For Users

Service Information

MACHINE TYPE: 8mm dummy feeders for YS series machines SOFTWARE VERSION: VGOS V3.06STD R1.000

CLASSIFICATION: Specification REFERENCE: H016578, H016729

No: SI1206003E-000 ISSUED DATE: 12 September 2012

Circuit board retrofitting for YS machine dummy feeders

Before June 2012, 8mm dummy feeders for YS series machines were available either with or without the circuit board fitted. But from June 2012, only dummy feeders with the board become available. If you want to use the "check feeder plate occupation" function, you need to retrofit 8mm dummy feeders at your disposal with the board. This document describes the retrofit procedures.

Update history

Revision No.	Updated contents	Issued date
-000	(First release)	12 September 2012

Warning

- YAMAHA is not responsible for any problems caused by the misuse of the document.
- The procedures herein involve editing of the machine system data that can affect the customer's machine condition. Make sure to thoroughly understand the contents of the document and perform the procedures on your own responsibility.

Safety note

Strictly follow the precautions in the "Safety" section in the machine's users manual.

Disclaimer

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1 Retrofit parts list

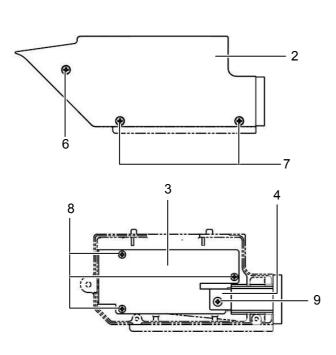
■ Retrofit parts kit

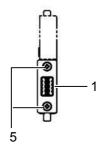
Description	Parts list designation	Part number	Q'ty	Remarks
Dummy feeder board retrofit kit	RFK. DUMMY FEEDER	KHJ-M34D7-00	1	

Included in the retrofit parts kit

#	Description	Parts list designation	Part number	Q'ty	Remarks
1	Connector	CONNECTOR, BOARD	KHJ-MC1A9-00	1	
2	EL box cover for dummy feeder board	COVER, BOX EL	KHJ-MC1A2-00	1	
3	Bracket for dummy feeder board	BRACKET, BOARD	KHJ-M34F5-00	1	
4	Dummy feeder board	BOARD, FDR DUMMY	KHJ-M4663-00	1	
5	Pan head screw (M2.5-8)	SCREW, PAN HEAD	90166-02JA08	2	Used to install part #1.
6	Flat head screw	SCREW, FLAT HEAD	90990-09J008	1	Used to install part #2.
7	Flat head tapping screw	SCREW, FLAT HEAD TAP.	90990-54J002	2	Used to install part #2.
8	Pan head tapping screw	SCREW, PAN HEAD TAP.	90990-54J004	3	Used to install part #3.
9	Pan head screw (M3-4)	SCREW, PAN HEAD	98502-03004	1	Used to install part #4.

Appearance of the parts listed above:





Other required items

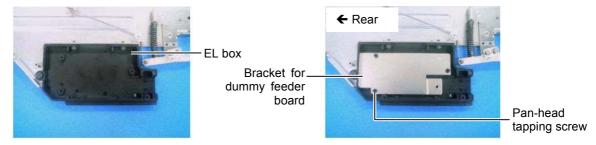
- Medium strength threadlocking fluid (Loctite 241 is recommended.)
- No.1 Phillips screwdriver



2 Service procedures

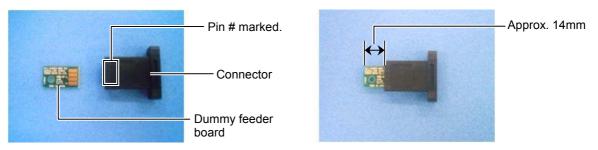
Step 1 Install the bracket for the dummy feeder board in the EL box.

Fit the bracket against the rear end of the EL box. Then fasten the bracket with three pan-head tapping screws using a Phillips screwdriver. Tightening torque is 0.2Nm.



Step 2 Insert the board in the connector.

With the connector's pin # 2, 4, 6, and 8 facing upward, insert the board in the connector with the board's silkscreen side upward. Ensure that approx. 14mm of the board length protrudes from the connector.



Step 3 Insert the connector with the board fitted in the EL box so that the connector is on top of the board bracket.

Check that the screw hole in the bracket to fasten the board is at the center or right of the board's hole.



Step 4 Fasten the connector to the EL box with two pan head screws with a Phillips screwdriver.

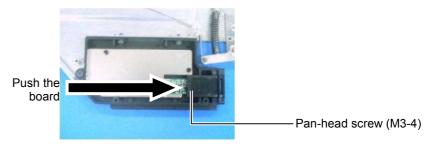
Beforehand apply small amount of medium strength threadlocker (Loctite 241 is recommended) on the pan head screws. Tightening torque is 0.3Nm.





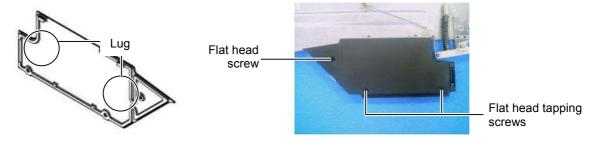
Step 5 Fasten the board on the bracket.

Fasten roughly the board on the bracket with a pan-head screw (M3-4) using a Phillips screwdriver. Push the board toward the connector and tighten the screw at 0.5 Nm.



Step 6 Install the dummy feeder EL box cover on the EL box.

Fit the two lugs at the upper part of the EL box cover into respective mating slots at the upper part of the EL box. Fasten the EL box cover to the EL box with a flat head screw and two flat head tapping screws using a Phillips screwdriver.





3 Enable the "Check feeder plate occupation" function

To enable the "Check feeder plate occupation" function, relevant VmSpec setting must be changed.

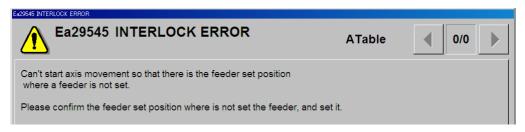
3.1 Feeder presence detection function

When a feeder lane on the feeder plate is not occupied by feeder, the operator might insert part of their body inside the running machine through the gap between the feeder plate and the upper safety cover. To prevent the operator from such hazardous actions to avoid critical accidents, the "check feeder plate occupation" function is used to monitor whether each feeder lane is occupied by the feeder. If any empty lane is detected, the following operations will be disabled:

- Automatic operation
- Move driving axes (including manual operation, return-to-origin and warm-up).

If you attempt to execute any of the following tasks when one or more feeder slots are empty, "Ea29545 INTERLOCK ERROR" appears and you cannot perform the task:

- Start automatic operation.
- Start to move a driving axis.
- Load board data with servomotors turned on.



3.2 Modify relevant VmSpec setting

To enable the "Check feeder plate occupation" function, set the [Check feeder plate occupation] setting in the VmSpec window to "Use" ([Machine Information] > [Installation Setting] > [Option] > [Check feeder plate occupation]).

