

Power Flame Incorporated

“C” BURNER PARTS LIST

THE POWER TO MANAGE ENERGY

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REV 602

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(e)

INSTRUCTIONS FOR ORDERING

1. Always specify model and serial number of burner.
2. Include nameplate information such as model, range, voltage, etc.
3. Certain fabricated components cannot be selected without reference to the specific Bill of Materials for your burner (these components are individually noted in this Book). Bill of Materials are included with all burner shipments. Should additional copies be required, they will be supplied no charge. Consult factory.
4. For reference purposes, Exploded View Burner Drawings are provided on pages 48, 49, 50, 51, 52 and 53. Call out numbers on these Drawings match Item numbers found to the left of each part group title.

MINIMUM BILLING \$50.00 NET PLUS TRANSPORTATION CHARGES

**IDENTICAL ITEMS MAY NOT ALWAYS BE AVAILABLE
BUT ITEMS OF EQUAL OR BETTER QUALITY WILL BE FURNISHED**

ALL PUBLISHED PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

1 BLOWER HOUSING

C20010	C1
C20030	C2
C20053	C3 with 8 1/4" x 3 1/2" Wheel
C20050	C3 with 9 1/8"x 4" Wheel
C20051	C3 without Inlet Ring
C20071	C4/5/6
C20072	C4 with Integral Pump
C20075	C7
C20080	C8
	Or refer to As Built Spec Sheet

2 BLAST TUBE

Refer to As Built Spec Sheet

3 **CHOKE AND END RING**

Refer to As Built Spec Sheet

4 **DIFFUSERS**

Consult Factory

5 **DAMPER BLADES**

C10540 C1
C10541 C1-CGA
C10550 C2
C10551 C2-CGA
C10560 C3
C10561 C3-CGA
C10576 C4/5/6
C10577 C4/5/6-CGA

6 **DAMPER AXLES**

C80580 C1
C80589 C2 Short Damper Axle
C80590 C2/3
C80611 C4/5/6

7 **DAMPER AXLE BUSHING**

930150 C1/2/3/4/5/6

8 **MOTOR MOUNTING PLATES**

C10730 C1 56C
C10740 C2 56C
C10750 C3 56C
C10760 C4/5 56C 145TC
C10810 C4/5/6 184T
C24206 C7
C24207 C8
 Or refer to As Built Spec Sheet

9 **BACK PLATE ASSEMBLY**

C24011 C1
C24012 C1 for Top Pilot Assembly
C24051 C1 Top Pilot Adjustment Plate (used w/C24012)
C24020 C2
C24021 C2 for Top Pilot Assembly
C24030 C3
C24031 C3 for Top Pilot Assembly
C24040 C4/5/6
C24041 C4/5/6 for Top Pilot Assembly

C24050 Top Pilot Adjustment Plate (used with C24021, C24031 & C24041)

15 MOTORS, 3450 RPM - 60 Hz

054120	1/3 HP	115/230	1PH	56C
054130	1/3 HP	208/230/460	3PH	56C
054160	1/2 HP	115/230	1PH	56C
054170	1/2 HP	208/230/460	3PH	56C
054180	3/4 HP	115/230	1PH	56C
054190	3/4 HP	208/230/460	3PH	56C
054210	1 HP	115/230	1PH	56C
054220	1 HP	208/230/460	3PH	56C
054240	1 1/2 HP	115/230	1PH	56C
054250	1 1/2 HP	208/230/460	3PH	56C
054270	2 HP	115/230	1PH	56C
054280	2 HP	208/230/460	3PH	56C

15 MOTORS, 1725 RPM - 60 Hz

054630	3 HP	208/230/460	3PH	56C
054650	3 HP	208/230/460	3PH	145TC
055220	5 HP	208/230/460	3PH	182TC
055920	5 HP	230/460	3PH	145TC
055970	5 HP	200/208	3PH	145TC
054760	7 1/2 HP	208/230/460	3PH	184TC
054780	10 HP	208/230/460	3PH	215TC
055580	3/4 HP	115/230	1PH	56C
055590	3/4 HP	208/230/460	3PH	56C
055630	1 HP	208/230/460	3PH	56C
059710	15 HP	208/230/460	3PH	215T

16 BLOWER WHEELS

084900	6 1/4" x 3" x 5/8"
080500	7" x 3" x 5/8"
081100	7 5/8" x 3 1/2" x 5/8"
081750	8 1/4" x 3 1/2" x 5/8" D-Hub
081700	8 1/4" x 4 1/2" x 5/8" S-Hub
081800	8 1/4" x 4 1/2" x 7/8"
081850	9 1/8" x 2 1/2" x 5/8"
082510	9 1/8" x 4" x 5/8" S-Hub
082550	9 1/8" x 4" x 5/8" D-Hub
082850	9 1/8" x 4" x 7/8"
082900	9 1/8" x 5 1/2" x 7/8"
083100	9 1/8" x 5 1/2" x 1 1/8"
083800	9 7/8" x 5" x 1 1/8"
084200	10 3/4" x 5 1/2" x 1 1/8"
084210	10 3/4" x 5 1/2" x 1 3/8"
084300	12 5/8" x 5" x 1 3/8"

16.5 BALANCED BLOWER ASSEMBLY (Not Shown On Exploded View)

Consists of ODP 208/230/460/3 Motor, Motor Mounting Ring and Blower Wheel Balanced as an Assembly.

For C4 (5 HP)
For C5 (7 1/2 HP)
For C6/C7 (10 HP)
For C8 (15 HP)

17 PANEL BOX HINGED TOPS

E21103 15 1/2" x 17"
E21113 15 1/2" x 24"
E21123 15 1/2" x 34"
E21133 15 1/2" x 42"
Or refer to As Built Spec Sheet

17.1 PANEL BOX BODIES

E20034 15 1/2" x 17"
E20044 15 1/2" x 24"
E20049 15 1/2" x 34"
E20065 15 1/2" x 42"
Or refer to As Built Spec Sheet

17.2 PANEL BOX CHASSIS PLATES (Not Shown On Exploded View)

E80301 15 1/2" x 17"
E80310 15 1/2" x 24"
E80320 15 1/2" x 34"
E80325 15 1/2" x 42"
Or refer to As Built Spec Sheet

17.3 PANEL BOX DOORS

E20112 15 1/2" x 17"
E20122 15 1/2" x 24"
E20132 15 1/2" x 34"
E20134 15 1/2" x 42"
Or refer to As Built Spec Sheet

PANEL BOX DOORS WITH VIEWPORT

E30002 15 1/2" x 17"
E30012 15 1/2" x 24"
E30013 15 1/2" x 34"
E30014 15 1/2" x 42"
Or refer to As Built Spec Sheet

18 PANEL BOX MOUNTING BRACKETS

E10610 Integral
E10631 Remote Left
E10641 Remote Right

Or refer to As Built Spec Sheet

18.1 PANEL BOX DOOR LATCH & KNOB

910500 Southco Latch

18.2 - FLAME SAFEGUARD CONTROLS (Not Shown On Exploded View)

18.5

FIREYE

M II SERIES

CONTROLS AND SUBBASE LESS PROGRAMMER AND AMPLIFIER

360000 MC120 Chassis and Dustcover
360010 MC120P Chassis and Dustcover with 15 Second Postpurge
372200 61-3060 Subbase

PROGRAMMERS

360100 MP100 Relight Control
360110 MP230 Recycle Control with Prepurge
360120 MP230H Non-Recycle Control with Intermittent Pilot
360130 MP560 Non-Recycle Control with Interrupted Pilot
360140 MP562 Non-Recycle Control with Interrupted Pilot and Lockout on Airflow Failure

AMPLIFIERS

360210 MAUV1 Ultraviolet 2-4 Seconds F.F.R.T.
360230 MART1 Rectification 2-4 Seconds F.F.R.T.

MEP SERIES

CONTROLS AND SUBBASE LESS PROGRAMMER AND AMPLIFIER

361000 MEC120 Chassis and Dustcover
372200 61-3060 Subbase

PROGRAMMERS

361150 MEP230 Recycle Control with Prepurge
361160 MEP230H Non-Recycle Control with Intermittent Pilot
361170 MEP560 Non-Recycle Control with Interrupted Pilot
361190 MEP562 Non-Recycle Control with Interrupted Pilot and Lockout on Airflow Failure

AMPLIFIERS

361310 MEUV4 Ultraviolet 4 Seconds F.F.R.T.
361370 MART1 Rectification 3 Seconds F.F.R.T.

E SERIES

CONTROL AND SUBBASE LESS PROGRAMMER AND AMPLIFIER

372300 60-1386-2 Subbase
398420 ED510 Fireeye Display Module
398800 E110 Fireeye Chassis

PROGRAMMERS

398100 EP160 60 Seconds Supervised Prepurge Interrupted Ignition
398130 EP260 60 Seconds Prepurge Interrupted Ignition
398160 EP380 30 Seconds Prepurge Interrupted Ignition/Intermittent or Interrupted Pilot
398180 EP390 90 Seconds Prepurge Interrupted Ignition/Intermittent or Interrupted Pilot

DISPLAY/PROGRAMMERS

398820 EPD160 60 Seconds Supervised Prepurge Interrupted Ignition
398830 EPD260 60 Seconds Prepurge Interrupted Ignition
398840 EPD380 30 Seconds Prepurge Interrupted Ignition/Intermittent or Interrupted Pilot
398810 EPD390 90 Seconds Prepurge Interrupted Ignition/Intermittent or Interrupted Pilot

AMPLIFIERS

398200 ERT1 Rectification
398210 EUV1 Ultraviolet
398220 EIRI Infrared
398230 EUVS4 Ultraviolet Self-Check

ACCESSORIES

398300 E300 Expansion Module
398310 E350-3 3 Foot Ribbon Connector Cable
398320 E350-6 6 Foot Ribbon Connector Cable
398350 60-1950 Wiring Base for E300 Expansion Module
398400 ED500 Display Module
398460 ED512-4 RJ 12 Connector Cable
398510 ED610 Multi-port Cable Adaptor
398490 E500-1 Communication Interface
398500 E500-3 Communication Interface
399000 E340 Boiler Room Control

HONEYWELL

R7184 SERIES

395350 R7184P-1049 – with 24 Volt Alarm Contact
395360 R7184P-1056

R8184 SERIES

395250 R8184G-1294
395260 R8184G-4090

R4795 SERIES

39535 R7184P-1049
39526 R7184P-1056

BCS7700 SERIES

411000 BU7700A-1015 Chassis Module
411020 ST7700A-1015 Key Board Display
411100 M7484A-1010 Firing Rate Motor
332100 AT72D-1089 40 VA 12 VAC/24 Stepdown Transformer

PROGRAM MODULE

411060 PM7700A-1059
411110 PM7700A-1042

OPERATING SENSORS

STEAM

411070 P7710A-1047 15 PSI
411120 P7710A-1054 7.5 - 150 PSI

WATER

411130 T7710A-1025 0-300E
411170 T7710A-1033 0-500E

FUEL PRESSURE/TEMPERATURE SENSORS

GAS

411080 P7720A-1052 2.8 - 28" W.C.
411210 P7720A-1094 5.6 - 56" W.C.
411220 P7720A-1060 0.5 - 5 PSI
411150 P7720A-1078 1.5 - 15 PSI

#2 OIL

411200 P7730A-1027 35 - 350 PSI

FLAME DETECTION

411090 R7749B-1014 Ultraviolet Flame Amplifier
403200 C7027A-1076 Ultraviolet Flame Sensor
411140 R7748B-1015 Infrared Ampli-Check Amplifier
402800 C7015A-1076 Lead Sulphide Cell
411190 R7747C-1014 Self Check Amplifier
402700 C7012E-1104 Ultraviolet Self Check Amplifier

OPTIONS

411180 Q7710A-1012 Firing Rate Interface
410000 Q7700A-1014 Communications Interface
411050 QS7700A-1011 Communications Interface Control Bus
410020 ZM7850A-1001 Manager Software

RM7800 SERIES

PRIMARY SAFETY CONTROLS, 4 OR 10 SECONDS PFEP, LESS BASE, AMPLIFIER AND TIMER

397700 RM7895C-1012 Interrupted Pilot
397710 RM7895A-1014 Intermittent Pilot
397740 RM7896C-1010 Interrupted Pilot with Postpurge
397750 RM7896A-1012 Intermittent Pilot with Postpurge

FLAME SAFEGUARD PROGRAMMER 4 OR 10 SECOND PFEP, WITH PROOF OF CLOSURE CIRCUIT, LESS BASE, AMPLIFIER AND TIMER, LESS DISPLAY

397500 RM7840E-1016 Same as RM7840L plus Energy Saving
Purge
397510 RM7840G-1014 Recycle Interlock, Low Fire Interlock
397520 RM7840L-1018 Lockout Interlock, Purge and Low Fire Interlock
397530 RM7840M-1017 Recycle Interlock, Low Fire Interlock

FLAME SAFEGUARD PROGRAMMER WITH DISPLAY, 4 OR 10 SECOND PFEP, WITH PROOF OF CLOSURE CIRCUIT, LESS BASE, AMPLIFIER AND TIMER

397540 RM7800E-1010 Same as RM7800L plus Energy Saving
Purge
397550 RM7800G-1018 Recycle Interlock, Low Fire Interlock
397560 RM7800L-1012 Lockout Interlock, Purge and Low Fire Interlock
397570 RM7800M-1011 Recycle Interlock, Low Fire Interlock

SUBBASES

400900 Q7800A-1005 Plastic (Internal) Mount
400910 Q7800B-1003 Metal (External) Mount
400920 Q7800B-1011 Metal Base with additional Conduit Knockouts

AMPLIFIERS

406910 R7847C-1005 Self Check, Ultraviolet, 3 Seconds
406920 R7848A-1008 Non Self Check, Infrared, 3 Seconds
406950 R7849A-1023 Non Self Check, Ultraviolet, 3 Seconds
406960 R7849B-1021 Dynamic Check, Ultraviolet, 3 Seconds
406970 R7848B-1006 Dynamic Check, Infrared, 3 Seconds

TIMING CARDS

407710 ST7800A-1039 30 Seconds
407720 ST7800A-1062 90 Seconds

OPTIONS

408000 S7800A-1001 Keyboard Display Module

18.6 OPERATING AND LIMIT CONTROLS (Not Shown On Exploded View)

STEAM PRESSURE CONTROLS

434000 PA404A-1009 .5-9 PSI Range, .1-.6 kg, SPST Switch Breaks on Pressure Rise
432050 L404A-1354 2-15 PSI Range, 1-6 PSI Differential, SPST Switch, HW Pressuretrol, No Siphon
432250 L404A-1396 10-150 PSI Range, 8-16 PSI Differential, SPST Switch, HW Pressuretrol, No Siphon
432700 L404C-1162 10-150 PSI Range, No Adjustment Differential, SPST Switch, HW Pressuretrol, Manual Reset
432800 L404C-1147 2-15 PSI Range, No Adjustment Differential, SPST Switch, HW Pressuretrol, Manual Reset, No Siphon
430400 L91B-1035 0-15 PSI Range, 1-12 Throttling Range, HW Proportioning Pressuretrol, Modulating
430500 L91B-1050 5-150 PSI Range, 5-23 Throttling Range, HW Proportioning pressuretrol, Modulating

WATER TEMPERATURE CONTROLS

420000 L4006A-1009 100°-240°F HW Aquastat
420300 L4006A-1678 100°-240°F 5°-30° Differential, Vertical HW Aquastat

420600	L4006E-1000 110°-290°F Manual Reset, Well Included HW Aquastat
422000	L6006A-1012 100°-240°F 5°-30° Adjustable Differential, HW Aquastat
423000	112622AA, Immersible Well for HW T991A-1/2"
423050	112630AA, Immersible Well for HW T991A-3/4"
440500	T991A-1061 160°-260°F, Modulating 5' Element, HW Thermostat
440600	T991A-1079 160°-260°F, Modulating 20' Element, HW Thermostat
423150	121371A 1/2" Well for L4006
423300	121371A 3/4" Well for L4006

18.7 **RELAYS (Not Shown On Exploded View)**

553910	Socket for KUP Relay 555200
554530	KUP14A55 3 PDT
556280	TGMLB115SC2 (Delay on Break) 15 Seconds
556370	TGC105SC1 (Delay on Make) 5 Seconds
556420	THC105SC (Delay on Make) 5 Seconds
556290	THCU1023E (Delay on Make) Airotronics 1-1023 Seconds
556430	THCU1300SC (Delay on Make) Airotronics 5 Minutes
556380	TBC1012 (Delay on Make) Airotronics 12 Seconds
556540	RTE-B12 (Delay on Make) 120 Volt IDEC Timer
556480	SR3B-05 Socket for use with RTEL-BN2 Timer
551000	TDM120AL 1-1023 on Delay SSAC
553900	OT08-PC Connector 8 pin Socket for KRP
556530	TGML B1100A2 (Delay on Make) Airotronics 1-100 Seconds
555200	KUP14A15-120 3PDT Relay
555000	SAS5S110AD Crouzet (Delay on Make) 5 Seconds
555010	SASSP100S110AD Crouzet (Delay on Make) 1–100 Seconds
555020	SAS300S110AD Crouzet (Delay on Make) 300 Seconds
555030	SASP1000S110AD Crouzet (Delay on Make) 10-1000 Seconds
554800	G7L-1A-T-CB-AC 100/120 Omron SPST
554900	P7LF-D Omron Socket – Din Rail Mount for 554800
556190	FS126RC SSAC Solid State Flasher

18.8 **CONTACTORS**

563700	8910DPA22S24V02 (2 Pole 25 Amp)
563720	8910DPA33S24V02 (3 Pole 30 Amp)
563740	8910DPA43S24V02 (3 Pole 40 Amp)
563750	8910DPA53S24V02 (3 Pole 50 Amp)
561000	B7C-1 ABB (3 Pole 9.6 Amp Inductive)
573020	A12-30-10-84 ABB (3 Pole 25 Amp Resistive, 11 Amp Ind.)
573040	A16-30-10-84 ABB (3 Pole 30 Amp Resistive, 17 Amp Ind.)
573060	A26-30-10-84 ABB (3 Pole 40 Amp Resistive, 28 Amp Ind.)
573080	A30-30-10-84 ABB (3 Pole 50 Amp Resistive, 32 Amp Ind.)

573100 A40-30/10/84 ABB (3 Pole 60 Amp Resistive, 41 Amp Ind.)
 573120 A50-30-11-84 ABB (3 Pole 80 Amp Resistive, 54 Amp Ind.)
 573140 A63-30-11-84 ABB (3 Pole 90 Amp Resistive, 65 Amp Ind.)

18.9 MOTOR STARTERS

563080 8911DPS033S8V02DB1F (3 Pole 30 Amp, .63-1 Amp Overload)
 563100 8911DPS033S8V02B1.6F (3 Pole 30 Amp, 1-1.6 Amp Overload)
 563140 8911DPS033S8V02D2.5F (3 Pole 30 Amp, 1.6-2.5 Amp Overload)
 563160 8911DPS033S8V02DB4 (3 Pole 30 Amp, 2.5-4 Amp Overload)
 563180 8911DPS033S8V02DB6 (3 Pole 30 Amp, 4-6 Amp Overload)
 563200 8911DPS033S8V02DB8 (3 Pole 30 Amp, 5.5-8 Amp Overload)
 563220 8911DPS033S8V02DB10 (3 Pole 30 Amp, 7-10 Amp Overload)
 563240 8911DPS0S8V02DB13 (3 Pole 30 Amp, 9-13 Amp Overload)
 563260 8911DPS033S8V02DB18 (3 Pole 30 Amp, 12-18.0 Amp Overload)
 563400 8911DPS043S8V02DB25 (3 Pole 30 Amp, 17-25 Amp Overload)
 563420 8911DPS043S8V02DB30 (3 Pole 30 Amp, 23-30 Amp Overload)
 563480 8911 DPS043S8V02DB37 (3 Pole 40 Amp, 30-37 Amp Overload)
 563900 Auxiliary Contact 1 N.O.
 571980 A9S-84D ABB 3 Pole (9 Amp, .40-.60 Amp Overload)
 572000 A9S-84E ABB 3 Pole (9 Amp, .63-1.0 Amp Overload)
 572020 A9S-84F ABB 3 Pole (9 Amp, 1.0-1.4 Amp Overload)
 572040 A9S-84G ABB 3 Pole (9 Amp, 1.3-1.8 Amp Overload)
 572060 A9S-84H ABB 3 Pole (9 Amp, 1.7-2.4 Amp Overload)
 572080 A9S-84J ABB 3 Pole (9 Amp, 2.2-3.1 Amp Overload)
 572100 A9S-84K ABB 3 Pole (9 Amp, 2.8-4.0 Amp Overload)
 572120 A9S-84L ABB 3 Pole (9 Amp, 3.5-5.0 Amp Overload)
 572140 A9S-84M ABB 3 Pole (9 Amp, 4.5-6.5 Amp Overload)
 572160 A9S-84N ABB 3 Pole (9 Amp, 6.0-8.5 Amp Overload)
 572180 A12S-84P ABB 3 Pole (11 Amp, 7.5-11 Amp Overload)
 572200 A16S-84P ABB 3 Pole (17 Amp, 7.5-11 Amp Overload)
 572220 A16S-84Q ABB 3 Pole (17 Amp, 10-14 Amp Overload)
 572240 A16S-84R ABB 3 Pole (17 Amp, 13-19 Amp Overload)
 572260 A26S-84R ABB 3 Pole (28 Amp, 13-19 Amp Overload)
 572280 A26S-84S ABB 3 Pole (28 Amp, 18-25 Amp Overload)
 572300 A30S-84T ABB 3 Pole (34 Amp, 24-32 Amp Overload)
 572320 A40S-84A ABB 3 Pole (42 Amp, 18-25 Amp Overload)
 561100 B7S-1E ABB 3 Pole (9.6 Amp, .60-1.0 Amp Overload)
 561120 B7S-1F ABB 3 Pole (9.6 Amp, 1.0-1.6 Amp Overload)
 561140 B7S-1G ABB 3 Pole (9.6 Amp, 1.6-2.4 Amp Overload)
 561160 B7S-1H ABB 3 Pole (9.6 Amp, 2.4-4.0 Amp Overload)
 561180 B7S-1J ABB 3 Pole (9.6 Amp, 4.0-6.0 Amp Overload)

18.13 LIGHTS

SIGNAL LIGHTS - Rectangular

654000 White
654010 Amber
654020 Red
654030 Blue
654040 Green

SIGNAL LIGHTS - 1" (Plastic)

655000 White
655100 Amber
655200 Red
655300 Green
655400 Blue

SIGNAL LIGHTS - 1" (Glass)

653050 Dialco Bulb
657110 Dialco Red Lens
657120 Dialco Green Lens
657130 Dialco Amber Lens
657140 Dialco Blue Lens
657150 Dialco White Lens
657100 Dialco Base (oil tight)

DIRECTOR LIGHTS AND ACCESSORIES

655700 5SD1LRN1/36 1/2" Red
655710 5SD1LAN1/36 1/2" Amber
655720 5SD1LBZ1/36 1/2" Blue
655730 5SD1LGX1/36 1/2" Green
655740 5SD1LWN White
655750 1/2" Timmerman Clip
938900 60843-1 2 Circuit Commoning Tab
938910 60842-1 3 Circuit Commoning Tab
938920 60620-1 Loose Piece Pin
938930 60619-1 Loose Piece Socket
938940 1-480324-O Pin Housing
938950 1-480323-O Socket Housing

18.14 CONTROL SWITCHES

140400 SPST Control Circuit - Toggle
140700 SPST Control - Rocker
140720 DPDT No Center Off Rocker
140730 DPDT Center Off Rocker
140740 N.O. Pushbutton
140750 N.C. Momentary Pushbutton

18.15 SWITCHES

X01010 Blast Tube Temperature Sensing Switch
140020 4PDT Fuel Selector Switch, Cutler Hammer
140300 DPDT No Center Off Manual-Auto

141690 SPDT Center Off Hands Off Auto

PUSH TO TEST SWITCHES

931730 52BAJ Furnace N.C. Contact Block
931700 52PA8A1 Furnace Push Button Operator
142310 4001 SPST N.C. Grayhill Push Button Switch
142100 No. 100 N.O. SPST Push Button

NEMA 4

931290 9001-KS11 2 pos SQD Selector Switch
931300 9001-KS43 3 pos SQD Selector Switch
658400 9001 KR-1U SQD Push Button
931400 9001 KA1 SQD SPDT Contact
931350 9001 B11 Black Operator Knob
931620 9001 KN200 BP SQD Legend Plate
931450 9001 KA2 SPST SQD Contact Block

18.16 TERMINAL STRIPS

610350 KT3 3 Pole 600V Connectron Terminal Block
610360 KAD End Mounting Adaptor
610370 MT 12 1/2" Marking Strip
612010 D6/8 ADO 14-16 GA, Screw Terminal Grey Block
612040 10 Pole Jumper Bar for D6/8 Block
612050 10 Pole Jumper Bar for D2.5/5 Block
612070 M10/10 Screw Terminal, 6-20 GA, 65 A
612080 End Section for M10/10
612090 M35/16, 0-16 GA, 150 A
612100 End Section for M35/16
612110 MTC6 Thermocouple Block
612120 End Section for MTC 6 Block
612130 D6/8 ADO 14-16 GA Screw Terminal Red
612140 D4/6 ADO, 16-22 GA ADO Screw Terminal Ivory
612200 M6/8, Terminal Block, 50 Amp, 8-22 GA Screw

18.17 MICRO SWITCH

141200 BZE6-2RQ
X02383 Damper Micro Switch Cam

18.18 STEPDOWN TRANSFORMERS

333000	500VA 208/230/460/120 (Din Rail Mount)
333010	500VA 575/120 (Din Rail Mount)
333830	TA-2-69306 750VA 208/230/460
335000	EL9J 500VA 600/120 (External Mount)
332100	AT72D-1089 120/24 (Modulating Motor) (Panel Mount)
333950	500VA 230/460/115 (Panel Mount)
333960	500VA 208/115 (Panel Mount)
334990	500VA 208/120 (External Mount)
335100	500VA 240/480/115/240 (External Mount)
333790	TA-2-32406 500VA 600/575/550/480/415/300/240/208

18.19 CONTROL CIRCUIT FUSES, 300 VOLT

934890	Fuse Block
935550	SC-2 2 Amp
935560	SC-3 3 Amp
935570	SC-4 4 Amp
935700	SC-5 5 Amp
935790	SC-6 6 Amp
935800	SC-10 10 Amp
935900	SC-15 15 Amp

CONTROL CIRCUIT FUSES 600 VOLT – CC CLASS

611730	1 Pole CC Class Fuseblock
611740	2 Pole CC Class Fuseblock
611750	3 Pole CC Class Fuseblock
925000	ATMR4 4 Amp, 600V Non-Motor Rated Ferraz Shawmut Fuse
925010	ATMR5 5 Amp, 600V Non-Motor Rated Ferraz Shawmut Fuse
925020	ATMR6 6 Amp, 600V Non-Motor Rated Ferraz Shawmut Fuse
925070	ATMR10 10 Amp, 600V Non-Motor Rated Ferraz Shawmut Fuse
925080	ATMR15 15 Amp, 600V Non-Motor Rated Ferraz Shawmut Fuse

STEPDOWN AND MOTOR FUSES – CC CLASS

926000	ATDR-3 3 Amp Ferraz Shawmut Low Peak Dual Element Time Delay Fuse
926030	ATDR-2 2 Amp Ferraz Shawmut Low Peak Dual Element Time Delay Fuse
926060	ATDR-4 4 Amp Ferraz Shawmut Low Peak Dual Element Time Delay Fuse
926120	ATDR-5 5 Amp Ferraz Shawmut Low Peak Dual Element Time Delay Fuse
926130	ATDR-2.8 2.8 Amp Ferraz Shawmut Low Peak Dual Element Time Delay Fuse
926140	ATDR-6 6 Amp Ferraz Shawmut Low Peak Dual Element Time Delay Fuse
926150	ATDR-8 8 Amp Ferraz Shawmut Low Peak Dual Element Time Delay Fuse
926160	ATDR-9 9 Amp Ferraz Shawmut Low Peak Dual Element Time Delay Fuse

STEPDOWN AND MOTOR FUSES – CC CLASS, Cont'd

926110 ATDR-10 10 Amp Ferraz Shawmut Low Peak Dual Element Time Delay Fuse
926070 ATDR-15 15 Amp Ferraz Shawmut Low Peak Dual Element Time Delay Fuse
926050 ATDR-20 20 Amp Ferraz Shawmut Low Peak Dual Element Time Delay Fuse
926090 ATDR-25 25 Amp Ferraz Shawmut Low Peak Dual Element Time Delay Fuse
926080 ATDR-30 30 Amp Ferraz Shawmut Low Peak Dual Element Time Delay Fuse

18.20 POTENTIOMETERS

480170 270 OHM (Limiting) with Knob
480200 150 OHM
480560 Knob
912360 Label

18.21 METERS

470550 0-25 DC Volt, TFM, UVP, UVM, D Series (Panel Mount)
471100 0-50 Microammeter (Panel Mount), Triplett
930500 117053 Cable Connector for Microammeter

18.22 ENGRAVED LABELS - ADHESIVE BACK

913100 210-221 1/16" x 1/2" x 2" Blank (Specify Verbiage Required When Ordering)

18.23 PRESSURE SENSITIVE PREPRINTED LABELS - 1/2" X 2"

914000 Control
914010 Power On
914020 Main Fuel
914030 Manual-Auto
914040 Manual-Pot
914050 Fuel Valve
914060 Low Fire Hold
914070 Alarm Silencing
914080 Flame Failure

18.23 PRESSURE SENSITIVE PREPRINTED LABELS - 1/2" X 2", Cont'd

914090 Service Switch
914100 Call for Heat
914110 Ignition On
914120 Low Water
914130 Pilot Failure
914140 Oil-Auto
914150 Oil-Gas
914160 Pilot On
914170 On-Off
914180 No. 1 Lead, No. 2 Lead
914190 Flame Out
912350 Caution
912310 Power Flame Logo
912380 Copper Conductor
Consult Factory for Additional Labels

19 **PUMP COUPLING ADAPTORS**

X04000 5/8" x 1/2" for Integral Pump and 56C Motor
C13182 7/8" x 1/2" for Integral Pump and 145 Motor
X02564 7/8" x 1/2" x 5" for C4 Integral Pump

19.1 **PUMP BUSHINGS**

122500 7/16" x 5/16" for 2 Step Suntec Pump
M10350 7/16" x .315" for Combu Pumps

20 **PUMP COUPLINGS, INTEGRALLY MOUNTED PUMPS**

120000 31PG 4 1/2" x 1/2" x 7/16" for C1 (Appropriate Bushing required - See 19.1)
120100 31PG 5 1/2" x 1/2" x 7/16" for C2 (Appropriate Bushing required - See 19.1)
C14100 31PG 7 1/2" x 1/2" x 7/16" for C3, 4 with Integral Pump (Includes Reinforcing Piece)
121100 ALO-90 5/8" x 7/16" for C3, 4, 5, 6 with Remote Pump

20.1 **PUMP COUPLINGS, PARTS**

X02550 Reinforcing Piece for C14100
123000 36" Length Rubber Body Only
120400 7/16" Metal End Only
120500 1/2" Metal End Only

21 **OIL PUMPS - (FUEL UNITS) 300 PSI**

SUNTEC

100000 H3PAN-C160H 14 GPH - 3450 RPM
100200 H4PAN-C161H 23 GPH - 3450 RPM
100310 H6PAN-C154H 45 GPH - 3450 RPM
100400 H8KCN-C200H 55 GPH - 1750 RPM
100800 B2TA-8850-N642R 10 GPH - 2 Step - 3450 RPM
100850 B2TA-8851-N642R 16 GPH - 2 Step - 3450 RPM
100910 B2TA-8249 16 GPH - 3450 RPM
100950 B2TA-8852-N642L 23 GPH - 2 Step - 3450 RPM

WEBSTER

101600 2R626D-5C14 50 GPH - 1725 RPM
101800 2V026C-5D020 95 GPH - 1725 RPM
101900 V026C-4D020 95 GPH - 1725 RPM
102500 22R221D-5C14 20 GPH - 3450 RPM
102600 22R322D-5AA14 34 GPH - 3450 RPM
102700 22R623D-5AA14 56 GPH - 3450 RPM

COMBU

105010 CV4RR25 25 GPH - 3450 RPM

21.2 REMOTE OIL PUMP PARTS

THRU

- 21.5** 120000 31PG Coupling for C1 (Appropriate Bushing required - see below)
120100 31PG Coupling for C2 (Appropriate Bushing required - see below)
121100 ALO-90 Coupling for Remote Suntec H Pump and Webster Pumps
122500 Bushing for 12000 and 12010 Coupling with Suntec Pump
M10350 Bushing for 12000 and 12010 Coupling with Combu Pump
C13180 Pump Stand
102350 Combu Remote Fuel Unit Stand
102360 Remote Pump Adaptor Plate
100100 Suntec Adaptor Flange (Not Shown On Exploded View)
X02095 1/8 90E BR Street EL 116A-A
C13186 Remote Pump Stand Coverplate
(Refer to Item Numbers (15) and (21) for Motors and Pumps)

21.6 OIL PRESSURE SWITCHES (Not Shown On Exploded View)

- 151000 DAF31-3 Range 9 Mercoïd
151050 DAF31-153 Range 9 Mercoïd
151600 B424V XG6 Ashcroft

21.7 OIL FILTERS, ELEMENTS AND "O" RINGS (Not Shown On Exploded View)

COMBU OIL FILTERS - GENERAL PURPOSE - ALUMINUM

- 985390 70101-100, 100 Micron, 1" NPT, 320 GPH, 0.5" Mercury
985400 70101-300, 300 Micron, 1" NPT, 320 GPH, 0.5" Mercury

COMBU OIL FILTER ELEMENTS - STAINLESS STEEL

- 985880 70310-60 Pleated S.S. Element for 70311-60
985930 70100-100 Pleated S.S. Element for 70101-100
985940 70100-300 Pleated S.S. Element for 70101-300

COMBU OIL FILTER "O" RINGS

- 985960 For 70361 and 70311
985970 For 70101

FULFLO OIL FILTERS WITH FIBER CARTRIDGE, 3/8" NPT

734100 FB6
734200 FB10

21.8 SIMPLEX OIL STRAINERS (Not Shown On Exploded View)

KRAISSL CAST IRON 125# WITH 100 MESH BASKET

732920 #72-07 1"
732930 #72-03 1/2"
732960 #72-11 1 1/2"

22 OIL VALVES, BRACKETS, BOXES

THRU

22.6

X02501 U-28-38-22-12 1/8" Oil Valve 300 PSI
X02504 1/4" UACF2NV Oil Valve 300 PSI
X02505 E7LUS 1/8" Oil Valve 15 GPH 300 PSI
X02508 U-31-30-22-12 1/8" 3 Way Oil Valve 300 PSI
X02518 NM22057101 1/4" 300 PSI
X02520 MCBV-BB Oil Regulator with Fittings
C131903/8" Single Oil Valve Bracket (Not Shown On Exploded View)
C842103 Hole Valve Junction Box Less Cover
C842204 Hole Valve Junction Box Less Cover
C830703 Hole Valve Junction Box Cover for C84210
C831004 Hole Valve Junction Box Cover for C84220
211450 HOV1A3021171 N.C. 1/2" Valve with Proof of Closure
X02503 1/8" S311AF02V2AC9
202490 SV401A02V9B7 1/4"

22.7 OIL PRESSURE GAUGE (Not Shown On Exploded View)

465200 0-400 PSI 2 1/2" Dial
460010 0-60# 2 1/2" Dial
460200 0-100# 2 1/2" Dial
465250 0-100# 2" Dial
465300 0-100# 2 1/2" Dial Liquid Filled
465360 0-600# 2 1/2" Dial Liquid Filled
460040 0-60# 4 1/2" Dial
464040 0-400# 4" Dial

VACUUM GAUGE

462050 0-30# 2 1/2" Dial
462060 0-30# 4" Dial

23 OIL IGNITION TRANSFORMERS

321000 120/10,000 Volt
321100 120/10,000 Volt Epoxy
323100 120/12,000 Volt
323200 120/12,000 Volt Epoxy

321050 120/10,000 Volt 50 Cycle

24 PHOTOCELL MOUNTING BRACKET

C24070 Mounting Bracket

25 OIL GUN ASSEMBLIES

Refer to As Built Spec Sheet

25.1 GAS GUN ASSEMBLIES

Includes

Diffuser

Part #

C95058	C23010	C1
C95068	C23110	C2
C95069	C23150	C2 3PV - Spinner Mounted Scanner
C95073	C23210	C3
C95074	C23250	C3 3PV - Spinner Mounted Scanner
C95082	C23310	C4/5 Spinner Mounted Scanner
C95229	C23370	C5B Gun Mounted Pilot (F20591), Spinner Mounted Scanner
C30191	C29910	C6 Gun Mounted Pilot (F20591), Spinner Mounted Scanner
C30401	C29930	C7
C30405	C29930	C8

Or refer to As Built Spec Sheet

26 OIL IGNITION ELECTRODES - (ORDER IN PAIRS)

C14025 Jacobs Ladder Electrodes Pair for use with 5/8" Hex Nozzle

C14022 Jacobs Ladder Electrodes Pair for use with 13/16" Hex Nozzle

27 OIL NOZZLES

DELANVAN TYPE B - SIMPLEX

45 Degrees

533050 3.50 GPH

533020 4.50 GPH

60 Degrees

531390 2.00 GPH

531540 2.25 GPH

531440 2.50 GPH

531430 3.00 GPH

531490 3.25 GPH

531510 3.50 GPH

531530 4.00 GPH

531560	4.50 GPH
531460	5.00 GPH
531470	5.50 GPH
531480	6.50 GPH
532910	7.00 GPH
532730	9.50 GPH
533070	10.00 GPH
532860	11.00 GPH
532740	12.00 GPH
532690	13.00 GPH

70 Degrees

531420	2.00 GPH
532940	2.50 GPH
532240	3.00 GPH
532960	3.25 GPH
532980	3.50 GPH
531520	4.00 GPH

70 Degrees

531570	4.50 GPH
532900	5.00 GPH
532890	5.50 GPH
533130	6.00 GPH
532930	6.50 GPH
532920	7.00 GPH
532480	8.00 GPH
532830	8.50 GPH
533090	9.00 GPH
532840	9.50 GPH
532790	10.00 GPH
532870	11.00 GPH
533120	12.00 GPH
532820	13.00 GPH

80 Degrees

532100	2.00 GPH
532150	2.25 GPH
532200	2.50 GPH
532250	3.00 GPH
532260	3.25 GPH
532300	3.50 GPH
532350	4.00 GPH
532400	4.50 GPH
532450	5.00 GPH
532500	5.50 GPH
532550	6.00 GPH
532700	6.50 GPH
532760	7.00 GPH
532710	7.50 GPH
532770	8.00 GPH
532720	8.50 GPH
532780	9.00 GPH

532850	9.50 GPH
532800	10.00 GPH
532810	11.00 GPH
533110	12.00 GPH
532880	13.00 GPH
532750	14.00 GPH
533080	17.00 GPH

90 Degrees

532950	2.50 GPH
532970	3.25 GPH
532990	3.50 GPH
533000	5.00 GPH

DELAVAN VARIFLOW BYPASS

70 Degrees

533400	80.00 GPH 30637-2
533410	90.00 GPH 30637-6
533420	100.00 GPH 30637-10

80 Degrees

532570	12.00 GPH 33769-73
532580	14.00 GPH 33769-77
532610	16.00 GPH 33769-80
530900	30.00 GPH 30630-17-1637
530910	35.00 GPH 30630-22-1637
530920	37.50 GPH 30630-54-1637
531000	40.00 GPH 30630-27-1637
531050	45.00 GPH 30630-32-1637

HAGO BYPASS

60 Degrees

535020	3.00 GPH
535030	3.50 GPH
535040	4.00 GPH
535060	5.00 GPH
535060	5.50 GPH
535070	6.00 GPH
535080	6.50 GPH
535090	7.00 GPH
535100	7.50 GPH
535110	8.00 GPH
535120	8.50 GPH

60 Degrees

535130	9.00 GPH
535140	9.50 GPH
535150	10.50 GPH
535160	12.00 GPH
535170	13.50 GPH
535180	15.50 GPH
535190	17.50 GPH
535200	19.50 GPH
535210	21.50 GPH
535220	24.00 GPH
535230	28.00 GPH
535240	30.00 GPH
535250	35.00 GPH
535260	40.00 GPH
535270	45.00 GPH
535280	50.00 GPH
535290	15.00 GPH

80 Degrees

535550	5.00 GPH
535560	5.50 GPH
535570	6.00 GPH
535580	6.50 GPH
535590	7.00 GPH
535600	7.50 GPH
535610	8.00 GPH
535620	9.00 GPH
535630	9.50 GPH
535640	10.50 GPH
535910	11.00 GPH
535810	11.50 GPH
535650	12.00 GPH
535820	12.50 GPH
535830	13.00 GPH
535660	13.50 GPH
535840	14.00 GPH
535850	15.00 GPH
535670	15.50 GPH
535860	16.00 GPH

80 Degrees

535680	17.50 GPH
535750	18.00 GPH
535690	19.50 GPH
535870	20.00 GPH
535700	21.50 GPH
535880	22.00 GPH
535710	24.00 GPH
535890	26.00 GPH
535720	28.00 GPH

MONARCH F-80 BYPASS

60 Degrees

519370	6.00 GPH
519380	6.50 GPH
519390	7.00 GPH
519400	7.50 GPH
519410	8.00 GPH
519430	9.00 GPH
519440	9.50 GPH
519460	10.50 GPH
519490	12.00 GPH
519530	13.50 GPH
519560	15.30 GPH
519600	17.50 GPH
519650	19.50 GPH
519700	21.50 GPH
519750	24.00 GPH
519800	28.00 GPH
519850	30.00 GPH
519860	35.00 GPH
519900	40.00 GPH
519950	45.00 GPH

80 Degrees

520050	5.00 GPH
520060	5.50 GPH
520070	6.00 GPH
520080	6.50 GPH
520090	7.00 GPH
520100	7.50 GPH
520110	8.00 GPH
520140	9.00 GPH
520150	9.50 GPH
520160	10.50 GPH
520200	12.00 GPH
520250	13.80 GPH
520300	15.30 GPH
520350	17.50 GPH
520400	19.50 GPH
520450	21.50 GPH
520500	24.00 GPH
520550	28.00 GPH
520600	30.00 GPH
520650	35.00 GPH

C14010 Simplex Oil Nozzle Adaptor
X02705 BPS Oil Nozzle Adaptor for HAGO or Delavan
X02706 BPS Oil Nozzle Adaptor for Monarch F80BPS
X02711 Delavan Oil Nozzle Adaptor (30298) for 13/16 Hex 30630

30 OIL GUN MOUNTING PLATES

C843101 Hole
C843202 Hole
C243213 Hole

31 OIL IGNITION ELECTRODE CLAMP

X04035 For Direct Spark Oil
X04036

32 OIL IGNITION CABLE GUIDE

X09824 3/8" Grommet
X09925 Snap Bushing
C11494C Electrode Wire Spacer

32.1 DIRECT SPARK OIL IGNITION CABLES (PAIR) SPECIFY BURNER MODEL

PRICE IS FOR EACH 3 FOOT LENGTH CONSISTING OF:

Y08000 #14-19 GTO 15,000 Volt Cable with
931110 #CT-11 Rajah Cage Terminal
931120 #S/S-11 Rajah Terminal

33-34 PHOTOCELL

X02730 C7013A-1003 Mount and Cell
402100 38316 Cell Only for C7013A

34.1 CAD CELL

X02585 C554A Cad Cell

34.2- SCANNERS

34.3

FIREYE

374100 48PT1-1007 Lead Sulfide
374400 48PT2-1007 Lead Sulfide
374600 UV-1A6 Ultraviolet
374610 UV-1A3 Ultraviolet

HONEYWELL

402800 C7015A-1076 Lead Sulfide

- 57.2 X09374 Screws for Mounting Hub to Crank Arm 10-24 x 1/2" Round Slot Head Machine Screws
- 57.3 P82120 Stamped Steel Crank Arm and Steel Hub Assembly for Ext. Shaft (1/2" ID)
- 57.4 P82110 Stamped Steel Crank Arm and Steel Hub Assembly for North American Oil Valve or Butterfly (3/8" ID)
- 57.4 M90002 Stamped Steel Crank Arm and Steel Hub Assembly for Hauck Modulating Oil Valve (3/4" ID)
- 57.5 P82130 Stamped Steel Crank Arm and Steel Hub Assembly for Damper (5/16" ID)
- 57.8 91100 Swivels (Ball Joints)
- 57.9 Y00470 5/16" Push Rod (36" Long)
- 57.10 M80011 5/16" x 1 5/8" Damper Arm (Tapped)

C10482C7/8 Jack Shaft Bracket (not shown)

Refer to As Built Spec Sheet or Consult Factory

		<u>Quantity</u>		
		All Fuels	<u>Mod</u>	
		<u>LHO/LHL</u>	Gas or Oil	Gas/Oil
57.11	See Below Damper Cross Link	1	1	1
	C83170 Steel Damper Arm 6" with 9 Holes	1	0	0
	X06002 Damper Arm Collar 3/8" Sq.	1	1	2
	P82120 Crank Arm Welded 1/2"	0	2	3
	M10500 Damper Weight-Typed	1	0	0
	M80010 Damper Arm Assembly 5/16" x 1-5/8"	2 (A)	2	2

		<u>Quantity</u>		
		All Fuels	<u>Mod</u>	
		<u>LHO/LHL</u>	Gas or Oil	Gas/Oil
	M80021 Damper Cylinder Arm	1 (B)	0	0
	X09101 Mod Motor Extension Shaft			
	P82130 Damper Arm Weld Assembly 6" x 5/16"	1	1	1
	X02387 Rivet	2	2	2
	X09662 Retaining Ring	2	2	2
	Y00470 5/16" Rod	1' (C)	3'	4'
	91100 Swivels	2 (D)	4 (D)	6

- (A) For C3, C4 use M80010
- (B) For Gas/Oil only
- (C) For C3, C4, order 2 for LHO/LHL
- (D) Reduce quantity by 2 for straight oil burner

DAMPER CROSS LINKS

- C83240C1
- C83241C2, C3

C83245C4, C5, C6

Note: For On/Off burners, only 2 each of M80011 (48) are required.

CROSS STRAP LINKAGE ASSEMBLIES

C95300C1

C95301C2, C3

C95302C4, C5, C6

Consists of Cross Link, Rivets, Retaining Rings, Arms - assembled.

58 AIR PRESSURE SWITCHES

170000 AFS-A Cleveland

171010 8024204107 SPDT Antunes

**59 GAS PILOT ASSEMBLIES
SCANNER AND FLAMEROD**

Includes

ElectrodeFlame Rod

F20015	X04210	X04225	Complete, Natural Gas, Flame Rod Pilot Assembly Includes 62.1, 62.2, 62.3, 62.4, 62.6, 63
F20010	X04210	N/A	Complete, Natural Gas, Scanner Pilot Assembly for C1/2 Includes 62.1, 62.2, 62.3, 63
F20020	X04210	N/A	Complete, Natural Gas, Scanner Pilot Assembly for C3/4/5 Includes 62.1, 62.2, 62.3, 63
F20591	X04244	N/A	C5B/C6/C7/C8 Gun Mounted, Natural Gas, Pilot Assembly (Not Shown On Exploded View)
F20011	X04210	N/A	Complete, Propane Gas, Scanner Pilot Assembly for C1/2
F20024	X04210	N/A	Complete, Propane Gas, Scanner Pilot Assembly for C3/4/5
F20017	X04210	X04225	Complete, Propane Gas, Flame Rod Pilot Assembly

60 OIL VALVES, MODULATING AND BRACKETS

NORTH AMERICAN

260000 1813M-03

260100 1813M-02A

260200 1813M-02B

260300 1813M-02C

260400 1813M-02D

C242406" Bracket Bolt On

C130406" Bracket

HAUCK

262240 S-3-3

262250 S-3-5

262260 S-3-7
262270 S-3-9
262280 S-3-11
262300 S-3-13
C242558" Bracket
C24242 Metering Valve Bolt On Bracket
C24244 Metering Valve Bolt On Bracket with Varicam

61 MODULATING MOTORS AND BRACKETS

060250 M9174C-1025
060700 220738A Bracket for Mod IV Motors
C10781 Mod Motor Mounting Bracket C1
B11681 Mod Motor Mounting Bracket C2

62 PILOT IGNITION ELECTRODES AND CABLE

X04210 Pilot Ignition Electrode with Porcelain
X04036 Aluminum Clamp (2 Required)
Y08000 #14-19 GTO 15,000V 3 Foot Cable
X09927 #2 Rajah Ring Terminal
931110 #CT-11 Rajah Cage Terminal

62 FLAME ROD AND CABLE

X04225 Flame Rod with Porcelain
X04600 Porcelain Only
Y08000 #14-19 GTO 15,000V 3 Foot Cable
937410 (2) 1/4" Stud Ring Terminals

63 PILOT ORIFICES (Not Shown On Exploded View)

X04350 #44 Natural Gas Flame Rod
X04350 #48 LP Gas Flame Rod
X04350 #36 Natural Gas Scanner C1/2
X04350 #30 Natural Gas Scanner C3/4/5
X04350 #48 LP Gas Scanner C1/2/3/4/5

69 PILOT MOUNTING PLATES

C24100C1
C24102C2
C24110C3
C24130C4/5

70 PILOT GAS REGULATORS

300100 RV20L 3/8" Cad Spring 2.8" to 5.2"
302800 325-3 3/8" Cad Spring 2.0" to 6.0"
305320 043-182 1/2" Rockwell
305420 043-182 3/4" Rockwell
A10456 I3315 Bracket 1/2" Rockwell

71 PILOT VALVES

202430 U-28-76-21-12 3/8" Alcon
202450 U-28-45-21-18 1/4" Alcon 115V

78 GAS IGNITION TRANSFORMERS

320000 120/6000 Volt
320200 120/8500 Volt

79 GAS VALVE OPERATORS

HONEYWELL

OPERATORS WITH PROOF OF CLOSURE

190900 V4055D-1019, 13 Seconds
191000 V4055D-1001, 26 Seconds
190500 V4062D-1002, 26 Seconds, Low-High-Low
190600 V4062D-1010, 13 Seconds, Low-High-Low

OPERATORS WITHOUT PROOF OF CLOSURE

190700 V4055A-1098, 13 Seconds
190800 V4055A-1064, 26 Seconds
190400 V4062A-1008, 26 Seconds, Low-High-Low
190430 V4062A-1131, 13 Seconds, Low-High-Low

ASCO - GENERAL CONTROLS

OPERATORS WITH PROOF OF CLOSURE

199010 AH2B112S4, 15 Seconds
199300 AH4B112S4, Low-High-Low

OPERATORS WITHOUT PROOF OF CLOSURE

199000 AH2B112A1, 15 Seconds
199100 AH2B102A4, 30 Seconds
199200 AH4B112S4, Low-High-Low

79.1 GAS VALVE BODIES

HONEYWELL

192300 V5055A-1004 1"
192400 V5055A-1012 1 1/4"
192500 V5055A-1020 1 1/2"

192600	V5055A-1038 2"
192700	V5055A-1046 2 1/2"
192800	V5055A-1053 3"
192900	V5055A-1228 4"

BODIES WITH GUIDE

193000	V5055B-1002 1"
193100	V5055B-1010 1 1/4"
193200	V5055B-1028 1 1/2"
193300	V5055B-1069 2"
193400	V5055B-1077 2 1/2"
193500	V5055B-1085 3"
193600	V5055B-1150 4"

BODIES WITH PROOF OF CLOSURE

193900	V5055C-1034 1"
194000	V5055C-1042 1 1/4"
194100	V5055C-1059 1 1/2"
194200	V5055C-1000 2"
194300	V5055C-1018 2 1/2"
194400	V5055C-1026 3"
194500	V5055C-1109 4"

ASCO - GENERAL CONTROLS

196000	V710FAS 1"
196100	V710GAS 1 1/4"
196200	V710HAS 1 1/2"
196300	V710JAS 2"
196400	V710KAS 2 1/2"
196500	V710LAS 3"

BODIES WITH GUIDE

196600	V710FASV15 1"
196700	V710GASV15 1 1/4"
196800	V710HASV15 1 1/2"
196900	V710JASV15 2"
197000	V710KASV15 2 1/2"
197100	V710LASV15 3"

BODIES WITH PROOF OF CLOSURE

197410	V710FASV22 1"
197420	V710GASV22 1 1/4"
197430	V710HASV22 1 1/2"
197440	V710JASV22 2"
197450	V710KASV22 2 1/2"

197460 V710LASV22 3"

79.2 DIAPHRAGM GAS VALVES (0.5 PSI MAXIMUM INLET PRESSURE) (Not Shown On Exploded View)

HONEYWELL

190100	V48A-2169 1"
190200	V48A-2177 1 1/4"
190300	V48A-2185 1 1/2"
199720	V443A-1038 (V4943A-1011) 1"
199730	V443A-1020 (V4943A-1029) 1 1/4"
199700	V443A-1012 (V4943A-1037) 1 1/2"
199710	V443A-1004 (V4943A-1045) 2"

79.3 BLEED VALVE (Not Shown On Exploded View)

195000 For V48A

79.4 COMBINATION DIAPHRAGM GAS VALVE AND PRESSURE REGULATORS (0.5 PSI MAXIMUM INLET PRESSURE) (Not Shown On Exploded View)

199800 V4843B-1002 (V4943B-1019) 120 Volt 1"
199810 V4843B-1051 (V4943B-1027) 120 Volt 1 1/4"
199820 V4843B-1028 (V4943B-1035) 120 Volt 1 1/2"
199830 V4843B-1077 (V4943B-1043) 120 Volt 2"

79.5 GAS LINE STRAINERS AND BASKETS (Not Shown On Exploded View)

Y STRAINERS WITH 100 MESH STAINLESS STEEL BASKET

731200 3/4"
731300 1"
731350 1 1/4"
731500 1 1/2"
731600 2"
731650 2 1/2"
731750 3"

80 GAS COCKS AND HANDLES

274500 BB2-100 3/4 " Milwaukee without Tappings
274550 BB2-100 1" Milwaukee without Tappings
274600 BB2-100 1 1/4" Milwaukee without Tappings
274650 BB2-100 1 1/2" Milwaukee with two Tappings
274700 BB2-100 2" Milwaukee without Tappings
354100 Essex 500 1" with two Tappings
354200 Cons. Brass 1 1/4" with two Tappings
354300 Cons. Brass 1 1/2" with two Tappings
352060 170m Lube 1" Milliken without Tappings
352160 170m Lube 1 1/4" Milliken without Tappings
352260 170m Lube 1 1/2" Milliken without Tappings
352360 170m Lube 2" Milliken without Tappings
352460 170m Lube 2 1/2" Milliken without Tappings

352560 170m Lube 3" Milliken without Tappings
352660 170m Lube 4" Milliken without Tappings
353350 "G" Handle 1", 1 1/4" Milliken
353360 "J" Handle 1 1/2", 2" Milliken
353370 "L" Handle 2 1/2", 3" Milliken
353380 "O" Handle 4" Milliken

80 **BALL VALVES WITH LEVER HANDLES**

980030 1/4"
980060 3/8"
980140 1/2"
980160 3/4"
980210 1" without Tappings
980240 1" with two Tappings
980260 1 1/4" with two Tappings
980270 1 1/4" without Tappings
980310 1 1/2" with two Tappings
980320 1 1/2" without Tappings
980360 2" with two Tappings
980370 2" without Tappings
980400 2 1/2"
980450 3"
980510 4"

80 **BALL VALVES WITH TEE HANDLES LESS TAPPINGS ALL SIZES**

980040 1/4"
980070 3/8"
980120 1/2"
980110 3/4"
980190 1"
980280 1 1/4"
980330 1 1/2"
980380 2"

84 **BUTTERFLY VALVES**

273000 103BV 3/4" - Does not include P82110 Damper Linkage Arm
273100 104BV 1" - Does not include P82110 Damper Linkage Arm
273200 105BV 1 1/4" - Does not include P82110 Damper Linkage Arm
273300 106BV 1 1/2"- Does not include P82110 Damper Linkage Arm
273400 108BV 2" - Does not include P82110 Damper Linkage Arm
273500 110BV 2 1/2" - Does not include P82110 Damper Linkage Arm
273600 112BV 3" - Does not include P82110 Damper Linkage Arm
273690 104BVR 1" - Does not include P82110 Damper Linkage Arm
273700 105BVR 1 1/4" - Does not include P82110 Damper Linkage Arm
273710 106BVR 1 1/2" - Does not include P82110 Damper Linkage Arm
273720 108BVR 2" - Does not include P82110 Damper Linkage Arm

84 **BUTTERFLY VALVES (Continued)**

273730 110BVR 2 1/2" - Does not include P82110 Damper linkage Arm
273740 112BVR 3" - Does not include P82110 Damper Linkage Arm

M90010	PF-FP 3/4" - Includes M90201 Damper Linkage Arm Assembly
M90015	PF-FP 1" - Includes M90201 Damper Linkage Arm Assembly
M90020	PF-FP 1 1/4" - Includes M90204 Damper Linkage Arm Assembly
M90025	PF-FP 1 1/2" - Includes M90204 Damper Linkage Arm Assembly
M90030	PF-FP 2" - Includes M90204 Damper Linkage Arm Assembly
M90050	PF-RP 3/4" - Includes M90200 Damper Linkage Arm Assembly
M90055	PF-RP 1" - Includes M90200 Damper Linkage Arm Assembly
M90060	PF-RP 1 1/4" - Includes M90200 Damper Linkage Arm Assembly
M90065	PF-RP 1 1/2" - Includes M90205 Damper Linkage Arm Assembly
M90070	PF-RP 2" - Includes M90205 Damper Linkage Arm Assembly

Note: On parts orders verify shaft size on Eclipse Butterfly Valve for replacement damper arms - after 3/99.

84 BUTTERFLY LINKAGE ARM ASSEMBLIES

P82110	3/8" I.D. BV, BVR
M90200	3/16" I.D. PF-RP
M90201	1/4" I.D. PF-FP
M90202	1/4" I.D. PF-RP
M90203	5/16" I.D. PF-RP
M90204	3/8" I.D. PF-FP
M90205	3/8" I.D. PF-RP

86.2 SIDE ORIFICES - SPECIFY INPUT

Orifice Size	Drill Size	Set Quantity		
		<u>1</u>	<u>3</u>	<u>10</u>
1 1/2"	15/64"	X04370	-----	-----
1 1/2"	1/4"	M11201	M11231	M11261
1 1/2"	17/64"	M11202	M11232	M11262
1 1/2"	9/32"	M11203	M11233	M11263
1 1/2"	19/64"	M11204	M11234	M11264
1 1/2"	5/16"	M11205	M11235	M11265
1 1/2"	21/64"	M11206	M11236	M11266
1 1/2"	11/32"	M11207	M11237	M11267
1 1/2"	23/64"	M11208	M11238	M11268

86.2 SIDE ORIFICES - SPECIFY INPUT, Continued

Orifice Size	Drill Size	Set Quantity		
		<u>1</u>	<u>3</u>	<u>10</u>
1 1/2"	3/8"	M11209	M11239	M11269
1 1/2"	25/64"	M11210	M11240	M11270
1 1/2"	13/32"	M11211	M11241	M11271
1 1/2"	27/64"	M11212	M11242	M11272
1 1/2"	7/16"	M11213	M11243	M11273
1 1/2"	29/64"	M11214	M11244	M11274
1 1/2"	15/32"	M11215	M11245	M11275
1 1/2"	31/64"	M11216	M11246	M11276
1 1/2"	1/2"	M11217	M11247	M11277
1 1/2"	17/32"	M11218	M11248	M11278
1 1/2"	9/16"	M11219	M11249	M11279

1 1/2"	19/32"	M11220	M11250	M11280
1 1/2"	5/8"	M11221	M11251	M11281
1 1/2"	11/16"	M11222	M11252	M11282
1 1/2"	25/32"	M11223	M11253	M11283
1 1/2"	13/16"	M11224	M11254	M11284
1 1/2"	27/32"	M11225	M11255	M11285
1 1/2"	7/8"	M11226	M11256	M11286
2"	17/32"	X04375	-----	-----
2"	35/64"	M11302	M11332	M11362
2"	9/16"	M11303	M11333	M11363
2"	37/64"	M11304	M11334	M11364
2"	19/32"	M11305	M11335	M11365
2"	39/64"	M11306	M11336	M11366
2"	5/8"	M11307	M11337	M11367
2"	41/64"	M11308	M11338	M11368
2"	21/32"	M11309	M11339	M11369
2"	43/64"	M11310	M11340	M11370
2"	11/16"	M11311	M11341	M11371
2"	45/64"	M11312	M11342	M11372
2"	23/32"	M11313	M11343	M11373
2"	3/4"	M11314	M11344	M11374
2"	25/32"	M11315	M11345	M11375
2"	51/64"	M11316	M11346	M11376
2"	13/16"	M11317	M11347	M11377
2"	7/8"	M11318	M11348	M11378
2"	1"	M11319	M11349	M11379
2"	1 1/16"	M11320	M11350	M11380

86.2 SIDE ORIFICES - SPECIFY INPUT, Continued

Orifice Size	Drill Size	Set Quantity		
		<u>1</u>	<u>3</u>	<u>10</u>
2"	1 1/8"	M11321	M11351	M11381
2"	1 1/4"	M11322	M11352	M11382
2"	1 5/16"	M11323	M11353	M11383
2 1/2"	3/4"	X04380	-----	-----
2 1/2"	25/32"	M11402	M11432	M11462
2 1/2"	13/16"	M11403	M11433	M11463
2 1/2"	27/32"	M11404	M11434	M11464
2 1/2"	7/8"	M11405	M11435	M11465
2 1/2"	29/32"	M11406	M11436	M11466
2 1/2"	15/16"	M11407	M11437	M11467
2 1/2"	31/32"	M11408	M11438	M11468
2 1/2"	63/64"	M11409	M11439	M11469
2 1/2"	1"	M11410	M11440	M11470
2 1/2"	1 1/64"	M11411	M11441	M11471
2 1/2"	1 1/32"	M11412	M11442	M11472
2 1/2"	1 5/16"	M11413	M11443	M11473
2 1/2"	1 27/64"	M11414	M11444	M11474
2 1/2"	1 5/8"	M11415	M11445	M11475
2 1/2"	1 29/32"	M11416	M11446	M11476
3"	29/32"	X04385	-----	-----
3"	31/32"	M11502	M11522	M11542
3"	1 1/64"	M11503	M11523	M11543
3"	1 1/16"	M11504	M11524	M11544

3"	1 1/8"	M11505	M11525	M11545
3"	1 3/32"	M11506	M11526	M11546
3"	1 3/16"	M11507	M11527	M11547
3"	1 7/32"	M11508	M11528	M11548
3"	1 15/64"	M11509	M11529	M11549
3"	1 1/4"	M11510	M11530	M11550
3"	1 3/8"	M11511	M11531	M11551
3"	1 7/16"	M11512	M11532	M11552
3"	1 1/2"	M11513	M11533	M11553
3"	1 9/16"	M11514	M11534	M11554
3"	2"	M11515	M11535	M11555

M31021 1 1/2" Orifice Set, Nat/LP, 27 Pieces, Drilled Assorted Sizes

M31022 1 1/2" Orifice Set, Nat, 18 Pieces, Drilled Assorted Sizes

M31023 1 1/2" Orifice Set, LP, 17 Pieces, Drilled Assorted Sizes

86.2 SIDE ORIFICES - SPECIFY INPUT, Continued

M31031 2" Orifice Set, Nat/LP, 23 Pieces, Drilled Assorted Sizes

M31032 2" Orifice Set, Nat, 8 Pieces, Drilled Assorted Sizes

M31033 2" Orifice Set, LP, 16 Pieces, Drilled Assorted Sizes

M31041 2 1/2" Orifice Set, Nat/LP, 16 Pieces, Drilled Assorted Sizes

M31042 2 1/2" Orifice Set, Nat, 5 Pieces, Drilled Assorted Sizes

M31043 2 1/2" Orifice Set, LP, 12 Pieces, Drilled Assorted Sizes

M31051 3" Orifice Set, Nat/LP, 15 Pieces, Drilled Assorted Sizes

M31052 3" Orifice Set, Nat, 4 Pieces, Drilled Assorted Sizes

M31053 3" Orifice Set, LP, 13 Pieces, Drilled Assorted Sizes

89 HIGH GAS PRESSURE SWITCHES

163200 C645B-1013 3-21"

160000 C437D-1005 1-26"

163450 HGP-A Antunes 2-16"

161100 HBP-6 Antunes 2-20"

90 LOW GAS PRESSURE SWITCHES

163100 C645A-1030 3-21"

160300 C437E-1004 1-26"

163150 C645A-1055 5-35"

163300 LGP-A Antunes 2-14"

163000 L645A 3-21" Auto Reset

161000 LGP-6 Antunes 1-20"

91 MAIN GAS PRESSURE REGULATORS 1 PSI MAXIMUM INLET (Not Lock Up Type)

300400 RV-53 1" Cad Plated 3"-6" Spring

300500 RV-61 1" Pink 3"-8" Spring

300550 RV-61 1 1/4" Pink 3"-8" Spring

300600 RV-81 1 1/4" Pink 3"-8" Spring

300700 RV-81 1 1/2" Pink 3"-8" Spring

300800 RV-91 2" Pink 3"-8" Spring

300900 RV-91 2 1/2" Pink 3"-8" Spring

301000 RV-111 2 1/2" Violet 4"-12" Spring
301100 RV-111 3" Violet 4"-12" Spring
301200 RV-131 4" Violet 4"-12" Spring

MAXITROL 210 SERIES (Pink 3-8 Spring)

302000 210D 1"
302100 210D 1 1/4"
302200 210D 1 1/2"
302300 210E 1 1/2"
302400 210E 2"
302700 210G 2 1/2"
302750 210G 3"

ROCKWELL

243-8 1/14"
243-8 1 1/2"
243-12 1 1/2"
121-12 1 1/2"
243-12 2"
121-12 2"
121-12 2 1/2"

Consult Factory for correct part number

92 OIL RETURN CHECK VALVES

X02521 Circle Seal 2232B-2MM
233000 Fiomatic B-100-HCV

93 PILOT SHUTOFF COCKS

350900 1/4" Nibco CGA Approved
834450 3/8" x 1/4" to MP Straight Compression
980030 1/4" Ball Valve

94 SIGHT GLASS

X09913 1 1/8" x 1 1/6"
X09910 2 1/2" Square

95 SOLENOID GAS VALVES

ASCO - GENERAL CONTROLS

280300 K3A562T 1"
280400 K3A772T 1 1/4"

280500 K3A782T 1 1/2"
281100 S261SA02N3JK4 2"
281200 S261SA02N3KK4 2 1/2"
281300 S261SA02N3LK4 3"

96 N.O. VENT VALVES (Not Shown On Exploded View)

ASCO - GENERAL CONTROLS

284050 8030G083 3/4"
284500 S262SA02N3FJ5 1"
284600 S262SA02N3GJ7 1 1/4"
284700 S262SA02N3JK4 2"

97 GAS PRESSURE GAUGES (Not Shown On Exploded View)

463100 2 1/2" Dial 0-18 oz. 0-32" W.C.
463000 2 1/2" Dial 0-15" W.C.

98 SIDE ORIFICE SPRINGS

911520 1 1/2"
911530 2"
911540 2 1/2"
911550 3"

100 TAPPED NIPPLES

M10550 3/4" x 2"
M10551 1" x 2 1/2"
M10552 1 1/4" x 2 1/2"
M10553 1 1/2" x 2 1/2"
M10554 2" x 2 1/2"
M10555 2 1/2" x 3 1/2"
M10557 2 1/2" x 6"
M10556 3" x 3 1/2"
Or Consult Factory

101 TEST PORT NIPPLES INCLUDING 1/4" NPT HALF COUPLING WELDED

M20225 1" x 4"
M20227 1" x 4" Pilot
M20226 1 1/4" x 4"
M20228 1 1/2" x 4" Pilot
M20220 1 1/2" x 4"
M20230 2" x 4"
M20241 2" x 4" Pilot
M20244 2" x 6"
M20235 2 1/2" x 4"
M20242 2 1/2" x 4" Pilot
M20245 2 1/2" x 6"
M20240 3" x 4"
M20243 3" x 4" Pilot
M20246 3" x 6"
Or Consult Factory

102

DAMPER GUARDS, WIRE

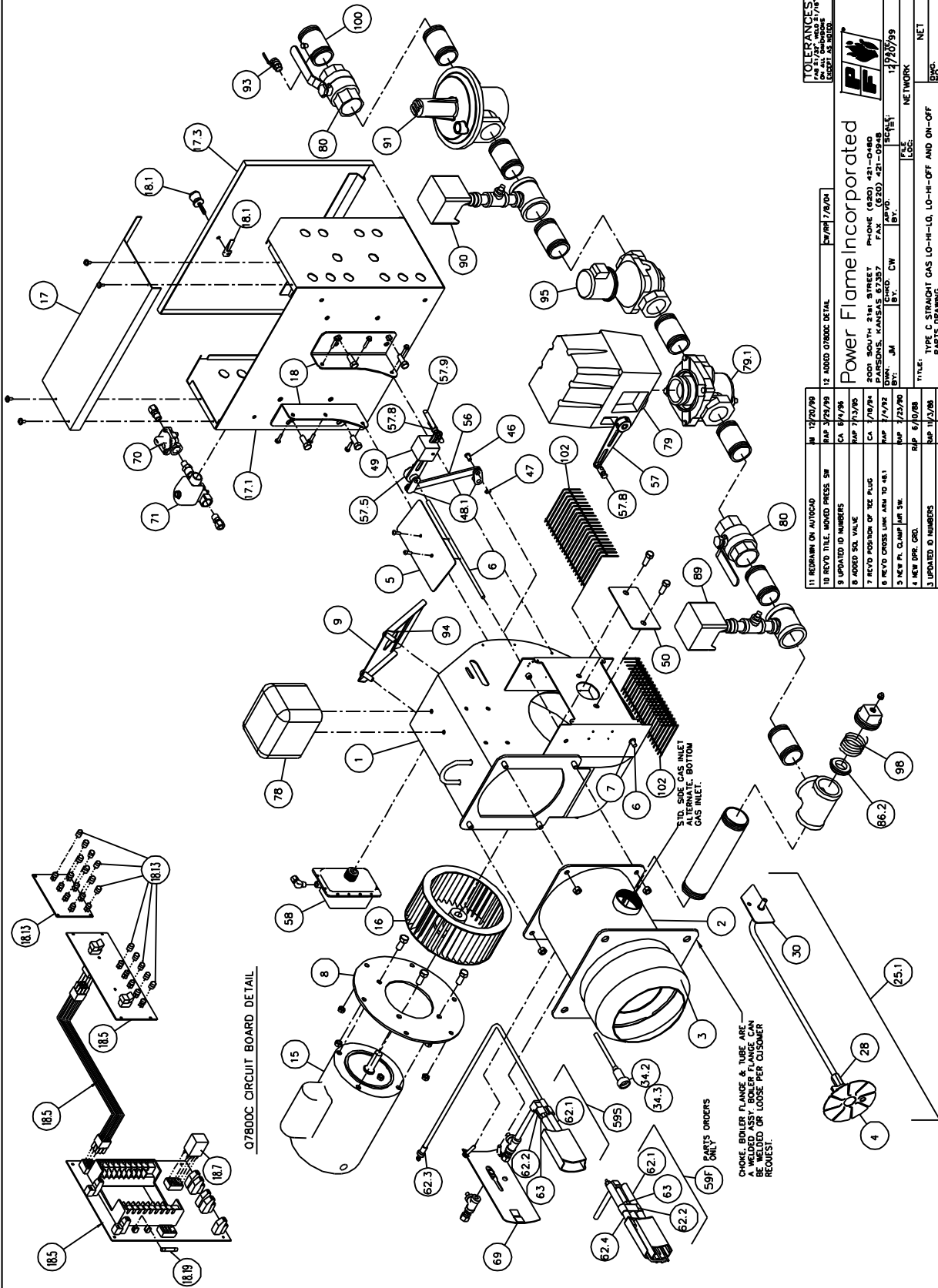
990000 C1

990010 C2

990020 C3

990040 C4/5/6

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11	REWORK ON AUTOCAD	12/20/98	JM	12/20/98	12	ADDED 07800C DETAIL	3/27/97	JR/DA
10	REV'D TITLE, WROTE PRESS SW	10/2/98	CA	9/1/98	9	UPDATED TO NUMBERS	1/4	1/1/98
9	ADDED SOL VALVE	7/17/98	CA	7/17/98	8	REV'D POSITION OF THE PLUG	1/10/98	CA
8	REV'D CROSS LINK ARM TO 48.1	7/7/98	MAP	7/7/98	7	REV'D CROSS LINK ARM TO 48.1	1/1/98	MAP
7	NEW PL. CLAMP FOR SW	7/23/98	MAP	7/23/98	6	NEW PL. CLAMP FOR SW	1/1/98	MAP
6	NEW IPE. CRD.	6/10/98	MAP	6/10/98	5	REV'D IPE. CRD.	1/1/98	MAP
5	UPDATED TO NUMBERS	10/2/98	MAP	10/2/98	4	REV'D TO NUMBERS	1/1/98	MAP
4	REVISION				3	REV'D TO NUMBERS	1/1/98	MAP
3	REV'D TO NUMBERS				2	REV'D TO NUMBERS	1/1/98	MAP
2	REV'D TO NUMBERS				1	REV'D TO NUMBERS	1/1/98	MAP

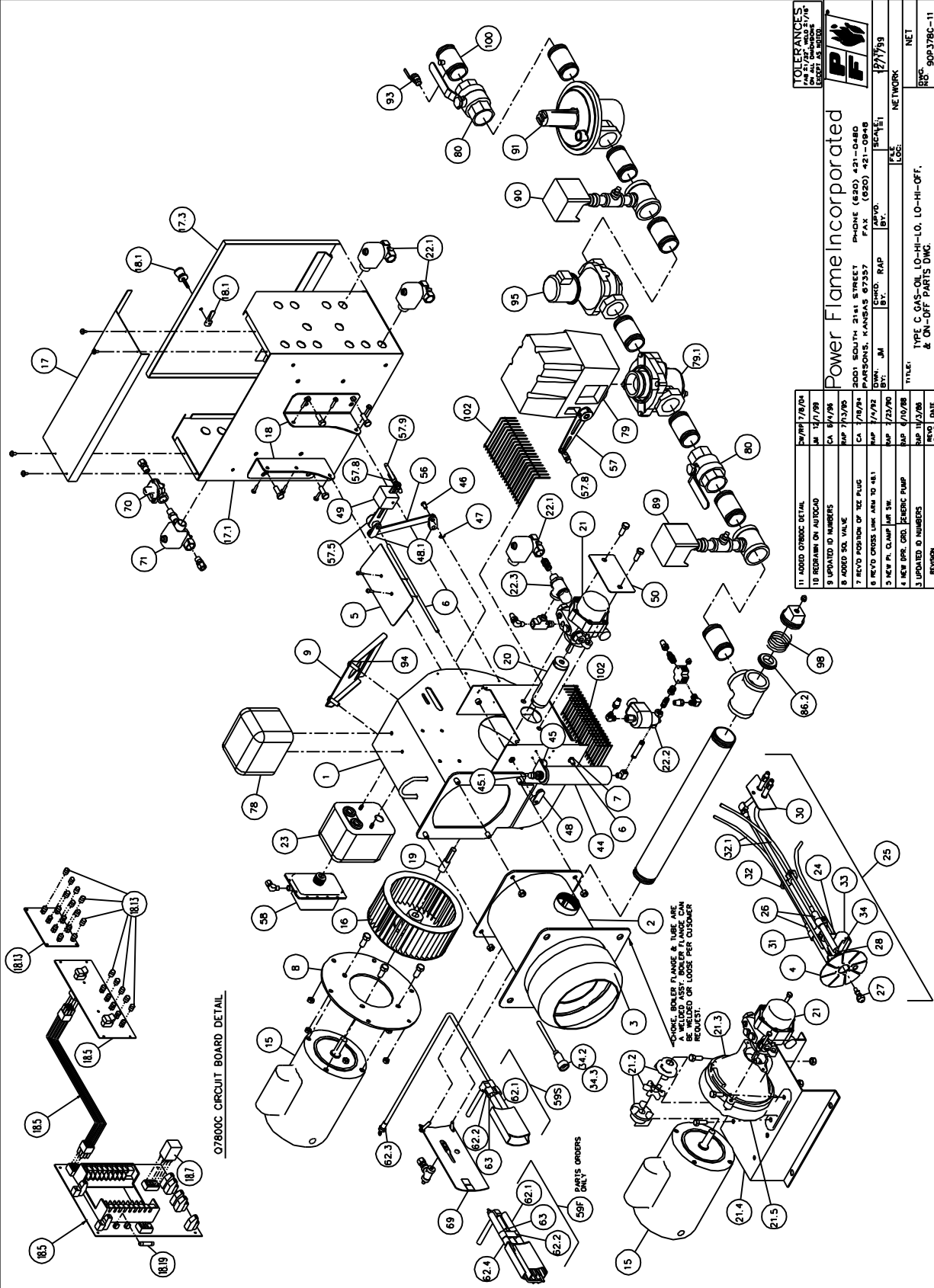
TOLERANCES
 UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 (EXCEPT AS NOTED)

Power Flame Incorporated

2001 SOUTH 21ST STREET PHONE (820) 421-0480
 PARSONS, KANSAS 67357 FAX (820) 421-0948
 BY: JM DATE: 12/20/98
 BY: CW DATE: 11/20/99
 BY: JCC DATE: NETWORK

TYPE: C STRAIGHT GAS LO-H-IQ, LO-H-OFF AND ON-OFF
 PARTS DRAWING
 NET
 90P-382C-12

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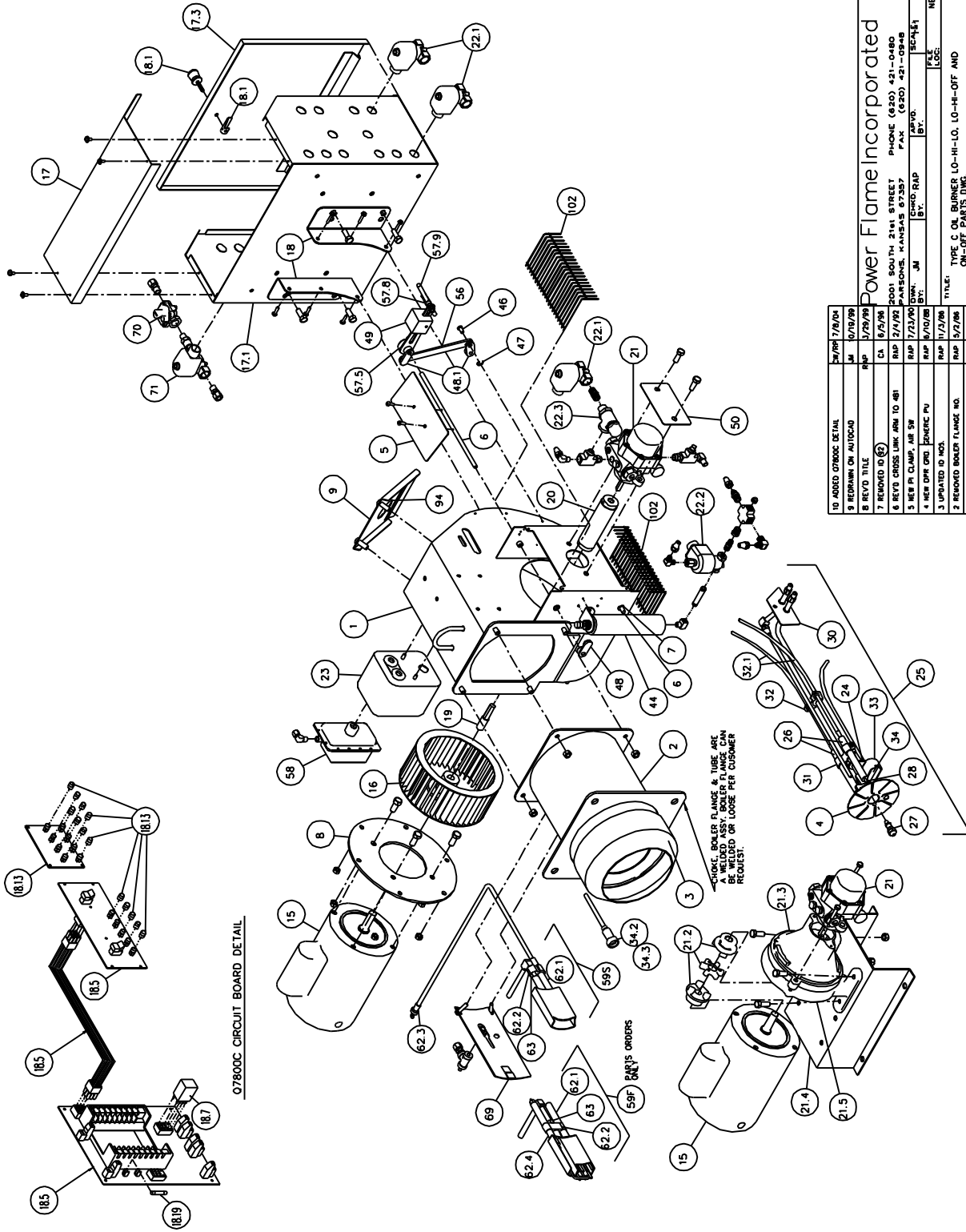


REV	DATE	DESCRIPTION
1	12/17/98	111 ADDD O-RING DETAIL
2	12/17/98	118 REWORK OF AUTOCAD
3	12/17/98	119 UPDATED DIMENSIONS
4	12/17/98	120 ADDD SOL VALVE
5	12/17/98	121 REV'D POSITION OF THE PLUG
6	12/17/98	122 REV'D CROSS LINE FROM 48.1
7	12/17/98	123 NEW PL. CLAMP FOR 3M
8	12/17/98	124 NEW BR. ORD. FERRIC PUMP
9	12/17/98	125 UPDATED DIMENSIONS

Power Flame Incorporated
 2001 SOUTH 21st STREET PHONE (820) 421-0480
 HAWKINSVILLE, KANSAS 67527 FAX (820) 421-0478
 BY: J.M. BY: J.M. DATE: 12/17/98
 CHECKED: R.A.P. BY: J.M. DATE: 12/17/98
 NETWORK
 TITLE: TYPE C GAS-OIL LO-HI-LO, LO-HI-OFF.
 & ON-OFF PARTS DMC.
 NET
 P/N: 90P-378C-11

ORIFICE, BURNER FLAME & TUBE ARE TO BE WELDED OR LOOSE PER CUSTOMER REQUEST.

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07800C CIRCUIT BOARD DETAIL

NO	DESCRIPTION	DATE	BY	CHKD
10	ADDED 07800C DETAIL	2/27/98	JM	7/8/98
9	REWORK ON AUTOCAD	1/10/98	JM	1/29/98
8	REV'D TITLE	1/7/98	CA	6/5/98
7	REMOVED ID 66	1/7/98	RAP	2/1/98
6	REV'D CROSS LINK ARM TO 481	1/7/98	RAP	7/23/00
5	NEW P. CLAMP, AIR SW	1/7/98	JM	6/10/98
4	NEW DPT CRD BURNER PV	1/7/98	JM	1/2/98
3	UPDATED ID NOS.	1/7/98	JM	1/2/98
2	REMOVED BOILER FLANGE NO.	1/7/98	JM	1/2/98
1	REVISION			

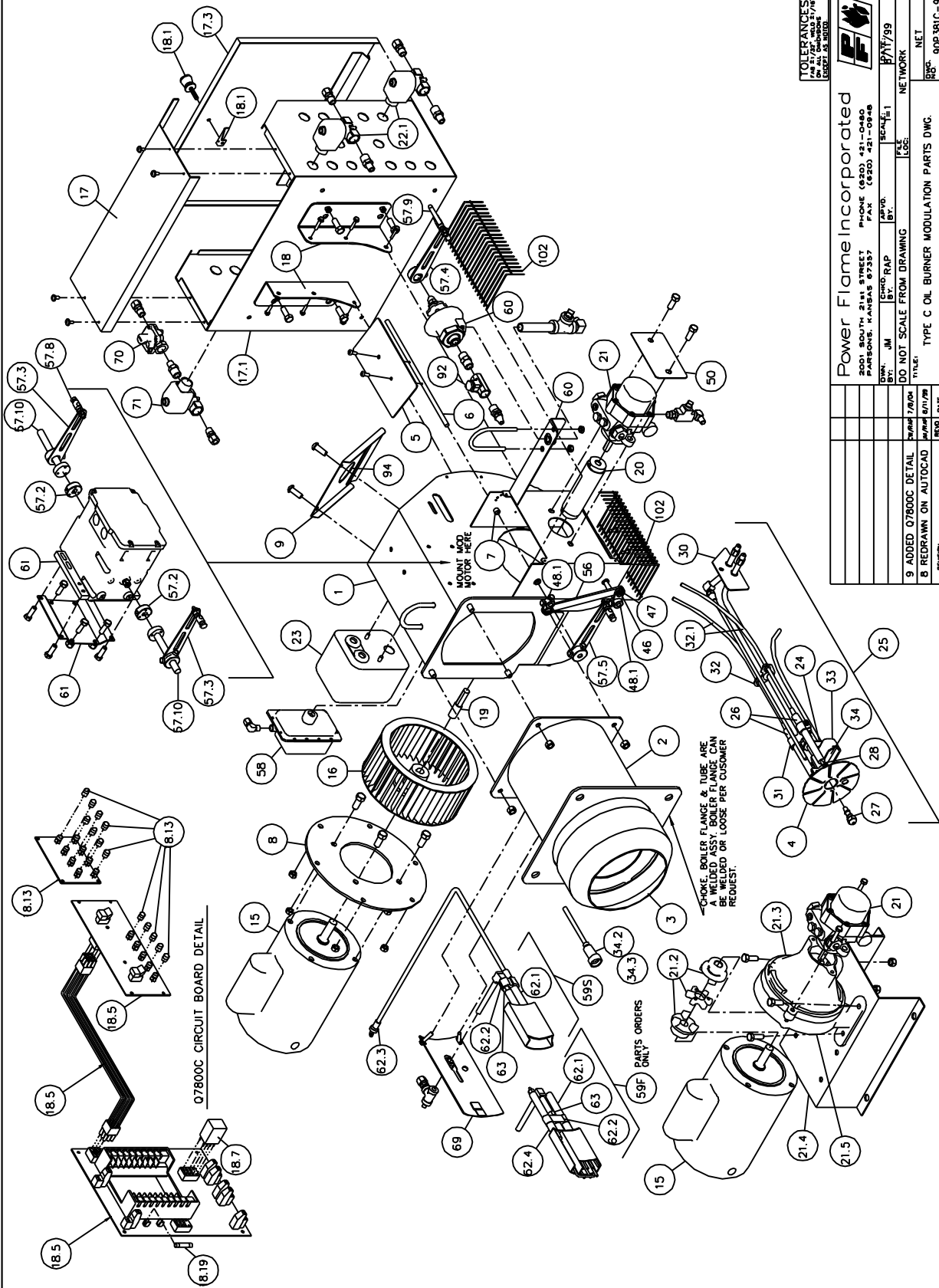
TOLERANCES
 UNLESS OTHERWISE SPECIFIED
 ALL DIMENSIONS ARE IN INCHES
 UNLESS OTHERWISE SPECIFIED

Power Flame Incorporated
 PHONE (820) 421-0480
 2001 SOUTH 21st STREET
 WINDSOR, KANSAS 67507
 FAX (820) 421-0888

DATE: 10/13/99
 BY: JM
 CHECKED: RAP
 APPROVED: JM

NET
 990P380C-10

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TOLERANCES
UNLESS OTHERWISE SPECIFIED
EXCEPT AS NOTED

Power Flame Incorporated
 100 SOUTH WASHINGTON ST. - 2ND FLOOR
 PORTLAND, MASSACHUSETTS 01901
 PHONE (603) 221-0000

DATE: 07/17/99
 BY: JIM
 CHECKED BY: RAP
 SCALE: 1:1
 TITLE: NETWORK
 DO NOT SCALE FROM DRAWING

TYPE C OIL BURNER MODULATION PARTS DWG.

REV	DATE	BY	DESCRIPTION
9			ADDED 07800C DETAIL
8			REDRAWN ON AUTOCAD
			REVISION