FCO CA00752: Carriage Driver Upgrade

Internal document number: 709-00170A-F

Product

- Kodak® Trendsetter® 400/800 TS8 – MPE
- Kodak Trendsetter 400/800 II - MCE
- Kodak Trendsetter® NEWS™ (All models)

FCO priority

Next visit

Machines affected Serial numbers TE174, TE195, TE198, TE227, TE235, TE236, TE238 and up, PX072 and up

Background

Increased performance and reliability was required for Trendsetter carriage systems so a new carriage driver board was designed.

Solution

The new carriage driver board operates from a single 48 V power supply and does not need PS3 to operate. This FCO is applicable to TS8 (MPE) and TSM (MCE) machines that use a 48 V carriage driver.

Parts required

Part Number	Part Name	Quantity
512-00040A	CA00752 Upgrade kit	1
	Contains:	
	503C01525B - Carriage driver board	1
	11-1133C - Carriage motor and pulley	1
	11-0885A - Carriage motor cooling fan	1
	220-00163B - Power supply to carriage driver board cable	1
	500-01185A - Carriage amp cooling fan and bracket	1
	52-3275 - Cap screw M5 x 12	2
	52-4028 - Cap screw M5 x 16	2

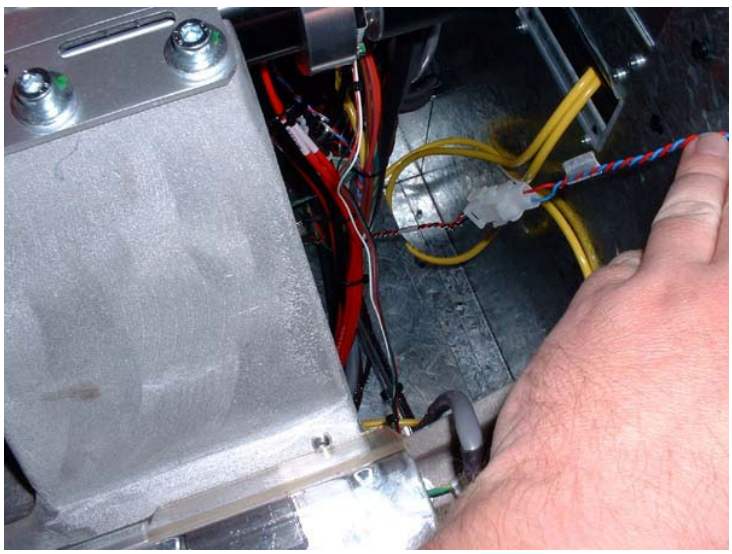
For MPE Devices:

1. Turn off the Trendsetter.
2. Remove the power cable between PS3 and the power distribution board.
3. Remove the cables that connect from PS3 to the old carriage driver board.
4. Remove PS3. Discard – it will not be used.
5. Disconnect the carriage motor from the carriage driver board.
6. Disconnect the data cable from the MCE to the carriage driver board.

7. Open the carriage motor access panel in the back wall of the power box.
8. Remove the existing carriage motor.
9. Install the new carriage motor.
10. Adjust the belt tension according to the procedure at: http://techplanet.creo.com/output/computer_to_plate/trendsetter_3244/content/docs/CarriageBeltTension.pdf
11. If you are installing this FCO on a Trendsetter that is not equipped with a carriage motor cooling fan, you must add the 11-0885A carriage motor fan assembly.

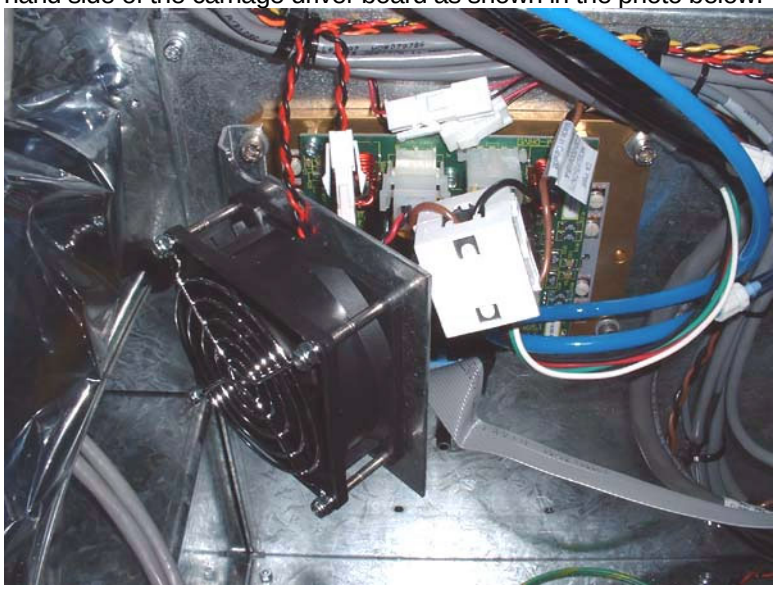


The wiring harness should have a power connection for this fan. (The wiring harness is attached to the base of the machine between the power box and the drum motor.) The connection is labeled **To Carriage Motor**.



If the wiring harness is not present in the machine you are upgrading, order part 10-4798A and complete the fan installation on your next site visit.

12. Remove the old carriage driver board.
13. Route the cable and connector from the motor into the power box.
14. Replace the access panel.
15. Install the new carriage driver board and fan.
    Note that the carriage driver mounting screws also hold the fan bracket. The fan mounts on the left hand side of the carriage driver board as shown in the photo below.



16. Connect the motor to J3 on the carriage driver board.
17. Remove the output power cable from PS4.
18. Attach cable 220-00163 to PS4. See the cable assembly drawing at http://techplanet.creo.com/output/computer_to_plate/trendsetter_3244/content/docs/220-00163B-A-AD01.pdf.
19. Plug the connector from PS4 into the carriage driver board J1
20. Plug the carriage driver board cooling fan into the unused socket on this cable.
21. Connect the control cable from the backplane to the carriage driver.
22. Turn on the Trendsetter.
23. Change the following parameters to these values:

    carriage again 179

    carriage mgain 179

    carriage pgain 179

    carriage hgain 30

24. Test the carriage as follows:

    carriage init

    carriage away

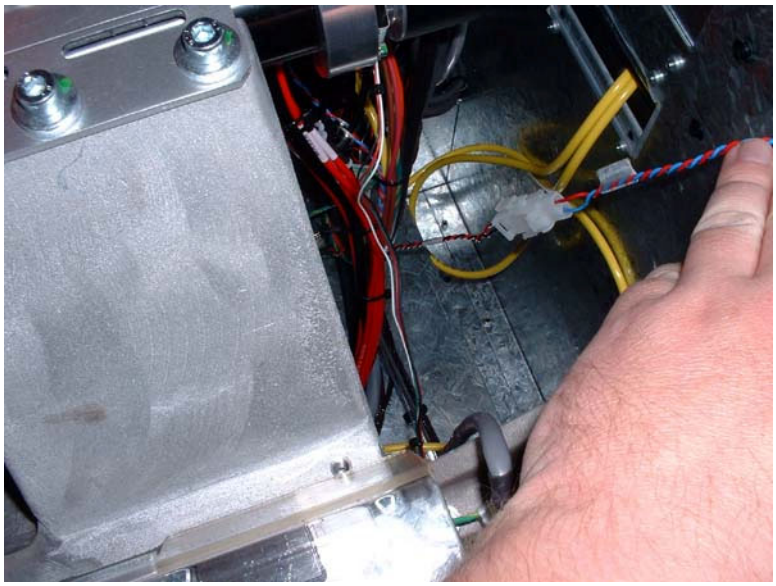
    carriage home

For MCE Devices:

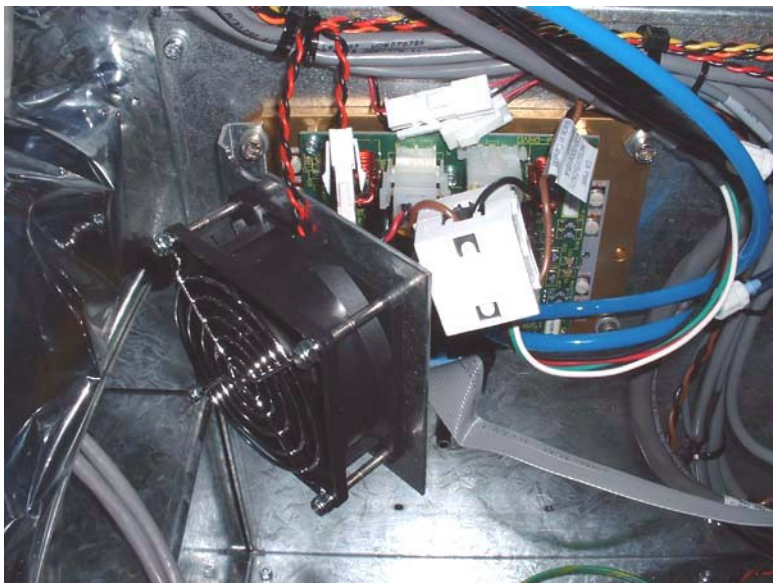
1. Turn off the Trendsetter
2. Remove the cable that connects from the MCE board to the carriage driver board and discard.
3. Disconnect the carriage motor from the carriage driver board.
4. Disconnect the data cable from the MCE board to the carriage driver board.
5. Open the access panel in the back wall of the power box.
6. Remove the existing carriage motor.
7. Remove the old carriage driver board.
8. Install the new carriage motor.
9. Adjust the belt tension according to the procedure at: http://techplanet.creo.com/output/computer_to_plate/trendsetter_3244/content/docs/CarriageBeltTension.pdf
10. If you are installing this FCO on a Trendsetter that is not equipped with a carriage motor cooling fan, you must add the 11-0885A carriage motor fan assembly.



The wiring harness already has a power connection for this fan. (The wiring harness is attached to the base of the machine between the power box and the drum motor.) The connection is labeled **To Carriage Motor**.

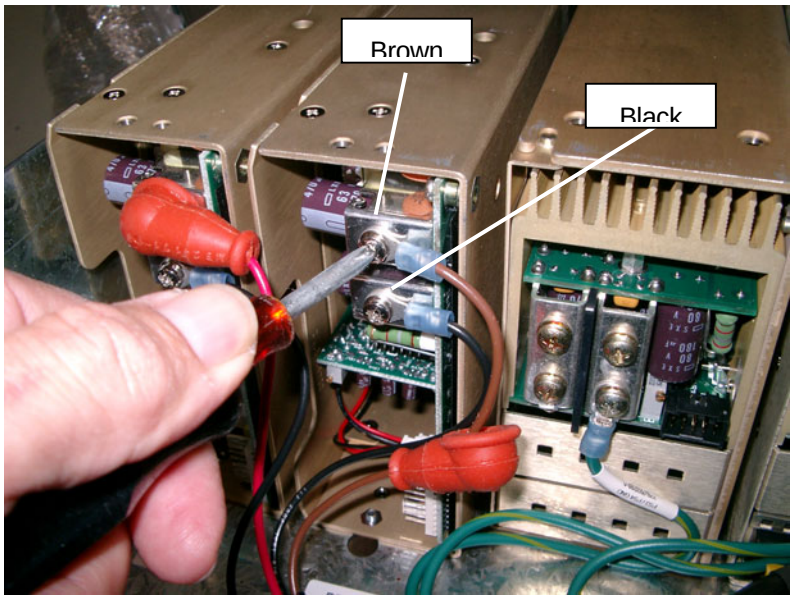


11. Route the cable and connector from the motor into the power box.
12. Replace the access panel.
13. Install the new carriage driver board and fan.
    Note that the carriage driver board mounting screws also hold the fan bracket. The fan mounts on the left hand side of the carriage driver board as shown in the photo below.



14. Connect the motor to J3 on the carriage driver board.

15. Connect cable 220-00163 from J1 on the carriage driver board directly to PS2. See photo below.



16. Plug the carriage driver board cooling fan into the unused socket on this cable.
17. Turn on the Trendsetter.
18. Change the following parameters to these values:

    `carriage imove 7.0`

    `carriage iplot 7.0`

    for **Base** and **Spectrum**:

    `carriage mspeed 45`

    `carriage accel 45`

    for **ContinuousLoad**, **Autoloader** and **NEWS**:

    `carriage mspeed 85`

    `carriage accel 150`

19. Test the carriage as follows:

    `carriage init`

    `carriage moveto 1100 85`

    `carriage moveto 0 85`

Notes	If you are installing this FCO in response to carriage drive problems, install all parts included in the kit. After installing this kit you must update the NVS parameters specified in this procedure. **Caution: Failure to update these parameters will cause failure of these new parts.**
See also	http://techplanet.creo.com/output/computer_to_plate/trendsetter_3244/content/docs/220-00163B-A-AD01.pdf. http://techplanet.creo.com/output/computer_to_plate/trendsetter_3244/content/docs/CarriageBeltTension.pdf
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