

# SONY

## MOTOR REMOVAL JH-110 SERIES

Includes JH-110, 110A, 110B, 110C, and 110M Tape Transports

### Tools Required

- .Number 6 Allen Driver
- .Medium flat-bladed screwdriver
- .Small flat-bladed screwdriver
- .Small slip-joint pliers or 3/16" nut driver
- .AC voltmeter (HP 400 FL or equivalent)
- .Test leads
- .Bench power supply capable of delivering 12 VDC at 1 amp maximum

..... Do one motor at a time .....

- Step 1 Remove reel lock by loosening center lock nut. (Do not remove nut) Lift reel lock from shaft.
- Step 2 Remove (3) (6-32 x 1/4") Allen head screws from turntable and remove turntable assembly.
- Step 3 Remove factory installed shims and retain for reinstallation. (Use pieces of adhesive tape to hold together.)
- Step 4 Viewing deck from rear, disconnect the 3 harnesses from the motor assembly. (tachometer harness, brake solenoid harness and motor supply harness)
- Step 5 To remove motor, loosen 3 (6-32 x 5/8") flathead screws. Do not remove screws.
- Step 6\* From the rear of the machine, support the motor in one hand and remove the motor mounting screws completely.  
  
(NOTE 1: On VP (Variable Profile) style cabinets tilting the deck to the highest position will enable easier removal.)
- Step 7 Go to Tachometer disassembly procedure
- Step 8 Reverse procedure to reinstall.  
  
\*NOTE 2: On HP (High Profile) or UM (Unmounted i.e. rack mounted) assistance from another individual may aid in motor removal.

## MOTOR REMOVAL JH-114 SERIES TRANSPORT

Includes JH-16/114 and JH-24 Series

### Tools Required

- .Number 8 Allen Driver
- .Medium flat-bladed screwdriver
- .Small slip-joint pliers or 3/16" Nut driver
- .AC Voltmeter (HP 400 FL or Equivalent) Test Leads
- .Bench Power supply capable of delivering 12 VDC at 1 amp maximum

.... Do one motor at a time ....

- Step 1 Remove locking screw located on inside top of reel lock. Remove bushing.
- Step 2 Remove reel lock nut. Lift reel lock and spring from motor shaft.
- Step 3 Remove (3) (8-32- $\frac{1}{4}$ ") Allen head screws and lift reel lock base and turntable from motor shaft.
- Step 4 Remove factory shims and return for reinstallation. (Use piece of adhesive tape to hold together)
- Step 5 Remove rear cover panel.
- Step 6 Viewing deck from rear, disconnect the tachometer harness and the motor supply harness from the motor assembly.
- Step 7 To remove motor, loosen (4) (6-32 x 1"). Do not remove screws.
- Step 8 From rear of machine, support the motor in one hand and remove motor mounting screws completely.  
  
CAUTION: Reel motor is heavy. Support carefully to prevent damage to hands or the tape machine. Assistance from another individual may aid in motor removal.
- Step 9 Go to tachometer disassembly procedure.
- Step 10 Reverse procedure to reinstall.

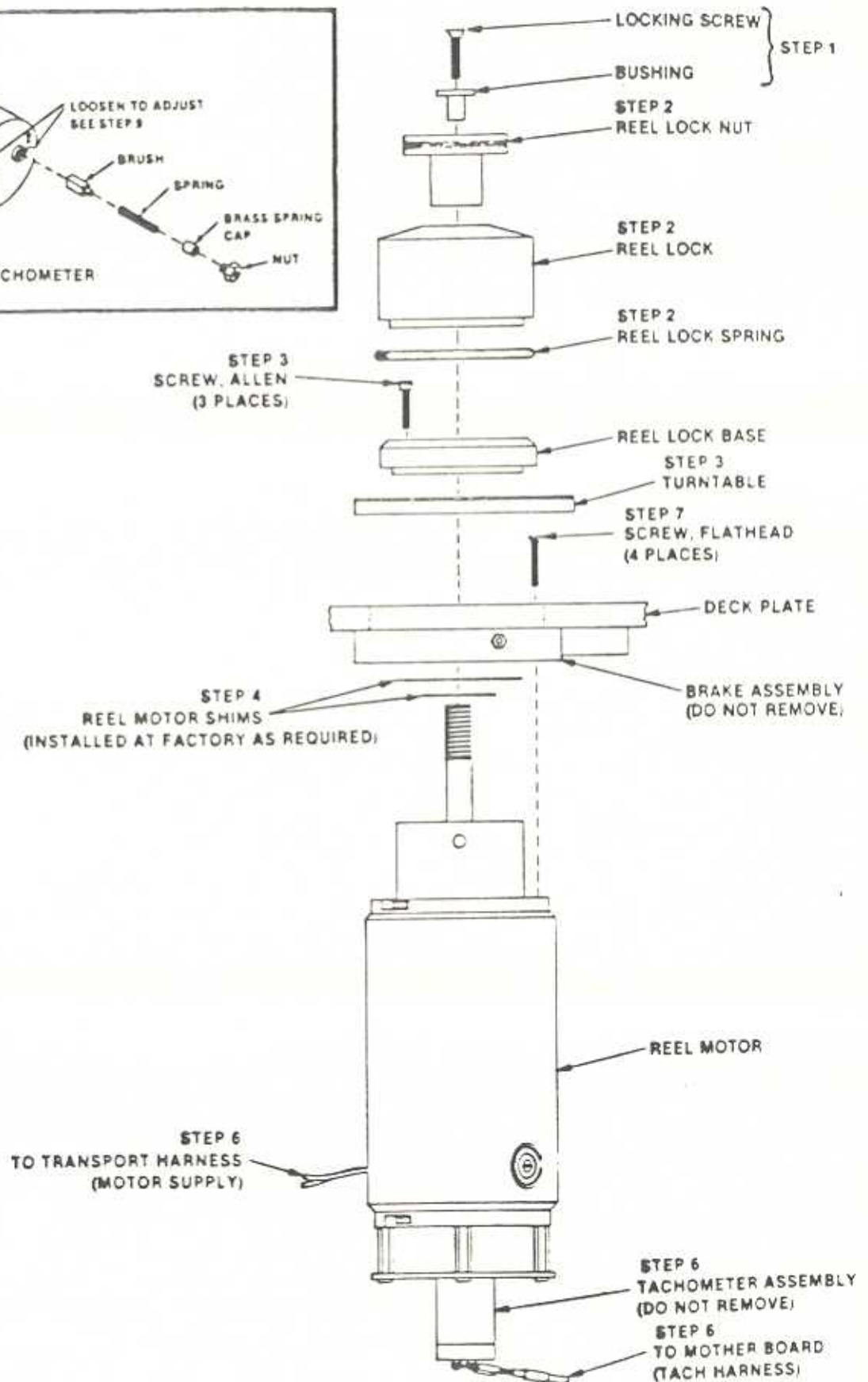
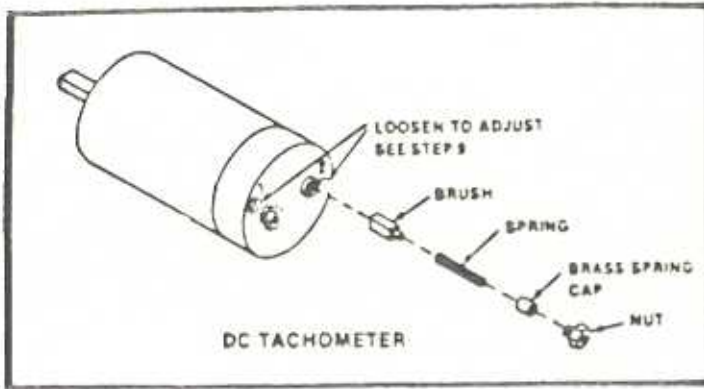
# TACHOMETER DISASSEMBLY

..... Do one motor at a time .....

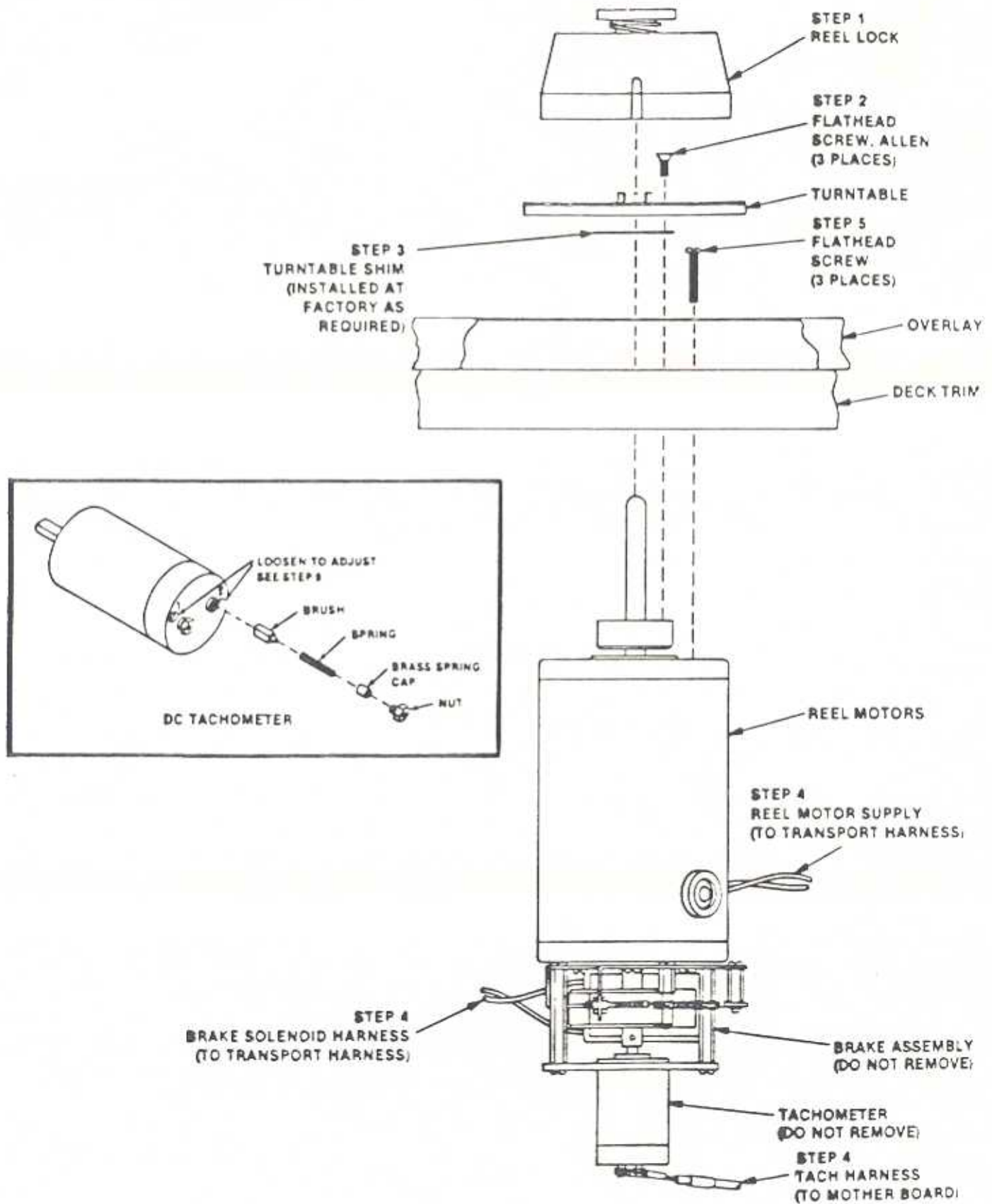
- Step 1 Place motor on bench to disassemble.
- Step 2 Remove screws holding harness to tachometer. Do not discard these screws. They will be needed on reassembly.
- Step 3 Remove nuts from bottom of tach with pliers or nutdriver. Discard these nuts.
- Step 4 Remove spring cap, spring, and brush. Discard these parts.
- Step 5 Install new brush and spring as shown in illustration, then install spring cap. NOTE: Spring must fit over round post on brush for proper installation.
- Step 6 Reinstall nuts supplied with kit and reinstall tachometer harness using screws from step 2.  
Black - Pin 1  
Red - Pin 2
- Step 7 Using a tie wrap, tie brake solenoid assembly to energized position to assure brake is mechanically released.
- Step 8 \* Attach bench power supply to reel motor (set at 12 vDC).  
  
NOTE: These motors must run the play direction of use to seat brushes properly.
- Step 9 Connect AC volt meter to tachometer output. Loosen recessed screws on bottom of tachometer (do not remove) and rotate cap while monitoring AC output of tachometer. Turn cap to null AC component. Tighten screws on cap. Run motor for approximately 4 hours.
- Step 10 For JH-110 Series, cut tie wrap on brake assembly (installed in step 7) before reinstallation of motor.

\* If the bench power supply cannot be obtained, the transport may be used to substitute. Route motor supply harness through motor mounting hole in deck. Connect. Install opaque card in tape sensor slot. Put machine in play mode. Proceed with Step 9.





JH-114 TRANSPORT  
AS VIEWED FROM REAR OF DECK



JH-110 TRANSPORT  
AS VIEWED FROM REAR OF DECK