

ELECTRONIC BOARD REPLACEMENT ON THE
EA-1 & ET-1 BALANCES

As a general rule, whenever we send out a replacement board, we always send a "matching" magnet. There is a possibility that when the board is replaced one cannot reach the range by adjusting the potentiometer on the board and this necessitates using the magnet that was sent out with the board.

The electronic board on the mechanical tare models of the EA-1 is located in the rear shroud of the balance. Access to the interior of the shroud is obtained by removing the screws that hold the shroud to the case. A bolt holds the board in position on the shroud. The board is a plug-in type and can readily be removed. It is keyed so it will not fit unless it is properly positioned.

For the force coil to operate properly, the lower end of the magnet assembly should be $1/8$ of an inch above the center of the windings of the coil. Before the magnet is attached to the skeleton, it should be checked to make sure that the overall length from the hole through which the clevis pin goes to the lower tip of the magnet is $2-5/8$ ". If this distance is not $2-5/8$ ", it can be varied by loosening the jam nut and rotating the brass portion to lengthen or decrease the overall distance. If the overall distance is $2-5/8$ ", then the distance from the hole in the magnet assembly to the top of the coil when the beam is

in the horizontal position should be $1-1/16$ ". This distance insures the proper height of the magnet. If the distance is other than $1-1/16$ ", the set screw in the casting holding the coil can be loosened and the coil raised or lowered, if necessary, to obtain the proper height.

ET-1

The electronic board for the ET-1 is readily accessible when the case is removed. When replacing boards on ET-1 balances, the same precautions should be taken as with the EA-1 (range check).

The overall distance from the end of the magnet to the hold from which it is suspended on the ET-1 magnet is $3-3/16$ ". If it has been necessary to replace the magnet on an ET-1 balance so that the proper range can be attained, this dimension should be checked. When installing the replacement magnet, the distance from the hole from which the magnet is suspended and the top of the coil should be $1-5/8$ " when the balance beam is in the horizontal position. The set screw in the casting holding the coil can be loosened and the coil raised or lowered, if necessary, to attain this spacing.