



**THIS BULLETIN DOES NOT CHANGE TYPE DESIGN**

SUBJECT: Gear Warning Transition

MODELS/ SN  
AFFECTED: M20V - 33-0002 Only

TIME OF  
COMPLIANCE: **AT NEXT ANNUAL OR 100 HOURS**

INTRODUCTION: This Service Bulletin will provide a greater airspeed cushion to the landing gear warning system, and will give an earlier gear warning "in power" to the upper position transition.

INSTRUCTIONS: **Read entire procedures before beginning work.**

- 1.1. Turn master switch - OFF.
- 1.2. Remove LH and RH tailcone access panels, and disconnect batteries, reference applicable Service and Maintenance manual.
- 1.3. Remove LH and RH grab handle and "pillar" covers from aircraft, keep hardware for re-assembly, refer to Figure M20-328-1.
- 1.4. Remove glareshield from aircraft, (keep hardware for re-assembly), refer to Figure M20-328-1.
- 1.5. Removing front seats is optional, refer to applicable Service and Maintenance manual.
- 1.6. Remove the MFD display unit by turning the 4 quarter turn locking sockets counterclockwise 90° until they reach their stops, gently pull the display out far enough to disconnect the connector from the locking tabs, then remove MFD.
- 1.7. From behind Instrument panel, locate and unmount the existing airspeed relay. Retain hardware for re-assembly refer to Figure M20-328-2.
- 1.8. Looking at front Instrument panel (MFD recess), carefully drill 2 holes (.20" diameter) thru 820367-13 panel parallel to existing nutplates refer to Figure M20-328-3.

**NOTE:**

**Use care to prevent any wires or components being chafed/damaged from drill bit.**

- 1.9. Modify and install new wiring per wiring harness modification drawing Figure M20-328-4. Route wiring along existing airspeed harness, and place new connector at existing A/S1 and A/S2 connector location. All wires/connectors should be installed with heat shrink tubing and cable tie (shop supplied) as required per AC43.13- 2B (or current revision).
- 1.10. Perform point to point continuity check on newly installed wires. If test does not pass, fix errors and try again.
- 1.11. Once continuity check has been performed and validated good, re-install airspeed relay on back panel with removed hardware, 2 qty MS35206-246 screws, 4 qty NAS1149FN832P washers, in Instrument panel (MFD recess) per Figure M20-328-5.
- 1.12. Install the new stall relay on back panel with 2 qty MS35206-246 screws, 4 qty NAS1149FN832P washers (2 under head of each screw and 1 under nut), 2 qty MS21042-08 nuts in Instrument panel (MFD recess) per Figure M20-328-5.
- 1.13. Secure all wires and connectors per AC43.13- 2B (or current revision).
- 1.14. Re-install MFD display unit by inserting wire connector on back of unit, and slide the lock tabs to secure. Insert MFD in place and turn the 4 quarter turn locking sockets clockwise 90° until they reach their stops.



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- 1.15. Re-install glareshield with removed hardware, refer to Figure M20-328-1.
- 1.16. Re-install LH and RH grab handle and "pillar" covers with removed hardware, refer to Figure M20-328-1.
- 1.17. Re-install seat if removed for this procedure.
- 1.18. Put Aircraft on Jacks per applicable Service and Maintenance Manual.
- 1.19. Re-connect batteries per applicable Service and Maintenance Manual.
- 1.20. Perform a GEAR SYSTEM OPERATIONAL INSPECTION and LANDING GEAR WARNING SYSTEM per Chapter 32 and of the applicable Service and Maintenance Manual - Verify New gear retraction occurs at 70 +/- 5 KIAS.
- 1.21. Re-install LH and RH tailcone access panels, reference applicable Service and Maintenance manual.
- 1.22. Complete log book entry.

**NOTE:**

**The attached compliance card needs to be filled out and returned to Mooney International Corporation upon completion of this Service Bulletin M20-328.**

**WARRANTY:** Mooney International Corporation will warrant labor 20 hours when inspection is done in accordance with procedures of this Service Bulletin for aircraft currently covered under the Mooney International Corporation factory warranty program.

**REFERENCE DATA:** 1. Applicable Mooney Service and Maintenance Manual  
2. FAA AC43.13- 2B (or current revision)

**Parts Kit P/N: Service Bulletin Kit M20-328- 001**

<u>Item</u>	<u>P/N</u>	<u>Description</u>	<u>Qty</u>
1.	92S11D22D- 24	RELAY (STALL)	1
2.	MS35206- 246	SCREW	2
3.	NAS1149FN832P	WASHER	6
4.	MS21042- 08	NUT	2
5.	WS01L20	WIRE (919026- 044/20WS01L20)	60"
6.	WS01M20	WIRE (919026- 044/20WS01L20)	20"
7.	EG05C20N	WIRE (919026- 044/20WS01L20)	20"
8.	WE07D20	WIRE (919026- 044/20WS01L20)	20"
9.	CM- SCE- TP- 1/4- 4H- 9	LABEL, WIRE (PRE- PRINTED STALL RELAY)	2
10.	1- 480319- 0	RECEPTACLE, WIRE	1
11.	60619- 1	SOCKET, WIRE	1
12.	640903- 1	SPADE TERMINAL (RED)	2
13.	640905- 1	SPADE TERMINAL (BLUE)	3
14.	1N2483	DIODE	1
15.	1- 480318- 0	PLUG	1
16.	60618- 1	PIN	1
17.	201568- 1	SOCKET	1



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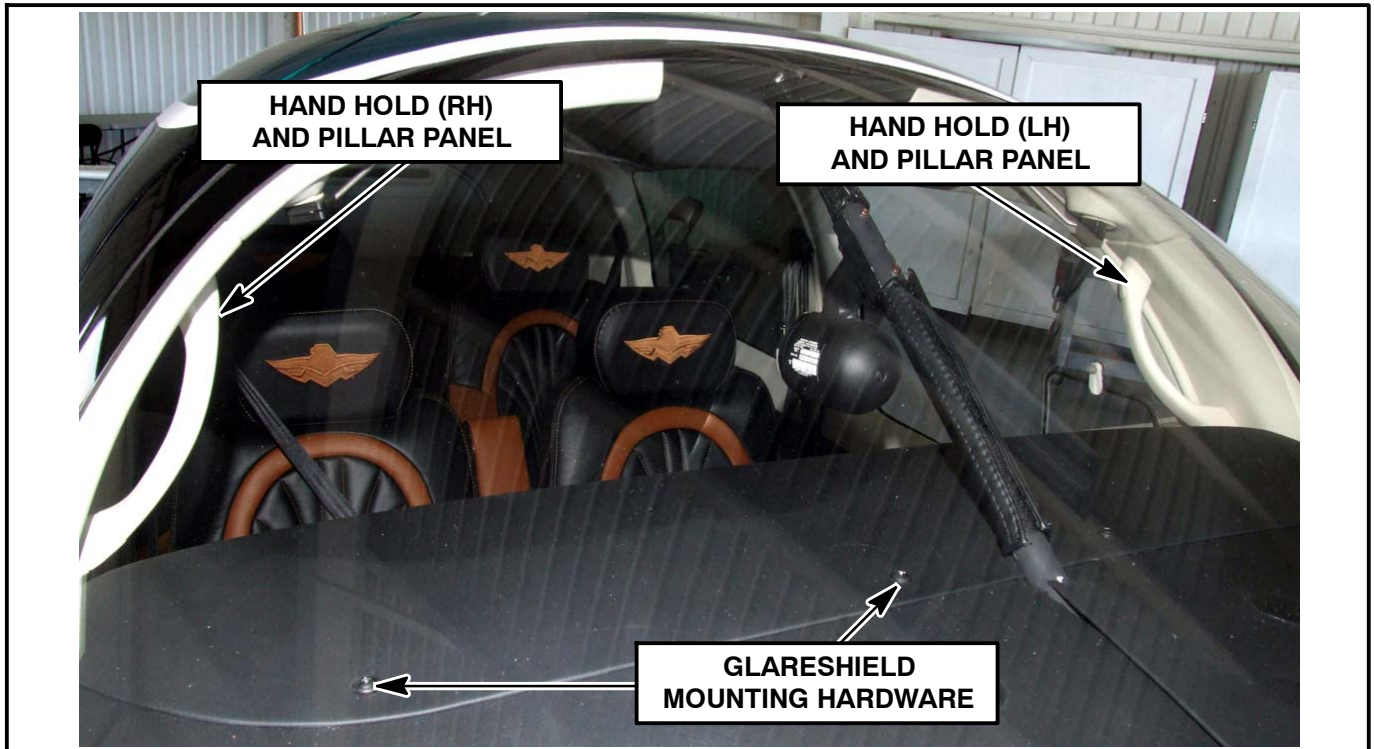


Figure SB M20-328-1 - REMOVING GLARESHIELD AND INTERIOR PANEL(S)

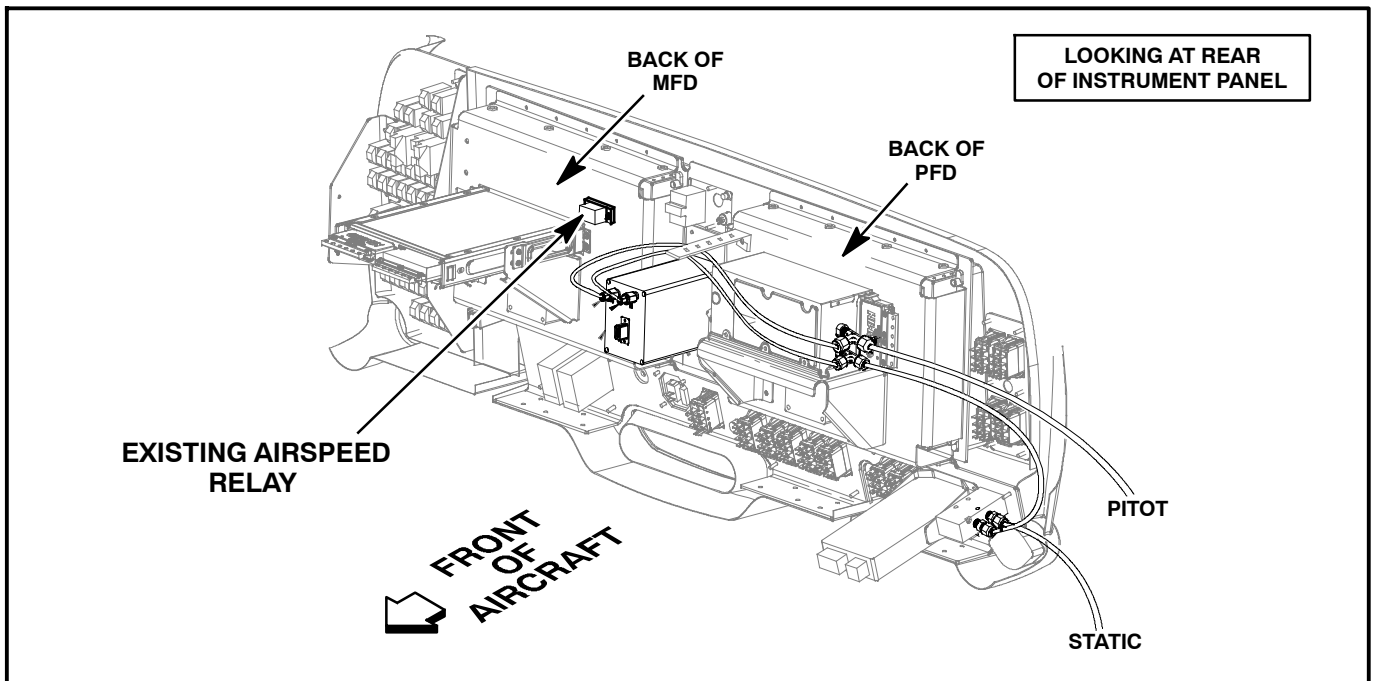


Figure SB M20-328-2 - BACK OF INSTRUMENT PANEL



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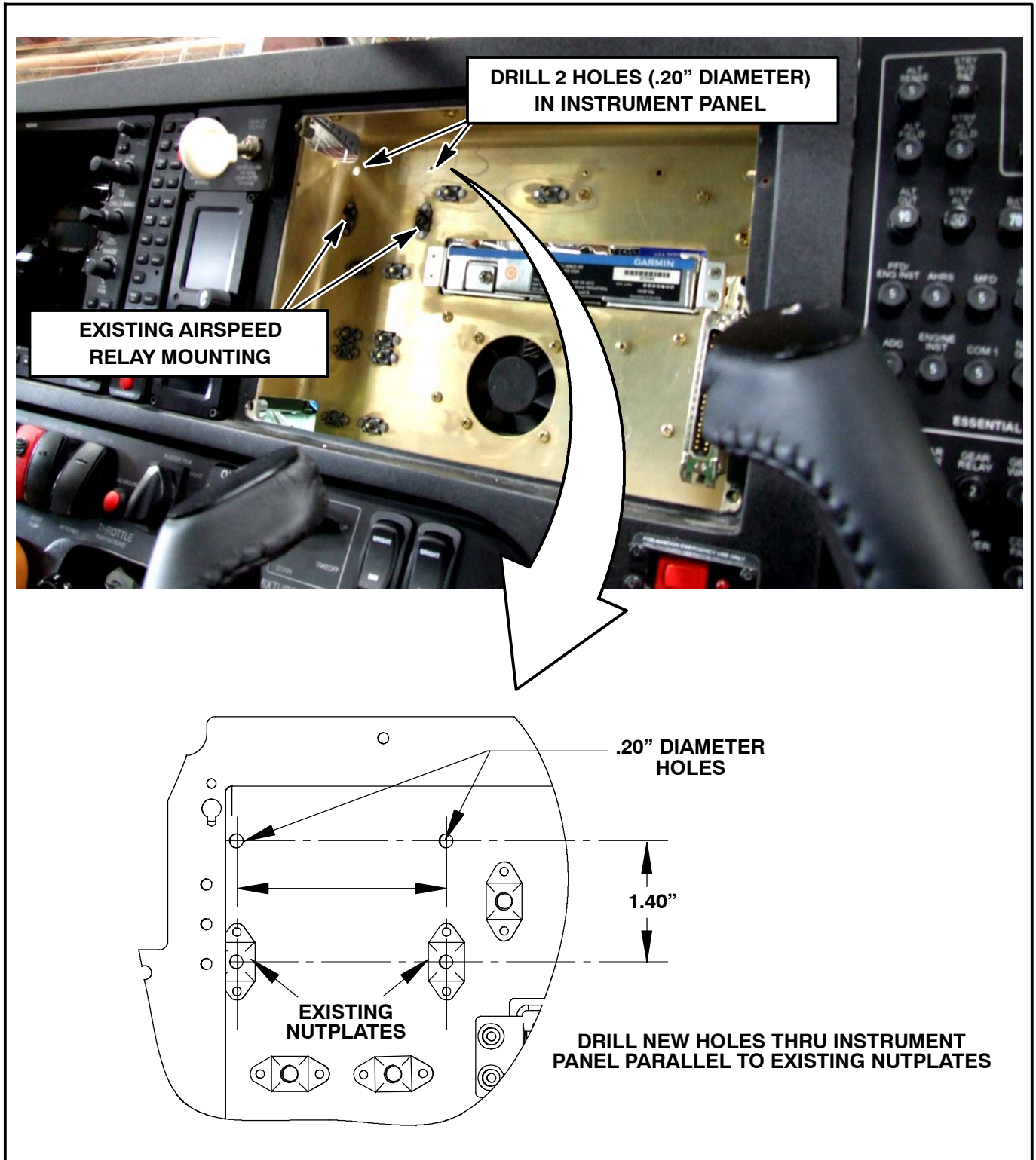


Figure SB M20-328-3 - MODIFICATION TO INSTRUMENT PANEL



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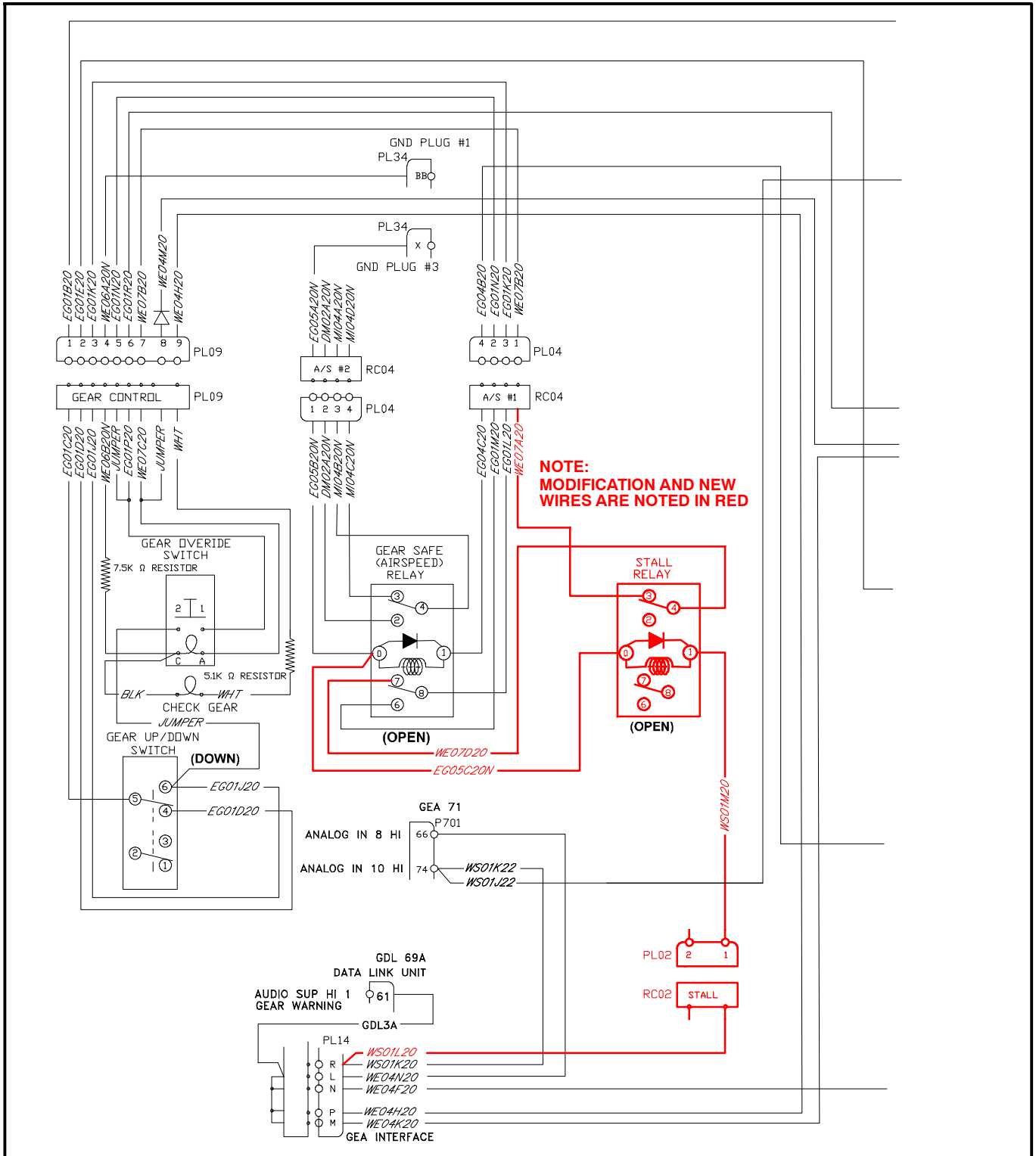


Figure SB M20-328-4 - WIRING HARNESS MODIFICATION



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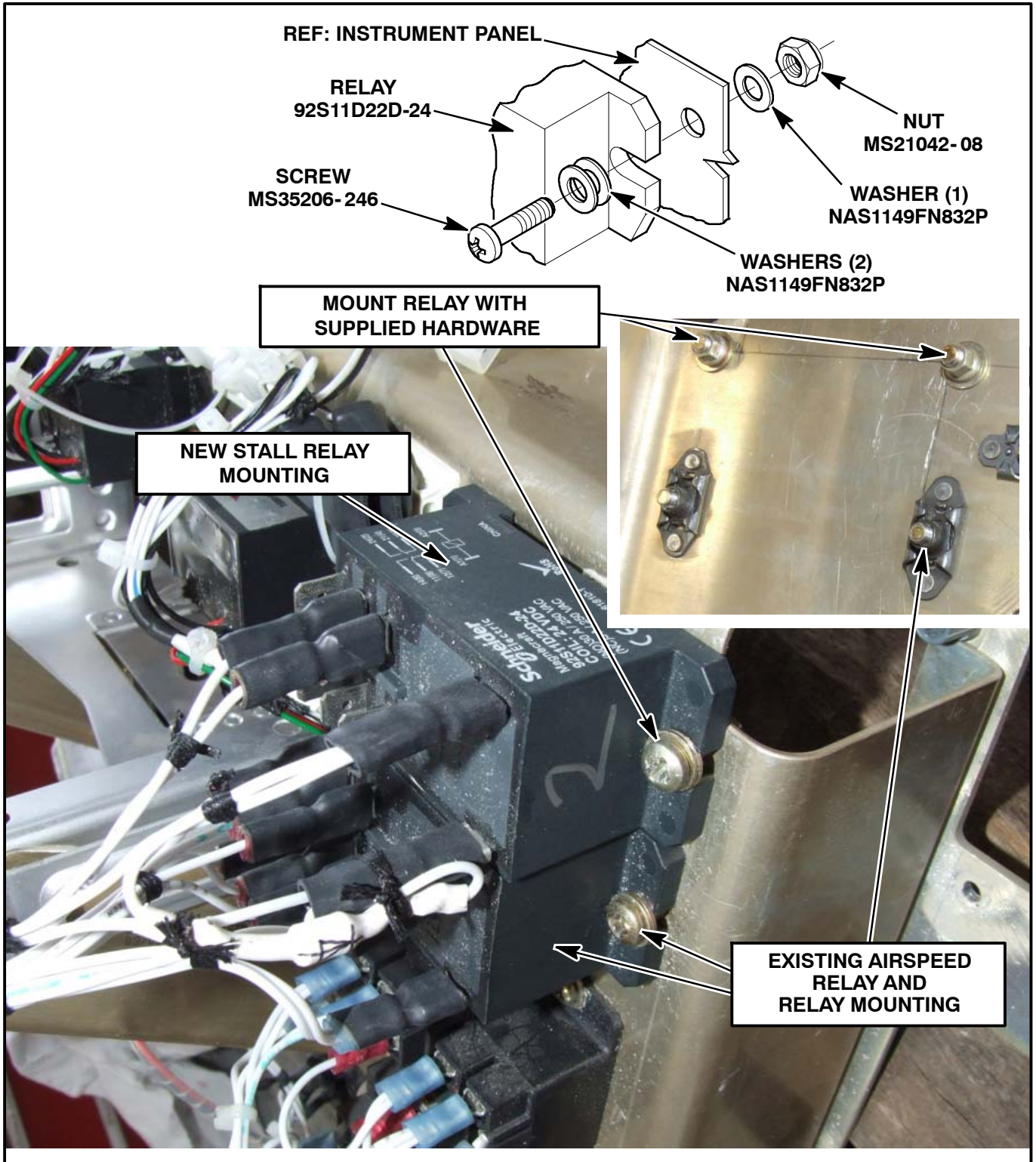


Figure SB M20-328-5 - MOUNTING RELAY TO INSTRUMENT PANEL (BACKSIDE)



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**MOONEY INTERNATIONAL CORPORATION**  
KERRVILLE, TEXAS 78028 - FAX 830-257-4635

SERVICE (BULLETIN) (INSTRUCTION) NO. \_\_\_\_\_ HAS BEEN COMPLIED  
WITH ON AIRCRAFT MODEL \_\_\_\_\_ SERIAL NUMBER \_\_\_\_\_

Tach. Time: \_\_\_\_\_ N-Number \_\_\_\_\_ (Reg. No.)  
Owner: \_\_\_\_\_ Date of Compliance: \_\_\_\_\_  
\_\_\_\_\_ Complied By: \_\_\_\_\_  
\_\_\_\_\_

Inspection Report: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Form 07-0001

PLACE  
STAMP  
HERE

**MOONEY INTERNATIONAL CORPORATION**  
**ATT'N: TECHNICAL SUPPORT**  
**165 Al Mooney Road, North**  
**Kerrville, Texas 78028**

**SEND TO: Mooney International Corporation**  
**165 Al Mooney Road North**  
**Kerrville, TX 78028**  
**FAX: (830) 257-4635 or EMAIL [support@mooney.com](mailto:support@mooney.com)**

**Figure SB M20-328-6 - Compliance Card**