

# EAGLE TECHNICAL BULLETIN

REF. TCCA STC: SH14-47  
REF. FAA STC SR03496NY

Eagle Technical Bulletin Number: **TB-E407-789-1**

**Purpose: To repair cracks to the engine firewall pan in the area of the engine mounts (STA 171, RBL 11.7)**

**Eligible Serial Numbers: 53197**

**Compliance: At the next convenient Maintenance Interval or immediately upon the detection of cracks in the engine firewall pan**

**Description: To prevent cracking or repair existing cracks in the RH firewall pan on the RH side of the aircraft perform the modification outlined in this Technical Bulletin. Compliance with this Technical Bulletin requires the parts listed in Table 1 below.**

**Parts List:**

Table 1

QTY -011	PART NUMBER	DESCRIPTION
X	TB-E407-789-1-011	STRUCTURAL REPAIR KIT
1	0789-03-200-1	DOUBLER
1	0789-03-200-3	ANGLE, FWD
1	0789-03-200-5	ANGLE
1	0789-03-200-7	ANGLE, AFT

**Weight and Balance:**

The incorporation of this TB has a negligible effect on the aircraft weight and balance


CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

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BY:   
D. SHEPHERD (DE # 02)

DATE: 15.09.03  
CERT. NO.: SH14-47  
ISSUE NO.: 1

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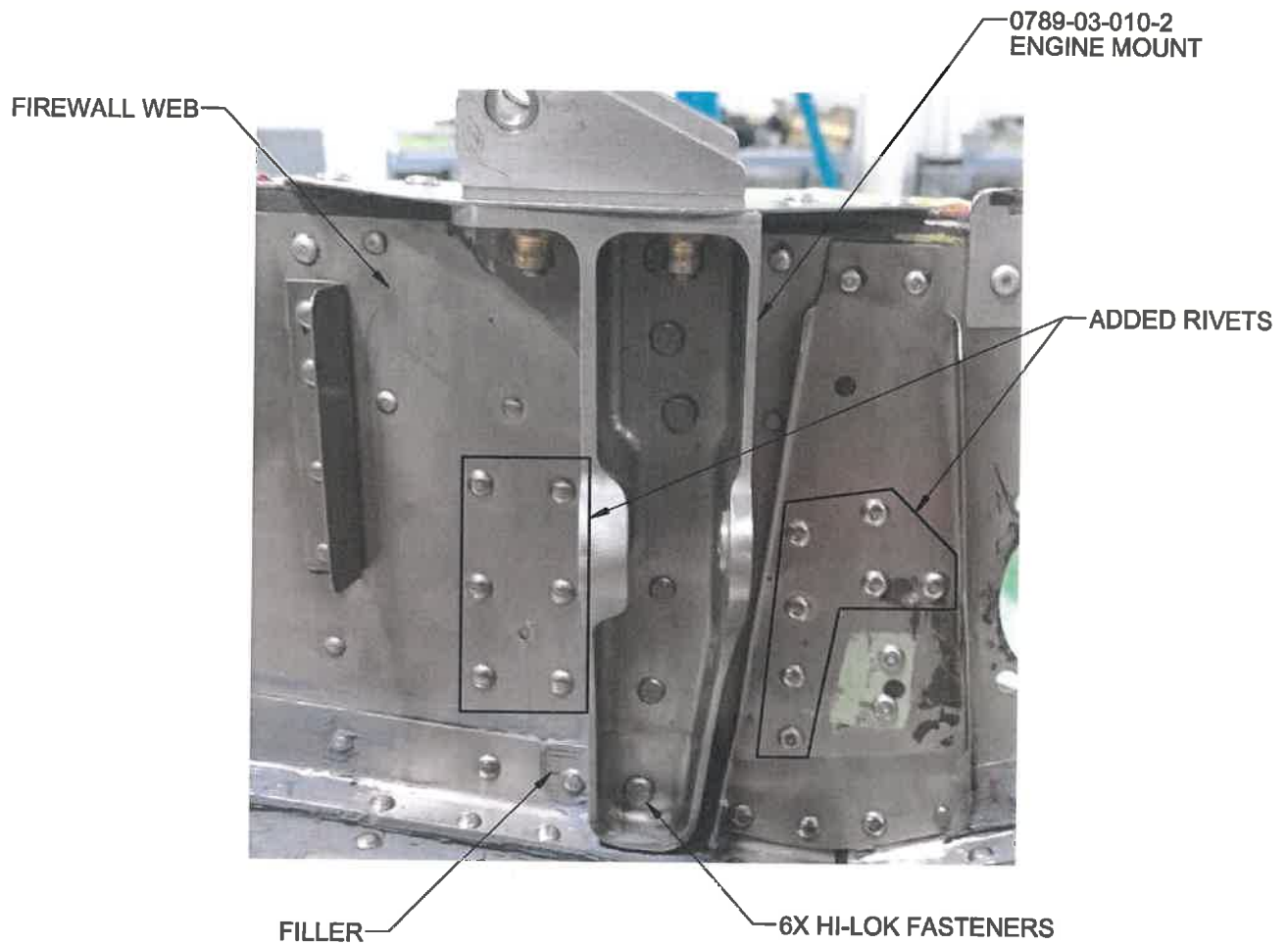
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**Procedure:**

- 1) Remove oil cooler and transmission cowls per the Aircraft Maintenance Manual. Remove engine cowl per Eagle Copters ICA-E407-789.
  - 2) Remove the tail rotor and main drive shafts per Eagle Copters ICA-E407-789.
  - 3) Remove engine per Eagle Copters ICA-E407-789.
  - 4) Remove 0789-03-010-2 engine mount and stop drill cracks in firewall pan. If damage is present in firewall web or lower firewall angle, remove damaged section and fabricate filler of the same material type and thickness. See Figure 1.
  - 5) Remove all fasteners in the repair area and position 0789-03-200-1 Doubler over damaged area. Mark and drill all existing fasteners. Maintain acceptable edge distance for all fasteners.
- NOTE:** Maintain a minimum of 0.25" distance between 0789-03-200-1 Doubler and oil line fittings. See Figure 2.
- 6) In addition to existing fastener locations, pitch in as many fasteners as possible on 0789-03-200-1 Doubler while maintaining acceptable edge distance and 0.6" to 0.9" pitch distance between rivets. Avoid existing spot weld locations.
  - 7) Clamp 0789-03-200-1 Doubler to the firewall and locate 0789-03-200-3/-5/-7 Angles as required. Install 0789-03-200-3/-5/-7 Angles on 0789-03-200-1 Doubler using MS20615-M4 Rivets as shown in Figure 4.
  - 8) Apply firewall sealant to 0789-03-200-1 Doubler and 0789-03-200-3/-5/-7 Angles.
  - 9) Re-install engine mount p/n 0789-03-010-1/-2 per Eagle Copters ICA-E407-789.
  - 10) Install 0789-03-200-1 Doubler and 0789-03-200-3/-5/-7 Angles to airframe using MS20615-M4 Rivets or MS3553-4 Cherrymax rivets as shown in Figure 2 and Figure 3.
  - 11) Re-install engine per Eagle Copters ICA-E407-789.
  - 12) Re-install the tail rotor and main drive shafts per Eagle Copters ICA-E407-789.
  - 13) Re-install oil cooler and transmission cowls per the Aircraft Maintenance Manual. Reinstall engine cowl per Eagle Copters ICA-E407-789.
  - 14) Ground run aircraft in accordance with FMS-E407-789-1 to check for vibration and leaks.
  - 15) Notify Eagle Copters that this Technical Bulletin has been accomplished by filling the attached form (Sheet 6) and emailing it to Eagle Copters.
  - 16) Make entry into aircraft technical reports to indicate TB-E407-789-1 has been completed.

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**FIGURE 1: REPAIR AREA LOOKING OUTBOARD AT STA 171**

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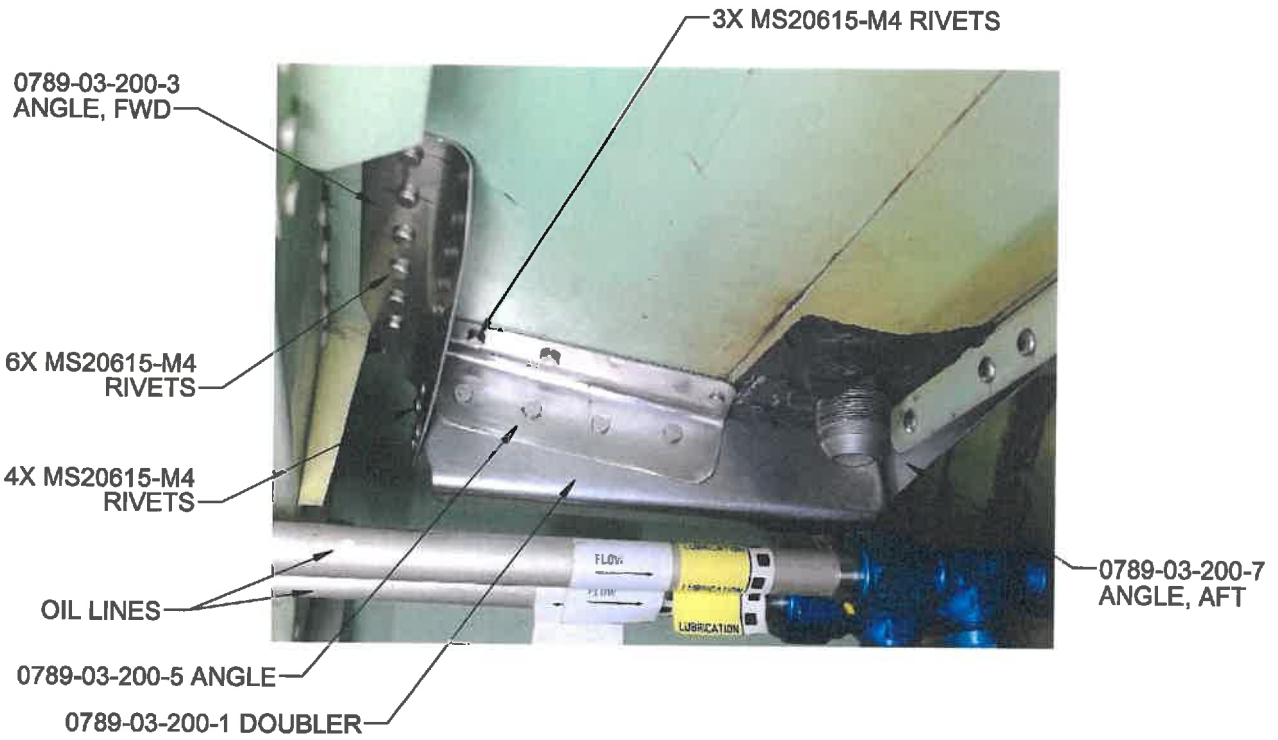
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**FIGURE 2: REPAIR AREA LOOKING OUTBOARD UNDER FIREWALL PAN**



**FIGURE 3: REPAIR AREA LOOKING OUTBOARD AND FWD AT STA 171**

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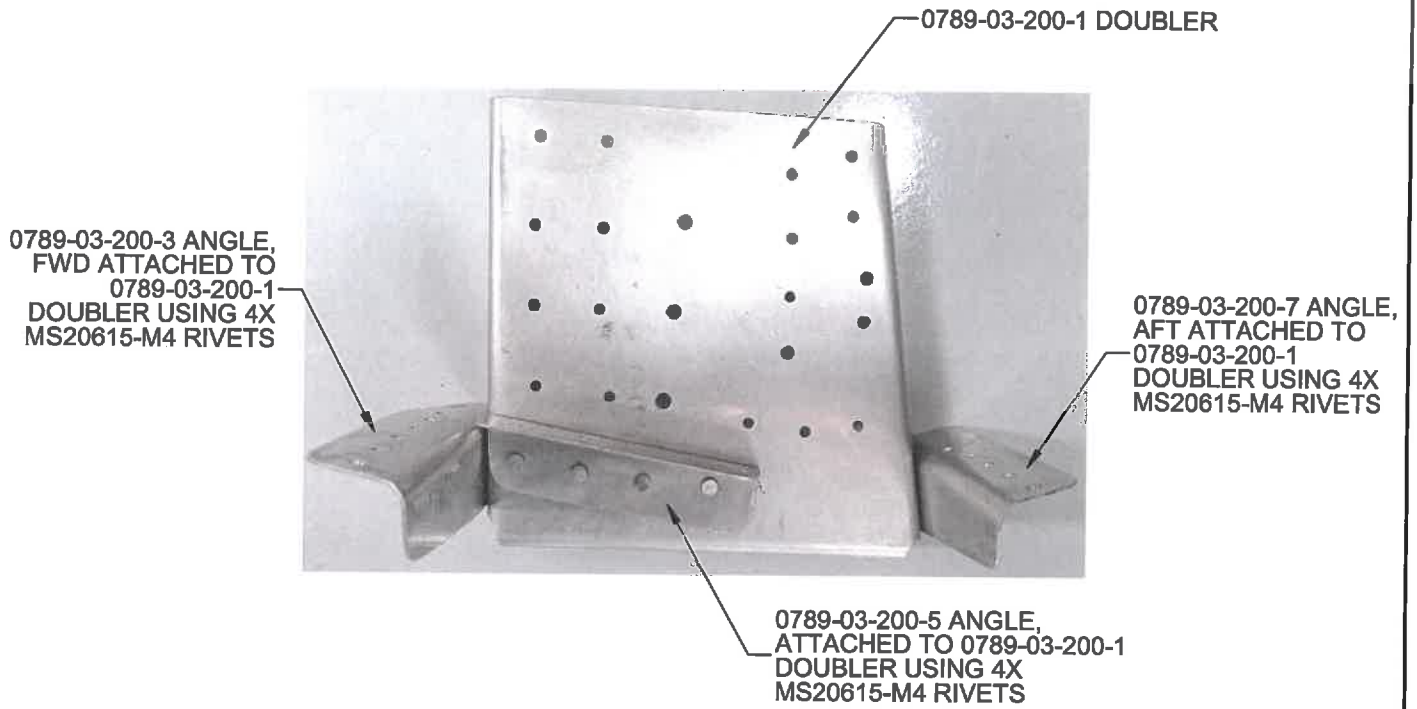
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**FIGURE 4: ASSEMBLED 0789-03-200-1/-3/-5/-7 DOUBLER/ANGLES**

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NOTIFY EAGLE COPTERS THAT THE TB-E407-789-1 HAS BEEN INCORPORATED INTO THE AIRCRAFT LISTED BELOW.

AIRCRAFT SERIAL NUMBER: \_\_\_\_\_

AIRCRAFT OWNER: \_\_\_\_\_

DATE TB-E407-789-1 WAS INCORPORATED ON THE ABOVE AIRCRAFT:

\_\_\_\_\_

SIGNATURE OF PERSON RESPONSIBLE FOR ENTRY INTO AIRCRAFT TECHNICAL RECORD:

\_\_\_\_\_

PRINT NAME OF PERSON RESPONSIBLE FOR ENTRY INTO AIRCRAFT TECHNICAL RECORD:

\_\_\_\_\_

Email this page to: [mboyce@eaglecopters.com](mailto:mboyce@eaglecopters.com)

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