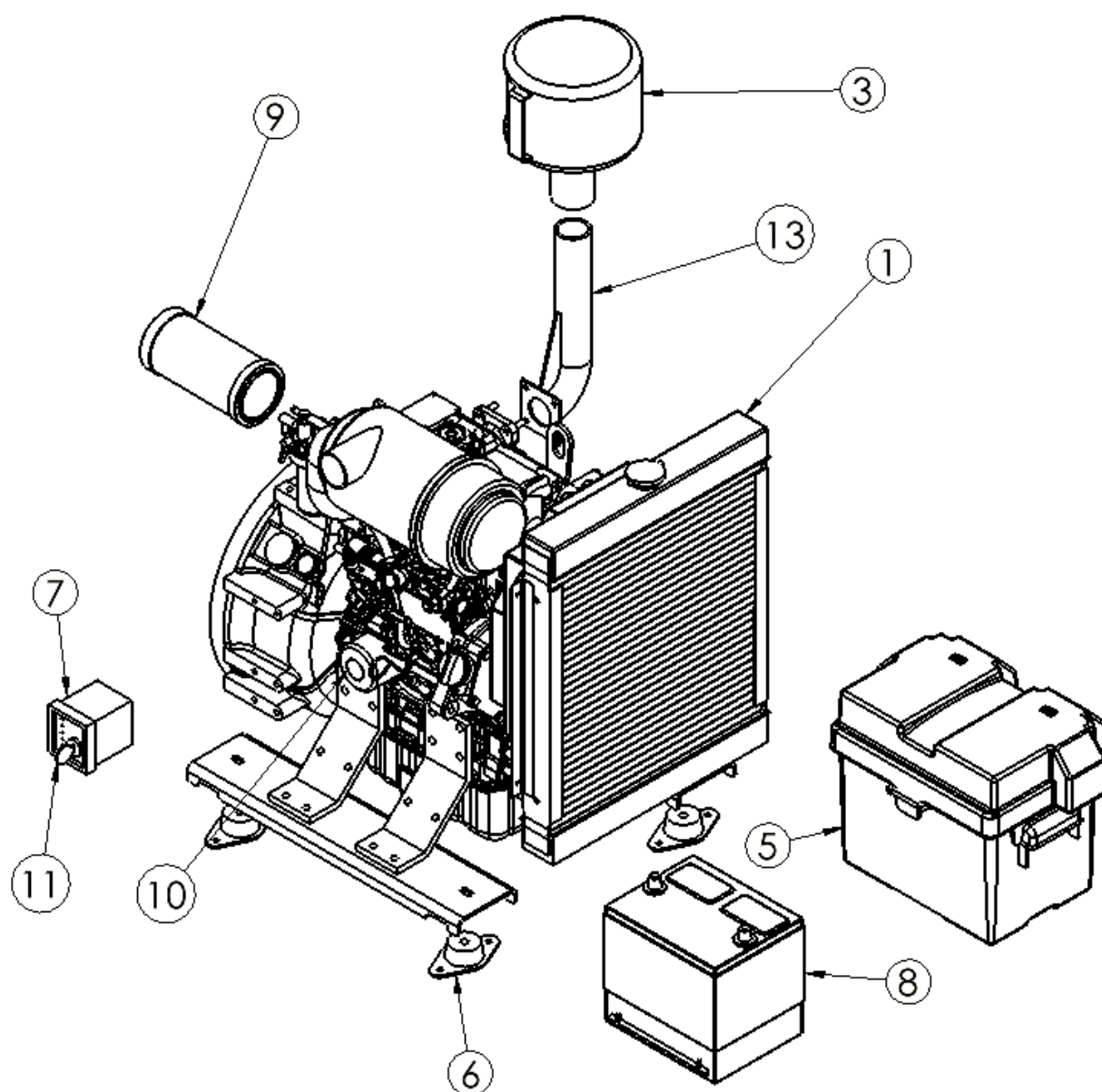
Engine Components

(See the included Engine Manual for additional engine component diagrams.)

#	Part #	Description
1	111951	ENGINE 3CJ1 ME3
2	308-252-004	PLATE - ME3 ENGINE MOUNT
3	153619	MUFFLER - COWL
4	172688	PUMP - HYD
5	200543	BATTER BOX
6	152047	SEALANT ISOLATOR
7	111108	LOFA CONTROL SWITCH
8	150212	BATTER 26/26R-50-WET
9	111111	AIR FILTER
10	111337	OIL FILTER
11	155266	IGNITION KEY
12	111372	FAN BELT
13	111730	EXHAUST ELBOW



Engine Components



ENGINE MAINTENANCE KIT PART NUMBER 406599	
PART #	DESCRIPTION
172695	SPIN ON FILTER
170169	FUEL FILTER - BURNER
111457	FUEL FILTER - ENGINE
111111	AIR FILTER
111337	OIL FILTER

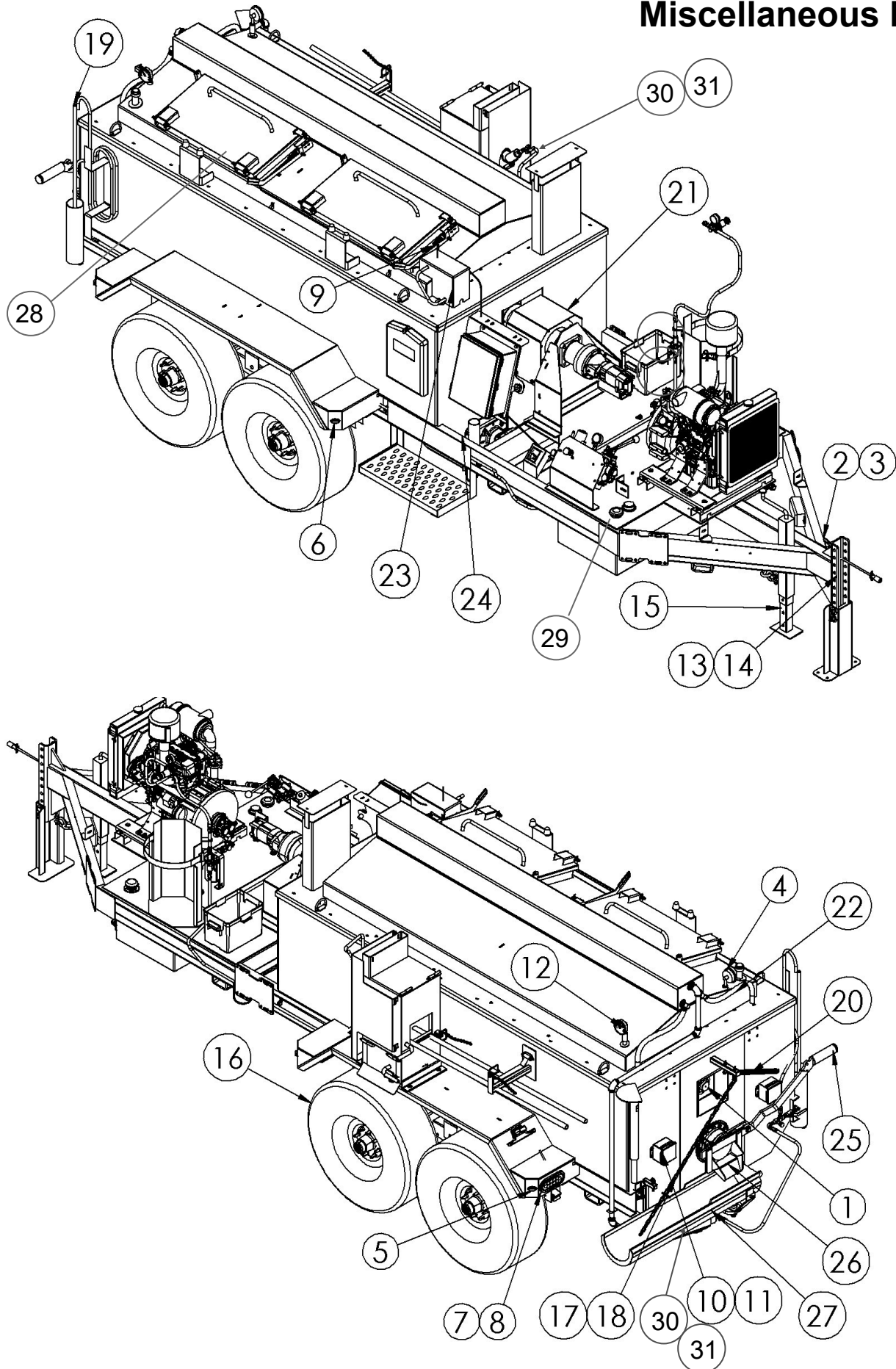
Miscellaneous Parts

#	Part #	Description	QTY
1	111945	BEARING FLANGE	1
2	130050	SWITCH - BERAKAWAY - NO.2010	1
3	153638	CABLE—BREAK AWAY	1
4	130130	THERMOMETER 24"	1
5	130374	CLEARANCE LIGHT RED	2
6	130375	CLEARANCE LIGHT AMBER	2
7	130403	TAILLIGHT LED OVAL	2
8	130405	GROMMET FOR TAILLIGHT	2
9	131034	SWITCH AGITATOR DOOR	2
10	131037	OVERNIGHT HEATER BOX	2
11	131038	OVERNIGHT HEATER ME3	2
12	131056	THERMOMETER 15 IN / DIPSTICK	1
13	140713	PINTLE HITCH - ZINC PLATE	1
14	140714	BALL HITCH 2-5/16	1
15	140729	JACK 5000 LBS SQUARE	1
16	140731	WHEEL ST235/85R16	4
17	155894	CARABINER	2
18	156036	CHAIN 4/0 X 38 LINKS	1
19	156394	HANHELD LP TORCH	1
20	156395	SPRING ME3	1
21	308-251-004	PLATE - COUPLING PROTECTION	1
22	308-274-000	HOSE - OVERFLOW	1
23	308-317-004	THERMOCOUPLE PROTECTION WELD	1
	130097	OIL THERMOCOUPLE	1
	131057	MATERIAL THERMOCOUPLE	1
24	308-325-004	BURNER MOUNT WELD	1
25	308-117-004	GATE WELD	1
26	308-122-004	OUTLET CHUTE	1
27	308-200-004	TROUGH WELDMENT	1
28	308-100-004	MATERIAL TANK DOOR	2
29	156657	FUEL CAP	1
30	308-247-004	BURNER TUBE	2
31	156392	LP ORIFICE	2
*	121163	NEEDLE VALVE	2
*	172694	3 WAY HYDRAULIC CONTROL VALVE	1
*	308-238-000	ME3 LP HOSE KIT	1
*	308-239-000	ME3 HYD HOSE KIT	1
*	308-275-000	AGITATOR STOP HARNESS	1
*		NOT SHOWN	

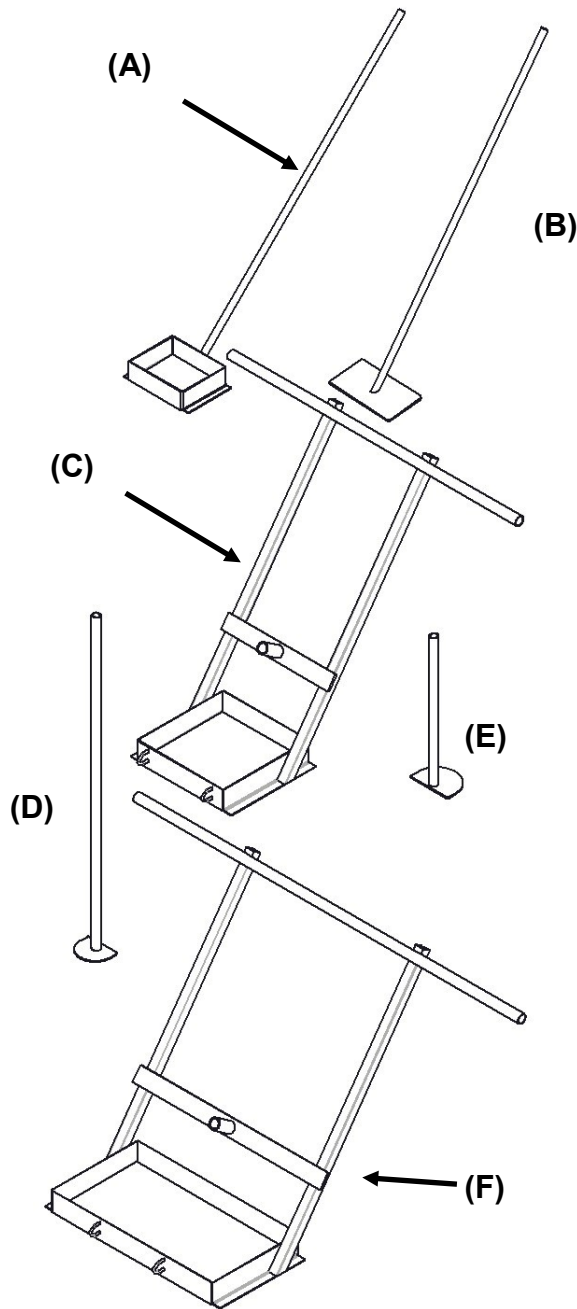
→ NOTE:

Fuel cap part number different for ME3 serial numbers ending in 21-123 and earlier

Miscellaneous Parts



Optional Mastic Tools



(A) Drag Box / 409577

- Standard with every ME3
- 8 in Depth x 10 in Width
- Used to push or pull mastic along cracks

(B) Flat Iron / 409578

- Standard with every ME3
- 12 in Width x 6 in Depth
- Flattens applied mastic

(C) Mounted 16 in Drag box / 304-071-004

- 16 in Width x 16 in Depth
- Mounted drag box to ease filling of longer cracks running the length of the road

(D) Tank Scraper / 308-326-004

- Tool to help facilitate the cleaning of the material tank

(E) Trough Scraper / 308-287-004

- Standard with every ME3
- Pulls material down material chute and trough

(F) Mounted 30 in Drag box / 304-072-000

- 30 in Width x 16 in Depth
- Mounted drag box to ease filling of longer cracks running the length of the road



EQUIPMENT WARRANTY

2601 Niagara Lane N,
Plymouth, MN 55447
(877) 841-0848
Tel: 763-694-2665
Fax: 763-553-1093
cimline.com

Cimline, Inc. warrants its equipment, to the original purchaser only, against defects in material or workmanship based on normal use of service. Except as provided herein, no agent, dealer, employee or any other person is authorized to give any warranties of any nature outside of this agreement on behalf of Cimline, Inc.

Cimline Equipment is warranted for one year / 1000 hours of use and includes/excludes the following:

Includes; basic frame and tanks, steel fabricated parts, hydraulic and burner control system.

Excludes; the engine, air compressor, battery, and tires as these items are covered by their respective manufacturer and all warranty for these items should be directed to their local authorized distributor/dealer.

Warranty period; begins at the date unit is first placed in service, or shipped from the factory. Upon sale or rental of the equipment by the distributor or Cimline, the provided warranty card should be mailed within 14 days starting date the unit is placed in service thus beginning the warranty period.

In the absence of any warranty card on file, the warranty period begins from date of shipment from factory.

Warranty for material pumps, electric heated hoses or heated hose with heated wands, are pro-rated using the following scale:

<u>Days</u>	<u>Hours</u>	<u>Warranty Coverage</u>
365 (1 year)	500	100%

Any warranty claims on parts may require a return for evaluation. Specifically, heated wands with heated hose, standard heated hoses, and material pumps will require an appropriate Return Merchandise Authorization (RMA) from Cimline Customer Care and that the item be returned for evaluation with that RMA for any warranty claim to be considered. For electric heated hose with heated wand claims; the defective hose and wand must be returned as a pair to the Cimline factory for inspection, unless the heated wand has a serial number on the handle, than it can ship back alone. All other components must be returned only at the request of Cimline Customer Service.

Replacement parts are warranted for a period of 60 days from factory invoice, with the exception of the replacement material pumps, heated hoses and heated hoses with heated wands, which use the above scale for pro-rated coverage. For replacement parts that are purchased from distributor stock, the 60-day period will commence from the date of distributor to end user invoice. A copy of the invoice will be required as proof of in service date. If invoice is not provided, policy will revert back to the original factory invoice date.

Warranty does not apply to defects caused by improper or unreasonable use, including but not limited to damage (including freight damage), accidents, failure to provide reasonable maintenance or faulty repair made by others. Furthermore, warranty is void if the product or any of its components are modified or altered in any way or if aftermarket (NON-OEM) parts have been used during the warranty period. In the event of freight damage, a claim must be filed by the purchaser with the freight carrier.

Our responsibility under this warranty is limited to replacement or repair (at Cimlines discretion) of such part or parts, as inspection shall disclose to have been defective, to be performed at Cimline Inc. factory at Plymouth, MN or at a facility designated by Cimline.

In no event shall Cimline Pavement Maintenance Group be liable for incidental or consequential damages of any kind whatsoever. Downtime, overhead and performance penalties are not recognized at any time as part of warranty coverage. Reasonable labor, travel, and diagnostic time will be reviewed for reimbursement. The use of aftermarket (NON-OEM) parts will result in denial of the claim. Mileage will be reimbursed at a rate of \$0.80 (80 cents) per mile (domestic 48 states), and no more than one round trip per claim. Shop Labor will be reimbursed at a max rate of \$80/hour. Parts freight will be reimbursed at a "UPS REGULAR" rate only for stock items, and for non-stock items will be reimbursed at a "UPS BLUE" rate.

All warranty claims must be processed through the factory authorized Cimline dealer that was the original distributor of your Cimline Equipment or OEM Parts. All claim notices to Cimline pursuant to this limited warranty must be made by completing a Cimline Warranty Claim Form which should be Emailed to: customercareorders@plymouthind.com

No exceptions will be made to this warranty unless agreed to in writing by the Cimline Director.

This warranty is in lieu of all other warranties expressed or implied, and such other warranties are hereby disclaimed including any warranty of merchantability and fitness for a particular purpose.



2601 Niagara Lane · Plymouth, MN 55447 · (763) 557-1982 · (800) 328-3874 · Fax (763) 557-1971