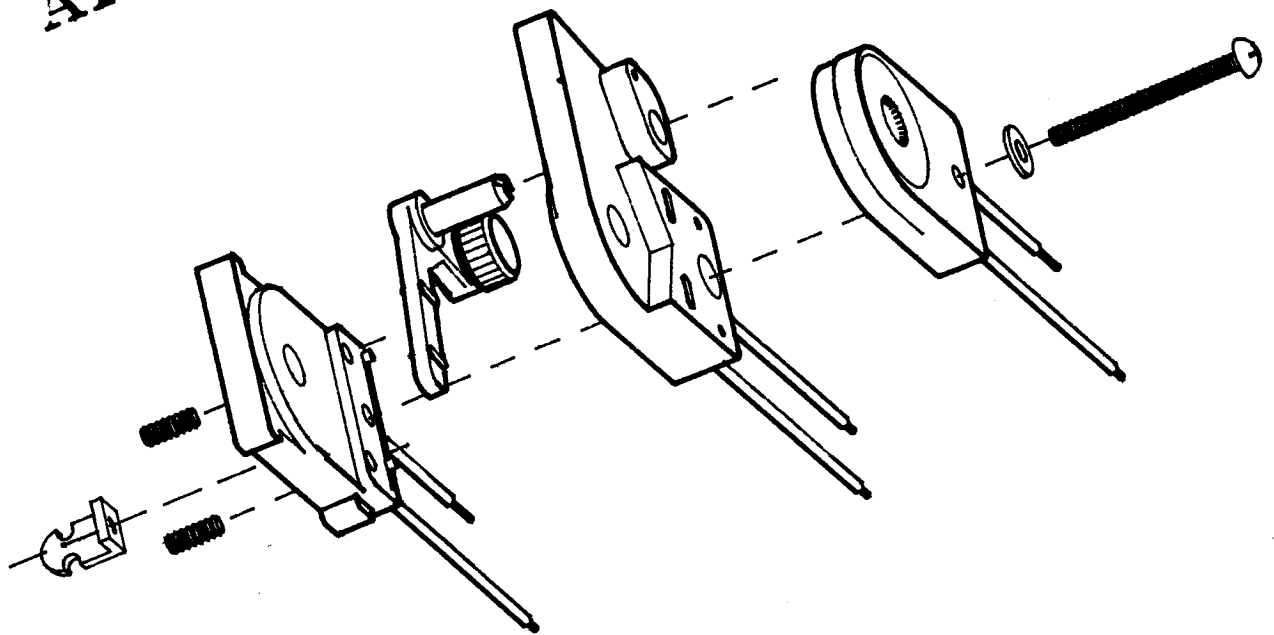


DOCUMENT NO. 09300024 REV. 2

# DETAILED PROCEDURE FOR AIR BALANCING SENSING COILS W/KIT METER



TECHNICAL GUIDE	NO. OF PAGES	SCALE	NA	DATE	<b>COIN MECHANISMS</b> <small>INC</small>	
		DRAWN	SS	10/7/92		TITLE DETAILED PROCEDURE FOR AIR BALANCING SENSING COILS W/KIT METER
		CHKD				DOC. NO. 09300024
COMP. # 09300024 CASE		DISK #			A	

OCTOBER 7, 1992

ENG. DEPT.  
DOCUMENT NO. 09300024

### DETAILED PROCEDURE FOR AIR BALANCING SENSING COILS W/KIT METER

1. PRIMARY SETUP

- 1A. POWER OFF, INSERT PLASTIC TOKEN (SEE FIG. 3).  
CONNECT  $\mu$ ADC KIT METER (50660008) RED PROBE LEAD TO TEST POINT (SEE FIG. 1).  
CONNECT BLACK PROBE LEAD TO MECH GROUND.  
REFER TO PAGE 6 FOR TEST POINT AND GROUND LOCATIONS.  
CONNECT POWER-I/O INTERFACE TO COMPARITOR.  
REFER TO PCB DOCUMENTATION FOR POWER-I/O WIRING SEQUENCE TO COMPARITOR.

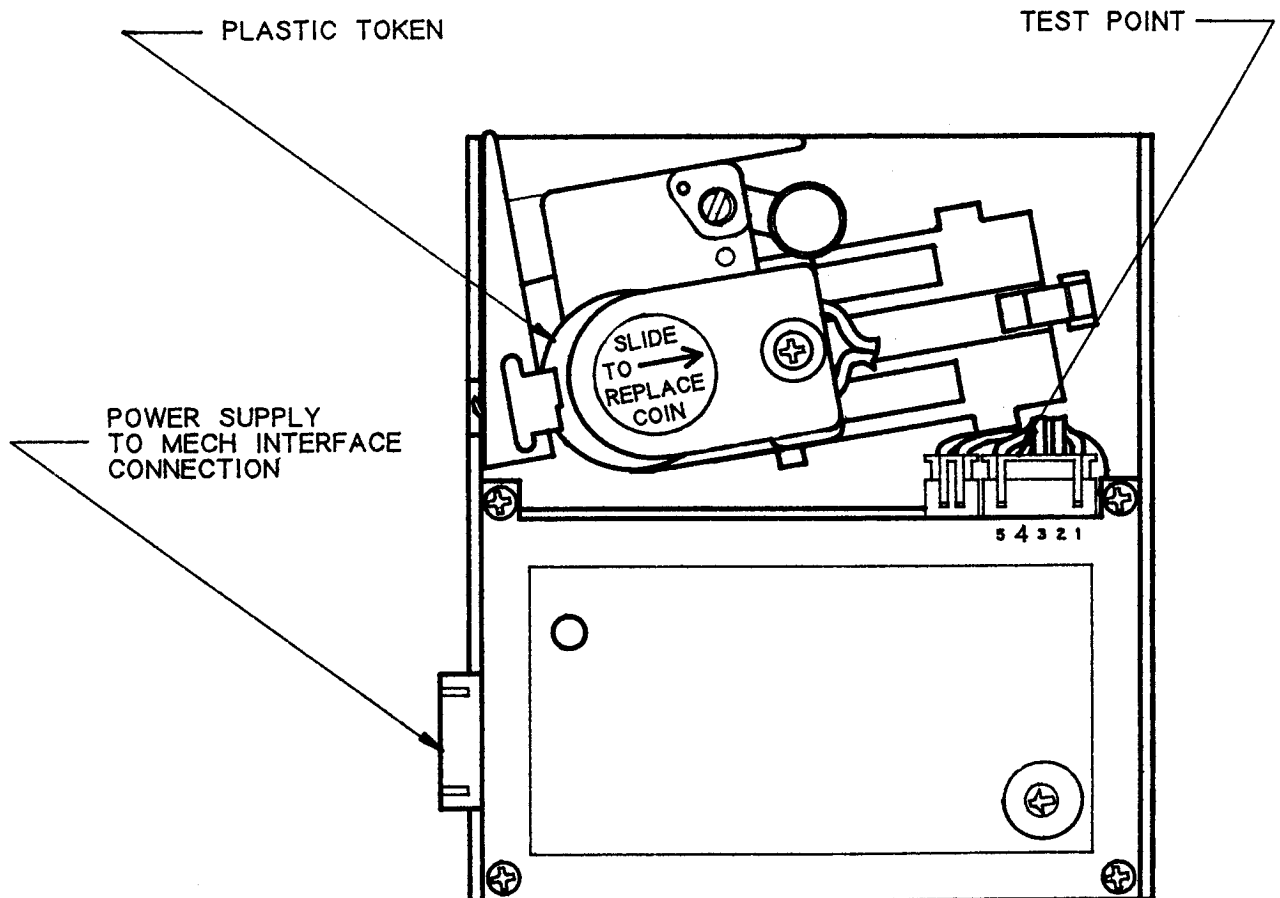
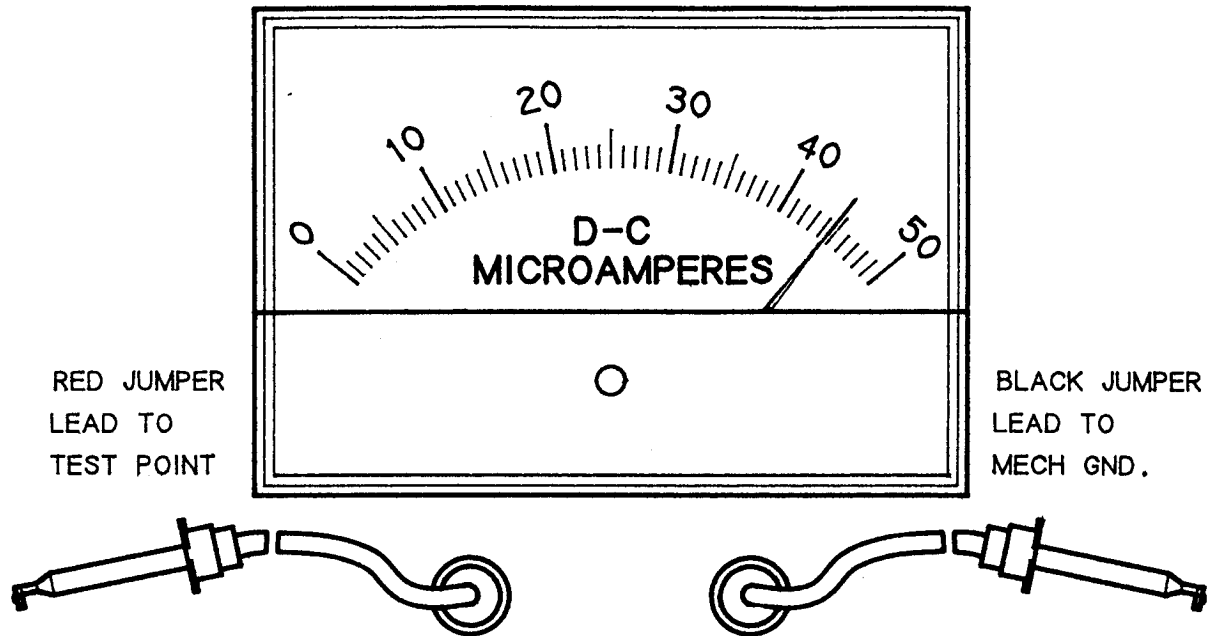


FIG. 1

- 1 B. AIR BALANCING THE SENSING COILS.  
TURN ON POWER TO MECH.  
OBSERVE  $\mu$ ADC METER FOR A TYPICAL READING BETWEEN  
35 AND 50  $\mu$ ADC (SEE FIG. 2). IF PROPER READING IS DISPLAYED  
PROCEED TO STEP 1D..

FIG. 2  
uADC METER KIT NO. 50660008



1 C. IF METER READING IS LOWER THAN 35uADC INSERT SAMPLE COIN (SEE FIG. 3) METER INDICATOR SHOULD DEFLECT TOWARDS 50uADC. IF METER DEFLECTS TOWARDS 50uADC REMOVE SAMPLE COIN AND PROCEED TO STEP 1.D., IF THERE IS NO METER DEFLECTION OBSERVED, COIL ASSY IS FAULTY.

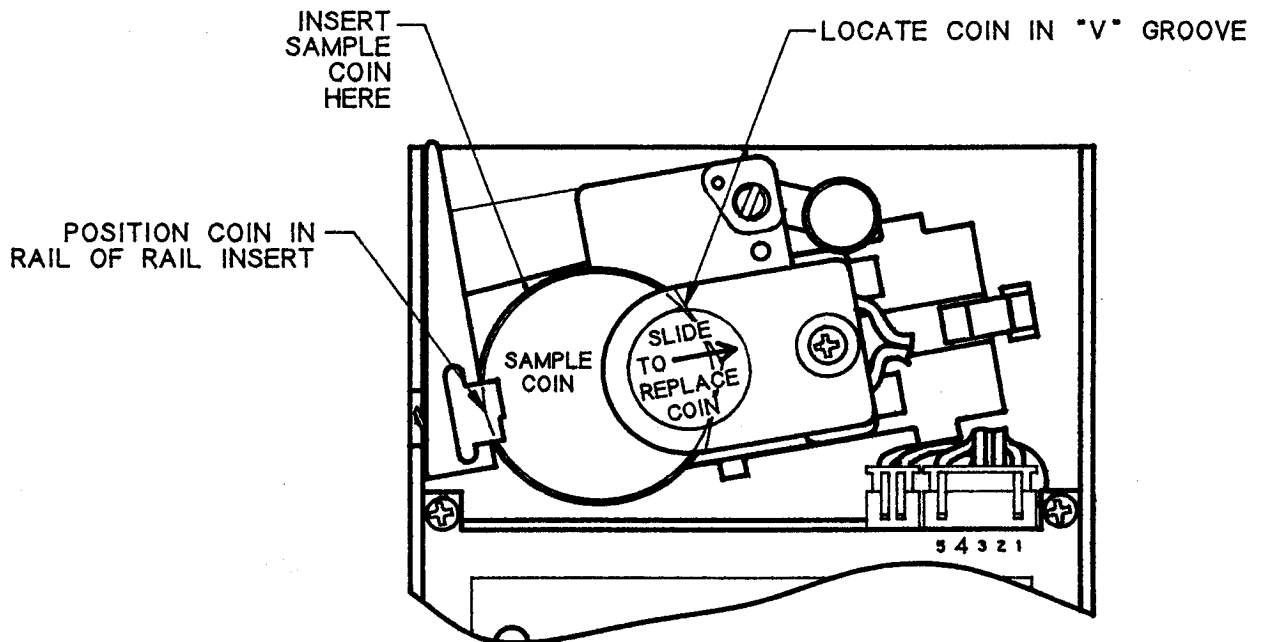


FIG. 3

- 1D. TURN TOP ADJUSTING SCREW (SEE FIG. 4) CLOCKWISE UNTIL SCREW BOTTOMS AGAINST CENTER COIL (SEE FIG. 4A). WHILE TURNING SCREW WATCH THE METER NEEDLE, WHEN IT BEGINS TO DEFLECT STOP THEN BOTTOM THE OTHER SCREW IN THE SAME WAY.

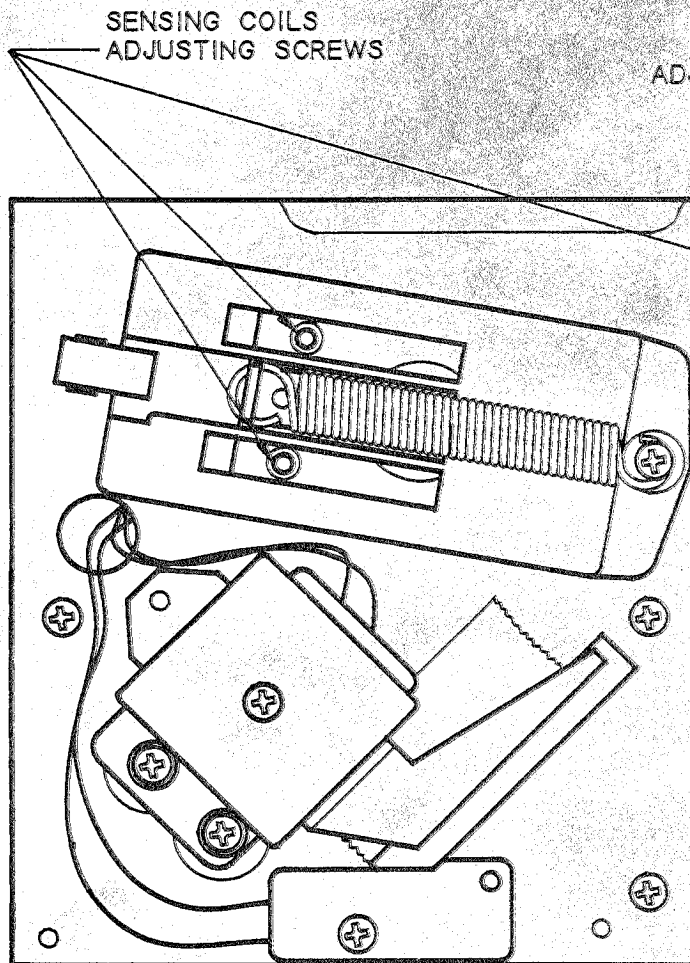


FIG. 4

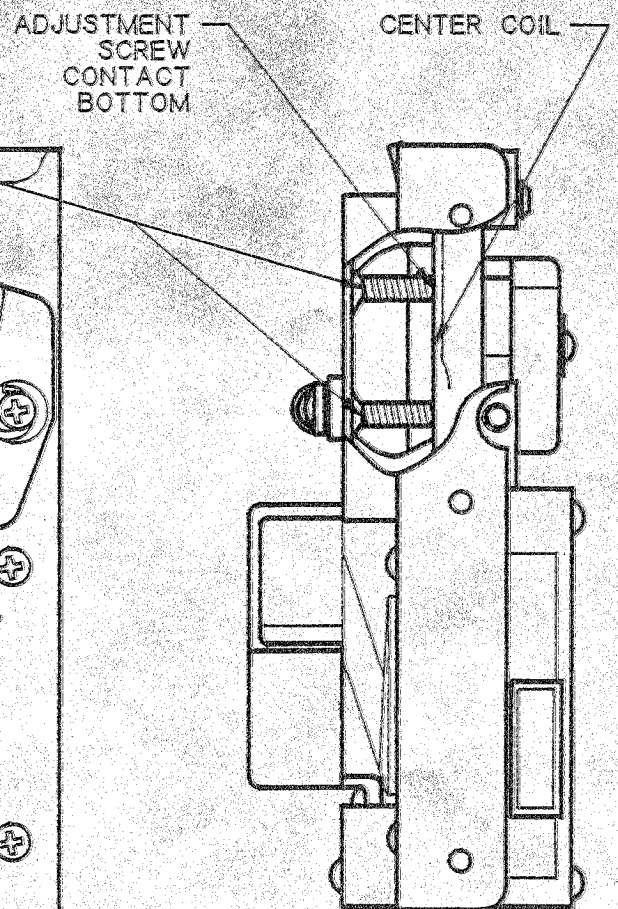


FIG. 4A

1D. CONTINUED START WITH TOP SCREW FIRST, TURN SCREW CLOCKWISE 1/8th ROTATION, THEN TURN BOTTOM SCREW 1/8th ROTATION CLOCKWISE. ALTERNATELY ADJUST SCREWS AND NOTICE THAT THE  $\mu$ ADC NEEDLE INDICATOR IS MOVING TOWARDS ZERO. WHEN THE METER BEGINS TO REACH 25  $\mu$ ADC SMALLER INCREMENTS TO THE SCREWS ARE NECESSARY, THIS WILL PREVENT OVER ADJUSTMENT, THE METER IS MORE SENSITIVE BELOW 25  $\mu$ ADC AND THE NEEDLE WILL MOVE MORE QUICKLY WITH A SLIGHT TURN OF THE SCREWS. TYPICAL NULL READINGS SHOULD BE BETWEEN 3 TO 6  $\mu$ ADC. REJECT ANY MECH WITH COILS THAT READ HIGHER THAN 6  $\mu$ ADC.

2. NULL VARIATION CHECK.

2 A. MAKE SURE COIL STOP IS IN THE LOCKED POSITION. (SEE FIG. 5). SLIDE COIL ASS'Y THRU FULL COIN RANGE ON THE MAINPLATE TRACK (SEE FIG. 5) AND OBSERVE THE  $\mu$ ADC METER FOR VARIATION IN READING. REJECT MECH IF VARIATION IS MORE THAN 4 $\mu$ ADC.

2 B. MAKE SURE THE DAMPER LEVER ASS'Y MOVEMENT IS NOT RESTRICTED THRU FULL COIN RANGE ON THE MAINPLATE TRACK. (SEE FIG. 5) LIFT LEVER WITH FINGER AND LET IT DROP BACK INTO ITS RESTING POSITION. REJECT MECH IF DAMPER LEVER MOVEMENT IS SLUGGISH OR STICKING OR IS STUCK.

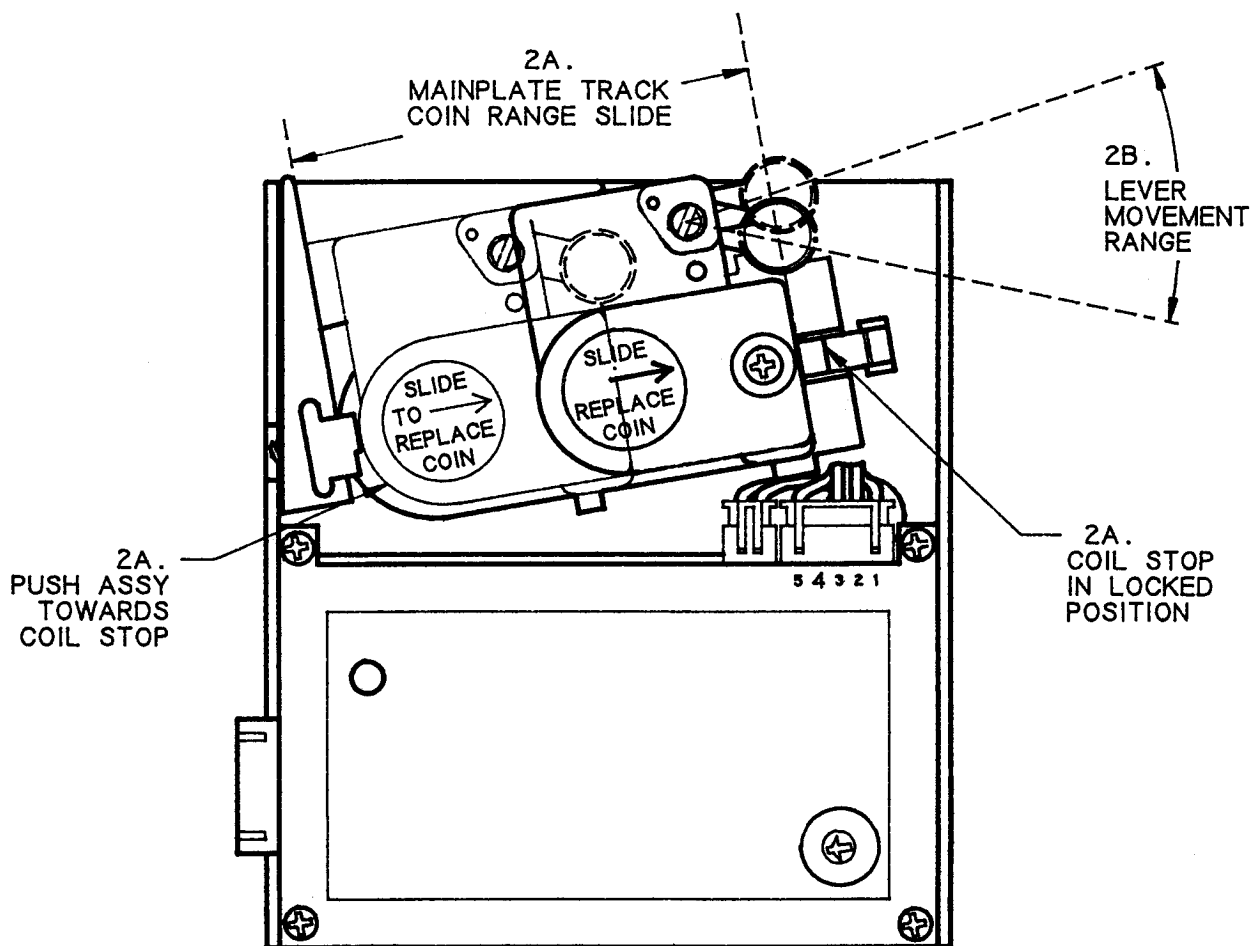


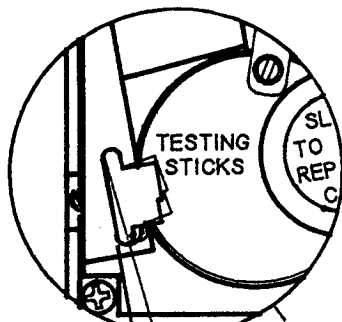
FIG. 5

3. RAIL INSERT ADJUSTMENT.

3A. CHECK RAIL INSERT SCREW AND RAIL INSERT FOR PROPER ALIGNMENT (SEE FIG. 6 AND 7). INSERT TESTING STICKS INTO COIL ASS'Y (SEE FIG. 7). MAKE SURE RAIL INSERT IS FLAT AGAINST RAIL WALL (SEE FIG. 6). IF NOT, BACK OFF RAIL ADJUSTING SCREW UNTIL INSERT IS FLAT AGAINST CAVITY WALL. APPLY PRESSURE TO COILS TO CLOSE ANY GAPS AND SLACK (SEE FIG. 7) REPOSITION (STICKS) (SEE FIG. 7) TO OBTAIN LOWEST READING ON THE  $\mu$ ADC METER.

3B. OBSERVE  $\mu$ ADC METER. PROCEED TO TURN RAIL INSERT ADJUSTING SCREW CLOCKWISE (SEE FIG. 7). TO ADJUST FOR THE LOWEST READING ON THE  $\mu$ ADC METER. IN THE EVENT OF OVER ADJUSTMENT, BACK OFF THE RAIL INSERT SCREW COUNTER-CLOCKWISE AND SQUEEZE COILS TO REMOVE ANY GAP. PROCEED TO ADJUST FOR LOWEST  $\mu$ ADC READING. TYPICAL METER READING SHOULD BE 3 TO 7  $\mu$ ADC. REJECT ANY MECH WHICH EXHIBITS MORE THAN 7 $\mu$ ADC.

FIG. 6



CLOSED GAP BEFORE ADJUSTMENT

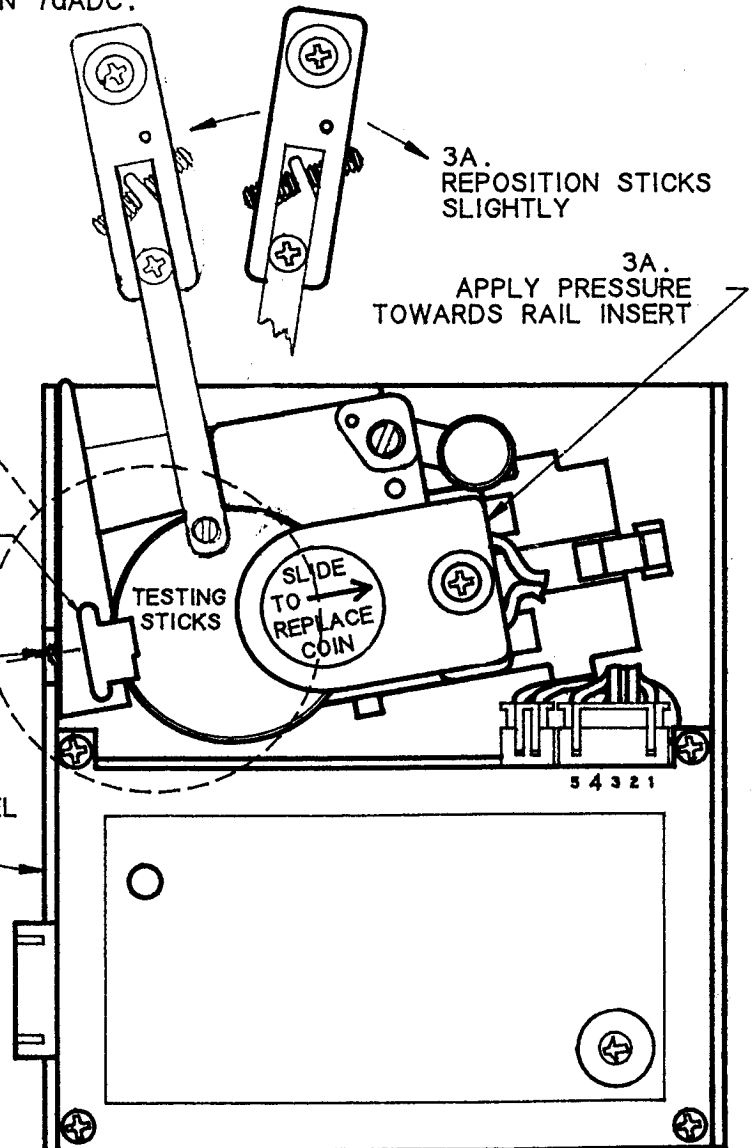
RAIL INSERT GAP AFTER ADJUSTMENT

RAIL INSERT

3A. AND 3B. RAIL INSERT ADJUSTING SCREW

SLIGHT ANGLE DOWNWARD APPROX. 5°

FIG. 7



# TEST POINT LOCATIONS

