
Service Bulletin

December 6, 1999

SB99-71-06

TITLE

ENGINE EXHAUST TAILPIPE LANYARD INSTALLATION AND FUEL FLOW TRANSDUCER RELOCATION

EFFECTIVITY

Model

T206H

Serial Numbers

T20608001 thru T20608112

REASON

- A. For airplane serial numbers T20608001 thru T20608112: installation of an exhaust tailpipe lanyard is required to provide a safety link ensuring positive turbocharger exhaust tailpipe retention should the clamp become loose.
- B. For airplane serial numbers T20608002, T20608004 thru T20608009 and T20608018 only: it has been determined that the engine fuel flow transducer should be relocated. Relocating the transducer from the input side of the fuel flow servo to the output side of the fuel flow servo will assist in providing information more accurately to the fuel flow indicator.

DESCRIPTION

The engine exhaust tailpipe lanyard installation and engine fuel flow transducer relocation shall be accomplished as described in this service bulletin. Non-compliance with this service bulletin could result in partial or complete loss of the turbocharger exhaust tailpipe and use of fuel flow indications that may not be as accurate as desired.

COMPLIANCE

Mandatory; shall be accomplished within the next 100 hours of operation or 6 months, whichever occurs first.

APPROVAL

FAA approval has been obtained on technical data in this publication that affects airplane type design.

MANPOWER

- A. 0.7 man-hour per airplane to install the engine exhaust tailpipe lanyard (airplane serial numbers T20608001 thru T20608112).
- B. 4.8 man-hours per airplane for fuel flow transducer relocation (airplane serial numbers T20608002, T20608004 thru T20608009 and T20608018 only).

REFERENCES

Model 206H/T206H Series 1998 And On Maintenance Manual

NOTE: Ensure all publications used are complete and current.

This information shall be considered an amendment to the Cessna Manufacturer's Maintenance Manual or Instructions for continued airworthiness, and must be accomplished for ongoing airworthiness compliance as required per FAR43.13.

OTHER PUBLICATIONS AFFECTED

Model 206H And Model T206H Illustrated Parts Catalog

NOTE: Ensure all publications used are complete and current.

MATERIAL PRICE AND AVAILABILITY

The following parts are available from Cessna Parts Distribution through an appropriate Cessna Service Station for the suggested list price shown.

- A. Fuel Flow Transducer Relocation for airplane serial numbers T20608002, T20608004 thru T20608009 and T20608018 only.

<u>Part Number</u>	<u>Description</u>	<u>Qty/Airplane</u>	<u>Price</u>
AN4-20A	Bolt	2	\$ 0.91 (PS) ea. MQ 25
AN815-6	Union	1	\$ 5.00 (PS) ea.
AN816-4	Fitting	1	\$ 3.74 (PS) ea.
AN816-4-4	Reducer	2	\$ 6.23 (PS) ea.
AN960-416L	Washer	as required	\$ 0.02 (PS) ea. MQ 100
EC1300LP	Adhesive	as required	\$ 25.50 (X) pt.
H880015	Grommet, 1 ft.	1	\$ 0.66 (PS) ea.
LW-12798-4S172	Hose Assembly	2	\$ 117.30 (LN) ea.
LW-12879-6S082	Hose Assembly	1	\$ 139.70 (LM) ea.
M81824/1-1	Splice	6 (if required)	\$ 2.47 (PS) ea.
MS21045-L4	Nut	2	\$ 0.59 (PS) ea. MQ 25
MS35489-3	Grommet	1	\$ 0.18 (PS) ea.
NAS1149F0416P	Washer	2	\$ 2.60 (PS) ea.
NAS43HT4-32	Spacer	2	\$ 0.83 (PS) ea. MQ 25
S1781-2	Connector	as required	\$ 0.41 (PS) ea.
S2562-1	Tubing	1 (as required)	\$ 0.61 (S) ea.
S2589-22-9	Wire	3 ft. (if required)	\$ 0.22 (PS) ft.

B. Tailpipe Lanyard Installation for airplane serial numbers T20608001 thru T20608112.

<u>Part Number</u>	<u>Description</u>	<u>Qty/Airplane</u>	<u>Price</u>
1250998-1	Lanyard	1	\$ 99.20 (SE) ea.
1250998-3	Clamp, Lanyard	1	\$ 115.00 (SE) ea.
1250998-4	Bracket, Lanyard	1	\$ 65.60 (SE) ea.
AN3C6A	Bolt, Lanyard	2	\$ 0.63 (PS) ea. MQ 25
MS21043-3	Nut, Lanyard	2	\$ 1.43 (PS) ea. MQ 10
NAS1149C0363R	Washer, Lanyard	2	\$ 0.08 (PS) ea. MQ 100

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

CREDIT INFORMATION

- A. For airplane serial numbers T20608001 thru T20608112:
Applicable parts credit and a labor allowance credit of 0.7 man-hour per airplane will be provided to install the engine exhaust tailpipe lanyard.
- B. For airplane serial numbers T20608002, T20608004 thru T20608009 and T20608018 only:
Applicable parts credit and a labor allowance credit of 4.8 man-hours per airplane will be provided for engine fuel flow transducer relocation.

To receive credit, the work must be completed and a Quick Claim must be submitted by a Cessna Single Engine Service Station before the dates shown below.

Domestic	August 6, 2000
International	October 6, 2000

ACCOMPLISHMENT INSTRUCTIONS

Weight And Balance Information

Model	T206H
Weight Change	Negligible

Material Information

The following parts are required to modify airplane serial numbers T20608002, T20608004-T20608009, and T20608018.

NEW P/N	QUANTITY	DESCRIPTION	OLD P/N	DISPOSITION
AN4-20A	2	Bolts	AN4-14A	Discard
AN815-6	1	Union	None	None
AN816-4	2	Adapter	MS20822-4	Discard
AN816-4-4	2	Adapter	AN816-4	Discard
AN960-416L	As Required	Washers	None	None
H880015	As Required	Grommet-Nylon Caterpillar	None	None
LW12798-4S172	2	Hose Assembly	LW12878-4S110	Discard
LW12879-6S082	1	Hose Assembly	LW12879-6S060	Discard
M81824/1-1	6 (If Required)	Splice	None	None
MS21045-L4	2	Nut	MS20365-428	Discard
MS35489-3	1	Grommet	None	None
NAS1149F0416P	2	Washer	None	None
NAS43HT4-32	2	Spacer	None	None
S1781-2	As Required	Sta-Strap	None	None
S2562-1	As Required	Tubing - Convolute	None	None
S2589-22-9	3 ft (If Required)	Wire	None	None

In addition to the above parts, the following parts are also required for airplane serials T20608001 thru T20608112:

NEW P/N	QUANTITY	DESCRIPTION	OLD P/N	DISPOSITION
1250998-1	1	Lanyard	None	None
1250998-3	1	Clamp (Lanyard)	None	None
1250998-4	1	Bracket (Lanyard)	None	None
AN3C6A	2	Bolts (Lanyard)	None	None
MS21043-3	2	Nut (Lanyard)	None	None
NAS1149C0363R	2	Washer (Lanyard)	None	None

In addition to the above parts, the following adhesive, or equivalent, will be required:

NAME	NUMBER	MANUFACTURER	USE
Adhesive	EC1300LP	3M Company	Attach Grommet

Modification Instructions

1. Refer to the Model 206H/T206H Series 1998 And On Maintenance Manual.

WARNING: DURING ALL FUEL SYSTEM SERVICING PROCEDURES, FIRE FIGHTING EQUIPMENT MUST BE AVAILABLE. INSTALL TWO GROUND WIRES FROM AIRPLANE TIE DOWN RINGS TO AN APPROPRIATE ELECTRICAL GROUND STAKE.

2. Ensure that all switches are in the OFF position and disconnect all electrical power from the airplane. Attach maintenance warning tags to the battery and external power receptacle stating:

DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS

3. Remove upper cowling. Refer to the Model 206H/T206H Series 1998 And On Maintenance Manual Chapter 71, Cowling - Maintenance Practices.

4. Fuel flow transducer relocation:

A. (Refer to Figure 1, Sheet 1, Details A and B.) Remove fuel lines and fittings:

- (1) Remove the existing LW-12879-6S060 Fuel Hose assembly that attaches to the outlet of the transducer and to the servo inlet port and discard.
- (2) Remove the LW12878-4S110 Hose Assembly that attaches the servo outlet port with the fuel flow divider valve inlet port and discard.
- (3) Remove the 90 degree MS20822-4 Fitting from the fuel flow divider valve inlet port and discard. Replace with an AN816-4 fitting.

B. (Refer to Figure 1, Sheet 3, Detail D.) Removal and disassembly of the 680501H Fuel Flow Transducer Assembly:

- (1) Disconnect the wire connector from the transducer assembly.
- (2) Remove the 680501H Fuel Flow Transducer assembly from the 1255117-64 Baffle Assembly by removing the two (2) mounting screws. Discard the mounting screws.
- (3) Remove and retain the 610504 Fire Shield Box Cover. Retain the six (6) pan screws for reinstallation.
- (4) Remove and discard the existing 1255117-48 Mounting Bracket and the attaching hardware from the back of the transducer.
- (5) Remove and discard the existing inlet and outlet reducers. Install two (2) AN816-4-4 Adapters.

C. (Refer to Figure 1, Sheet 1) Reinstallation of the 680501H Fuel Flow Transducer Assembly.

- (1) (Refer to Figure 1, Sheet 2) Drill two additional 0.25 inch diameter holes in the 1255117-64 Baffle Assembly.
- (2) (Refer to Figure 1, Sheet 3, Detail D, and Sheet 4, Detail E.) Position the fuel flow transducer assembly with the fuel flow arrow pointing outboard at the forward side of the 1255117-64 Baffle Assembly at the two 0.25 inch holes drilled in step 4.C.(1).
 - (a) Use two (2) NAS43HT4-32 Spacers between the bottom of the transducer fire shield box base and the 1255117-64 Baffle Assembly.
 - (b) Install the transducer fire shield box base to the 1255117-64 Baffle Assembly using two (2) AN4-20A Bolts, two (2) MS21045-L4 Nuts and two (2) NAS1149F0416P Washers.

NOTE: It is permissible to add AN960-416L Washers as required, above and below the transducer and the transducer fire shield box cover and base, to align the AN816-4-4 Reducers with the center of the holes in the transducer's fire shield box base.

- (3) Reinstall the 610504 Fire Shield Box Cover using the retained six (6) pan screws.

D. (Refer to Figure 1, Sheet 1, Detail B.) Fuel Hose Assembly Installation:

- (1) Connect and torque the LW12879-6S082 Hose Assembly between the fuel servo and the existing hose assembly attached to the fuel pump using an AN815-6 Union.
- (2) Connect and torque one (1) LW12798-4S172 Hose Assembly between the fuel servo outlet port and the fuel flow transducer inlet port.
- (3) Connect and torque one (1) LW12798-4S172 Hose Assembly between the fuel flow transducer outlet port and fuel flow divider valve inlet port.

E. (Refer to Figure 1, Sheet 3, Detail D and Sheet 4, Detail F.) Wire Modification:

- (1) If sufficient wire length from the fuel flow gauge is not available for the new transducer location, splice and increase the wire length near the transducer mating connector using S2589-22-9 wire as required, and M81824/1-1 Splices. Ensure each wire of the three wire group from the fuel flow gauge is spliced with the correct plug pin wire.
- (2) (Refer to Figure 1, Sheet 1, Detail A, Detail B) Locate the center point between the two 0.193 inch diameter holes previously used to mount the 1255117-48 Transducer Bracket. Drill a 1.063 inch diameter hole in this location.
- (3) (Refer to Figure 1, Sheet 1, Detail B.) Split half of a MS35489-3 Grommet and install in the 1.063 inch diameter hole.
- (4) Route the transducer power mating connector through the 1.063 inch diameter hole drilled in step 4.E.(2), and mate with transducer connector. Secure with S1781-2 Sta-Straps as required.
- (5) Install S2562-1 Convoluted Tubing as required aft of the baffle to protect exposed wire and splices.
- (6) (Refer to Figure 1, Sheet 1, Detail B.) Install a 1.5 inch piece of H880015 Nylon Caterpillar Grommet with EC1300LP Adhesive, positioned to prevent chafing of the fuel line against the flanges where the 1255117-64 Baffle and the 1255117-64 Baffle are fastened together.

5. (Airplane serials T20608001 thru T20608112 only) Installation of the exhaust tailpipe lanyard:

A. (Refer to Figure 3, Sheets 1 and 2) Exhaust lanyard installation:

- (1) Use existing turbocharger attaching hardware (aft outboard attaching bolt) to attach the tailpipe lanyard.

NOTE: Install the 1250998-4 Lanyard Attaching Bracket in place of the upper washer for turbo attachment flange bolt. Torque bolt to 360 inch-pounds after lanyard is positioned.

NOTE: Access may be obtained through the cowl flap opening.

- (2) Install 1250998-3 Lanyard Clamp around the exhaust pipe elbow and reattach the 1250998-1 Lanyard Cable to the clamp with AN3C6A Bolts, MS21043-3 Nuts and NAS1149C0363R Washers.
- (3) Slide lanyard clamp up the waste gate pipe until lanyard assembly is tight or has reached the bend in the exhaust pipe elbow, and torque the clamp bolt.

6. Remove maintenance warning tags and connect the airplane battery.
7. Start engine and inspect for fuel leaks and serviceable operation of fuel flow system.
8. Make an entry in the airplane logbook stating compliance with this service bulletin.

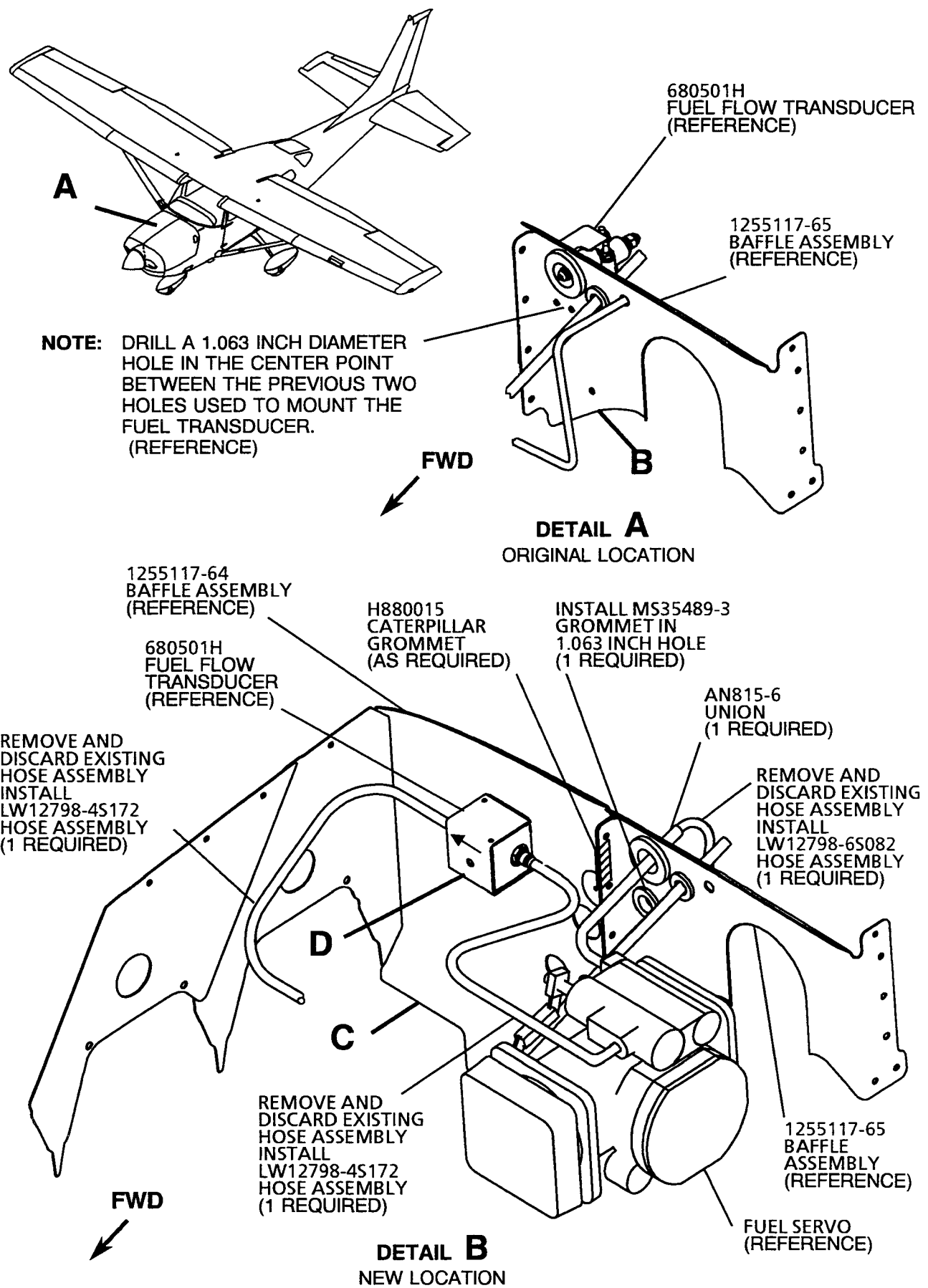
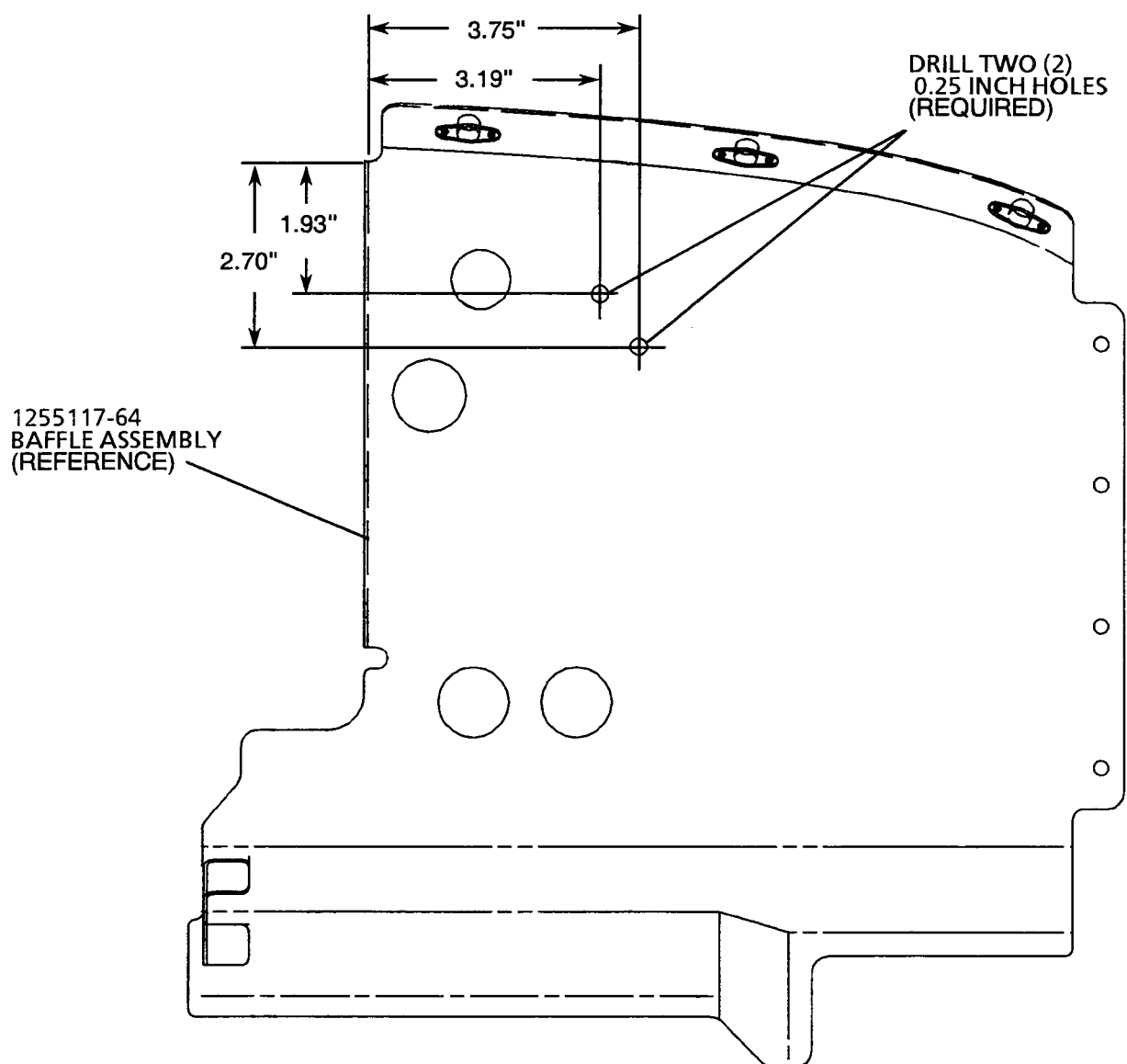


Figure 1. Fuel Flow Transducer Relocation. (Sheet 1 of 4)



DETAIL C
VIEW LOOKING FORWARD
(AFT SIDE OF BAFFLE)

NOTE:
ALL DIMENSIONS
SHOWN IN INCHES

Figure 1. Fuel Flow Transducer Relocation. (Sheet 2)

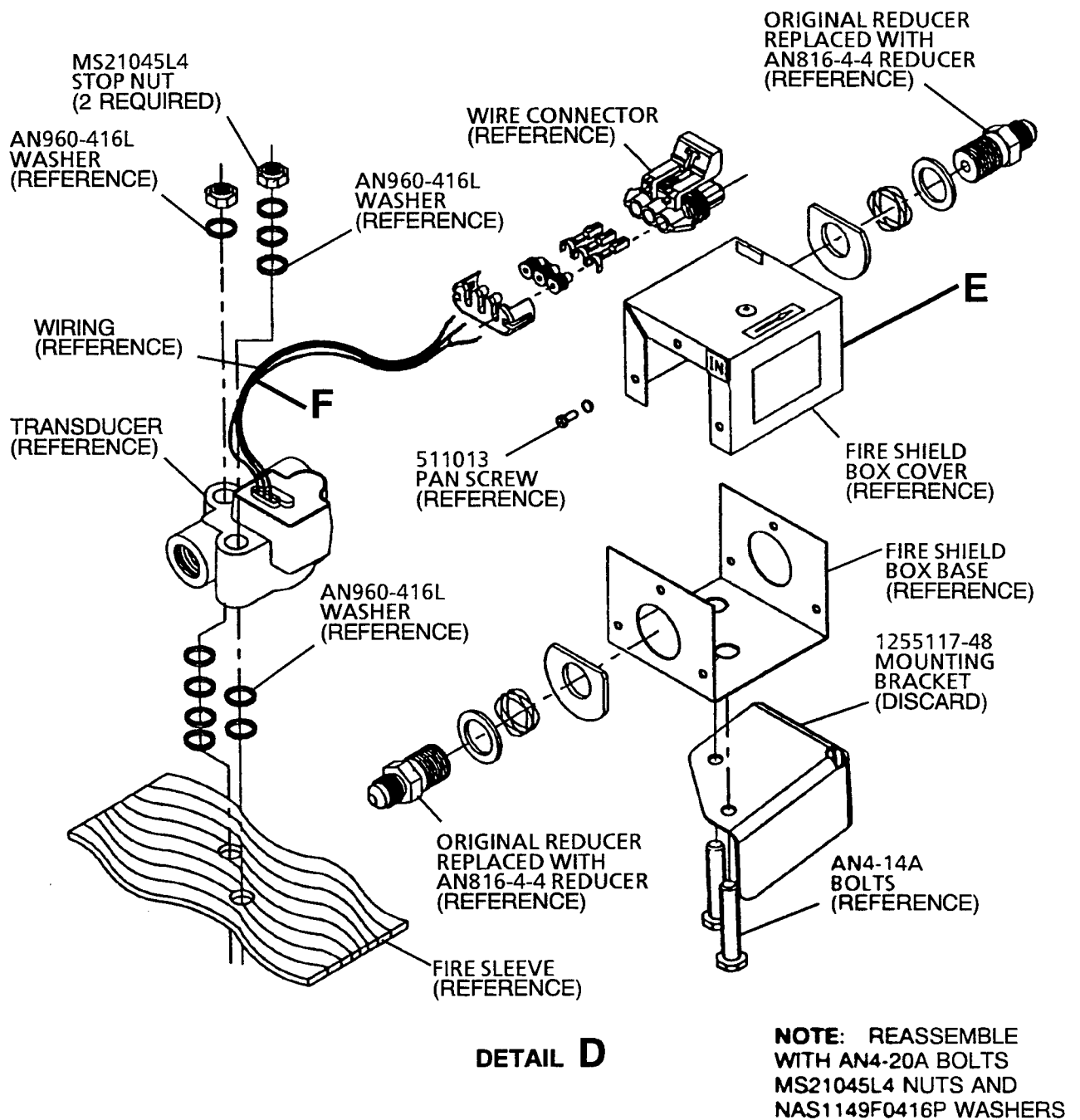
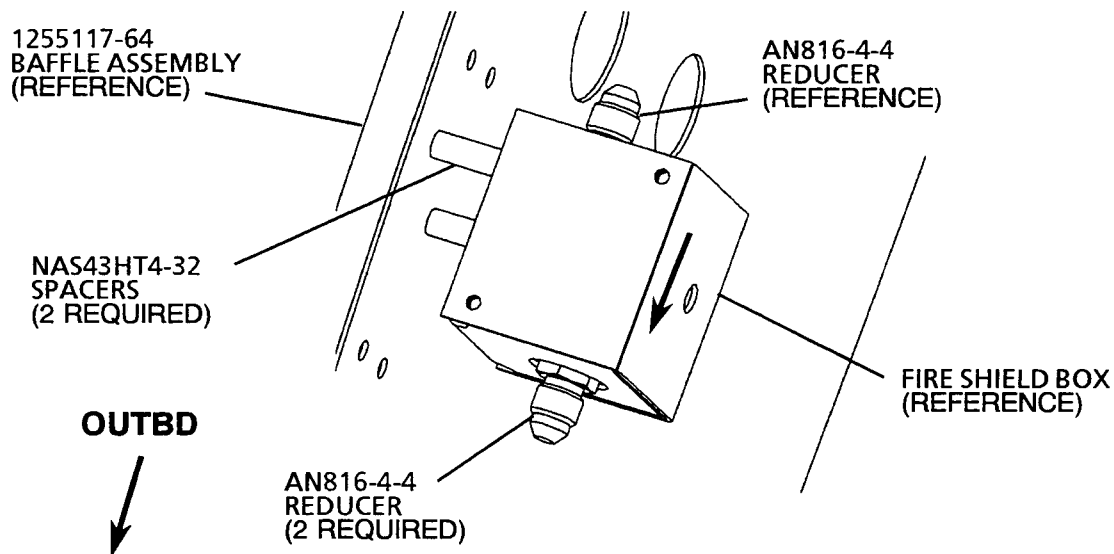
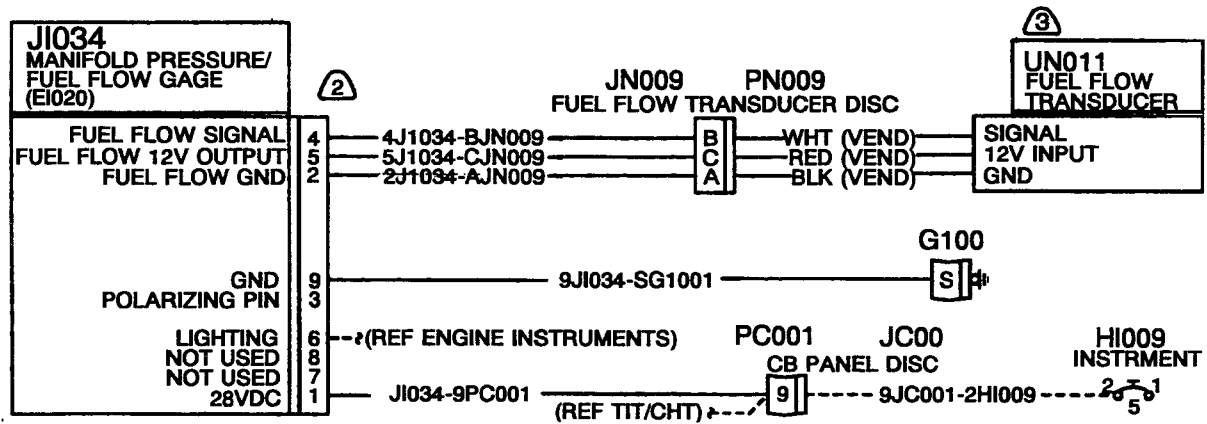


Figure 1. Fuel Flow Transducer Relocation. (Sheet 3)

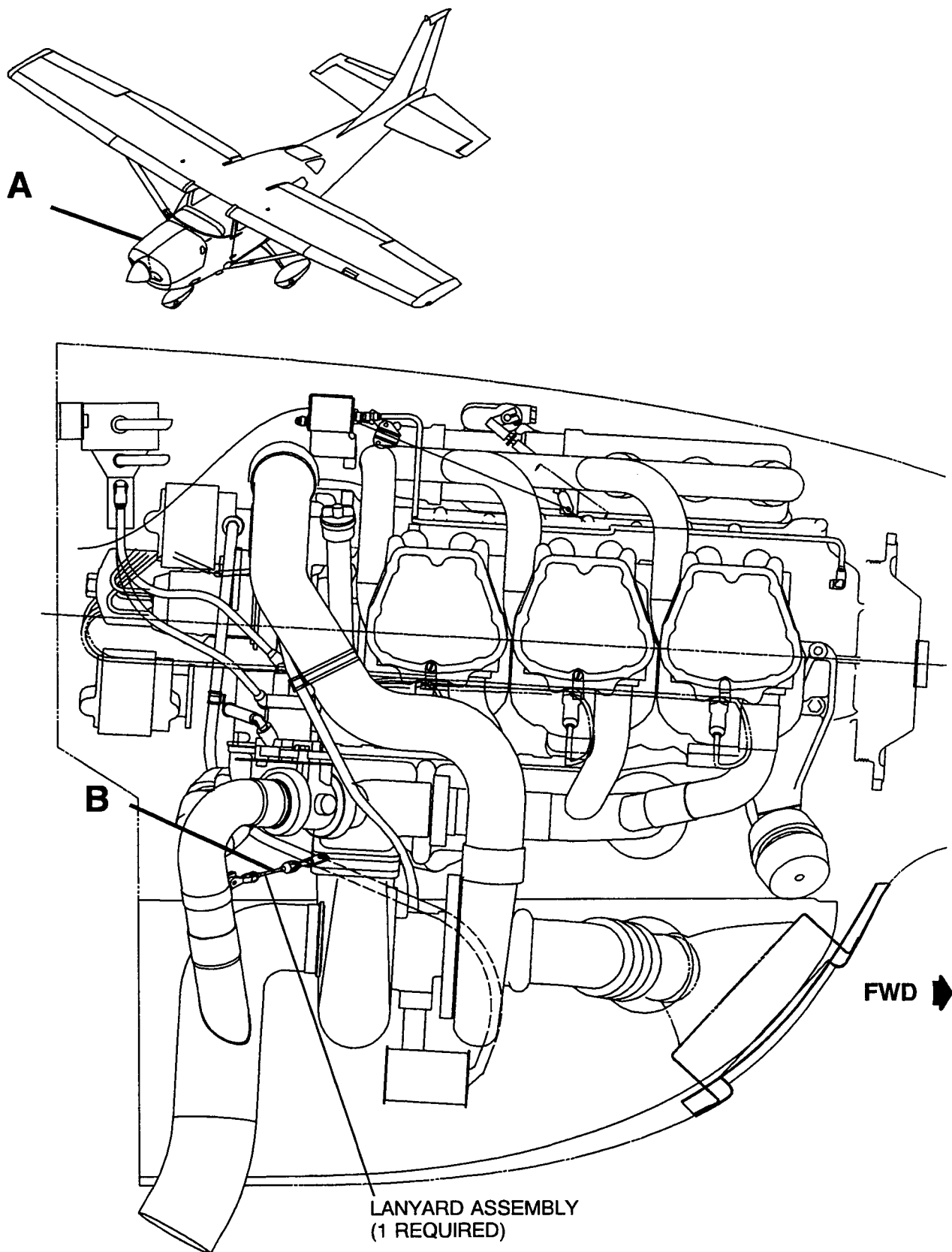


DETAIL E
LOOKING DOWN SHOWING SPACERS



DETAIL F
WIRING DIAGRAM

Figure 1. Fuel Flow Transducer Relocation. (Sheet 4)



DETAIL A
VIEW LOOKING INBOARD RIGHT SIDE

Figure 2. Exhaust Lanyard Installation. (Sheet 1 of 2)

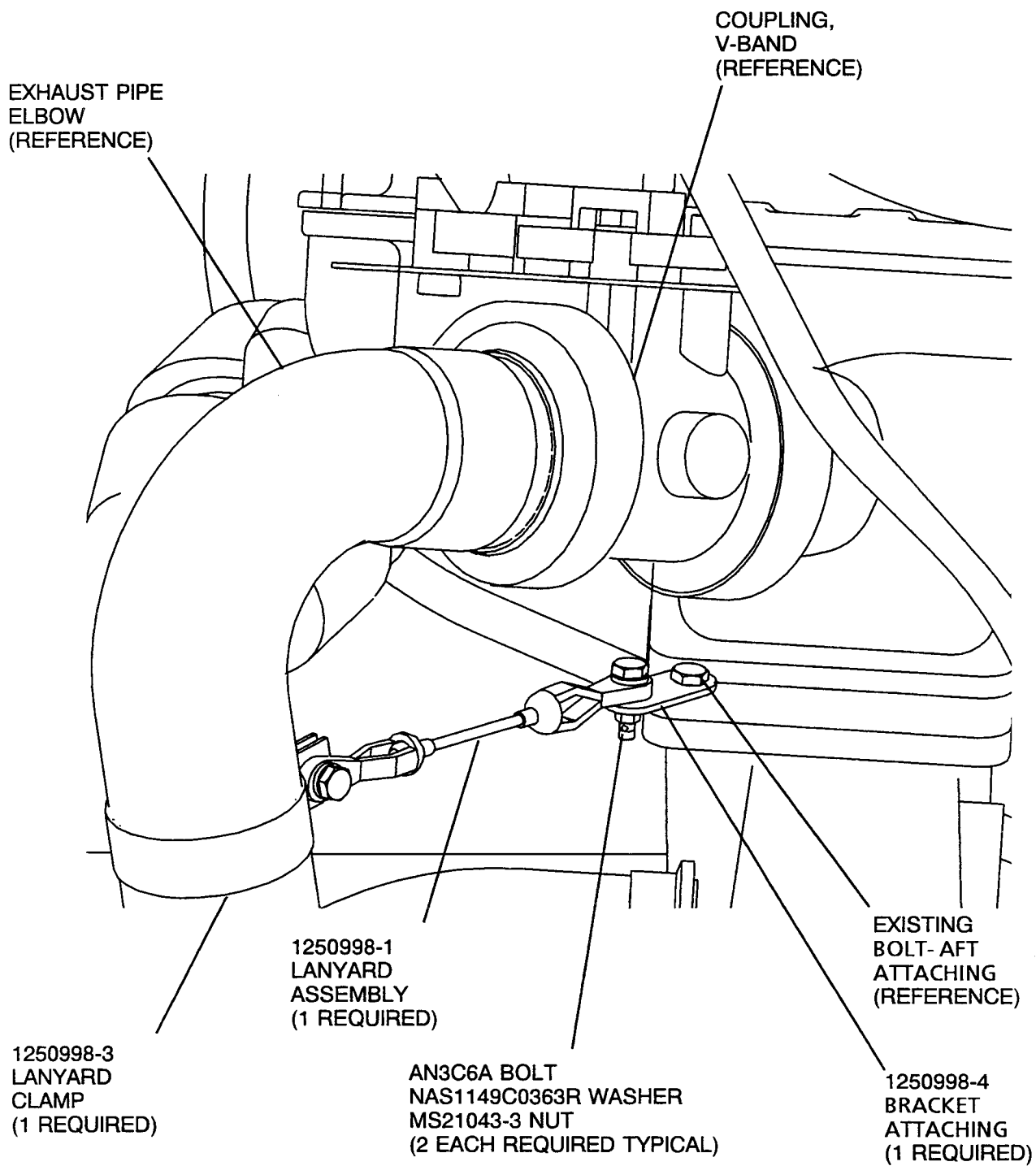


Figure 2. Exhaust Lanyard Installation. (Sheet 2)

OWNER NOTIFICATION

On December 6, 1999 the following Owner Advisory message will be sent to applicable owners of record in SB99-71-06A.

Dear Cessna Owner:

This message is to inform you that Service Bulletin SB99-71-06 has been issued and your airplane will be affected as described below.

For airplane serial numbers T20608001 thru T20608112: installation of an exhaust tailpipe lanyard is required to provide a safety link ensuring positive turbocharger exhaust tailpipe retention should the clamp become loose.

For airplane serial numbers T20608002, T20608004 thru T20608009 and T20608018 only: it has been determined that the engine fuel flow transducer should be relocated. Relocating the transducer from the input side of the fuel flow servo to the output side of the fuel flow servo will assist in providing information more accurately to the fuel flow indicator.

Non-compliance with this service bulletin could result in partial or complete loss of the turbocharger exhaust tailpipe and use of fuel flow indications that may not be as accurate as desired.

Compliance is mandatory; shall be accomplished within the next 100 hours of operation or 6 months, whichever occurs first.

The information contained in Cessna Service Bulletins shall be considered an amendment to the Cessna Manufacturer's Maintenance Manual or Instructions for continued airworthiness, and must be accomplished for ongoing airworthiness compliance as required per FAR43.13.

The following parts and labor credit will apply:

- A. For airplane serial numbers T20608001 thru T20608112:
Applicable parts credit and a labor allowance credit of 0.7 man-hour per airplane will be provided to install the engine exhaust tailpipe lanyard.
- B. For airplane serial numbers T20608002, T20608004 thru T20608009 and T20608018 only:
Applicable parts credit and a labor allowance credit of 4.8 man-hours per airplane will be provided for engine fuel flow transducer relocation.

To receive credit, the work must be completed and a Quick Claim submitted by a Cessna Single Engine Service Station before the dates shown below.

Domestic	August 6, 2000
International	October 6, 2000

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB99-71-06 accomplished on your airplane.

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