



1. SUPPLEMENTARY NOTES ON HITACHI ELECTRIC ROUTER

1.1 Collet-type chuck assembly

The collet-type chuck assembly consists of a collet chuck and a collet nut. The collet chuck and nut are assembled as a single unit to maintain desired dimensional accuracy. Therefore, when repairing the collet-type chuck assembly, be sure to replace it entirely.

2. NOTES ON DISASSEMBLY AND REASSEMBLY

The circled numbers in the following sentences, denote the item numbers in the parts list.

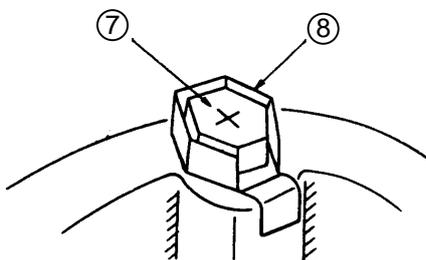
2.1 Disassembly

- (1) To disassemble the HITACHI Electric Router, prepare the following tools:
 - Phillips-type plus-head (+) screwdriver
 - Minus-head (-) screwdriver
 - 23 mm wrench (standard accessory)
 - 21 mm wrench (standard accessory)
 - 17 mm wrench
 - Vise
 - Wooden (or plastic) mallet
- (2) Since a bit is kept attached to the Router it may cause damage to its end or personal injury to the user, be sure to remove it while disassembling.
- (3) Remove the base assembly (40).
 - Position the Router body with the base bottom end facing downward.
 - Lock the lock lever (48).
 - Remove the M10 U-shaped nuts (21) and M10 nuts (22).
 - Unlock the lock lever (48) and disassemble the assembly (40) from the Router body. Since the spring (31) and the spring guide (30) are housed in the column, grip the handle unit to support the Router body.
- (4) Remove the armature assembly (9) and the end bracket (11).
 - Remove carbon brushes (44).
 - Loosen the M5 x 35 plus-head (pan-head) screws (27) to remove the handle (L) (25) and handle (R) (26).
 - Slightly knock the end bracket (11) with a wooden (or plastic) mallet to withdraw the end bracket (11) together with the armature assembly (9).

- Securely grip the armature assembly ⑨ with a vise. In this case, carefully handle the outer surface of the core to prevent damaging it.
 - Turn the collet nut ⑳ counterclockwise with a 23 mm wrench to unscrew it.
 - Use a hand press to withdraw the armature assembly ⑨ from the end bracket ⑪.
- (5) Remove the stator assembly ④.
- Loosen the M4 x 16 plus-head (pan-head) tapping screws ⑤⑨ to remove the end cover ⑱ and the bearing bushing ⑲. Subsequently remove the brush terminal ⑤ of the stator assembly ④ from the brush holder ②.
 - Loosen the M4 x 25 plus-head (pan-head) tapping screws ⑤④ to remove the switch cover ⑤③. Then, loosen the M4 x 10 plus-head (pan-head) tapping screws ⑤⑥ to remove the switch ⑤⑤. Furthermore, loosen the plus-head (pan-head) screws located on the switch terminal to remove the lead wires connected with the stator assembly ④.
 - Fold upward the lug provide with the special washer ⑧ and remove the M5 x 60 bolt ⑦.
 - To withdraw the stator assembly ④, use a wooden (or plastic) hammer to tap the parting line between the housing ① and the end bracket ⑪ facing downward.
- (6) CAUTION
- Since this machine is specifically designed to more strictly limit dynamically unbalanced armatures than that of the other electric tools supplied by Hitachi, be sure to handle the armatures very carefully during disassembling procedures.

2.2 Reassembly

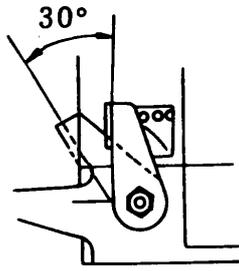
- (1) Reassemble in the reverse order to disassembly procedures.
- (2) CAUTION
- Special washer ⑧ used to reassemble the stator assembly ④. The special washer ⑧ is used to prevent the M5 x 60 bolt ⑦ attached to the stator assembly ④ from loosening due to mechanical vibration. Be sure to fold the lug at the correct position.



As illustrated on the left, the lug shall be folded after tightly securing the M5 x 60 bolt ⑦.

- Adjusting the lock lever position

Loosen the M12 U-nut (49) so that the lock lever (48) is located within 30° under the locking condition shown on



the left. Then correctly adjust the hexagonal shaft of the lock screw (51) in the dodecagonal (12-sided) slot of the lock lever (48).

- Mounting the collet nut (23)

Insert the armature assembly (9) into the ball bearings (16) housed in the end bracket (11). Then securely grip the armature assembly (9) with a vise and use a 23mm wrench to fully secure the collet nut (23).

- Mounting the lock screw (51) to the lock pin (52).

Apply adhesive agent (CEMEDINE 1500) to the lock pin and insert it into the slot for the lock screw (51).

2.3 After completing disassembled repairing, be sure to measure the insulation resistance and test the dielectric strength (withstand voltage test).