

**SUBJECT:** Gear Driven Compressor Assembly Hose Fittings  
**Aircraft:** Eclipse 500 and Eclipse 550  
**Effectivity:** Eclipse 500 serial numbers 000001 thru 000262 and 000266 and 000267 when modified per MB 500-21-001.  
All Eclipse 550 Serial Numbers.  
**Applicability:** All aircraft equipped with a Gear Driven Compressor Assembly.

## 1. SUMMARY

This SIL provides guidance regarding the freon hose fittings on the Gear Driven Compressor Assembly.

## 2. BACKGROUND

Eclipse has become aware that compressor freon hose fittings on the Gear Driven Compressor Assembly are being damaged by improper handling.

## 3. ECLIPSE ACTION

EAI is issuing this SIL to as a cautionary note to bring awareness to this issue.

## 4. SUGGESTED OPERATOR ACTION

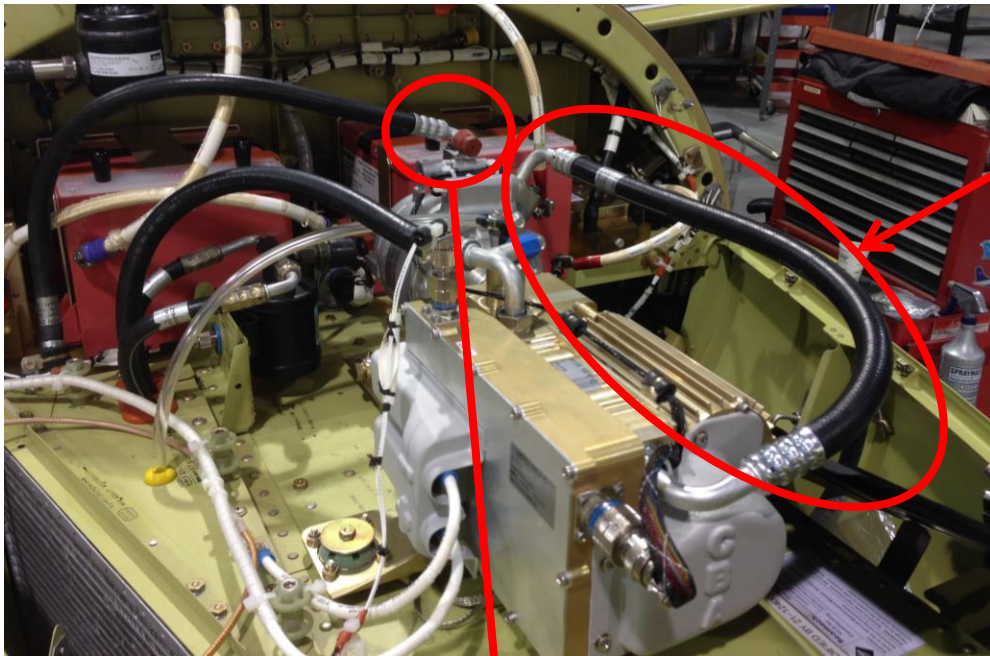
Eclipse engineering has released MB 500-21-001. This MB installs the Gear Driven Compressor Assembly (GDCA).

The GDCA is shown in figure 1. It uses hose fittings with elbows as seen in figure 2. Please note the shape of the cold plate to compressor hose assembly in Figure 1. It shows the proper routing of the hose. Contrast the figure 1 hose with the hose shown in figure 3 that is not properly routed. The improper routing of the hose is due to the bent / kinked fitting elbow shown in Figure 4.

### **Care must be taken when working or around the GDCA.**

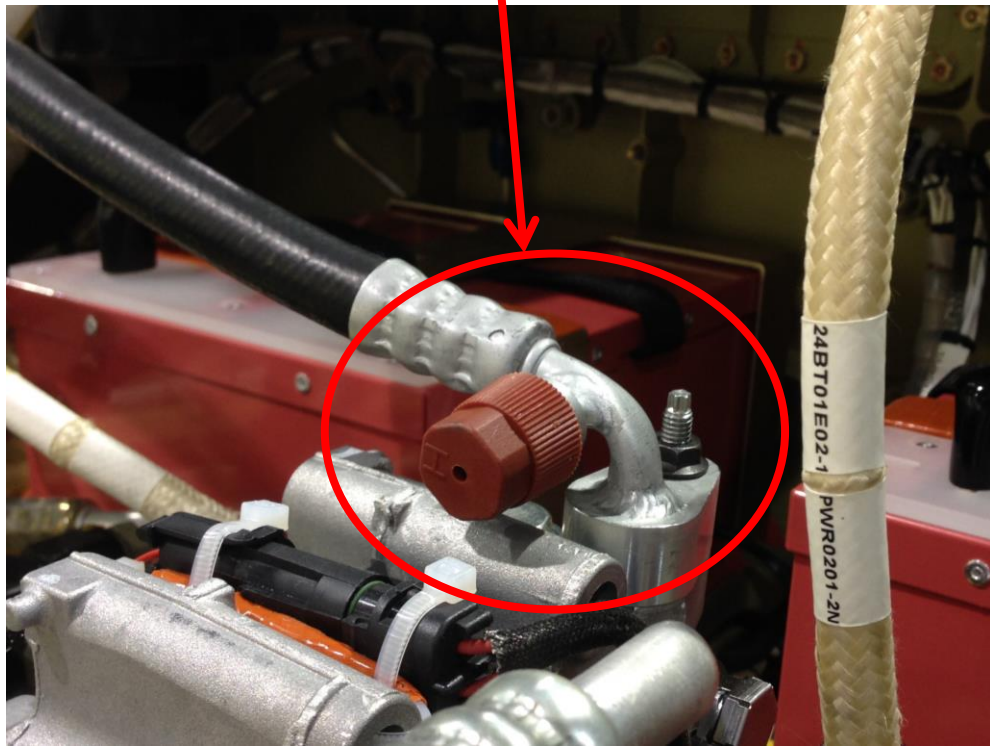
- Do not place force on the fitting elbows.
- Do not use the GDCA hoses or fittings for hand holds.
- The elbows can be bent or kinked.
- A bent or kinked elbow will create a restriction, reduce vapor cycle system performance, and may require replacement of the hose assembly.

**INFORMATIONAL — This service letter is for informational purposes only.**



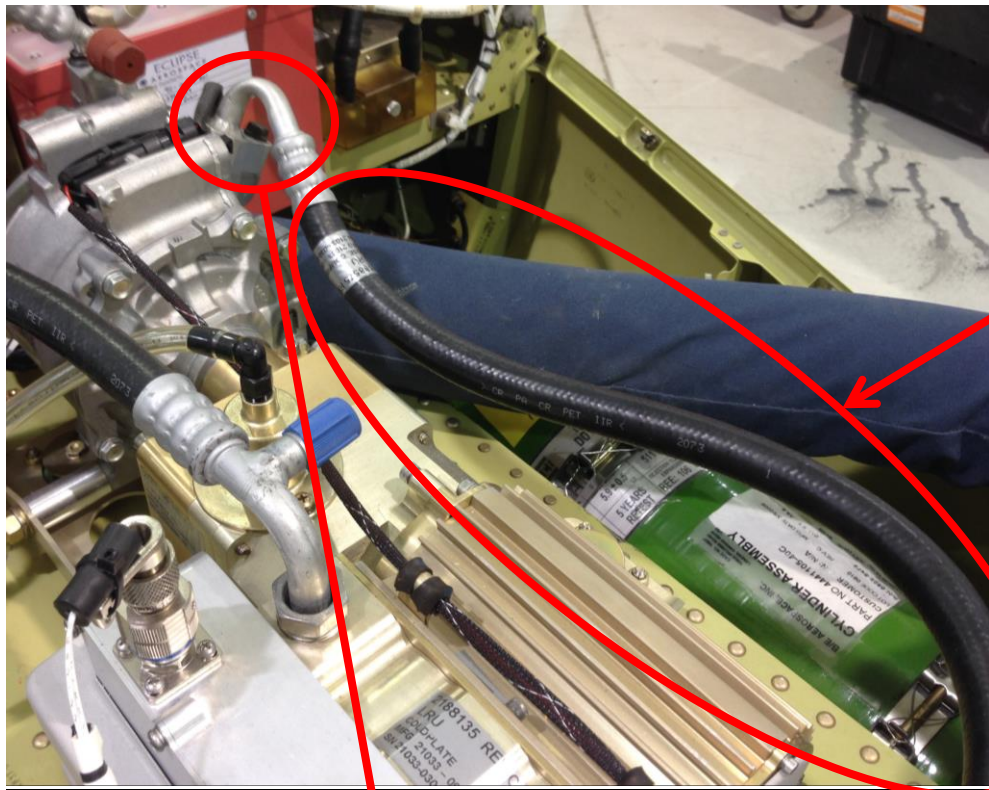
Proper Routing  
of Cold Plate to  
Compressor  
Hose Assembly

**Figure 1**



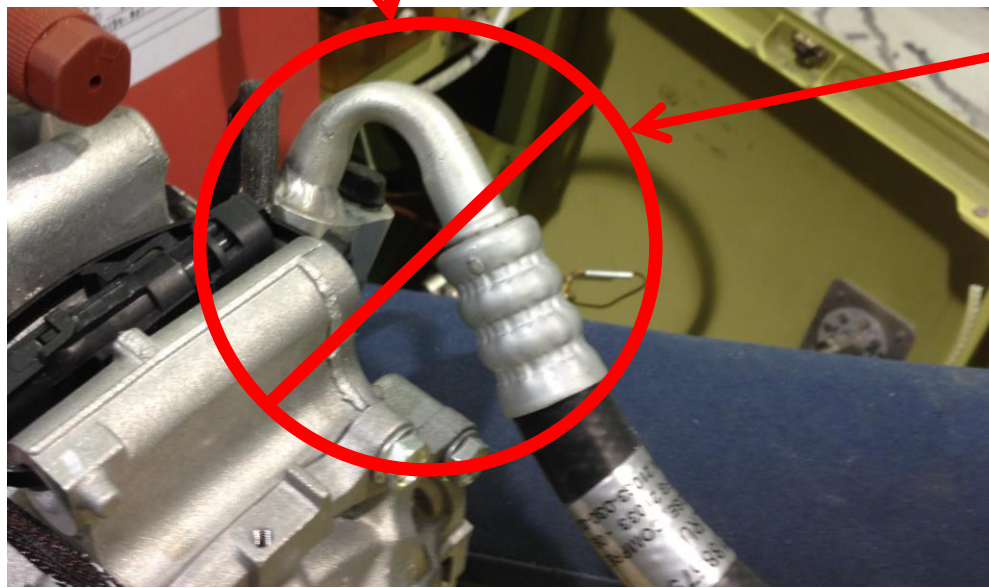
**Figure 2**

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**Improper  
Routing of Cold  
Plate to  
Compressor  
Hose Assembly**

**Figure 3**



**Kinked / Bent  
Hose Fitting  
Elbow Creating a  
Flow Restriction**

**Figure 4**

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## 5. EXPORT CONTROL

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