

Service Information

MACHINE TYPE : FV,CL,FS,FS2 and FT type tape feeders

No: SI1003007E-000

CLASSIFICATION : Adjustment / Maintenance

ISSUED DATE: 26 March 2010

How to retrofit the “JIG FEEDER PICK POS.”

1 Outline

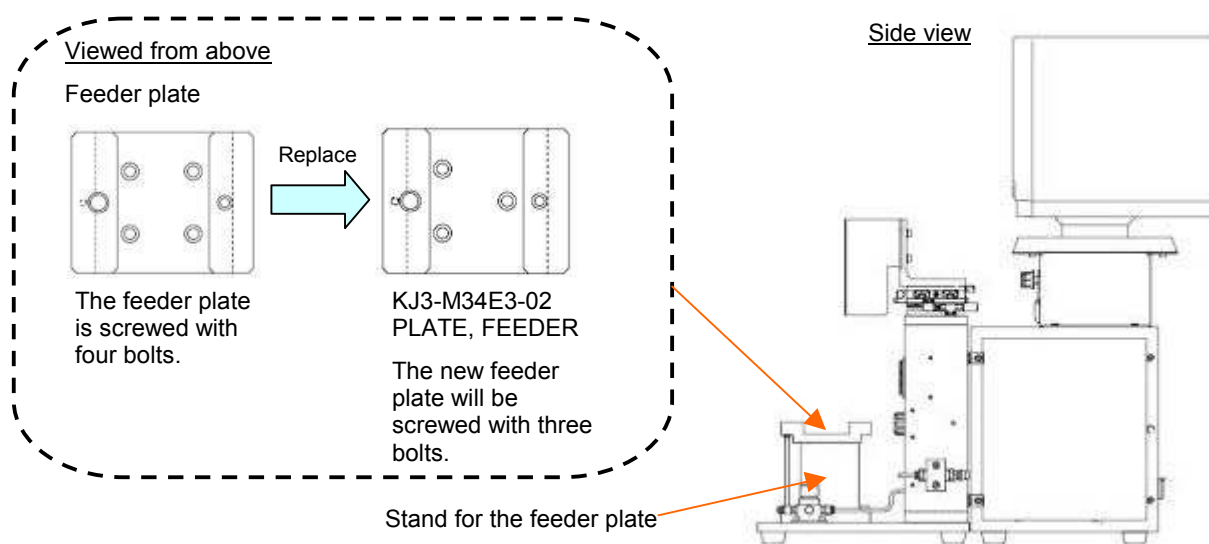
To simplify the adjustment of the pickup position towards the X direction with the FS, FS2 and FT type tape feeders, the “JIG FEEDER PICK POS.” has been modified since August 2007.

By replacing the feeder plate and the stand for the feeder plate of the “JIG FEEDER PICK POS.” for the FV and CL type tape feeders, it can function as same as for the “JIG FEEDER PICK POS.” that has been modified.

(However without replacing them, pickup position towards the X direction can be adjusted.)

This document describes how to retrofit the “JIG FEEDER PICK POS.” for the FV and CL type tape feeders.

JIG FEEDER PICK POS.



2 “JIG FEEDER PICK POS.” to be retrofitted

KJ3-M34E0-10 (JIG FEEDER PICK POS.) - For 200V

KJ3-M34E0-01 (JIG FEEDER PICK POS.) - For 100V

Reference

Please consult YAMAHA or your distributors for retrofitting earlier type of the JIG FEEDER PICK POS. (KJ3-M34E0-00, stationary camera type)

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3 Parts to be replaced

| Part name | | Part No. | Qty. |
|--------------------------------------|------------------------|---------------|------|
| Stand for a feeder plate | (STAND PLATE FEE.) | KJ3-M34E2-01 | 1 |
| Feeder plate | (PLATE FEEDER) | KJ3-M34E3-01 | 1 |
| Joint to supply air to a tape feeder | (AIR JOINT) | KG2-M3407-A0 | 1 |
| Joint to connect a urethane tube | (JOINT(STRAIGHT:W/HOL) | \$TSH4-M5 | 1 |
| Black urethane tube(4mm in dia.) | (URETHANE TUBE) | \$UB0425-BK-1 | 1 |
| Bolt(M6-18) | (BOLT HEX.SOCKET HEAD) | 91317-06018 | 3 |
| Bolt(M6-25) | (BOLT HEX.SOCKET HEAD) | 91317-06025 | 4 |

4 How to retrofit the "JIG FEEDER PICK POS."

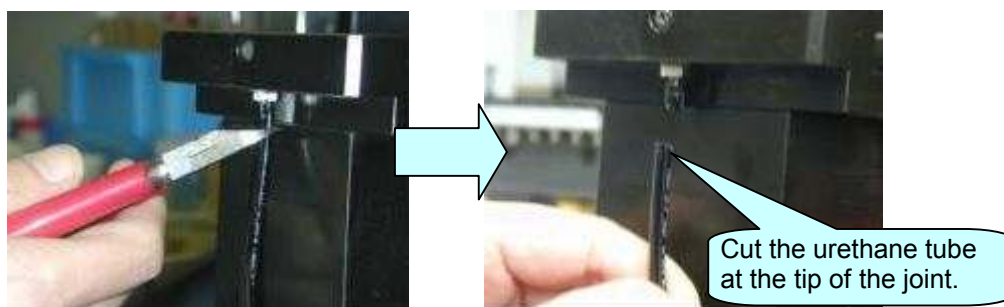
4.1 Removal of the each section

Step 1 Remove the air hose on the primary side.

Remove the air hose connected to the JIG FEEDER PICK POS. on the primary side.

Step 2 Cut the urethane tube.

Cut the urethane tube at the air joint fixed to the feeder plate.

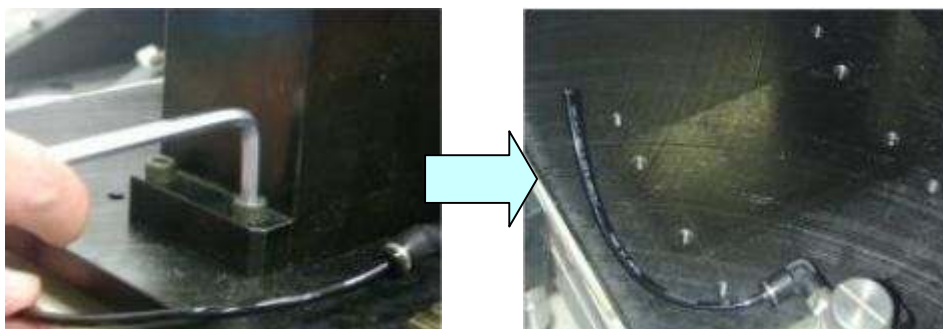


Note

Cut the urethane tube orthogonally. Otherwise air leak could occur after connecting the urethane tube to a new joint.

Step 3 Detach the stand for the feeder plate from the JIG FEEDER PICK POS. body.

Unscrew the fixing bolts(x4) of the stand for the feeder plate with a hex wrench(5.0). And then detach it from the body of the JIG FEEDER PICK POS. with the feeder plate remain attached.



* Hereafter the stand for the feeder plate will be referred to as *stand* for short.

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4.2 Attachment of the each section

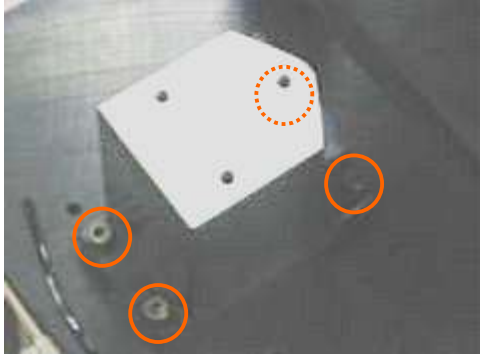
Step 1 Clean before attachment.

Clean the surface of the base of the JIG FEEDER PICK POS. that contacts with the stand and the bottom surface of a new stand with a lint-free cloth.

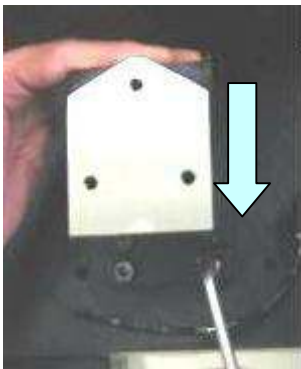
Step 2 Attach a new stand to the JIG FEEDER PICK POS. body.

(1) Set a new stand on the base of the JIG FEEDER PICK POS. so that the side having two bolt holes are in the front side.

And then temporarily screw the stand with the M6-25 bolts(x4) with a hex wrench(5.0).



(2) Push the stand towards you until it stops and then fully tighten the bolts.



Step 3 Attach a new feeder plate onto the top of the stand.

(1) Set a new feeder plate onto the top of the stand so that the bolt holes of the feeder plate are fitted to those on the stand.

And then temporarily screw the feeder plate with the M6-18 bolts(x3) with a hex wrench(5.0).

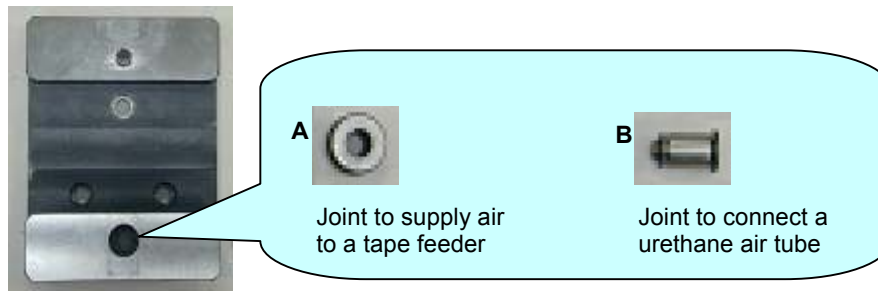
(2) Push the feeder plate towards the rear until it stops and then fully tighten the bolts.



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Step 4 Install new joints to the feeder plate.

Install new joints(The joint to supply air to a tape feeder and the one to connect a urethane air tube) to the feeder plate.



(1) A: Joint to supply air to a tape feeder

Thinly apply a small amount of grease or turbine oil(VG32) to the side surface of the O-ring part of the joint. Put it into the hole so that a mark of the joint is in front side.



(2) B: Joint to connect a urethane air tube

Manually screw the joint to the tapped hole on the bottom front of the feeder plate and then fully tighten it with a hex wrench(2.0).



Note

Do not tighten the joint with a hex wrench massively. Otherwise it could break.

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- Step 5 Connect the urethane air tube to the joint.**
Put the urethane air tube into the joint from underneath until it stops.



Tip

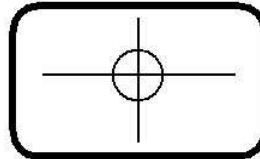
When the existing urethane air tube is too short to be connected to the joint, use a spare one.(\$UB425-BK-1)

- Step 6 Check to see that the JIG FEEDER PICK POS. retrofitted normally functions.**
Set the FEEDER JIG ASSY on the feeder plate replaced and check to see that the table provided with the camera for the X and Y directions can be moved in order to adjust the pickup position normally.



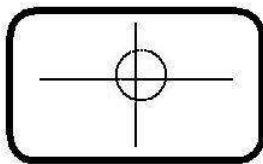
FEEDER JIG ASSY

Proper condition of the JIG FEEDER PICK POS.



If not, again check that installing condition of the feeder plate and the stand is proper.

Improper condition of the JIG FEEDER PICK POS.



Service Information

5 Appendix

Some tools for adjustment of the FS, FS2 and FT type tape feeders have been added to the maintenance tool kit. Please understand the functions of each tool and purchase it(them) if needed.(When purchasing as a tool kit → KJ3-MJA00-00X, TOOL CASE ASSY)

- Offset screwdriver(KJ3-MJ150-00, OFFSET DRIVER)

This is used when adjusting the pickup position in the X direction with a tape feeder set on the JIG FEEDER PICK POS. that has been retrofitted.



- Torque screwdriver(KJ3-MJ151-00, TORQUE DRIVER)

The torque can be precisely adjusted and accurately read off using the adjustment scale. Includes No.0 sized bit.



- Feeler gauge(KJ3-MJ152-00, THICKNESS GAUGE)

A series of blades of graduated thickness in order to measure the clearance at the time of assembling each section during overhaul.



- Spring scale(KJ3-MJ154-00, BAR TYPE TENSION GA.)

This is used when measuring the tension or the torque of the spring for the front lever Assy and the rear lever Assy of the tape guide.



Reference

We recommend that you will have the maintenance training for feeders to learn how to handle the tools above.