

5.6 MOTOR SERVICE LIFE

Brushes may be replaced one time for motor or tachometer. When *replacement* brushes wear to length described below, the motor must be returned to a suitable service center for commutator service, or replaced.

5.6.1 Motor Brush Removal

Position axes to allow easy access to servo motors. Remove machine from service by disconnecting power and attaching "Out of Service for Maintenance" tag to disconnect switch.

Remove appropriate motor covers to gain access to motor. Remove motor from machine if necessary.

Remove motor brushes by rotating caps counterclockwise, and measure the length of each brush. See Figure 5-9. Motor brush length when new is .5 inch. The minimum acceptable length is .20 inch.

If both motor brushes measure more than .20 inch in length, brush replacement is not necessary. See following information on Motor Cleaning and Brush Replacement. If either brush length is less than .20 inch, replace both brushes with new items, Hurco part number 401-4003-010.

5.6.2 Tachometer Brush Removal

Remove tachometer brushes by rotating caps counterclockwise and measure the length of each brush. See Figure 5-9. Tachometer brush length when new is .43 inch. The minimum acceptable length is .20 inch.

If both tachometer brushes measure more than .20 inch in length, brush replacement is not necessary. See information on Motor Cleaning and Brush Replacement. If either brush length is less than .20 inch, replace both items with new items, Hurco part number 401-4003-005.

5.6.3 Motor Cleaning and Brush Replacement

CAUTION

Eye protection such as full face shield or approved safety glasses must be worn during the following cleaning operation. Use only a pressure-regulated air nozzle with a 30 PSI rating, or a nozzle rated less than 30 PSI. Permanent eye damage may result if these precautions are not followed.

Place a pressure-regulated air nozzle at any one brush mounting hole with *all* brushes removed from motor and tachometer. Clean interior of motor with air blast and, if possible, rotate motor shaft during air blast.

Repeat at each brush mounting hole. Insert new brushes and tighten caps.

When replacing used but acceptable tachometer brushes, note wear marks on end of brush and insert so as to keep the same orientation and wear direction.

Motor and axis movement may be slightly rough during seat-in period of new brushes.

Record new brush installation to allow compliance with motor service life note paragraph 5.5 above.

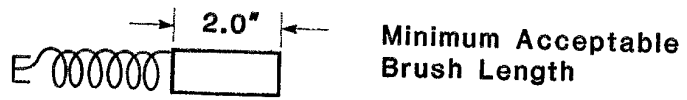
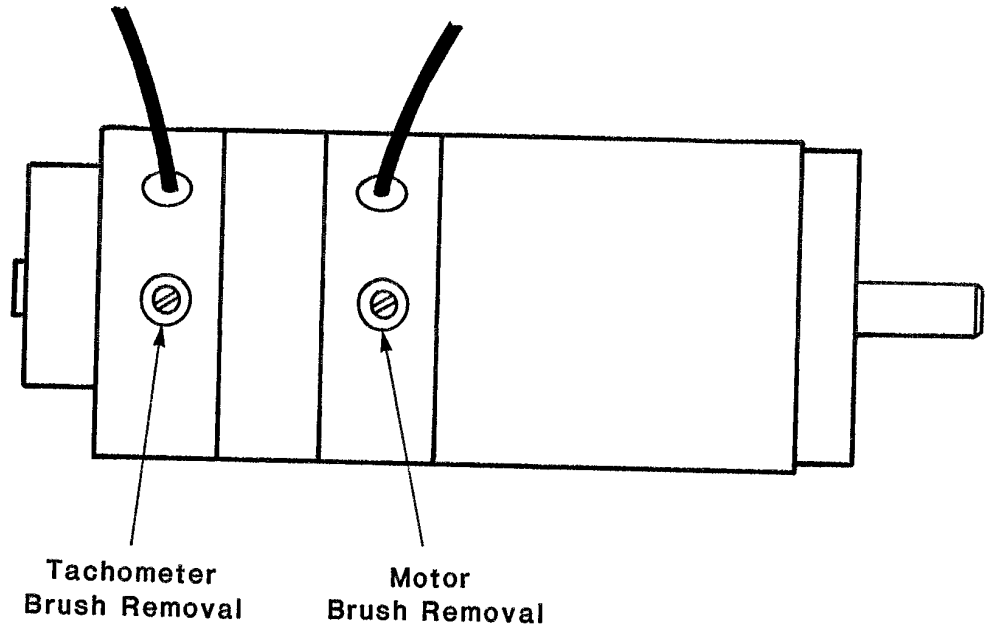


Figure 5-3 Brush Removal