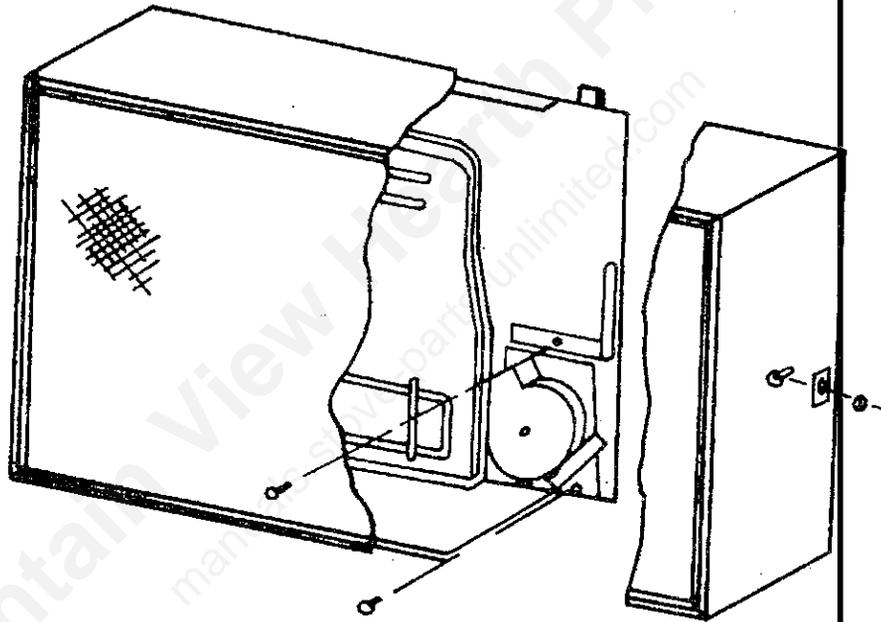


*Lawson*

# FORCED AIR FAN

MODEL NUMBER F-31

Instructions For Installation and Operation  
With Parts List

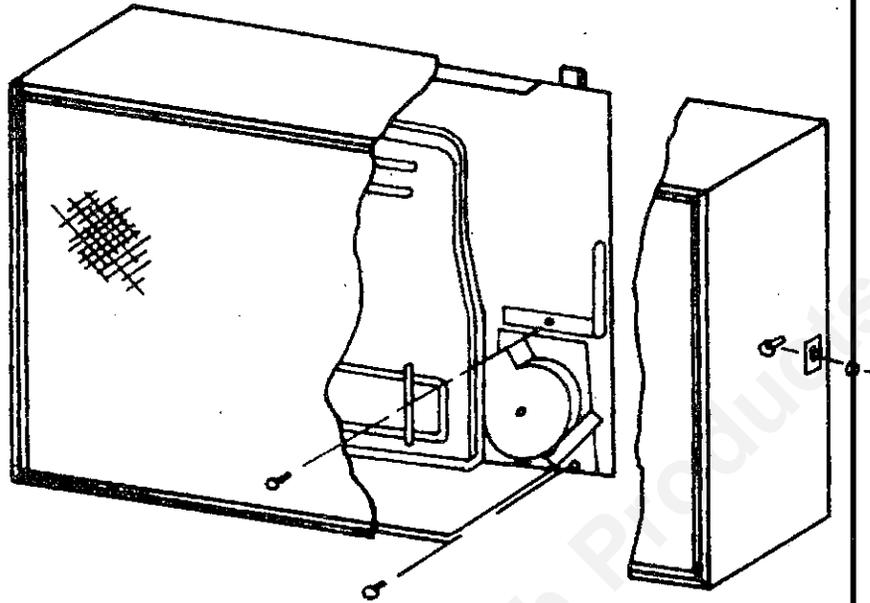


IF THE CABINET IS TO BE REMOVED FOR SERVICING OF THE UNITS,  
ALWAYS UNPLUG THE 115V POWER CORD.

**UNITED STATES STOVE COMPANY**

SOUTH PITTSBURG, TENNESSEE 37380

# Installation Instructions

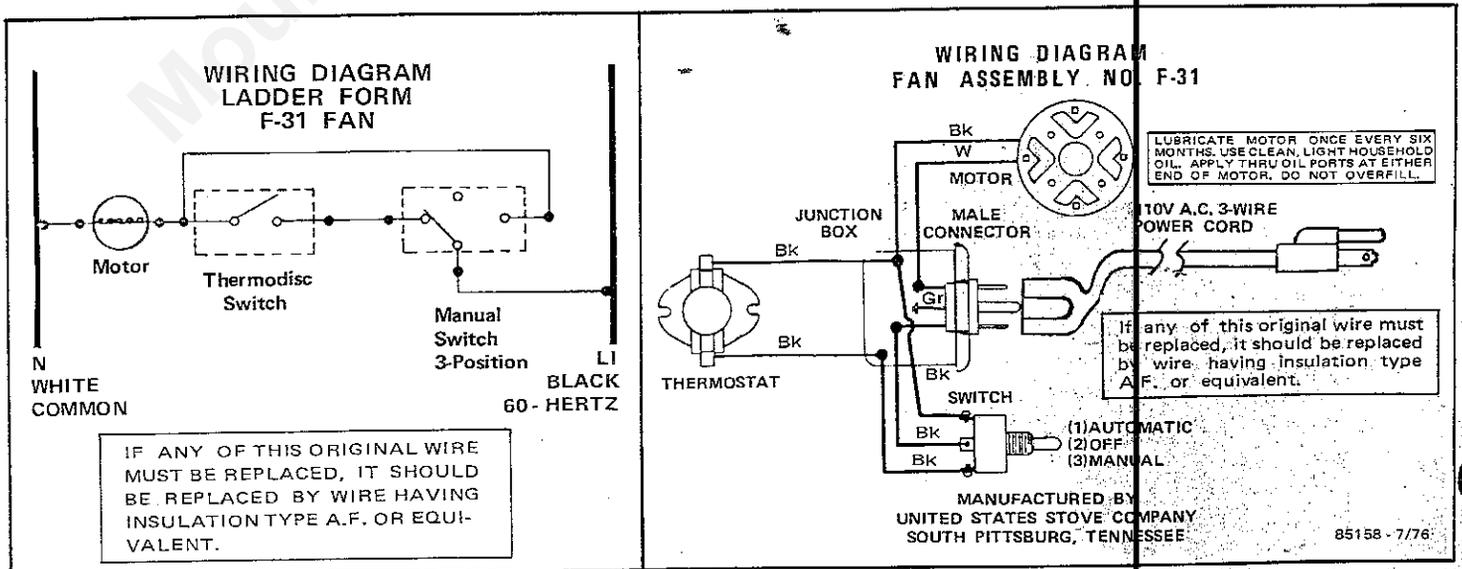


## TO INSTALL FAN HOUSING TO HEATER BACK

1. If the cabinet is already in place, remove it now.
2. To remove cabinet, lift cabinet up and forward to disengage flange on heater back. Remove access door from cabinet.
3. Attach fan assembly to heater back, by aligning 2 holes in fan housing to 2 holes in heater back, secure with 2 sheet metal screws.

**CAUTION: DO NOT ENERGIZE 110V A.C. POWER CIRCUIT UNTIL INSTALLATION IS COMPLETED AND CABINET IS REPLACED.**

1. Replace cabinet by lowering it over the metal tabs on heater back. The flanges on cabinet side should slide behind the metal tabs on heater back. The cabinet top flange should fit behind the top of the heater back.



# Installation Instructions

## FOR F-31 FAN

1. Remove all parts from carton before disposing of the carton.
2. Remove Outer Cabinet from heater (See Installation Instructions of Heater).
3. Attach Fan Assembly to back of Inner Unit (Fig. 1) with metal screws found in parts bag.
4. Drop the 110V supply line through the bottom of the cabinet. Do not plug into supply line until installation is complete.
5. Take a screw driver and hammer and knock plug out of Cabinet Side. Remove ring nut from toggle switch and thread switch through cabinet.
6. Remove paper backing from label and punch out center hole on label. Place the label over the toggle switch with the switch through the hole.
7. The label is self adhesive and will stick to the cabinet side. Place the label against the cabinet and press it into place.
8. Secure the switch with the ring nut from the parts bag and replace cabinet on the heater.

The Toggle Switch has three positions: (Refer to wiring diagram).

Position 1 (Up)

The fan will be operated by the thermostat.

Position 2 (Center)

The fan will be turned off.

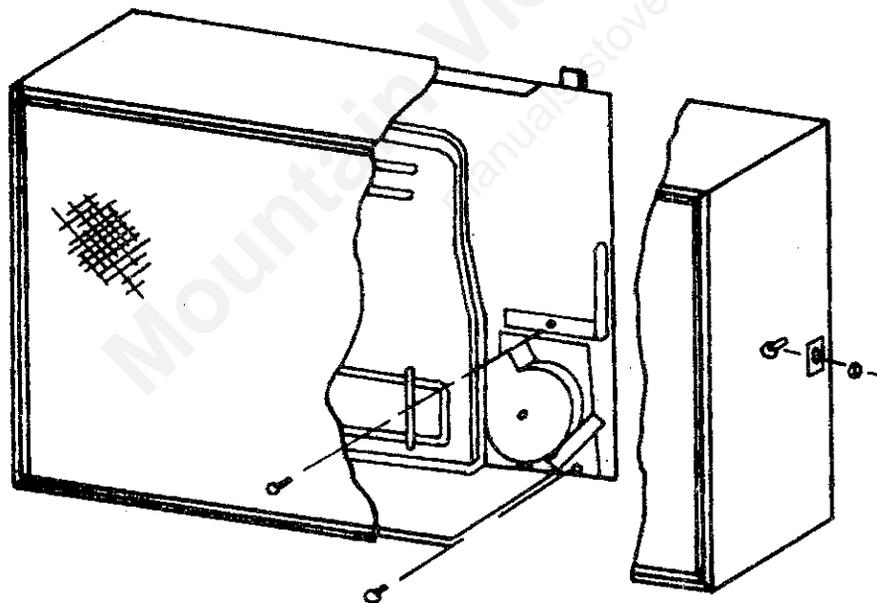
Position 3 (Down)

The fan will run continuously and is independent of the thermostat. When the fan is set in this position it will offer circulating air in the summer time.

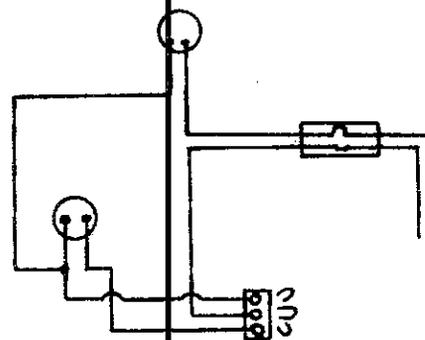
**CAUTION:** To guard against electrical shock always unplug supply line from wall plug if cabinet is to be removed for servicing the unit.

### OILING INSTRUCTIONS:

To lubricate motor, remove fan from heater and drop about four drops of S.A.E. 20 Motor Oil in each oil cup on the back of the motor.



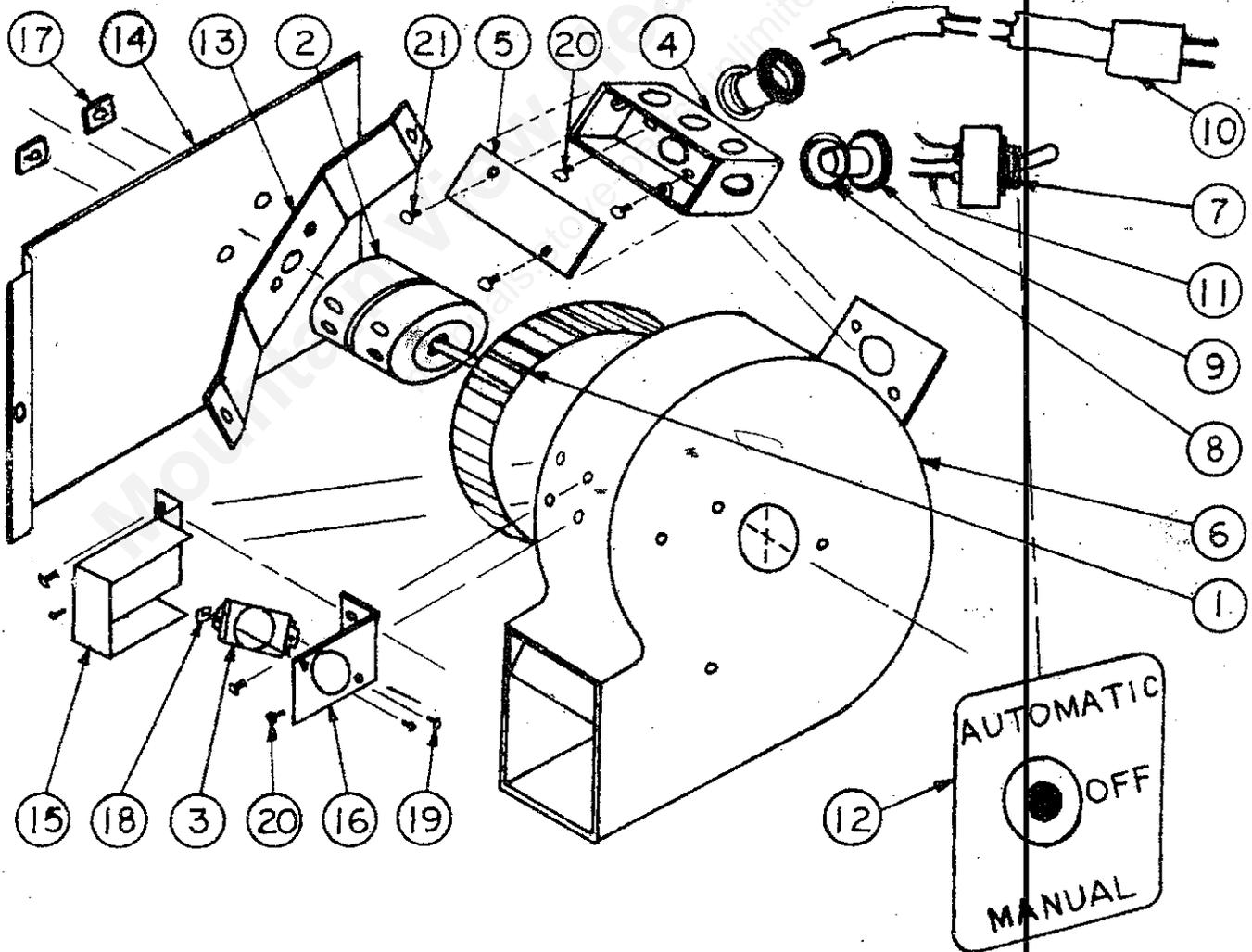
IF ANY OF THIS ORIGINAL WIRING MUST BE REPLACED, IT MUST BE TYPE "AF" WIRE OR ITS EQUIVALENT.

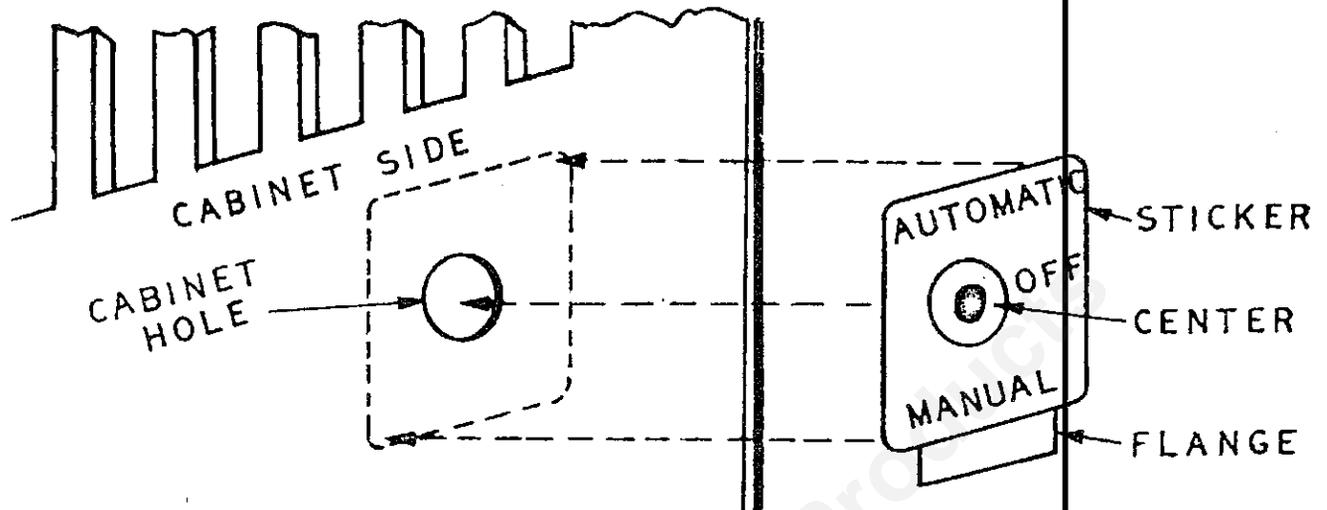


# F-31 FAN KIT

## PARTS LIST

Key No.	Part No.	Name	Description
1	9360	Blower Wheel	Torrington No. FE-610-119-1-CW
2	9361	Motor	GE. No. 5KSM59CS12165-SW
3	9359	Fan Switch	Thermodisc No. WA-12 Close: 175°
4	9369	Outlet Box	Raco 1½ x 1½ x 3-7/8
5	9375	Outlet Box Cover	Raco 1½ x 3-7/8
6	9229	Blower Housing	Desta No. 941-E-610
7	9356	Toggle Switch	3 Pos. Cutler Hammer No. 750 2-K-13
8	9357	Strain Relief	Heyco No. SP-6P-1
9	9358	Strain Relief Bushing	Heyco No. A-26
10	9354	Supply Cord	6 Ft. No. 200 Plug
11	9353	Wire	Black 20" Thermoplastic
12	9370	Label	"On-Off-Automatic" Sticker Type
13	1496	Motor Mounting Bracket	
14	1497	Blower Mounting Bracket	
15	1495	Fan Switch Cover	
16	1498	Switch Bracket	
17	9537	Nut No. 10-24 Sq.	
18	9211	Nut No. 6-32 Hex	
19	9212	Bolt No. 6-32 x 3/16 Pan Hd.	
20	9424	Screw No. 10 x 3/8 Tr. Hd.	
21	9210	Bolt No. 8-32 x 1/2 Pan Hd.	



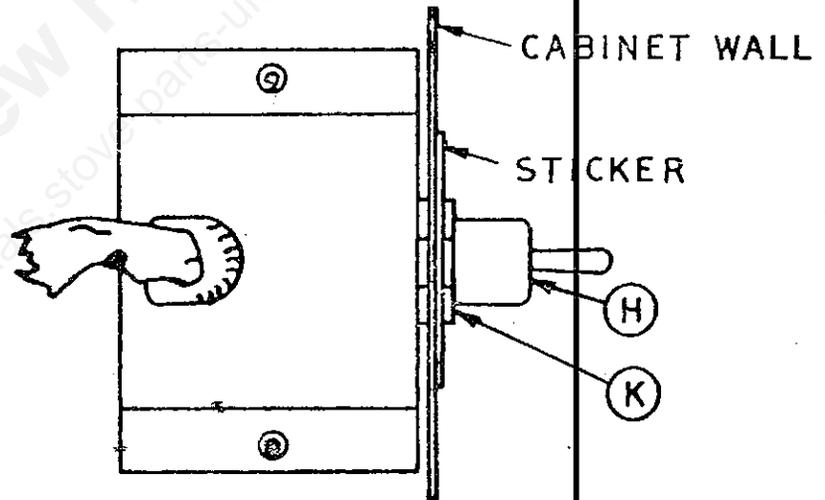


### APPLYING THE STICKER

1. Sticker will be found in parts bag.
2. Remove center of sticker, grasp flange and peel off back.
3. Place sticker on cabinet side by aligning sticker hole to cabinet knockout hole. Press down sticker to adhere.

### INSTALLING SWITCH

1. Place switch (H) in hole in cabinet side from inside heater, and secure with hex ring nut (K) found in parts bag, by holding box in vertical position as shown, and tighten nut.



### FAN SWITCH OPERATION

The toggle switch has three positions. (See Wiring Diagram.)

- |                       |  |
|-----------------------|--|
| Position 1 – (Up)     | The fan will be operated by the thermostat.  |
| Position 2 – (Center) | The fan is off.  |
| Position 3 – (Down)   | The fan will operate continuously and is independent of the thermostat. When the fan is in this position, it will offer circulating air in warm weather. |

# F-31 Fan Kit

## PARTS LIST

Key No.	Part No.	Name	Description
1	65350	Blower Housing Ass'y	
2	83812	Heyco Adapter	No. A-25F
3	83826	Bushing, Strain Relief	Heyco No. SR-6P-3-4
4	80064	Wire, Black	22" No. 6 Spade x 1/2" Strip
5	80067	Fiberglass Tube	1/2" Dia. x 16"
6	83017	Screw, Sheet Metal	No. 10A x 3/8 P.H. Tr. Hd.
7	14910	Switch Box Cover	
8	80045	Toggle Switch	3 Position
9	14900	Switch Box Housing	
10	83814	Bushing, Strain Relief	Heyco No. SR-7P-2
11	80065	Fiberglass Tube	1/2" Dia. x 8"
12	83002	Lockwasher	1/4" - Split
13	83064	Nut, Hex	No. 8-32
14	14970	Blower Mounting Brkt.	
15	14960	Motor Mounting Brkt.	
16	89127	Blower Inlet Air Ring	
17	80052	Motor	Torin-Part of 941-P Housing GE No. 5KSM59CS12165
18	89038	Blower Wheel	Torin No. FE-610-119-1
19	83136	Heyco Adapter	No. A-41
20	80070	Supply Cord	6 FT.-18-3, SPT-3
21	83804	Heyco Adapter	No. A-42
22	80010	Wire Nut	No. 71-B
23	80040	Utility Box Cover	W/Screws
24	80072	Ring Terminal	Leviton No. 41136 (No. 8 Ring)
25	80073	3-Prong Male Connector	Leviton No. 1373
26	80066	Fiberglass Tube	1/2" Dia. x 14"
27	80063	Wire, Black	20" No. 8 Spade x 1/2" Strip
28	14950	Thermodisc Cover	
29	83068	Nut, Hex	No. 6-32
30	80053	Fan Switch	Thermodisc-Close 175°
31	83069	Screw, Machine	No. 6-32 x 3/16
32	14980	Thermodisc Bracket	
33	83049	Ring Nut	Circle F-No. 2324-15132-32
34	85043	Label	Automatic, Off, Manual

