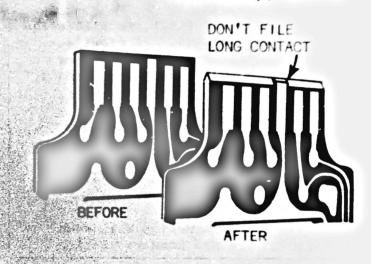
## LOOSE CONNECTIONS IN SAMPLING HEADS

John Mulvey, 12-7-70

Sometimes only a very slight pull or wiggle on an operating sampling head may cause the circuit board connections at the rear to intermittently break and make. A production mod to correct the trouble got lost in the mill until recently, so how to identify and cure the problem in the field is important. If you encounter intermittent connections, carefully measure the distance between the back edge of the sampling head and the back end of the middle circuit board. If the distance is 4/32 inches or less, there should be no problem; if 5/32 inches or more. you should take the head apart and do some filing in the right places. The picture below shows where to file.

By properly tapering the edges of the circuit board between the ends of the circuit contacts and the edge of the board, proper engagement with the



receptacle may be assured. Unless the edges are tapered, the contacts in the receptacle may be forced out of position to make electrical contact when the board is not as long as it should be. S-4, S-5, S-50 and S-51 heads are believed to be the only ones that may be in this kind of trouble.