

# **Fuel Oil Burner**

# **Operating Instructions**

#### FORM S-3022-96



PO Box 525

Clay Center, KS 67432 U.S.A.

Phone: (785) 632-2151 Fax: (785) 632-3308 E-Mail: info@gtmfg.com

#### FUEL OIL BURNER OPERATING INSTRUCTIONS

Supplement to Operator's Manual and Parts Book

#### **GENERAL**

Model 345 *GT* Dryers are equipped with a 3 GPH nozzle on the primary burner and a 5 GPH nozzle on the auxiliary burner.

Model 545 and 645 **GT** Dryers are equipped with a 4 GPH nozzle on the primary burner and a 6 GPH nozzle on the auxiliary burner.

# IMPORTANT: Plenum Operating Temperatures Above 200° F ARE NOT RECOMMENDED with the Fuel Oil Burners.

The fuel pump is factory set at 160 PSI for optimum conditions. If necessary, the pump capacity may be varied by adjusting the pump pressure in the 150 PSI to 200 PSI range. The pressure nay be changed by removing the cover screw or nut (opposite the nozzle port) on the adjusting screw and inserting a 1/8" Allen wrench or straight screwdriver (depending on pump style) to turn the adjusting screw.

The electrode gap should be maintained at 1/4 to 5/16" for proper fuel ignition.

The air adjustments are set at factory for average conditions. However, it may be necessary to readjust the air intake for various altitudes or existing local conditions.

The primary nozzle fuel/air ratio is controlled by the slide gates on the two smaller air intakes. The auxiliary nozzle fuel/air ratio is controlled by the larger slide gate on the large air intake. While smoke level tests of the combustion air from the burner is the most accurate way to determine the proper fuel/air levels, generally the proper air adjustments can be accomplished by observing the color of the flame. The desired color is a bright orange. Should the flame appear white or if there is a burning sensation in the eyes, an excess of air is indicated. The primary air gates should each be closed slightly to eliminate these conditions.

Due to viscosity changes in the fuel during outside temperature variations, it is recommended the No. 2 fuel oil be used when temperatures are above 32° F. (0° C). When temperatures below 32° are encountered, it is suggested that No. 1 fuel oil be used.

#### BEFORE OPERATING THE DRYER

**IMPORTANT:** Fuel must be supplied to the pump before engaging the tractor PTO or electric motor drive. Failure to do so will result in pump damage. The fuel level switch will safeguard the pump only if there is an oil *supply* to circulate through the pump and return to the tank. The switch will not protect the pump if there is no fuel.

- 1. Connect the pump fuel supply and return lines to the fuel supply source.
  - **NOTE**: The liquid level switch must be mounted in the vertical position so that the float is free to move up and down with the fuel level.
- 2. Fill the fuel supply source with No. 1 or No. 2 fuel oil (see reference to outside temperature above).

NOTE: The volume of fuel that the dryer will use per hour varies greatly depending on such things as the amount of heat rise required, the type of grain, and humidity. The Model 345 has a standard range of approximately 3 to 8 gallons per hour (11 to 30 liters per hour) and the Model 545 has a standard range of approximately 4 to 10 gallons per hour (15 to 38 liters per hour). It is recommended that at least a 50 gallon (190 liter) fuel supply is used.

Even with these recommendations, the fuel supply should be checked before starting each batch of grain to assure an adequate supply.

- 3. Adjust the high limit control. Refer to the operator's manual for the correct setting.
- 4. Adjust the grain temperature control. Refer to the operator's manual.
- 5. Adjust the auxiliary burner control. This control must be set below ambient temperature for dryer start up Make additional adjustments as required to set the drying (plenum) temperature (maximum recommended plenum temperature is 190° F).

#### STARTING THE BURNER

1. Connect the lead-in wire to a 12 VDC negative ground power source.

**IMPORTANT:** Battery connections other than described above will be harmful to the ignition system.

**NOTE:** At this time there should be power to the control panel. If not check first the lead-in wire connections for good contact/ and second the fuel level. This unit will not operate unless adequate fuel is provided to activate the fuel switch.

2. Bring the fan to operating speed (obtained with a PTO speed of approximately 525 RPM).

<u>IMPORTANT</u>: Make certain the pump is connected to the fuel supply and an adequate supply of fuel exists to complete the drying cycle.

- 3. Open the fuel line valve.
- 4. Turn the circuit breaker switch to the "ON" position. The "POWER ON" and "AIR FLOW" indicators will light.
- 5. Depress and hold the "START" button ("IGNITION", "LOW FLAME TEMP" and "GAS ON" indicators will light). The ignition coil will begin and continue to spark, until the flame has been established. Release the "START" button after the ,"LOW FLAME TEMP" indicator has gone off. The "IGNITION" Indicator will go off as the "START" button is released

If ignition is not established within 60 seconds release the "START" button. Wait at least 20 seconds before reattempting to ignite the flame This will allow the unburned fuel to be vented from the burner.

**IMPORTANT:** Do not attempt to light the burner unless, fuel pressure gauge is at operating pressure. Do not operate the dryer without fuel, as pump damage will result.

6. The auxiliary burner is controlled by the auxiliary burner control thermostat located in the control box. Whenever a higher heat is needed It will be necessary to adjust the auxiliary burner control to suit the drying conditions required. The indicating lamp on the panel will light whenever the auxiliary burner is on. The auxiliary burner thermostat also controls the auxiliary air control solenoid which opens the auxiliary air vane whenever the auxiliary fuel valve is energized.

#### SHUTTING OFF THE BURNER

- 1. Shut off auxiliary burner by turning down auxiliary burner control thermostat until indicating lamp goes out.
- 2. Turn off circuit breaker switch.
- 3. Turn off fuel line valve.
- 4. Allow fan to run at least two minutes after burner has been shut off to cool residual heat inside the burner.

Dryer Model 345

Fan Speed 2600 RPM

Fuel Pressure 160 PSI [1100k Pal]

Fan Static Pressure Inches of H2O	Primary Nozzle Size Gallons/Hour (Liters/Hour)	Auxiliary Nozzle Size Gallons/Hour (Liters/Hour)	Heat Rise Minimum ° F [° C]	Heat Rise Maximum ° F [°C]	Primary Air Gate Opening Inches [mm]
1	2 [7.5]	5 [19]	32 [18]	113 [63]	5/8 [ 16 ]
1	5 [19]	5 [19]	80 [44]	160 [89]	1-3/4 [44.5]
1-1/2	2 [7.5]	5 [19]	35 [19]	122 [ 68 ]	5/8 [ 16 ]
1-1/2	5 [19]	5 [19]	88 [49]	175 [97]	1-3/4 [44.5]
2	2 [7.5]	5 [19]	40 [22]	140 [78]	5/8 [16]
2	5 [19]	5 [19]	100 [56]	200 [111]	1-3/4 [44.5]
2-1/2	2 [7.5]	5 [19]	47 [26]	166 [ 92 ]	5/8 [ 16 ]
2-1/2	5 [19]	5 (19]	118 [66]	236 [ 131 ]	1-3/4 [44.5]

The heat rises are approximations which are affected by such variables as: fan speed, fuel pressure, heat value of the fuel, outside air density, etc.

To determine the proper nozzle size first determine the amount of heat rise required as follows:

#### Desired Plenum Temperature - Qutside Air Temperature = The Required Heat Rise

Example: The desired plenum temperature is to be 140°F (60°C) and the outside air temperature is 80°F [27°C]. Therefore, the desired heat rise is 140 - 80 = 60°F or (60 - 27 = 33°C). Now find the proper nozzle sizes to give this heat rise at the fan static pressure of the dryer. Assume for this example the fan is working against 1-1/2" static pressure. Thus the 2 and 6 GPH nozzle are correct. Set primary gates so that they are open 5/8" (16mm).

Fan	Primary	Auxiliary			Primary
Static	Nozzle	Nozzle	Heat Rise	Heat Rise	Air Gate
Pressure	Size	Size	Minimum	Maximum	Opening
Inches of	Gallons/Hour	Gallons/Hour	° F	° F	Inches
H20	[Liters/Hour]	[Liters/Hour]	[° C]	[° c]	[mm]
1	3 [11]	7 [26]	32 [ 18 ]	108 [ 60 ]	1-1/16 [ 27 ]
1	7 [26]	7 [26]	76 [42]	151 [84]	2-3/8 [ 60 ]
1-1/2	3 [11]	7 [26]	36 [20]	120 [67]	1-1/16 [ 27 ]
1-1/2	7 [ 26 ]	7 [26]	84 [47]	168 [ 93 ]	2-3/8 [ 60 ]
2	3 [11]	7 [26]	41 [23]	136 [76]	1-1/16 [ 27]
2	7 [26]	7 [26]	95 [53]	190 [106]	2-3/8 [60]
2-1/2	3 [11]	7 [26]	48 [27]	162 [90]	1-1/16 [ 27]
2-1/2	7 [26]	7 [26]	113 [63]	227 [ 126 ]	2-3/8 [ 60 ]

The heat rises are approximations which are affected by such variables as: fan speed, fuel pressure, heat value of the fuel, outside air density, etc.

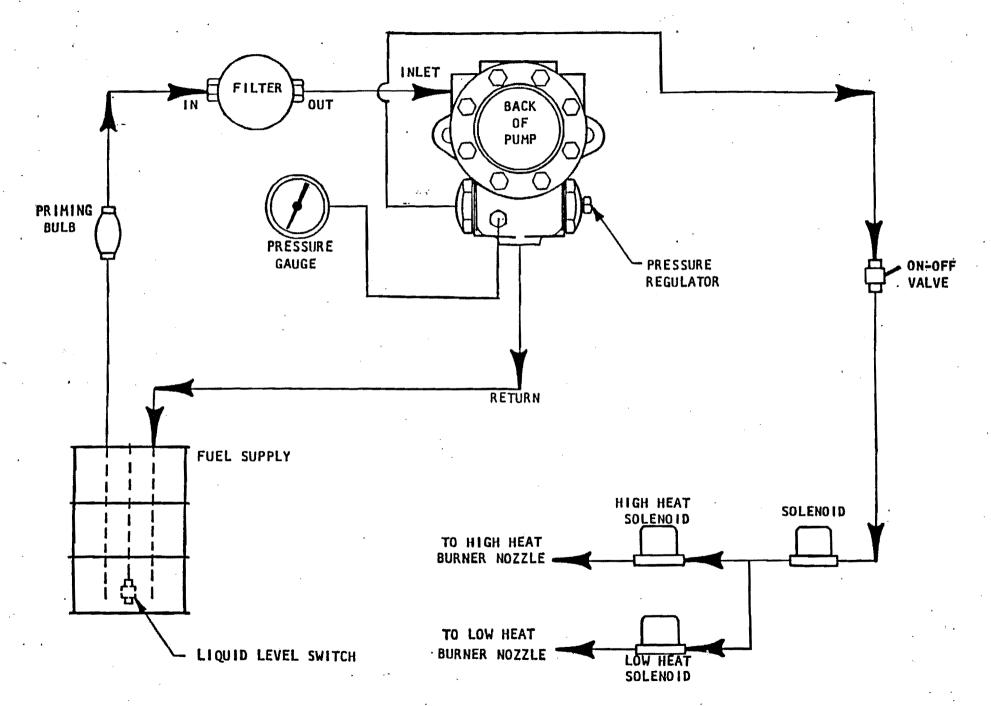
To determine the proper nozzle size first determine the amount of heat rise required as follows: ;

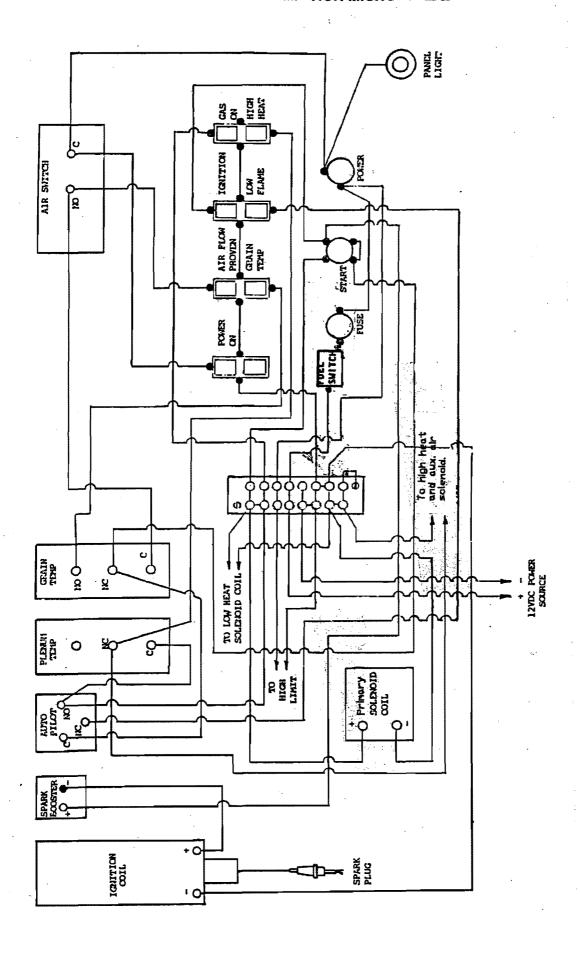
Desired Plenum Temperature - Outside Air Temperature = The Required Heat Rise

#### **EXAMPLE:**

The desired plenum temperature is to be  $140^{\circ}$  F  $[60^{\circ}$ C] and the outside air temperature is  $80^{\circ}$  F  $[27^{\circ}$ C]. Therefore, the desired heat rise is  $140-80 = 60^{\circ}$ F or  $[60-27-33^{\circ}$ C]

Now find the proper nozzle sizes to give this heat rise at the fan static pressure of the dryer. Assume for this example the fan is working against 1-1/2" static pressure. Thus the 3 and 7 GPH nozzles are correct. Set primary gates so that they are open 1-1/16" [27mm].





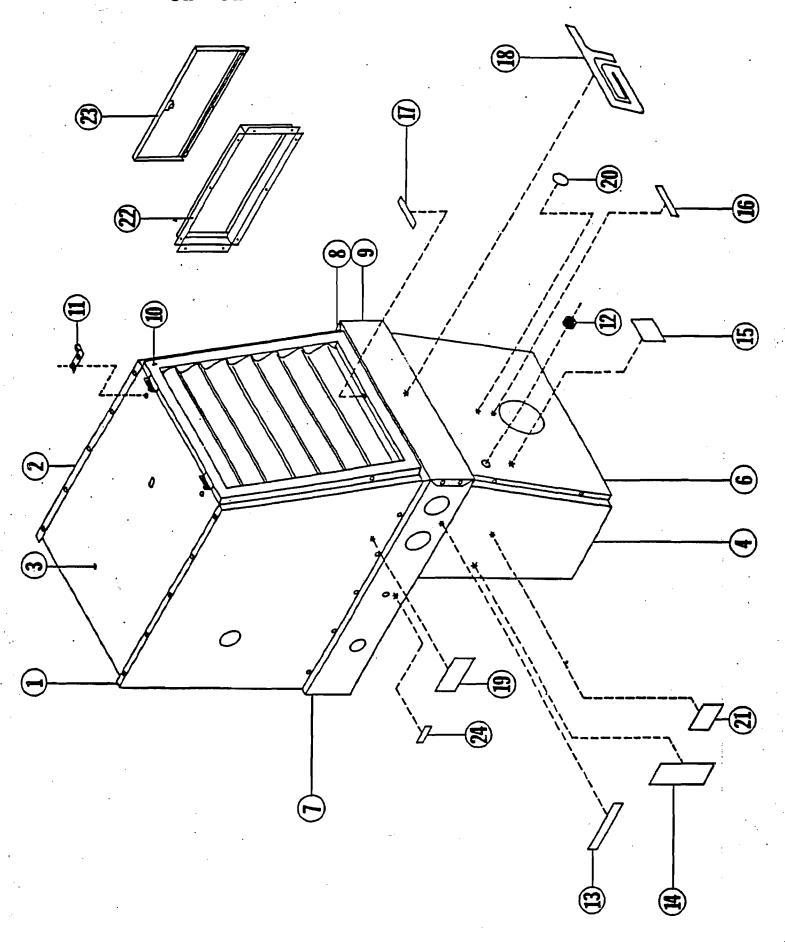
### NOTE: TORQUE ALL BOLTS PER TORQUE SPECIFICATION CHART

COARSE THREAD	GRADE	SCREW, STUD, OR BOLT SHANK SIZE OR DIAMETER							
FASTENER	DESIGNATION	1/4"	B/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"
CAPSCREW	S.A.E. 2 STEEL	5	11	20	30	50	70	100	170
CAPSCREW	S.A.E. 5 STEEL	8	17	30	50	75	110	150	270
CAPSCREW	S.A.E. 8 STEEL	12	24	45	70	105	155	210	376

Torques are in ft - lbs.

Torques shown are for National Coarse Thread Plain or Zinc Plated fasteners carrying residual oil of Manufacture.

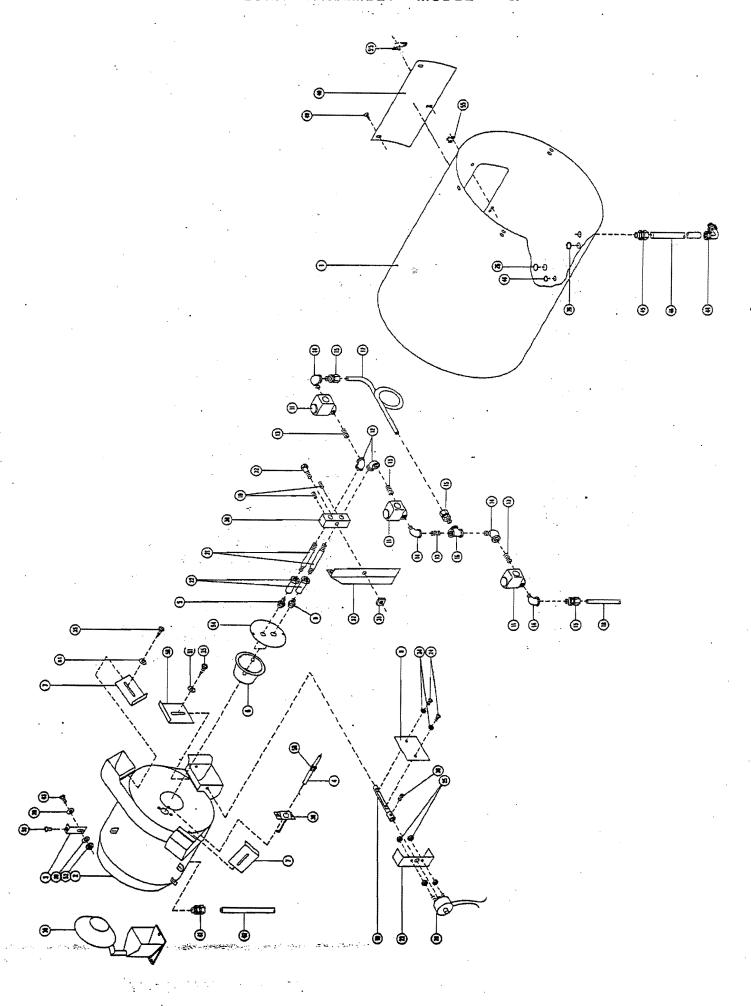
# ASSEMBLY DRAWINGS AND PARTS LISTS



# 345 – 545 Fuel Oil Burner

# Power Unit Panels

Ref. No.	Part No.	No. Req'd.	Description
1	D22213	1	Panel, Right Fan Guard - 345
	D52663	1	Panel, Right Fan Guard - 545
2	D32601	1	Panel, Left Fan Guard - 345
	D52676	1	Panel, Left Fan Guard - 545
3	D22042	1.	Panel, Top Fan Guard - 345
	D52042	1	Panel, Top Fan Guard - 545
4	D32110	1	Pane, Right Belt Guard - 345
	D52885	1	Panel, Right Belt.Guard - 545
5	D32100	1	Panel, Left Belt Guard - 345
	D52880	1	Panel, Left Belt Guard - 545
6	D22062	1	Guard, Front Belt - 345
	D52062	. 1	Guard, Front Belt - 545
7	D32085	1	Panel, Right Gauge - 345
	D52905	1	Panel, Right Gauge - 545
8	D32070	1	Panel, Left Wrapper - 345
	D52130	1	Panel, Left Wrapper - 545
9	D32080	1	Panel Front Wrapper - 345
	D52900	1	Panel Front Wrapper - 545
10	D22052	1	Grill - 345
	D52052	1	Grill - 545
11	D32120	2	Strap, Grill Hinge
12	73278	1	Grommet
13	73958	1	Decal, Plenum & Grain Temp.
14	73682	1	Decal, Be a Safe Operator
15	73668	1	Decal, Fan Clutch
16	73607	1	Decal, Max. PTO Speed 540 RPH
17	73631	1	Decal, Max. Fan Speed -345
	73619	1	Decal, Max. Fan Speed -545
18	73949	1	Decal, GT Logo
19	73954	1	Decal, Model - 345
	73955	1	Decal, Model - 545
21	73981	1	Decal, Danger - Electrocution
22	D32642	1	Frame, Side Panel Access Hole
23	D32631	1	Door, Side Panel
24	73946	1	Decal, On-Off Fuel

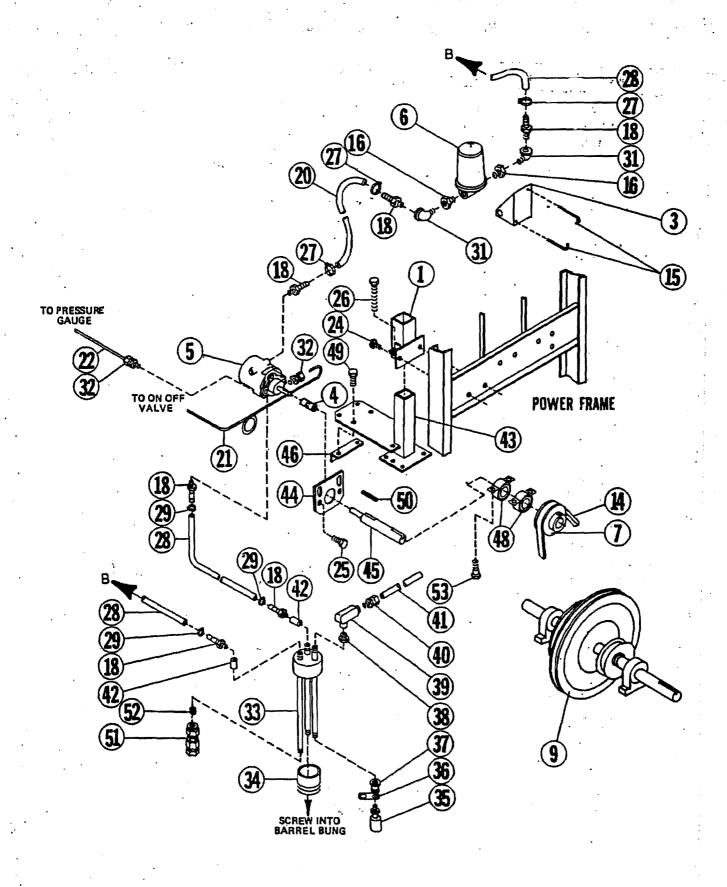


# MODEL 345 - 545 Fuel Oil Burner Burner Assembly

Ref. No.	Part No.	No. Req'd.	Description
1	D32972	1	Tube, 345 FOB Burner
•	D52972	1	Tube, 545 FOB Burner
2	D32821	1	Burner, 345 FOB
_	D52821	1	Burner, 545 FOB
3	D32870	3	Tab, Burner Mount 345
ū	D52870	3	Tab, Burner Mount 545
4	77224	1	Electrode
5	D32650	1	Nozzle, 345 Primary - 3 GPH
_	D32651	1	Nozzle, 545 Primary - 4 GPH
6	D32721	1	Cone - Burner
7	D32850	2	Gate 345 Primary Air
•	D52850	2	Gate 545 Primary Air
8	D32830	1	Vane 345 Butterfly
	D52835	1	Vane 545 Butterfly
9	D32652	1	Nozzle, 345 Auxiliary - 5 GPH
	D32653	1	Nozzle, 545 Auxiliary - 6 GPH
10	D32841	1	Shaft, 345 Butterfly Vane
	D52841	1	Shaft, 545 Butterfly Vane
11	77187	3	Valve, Solenoid
12	72840	2	Elbow, 1/8" x 90° NPT
13	72670	3	Nipple, 1/8" Close
14	72855	2	Elbow, 1/8" x 90° St. NPT
15	73040	3	Conn., 1/8" MNPT x 1/4" Tube Flex
16	72935	1	Tee, 1/8" x 1/8" x 1/8" HPT
17	D32610	1	Line, Primary Nozzle Feed
18	D32561	2	Line, Valve to Nozzle Feed 345/545
19	71471	2	Setscrew, 1/4" - 28 NF
20	77189	1	Solenoid, Rotary Auxiliary Air
21	72764	2	Nipple, 1/8" x 3"
22	D32751	2	Adapter, Nozzle
23	D32855	1	Brkt, Rotary Solenoid Torque 345
	D52855	1	Brkt, Rotary Solenoid Torque 545
24	71641	2	Screw, 8 - 32 x 3/8 Rd. Hd. Slotted
25	72229	2	Nut, 1/4" - 28 NF Hex
26	73278	3	Grommet, 5/8" ID Rubber
27	77093	3	Connector, Solderless 12-18
28	72409	6	Washer, 5/16" Wrought
29	77099	2	Connector, Strain Relief 3/8" ID

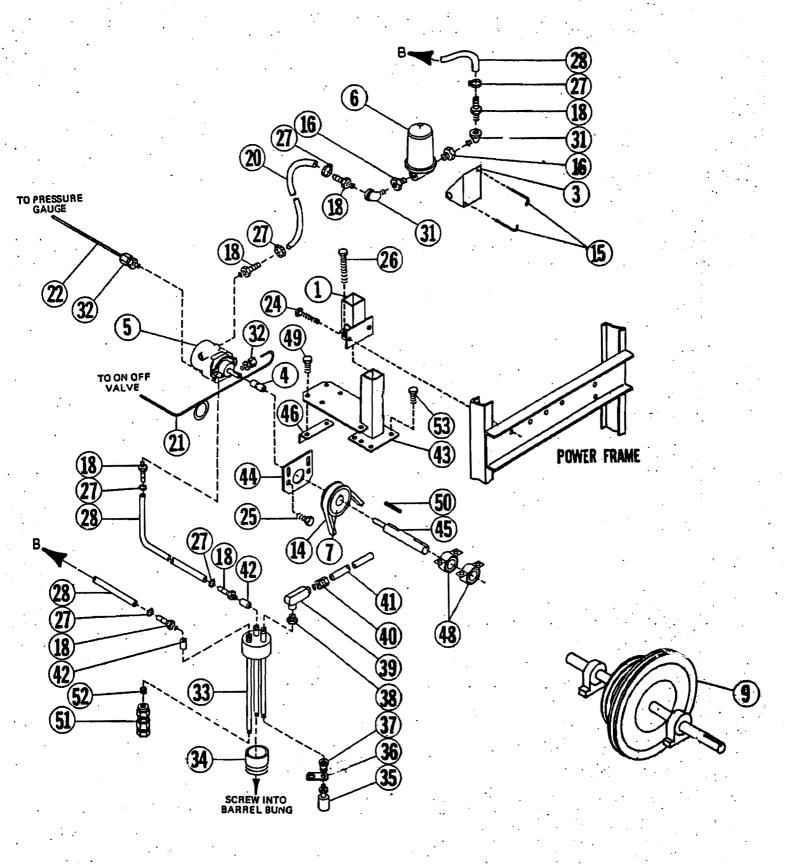
#### MODEL 345 - 545 Fuel Oil Burner Burner Assembly

Ref. No.	Part No.	No. Req'd.	Description	
30	71470	1	Setscrew, 1/4" - 20 NC x 1/4"	
31	72292	1	Nut 1/4" Square	
32	71003	1	Capscrew, 1/4" x 1-1/4"	
33	71825	6	Screw, 1/4" - 20 x 3/4" Slotted Tr. Hd.	
34	72433	2	Washer, No. 8 Lock	
35	72155	7	Screw, 5/16" x 3/4" Hex Hd. Metal	
36	D32891	1	Mount, Electrode	
37	D32901	1	Bar, Nozzle Mount	
38	D32620	1	Block, Nozzle Mount	
39	D22682	1	Deflector, Flame - 345	
	D52512	1	Deflector, Flame -545	
40	D32642	1	Door, Burner Tube Access	
41	73112	1	Connector, 1/4" MNPT x 3/8" Tube Comp.	
42	D32540	1	Line, Fuel Drain	
43	71027	3	Capscrew, 5/16" x 1"	
44	73159	1	Elbow, 3/8" x 90° Liquitite	
45	73157	1	Connector, 3/8" Liquitite	
46	73166	1.5 ft.	Conduit, 3/8" x 18" Liquitite	
47	72677	1	Coupling, 1/2" Pipe	
48	73270	1	Grommet, 3/8" ID Rubber	
49	72089	2	Screw. No. 8 x 1/2" Metal	
50	D32625	1	Gate, 345 Auxiliary Air	
	D52625	1	Gate, 545 Auxiliary Air	
51	72408	3	Washer, 1/4" Wrought	
52	72439	3	Washer, 5/16" Lock	
53	71683	2	Screw, No. 10 - 24 x 1/2" Mach	
54	D32875	1	Cover, Burner Cone	
55	D21115	1	Corbin Catch	
56	-			
57	-			
58	77099	1	Connector, Strain Relief 3/8" ID	



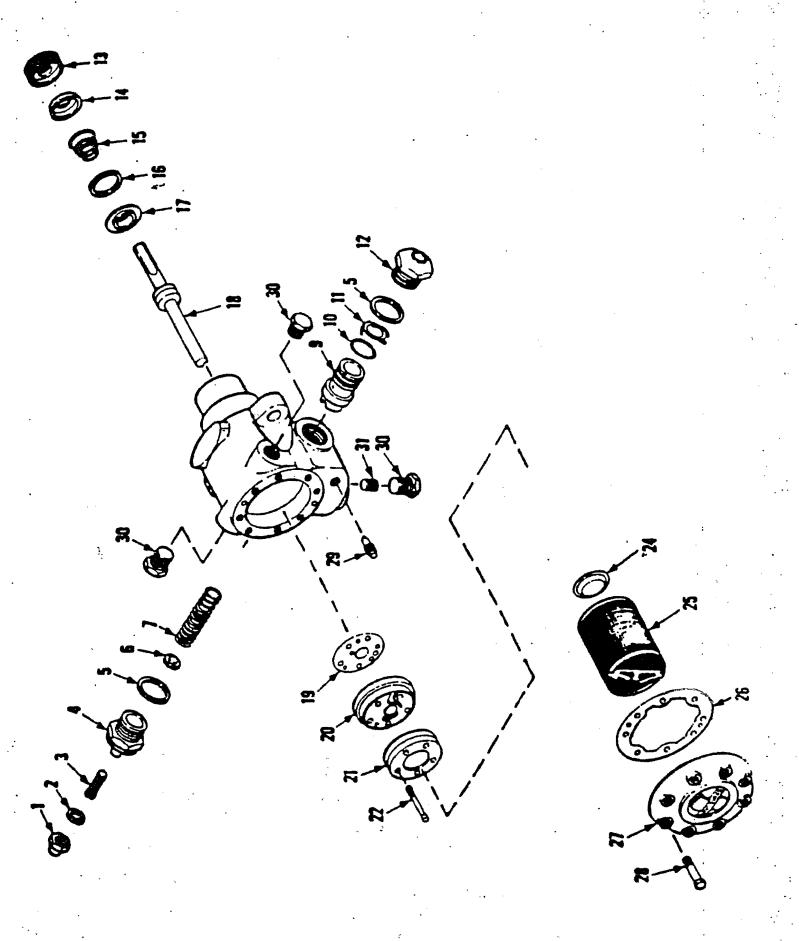
# Fuel Oil Burner Pump Drive Assembly – Model 545

Ref. No.	Part No.	No. Req'd.	Description
1	D22871	1	Mount
3	D32861	1	Mount, Filter
4	D32945	1	Coupler, Pump
·	D32948	1	Insert, Coupler
5	D32815	1	Pump, Fuel (Sunstrand)
6	D32280	i	Filter, Fuel
	D32285	1	Element, Replacement Filter
7	D32696	1	Sheave, Pump 1B x 3-1/2" w/1" Bore
9	57001223	1	Sheave, Pump Drive 1B x 15"
14	42-66015	1	Belt, B58
15	001-155	2	J-Bolt 5/16" x 3-1/2"
16	72896	2	Reducer Bushing, 1/4"x 1" NPT
18	73041	4	Connector, 3/8" Hose x 1/4" MNPT.
20	02535	2 ft.	Tube, 3/8" Urebrade x 2 ft. long
21	D32561	2	Line, Valve to Pump and Nozzle
22	D32905	1	Tube, Pressure Gauge
24	71103	2	Capscrew, 1/2" x 1-1/4"
25	71053	2	Capscrew, 3/8" x 1-1/4"
26	71992	1	Capscrew, 1/2" x 7" Full Thread
27	78026	6	Clamp, Hose
28	02535	24 ft.	Tube, 3/8" Urebrade x 12' long (2 ea.)
31	72856	2	Elbow, 1/4" NPT St.
32	73040	2	Connector, Tube x 1/8 MNPT Flex
33	D32291	1	Fuel Supply Plumbing Assembly
34	D32295	1	Collar, Barrel
35	77180	1	Switch, Liquid Level
36	D32275	1	Spacer Pipe
37	72900	1	Reducer, 1/8 NPT to NPT Bell
38	72918	1	Red, 1/2" NPT to 1/4" NPT Bush
39	77097	1	Elbow, LB Conduit, 90° x 1/2"
40	73157	1	Connector, 3/8 Conduit
41	73166	12 ft.	Conduit, 3/8 Liquitite
42	72637	2	Coupling, 1/4" NPT
43	D32711	1	Mount, In Line Pump
44	D32705	1	Plate, Pump Support
45	D32950	1	Jack Shaft, Pump
46	D32715	1	Angle, Pump Mount
48	D28040	2	Bearing, 1"
49	71052	4	Capscrew, 3/8' x 1"
50	42-66057	2	Key, 1/4" x 1/4" x 1-1/2"
51	74147	1	Valve, Check
52	72918	1	Bushing, Reducer 1/2" to 1/4"
53	71054	4	Capscrew, 3/8" x 1-1/2"



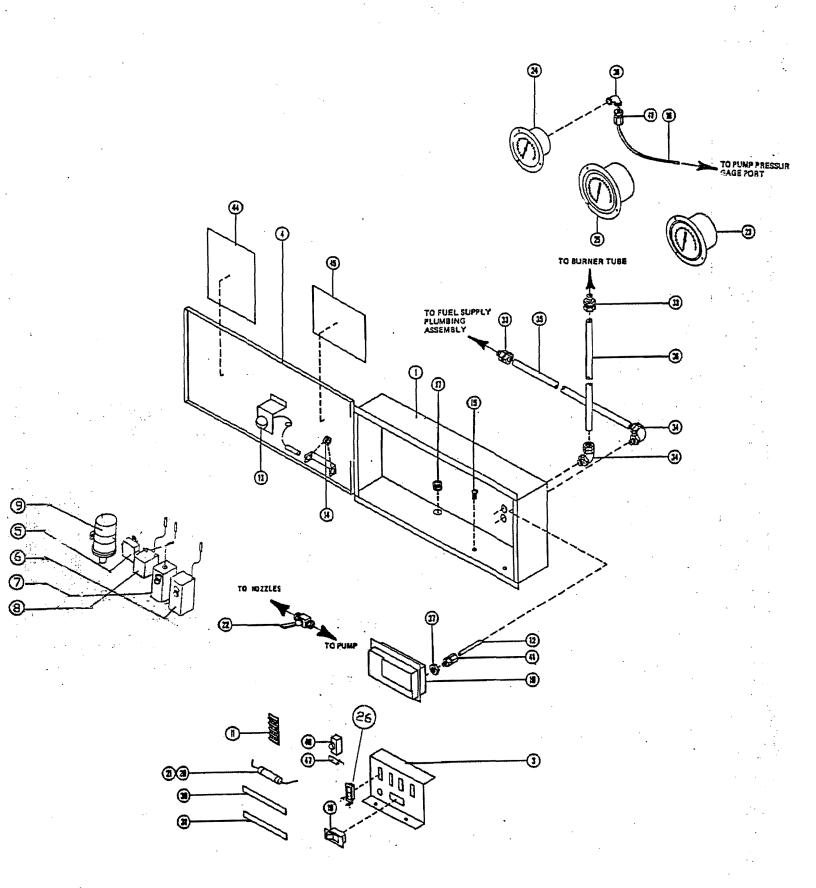
# FUEL OIL BURNER PUMP DRIVE ASSEMBLY - MODEL 345

Ref. No.	Part No.	No. Req'd.	Description
1	D22071	1	Married
1 2	D22871	1	Mount Filter
3	D32861	1	Mount, Filter
4	D32945	1	Coupler, Pump
_	D32948	1	Insert, Coupler
5	D32815	1	Pump, Fuel (Sundstrand)
6	D32280	l 1	Filter, Fuel
7	D32285	1	Element, Replacement Filter
7	D32696	1	Sheave, Pump 18 x 3-1/2" w/1" Bore
9	57001223	. 1	Sheave, Pump Drive 1B x 15"
14	42-210144	1	Belt B51
15	001-155	2	J-Bolt, 5/16" x 3-1/2"
16	72896	2	Reducer Bushing, 1/4" x 1" NPT
18	73041	6	Connector, 3/8" Hose x 1/4" MNPT
20	02535	2 ft.	Tube, 3/8" Urebrade x 2 ft, long
21	D32561	2	Line, Valve to Pump and Nozzles
22	D32905	1	Tube, Pressure Gauge
24	71103	2	Capscrew, 1/2" x 1-1/4"
25	71053	2	Capscrew 3/8" x 1-1/4"
26	71996	1	Capscrew, 1/2" x 10" Full Thread
27	78026	6	Clamp, Hose
28	02535	24 ft.	Tube. 3/8" Urebrade x 12' long (2 req'd)
31	72856	2	Elbow, 1/4" NPT St.
32	73040	2	Conn., 1/4" Tube x 1/8" MNPT Flex
33	D32291	1	Fuel Supply Plumbing Assembly
34	D32295	1	Collar, Barrel
35	77180	1	Switch, Liquid Level
36	D32275	1	Spacer Pipe
37	72900	1	Reducer 1/8" NPT to 1/4" NPT Bell
38	72918	1	Reducer 1/2" NPT to 1/4" NPT Bushing
39	77097	1	Elbow, LB Conduit., 90° x 1/2"
40	73157	1	Connector, 3/8" Conduit
41	73166	12 ft.	Conduit, 3/8" Liquitite
42	72637	1	Coupling, 1/4" NPT
43	D32711	Î	Mount, In-Line Pump
44	D32705	1	Plate, Pump Support
45	D32950	1	Jack Shaft, Pump
46	D32715	1	Angle, Pump Mount
48	D28040	2	Bearing, 1" 4-Bolt Flange
49	71052	4	Capscrew, 3/8" x 1"
50	42-66057	2	Key, 1/4" Square x 1-1/2"
51	74147	1	Valve, Check
52	72918	1	Bushing, Red 1/2" to 1/4"
53 53	71054	4	Capscrew, 3/8"x 1-1/2"
33	/1034	7	Capsciew, 5/6 x 1-1/2



# Sunstrand Pump Breakdown

Ref. No.	Part No.	Avail. GT Part No.	Description
1	100241		End Cap Nut
2	100371		End Cap Nut Gasket
3	123572		Pressure Adjusting Screw
4	123997		End Plug Assembly
5	100901		End Plug Gasket (2)
6	108051	74129	Spring Seat
7	123591	74130	Pressure Adjusting Spring
9	991352	74125	Piston and Sleeve Assembly
10	25815		"0"-Ring
11	121732		Sleeve Retainer
12	109777		Nozzle End Plug Assembly
13	100031		Seal Cap
14	100291		Seal Cup
15	100301		Seal Spring
16	101861		Seal Washer
17	100319HK	74126	Seal Ass'y (Includes Ref. 16)
18	109757		Shaft Assembly
19	113331		Port Housing Gasket
20	110573		Port Housing
21	112267	74127	End Place Assembly
22	104671		Gear Set Screws
24	122822		Anti Hum Wafer
25	131129HK	74128	"P" Strainer (Includes Ref. 26)
26	110441		Cover Gasket
27	120353		Cover
28	111401		Cover Screw (8)
29	3759231		Bleed Plug
30	3729241		Pipe Plug (3)
31	24800		By-Pass Plug



# Fuel Oil Burner Control Cabinet Assembly - Model 345 & 545

Ref. No.	Part No.	No. Req'd.	Description
1	D25503	1	Cabinet
3	D25212	1	Bracket, Switch
4	D25511	1	Door, Cabinet
5	77384	1	Booster, Spark
6	725231	1	Thermostat, Grain Temperature
7	D25770	1	Thermostat, Auxiliary Burner
8	D25161	1	Pilot, Automatic
9	77228	1	Coil 12 Volt (See operators manual)
10	K25030	1	Switch, Air
11	77230	1	Block, Terminal
12	D52321	1	Tube, Air
13	73223	1	Light, 12 Volt
14	73271	2	Grommet, 5/8" ID Rubber
15	71683	4	Screw, 10-24 x 1/2" Slotted Truss Mach. Hd.
16	D32905	1	Tube, Pressure Gauge
17	73278	2	Grommet, 5/8" ID Rubber
19	D25130	1	Switch, On-Off
20	77188	1	Holder, Fuse
21	77143	1	Fuse (10 AMP)
22	D32770	1	Valve, On-Off
23	D24123	1	Thermometer, Grain Temperature
24	D32780	1	Gauge, Pressure 0 - 300 P.S.I.
25	D24033	1	Thermometer, Plenum Temperature
26	77162	4	Light, Indicator
27	72035	. 11	Screw, No. 8 x 1/4" Metal
28	72089	8	Screw, No. 8 x 1/2" Metal
30	74530	1	Decal, Green Indicator
31	74615	1	Decal, Red Indicator
33	73157	2	Connector, 3/8" Conduit Liquitite
34	73159	2	Elbow, 3/8" Conduit Liquitite x 90°
35	73166	12 ft.	Conduit, 3/8" x 12' Liquitite
36	73166	1.67 ft.	Conduit, 3/8" x 20" Liquitite
37	72279	1	Nut, UNF Hex Jam
38	72841	1	Elbow, 1/4" NPT x 90°
41	73110	2	Connector, 1/4" Tube x 1/4" MNPT
44	74617	1	Decal, Operating Instruction
45	74715	1	Decal, Wiring Diagram
46	D25140	1	Switch, Start
47	73962	1	Decal, Push to Start



(785) 632-2161 - [800] 429-9428 OLAY CENTER, KANSAS U.6.A. 67402 www.gbmig.com inia@gimig.com