

# Nomad

# SERVICE BULLETIN

## FUEL — SELECTOR CONTROL CABLE — IMPROVED ROUTING IN OVERHEAD CONSOLE (MOD N584)

### 1. PLANNING INFORMATION

#### A. Effectivity

(1) All Nomad N22 series and N24 series aircraft whose Log Books do not record the embodiment of Mod N584 or compliance with Service Bulletin NMD-28-19.

(2) Spares Affected

Circuit Breaker Cover – PN 1/N-80-230.

#### B. Reason

Several cases of premature failure have been reported of the fuel selector cable. The failures have all been at the control end of the cable, in the cockpit overhead console, where the cable makes a sharp bend to pass over the circuit breaker cover. Complete failure of the cable could lead to loss of fuel cross-feed control. When reworked in accordance with this SB, the sharp bends in the cable are considerably eased, resulting in easier operation of the fuel selector, and prolonged life of the operating cable.

##### Reason for revision 1

Corrects locating jig PN and reworked circuit breaker cover PN, and incorporates minor editing corrections.

##### Reason for revision 2

Figure 5 illustrates the correct pickup location for screws and locating jig. The effectivity of this Service Bulletin NMD-28-19 Rev 2 is changed and some minor editing corrections are incorporated.

#### C. Description

(a) The circuit breaker panel is lowered from its current flush position in the overhead console, by means of spacers and longer attachment bolts and the cable support plate is repositioned in the console, so providing an easier run for the control cable, with less severe bends.

(b) Trim angles are introduced to close off the resulting gap between the circuit breaker panel and the lower surface of the overhead console.

#### D. Compliance

(1) Compliance with this Service Bulletin is strongly recommended.

(2) Rework should be carried out prior to/or at the next 300 hourly inspection.

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#### E. Approval

The requirement detailed herein has been approved by a person authorised under Civil Aviation Regulation 35 and conforms to the type certification requirements.

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F. **Manpower**

Approximately 9.0 manhours.

G. **Material – Price and availability**

Parts required for the embodiment of this modification are to be obtained or manufactured from operator's stock or local sources.

H. **Tooling**

Locating jig PN NMD-28-19-05-T1 to be manufactured by the operator from local stock in accordance with Figure 2.

I. **Weight and Balance Change**

None

J. **References**

None

K. **Publications Affected**

Illustrated Parts Catalogue                      Chap 39-10-03, Figure 1

2. **ACCOMPLISHMENT INSTRUCTIONS**

**WARNING**

ENSURE ALL ELECTRICAL POWER IS OFF AND THAT THE AIRCRAFT BATTERY IS DISCONNECTED.

**CAUTION**

ELECTRICALLY GROUND THE AIRCRAFT.

- (1) Manufacture the trim angles shown in Figure 1.
- (2) Manufacture the spacers shown in Figure 2.
- (3) Manufacture the locating jig shown in Figure 2.
- (4) Remove and temporarily retain the four screws securing the circuit breaker panel to the overhead console, and allow the panel to be lowered to the full extent permitted by the attached wiring. Remove the circuit breaker cover and rework in accordance with Figure 3. Re-identify as in Para 3A.
- (5) Trim 0.1 in from the forward edge of the metal part of the circuit breaker panel, and elongate the four attachment holes in a similar manner as for the circuit breaker cover.
- (6) Remove the four 3/32 in dia rivets (two each side of the overhead console) attaching the cable support plate, PN 1/N-80-115. Remove the plate and plug the rivet holes in the overhead console using 4-off rivets MS204206A 3-2 or similar.
- (7) Using two screws (retained in paragraph 2(4)) attach the locating jig as in Figure 5.

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- (8) Install the cable support plate, so that the two holes in the plate sit over the projections on the locating jig, and the undersurface of the support plate is in contact with the supporting edge of the locating jig. The support plate should assume an angle of approximately 26° to the lower surface of the overhead console, with the control cable contacting the upper surface of the support plate from edge to edge in a fore and aft direction. The resulting bend in the cable from immediately aft of the forward attachment fitting to where it passes over the cable support plate should be much less severe than was the case with the support plate in the previous location.
- (9) With the support plate lying at the 'best' angle, and ensuring that the locating jig is not unduly deflected by the weight of the cable lying across the support plate, mark the position of the rivet holes required on the inner surfaces of the overhead console.
- (10) Remove the locating jig, drill and countersink the required rivet holes, and attach the cable support plate within the overhead console, using the rivets specified in paragraph 3.
- (11) Reposition the reworked circuit breaker cover on the circuit breaker panel and secure the circuit breaker panel in position using the new spacers, trim angles and new mounting screws as shown in Figure 4.

### NOTE

If the cable support plate has been correctly located, there should be approximately 0.060 in clearance between it and the circuit breaker cover, when fully installed. If the circuit breaker panel does not seat properly, particularly at the forward end, then the cable support plate may be incorrectly located. In such case the cable support plate needs to be relocated, or extra washers placed under the new spacers to give increased 'stand-off' to the circuit breaker panel.

- (12) With the circuit breaker panel fully installed, check the fuel selector for ease of operation and freedom from stiffness throughout the full range of movement.

### 3. MATERIALS INFORMATION

#### A. Parts required per Aircraft

Operators are required to arrange manufacture of the following parts, in accordance with details shown in Figure 1 and 2 of this Service Bulletin.

New Part No	Qty	Description	Old Part No	Instruction/Disposition
NMD-28-19-01	1	Trim Angle, Side, LH		Manufacture locally
NMD-28-19-02	1	Trim Angle, Side, RH		Manufacture locally
NMD-28-19-03	1	Trim Angle, Forward		Manufacture locally
NMD-28-19-04	1	Trim Angle, Rear		Manufacture locally
NMD-28-19-05	4	Spacer		Manufacture locally
MS35214-31	4	Screw		Obtain locally
MS20426 AD3-3	4	Rivet		Obtain locally
MS20426 AD3-2	4	Rivet		Obtain locally
G51 P/A	AR	Grommet (Hellerman Electric)		
NMD-28-19-06	1	Cover, Circuit Breaker	1/N-28-230	Rework and identify
	4	Screw	MS35214-26	Scrap

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(4) **SPECIAL TOOLS AND EQUIPMENT**

<b>New Part No</b>	<b>Qty</b>	<b>Description</b>	<b>Old Part No</b>	<b>Instruction/Disposition</b>
NMD-28-19-05-T1	1	Locating Jig		Manufactured by operator (Ref Para 1.H)

(5) **RECORDING ACTION**

Record compliance with Service Bulletin NMD-28-19 in the Airframe Log Book.