

Helios 400C
Helios 500C
Helios 750C

INDIRECT FIRED
AIR HEATERS

Operator's Manual

Diesel
Natural Gas
Propane



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1. General safety rules

WARNING

READ INSTRUCTIONS CAREFULLY. READ AND FOLLOW ALL INSTRUCTIONS. PLACE INSTRUCTIONS IN A SAFE PLACE FOR FUTURE REFERENCE. DO NOT ALLOW ANYONE WHO HAS NOT READ THESE INSTRUCTIONS TO ASSEMBLE, LIGHT, ADJUST OR OPERATE THE HEATER.

IF THE INFORMATION IN THIS MANUAL IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

ALL MAINTENANCE AND REPAIR MUST BE PERFORMED BY A TRAINED SERVICE TECHNICIAN UNDER THE GUIDELINES OF ANY GOVERNING AUTHORITY OR LICENSING REQUIREMENT.

UNVENTED PORTABLE HEATERS USE AIR (OXYGEN) FROM THE AREA IN WHICH THEY ARE USED. ADEQUATE COMBUSTION AND VENTILATION AIR MUST BE PROVIDED. REFER TO INSTRUCTIONS.

WARNING

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

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.

WARNING

COMBUSTION BY-PRODUCTS PRODUCED WHEN USING THIS PRODUCT CONTAIN CARBON MONOXIDE, A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS (OR OTHER REPRODUCTIVE HARM).

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

YOUR SAFETY IS IMPORTANT TO YOU AND TO OTHERS, SO PLEASE READ THESE INSTRUCTIONS BEFORE YOU OPERATE THIS HEATER

WARNING!

NOT FOR HOME OR RECREATIONAL VEHICLE USE

The heater is designed and approved for use as a construction heater in accordance with the Standard ANSI Z83.7 – CGA 2.14. CHECK WITH YOUR LOCAL FIRE SAFETY AUTHORITY IF YOU HAVE QUESTIONS ABOUT APPLICATIONS. Other standard govern the use of fuel gases and heat producing products in specific applications. Your local authority can advise you about these.

This unit is intended for temporary air heating only, do not use it for any other purpose.

Adequate ventilation must be provided.

MAINTAIN THE FOLLOWING MINIMUM CLEARANCES FROM COMBUSTIBLE MATERIALS, WALLS, CEILINGS, ETC:

FRONT:	10 ft	(3.0 m)
REAR:	6 ft	(1.8 m)
SIDES:	4 ft	(1.2 m)
TOP:	4 ft	(1.2 m)

Electrical grounding of the appliance shall be in compliance with the National Electrical Code ANSI/NFPA 70 or CSA C22.1 Canadian Electrical Code, Part I.

Installation shall conform with local codes or, in the absence of local codes, with the national Fuel Gas Code ANSI Z223.1/NFPA 54, the Storage and Handling of Liquefied Petroleum Gases, ANSI/NFPA 58, the Natural Gas and Propane Installation Code, CSA B149.1 and, for use with diesel fuels, with the Installation Code for Oil-Burning Equipment CSA B139.

The heater shall not be directed toward any propane-gas container within 20 feet (6 m).

An indirect air heaters may operate indoors so long as the combustion gas is ducted outside through an approved vent.

When an INDIRECT-FIRED heater connected to a flue pipe is used in a closed room, provide a minimum opening area of 1 ft³ per US gallon capacity at the unit level.

When an INDIRECT-FIRED heater - NOT connected to a flue pipe - is used in a closed room, provide a minimum opening area of 3 ft³ per US gallon capacity at the unit level and a continuous, natural air circulation through windows and doors.

The heater must be located at least 10 ft (6 m) from any propane gas container.

The gas shall be turned off at the propane supply container when the heater is not in use.

When the heater is to be stored indoors, the connection between the propane supply container(s) must be disconnected and the container(s) removed from the heater area and stored in accordance with the Standard for the Storage and Handling of Liquefied Petroleum Gases; ANSI/NFPA 58 and CSA B149.1, Natural Gas and Propane Installation Code.

WARNING
COMBUSTION GAS IS PRODUCED BY THE HEATER; COMBUSTION GAS VENTING MUST CONFORM TO ALL APPLICABLE CODES AND REGULATIONS. COMBUSTION GAS CONTAINS CARBON MONOXIDE, A COLORLESS, ODORLESS AND DEADLY GAS.

Do not install the equipment in premises where there is any kind of explosive material or live flame.

VENTING PRECAUTIONS

When operating the heater indoors you must adhere to all applicable codes in force. Consult the appropriate governing body or a local contractor for venting and fresh air requirements.

It is recommended that the heater be placed in a manner that avoids excessive vent elbows, long or horizontal runs (fig. 1). Improperly vented combustion gas can be hazardous to humans and pets.

When the heater is connected to a flue pipe, the flue pipe shall terminate in a vertical section at least two feet long and sufficient draft shall be created to assure safe and proper operation of the heater.

Notes:

1. Where back drafts may occur a vent cap should be used on the exit from the flue pipe.
2. Horizontal runs of flue pipe should have a rise of 1 in 10 away from the heater.

Recommended chimney draft: 0.06 in w.c.

RISK PREVENTION

The fuel burns in a closed combustion chamber. The exhaust gases are vented outdoors through a vent pipe.

The clean, dry hot air is blown or circulated in the space to be heated by a centrifugal blower.

The blower assembly is protected by a guard fitted on the air inlet. Never operate this or any equipment without factory installed guards in place as it could cause personal injury and/or damage to the blower.

Air inlets and outlets must always be free of obstruction.

Hot combustion gases must be directed in such a manner to prevent contact with any flammable material. Vent pipes must be routed in a manner that avoids contact with humans and combustible material (Fig. 1).

Disconnect the heater from electrical supply before any maintenance or cleaning.

This unit is intended for temporary air heating only, do not use it for any other purpose.

INSTALLATION PRECAUTIONS

The heater must be installed by qualified personnel who have read and understood all supplied instructions.

The heater must be installed on firm and level ground.

WARNING
CONNECTION TO NG OR LP NETWORK MUST BE PERFORMED BY QUALIFIED PERSONNEL WHO POSSESS CERTIFICATIONS OR LICENSING PERTINENT TO THAT STATE, LOCAL OR PROVINCIAL AS REQUIRED BY LAWS OR CODES.

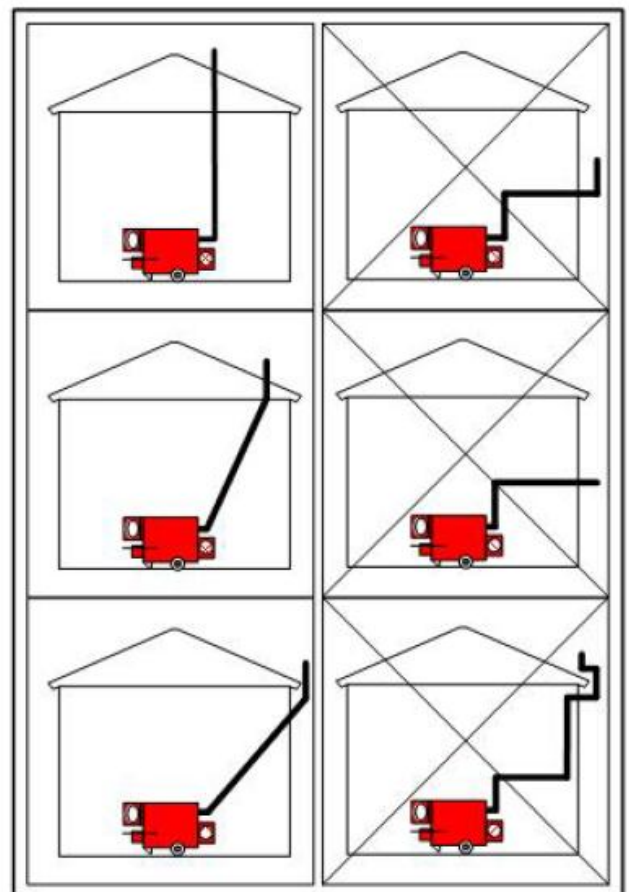


Fig. 1

2. Installation instructions

WARNING

CONNECTION TO NG OR LP MUST BE PERFORMED BY QUALIFIED PERSONNEL WHO POSSESS CERTIFICATIONS OR LICENSING PERTINENT TO STATE, LOCAL OR PROVINCIAL GOVERNING AUTHORITIES AS REQUIRED BY LAWS OR CODES.

COMBUSTION GASES CAN BE VERY DANGEROUS IF RELEASED IN A ROOM WITH PEOPLE OR ANIMALS. COMBUSTION GAS CONTAINS CARBON MONOXIDE, A COLORLESS, ODORLESS AND DEADLY GAS.

EXHAUST GASES CAN BE DANGEROUS AND COULD START A FIRE. DO NOT USE THE EQUIPMENT IN PREMISES THAT CONTAIN FLAMMABLE OR EXPLOSIVE MATERIALS OR ANY OPEN FLAME.

NG BURNERS: THE AIR AND/OR GAS SETTINGS ARE RETURNED TO "ZERO" AFTER FACTORY TEST FIRING. A CERTIFIED AND LICENSED GAS TECHNICIAN MUST RECALIBRATE THE BURNER AIR AND FUEL SETTINGS TO OBTAIN PROPER COMBUSTION AT YOUR WORK SITE.

Follow all burner setup and installation: fuel supply connection, test-firing and burner adjustment must be performed by a licensed professional and must conform to the requirements of local, state and federal authorities. In the Commonwealth of Massachusetts, gas piping shall be installed by a licensed plumber or gas fitter.

Indirect fired heaters may be operated without a vent only when used in the open outdoors. It is recommended that a rain cap is mounted to protect the vent pipe from rain or snow when using the unit outdoors.

WARNING

THE HEATER TO WHICH THIS MANUAL REFERS IS DESIGNED TO FUNCTION WITH DIESEL #1 AND #2, NATURAL GAS OR PROPANE BURNERS. THE BURNER OPERATOR'S MANUAL HAS TO BE CONSIDERED AS AN INTEGRAL PART OF THE PRODUCT DOCUMENTATION. QUALIFIED PERSONNEL IS REQUIRED TO CONNECT THE HEATER TO ANY EXTERNAL FUEL SUPPLY SYSTEM (TANK, GAS LINE, ETC.) FOLLOWING ALL INSTRUCTIONS CONTAINED IN THIS MANUAL AND IN THE BURNER OPERATOR'S MANUAL.

PROPANE SUPPLY SIZING

To allow proper propane vaporisation, the following gas supply specifications can be used as guidelines:

Input	Propane Tank Capacity
400,000 Btu/h	500 gal
500,000 Btu/h	500 gal
750,000 Btu/h	1000 gal

However, as a number of environmental factors affect gas vaporisation, a qualified gas technician is required to select the correct propane supply for every specific site. If several containers are used to supply a heater with propane, they should be manifolded together. Use a manifold system complying with NFPA 58.

CONNECTION TO OIL TANK

For connection to oil tanks, follow the prescriptions and recommendations contained in the burner instruction manual supplied with the unit. The installation shall be carried out by a qualified technician.

3. Instructions for use

BEFORE STARTING THE HEATER:

1. Ensure the heater is parked on a firm, level surface. **KEEP THE FOLLOWING MINIMUM CLEARANCES TO COMBUSTIBLES WALLS, CEILINGS, MATERIALS, ETC.**

FRONT:	10 ft	(3.0 m)
REAR:	6 ft	(1.8 m)
SIDES:	4 ft	(1.2 m)
TOP:	4 ft	(1.2 m)

2. FOR USE WITH DIESEL: at low temperatures, ensure the fuel tank is filled with blended diesel to avoid gelling.

3. FOR USE WITH NATURAL GAS OR PROPANE: a qualified gas technician must connect the heater to the fuel source and verify the inlet gas pressure is correct (see technical specifications) and the line is adequately sized for the BTU input.

4. Ensure the main operation switch is OFF (center position)

5. Connect the heater to a 230V 60Hz 4 wire power supply. When using diesel, the fuel filter preheater will start warming the fuel.

6. Remove the protective receptacle cap and connect the remote thermostat (if used)

NOTE: The heater will not operate unless the protective receptacle cap or the remote thermostat cable is connected.

STARTING THE UNIT

1. Remote thermostat (if used) is placed in the area to be heated and set to the desired room temperature.

2. Turn the main operation switch to HEAT position (☼) to start the heater.

NOTE: Turning the main operation switch to FAN position (✱), only the blower starts and the unit functions as a ventilator.

3. When using diesel fuel, monitor the fuel usage based on the fuel consumption and tank capacity (see technical specifications).

SAFETY CONTROLS

The burner is equipped with a RESET PUSHBUTTON/LAMP. The red lamp lights up in the event that the unit locks out. If this occur, push the RESET button to restart the heater (see also par. 7 "Troubleshooting" for possible causes of lock out).

The heater is equipped with a fixed setting (212 F) SAFETY LIMIT CONTROL, that shuts down the unit in the event of an overheating problem. In this case, disconnect the heater from mains, fix the overheating problem and reset the thermostat by pushing the thermostat reset button on the electrical panel.

The heater is equipped with a variable setting AIR TEMPERATURE CONTROL that commands the BURNER start and stop according to the set temperature.

The heater is equipped with a variable setting FAN CONTROL that commands the BLOWER start and stop according to the set temperature. It also controls the cooling sequence after burner shut down.

The heater is equipped with a variable setting LIMIT thermostat that commands the burner start and stop according to the set temperature.

WARNING

IN THE EVENT THAT ANY SAFETY CONTROL FUNCTIONS REPEATEDLY OR YOU NOTICE ANY ABNORMAL OPERATION, DISCONNECT THE HEATER FROM MAINS AND HAVE IT CHECKED BY QUALIFIED PERSONNEL.

WARNING

NEVER DISCONNECT FROM MAINS TO STOP THE HEATER WHILE IN OPERATION. ALWAYS ALLOW THE COOLING SEQUENCE TO TAKE PLACE, OTHERWISE THE HEAT ACCUMULATION COULD DAMAGE THE COMPONENTS OR ACTIVATE THE SAFETY THERMOSTAT. ALWAYS USE THE MAIN OPERATION SWITCH ✱ - 0 - ✱ ON THE ELECTRICAL PANEL TO SHUT OFF.

WARNING

THE FAN CAN START SUDDENLY DUE TO THE FAN CONTROL EVEN IF THE MAIN SWITCH ON THE "0" (OFF) POSITION. BEFORE REMOVING ANY GUARD, MAKE SURE THAT THE HEATER HAS BEEN DISCONNECTED FROM MAINS.

SHUTTING OFF THE UNIT

1. Turn the main operation switch OFF (center position). Do not disconnect the power cord until the fan has sufficiently cooled the heat exchanger and has shut off automatically.
2. Disconnect the power supply cord.
3. Disconnect the remote thermostat (if used) and replace the protective receptacle cap.
4. When using NG or LP fuel: A qualified gas technician must disconnect the heater from the fuel source.

4. Troubleshooting guidelines

WARNING

ELECTRICITY IS DANGEROUS! ALL ELECTRICAL REPAIR OR MAINTENANCE MUST BE CARRIED OUT BY AUTHORIZED SERVICE TECHNICIANS OR QUALIFIED PERSONNEL.

ISSUE	POSSIBLE CAUSE	SOLUTION
The burner does not start	The remote thermostat or protective cap is not inserted correctly Faulty cable or power supply Room thermostat set too low The high limit has tripped	Insert the plug Check the cable and power supply Set the remote thermostat to a higher temperature Call dealer for service assistance
The burner starts, the flame does not ignite, the unit locks out	No fuel Defective fuel valve(s) Worn burner nozzle Faulty electrodes Flame sensor defective Burner control defective	Fill the fuel tank Open gas supply valves Call for Service Assistance
The burner starts, flame ignites, the	Incorrect fuel pressure	Call for Service Assistance

unit locks out	Worn Burner Nozzle (oil) NG/LP supply line too small Incorrect orifice installed (NG/LP) Incorrect air adjustment Flame sensor defective Burner control defective	
The burner starts and ignites but: - combustion is poor or noisy - black smoke is emitted from the vent.	Ensure that fresh air for combustion is in adequate supply and is not restricted from entering the burner Ensure that the vent pipe is not blocked or undersized.	Call for Service Assistance

5. Maintenance schedule

ITEM	FREQUENCY	NOTES
Replace burner nozzle with an exact replacement (oil)	Prior to first seasonal use	Every 1200 – 1500 hours thereafter or if burner performance is questioned
Check/Adjust Electrodes (oil)	Prior to first seasonal use	If burner fails to ignite
Replace Oil Filter Element	Prior to first seasonal use	If clogged or contaminated
Check/Adjust fuel pressure	Prior to first seasonal use	If burner performance is questioned
Check/Adjust gas pressure	During set-up at each job	If burner performance is questioned
Check/Adjust air settings	During set-up at each job	See technical specifications
Clean the unit interior	Prior to first seasonal use	After use in dirty or dusty conditions
Check/Adjust the blower belts	Prior to first seasonal use	Replace glazed, worn or cracked belts
Blower lubrication	Permanently lubricated	DO NOT OIL

THE APPLIANCE AREA SHALL BE KEPT CLEAR AND FREE FROM COMBUSTIBLE MATERIALS, GASOLINE AND OTHER FLAMMABLE VAPOURS AND LIQUIDS. THE FLOW OF COMBUSTION AND VENTILATION AIR SHALL NOT BE OBSTRUCTED. THE HEATER SHALL BE INSPECTED BEFORE EACH USE, AND AT LEAST ANNUALLY BY A QUALIFIED SERVICE PERSON. THE HOSE ASSEMBLY 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.

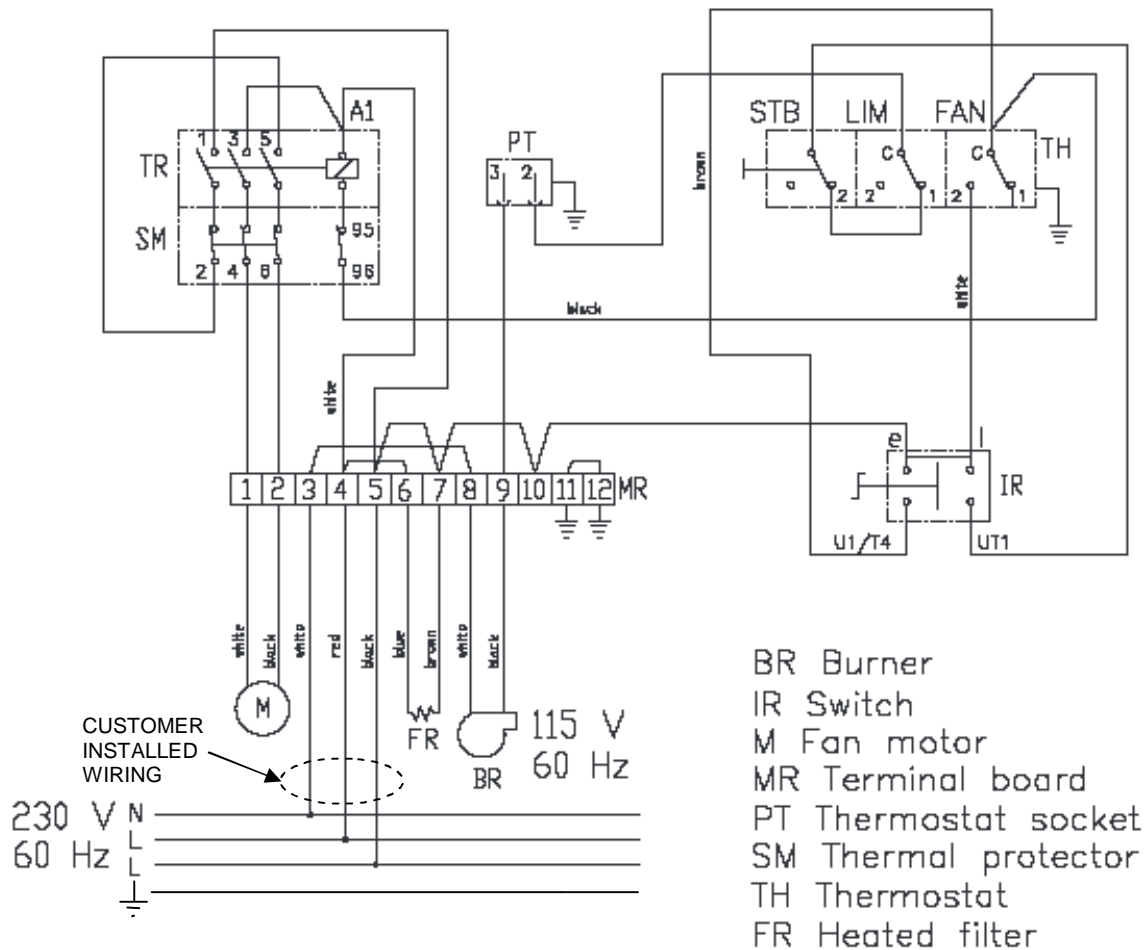
6. Technical information

	Helios 400 C	Helios 500 C	Helios 750 C
Gross Input (Btu/h)	400,000	500,000	720,000
Nozzle (OIL)	2.25 gph 60° solid	3.00 gph 60° solid	4.50 gph 60° solid
Fuel Pressure (OIL)	180 psi	180 psi	160 psi
Air Shutter Setting (OIL)	7	3	6
Gas Supply Pressure (NG)	7-14 in w.c.	7-14 in w.c.	7-14 in w.c.
Orifice (NG)	2.2	3.7	3.7
Manifold Pressure (NG)	1.84 in w.c.	1.91 in w.c.	2.20 in w.c.
Air Shutter Setting (NG)	6	3.2	5
Gas Supply Pressure (LP)	8-14 in w.c.	8-14 in w.c.	8-14 in w.c.
Orifice (LP)	1.5	2.0	2.0
Manifold Pressure (LP)	3.17 in w.c.	2.69 in w.c.	4.21 in w.c.
Air Shutter Setting (LP)	6	3.5	3.6
Air Output	5,000 ft ³ /min	6500 ft ³ /min	8,200 ft ³ /min
Static Pressure	0.64 in w.c.	0.48 in w.c.	0.60 in w.c.
Voltage Rating	230V 60 Hz 4-wire	230V 60 Hz 4-wire	230V 60 Hz 4-wire
Blower Motor Power	1.5 kW	2.2 kW	3.0 kW
Weight (NG)	522 lb	650 lb	882 lb
Flue Pipe Diameter	8 in	8 in	10 in

7. Wiring diagram (for all models)

WARNING

The unit must be connected to the supply by a qualified electrician following the supplied wiring diagrams.



IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE APPLIANCE MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE TEW WIRE OR EQUIVALENT

8. Transporting

WARNING!

THIS UNIT IS NOT DESIGNED TO BE TOWED WITH ANY VEHICLE.

- The heater must be supported by use of blocks during transport. **DO NOT** strap or chain down the unit with the foot or wheels in contact with the transporter.
- Openings or the entire unit should be covered during transport to avoid road debris and clutter.
- Take care when placing straps on areas which are painted red, use corner protectors and never use chains.
- Excessive loading on the foot, wheels and axle will cause permanent damage.
- The foot and wheels are for moving by hand and for parking only.
- All venting external to the unit must be removed prior to transporting.
- Only qualified riggers should attempt aerial lifting.
- Units equipped with oil burners may be strapped directly to the transporter for transit.
- Do not place straps or chains on areas which are painted.

9. Part lists

Contact your local dealer/service agency for spare part requests and orders.

HELIOS 400 C
FIG. 1

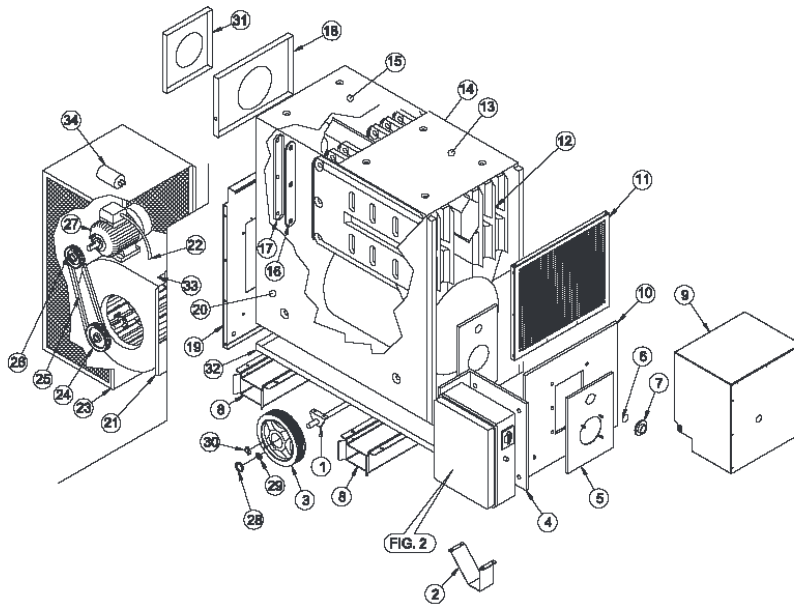


FIG.	POS.	PART NR	DESCRIPTION
1	1	1094113235	AXLE
1	2	PIEDEG#HELG1	FOOT
1	3	1004001680	WHEEL
1	4	1094148035	SUPPORT PANEL
1	5	PANNELLO#FBR80144	BURNER PANEL
1	6	D001806011	INSPECTION GLASS
1	7	D007373900	GLASS FIXING RING
1	8	1094185535	FORK POCKET
1	9	1094215335	BURNER COVER (OPTIONAL)
1	10	PANEST#FIN35544	FRONT LOWER PANEL
1	11	PANNELLO#UAS35544	AIR OUTLET PANEL
1	12	CAMERHE#111	HEAT EXCHANGER ASS.Y
1	13	PANEST#SAN11144	UPPER FRONT PANEL
1	14	PANEST#LSX35544	LEFT SIDE PANEL
1	15	PANEST#SPO11144	UPPER REAR PANEL
1	16	1051001735	GASKET
1	17	1094018435	INSPECTION COVER
1	18	PANEST#USF11144	EXHAUST PANEL
1	19	PANEST#MOT35544	MOTOR PANEL
1	20	PANEST#LDX35544	RIGHT SIDE PANEL
1	21	1087002835	CENTRIFUGAL FAN
1	22	1039011800	MOTOR SUPPLY CABLE
1	23	1094184535	CAGE
1	24	1099003635	PULLEY
1	25	1002007335	BELT
1	26	1099000635	PULLEY
1	27	1040014935	MOTOR
1	28	1005002280	WHEEL CAP
1	29	1022000200	SEEGER RING
1	30	-	-
1	31	PANNELLO#COC10544	FLUE PANEL
1	32	1094185035	LOWER BASE PANEL
1	33	1099002135	CONNECTION FLANGE
1	34	1049003500	CAPACITOR

HELIOS 400 C
FIG. 2

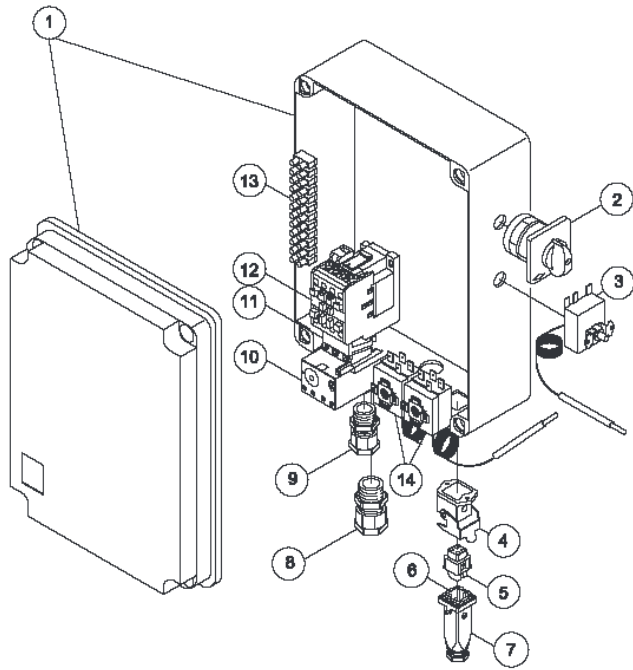


FIG.	POS.	PART NR	DESCRIPTION
2	1	1048001035	ELECTRICAL BOX
2	2	1032003035	SWITCH
2	3	1036001500	SAFETY SWITCH
2	4	1043000600	THERMOSTAT SOCKET
2	5	1043000400	THERMOSTAT SOCKET
2	6	1043000500	THERMOSTAT PLUG
2	7	1043000700	THERMOSTAT PLUG
2	8	1031000400	CABLE CLAMP
2	9	1031001735	CABLE CLAMP
2	10	1032003335	THERMAL RELAY
2	11	1052007400	CONNECTOR
2	12	1037000700	REMOTE SWITCH
2	13	1034000635	TERMINAL BOARD
2	14	1036001335	FAN/LIMIT THERMOSTAT
		1105015355	RESET BUTTON
		1105015600	HOT SURFACE LABEL
		1105055955	FAN ROTATION LABEL
		1048008635	ELECTRICAL PANEL ASS.Y

HELIOS 500 C
FIG. 1

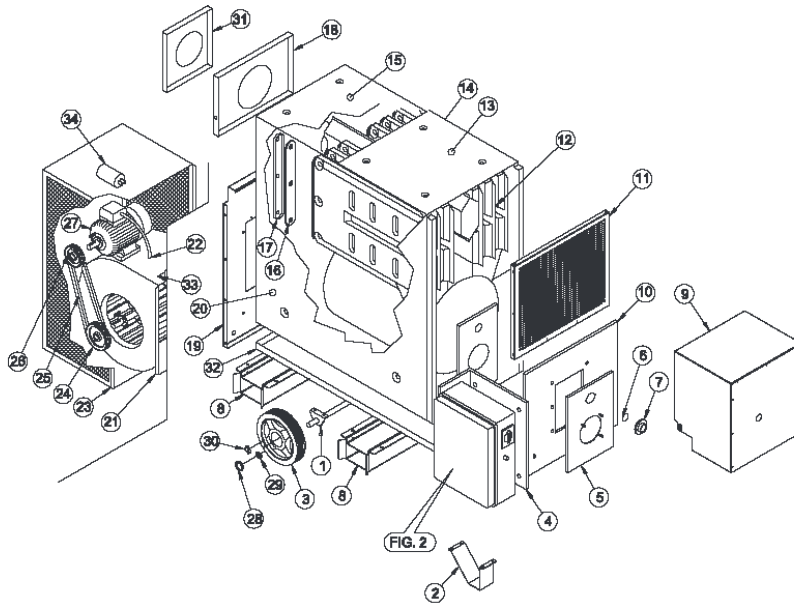


FIG.	POS.	PART NR	DESCRIPTION
1	1	1094148035	SUPPORT PANEL
1	2	PANNELLOG#FBR402	BURNER PANEL
1	3	D001806011	INSPECTION GLASS
1	4	D007373900	GLASS FIXING RING
1	5	PANNELLO#RBR40220	BURNER COVER
1	6	PANEST#FIN14536	FRONT LOWER PANEL
1	7	PANNELLO#UAS14536	AIR OUTLET PANEL
1	8	CAMERHE#145	HEAT EXCHANGER ASS.Y
1	9	PANEST#SAN14536	UPPER FRONT PANEL
1	10	PANEST#LSX14336	LEFT SIDE PANEL
1	11	PANEST#SPO14536	UPPER REAR PANEL
1	12	1051001735	GASKET
1	13	1094018435	INSPECTION COVER
1	14	PANEST#USF14536	EXHAUST PANEL
1	15	PANEST#MOT15036	MOTOR PANEL
1	16	PANESTG#LDX143	RIGHT SIDE PANEL
1	17	1087003035	CENTRIFUGAL FAN
1	18	1039044800	MOTOR SUPPLY CABLE
1	19	1094177035	CAGE
1	20	1099003235	PULLEY
1	21	1002003335	BELT
1	22	1099001035	PULLEY
1	23	1040014535	MOTOR
1	24	1086004400	HEATED FILTER
1	25	1094012535	FILTER BRACKET
1	26	PANNELLO#COC10536	FLUE PANEL
1	27	PANINF#143	LOWER BASE PANEL
1	28	1099002235	CONNECTION FLANGE
1	29	1049003500	CONDENSATORE

HELIOS 500 C
FIG. 2

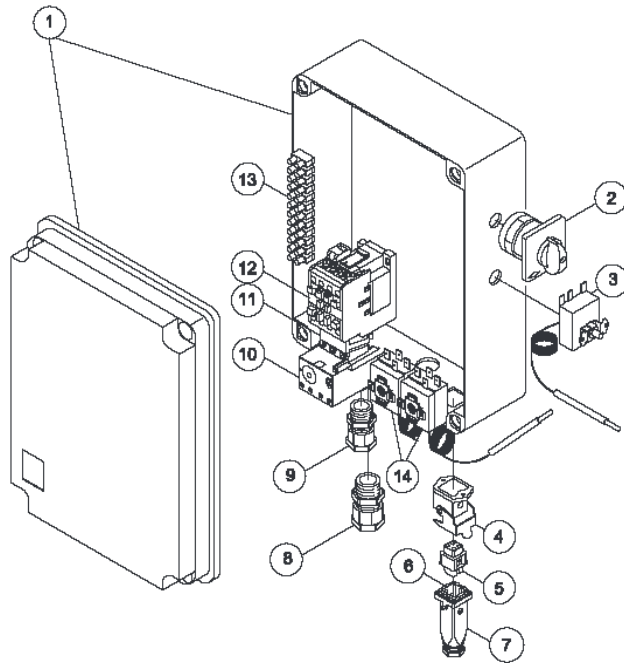


FIG.	POS.	PART NR	DESCRIPTION
2	1	1048001035	ELECTRICAL BOX
2	2	1032003035	SWITCH
2	3	1036001500	SAFETY SWITCH
2	4	1043000600	THERMOSTAT SOCKET
2	5	1043000400	THERMOSTAT SOCKET
2	6	1043000500	THERMOSTAT PLUG
2	7	1043000700	THERMOSTAT PLUG
2	8	1031000400	CABLE CLAMP
2	9	1031001735	CABLE CLAMP
2	10	1032006135	THERMAL RELAY
2	11	1052007400	CONNECTOR
2	12	1037001500	REMOTE SWITCH
2	13	1034000635	TERMINAL BOARD
2	14	1036001335	FAN/LIMIT THERMOSTAT
		1105015355	RESET BUTTON
		1105015600	HOT SURFACE LABEL
		110505955	FAN ROTATION LABEL
		1048008435	ELECTRICAL PANEL ASS.Y

HELIOS 750 C
FIG. 1

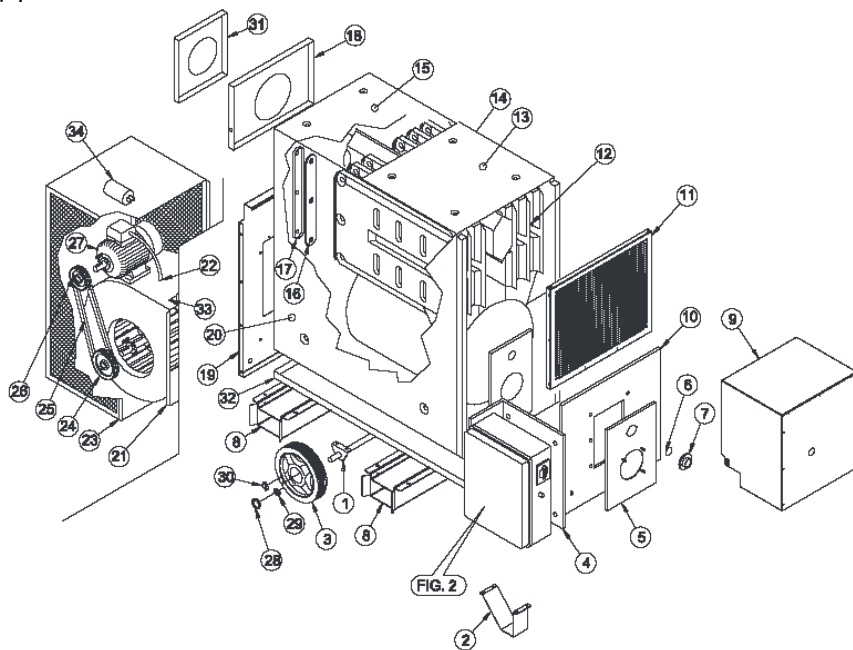


FIG.	POS.	PART NR	DESCRIPTION
1	1	-	-
1	2	1094217335	FOOT
1	3	1004002100	WHEEL
1	4	1094148035	SUPPORT PANEL
1	5	PANNELLO#FBR40244	BURNER PANEL
1	6	D001806011	INSPECTION GLASS
1	7	D007373900	GLASS FIXING RING
1	8	1094188535	FORK POCKET
1	9	1094216135	BURNER COVER
1	10	PANEST#FIN67044	FRONT LOWER PANEL
1	11	PANNELLO#UAS67044	AIR OUTLET PANEL
1	12	CAMERHE#172	HEAT EXCHANGER ASS.Y
1	13	PANEST#SAN17244	UPPER FRONT PANEL
1	14	PANEST#LSX67044	LEFT SIDE PANEL
1	15	PANEST#SPO17244	UPPER REAR PANEL
1	16	1051001735	GASKET
1	17	1094018435	INSPECTION COVER
1	18	PANEST#USF17244	EXHAUST PANEL
1	19	PANEST#MOT67044	MOTOR PANEL
1	20	PANEST#LDX67044	RIGHT SIDE PANEL
1	21	1087003035	CENTRIFUGAL FAN
1	22	1039025000	MOTOR SUPPLY CABLE
1	23	1094187535	CAGE
1	24	1099003735	PULLEY
1	25	1002003435	BELT
1	26	1099001035	PULLEY
1	27	1040015035	MOTOR
1	28	-	-
1	29	-	-
1	30	1023000500	SPLIT PIN
1	31	PANNELLO#COC17244	FLUE PANEL
1	32	1094188135	LOWER BASE PANEL
1	33	1099002235	FLANGE
1	34	1049003600	CAPACITOR

HELIOS 750 C
FIG. 2

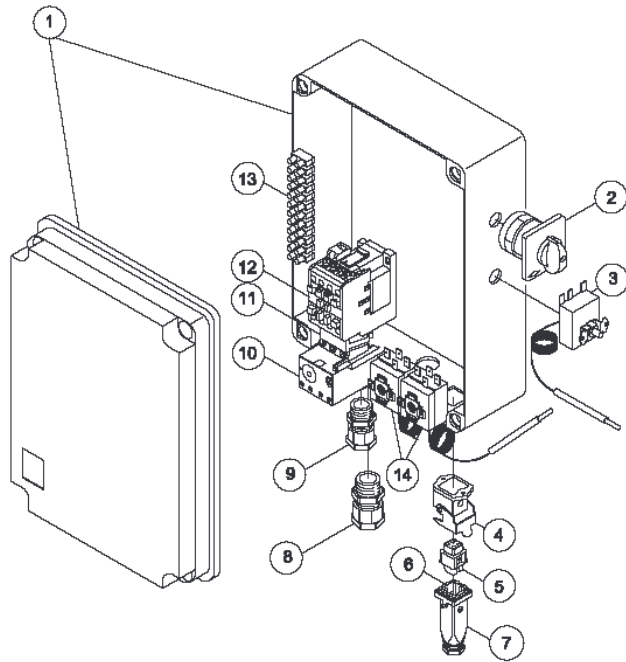


FIG.	POS.	PART NR	DESCRIPTION
1	1	1048001035	ELECTRICAL BOX
1	2	1032003035	SWITCH
1	3	1036001500	SAFETY SWITCH
1	4	1043000600	THERMOSTAT SOCKET
1	5	1043000400	THERMOSTAT SOCKET
1	6	1043000500	THERMOSTAT PLUG
1	7	1043000700	THERMOSTAT PLUG
1	8	1031000400	CABLE CLAMP
1	9	1031001735	CABLE CLAMP
1	10	1032006135	THERMAL RELAY
1	11	1052007400	CONNECTOR
1	12	1037001500	REMOTE SWITCH
1	13	1034000635	TERMINAL BOARD
1	14	1036001335	FAN/LIMIT THERMOSTAT
		1105015355	RESET BUTTON
		1105015600	HOT SURFACE LABEL
		1105055955	FAN ROTATION LABEL
		1048008735	ELECTRICAL PANEL ASS.Y

Your local dealer for spare part requests/orders _____