AIRCRAFT, LLC

226 Pilot Way, Martinsburg, WV 25401

SERVICE LETTER

No. 2002-1
ATA 2840

DATE: December 30, 2002

SUBJECT: **FUEL GAUGE WIRE ROUTING**

MODEL / SERIALS AFFECTED: AG-5B   S/N 10201 through 10211

TIME OF COMPLIANCE: Within the next 25 hours time in service or at the next scheduled inspection, whichever comes first

GENERAL:

We have received a report of fuel gauge malfunction due to a short in the wire between the fuel gauge and the fuel gauge circuit breaker. Our investigation revealed that the wiring bundle (six wires) for the fuel gauge cluster has been routed in a manner that could cause chafing of the wires on the edge of the 5406002-30 Brace located between the left and right hand fresh air plenums. If chafing occurs and the wire shorts to the brace, it may cause the 1 amp Fuel Quantity Circuit Breaker to trip, resulting in loss of fuel quantity indication.

ACTION

Within the next 25 hours time in service or at the next scheduled inspection, whichever occurs first, accomplish the following;

Refer to Figure 1

1. Prepair the aircraft for safe maintenance.
   a. Disconnect the Battery.
   b. Attach a suitable ground to the aircraft.
2. Locate the fuel indicator wire bundle (A) where it passes between the right and left fresh air plenums (B) & (D) in front of and below the throttle quadrant (E).
3. Inspect the wires for evidence of chafing in the area of Brace (C) and repair as necessary.
4. Follow the wire bundle down in the direction of the fuel gauges to locate the six-pin Molex connector (not shown).
5. Disconnect the connector, re-route and secure the wire bundle in a manner to prevent chafing. See Figure 2 for an example of alternate routing.

6. Reconnect the Molex connector.
7. Reconnect the battery, turn Master Switch on and check the fuel gauges for proper operation. Turn off Master Switch.
8. Record compliance in the aircraft log book.
9. Fill out the attached Compliance Card and return to Tiger Aircraft, LLC.
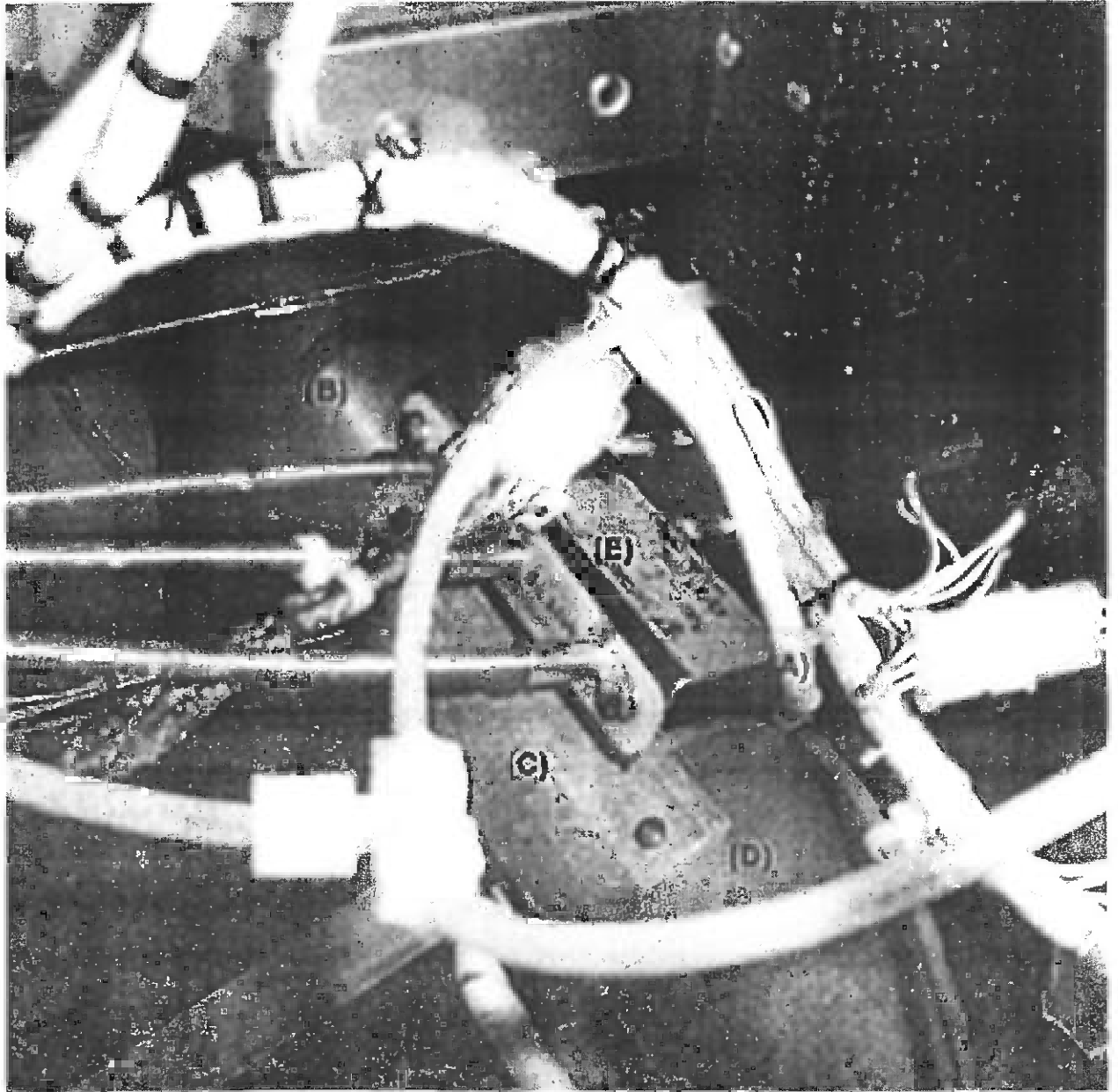
Very Truly Yours,
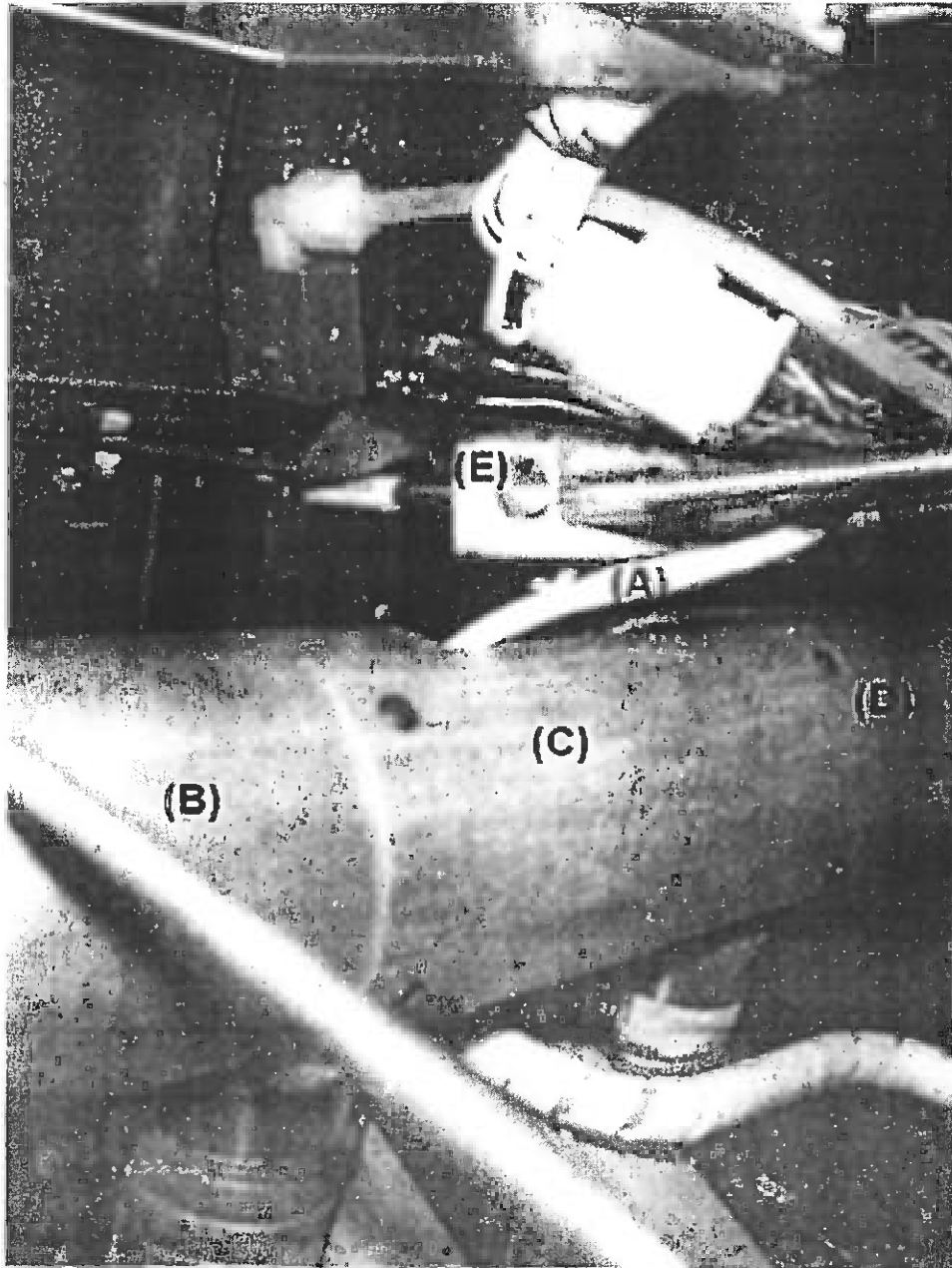Tiger Aircraft, LLC.

FIGURE 2

FIGURE 1