



*Built Better to Last Longer*

**USER MANUAL**  
**SOM SERIES**  
**MUL-T-POISE**  
**WARM AIR OIL FIRED FURNACE**

*Save These Instructions For Reference*

**ALL SOM SERIES FURNACES ARE AIR CONDITIONING READY!**

NOTICE TO HOMEOWNER  
THIS FURNACE SHALL BE INSTALLED BY A CERTIFIED INSTALLER AND  
WHERE REQUIRED BY LAW, A LICENSED TECHNICIAN

NOTICE TO HOMEOWNER  
IF YOUR SUMMERRAIRE SOM SERIES OIL FURNACE HAS BEEN INSTALLED USING THE  
APPROVED SS2-C TJERNLUND SIDEWALL POWER VENTOR; IT IS YOUR  
RESPONSIBILITY TO KEEP THE AREA AROUND THE VENT TERMINAL FREE OF ICE,  
SNOW, AND DEBRIS

**FOR SERVICE CALL:**

<b>INSTALLATION INFORMATION</b>	
_____	_____
<b>Installing Contractor</b>	<b>Telephone Number</b>
_____	_____
<b>Unit Model Number</b>	<b>Unit Serial Number</b>
_____	
<b>Installation Date</b>	

Summerraire Mfg.  
Peterborough, Ontario  
K9J 7B1

## **OPERATING INSTRUCTIONS**

**CAUTION:** NEVER BURN GARBAGE, REFUSE OR PAPER IN THE HEATING UNIT.  
NEVER LEAVE COMBUSTIBLE OR OTHER MATERIALS AROUND OR NEAR THE FURNACE.

### **IDENTIFY THE LOCATION OF YOUR BURNER / FURNACE POWER SWITCH**

#### **OIL BURNER OPERATING INSTRUCTIONS**

- Use No 2 furnace oil ***ONLY***
- Do not use gasoline, crankcase oil, or any oil containing gasoline.
- Do not attempt to start the burner if excess oil has accumulated, when the furnace is full of vapor, or if the combustion chamber is hot.
- Press the burner relay reset button **ONLY ONCE**; if the burner fails to start, call an Oil Burner Technician.
- If the oil burner is to be shut off for any period of time, shut the oil valve OFF at the oil tank.
- Do not adjust or tamper with the furnace or any of the controls
- Do not burn garbage or paper in this unit.
- Never leave paper, rags, or other combustibles around the furnace.
- Only qualified, or where required by law, a licensed technician shall set – up this unit and adjust controls.
- **DO NOT START THE OIL BURNER UNLESS THE BLOWER DOOR IS SECURED IN PLACE.**

#### **TO TURN THE BURNER OFF**

- Turn the main oil burner switch to “ OFF “
- Set the thermostat as far below room temperature as possible.

#### **IF BURNER IS TO BE SHUT OFF FOR AN EXTENDED PERIOD.**

- Turn main oil burner switch to “OFF”.
- Close all oil supply valves.
- The heating system should be checked and cleaned if necessary.

#### **RESTARTING BURNER AFTER EXTENDED SHUT DOWN.**

The complete oil burner should be checked and serviced by a qualified technician.

- Check oil pump strainer
- Replace oil filter cartridge
- Check electrodes
- Oil burner motor ( see lubrication section )
- Restart burner by following instructions in; “ STARTING THE OIL BURNER “ section.
- If your furnace has been shut off for an extended period – contact your qualified service technician for start - up

## **BURNER FAILS TO OPERATE**

Always call a qualified technician.

The trouble may be :

- Raise your thermostat to 5 ° C ( 10 ° F ) above present room temperature
- Make sure your “ Oil Burner “ power switch is in the “ ON “ position
- If you hear a hum from the oil burner, and the motor has not started, press the reset button on the burner motor once only.
- Blown fuse / “ tripped “ breaker in electrical panel
- Thermostat may be set below room temperature.
- Burner relay ( combustion control ) may have to be “ reset “ ( press reset once only )
- Oil valve may be closed.
- Oil supply may be too low.
- Blocked flue sensor “ tripped “
- If the oil burner fails to start or runs for only a few seconds, call a qualified service technician.

## **FAN CONTROL – INFITEC Part No, DFS530S180**

The Fan Control used on the Summeraire SOM series of furnaces is controlled by a “Timed Relay”. After Burner Ignition, the blower will start after 30 seconds. The blower turns “Off” or returns to “Constant Speed” 3 minutes after the Oil Burner shuts OFF. There is **NO ADJUSTMENT** on the “Timed Relay”

## **DUAL AIR OPERATION**

This furnace is equipped with a dual ( two ) speed blower system which allows partial air distribution at all times. When the thermostat calls for Heat, the Oil Burner starts and the HIGH speed quickly distributes warm air throughout the home. When the HIGH SPEED stops, the “LOW” speed continues operating, circulating the air to even the temperature throughout the house. If the “LOW” speed feature is not required / desired, operate the small “rocker” switch located on the power junction box.

## **MAINTENANCE**

### **OIL FURNACE ANNUAL SERVICE**

*The oil burner and furnace should be thoroughly cleaned and serviced annually by a qualified service technician, and where required by law, a licensed technician.*

#### **CAUTION :**

Do not use any commercially available soot remover.

Use extreme caution when servicing since the combustion chamber is fragile.

Routine cleaning of the flue passages does not require cleaning the combustion chamber.

If for some reason, it is necessary to work in the area of the combustion chamber, do not touch or alter the chamber position.

Before cleaning, shut off electrical power supply to the furnace.

- Note :** *Always keep oil supply valve shut off if burner is shut down for an extended period of time.*
- The nozzle should be replaced annually – handle nozzle with care so that the inside surface tip is not scratched.
- The electrodes should be cleaned and adjusted. (see oil burner manual supplied with the oil burner).

## **LUBRICATION**

Apply 2 – 3 drops of SAE 20 – 30 Non Detergent oil ONLY to the oil port(s) located at either end of the burner motor.

Apply 2 – 3 drops of SAE 20 – 30 Non Detergent oil ONLY to the oil ports located at either end of the blower motor.

**DO NOT OIL THE FAN BEARINGS !**

## **CLEANOUTS**

### **SOM SERIES**

Remove smoke pipe from furnace and chimney.

Remove any soot that may be present.

Remove cleanout panel from front of unit

Remove the centre cleanout panel and the round “disc type” cleanout covers located on either side of the centre cleanout panel.

Remove the baffles in the secondary heat exchanger tubes.

Loosen soot from the tubes with a cleaning tool or brush.

*Remove all loose soot with a vacuum cleaner suitable for this purpose. Inspect passages to check for missed areas. When reinstalling the cleanout cap, make sure to replace the gasket.*

Reassemble heat exchange cleanout covers and replace gaskets.

**NOTE:** WE RECOMMEND THAT A QUALIFIED MECHANIC OR WHERE REQUIRED BY LAW, A LICENCED MECHANIC **ONLY** SHOULD PERFORM ALL SERVICE AND CLEANING OF YOUR SUMMERAIRE FURNACE !

## **AIR FILTER**

This furnace should never be operated without filters.

**A DIRTY AIR FILTER CAUSES INEFFICIENCY AND HIGHER OPERATING COSTS**

Clean or replace filters each heating season, or as required.

Filter specifications for the air filter installed in your Summerraire oil fired warm air furnace, are listed below.

**DO NOT SUBSTITUTE !**

***Note: Changing the type or size of filter used in your Summerraire furnace can seriously affect the operation of the furnace!***

## **AIR FILTER SPECIFICATIONS**

Filter size: SOM75-16” X 20” X 1” – CSA or ULC Certified/Approved - Type: Throw-away/disposable

SOM95-16” X 20” X 1” – CSA or ULC Certified/Approved - Type: Throw-away/disposable

SOM125-20“ X 25” X 1” – CSA or ULC Certified/Approved - Type:Through-away/disposable

**USE OF FILTERS OTHER THAN THOSE SPECIFIED ABOVE, CAN CAUSE DANGEROUS ELEVATION OF FURNACE TEMPERATURES – THIS IS AN UNSAFE CONDITION !**

**DO NOT USE / INSTALL PLEATED TYPE AIR FILTERS IN THIS FURNACE !**

**WARNING:** Your furnace requires Combustion Air

***DO NOT*** close off furnace room or enclose furnace - this will starve to furnace oil burner for air necessary for combustion and could result in a dangerous situation.

**NOTE:**

IF YOUR SUMMERAIRE FURNACE IS INSTALLED WITH A SS2-C TJERNLUND SIDEWALL POWER VENTOR.

***IT IS THE USERS / HOMEOWNERS RESPONSIBILITY TO KEEP THE AREA AROUND THE VENT TERMINAL FREE OF ICE , SNOW AND DEBRIS !***

## WARRANTY:

Summerraire Mfg. warrants that it will supply to the owner of a Summerraire Oil furnace that has been installed in Canada, a replacement **Heat Exchanger** (Heat Element) free of charge F.O.B. Factory, Peterborough, Ontario, Canada. If the said **Heat Exchanger** wears out or fails under normal use and service due to a defect in material or workmanship during the first **Twenty (20) years** after the date of installation and only if the following conditions have been met.

1. The furnace has been installed and maintained in accordance with accepted practices as recommended from time to time by the Heating Refrigeration and Air Conditioning Institute of Canada; The National Building Code, or CSA standard B139 by a qualified installer.
2. The furnace has been operated with an input rate not in excess of the rating and fuel as specified on the rating plate attached to the furnace.
3. The furnace has not been operated with out the use of the proper automatic limit control on the maximum warm air temperature.
4. That the furnace has not been operated without adequate air circulation over it.
5. Proof satisfactory to Summerraire Mfg., that the defect claimed has not been caused by damage to, or destruction of the furnace.
6. The furnace has remained at all times in the place of initial installation.
7. Written notification of the failure under terms and conditions of this warranty are provided no later than thirty (30) days after the expiration of this warranty whichever shall first occur.
8. No mechanically cooled air. Originating in the return air duct shall be circulated over the heat exchanger of the furnace.
9. The owner must provide proof that the appliance has been serviced annually, including annual cleaning of the complete furnace and, inspection of the heat exchanger.
10. The unit must not be installed in any structure where a corrosive atmosphere exists as may be found in dry cleaning establishments, Laundromats, Beauty Salons, etc.
11. Summerraire Mfg. shall not be responsible for any failure due to water damage and/ or Acts of God.
12. No Air Conditioning or Heat pump coil may be installed on the return air side of this furnace.

This warranty expressly supersedes all other warranties and obligations of Summerraire Mfg. No person has authority to alter or modify the terms of this warranty in any manner. Summerraire Mfg. assumes no liability for consequential damages of any kind, and the purchaser, by acceptance of this Equipment assumes all liability for the consequence of its use or misuse, by the purchaser, his employee or others.

This **Warranty** is for the benefit of the owner of the furnace and terminates in the event of any alterations not specified by Summerraire Mfg. and other than herein provided. No further or other warranty, express or implied, is granted by this warranty and no liability shall accrue for any consequential damage resulting from alleged defects in the **Heat Exchanger** or its component parts.

### **Mechanical components for this furnace are covered under a five (5) year warranty.**

If these components fail under normal use and service within five (5) years from date of installation, the defective part will be replaced free of charge, F.O.B. our factory in Peterborough, Ontario.

The Model Number and Serial Number of your Summerraire Furnace must accompany all claims for warranty.