

**EVANS MACHINERY, INC.**

P.O. Box 1406 - Glendale AZ 85311

623-934-7294

**EZY OVERARM ROUTER MODEL 2480/2470**

**INSTALLATION & MAINTENANCE MANUAL**



**CAUTION:**

USE FUSEABLE DISCONNECT TO TURN OFF POWER AND LOCK-OUT WHEN SERVICING MACHINE

**POWER REQUIREMENTS**

Electrical : standard - 220/230 V, 3 Phase, 15 Amp service  
special - 480 V, 3 Phase, 10 Amp service

**Note to electrician:** when wiring machine, check for proper router rotation.

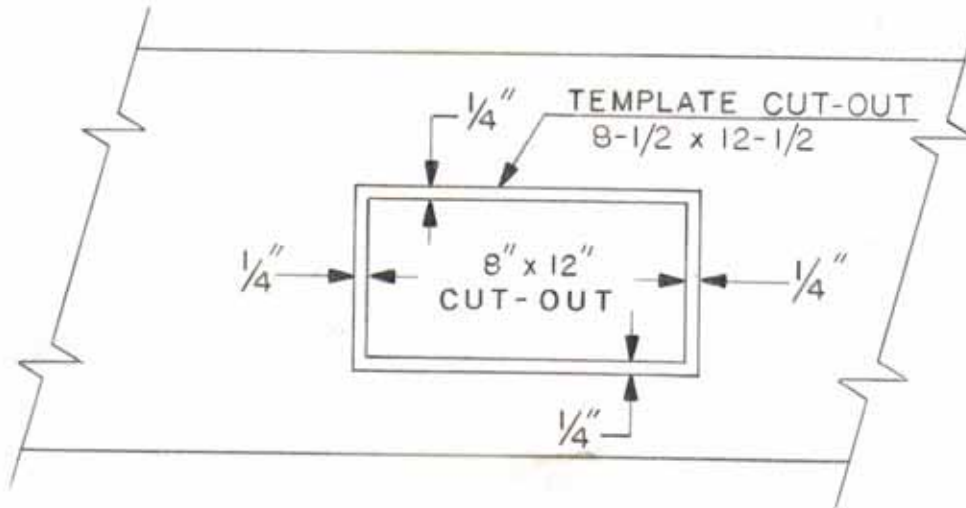
Air : 60 - 80 PSI, 2 CFM

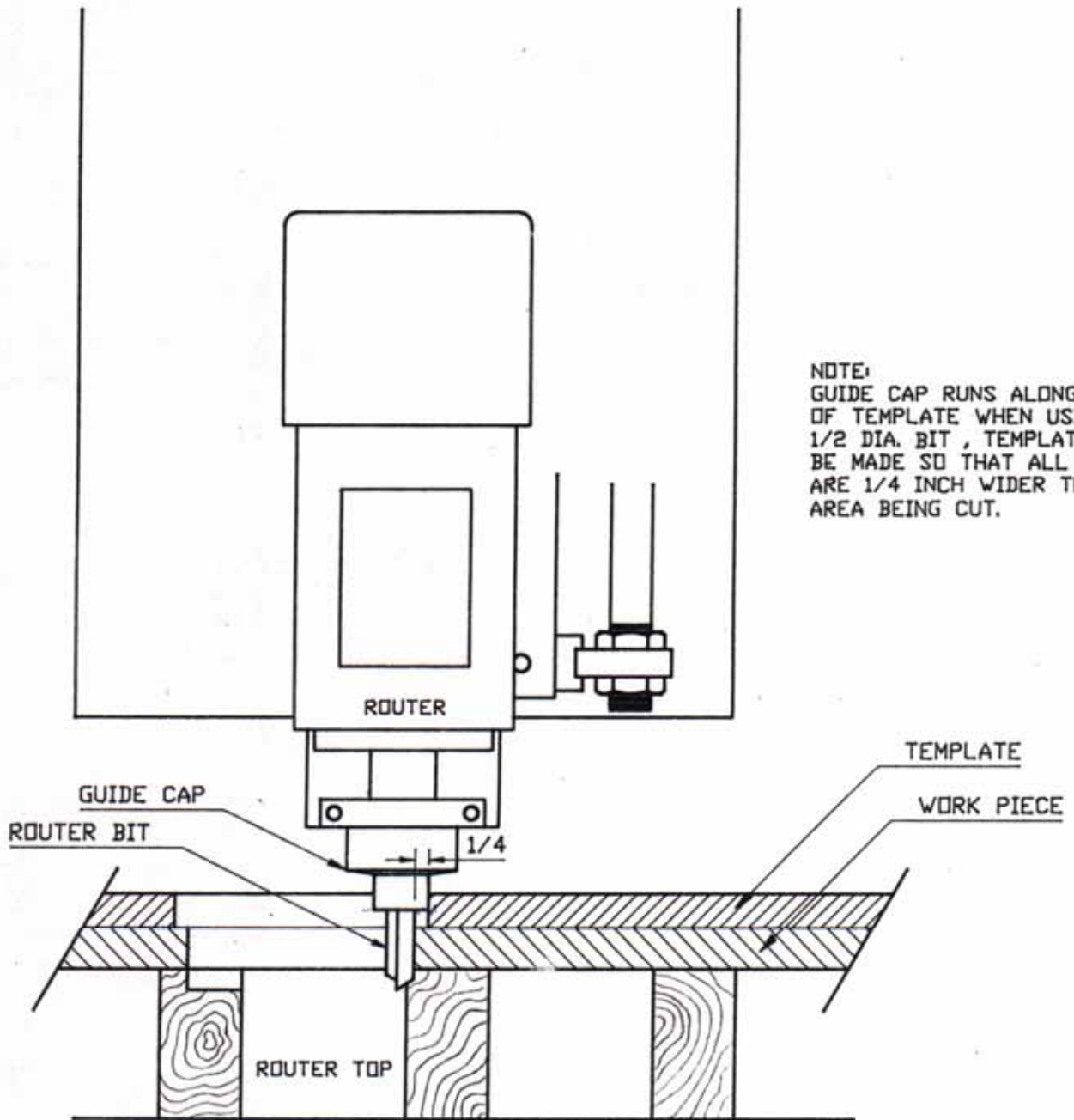
**INSTALLATION**

1. Locate machine in place and anchor to floor.
2. Adjust the level of machine with the rear left hand corner of the frame low. This will help keep router head to that area when not in use.

**SET UP**

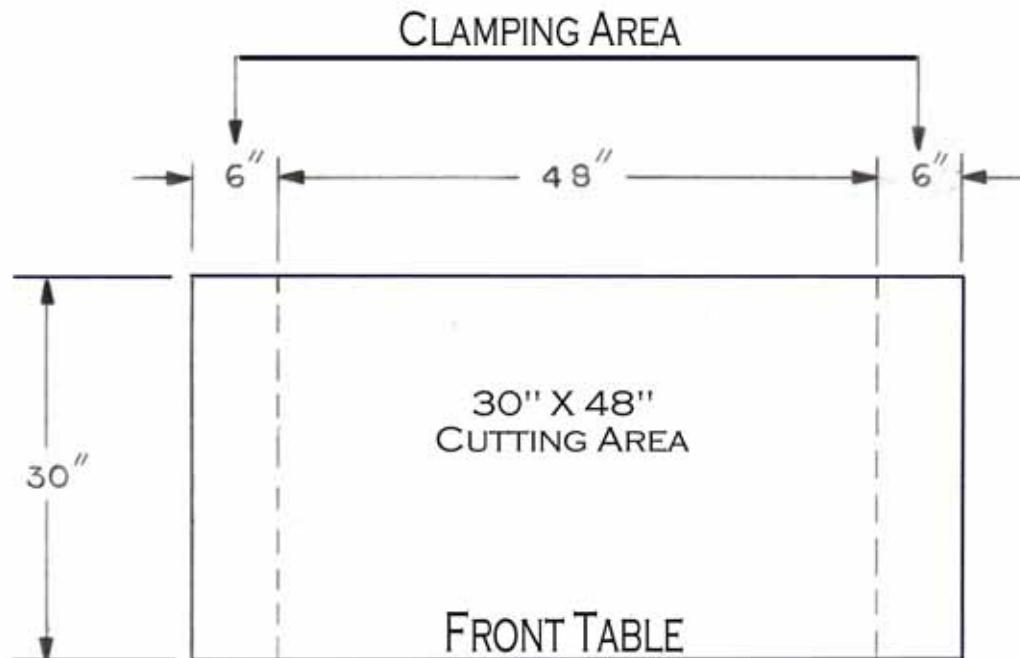
1. Templates will be required for routing with this machine. Template configuration will depend on size of router bit to be used. Typical bit size is 1/2" diameter - 2 1/2" long. For this diameter allows 1/4" on each side of template for guiding with machine bell guide cap.





### SET UP (continued)

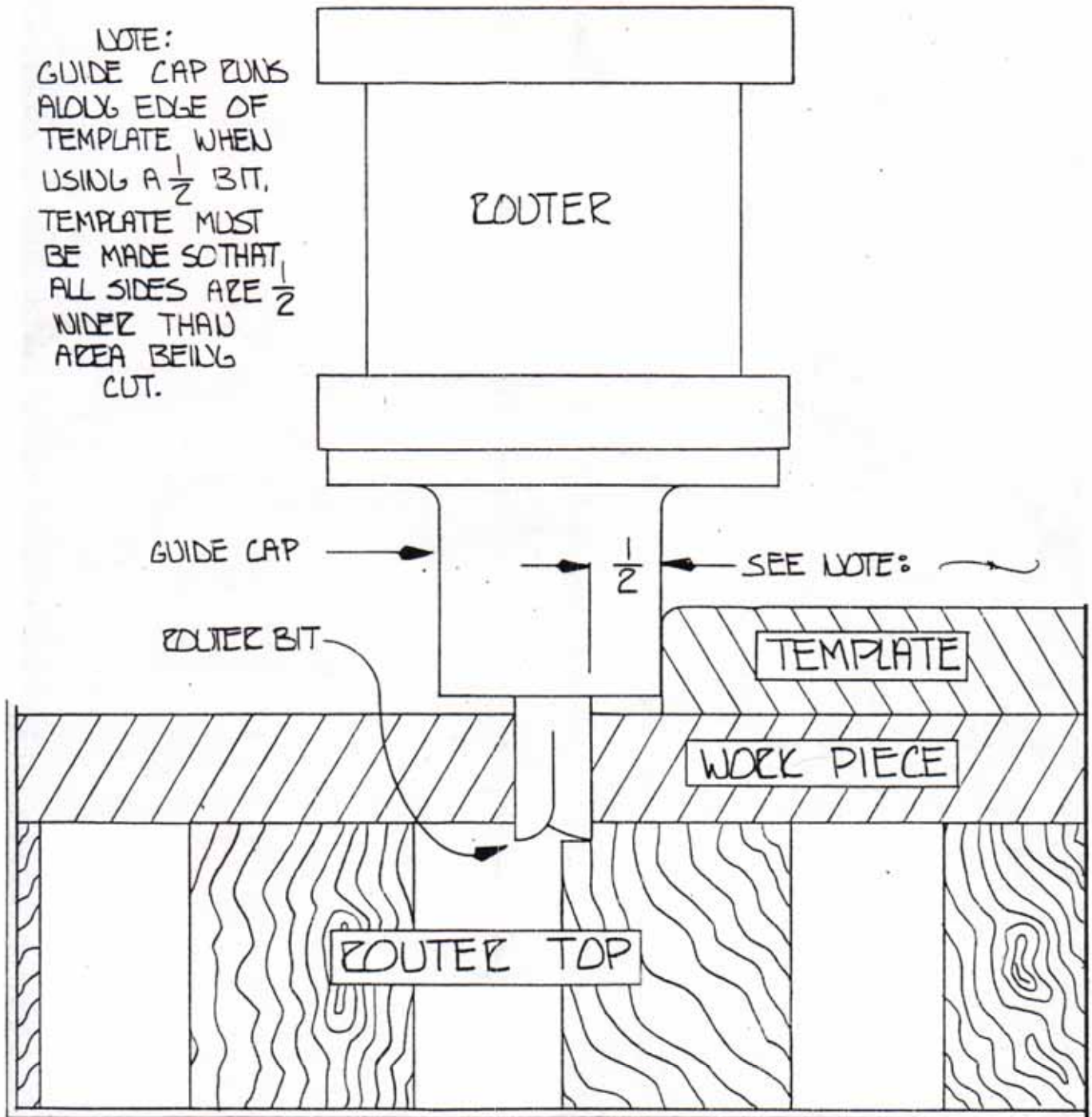
2. Template outside overall dimensions must be minimum of 60" long to allow for hold down clamping.
3. Maximum cutout area is 30" x 48".
4. When in process of routing always operate in a clockwise rotation.



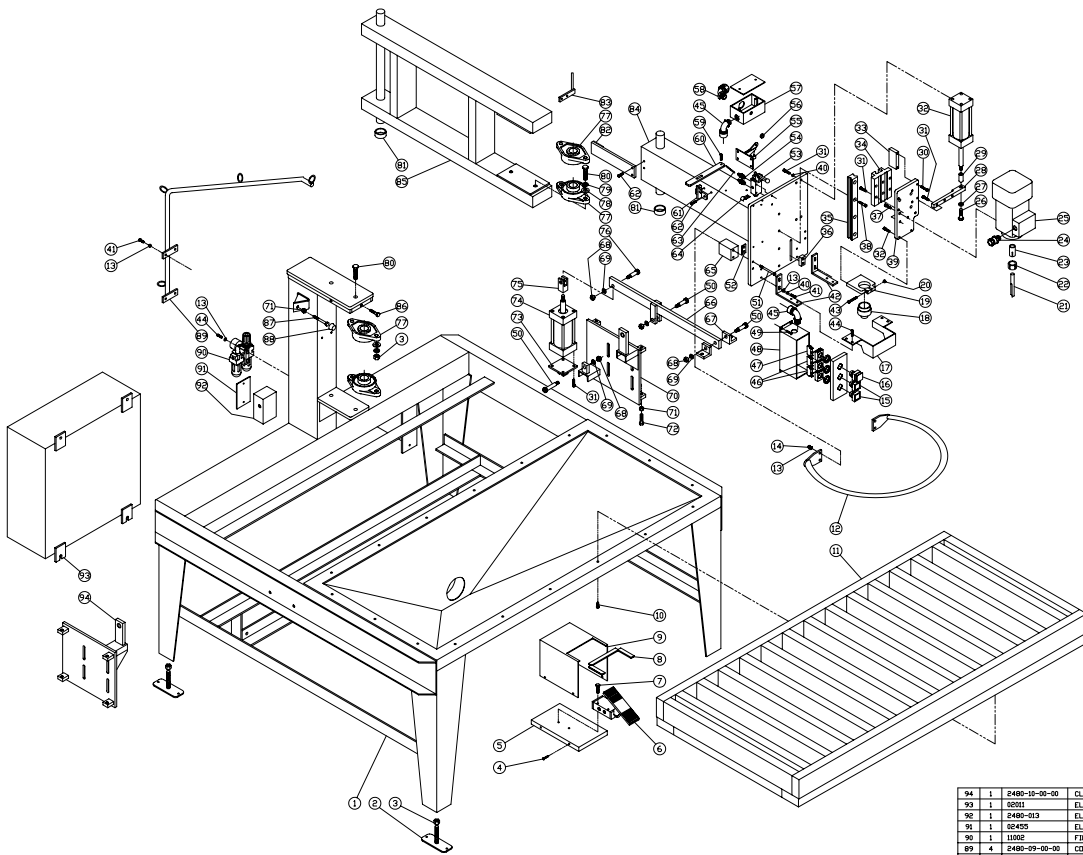
### MAINTENANCE

1. Lube-air unit located on back side of machine filters regulates and lubricates air system (air cylinders and valves). Adjust oil for one drop of oil every 2-3 cycles on air cylinders. **DRAIN AND CLEAN FILTER REGULARLY (see lube-air unit brochure)**
2. Grease swing arm bearings every 2-3 months.
3. Grease router head up down bearing regularly. **KEEP FULL DO NOT OVER GREASE.**


NOTE:  
GUIDE CAP RUNS  
ALONG EDGE OF  
TEMPLATE WHEN  
USING A  $\frac{1}{2}$  BIT.  
TEMPLATE MUST  
BE MADE SO THAT  
ALL SIDES ARE  $\frac{1}{2}$   
WIDER THAN  
AREA BEING  
CUT.







82	1	2480-05-00-00	ARM STOP
81	2	2480-003	SPACER
80	8	4007	1/2-13 x 1-1/2 HHCS
79	8	4809	1/2 LOCKWASHER
78	8	5007	1/2 FLAT WASHER
77	4	03519	BEARING 1 1/4 DIA
76	2	4009	1/2 x 100 SHOULDER BOLT
75	2	2480-002	AIR CYLINDER CLEVIS
74	2	0602	AIR CYLINDER
73	2	163-00	CLEVIS ASSEMBLY
72	8	4004	3/8-16 x 2-1/2 HHCS
71	13	5700	3/8-16 HEX NUT
70	1	2480-10-00-00	CLAMP PLATE ASSEMBLY - R/H
69	8	5205	3/8 FLAT WASHER
68	8	5410	3/8-16 CONE LOCKNUT
67	4	2480-005	CLAMP FOOT
66	2	2480-11-00-00	CLAMP ARM ASSEMBLY
65	2	2480-027	HANDLE SPACER
64	1	03079	3/8 STRAP
63	1	03557	CHAIN 3'
62	2	3901	1/4-20 x 1/2 HHCS
61	1	2480-19-00-00	RELEASE HOSE BRACKET
60	1	2480-022	RELEASE HANDLE
59	1	4405	RHD-28 x 3/4 P/MSL
58	1	03139	LT CONNECTOR 3/4, 90 DEG
57	1	2480-014	ELECTRICAL BOX
56	1	0906	3/8 GRINDMET
55	1	2480-07-00-00	SAFETY LATCH ASSEMBLY
54	2	07142	VALVE SPEED CONTROL
53	1	07029	VALVE 3-WAY
52	1	2480-025	WASHER PLATE
51	1	4003	1/4-20 x 3-1/2 HHCS
50	6	4830	1/2 x 1-1/4 SHOULDER BOLT
49	4	4402	RHD-28 x 3/8 P/MSL
48	1	2480-024	SWITCH BOX
47	1	02669	CONTACT BLOCK - NC
46	2	02668	CONTACT BLOCK - NO
45	2	02139	LT CONNECTOR 3/8, 90 DEG
44	4	4401	1/4-20 x 3/8 P/MSL
43	1	36041	1/4-20 x 1-1/2 SHCS
42	1	2480-03-00-00	GUARD MOUNT BRACKET
41	8	4001	1/4-20 x 3/4 HHCS
40	4	4805	1/4 LOCKWASHER
39	1	2480-056	ROUTER MOUNT PLATE
38	4	36066	5/16-24 x 100 SHCS
37	4	36021	MB x 15 MM SHCS
36	1	2480-019	ROUTER STOP PLATE
35	1	03663	LINEAR BEARING TRACK
34	1	03664	LINEAR BEARING BLOCK
33	1	2480-021	STOP PLATE
32	1	36062	AIR CYLINDER
31	11	36065	5/16-24 x 3/4 SHCS
30	2	36040	1/4-20 x 1-1/4 SHCS
29	1	2480-021	AIR CYLINDER EXTENSION
28	1	2480-021	CYLINDER MOUNT
27	1	48008	7/16 LOCKWASHER
26	1	4015	7/8-20 x 1-1/4 HHCS
25	1	08225	ROUTER
24	1	02126	CONNECTOR 3/8, STRAIGHT
23	1	08230	ROUTER COLLET 1/2"
22	1	08231	COLLET NUT
21	1	0804	ROUTER BIT 1/2"
20	1	54006	1/4-20 CONE LOCKNUT
19	1	2480-017	GUIDE HOLDER
18	1	2480-018	TEMPLATE GUIDE
17	1	2480-026	ROUTER GUIDE
16	1	0161	SWITCH EMERGENCY STOP
15	2	01645	OPERATOR SWITCH
14	4	57000	1/4-20 HEX NUT
13	12	52050	1/4 FLAT WASHER
12	1	2480-12-00-00	HANDLE ASSEMBLY
11	1	2480-04-00-00	TABLE
10	14	4200	1/4 x 100 LAG SCREW
9	1	020-008	FOOT SWITCH COVER
8	1	09050	RUBBER EDGE TRIM
7	2	4003	5/8-18 x 100 HHCS
6	1	07015	4-WAY FOOT VALVE
5	1	020-005	BASE PLATE
4	4	57012	1/2-13 x 1-1/2 HHCS
3	8	57012	1/2-13 HEX NUT
2	4	316-20	FOOT ASSEMBLY
1	1	2480-01-00-00	MAIN FRAME ASSEMBLY
0	1		

EVANS  MACHINERY, INC.

2480 ROUTER

EXPLODED VIEW

IMAGE NUMBER  
2480-EXP 4

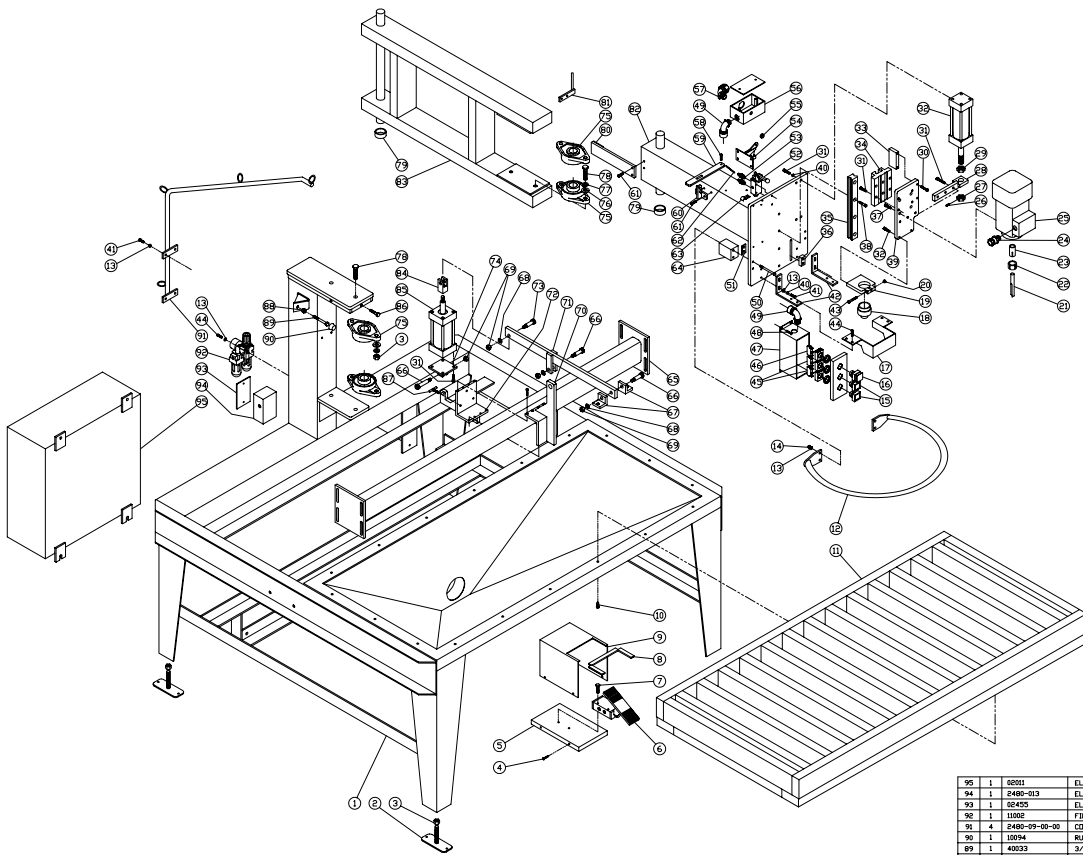
84	1	2480-10-00-00	CLAMP PLATE ASSEMBLY - L/H
83	1	5801	ELECTRICAL BOX
82	1	2480-013	ELECTRICAL BOX COVER
81	1	02425	FILTER REGULATOR
80	4	2480-09-00-00	CORD GUIDE ASSEMBLY
79	1	10794	RUBBER TIP
78	1	40020	3/8-16 x 300 HHCS
77	3	40019	3/8-16 x 1-1/4 HHCS
76	1	2480-02-00-00	BACK SWITCH ASSEMBLY
75	1	2480-17-00-00	FRONT SWITCH ASSEMBLY
74	1	2480-15-00-00	LOCK PIN
73	1		
72	1		
71	1		
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8	1		
7	2		
6	1		
5	1		
4	4		
3	8		
2	4		
1	1		
0	1		

REV. JULY 93

2480 ROUTER

EXPLODED VIEW

IMAGE NUMBER  
2480-EXP 4

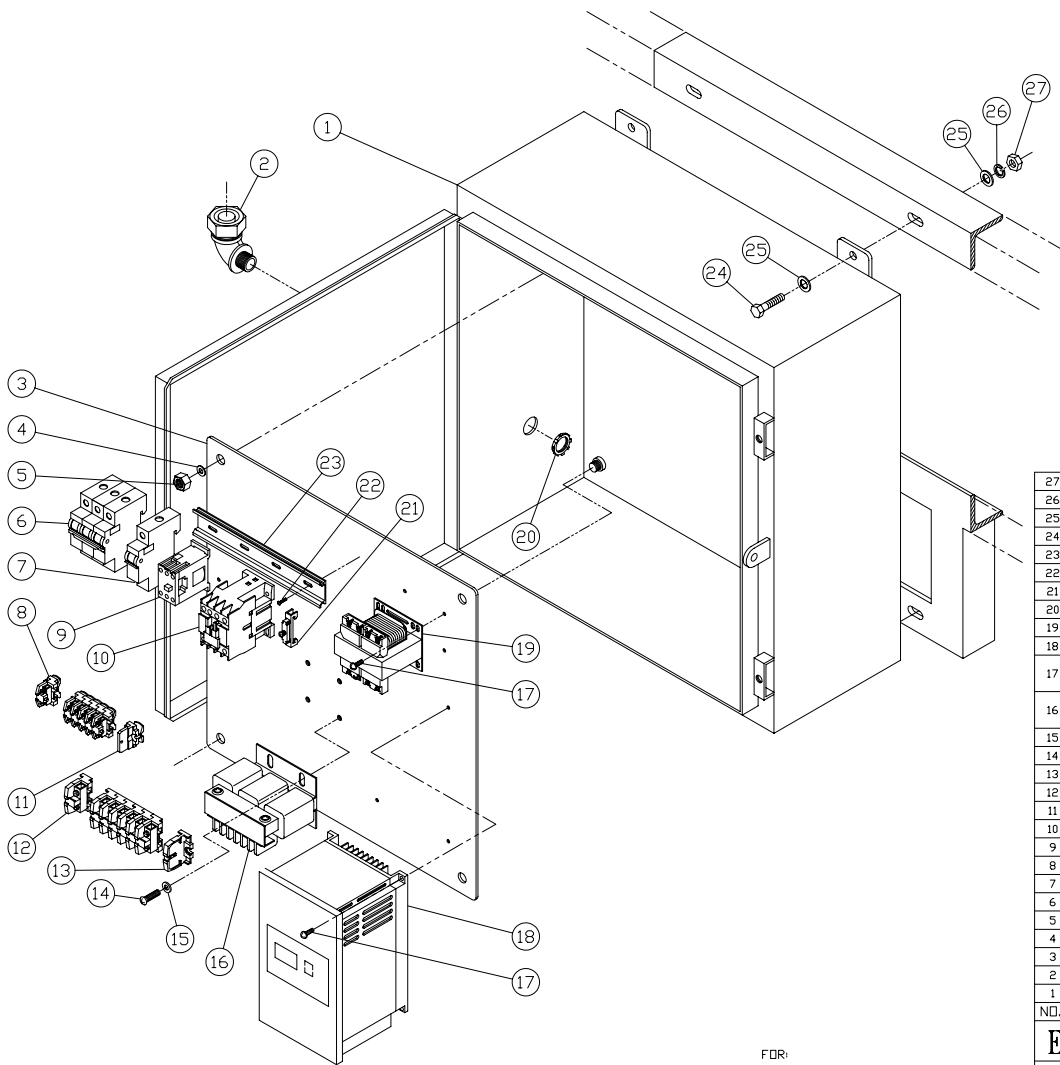


95	1	58001	ELECTRICAL BOX	5	1	0820-005	BASE PLATE
94	1	2480-003	ELECTRICAL BOX	4	4	29012	1/2-20 x 1/2 SHCS
93	1	58425	ELECTRICAL BOX COVER	3	8	27012	1/2-13 HEX NUT
92	1	11002	FILTER REGULATOR	2	4	316-20	FOOT ASSEMBLY
91	4	2480-09-00-00	CORN GUIDE ASSEMBLY	1	1	2480-01-00-00	MAIN FRAME ASSEMBLY
90	1	15094	RUBBER TIP	NDL QTY.	PART NO.	DESCRIPTION	
89	1	40033	3/8-16 x 3.00 HHCS				
88	1	27001	3/8-16 HEX NUT				
87	6	2700-02-01-00	TEE HANDLE ASSEMBLY				
86	3	40019	3/8-16 x 1-1/4 HHCS				
85	2	56205	AIR CYLINDER				
84	2	183-00	CLEVIS ASSEMBLY				
83	1	2480-02-00-00	BACK SWIVEL ASSEMBLY				
82	1	2480-17-00-00	FRONT SWIVEL ASSEMBLY				
81	1	2480-15-00-00	LOCK PIN				
80	1	2480-05-00-00	ARM STOP				
79	2	2480-003	SPACER				
78	8	40077	1/2-13 x 1-1/2 HHCS				
77	8	40009	1/2 LOCKWASHER				
76	8	20007	1/2 FLAT WASHER				
75	4	02519	BEARING, 1-1/4 DIA				
74	2	2480-001	AIR CYLINDER CLEVIS				
73	2	40009	1/2 x 1.00 SHOULDER BOLT				
72	2	2480-23-00-00	BOTTOM SLIDER ASSEMBLY				
71	2	2480-11-00-00	CLAMP ARM ASSEMBLY				
70	2	2480-22-00-00	TOP SLIDER ASSEMBLY				
69	8	24010	3/8-16 ENH LOCKNUT				
68	8	20205	3/8 FLAT WASHER				
67	4	2480-005	CLAMP FOOT				
66	6	40230	1/2 x 1-1/4 SHOULDER BOLT				
65	1	2480-21-00-00	CLAMP TRACK ASSEMBLY				
64	2	2480-007	HANDLE SPACER				
63	1	08293	3/8 STRAP				
62	1	02557	CHAIN, 3"				
61	2	29011	1/4-20 x 1/2 SHCS				
60	1	2480-19-00-00	RELEASE HANDLE BRACKET				
59	1	2480-022	RELEASE HANDLE				
58	1	44002	HD-32 x 3/4 FRANK				
57	1	08132	LT CONNECTOR, 3/4, 90 DEG				
56	1	2480-024	ELECTRICAL BOX				
55	1	02006	2/8 GRIPPER				
54	1	2480-07-00-00	SAFETY LATCH ASSEMBLY				
53	2	07142	VALVE, SPEED CONTROL				
52	1	07029	VALVE, 3-WAY				
51	1	2480-020	WASHER PLATE				
50	4	40021	1/4-20 x 3-1/2 HHCS				
49	2	08230	LT CONNECTOR, 3/8, 90 DEG				
48	4	44002	HD-32 x 3/4 FRANK				
47	1	2480-024	SWITCH BOX				
46	1	02649	CONTACT BLOCK, NC				
45	1	02648	CONTACT BLOCK, NO				
44	4	44001	1/4-20 x 3/8 FRANK				
43	1	36041	1/4-20 x 1-1/2 SHCS				
42	2	2480-20-00-00	GUARD MOUNT BRACKET				
41	8	40001	1/4-20 x 3/4 HHCS				
40	4	48005	1/4 LOCKWASHER				
39	1	2480-026	ROUTER MOUNT PLATE				
38	4	36066	5/16-24 x 1.00 SHCS				
37	4	36021	M8 x 15 MM SHCS				
36	1	2480-019	ROUTER STOP PLATE				
35	1	02657	LINEAR BEARING TRACK				
34	1	02657	LINEAR BEARING BLOCK				
33	1	2480-061	STOP PLATE				
32	1	36062	AIR CYLINDER				
31	11	36063	5/16-24 x 3/4 SHCS				
30	2	36040	1/4-20 x 1-1/4 SHCS				
29	2	26095	3/4-10 HEX JAM NUT				
28	1	2480-18-00-00	CYLINDER MOUNT				
27	1	0100-031	MODIFIED HEX JAM NUT				
26	1	2480-01	1/4-20 x 1/4 SET SCREW				
25	1	08225	ROUTER				
24	1	08216	CONNECTOR, 3/8, STRAIGHT				
23	1	08230	ROUTER COLLET, 1/2"				
22	1	08231	COLLET NUT				
21	1	08014	ROUTER BIT, 1/2"				
20	1	24006	1/4-20 ENH LOCKNUT				
19	1	2480-017	GUIDE HOLDER				
18	1	2480-018	TEMPLATE GUIDE				
17	1	2480-025	ROUTER GUARD				
16	1	01161	SWITCH, EMERGENCY STOP				
15	2	01165	OPERATOR SWITCH				
14	4	27000	1/4-20 HEX NUT				
13	12	20005	1/4 FLAT WASHER				
12	1	2480-12-00-00	HANDLE ASSEMBLY				
11	1	2480-04-00-00	TABLE				
10	14	42000	1/4 x 1.00 LAG SCREW				
9	1	080-008	FOOT SWITCH COVER				
8	1	09050	RUBBER EDGE TRIM				
7	2	40023	5/16-18 x 1.00 HHCS				
6	1	07015	4-WAY FOOT VALVE				
5	1	082-005	BASE PLATE				
4	4	29012	1/2-20 x 1/2 SHCS				
3	8	27012	1/2-13 HEX NUT				
2	4	316-20	FOOT ASSEMBLY				
1	1	2480-01-00-00	MAIN FRAME ASSEMBLY				

**EVANS MACHINERY, INC.**

2480 ROUTER  
EXPLODED VIEW

ISSUE NO. 3



FDR: 220 V, 3 $\phi$ , 60 Hz

27	4	57010	3/8-16 HEX NUT
26	4	48007	3/8 LOCKWASHER
25	8	52005	3/8 FLAT WASHER
24	4	40019	3/8-16 x 1-1/4 H.H.C.S.
23	1	02070	DINRAIL, 6-1/2" LG
22	2	44001	#6-32 x 3/8 P.H.M.S.
21	2	02068	END CLAMP
20	1	02222	3/4 LOCKNUT
19	1	01349	TRANSFORMER
18	12	44015	#8-32 x 3/8 P.H.M.S.
17	1	01400	FREQUENCY INVERTER, 440 V
	1	01399	FREQUENCY INVERTER, 220 V
16	1	01384	REACTOR, 440 V
	1	01385	REACTOR, 220 V
15	4	52003	1/4 FLAT WASHER
14	4	44010	1/4-20 x 3/8 P.H.M.S.
13	1	02158	END PIECE
12	7	02300	TERMINAL SECTION
11	1	02160	END PIECE
10	1	01162	CONTACT BLOCK
9	1	01130	RELAY, 120 V, 2 N.O., 0 N.C.
8	6	02303	TERMINAL SECTION
7	1	01071	CIRCUIT BREAKER, 1 POLE, 1 A
6	1	01046	CIRCUIT BREAKER, 3 POLE, 10 A
5	4	57011	7/16-14 HEX NUT
4	4	52006	7/16 FLAT WASHER
3	1	2480-015	ELECTRICAL PANEL
2	1	02132	LT. CONNECTOR, 90°, 3/4"
1	1	02011	ELECTRICAL BOX, 20" x 20" x 8"
NO.	QTY.	PART NO.	DESCRIPTION

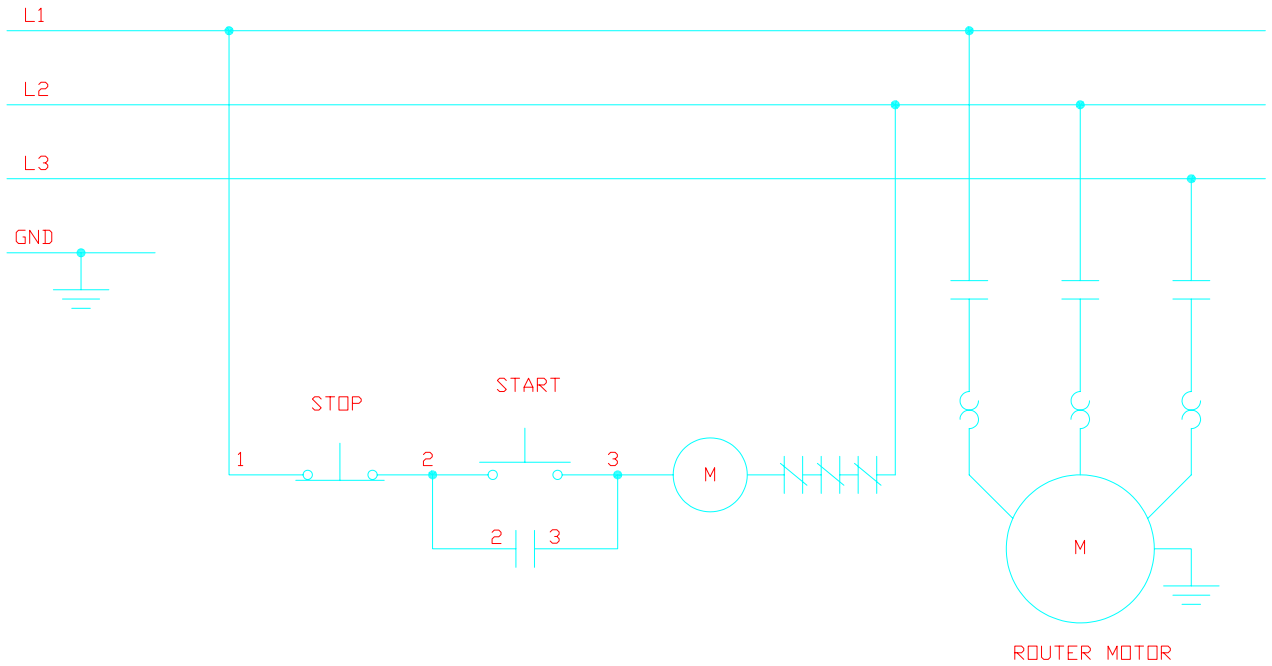
**EVANS  MACHINERY, INC.**

SCALE: 1 : 4      APPROVED BY:      DRAWN BY: G.M.C.  
DATE: APR 27, 00      REVISED: MAR 25, 03

**2480 ROUTER**  
EXPLODED VIEW

DRAWING NUMBER  
2480EXP-2

208 VAC  
 220 VAC  
 440 VAC  
 3Ø  
 60 Hz



ELECTRICAL DIAGRAM

EVANS  MACHINERY, INC.

5530N. 51ST AVE. - GLENDALE - AZ. 85301

2480 ROUTER

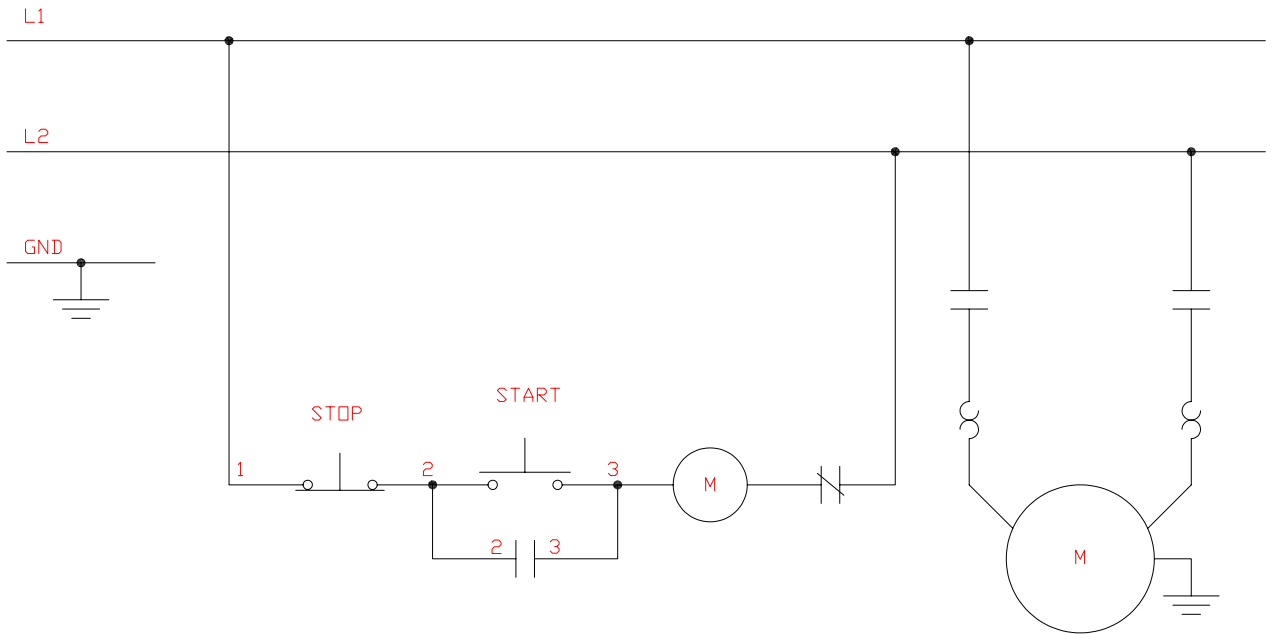
DRN. G.M.C. CHECKED

TOLERANCES UNLESS NOTED DATE DEC 2, 93

.XXX ± 0.010 SCALE NONE

.XX/FRACTION ± 0.030 2480-E

220 VAC  
1Ø  
60 Hz



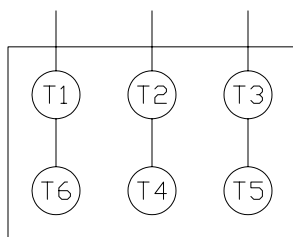
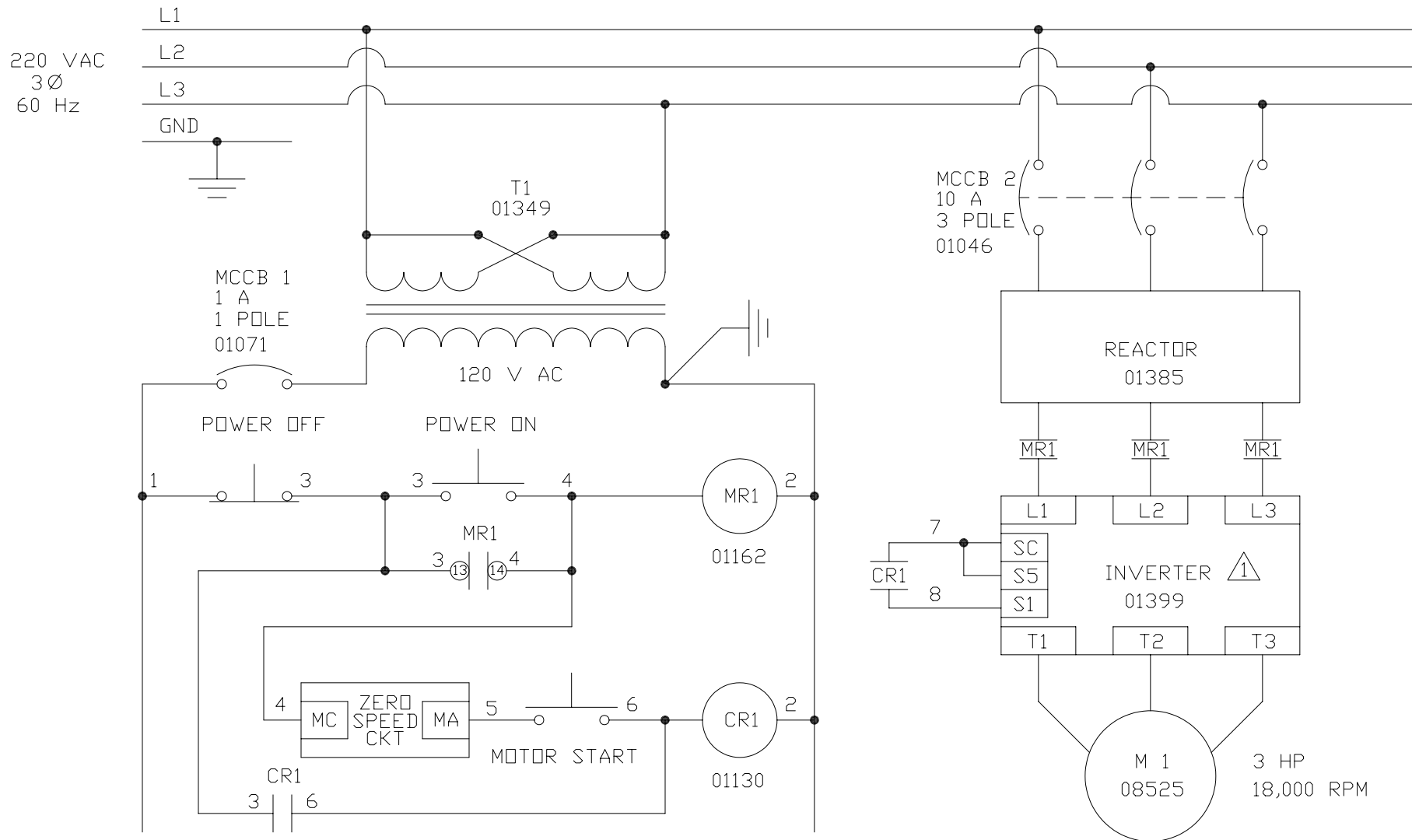
ELECTRICAL DIAGRAM

EVANS  MACHINERY, INC.

5530N. 51ST AVE. - GLENDALE - AZ. 85301

2480 ROUTER

DRN. G.M.C.	CHECKED
TOLERANCES UNLESS NOTED	DATE DEC 2, 93
.XXX ± 0.010	SCALE NONE
.XX/FRACTION ± 0.030	2480-E



MOTOR TERMINAL WIRING

NOTES:

FOR GPD 305 INVERTER

ELECTRICAL DIAGRAM

EVANS MACHINERY, INC.

5530N, 51ST AVE. - GLENDALE - AZ. 85301

2480 ROUTER

DRN. G.M.C.

CHECKED

TOLERANCES  
UNLESS NOTED

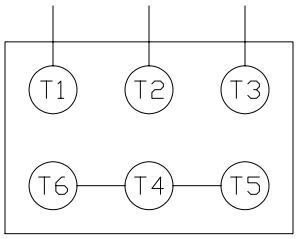
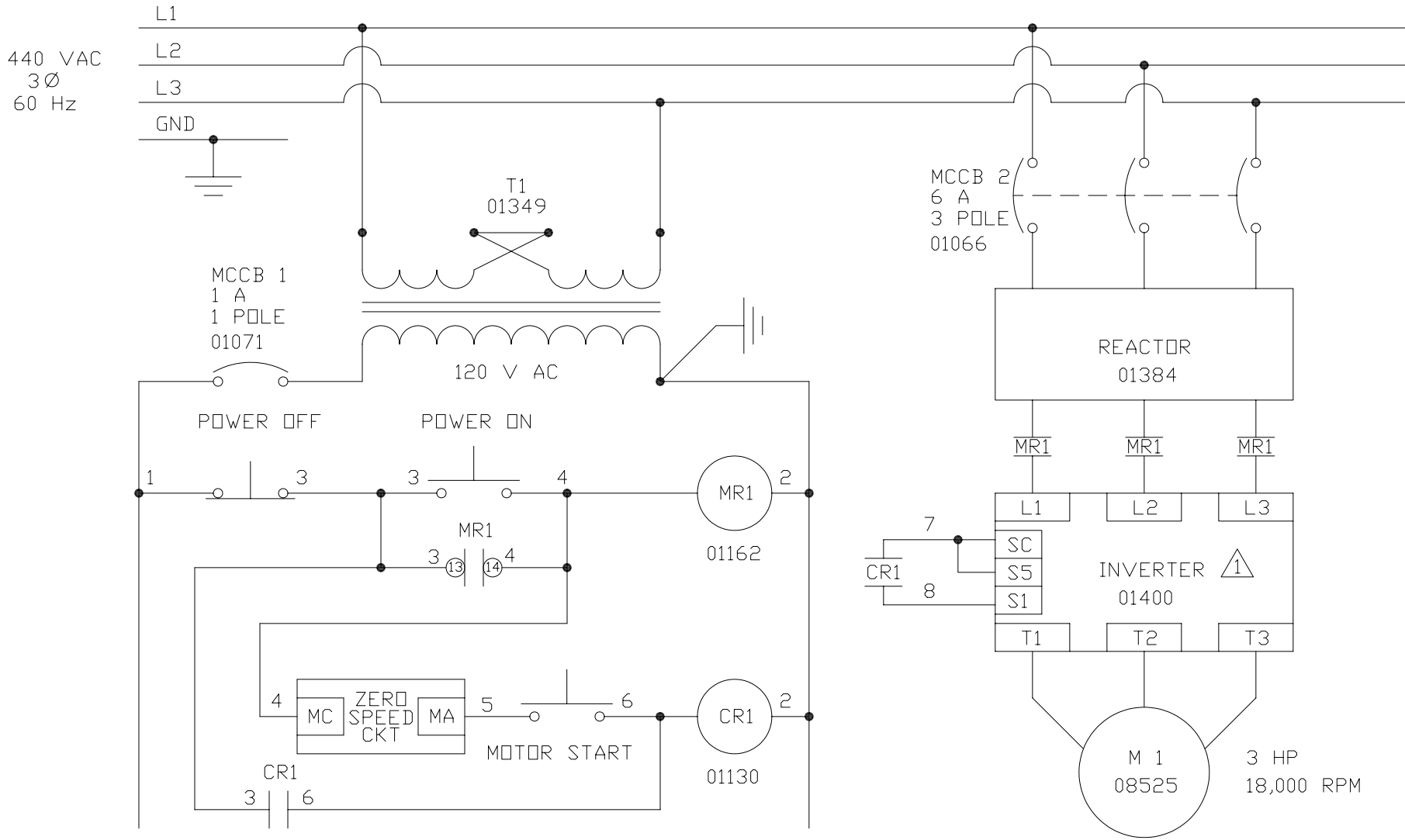
DATE OCT 31, 06

SCALE NONE

.XXX  
.XX/FRACTION

+ 0.010  
 $\pm$  0.030


2480-ELEC-1

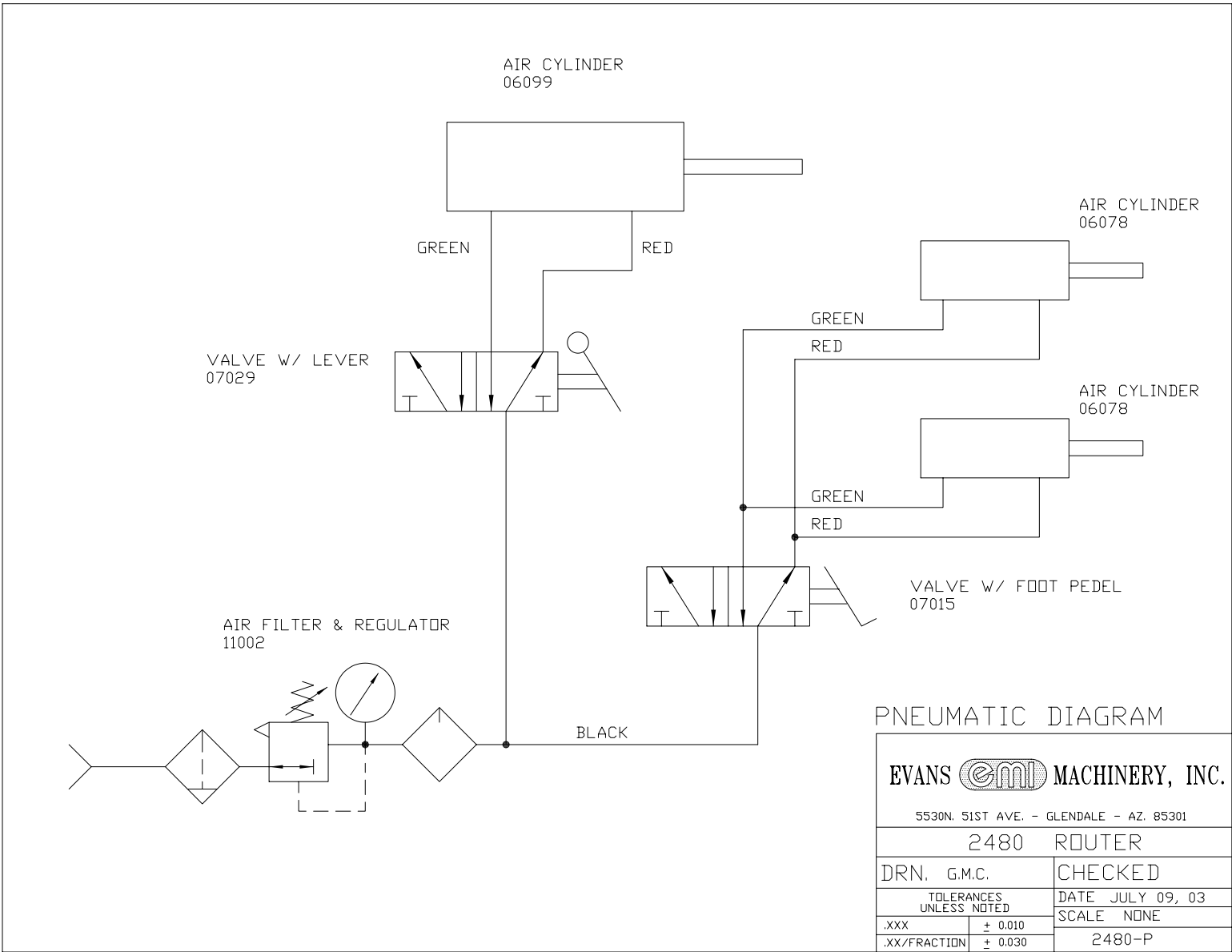


MOTOR TERMINAL WIRING


NOTES:  
 $\triangle$  1 FOR GPD 305 INVERTER

ELECTRICAL DIAGRAM

<b>EVANS  MACHINERY, INC.</b> 5530N. 51ST AVE. - GLENDALE - AZ. 85301	
<b>2480 ROUTER</b>	
DRN. G.M.C.	CHECKED
TOLERANCES UNLESS NOTED	DATE OCT 31, 06
.XXX	+ 0.010
.XX/FRACTION	$\pm$ 0.030
SCALE NONE <b>2480-ELEC-2</b>	



PNEUMATIC DIAGRAM

<b>EVANS  MACHINERY, INC.</b>	
5530N. 51ST AVE. - GLENDALE - AZ. 85301	
<b>2480 ROUTER</b>	
DRN. G.M.C.	CHECKED
TOLERANCES UNLESS NOTED	DATE JULY 09, 03
.XXX ± 0.010	SCALE NONE
.XX/FRACTION ± 0.030	2480-P