Upgrade Drum Vacuum System, ECO C698 (Interim to Final)

Applies to

☑ Thermoflex

Background

This procedure is meant to upgrade ThermoFlex machines in the Interim Stage to the Final Stage. Machines in the Interim stage use an old vacuum system. The Vacuum tubing, in the old system runs along the back of the machine. There is no feedback to the vacuum system. Pressure is regulated by varying flow with a solenoid valve located in the back of the machine. The old system also used an external pressure sensor.

The Final stage uses a new Drum Vacuum System. The tubing for this system runs along the front of the machine, beside the drum. The sensor is on board the TEE board. It senses pressure via a pneumatic tube connected to a small orifice on the drum tubing located by the drum's side. Pressure is controlled by the ThermoFlex's firmware.

Tools and parts

- Kit, Upgrade, Drum Vacuum System, ECO698 BOM (05-0126)
- Slotted screwdriver
- 3mm Allen Key
- 4 mm Allen Key
- 5mm Allen Key

Steps

Mechanical Upgrade

1. Using a slotted screwdriver remove all side panels from the ThermoFlex unit.
2. Remove vacuum pressure sensor from Drum Vacuum tubing
3. Remove pneumatic control tubes (Red and Black ¼" tubes) that connect Drum Vacuum 3-way control valve to solenoid valve on manifold block.
4. Remove existing PVC drum vacuum tubing along with clamps, large 3-way valve and valve bracket.
5. Remove Drum Vacuum control solenoid valve and replace it with a blanking plate.
6. Remove brass tube fittings from top of manifold block and replace them with plugs (1/8 NPT)
7. Install the Drum Vacuum tubing kit (50-1832A). Refer to the 50-1832A (DWG).
8. Remove the actuator from the front side of the ThermoFlex machine. The actuator is located on the frame below the drum.
9. Place actuator mounting bracket (57-6537A) over top of tubing mounting bracket (57-6405A), where actuator was previously, and secure to the

ThermoFlex frame using 1 m6 screw (52-4485), 2 M5 screws (52-3150), washer (52-4070) and 2 washers (52-4387).

10. Attach the actuator to the angled bracket (57-6537A) using 2 M6 screws (52-3127) and 2 washers (52-4144).
11. Attach 2" bulkhead assembly (50-1830A) using 4 M6 screws (52-4324)
12. Install home end tube assembly (50-1828A) by attaching clamp (52-3232)to mounting bracket with 2 M6 screws (52-4485) and 2 washers (52-4070).
13. Attach end of tube to Drum Pin using hose coupling (57-6481A) and hose clamps (52-4517).
14. Attach tee section assembly of tubing (50-1828A) to drum pin, home end tube assembly, and bulkhead tube using 3 hose couplings (57-6481A) and 6 hose clamps (52-4517)

Electrical Upgrade

1. Remove cables 10-3830A and 10-3030A from connectors J8, J19, and J20 on the TEE board.
2. Connect one end of cable 10-4146A to connectors J8, J19, and J20 on the TEE board, and the other end of the cable to the frame.

Firmware Upgrade

Download new firmware referring to Appendix D of MPE Firmware Release Notes.
http://intranet.creo.com/support/firmware/ctp/Thermoflex/thermal/1.00_current/TFTS_100.doc

Drum Vacuum System Installation

Once the Machine has been upgraded install the Drum Vacuum System refer to TF Proc-DrumvacInstallationAtSite.doc 77-0094A

Notes ThermoFlex machines are in various stages. If this procedure is not adequate for your machine contact the technical contact below.

Technical contact Ted Nivolianitis

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