

Affecting A-30 altitude encoders to serial number 23849

November 11, 1989

Ack A-30 altitude encoder distributors
Please provide copies of this letter
To all installing dealers.

Modification of the A-30 to MOD 2 status

Beginning with serial number 23850 all internal ground points have been isolated from the A-30 case. The only ground path available to the A-30 is through pin 15 of the connecting jack. Beginning with serial number 23850 the recommendations of service bulletin a-30-1 dated April 10, 1989 are no longer applicable.

The following procedure describes Modifications which may be done in the field to bring earlier serial numbers to MOD level 2. This MOD need only be done on units where a ground loop problem as described in our service bulletin a-30-1 is encountered.

The following parts are required for this field Modification:

Qty	description
1)	DF103C to-220 mica insulator RCA type KH3477 or equivalent
2)	DF378F insulating shoulder washer RCA type KH3479 or equivalent

Our service kit A-30-2 containing the above parts may be ordered from us at the address listed below.

Ack technologies inc.
440 w. Julian st.
San jose, ca
95110

Modification procedure

All work should be performed at a static safe work area

1. Remove the A-30 top cover by removing the four retaining screws which affix it to the die cast aluminum base. (see figure 1)
2. Remove the analog board assembly by disconnecting the 10 pin plug located at the end of the ribbon cable from the main board assembly.
3. Remove the main board assembly from die cast base by removing the two 4-40 securing socket head screws securing it to the base assembly and the two hex head shoulder screws which secure the 15 pin connector to the exterior of the die cast base.
4. Remove the screw which attaches the voltage regulator heat sink to the voltage regulator. (see figure 2)
5. Using a 5/32" drill enlarge the two main board attaching screw holes pi (see figure 2) making sure that the drill removes all of the conductive trace material between the upper and lower layer of the board. If any conductive material remains in the hole remove any remainder with a bearing scraper or exacto knife.
6. Reassemble the unit installing the insulator bushings and mica insulator as shown in figure 2. A non conductive grease or adhesive may be used to hold the insulator bushings in place during assembly.

7. Before replacing the top cover check the resistance between pin 15 of the connector jack and the die cast base. This resistance should be 10 megohm or greater. If it is not check for proper removal of conductive trace material step 5 above and proper placement of insulators step 6 above.

8. Replace the top cover facing the end with the TSO label towards the 15 pin connector. After replacing the top cover double check the case ground as in step 7 above. Mark the MOD 2 box on the TSO label to indicate that this Modification has been done.

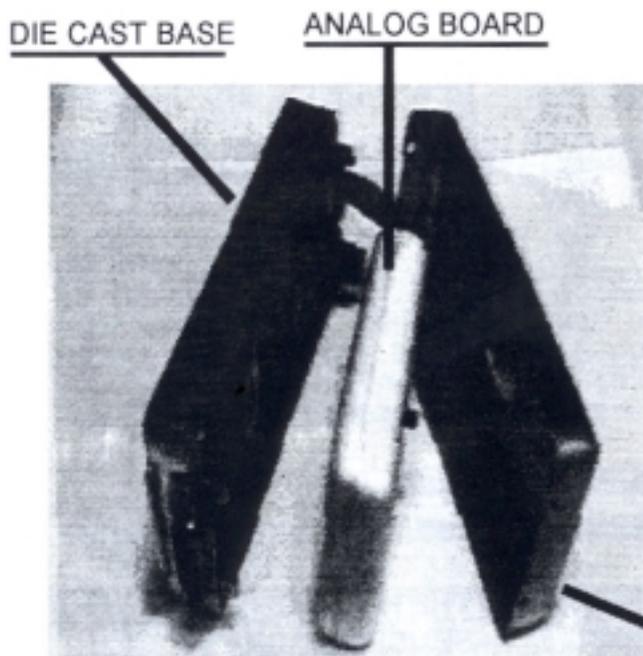


FIGURE 1

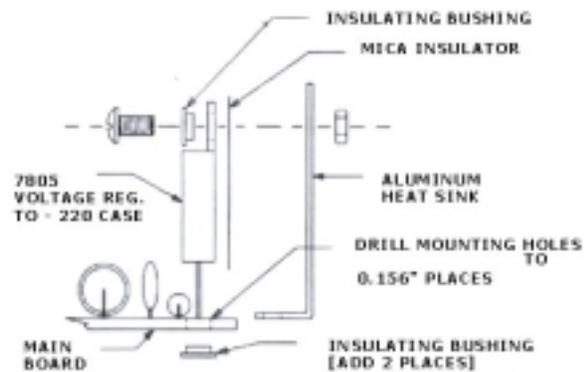


FIGURE 2

TOP COVER