OPERATING INSTRUCTIONS MANUAL

(Please retain for future reference)

For

FVO-1100TR INDIRECT FIRED HEATER TRAILER



CERTIFIED FOR USE IN CANADA AND U.S.A.
As per CSA B140.8 Portable Oil Fired Heaters / CSA B140.0 2003 Oil Burning Equipment
UL733 Oil Fired Air Heaters
Construction Heaters Unattended Type.

FLAGRO INDUSTRIES LIMITED ST. CATHARINES, ONTARIO CANADA

GENERAL HAZARD WARNING:

FAILURE TO COMPLY WITH THE PRECAUTIONS AND INSTRUCTIONS PROVIDED WITH THIS HEATER, CAN RESULT IN DEATH, SERIOUS BODILY INJURY AND PROPERTY LOSS OR DAMAGE FROM HAZARDS OF FIRE, EXPLOSION, BURN, ASPHYXIATION, CARBON MONOXIDE POISONING, AND/OR ELECTRICAL SHOCK.

ONLY PERSONS WHO CAN UNDERSTAND AND FOLLOW THE INSTRUCTIONS SHOULD USE OR SERVICE THIS HEATER.

IF YOU NEED ASSISTANCE OR HEATER INFORMATION SUCH AS AN INSTRUCTIONS MANUAL. LABELS. ETC. CONTACT THE MANUFACTURER.

WARNING:

FIRE, BURN, INHALATION, AND EXPLOSION HAZARD. KEEP SOLID COMBUSTIBLES, SUCH AS BUILDING MATERIALS, PAPER OR CARDBOARD, A SAFE DISTANCE AWAY FROM THE HEATER AS RECOMMENDED BY THE INSTRUCTIONS. NEVER USE THE HEATER IN SPACES WHICH DO OR MAY CONTAIN VOLATILE OR AIRBORNE COMBUSTIBLES, OR PRODUCTS SUCH AS GASOLINE, SOLVENTS, PAINT THINNER, DUST PARTICLES OR UNKNOWN CHEMICALS.

This heater is designed and approved for use as a construction heater under CSA B140.8 Portable Oil Fired Heaters / CSA B140.0 2003 Oil Burning Equipment, UL733 Oil Fired Air Heaters

We cannot anticipate every use which may be made of our heaters. CHECK WITH YOU LOCAL FIRE SAFETY AUTHORITY IF YOU HAVE QUESTIONS ABOUT APPLICATIONS.

Other standards govern the use of fuel gases and heat producing products in specific applications. Your local authority can advise you about these

TABLE OF CONTENTS

Trailer Check List4
Towing Instructions5
FVO-1100TR Set-up Procedure6
Set-up Procedure (High Altitude)
Nozzle Placement
Specifications
Trailer Preparation 12,13
Heater Start up
Troubleshooting
Heater Maintenance
Feeler Gauge
Burner Wiring Diagram
Electrode & Oil Line
Trailer Wiring Schematic
Parts List21.22.2

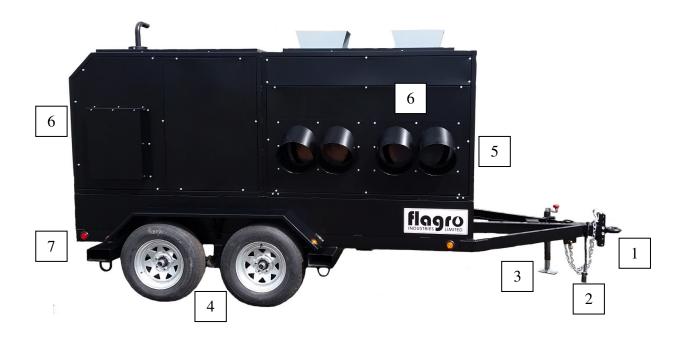
TRAILER CHECK LIST

PLEASE PERFORM THE FOLLOWING STEPS TO YOUR FVO-1100TR HEATER TRAILER TO ENSURE PROPER OPERATION.

- Visually inspect outside & inside of trailer to ensure all instructions and decals are in place and legible.
- Inspect the tires to ensure road worthy and have proper inflation.
- Inspect hitch assembly and safety tow chains.
- Inspect jack assembly to make sure it operates properly.
- Make sure all trailer cabinet doors are closed before attempting to relocate trailer.
- Check lug nuts and torque to 80-90 ft. lbs. Lug nuts should be retorqued every 100 miles.
- Check oil, fuel and coolant levels on genset.
- Make sure brake & signal lights on trailer are completely operational.
- Make sure the battery is fully charged and the terminals are tight.
- Start engine and heaters to ensure proper operation.
- Review engine manual for maintenance requirements.

TOWING INSTRUCTIONS

Before towing the FVO-1100TR, please make sure you go over the following steps to ensure your trailer is road ready.



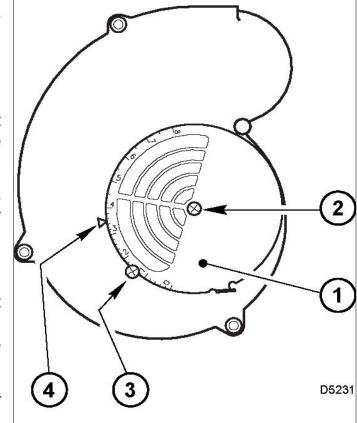
- 1. Hitch is securely attached to towing vehicle.
- 2. Safety chains are securely attached to towing vehicle.
- 3. Front jack is completely retracted.
- 4. Check all tires ensure they have adequate air pressure.
- 5. Make sure all ducting is removed from heaters and stored.
- 6. All doors are closed and secure.
- 7. Taillights are connected and operating.

FVO-1100TR SETUP PROCEDURE

The two FVO-400RC heaters in the trailer need to be tested and set up before every operation. Proper combustion must be achieved using a certified combustion analyzer and smoke gun tester to ensure optimum set up. The air adjustment should be made to achieve a maximum of 10% CO₂ and No. 1 or "trace" smoke. (Bacharach Scale)

SETTING THE AIR ADJUSTMENT PLATE

- A) Regulation of the combustion air flow is made by adjustment of the manual AIR ADJUSTMENT PLATE (1) after loosening the FIXING SCREWS (2 & 3). The initial setting of the air adjustment plate is set to 4.5 at the factory.
- **B)** The proper number on the manual AIR ADJUSTMENT PLATE (1) should line up with the SETTING INDICATOR (4) on the fan housing cover. Once set, the air adjustment plate should be secured in place by tightening SCREWS 2 and 3.
- C) The final position of the air adjustment plate will vary on



each installation. Use instruments to establish the proper settings for maximum CO_{\circ} and a smoke reading of zero.

NOTE: Variations in flue gas, smoke, CO₂ and temperature readings may be experienced when the burner cover is put in place. Therefore, the burner cover **must** be in place when making the final combustion instrument readings, to ensure proper test results.

SETUP PROCEDURE (HIGH ALTITUDE)

When the FVO-1100TR is required to operate over 2000 feet above sea level there will be necessary adjustments needed to burn efficiently with thinner air. Please review the following chart as a starting point; please note that a combustion analyzer & smoke gun will be required to achieve optimum set up.

ACTUAL FIRING RATE	NOZZLE SIZE	PUMP PRESSURE	TURBULATOR SETTING	AIR DAMPER SETTING	ALTITUDE RANGE
+/- 5%					
2.11 GPH	1.75 X 60W	145 PSI	2.5	3.1	OVER
					7000FT
2.41 GPH	2.00 X 60W	170 PSI	3.5	3.4	3500-6900FT
2.61 GPH	2.00 X 60W	170 PSI	5.0	4.5	0-3500FT

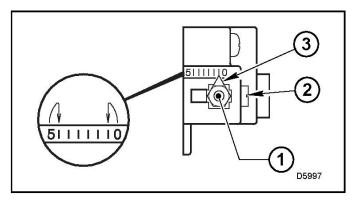
Please refer to the Air adjustment plate diagram on page 6, the turbulator diagram at the bottom of this page & the nozzle replacement diagram on page 8.

NOTE: The burners are equipped with a 2.00 X 60W nozzle, due to the increase density of oil/diesel fuel at colder temperatures.

TURBULATOR SETTING

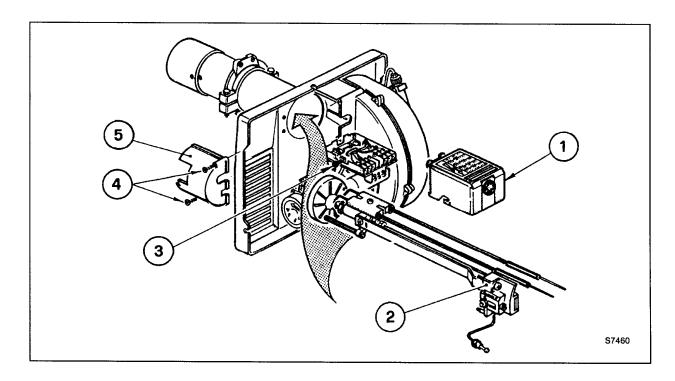
- A) Loosen NUT (1), then turn SCREW (2) until the INDEX MARKER (3) is aligned with the correct index number as per the Burner Set-up chart above.
- B) Retighten the RETAINING NUT (1)

NOTE: Zero and five are scale indicators only. From left to right, the first line is 5 and the last line 0.



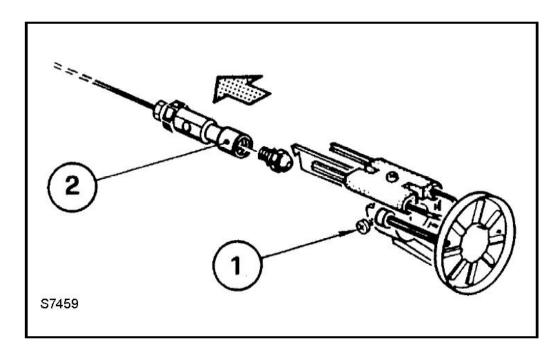
INSERTION / REMOVAL OF DRAWER ASSEMBLY

- A) To remove drawer assembly, loosen SCREW (3), then unplug CONTROL BOX (1) by carefully pulling it back and then up.
- **B)** Remove the AIR TUBE COVER PLATE (5) by loosening the two retaining SCREWS (4).
- C) Loosen SCREW (2), and then slide the complete drawer assembly out of the combustion head as shown.
- **D)** To insert drawer assembly, reverse the procedure in items A to C above, and then attach fuel line to the pump.



NOZZLE PLACEMENT

A) Remove the NOZZLE ADAPTER (2) from the DRAWER ASSEMBLY by loosening the SCREW (1).



- **B)** Insert the proper NOZZLE into the NOZZLE ADAPTER and tighten securely (Do not over tighten).
- **C)** Replace adapter, with nozzle installed, into drawer assembly and secure with screw (1).

SPECIFICATIONS

Model FVO-1100TR

Engine Kubota Liquid Cooled Diesel

Electric start/ glow plugs

Battery charging alternator

Heavy duty Radiator & Air Cleaner

Remote Oil Drain

Generator...... 8 kw @ 1800 rpm (15.4 HP)

Single phase-120V

Instrument panel including Hour Meter

Fuel Pressure170 psi @ 0-2000 ft

Heavy duty fuel sight gauge

3.5" Fuel inlet nozzle

Ignition Direct Spark Ignition

Fan Motor.....1- HP @ 1750 RPM

Air Circulation 8000 CFM (4000 PER HEATER)

Fuel Consumption 6.07 GPH at full load

Dimensions...... Height-7ft, Length-15ft, Width-7ft 4 inches

Approvals cWHus listed (Heaters)

CSA/ Entela approved (Engine/Generator)

DOT approved trailer

TRAILER PREPARATION FOR START-UP

PLEASE REVIEW TRAILER CHECKLIST, FVO-1100TR SETUP & GENERATOR MANUAL BEFOR PROCEEDING

OPEN REAR GENERATOR ACCESS DOORS



ATTACH DUCTING TO DUCT OUTLET ADAPTERS



INSPECT FUEL GAUGE FOR SUFFICIENT LEVEL OF FUEL



MAKE SURE BATTERY LOCK OUT IS TURNED OFF, AND TURN KEY ON CONTROL PANEL TO START



OPEN HEATER DOORS & START UP HEATERS



ONCE HEATERS HAVE STARTED, CLOSE DOORS & ATTACH DUCTING TO HEATER INLET DUCT ADAPTERS



HEATER START UP INSTRUCTIONS:

- 1. Open heater inlet doors; verify that each heater toggle "switch" is in the "OFF" position.
- 2. Attach ducting to outlet duct adapters, if required
- 3. Start generator
- 4. Start heaters by moving the toggle switch to "MANUAL" position for manual control.

OR

5. Move toggle switch to "THERMOSTAT" position for thermostatic control.

Please Note:

- 1. If using Thermostat on unit, unit must be started in Thermostat position.
- 2 When changing between manual and thermostat operation, the heater must be left in the "OFF" position for 30 seconds to prevent the burner from locking out.
- 3. If the generator runs out of fuel, make sure the heater switch is in the "OFF" position before restarting generator, failure to do so may damage heater.

TO SHUT DOWN:

1. Move heater toggle switch to "OFF" position.

NOTE: Fan will continue to operate after the burner shuts off . Once the unit cools down, the fan will stop.

Never pull power plug to shut unit down, if power plug is pulled ignition box may be damaged, and will not be covered under warranty.

IF HEATER FAILS TO START:

- 1. Press manual reset button at rear of burner. (Red button)
- 2. Check fuel level gauge for sufficient amount of fuel.
- 3. Make sure there are no air blocks in fuel lines or filter. Bleed lines if required.
- 4. Ensure power supply plug is connected properly.
- 5. Check for dirty fuel filter or blocked fuel supply line.
- 6. Check burner nozzle assembly.
- 7. Make sure the burner control box does not need to be reset.

NOTE: IF THE BURNER HAS BEEN RESET SEVERAL TIMES THERE MAY BE AN ACCUMULATION OF **FUEL** IN THE CHAMBER! <u>DO NOT</u> CONTINUE TO TRY AND START THE HEATER!

DRAIN FUEL FROM HEAT EXCHANGER USING DRAIN HOLE AT FRONT OF HEAT EXCHANGER FOR 15-20 MINUTES BEFORE ATTEMPTING TO RELIGHT. LET REMAINING EXCESS **FUEL** BURN OFF BEFORE CHECKING COMBUSTION OF UNIT.

SAFE OPERATION PRECAUTIONS:

- 1. Do not fill fuel tank while heater is operation.
- 2. Do not attempt to start heater if excess oil remains in the heat exchanger.
- 3. Use switch to shut down the heater. Do not try to shut down the heater by unplugging the electrical cord.
- 4. Do not plug anything other that the thermostat into the "Thermostat" plug.
- 5. Do not use any fuel other that those listed on rating plate.
- 6. Before removing any guards or performing any maintenance, be sure that the main power supply is disconnected.

MAINTENANCE:

- Every construction heater should be inspected before each use, and at least annually by a qualified service person. Incorrect maintenance my result in improper operation of the heater and serious injury could occur.
- 2. The hose assemblies shall be visually inspected prior to each use of the heater. If it is evident there is excessive abrasion or wear, or the hose is cut, it must be replaced prior to the heater being put into operation. The replacement hose assembly shall be that specified by the manufacturer.
- 3. The flow of combustion and ventilation air must not be obstructed. Be sure to check the fan assembly and ensure that the motor and blade are operating properly.
- Compressed air should be used to keep components free of dust and dirt build up. Note: <u>Do not</u> use the compressed air inside any piping or regulator components.
- 5. Change fuel filter insert (Part# FVO-TLSF) once year.
- 6. Change oil burner nozzle (Part# FV-435B (2.00 X 60) once per year.
- 7. Fan Limit Switch (Part# FV-407A) should be replaced if the fan motor does not shut off after the heat exchanger has cooled down.
- 8. The High Limit Switches (Part# FV-406 & FV-437) should be checked each season. These limit switches will ensure the burner shuts down if the temperature exceeds 150° F at rear of unit and 250° F at the outlet.
- 9. Fuel tank should be drained on a regular basis by removing drain plug.
- 10. **CAUTION** Do not have any source of ignition near the heater when draining tank.

NOTE: No.1 fuel oil or kerosene is recommended for temperatures below -10° C / 8° F.

11. Heat Exchanger should be cleaned if smokey conditions continue even after the air adjustments on the burner are made.

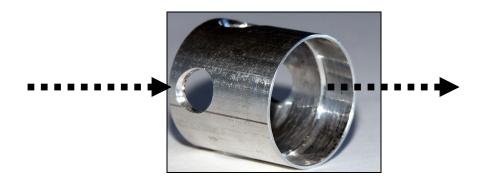
TEMPERATURE FEELER GAUGE ADJUSTMENT (ATTACHED TO FAN SWITCH)

The temperature feeler gauge is required to be always touching the heater exchanger.

The temperature feeler gauge controls the air flow over the fan switch, which eliminates any unnecessary fan cycling. The temperature feeler gauge can be adjusted for different outside temperatures, by rotating the location of the temperature feeler gauge holes. This will provide maximum performance of the unit in different applications.

If supply air is warm (-5° C, indoor application):

Turn the temperature feeler gauge so that the holes are parallel with the heat exchanger. This will help the fan switch to remain cool and not overheat. See following:



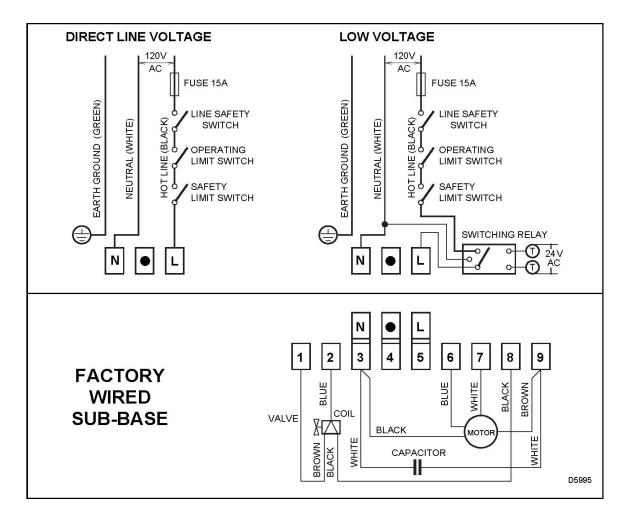
If supply air is cold (under -5° C):

Turn the temperature feeler gauge so that the holes are closed off as the air goes over the heat exchanger. This will reduce fan cycling and the unit from shutting down. See following:



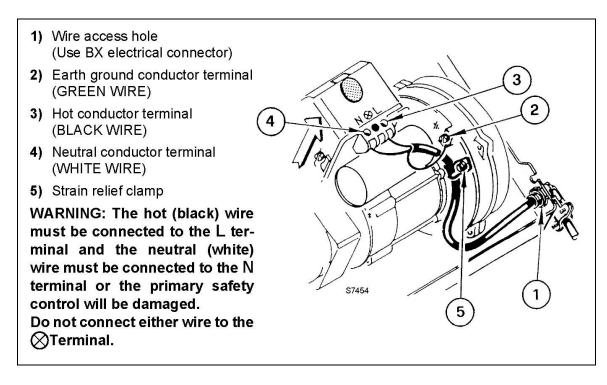
In extreme cold conditions, cover the holes on the temperature feeler gauge using foil tape or use part# FV-433B (solid feeler gauge). Ensure that the temperature feeler gauge is readjusted for warmer weather conditions. Failure to do so may result in burning out fan switches- not covered under warranty.

BURNER WIRING DIAGRAM

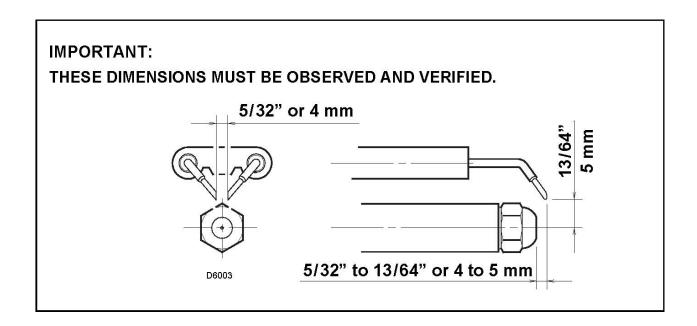


ELECTRICAL CONNECTIONS

It is advisable to leave the control box off the sub-base while completing the electrical connections to the burner.

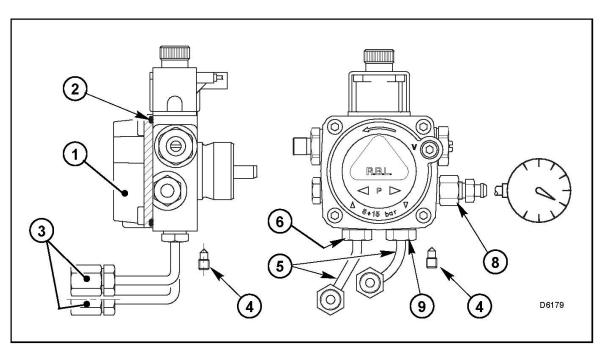


ELECTRODE SETTING



OIL LINE CONNECTIONS

Note: Pump pressure must be set at time of burner start-up. A pressure gauge is attached to the PRESSURE PORT (8) for pressure readings. Two PIPE CONNECTORS (5) are supplied with the burner for connection to either a single or a two-pipe system. Also supplied are two ADAPTORS (3), two female 1/4" NPT, to adapt oil lines to burner pipe connectors. All pump port threads are British Parallel Thread design. Direct connection of NPT threads to the pump will damage the pump body. Riello manometers and vacuum gauges do not require any adaptors, and can be safely connected to the pump ports. An NPT (metric) adapter must be used when connecting other gauge models.



FVO-1100TR – PARTS LIST HARDWARE









































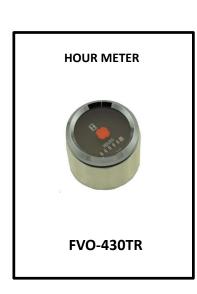
CONTROL PANEL





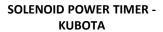








KUBOTA PARTS





FVO-450TR

OIL FILTER- KUBOTA



FVO-451TR

FUEL FILTER- KUBOTA



FVO-452TR

FUEL SOLENOID- KUBOTA



FVO-453TR

LIFT PUMP - KUBOTA

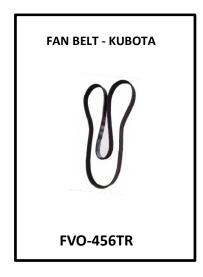


FVO-454TR

SLAVE SOLENOID - KUBOTA



FVO-455TR

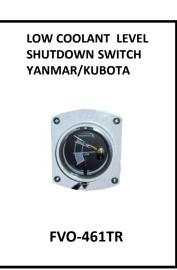










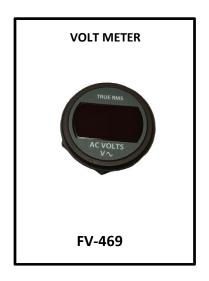


HEATER PARTS





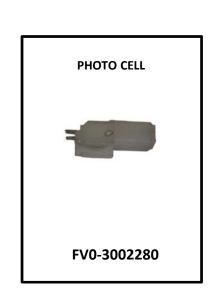






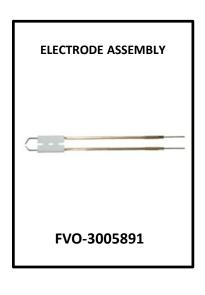












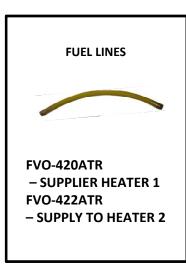












TRAILER BODY PANELS



P/N	DESCRIPTION
FV-1100TRC24	HEATER INLET ACCESS DOOR – RIGHT
FV-1100TRC23	HEATER INLET ACCESS DOOR – LEFT
FVO-1100TRC25	TANK ACCESS PANEL – DRIVER SIDE (INCL. DOOR LATCH)
FVO-1100TRC31	TANK ACCESS PANEL – PASSENGER SIDE
FVO-1100TRC26	GENSET SIDE PANEL – DRIVER SIDE (INCL. SHIELD)
FVO-1100TRC30	GENSET SIDE PANEL – PASSENGER SIDE (INCL. SHIELD)
FVO-1100TRC27	REAR TOP PANEL
FVO-1100TRC28	REAR GENSET DOOR – LEFT
FVO-1100TRC29	REAR GENSET DOOR – RIGHT (INCL. DOOR LATCH)
FVO-1100TRC32	HEATER OUTLET TOP PANEL
FVO-1100TR33	HEATER OUTLET DUCT ADAPTOR PANEL
FVO-1100TRC34	FRONT ROOF PANEL
FVO-1100TRC35	REAR ROOF PANEL
FVO-DAR16CB	HEATER RETURN DUCT ADAPTOR – 1 X 16"
FVO-DAO16CB	HEATER OUTLET DUCT ADAPTOR – 1 X 16"
FVO-DAO12CB	HEATER OUTLET DUCT ADAPTOR – 2 X 12"

PARTS LIST FOR FVO-1100TR

HEATER PART LIST

Part Number	Part Description
FV-401A	PRIMARY FAN MOTOR - 1 H.P.
FV-402RC	16" BC IMPELLER
FV-404	18" POWER CORD C/W PLUG END
FV-405	SS HEAT EXCHANGER
40-113-D7GALV	1/2" X 7" GALVANIZED NIPPLE
40-108-8GALV	1/2" GALVANIZED CAP
FV-406	HIGH LIMIT SWITCH (250F OUTLET)
FV-407A	FAN LIMIT SWITCH (ADJUSTABLE)
FV-407G	FAN LIMIT SILICONE GASKET
FV-408RC	FAN MOTOR CANOPY
FV-408IFP	CANOPY INNER FACEPLATE
FV-408IC	CANOPY INLET RING 16"
FV-409	TOGGLE SWITCH (ON CONTROL BOX)
FV-411	RED LIGHT (ON CONTROL BOX)
FV-414B	THERMOSTAT PLUG (ON CONTROL BOX) 2011>
FV-415A	MALE CONNECTOR FOR FV-THB
FVO-415	RIELLO BURNER (OIL)
FVO-416ATR	299 US GALLON OIL TANK (POLY)
FVO-416AGTR	FUEL GAUGE (POLY TANK)
FVO-417BTR	OIL TANK CAP FOR FVO-1000TR (POLY TANK)
FVO-TLS	TIGERLOOP SYSTEM C/W FILTER
FVO-TLSF	REPLACEMENT FILTER FOR TIGERLOOP
FVO-420ATR	FUEL LINE 40" (SUPPLY FOR HTR#1)
FVO-422ATR	FUEL LINE 72" (SUPPLY FOR HTR #2)
FVO-423ATR	SUPPLY ELBOW C/W PICK UP TUBE - POLY TANK
FV-431	BURNER GASKET
FV-433	FEELER GAUGE
FV-433B	FEELER GAUGE - SOLID
FV-434CB12	FRONT FACE PLATE (2 X 12")
FV-434CB16	FRONT FACE PLATE (1 X 16") - CUFF & BUCKLE
FV-434PL16	FRONT FACE PLATE (1 X 16") PIN LOCK

P.	
FV-435H	OIL BURNER NOZZLE (HI ALTITUDE) (1.75 X 60W)
FV-435B	OIL BURNER NOZZLE (2.00 X 60W)
FV-437	HIGH LIMIT (150F REAR)
FV-446	SIGHT GLASS C/W FIBER GASKET
FV-447	SIGHT GLASS WASHER
FV-448	MAIN RELAY
FV-450SI	POWER INDICATOR LIGHT
FV-461	PUMP INLET/OUTLET ADAPTER
FV-469	VOLT METER
FVO-3000443	PUMP DRIVE KEY
FVO-3002278	SUB-BASE FOR BURNER
FVO-3002279	COIL
FVO-3002280	PHOTO CELL
FVO-3005844	CAPACITOR
FVO-3005847	FUEL LINE PIPE FITTING
FVO-3005854	SEMI FLANGE FOR F10 BURNER (FVO-400)
FVO-3005855	MOUNTING FLANGE
FVO-3005869	ELECTRODE PORCELAIN
FVO-3005889	REGULATOR ASSEMBLY FOR F10 BURNER
FVO-3005891	ELECTRODE ASSEMBLY
FVO-3006553	COIL U-BRACKET C/W KNURLED NUT
FVO-3006965	NOZZLE ADAPTER
FVO-3006966	ELECTRODE SUPPORT
FVO-3006978	TURBULATOR DISC.
FVO-20136639	NOZZLE HOLDER
FVO-3006992	PIPE CONNECTOR - SUPPLY
FVO-3006993	PIPE CONNECTOR - RETURN
FVO-3007087	NOZZLE OUTLET WASHER FOR F10 BURNER
FVO-3007162	O-RING FOR F10 PUMP
FVO-3007203	VALVE PLATE FOR OIL BURNER
FVO-3007209	AIR INTAKE HOUSING (F10)
FVO-3007223	CHASSIS FRONT PLATE
FVO-20136636	BURNER BACK COVER
FVO-3007268	NOZZLE OUTLET FITTING FOR F10 BURNER
FVO-3007317	AIR TUBE COVER PLATE FOR F10 BURNER
FVO-3007568	BLEEDER SCREW

FVO-3949072	LONG COMBUSTION HEAD FOR F10 BURNER
FVO-20136491	PRE-HEATER
FVO-20136488	PUMP
FVO-C700-1029	IGNITION MODULE
FVO-C7001034	BURNER MOTOR

TRAILER PARTS LIST

Part Number	Part Description
FV-EBK	EMERGENCY BREAKAWAY KIT
FV-403TR	205/75 R15 WHEEL AND TIRE
FV-442TR	TOP DOOR STAY - 2 PCS PER DOOR
FV-443TR	PUSH TO CLOSE DOOR LATCH
FV-444TR	LOCK DOWN LEVER LATCH - 2 PCS PER DOOR
FV-445TR	CAM FOR LOCK DOWN LEVER LATCH
FV-450TR	BOLT ON HINGE
FV-463TR	VENT PIPE
FV-464TR	VENT DEFLECTOR
FV-465TR	LOCKING DOOR LATCH C/W RODS
FVO-437TR	BALL HITCH
FVO-438TR	PINTLE HITCH

GENSET/ELECTRICAL PART LIST

Part Number	Part Description
FV-440TR-1	KILL SWITCH
FV-451TR	DISTRIBUTION PANEL
FV-473TR	HEATER BREAKER - 15 AMP 2 POLE
FV-454TR	115V GFI RECEPTACLE
FV-455TR	115V RECEPTACLE WEATHERPROOF ENCLOSURE
FV-455TR-2	WEATHER PROOF CLEAR -IN-USE GFI/ PVC COVER
FV-457TR	TAIL PIPE
FV-458TR	MUFFLER
FV-459TR	FLEX PIPE C/W CLAMPS FOR MUFFLER
FV-460TR	BATTERY
FV-461TR	BATTERY TRAY & HARNESS
FV-462TR	BATTERY LOCK-OFF COMPLETE
FVO-424TR	COMPLETE CONTROL PANEL
FVO-425TR	10' TEMPERATURE GAUGE- FVO-1000TR
FVO-426TR	MAGNETIC SWITCH
FVO-427TR	OIL PRESSURE GAUGE
FVO-428TR	IGNITION SWITCH C/W KEYS
FVO-429TR	VOLT METER
FVO-430TR	HOUR METER
FVO-431TR	FUEL PUMP SOLENOID
FVO-432TR	COOLANT SHUT-OFF
FVO-433TR	DIODE (CONNECTED TO FUEL PUMP - YANMAR MOTOR)
FVO-450TR	SOLENOID POWER TIMER
FVO-451TR	OIL FILTER
FVO-452TR	FUEL FILTER
FVO-453TR	FUEL SOLENOID
FVO-454TR	LIFT PUMP
FVO-455TR	SLAVE SOLENOID
FVO-456TR	FAN BELT
FVO-457TR	AIR FILTER
FVO-458TR	ALTERNATOR
FVO-459TR	STARTER
FVO-460TR	ANTIFREEZE RESERVOIR
FVO-461TR	LOW COOLANT LEVEL SHUTDOWN SWITCH

	ACCESSORIES
FV-HD12	12" X 12-FT HITEX VINYL DUCTING
FV-HD12x25	12" X 25-FT HITEX VINYL DUCTING
FV-HD16x25	16" X 25-FT HITEX VINYL DUCTING
FV-HDV16	16" X 25-FT VENTFLEX VINYL DUCTING
FV-THB	THERMOSTAT C/W 25FT CORD/MALE PLUG END (AS OF 2011)
FV-THB (15M)	THERMOSTAT C/W 50FT CORD/MALE PLUG END (AS OF 2011)
FVO-C7001001	EMERGENCY SERVICE KIT
FVO-C7050010	VACUUM & PRESSURE TESTER MANIFOLD
FV-432	PRESSURE GAUGE ADAPTER/WITH PLUG