

BRUSH BEDDING - METHOD A

INITIAL PRE-BEDDING (STAGE 1)

1. a. Apply an even coating of Gum Lacquer white (M4) 330/2244718 (HAZ CHEM) to contact surfaces. Remove any lacquer from sides and faces using clean rag and Methylated Spirits (34B/2200985) (M/g) (HAZ CHEM).
- b. Check clearance between brush and brush-holder. Note reading obtained.
- c. Shim brush face with Adhesive Tape (M2) 32B/1255289 (M2) 32B/1013668 sufficient to take up clearance noted in operation b and mark brush position to facilitate refitting.

NOTE: If possible entering face is to be shimmed unless otherwise stated in schedule.
In carrying out operations d to g inclusive care is to be taken to prevent foreign matter adhering to either side of tape tissue.

- d. Cut strip of abrasive paper Tri-m-ite P150 (M4) 5F/NIV/18264 to suit width and circumference using template.

- e. Wind strip on to commutator or slip-ring.

NOTE: It is essential that normal brush track is covered by the strip.

- f. Mark free end of abrasive paper where it meets fixed end and trim to obtain a butt joint with a minimum gap.

- g. Fit brushes correctly in their relevant brush-holders and ensure that they move freely without excessive clearance.

- h. Rotate armature or rotor in correct direction by hand until all traces of lacquer are removed from contact surfaces. Lift completed sets of brushes clear of abrasive strip progressively until all brushes are pre-bedded.

FINAL PRE-BEDDING (STAGE 2)

2. a. Remove brushes.

- b. Apply an even coating of Gum Lacquer white (M4) (HAZ CHEM) to contact surfaces. Remove any lacquer from sides and faces using clean rag and Methylated Spirits (M/g) (HAZ CHEM).

- c. Cut strip of abrasive paper Tri-m-ite P240 (M23) 5F/NIV/18265.

- d. Wind abrasive paper on to commutator or slip rings, trim free end and press down to make a butt joint with a small gap.

NOTE: It is essential that the normal brush track is covered by the abrasive strip.

- e. Fit brushes correctly in their relevant brush-holders allowing one set only to make contact with the abrasive paper.

- f. Rotate armature or rotor in correct direction by hand, lifting brushes at each revolution to allow brush joint to pass underneath. When all traces of lacquer are removed from contact surfaces, lift brushes clear, lower next set and continue cycle of operations until all brushes have been processed.
- g. Remove tape shim from brushes.
- h. Remove carbon dust using dry air blast, in dust cabinet.
- i. Remove abrasive strip from commutator/slip rings. Clean commutator/slip rings.
- j. Refit brushes.

FINAL BEDDING

NOTE: During following operations blast cooling is not to be employed except where temperature of machine is likely to reach 100°C. Prolonged running on light load is to be avoided to prevent glazing of brush and commutator surfaces.

- 3. a. Fit machine to test rig.
- b. Run on light load and ensure sparking is no more than pin-point. Monitor brush temperature throughout final bedding. Maintain brush temperature at 70° to 80°C.
- c. Progressively increase load as brushes bed-in until machine will accept normal loading ensuring sparking is no more than pin point throughout.
- d. Run machine until brushes are bedded over full thickness and at least 90% of their width, (commutators) and (50% for sliprings).
- e. Disconnect and remove machine from test rig.