

Date: 2/6/2020

Goodrich Contoured Diaphragm Flexible Coupling – Touch up Paint and Diaphragm Scratch Evaluation

Touch up Paint

The following procedure is recommended for cleaning and touch-up paint (however please follow the scratch evaluation procedure if there is any concern associated with a scratch in the diaphragm profile):

- a) Clean away peeling paint - wire brush acceptable to use - USE CAUTION TO AVOID THIN FLEXIBLE DIAPHRAGM PROFILE SURFACE.
- b) Lightly scuff areas to be painted with 320 grit emery cloth.
- c) Clean area with acetone to remove grease, oil, dirt, rust.
- d) Apply heavy-duty epoxy paint – such as:

Rust-Oleum 4200/4300 System High Heat Coating 4268402 Red Primer

Rust-Oleum 4200/4300 System High Heat Coatings 4279402 Black

Allow all cure time as called for in paint instructions.

NOTE: IF THE SERMETEL COATING IS REMOVED, THE HEAVY DUTY EPOXY PAINT MAY NOT PROVIDE ACCEPTABLE CORROSION PROTECTION DEPENDING ON THE COUPLING OPERATING ENVIRONMENT. GOODRICH WILL NOT WARRANTY DAMAGES RESULTING FROM A COUPLING MODIFICATION.

Scratch Evaluation

The following procedure is recommended for inspection and evaluation of a scratched coupling diaphragm profile.

The region of greatest concern is the thin diaphragm “profile” area. This region is contoured, and extends from the breakout at the bolt rim flange to the breakout at the inner diaphragm hub. There are typically two diaphragms per coupling – one at each end of the center flex unit.

The diaphragm profile is covered by several protective layers (see Figure 1). First, a sacrificial Sermetel 'W' (aluminum slurry) coating. On top of this is either Rustoleum Heavy

Proprietary Notice

This document is the property of Collins Aerospace. You may not possess, use, copy or disclose this document or any information in it, for any purpose, including without limitation, to design, manufacture or repair parts, or obtain any government approval to do so, without Collins Aerospace's express written permission. Neither receipt nor possession of this document alone, from any source, constitutes such permission. Possession, use, copying or disclosure by anyone without Collins Aerospace's express written permission is not authorized and may result in criminal and/or civil liability.
© Collins Aerospace 2020

U.S. Export Classification EAR99

104 Otis Street
Rome, NY 13441

Page 1 of 3

Form RME005
Rev. 2/2020

G:\Couplings\Customer Specifications\Customer Support\Paint\Touch up paint & Diaphragm Scratch Evaluation 2020.doc.docx

Duty epoxy paint (9323 system, blue), or Everslik 1201 or Everlube 9800 high-temperature paint (blue or black). There may or may not be a white primer coat beneath the top coat.

Examination

- 1) Dents, cracks, or large gouges must be evaluated by Goodrich Corporation.
- 2) Scratches that do not penetrate the blue epoxy or black high-temperature paint need no further action.
- 3) Scratches that appear metallic in color at the bottom need to be examined further to determine if the scratch has penetrated the Sermetel W coating – (see Figure 2)
 - a) Using fine sand paper, such as 320 grit emery cloth, remove the paint around the scratch. If the scratch disappears at this point, the diaphragm is not damaged - repaint the area with suitable available paint. If not –
 - b) Using a soft piece of metal (copper or brass), scrape the Sermetel 'W' away from the area. Because of the color of the Sermetel, it will appear as if metal is being removed. Scrape until a machining pattern appears around the scratch – (see Figure 3). At this point base metal has been reached.
 - c) If the scratch has disappeared, the part is not damaged and may be repainted.
 - d) If the scratch still remains, it has penetrated into the base metal. It is important to know the depth of this scratch in order for Goodrich Engineering to determine if polishing can be done to repair.

Proprietary Notice

This document is the property of Collins Aerospace. You may not possess, use, copy or disclose this document or any information in it, for any purpose, including without limitation, to design, manufacture or repair parts, or obtain any government approval to do so, without Collins Aerospace's express written permission. Neither receipt nor possession of this document alone, from any source, constitutes such permission. Possession, use, copying or disclosure by anyone without Collins Aerospace's express written permission is not authorized and may result in criminal and/or civil liability.
© Collins Aerospace 2020

U.S. Export Classification EAR99

104 Otis Street
Rome, NY 13441

Page 2 of 3

Form RME005
Rev. 2/2020

G:\Couplings\Customer Specifications\Customer Support\Paint\Touch up paint & Diaphragm Scratch Evaluation 2020.doc.docx

Figure 1 Paint Scheme

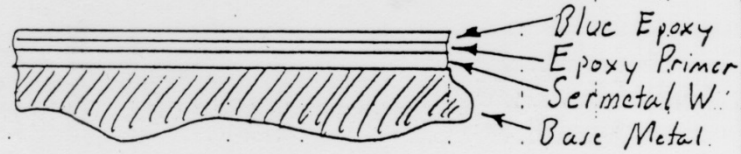


Figure 2 Scratch Cross Section

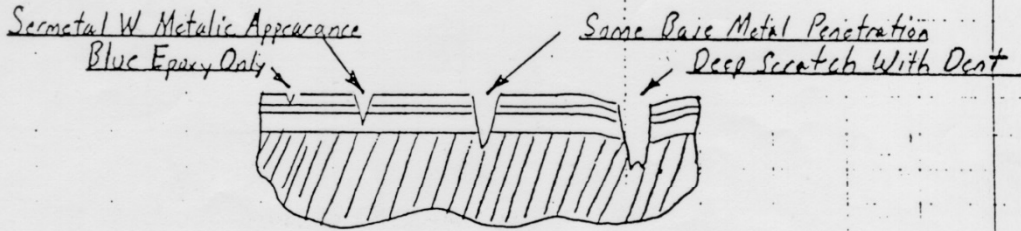
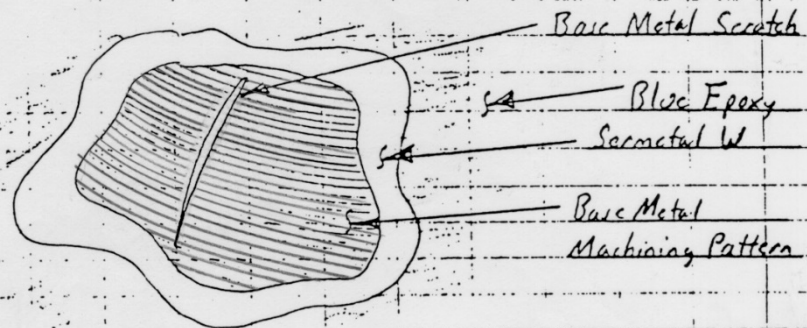


Figure 3 Top View Scratch Area With All Coatings Removed.



Proprietary Notice

This document is the property of Collins Aerospace. You may not possess, use, copy or disclose this document or any information in it, for any purpose, including without limitation, to design, manufacture or repair parts, or obtain any government approval to do so, without Collins Aerospace's express written permission. Neither receipt nor possession of this document alone, from any source, constitutes such permission. Possession, use, copying or disclosure by anyone without Collins Aerospace's express written permission is not authorized and may result in criminal and/or civil liability.
 © Collins Aerospace 2020

U.S. Export Classification EAR99

104 Otis Street
 Rome, NY 13441

Form RME005
 Rev. 2/2020

G:\Couplings\Customer Specifications\Customer Support\Paint\Touch up paint & Diaphragm Scratch Evaluation 2020.doc.docx