

Service Information



Model Nakamichi 550
Serial No. from 3601871

Subject MHX Motor Ass'y and MHX Governor P.C.B. Ass'y No. NR-0007 (1/6)
(B) Modification Procedures for Previous Models Date 9 August 1976

I. General:

NE motor ass'y has been changed to new MHX motor ass'y, and according to this modification D-D,D-Fast Converter & Motor Governor P.C.B. Ass'y has been changed to new D-D Converter & MHX Governor P.C.B. Ass'y.

Previous motors (JA motor and NE motor) will not be supplied to you as spare parts in future due to discontinuation of production, therefore application of latest motor (MHX motor) instead of previous motors will be desired.

A. History:

Motor ass'y and governor ass'y have been revised in the following three stages:

1. Models bearing serial Nos. 3601871 and greater:

MHX Motor Ass'y, D-D Converter & MHX Governor P.C.B. Ass'y

2. Models bearing serial Nos. 54666 to 3601870:

Motor Ass'y (NE), D-D,D-Fast Converter & Motor Governor P.C.B. Ass'y

3. Models bearing serial Nos. from beginning to 54665:

Motor (JA), D-D Converter & Motor Governor P.C.B. Ass'y

B. Compatibility:

Latest motor has no compatibility with previous motors.

When latest MHX motor ass'y and MHX governor are incorporated to the previous Models, modifications as indicated in the following modification procedures will be required.

Note: Refer to Service Information OOD-M-0039 "Modification of Motor Ass'y and Governor Ass'y".

Service Information



Model _____
Serial No. from _____

No. NR-0007 (2/6)
Date _____

Subject _____

II. Modification Procedures for Previous Models:

A. Modification Procedures for NE Motor Models: (Serial Nos. 54666 to 3601870)

1. Parts for Modification:

a. Parts to be removed:

Part No. CA-3233: Motor Ass'y (NE) (1 pce.)

BA-3699: D-D, D-Fast Converter & Motor Governor P.C.B. Ass'y
(1 pce.)

b. Parts to be replaced:

Part No. CA03253B: MHX Motor Ass'y (1 pce.)

BA03730A: D-D Converter & MHX Governor P.C.B. Ass'y (1 pce.)

2. Modification Procedures:

a. Motor Ass'y:

- (1) Remove the Motor Ass'y (NE) (Motor, Pulley and Bracket) and replace with MHX Motor Ass'y (Motor, Pulley and Bracket).
- (2) Cut the previous type motor-signal-wires (BLU, WHT, YEL, YEL) referring to Fig. 1. Then connect to the new motor referring to Fig. 2.
- (3) Cover with tube for isolation at the connecting point of two wires.
- (4) After replacement of motor ass'y, adjust the pulley position of the new motor as shown in Fig. 3 then check the position of driving belt to insure the following:
 - (a) Set a driving belt through Flywheel, Idler Pulley, Belt Guide and Motor Pulley.
 - (b) Turn the motor back and forth by hand and check to insure whether the drive belt is travelling along the correct position i.e. the center part of the idler pulley without contacting the belt guide.
 - (c) Fasten the screw of the motor pulley and then apply a drip of lock tight paint.

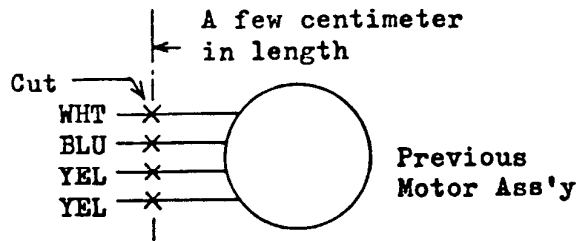


Fig. 1

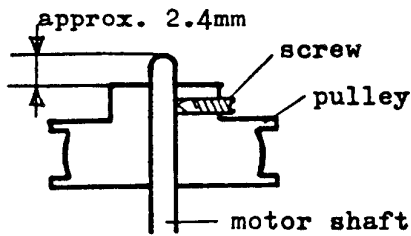


Fig. 3

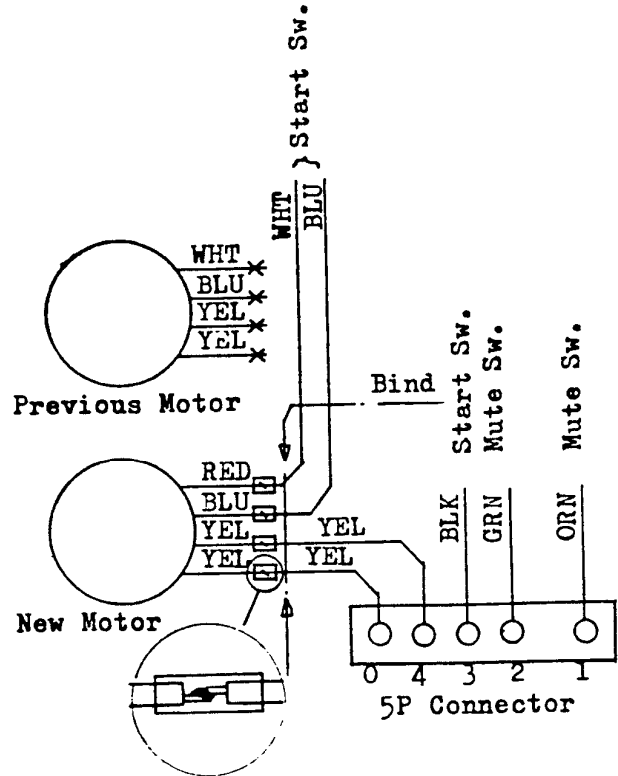


Fig. 2

b. Governor Ass'y:

- (1) Remove previous type D-D, D-Fast Converter & Motor Governor P.C.B. Ass'y, and replace with new D-D Converter & MHX Governor P.C.B. Ass'y.
- (2) Unsolder signal wires from the previous type governor and resolder to the new one.

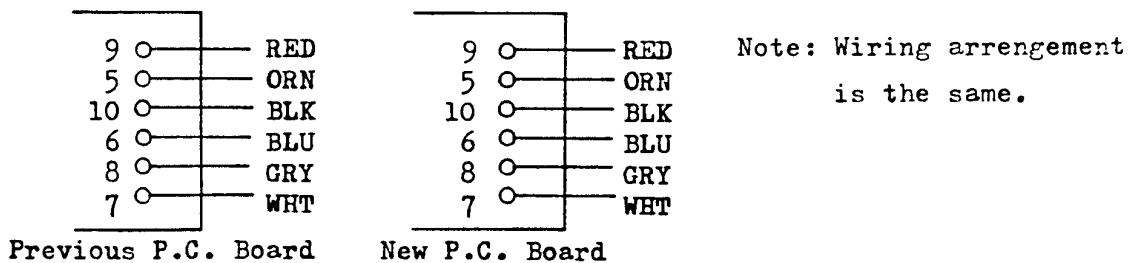


Fig. 4

c. Readjustment:

After the modifications, following adjustments are required.

(1) Driving Belt Adjustment:

Check to insure that the belt remains at the correct position after the following modes: FF to Stop

REW to Stop

Quickly FF to REW then Stop

If the belt is away from its correct position, readjustment of motor pulley position will be required.

(2) Tape Speed Adjustment:

Connect a frequency counter either to left or right output jack.
Load the 3KHz Speed Wow/Flutter Tape (DA09006A) and play it back.
Adjust the tape speed adjust potentiometer for an average reading of correct frequency on the counter.

B. Modification Procedures for JA Motor Models:
(Serial Nos. from beginning to 54665)

1. Parts to be removed:

Part No. CA-3163: Motor Ass'y (JA) (1 pce.)
BA-3679: D-D Converter & MHX Governor P.C.B. Ass'y (1 pce.)
B-8128 : 4P Connector Ass'y (1 pce.)

2. Parts to be replaced:

Part No. CA03253B: MHX Motor Ass'y (1 pce.)
BA03730A: D-D Converter & MHX Governor P.C.B. Ass'y (1 pce.)
OBO8141A: 5P Connector Ass'y (1 pce.)
JA03033A: Noise Shield Case A (1 pce.)
JA03034A: Noise Shield Case B (1 pce.)

3. Modification Procedures:

a. Motor Ass'y:

Refer to Fig.5 and 6.

- (1) Remove the Motor Ass'y (JA) (Motor, Pulley and Bracket) and replace with MHX Motor Ass'y (Motor, Pulley and Bracket).
- (2) Cut the previous type motor-signal-wires (WHT,BLU,BRN), and connect the disconnected signal-wires (WHT and BLU) with new motor-signal-wires (RED and BLU).
Cut the 4P connector ass'y-signal-wires (BRN,BLK,GRN,ORN), and connect the disconnected signal-wires (BLK,GRN and ORN) with new 5P connector ass'y-signal-wires (BLK,GRN and ORN).
Connect motor-signal-wires (YEL and YEL) with 5P connector ass'y-signal-wires (YEL and YEL).
- (3) Cover with tube for isolation at the connection point of two wires.
- (4) After replacement of motor ass'y, adjust the pulley position of the new motor as shown in Fig. 7, then check the position of driving belt to insure the following:
 - (a) Set a driving belt through Flywheel, Idler Pulley, Belt Guide and Motor Pulley.

- (b) Turn the motor back and forth by hand and check to insure whether the drive belt is travelling along the correct position i.e. the center part of the idler pulley is free from contact with belt guide.
- (c) Tighten the motor pulley screw then apply a drop of lock tight paint to that screw.

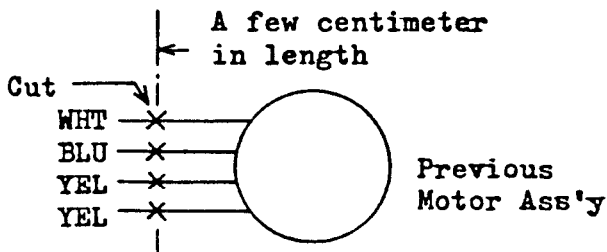


Fig. 5

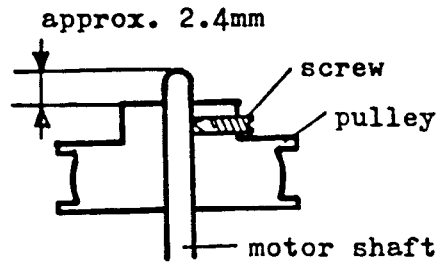


Fig. 6

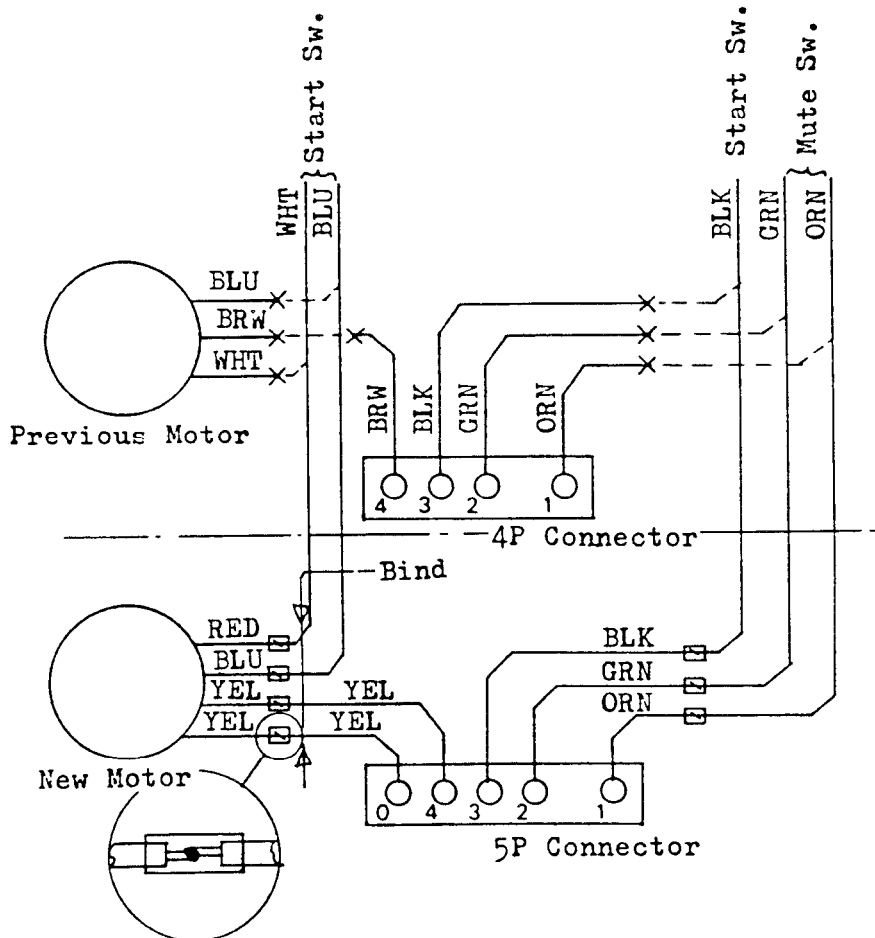


Fig. 7

b. Governor Ass'y:

- (1) Remove previous type D-D Converter & Motor Governor P.C.B. Ass'y, and replace with new D-D Converter & MHX Governor P.C.B. Ass'y.
- (2) Unsolder signal wires from the previous type governor and resolder to the new one.

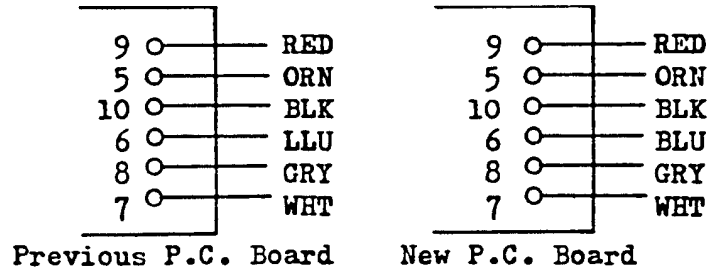


Fig. 8

Note: Cut both sides of 5P connector socket on the governor board with a pair of nippers as shown in the Fig. 9.

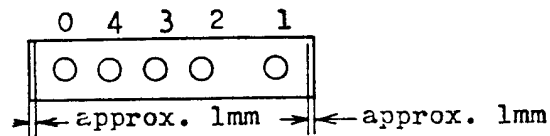


Fig. 9

c. Noise Shield Case:

To prevent the motor noise, assemble the shield case A with Coil L202 and shield case B with Coil L201 on the Main P.C. Board.

d. Readjustment:

After the modifications, following adjustments are required.

(1) Driving Belt Adjustment:

Check to insure that the belt remains at the correct position after the following modes: FF to Stop

REW to Stop

Quickly FF to REW then Stop

If the belt is away from its correct position, readjustment of motor pulley position will be required.

(2) Tape Speed Adjustment:

Connect a frequency counter either to left or right output jack. Load the 3KHz Speed Wow/Flutter Tape (DA09006A) and play it back. Adjust the tape speed adjust potentiometer for an average reading of correct frequency on the counter.