

Problem Details:

- Espar Heater Fuel Pickup Tube Solder Joint Failure
- After change from brass to steel fitting
- Espar heater fails to run, tube falls into fuel tank

FSPRs, FRACAS, DPR, Zeus:

- FSPR 38779
- FRACAS 13951

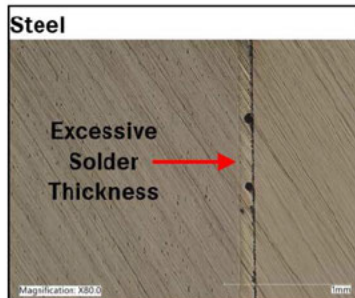
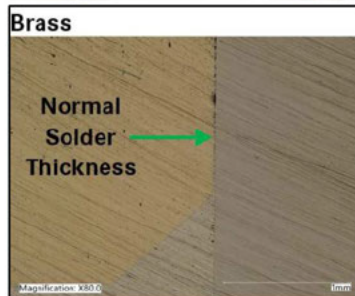
Affected Models / Truck options:

- All Models w/Espar Heater
- 48,008 units

Responsible Supplier:

- TEMCO

Solder Joint Fails Tube Falls in Fuel Tank



Production Containment:

- Changed back to original brass design via Deviation
- 03/15/2024

☐ No ☒ Yes

Field Containment (short term):

- Replace failed tube with brass

☒ No ☐ Yes

Root Cause:

- Eng'g was directed by DDC to remove all brass from fuel system
- New steel version ended up with excessively large solder joint gap which made the joint very weak
- Solder joint fails and tube falls out of fitting and into fuel tank
- Driver only notices when attempting to start heater and it doesn't (no fuel)

☐ No ☒ Yes

Long Term Corrective Action Plan:

- Resolving issue with a revised pickup tube design
- Nickel plated brass was chosen
- Will be a Campaign
- Pushing for new design production changeover by 07/31/24

☐ No ☒ Yes

☒ No ☐ Yes

Long Term Field Plan:

- Replace failed tube with new tube design (once available)

Part numbers:

Length	Brass		Nickel Plated Steel		Nickel Plated Brass
22"	A03-39090-000	➡	A03-39090-003	➡	A03-39090-006
24"	A03-39090-001	➡	A03-39090-004	➡	A03-39090-007
26"	A03-39090-002	➡	A03-39090-005	➡	A03-39090-008
	Good		Bad		NEW



When did **Bad Steel** standpipes go into production?

Actual Changeover is 02/13/23

What are Clean Dates – Going back to brass from steel?

MTH	None Used
PDX	03/08/24
Saltillo	03/06/24
Cleveland	03/11/24
Santiago	03/15/24

When will **New Parts** go into production?

New design - nickel plated brass

08/05/24 first shipment from TEMCO

10/07/24 c/o to new Nickel-Plated Brass in production

Campaign Approved

All trucks built in population will get the new standpipe design

Timing based on parts and writing the required documentation

Good

BRASS
Prior
to
02/13/23

Bad

Nickel-Plated Steel
02/13/23
to
03/15/24

Good

**Engineering Deviation
back to BRASS**
03/15/24
to
10/07/24

NEW

**Production c/o to
Nickel-Plated Brass**
10/07/24
to
Current

