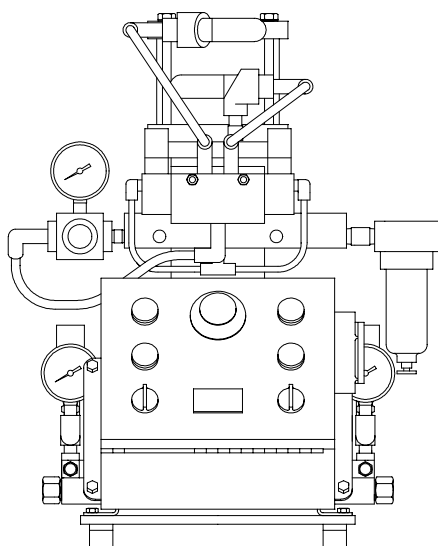




"Teamwork & Communication"



Model FF-1600 without Heat

Parts Identification Manual 17942C-ID

January 7, 2000

Issue 1

GUSMER CORPORATION®

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CONTENTS

WARRANTY.....5

FF-1600 WITH OUT HEAT ASSEMBLIES6

 FINAL ASSEMBLY6

 ELECTRIC CONSOLE8

 16:1 RATIO AIR MOTOR.....10

 REVERSING SWITCH12

 PROPORTIONING PUMP.....14

ELECTRICAL SCHEMATIC DIAGRAMS.....16

INSTRUCTION MANUAL DISCREPANCY REPORT.....19

LIST OF FIGURES

FIGURE 1. FF-1600 ASSEMBLY WITH OUT HEAT, (PART NUMBER 17000C-1-CSTM), EXPLODED VIEW	6
FIGURE 2. ELECTRIC CONSOLE, (PART NUMBER 17670-1), EXPLODED VIEW.....	8
FIGURE 3. 16:1 RATIO AIR MOTOR, (PART NUMBER 17775), EXPLODED VIEW	10
FIGURE 4. REVERSING SWITCH, (PART NUMBER 57745-10), EXPLODED VIEW	12
FIGURE 5. PROPORTIONING PUMP, (PART NUMBER 17400/17450-60), EXPLODED VIEW	14
FIGURE 6. FF-1600 WITH OUT HEAT ELECTRICAL SCHEMATIC, (SD17000C-1).....	16

LIST OF TABLES

TABLE 1. FF-1600 ASSEMBLY WITH OUT HEAT, (PART NUMBER 17000C-1-CSTM), PARTS.....	7
TABLE 2. ELECTRIC CONSOLE, (PART NUMBER 17670-1), PARTS	9
TABLE 3. 16:1 RATIO AIR MOTOR, (PART NUMBER 17775), PARTS.....	11
TABLE 4. REVERSING SWITCH, (PART NUMBER 57745-10), PARTS	13
TABLE 5. PROPORTIONING PUMP, (PART NUMBER 17400/17450-60), PARTS.....	15
TABLE 6. FF-1600 WITH OUT HEAT ELECTRICAL SCHEMATIC, (SD17000C-1), PARTS	17

WARRANTY

Gusmer Corporation (Gusmer) provides a limited warranty to the original purchaser (Customer) of Gusmer manufactured parts and equipment (Product) against any defects in material or workmanship for a period of one year from the date of shipment from Gusmer facilities.

In the event Product is suspected to be defective in material or workmanship, it must be returned to Gusmer, freight prepaid. If Product is found to be defective in material or workmanship, as determined solely by Gusmer, Gusmer will issue full credit to Customer for the freight charges incurred in returning the defective Product, and either credit will be issued for the replacement cost of the Product or a replacement part will be forwarded no-charge, freight prepaid to Customer.

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To insure proper validation of your warranty, please complete the warranty card and return it to Gusmer within two weeks of receipt of equipment.

Revised 11/12/98

FF-1600 WITH OUT HEAT ASSEMBLIES
FINAL ASSEMBLY

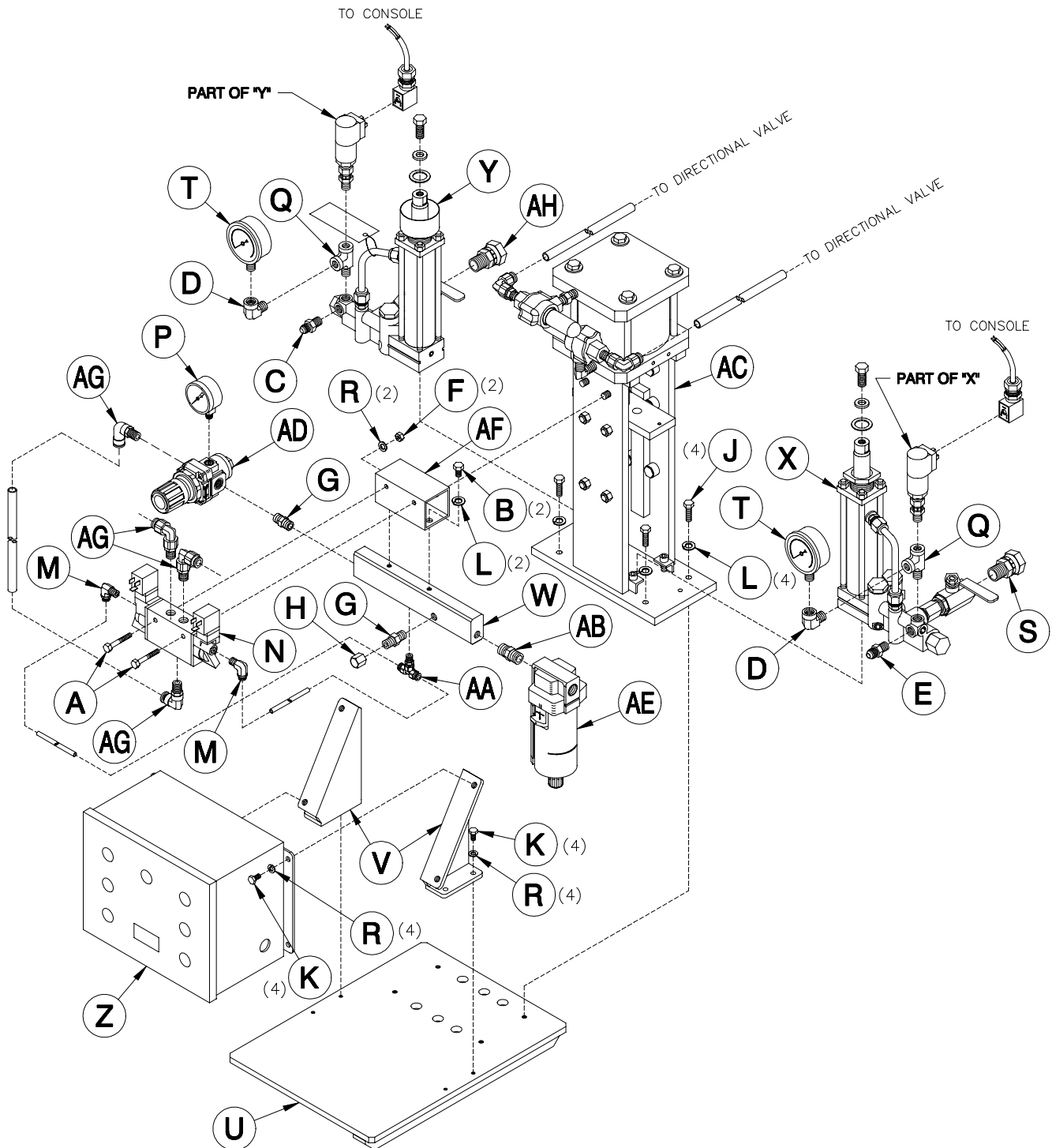


Figure 1. FF-1600 Assembly with out Heat, (Part Number 17000C-1-CSTM), Exploded View

TABLE 1. FF-1600 ASSEMBLY WITH OUT HEAT, (PART NUMBER 17000C-1-CSTM), PARTS

Reference Letter	Part Number	Description	Quantity
A	0203-26	Hex Head Cap Screw	2
B	0370	Hex Head Cap Screw	2
C	0375	JIC Hex Nipple	1
D	0375B-2	Street Elbow	2
E	0381-2	JIC Hex Nipple	1
F	0385-4	Hex Nut	2
G	0466A	Hex Nipple	2
H	0575	Pipe Cap	1
J	0759	Hex Head Cap Screw	4
K	0760-3	Hex Head Cap Screw	8
L	5504-3	Helical Lockwasher	6
M	6306-3	Tube Fitting	2
N	6311-109	Valve	1
P	6314-31	0-100 PSI Gauge	1
Q	6465	Pipe Tee	2
R	9758	Helical Lockwasher	10
S	10420	Swivel Union	1
T	17001	0-3000 PSI Gauge	2
U	17010-1	Base Weldment	1
V	17010-2	Console Bracket	2
W	17010-3	Air Manifold	1
X	17400-SIZE	Resin Proportioning Pump Assembly	1
Y	17450-SIZE	Iso Proportioning Pump Assembly	1
Z	17670-1	Electrical Console	1
AA	17746-5	Tube Tee	1
AB	17746-7	Hex Nipple	1
AC	17775	Air Motor Assembly	1
AD	6311-124	Regulator	1
AE	6312-26	Air Filter	1
AF	17756-4	Mounting Bracket	1
AG	20042	Tube Fitting	4
AH	OP179-6	Swivel Union	1

ELECTRIC CONSOLE

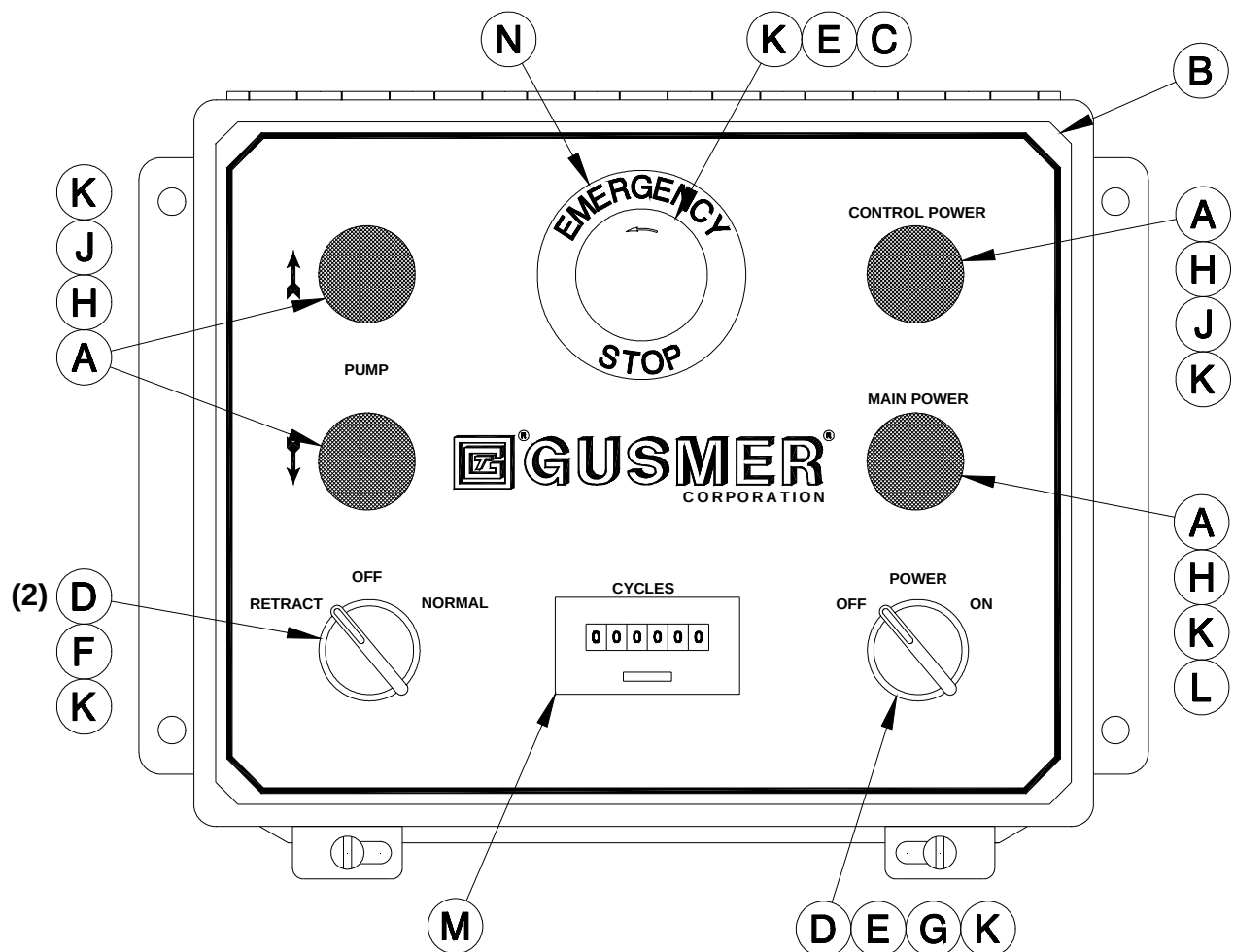


Figure 2. Electric Console, (Part Number 17670-1), Exploded View

NOTE: Consult the Electrical Schematic section of this manual for Electrical Components not called out in this view.

TABLE 2. ELECTRIC CONSOLE, (PART NUMBER 17670-1), PARTS

Reference Letter	Part Number	Description	Quantity
A	0662A	Incandescent Bulb	4
B	17670-2	Bezel	1
C	6690-16-129	Red Mushroom Switch	1
D	6690-16-130	Switch Block	2
E	6690-16-131	Switch Block	2
F	6690-16-133	Selector Switch	1
G	6690-16-135	Selector Switch	1
H	6690-19-22-1	Light Base	4
J	6690-19-22-2	Amber Light	3
K	6690-19-22-3	Latch	7
L	6690-19-22-4	Clear Lens	1
M	9651-6-2	Counter	1
N	L0257	Emergency Stop Label	1

16:1 RATIO AIR MOTOR

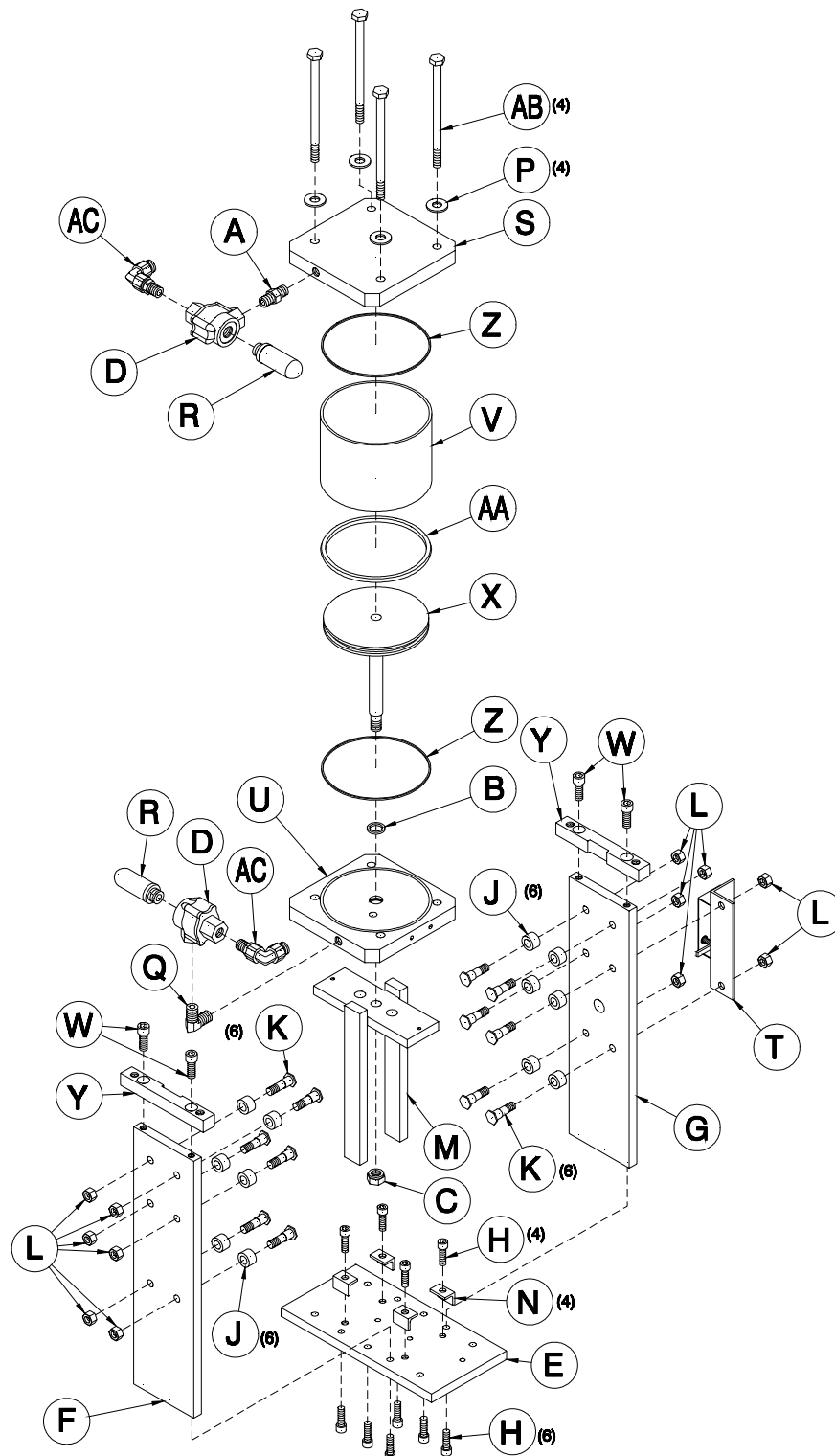


Figure 3. 16:1 Ratio Air Motor, (Part Number 17775), Exploded View

TABLE 3. 16:1 RATIO AIR MOTOR, (PART NUMBER 17775), PARTS

Reference Letter	Part Number	Description	Quantity
A	0466A	Hex Nipple	1
B	0551	O-Ring	1
C	0557	Piston Rod Nut	1
D	0562-12	Exhaust Valve	2
E	0751	Proportioning Unit Base	1
F	0752	Air Cylinder Upright	1
G	0753	Air Cylinder Upright-(Switch Side)	1
H	0754	Socket Head Cap Screw	10
J	0755-1	Bearings	12
K	0755-2	Cam Roller Stud	12
L	0756	Hex Nut	12
M	0757A	Pump Yoke	1
N	0765	Pump Mounting Bracket	4
P	1516A-3	Washer	4
Q	14501-20	Elbow	1
R	17002	Muffler	2
S	17745-1	Air Cylinder Top Plate	1
T	57745-10	Reversing Switch Assembly	1
U	17745-2	Air Cylinder Bottom Plate	1
V	17745-3	Air Cylinder	1
W	17745-4	Socket Head Cap Screw	4
X	17745-5	Air Piston W/Rod	1
Y	17745-6	Air Cylinder Adapter	2
Z	17745-7	O-Ring	2
AA	17745-8	O-Ring	1
AB	17745-9	Hex Head Cap Screw	4
AC	20042	Tube Fitting	2

Air Cylinder Rebuild Kit (Part # 17745-3-1)- Includes B, Z, AA, & Air Cylinder Lubricant (Part #553-2). Order as required from your local distributor.

Exhaust Valve Repair Kit (Part # 0562-12-1-D)- Order as required from your local distributor

REVERSING SWITCH

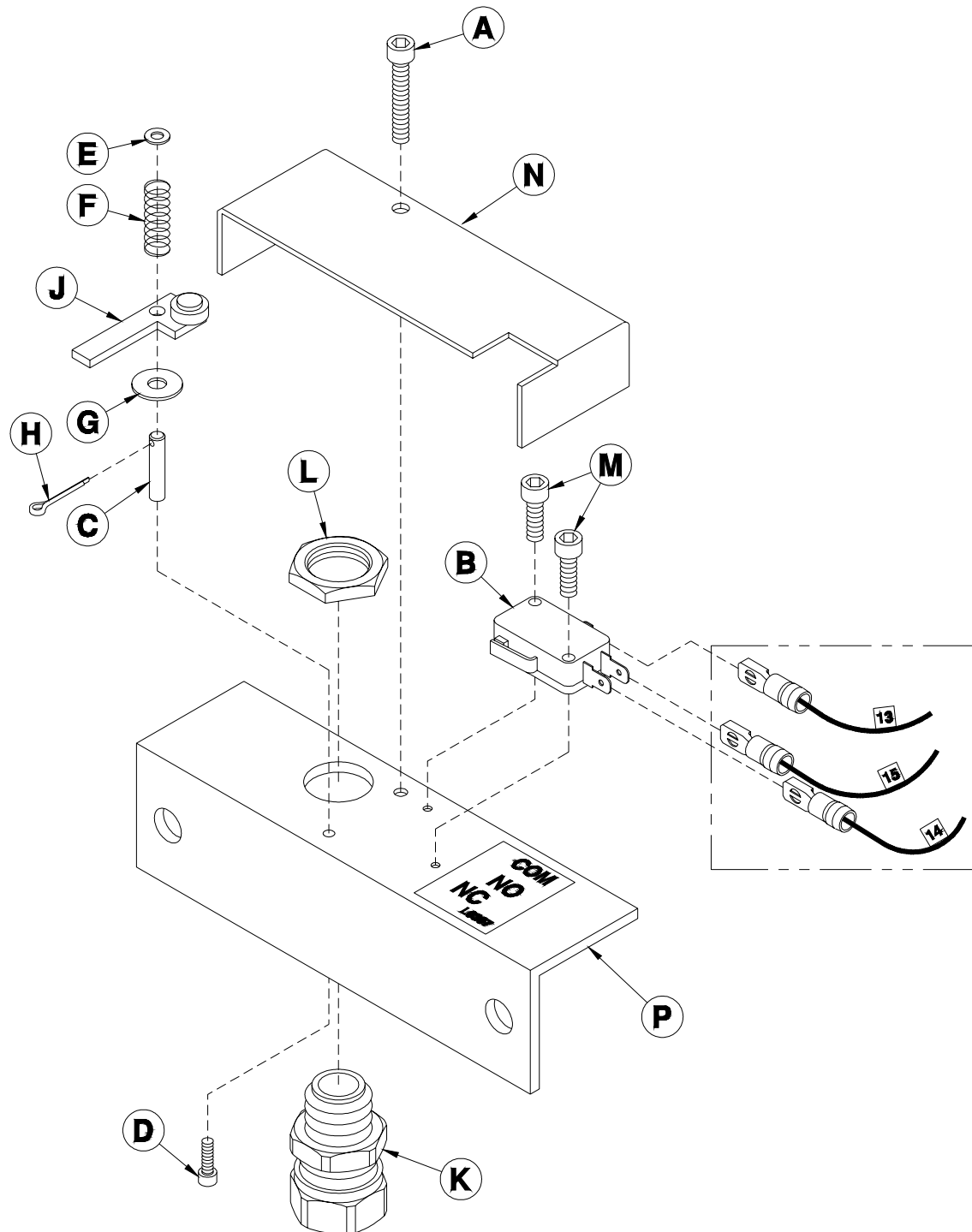


Figure 4. Reversing Switch, (Part Number 57745-10), Exploded View

TABLE 4. REVERSING SWITCH, (PART NUMBER 57745-10), PARTS

Reference Letter	Part Number	Description	Quantity
A	577-3	Socket Head Cap Screw	1
B	578A	Reversing Switch Cover	1
C	578A-1	Socket Head Cap Screw	2
D	579-2	Pivot Arm	1
E	579-3	Socket Head Cap Screw	1
F	579-4	Flat Washer	1
G	579-5	Spring	1
H	579-6	Fiber Washer	1
J	579-7	Cotter Pin	1
K	579A-1	Reversing Switch Lever	1
L	5621-136-22	Straight Connector	1
M	5621-136-24	Locknut	1
N	57577	Reversing Switch Cover	1
P	57578	Reversing Switch Bracket Assembly (Includes C, D, and E)	1

PROPORTIONING PUMP

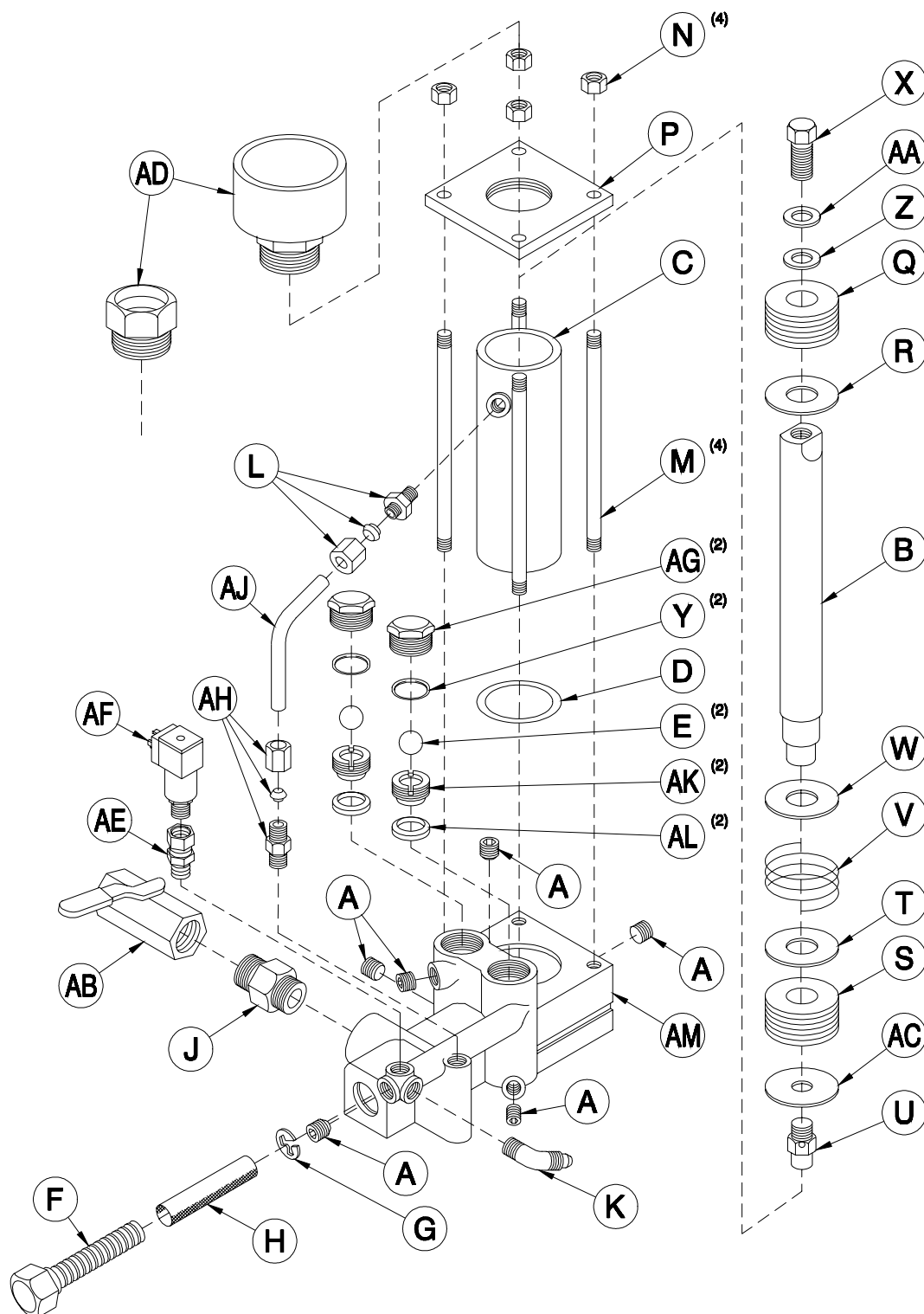


Figure 5. Proportioning Pump, (Part Number 17400/17450-60), Exploded View

TABLE 5. PROPORTIONING PUMP, (PART NUMBER 17400/17450-60), PARTS

Reference Letter	Part Number	Description	Quantity
A	0377	Pipe Plug	6
B	0451A-60	Pump Piston Rod	1
C	0452B-60	Pump Cylinder	1
D	0453	O-Ring	1
E	0455	Valve Ball	2
F	0460	Screen Screw	1
G	0461	Snap Ring	1
H	0462	Pump Screen	1
J	0463	Hex Nipple	1
K	Not Used	Hose Elbow	1
L	0470	Tube Nipple	1
M	56427	Tie Rod	4
N	0213-1	Hex Nut	4
P	0474	Cylinder Top	1
Q	0476-60	Packing Set	1
R	0477-60	Packing Support Washer	1
S	0478A-60	Packing Set	1
T	0479-60	Packing Support Washer	1
U	0480D-60/40	Packing Retainer Bolt	1
V	0481-60/48	Conical Spring	1
W	0482-60	Spring Retainer Washer	1
X	0483-7/16	Hex Head Cap Screw	1
Y	0485	O-Ring	2
Z	0486-7/16	Washer	1
AA	Not Used	Washer	1
AB	0487A	Ball Valve	1
AC	0488-60	Packing Retainer Washer	1
AD	0475-60	R-Packing Nut	1
	0489-60	A-Packing Nut w/Lube Cup	1
AE	0562-15	Swivel Union	1
AF	6690-16-12-2	Pressure Switch	1
AG	17402	Check Valve Retainer	2
AH	17404	Tube Fitting	1
AJ	17405	Crossover Tube w/Ferrule	1
AK	17406	Check Valve Seat	2
AL	17407	Check Valve Seal	2
AM	17428	Resin Pump Base (Includes A)	1
	17478	Iso Pump Base (Includes A)	1

ELECTRICAL SCHEMATIC DIAGRAMS

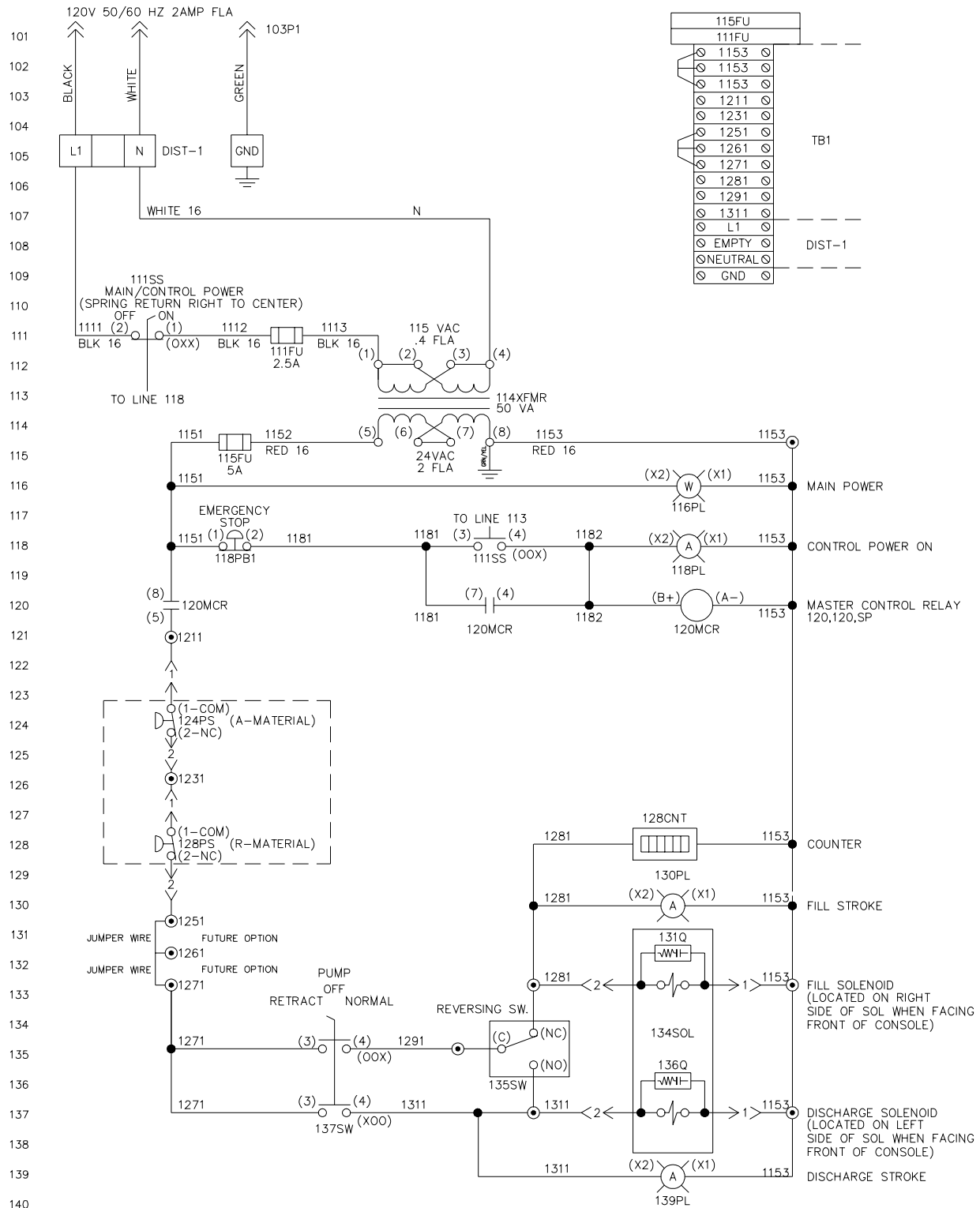


Figure 6. FF-1600 with out Heat Electrical Schematic, (SD17000C-1)

TABLE 6. FF-1600 WITH OUT HEAT ELECTRICAL SCHEMATIC, (SD17000C-1), PARTS

Reference Number	Part Number	Description	Quantity
	17670-1-1	Console	1
	17670-1-2	Subplate	1
	17670-2	Bezel	1
LINE CORD	OP304-3-1	110V Line Cord	1
DIST-1	6690-20-28-8	Terminal Block	1
GND	6690-20-28-11	Ground Block	1
111SS	6690-16-135	Selector Switch	1
	6690-19-22-3	Latch	1
	6690-16-130	Switch Block	1
	6690-16-131	Switch Block	1
111FU	6690-20-28-1	Terminal Fuse Block	1
	6690-24-101	2.5 Amp Fused	1
114XFMR	OP304-9	Transformer (115V)	1
115FU	6690-20-28-1	Terminal Fuse Block	1
	6690-24-15	5 Amp Fuse	1
116PL	6690-19-22-1	Light Base	1
	6690-19-22-3	Latch	1
	6690-19-22-4	Clear Lens	1
	0662A	24V Bulb	1
118PB1	6690-16-129	Red Mushroom Switch	1
	6690-19-22-3	Latch	1
	6690-16-131	Switch Block	1
	L0257	Emergency Stop Label	1
118PL	6690-19-22-1	Light Base	1
	6690-19-22-3	Latch	1
	6690-19-22-2	Amber Lens	1
	0662A	24V Bulb	1
120MCR	6690-1-48	3 Pole; 24V Relay	1
	6690-1-27	Relay Base	1
TB1	6690-20-28-2	Terminal Blocks	4
124PS	17001	Pressure Switch	1
	6690-16-76-1	Din Connector	1
128PS	17001	Pressure Switch	1
	6690-16-76-1	Din Connector	1
128CONT	9651-6-2	Counter	1
130PL	6690-19-22-1	Light base	1
	6690-19-22-3	Latch	1
	6690-19-22-2	Amber Lens	1
	0662A	24V Bulb	1
131Q	6690-21-3	Quencharc	1
134SOL	6113-109	Directional Valve	1
	8680-3-2	DIN Connector	2
135SW	0578A	Reversing Switch	1
136Q	6690-21-3	Quencharc	1
137SW	6690-16-133	3 Position Selector Switch	1
	6690-19-22-3	Latch	1

Reference Number	Part Number	Description	Quantity
	6690-16-130	Switch Block (Normally Open)	1
	6690-16-131	Switch Block (Normally Closed)	1
139PL	6690-19-22-1	Light Base	1
	6690-19-22-3	Latch	1
	6690-19-22-2	Amber Lens	1
	0662A	24V Bulb	1

INSTRUCTION MANUAL DISCREPANCY REPORT

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