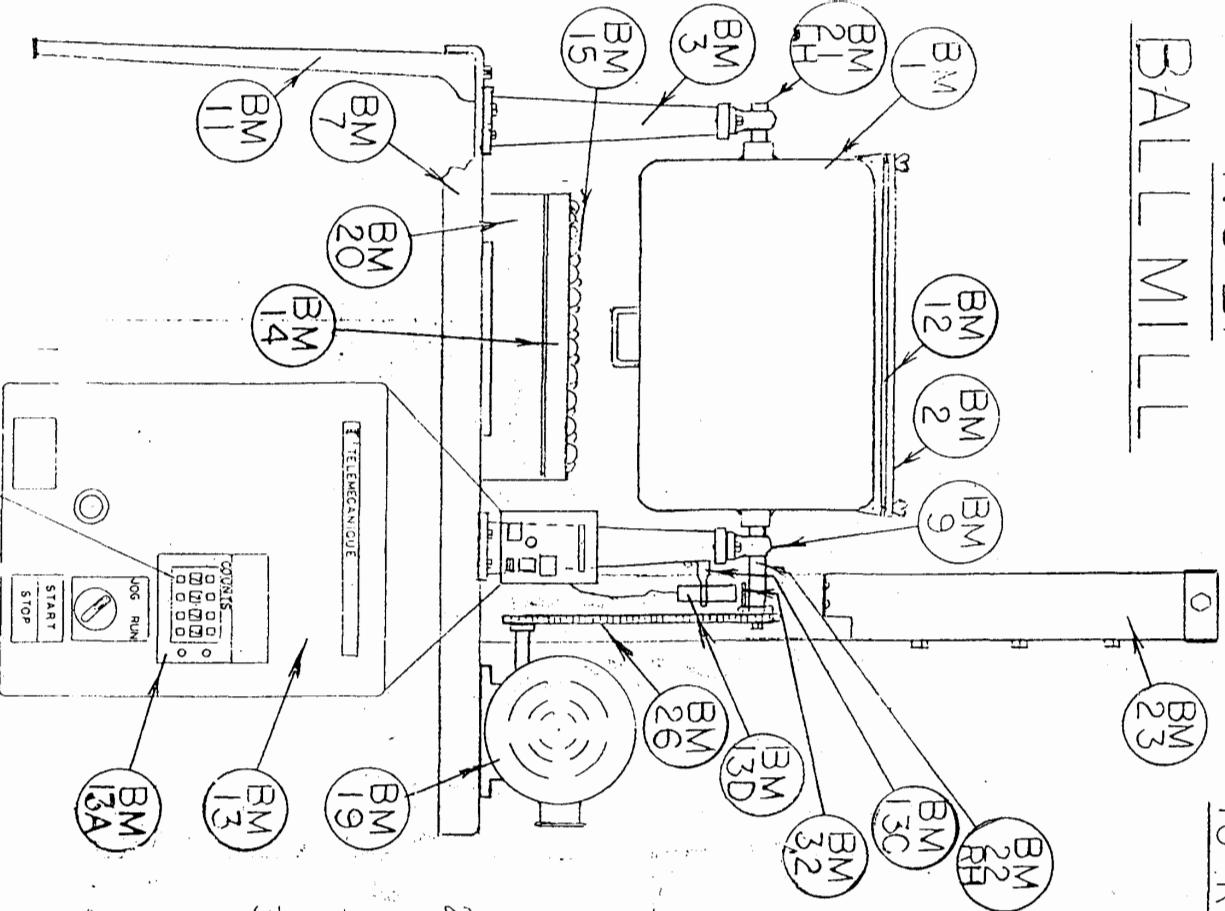


PROCEDURE TO REPLACE PARTS ON F.C.B. BALL MILL

F.C.B.

BALL MILL



TO REPLACE BM-1 & BM-9s (2): (A) REMOVE BM-23.
 (B) REMOVE BM-26 (C) REMOVE BOTH BM-9s

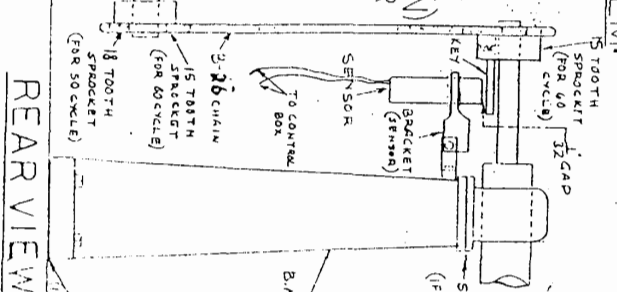
TO INTERCHANGE SPROCKETS (TO CHANGE CYCLE ETC.): (A) BM-25-B TOP SPROCKET, WITH 1 7/8" BORE & 15 TEETH, TOGETHER WITH BM-25 BOTTOM SPROCKET, WITH 1" BORE AND 15 TEETH, IS FOR 60 CYCLE, THE SAME TOP SPROCKET, TOGETHER WITH BM-25-D BOTTOM SPROCKET, WITH 1" BORE AND 18 TEETH, IS FOR 50 CYCLE

TO CONVERT BALL MILL TO AN ELECTRONIC SYSTEM:
 1 REMOVE MANUAL CLUTCH.

2 INSTALL 15 TOOTH SPROCKET KEY AND B-26 CHAIN (AS SHOWN) (CHAIN MAY NEED LINKS REMOVED OR BM BRACKET SHIMMED)

3 BOLT SENSOR BRACKET TO BM BRACKET INSTALL SENSOR 3/2 FROM KEY

4 WIRE SENSOR TO CONTROL BOX.

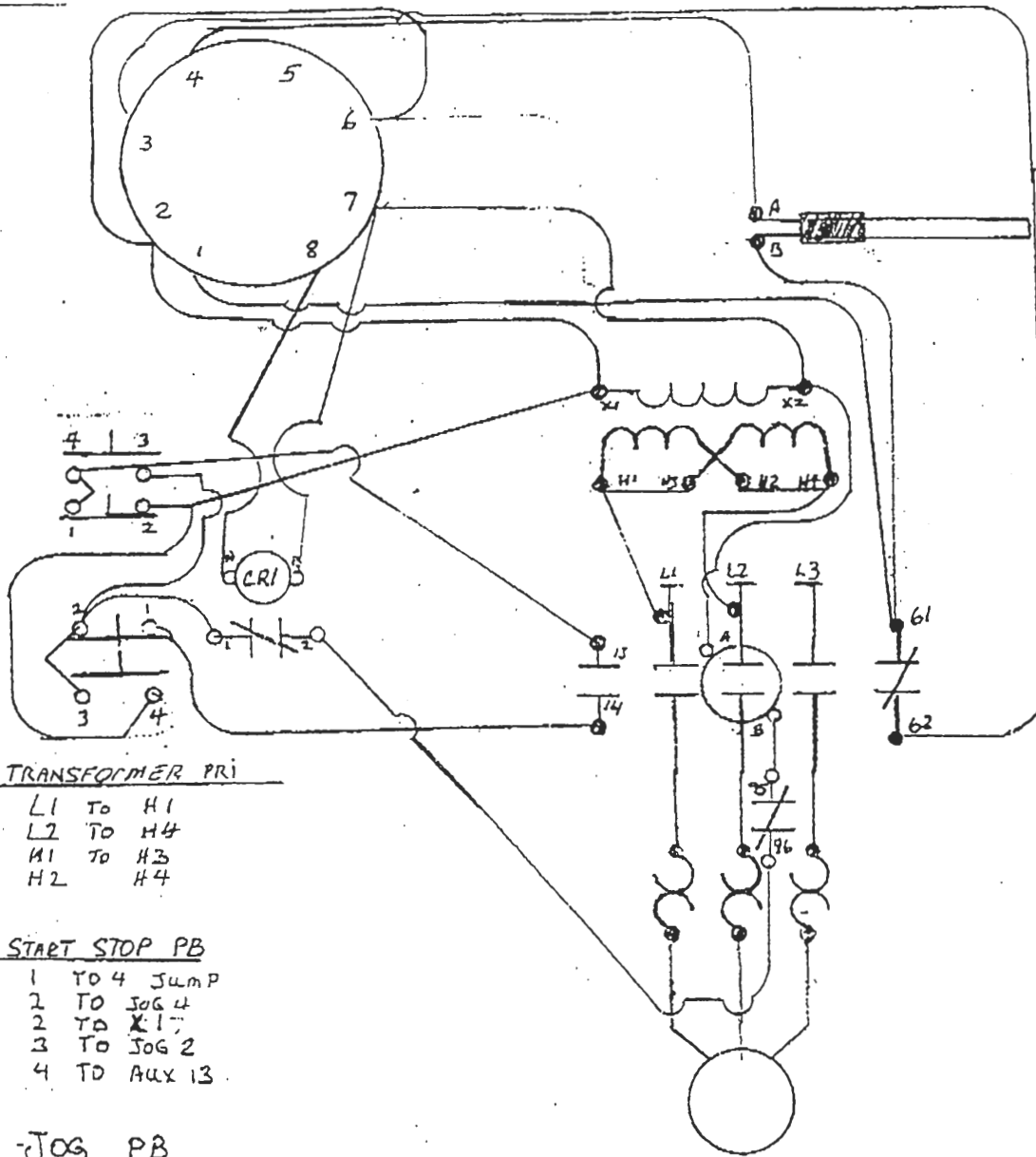


PRESS THESE 4 LOWER BUTTONS IN TURN TO SET NUMBER ABOVE EACH - SET SWITCH ON RUN - PRESS START BUTTON - MACHINE WILL SHUT OFF AFTER NUMBER OF TURNS COMPLETE - TO JOG MACHINE: 1. PUT SWITCH ON JOG. 2. KEEP PRESSING START BUTTON OR AND OFF UNTIL DESIRED POSITION IS REACHED.



BICO INC

WIRING DIAGRAM FOR BALL MILL
50 CYCLE 220 VOLT



TRANSFORMER PRI

L1 TO H1
L2 TO H4
H1 TO H3
H2 H4

START STOP PB

1 TO 4 JUMP
2 TO JOG 4
2 TO X1
3 TO JOG 2
4 TO Aux 13

JOG PB

1 TO Aux 14
2 TO PB 3
2 TO CRI NC 1
3 TO 2 JUMP
4 TO PB 2

NC Control RELAY 1

CRI A TO C8
CRI B TO C7
CRI, 1 TO J2
CRI, 2 TO Aux 96

SENSOR

SA TO C4
SB TO Aux 61

COUNTER

C1 TO Aux 61
C2 TO X1-C6
C3 TO Aux 62
C4 TO SA
C5 TO
C6 TO C2
C7 TO X2-CRIB
C8 TO CRI A

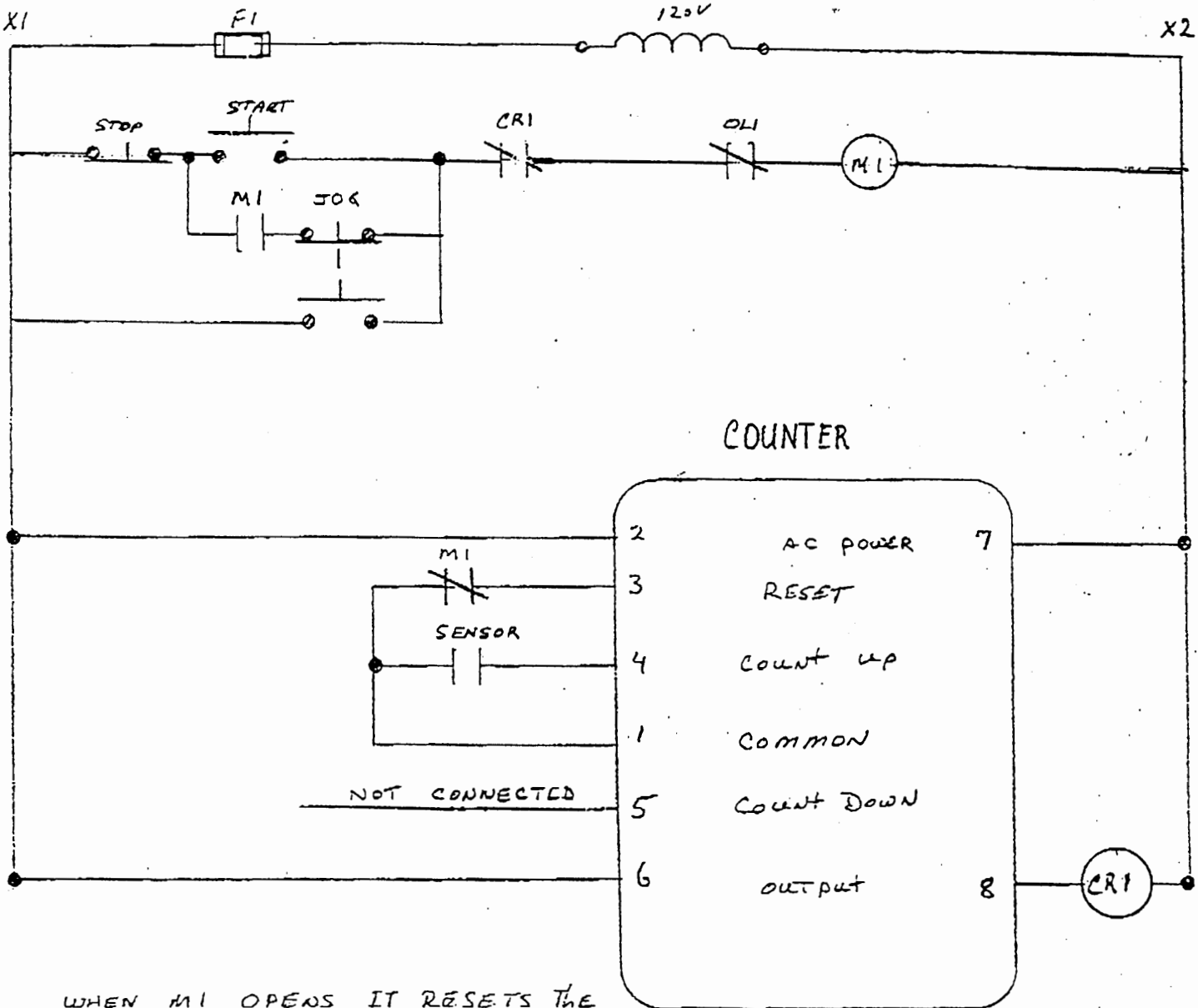
STARTER

L1 TO H1
L2 TO H4
A TO X2
B TO 95
13 TO PB4
14 TO J1
96 TO CRI, 2
61 TO SB-C1
62 TO C3

TRANSFORMER SEC-

X1 TO PB2-C2
X2 TO CT-A

WIRING DIAGRAM FOR BALL MILL
50 CYCLE 220 VOLT



WHEN M1 OPENS IT RESETS THE
COUNTER. WHEN THE PRESET VALUE
IS REACHED THE COUNTER WILL
OPERATE THE RELAY CR1 AND STOP
THE MOTOR. THE JOG BUTTON
DISABLES THE INTERLOCK
CONTACT AS SHOWN