



# SERVICE BULLETIN

SUBJECT: RETRACT SAFETY MICROSWITCH REPLACEMENT (MODIFICATION N366)

## 1. Planning Information

### A. Effectivity

#### (1) Aircraft Affected

All Nomad N22-Series and N24-Series aircraft whose log books do not already record the embodiment of Mod N366 of compliance with Service Bulletin NMD-32-12.

Pre-certification implementation of the intent of this service bulletin is recorded in the airframe log book as Mod N366.

#### (2) Spares Affected

Nil.

### B. Reason

The existing retract safety microswitch is replaced by an hermetically-sealed microswitch to prevent the ingress of moisture and dirt.

### C. Description

A new microswitch and mounting bracket is fitted to the LH main gear oleo leg upper torque link assembly and a new terminal board fitted to the LH wheel pod wall.

### D. Compliance

The incorporation of this modification is recommended.

### E. Approval

The modification detailed herein has been approved pursuant to Air Navigation Regulation 40 and conforms with the type certification requirements.

### F. Manpower

Three manhours.

G. Material-Price and Availability

The parts required to incorporate the modification detailed in this Service Bulletin are available as Kit No. NMD-32-12-1 from the operator's local distributor. Distributors are to place a purchase order on G.A.F. through the normal procurement procedure. Purchase orders are to quote the aircraft Serial No. and Service Bulletin No. NMD-32-12. This Kit will be available ex-factory from October, 1981 at \$A634 each. The price remains effective for 90 days from the date of this Bulletin.

H. Tooling-Price and Availability

None required.

J. Weight and Balance

Negligible effect.

K. References

MM - Maintenance Manual.

L. Publications Affected

Maintenance Manual  
Illustrated Parts Catalogue  
Wiring Diagrams Manual.

2. Accomplishment Instructions

- A. Jack up aircraft until oleo legs are fully extended and the wheels clear of ground (Ref MM 7-00-00) and remove outer LH wheel (Ref MM 32-40-51).
- B. Ensure that all electrical power is switched off.
- C. Remove cable assembly P/N 1/N-81-343
  - (1) Remove and discard the microswitch P/N 5750 and attaching parts.
  - (2) Remove and discard tiedown straps P/N MS 3367-5-9 securing cable assembly to hydraulic brake pipe on the LH main gear oleo leg. Note position of tiedown straps.
  - (3) Disconnect cable assembly from terminal board TB21 on the wheel pod wall (Ref Figure 1).
- D. Remove and discard terminal board TB21 P/N MS27212-1-4 and the self-locking nuts P/N MS21083-D04 but retain the screws P/N MS35206-216.

- E. Fit new terminal board TB53 P/N MS27212-1-6.
- (1) Remove TB number and terminal idents from the wheel pod wall.
  - (2) Locate the position of the forward fixing hole for the new terminal board (Ref Figure 2) and drill a 3.0 mm dia hole in this position.
  - (3) Secure the new terminal board using the screws P/N MS35206-216, retained in Para 2.C. and new self-locking nuts P/N MS21083-DO4.
  - (4) Paint the TB number and terminal idents in black characters 0.125 inches high on the wheel pod wall in the positions shown in Figure 2.
- F. Remove brackets P/N 1/N-40-648 and P/N 1/N-40-649 from upper torque link assembly of LH main gear oleo leg.
- (1) Drill out rivets P/N MS20470AD4-6 securing bracket P/N 1/N-40-649 and remove and discard bracket.
  - (2) Remove and discard bracket P/N 1/N-40-648 and attaching parts, screws P/N MS35206-229, self-locking nuts P/N MS21083-N06 and washers P/N AN960-PD6.
- G. Secure bracket P/N 1/N-40-934 to the upper torque link using screws P/N MS35206-217, washers P/N AN960-4 and self-locking nuts P/N MS21083 N04.
- H. Fit new retract safety switch assembly P/N 1/N-81-694.
- (1) Secure microswitch to bracket P/N 1/N-40-934.
  - (2) Secure cable loom to hydraulic brake pipe on main gear oleo leg using tiedown straps P/N MS3367-5-9.
  - (3) Locate the tiedown straps in the positions noted in Para 2.C.(2).
  - (4) Connect the cable conductors to terminal board TB53 on the wheel pod wall as shown in Figure 3.
  - (5) Refit the outer LH wheel (Ref MM 32-40-51).
- H. Adjust retract safety microswitch.
- (1) Ensure LH main gear oleo leg is fully extended.
  - (2) Connect a continuity tester across terminals 1 and 2 of terminal block TB53.

- (3) With microswitch actuating plunger in contact with the oleo leg adjust microswitch position until continuity is obtained across terminals 1 and 2.
- (4) Further adjust switch position until actuating plunger has an override of 0.030 inches after continuity occurs between terminals 1 and 2, tighten switch mounting locknut.
- (5) Slowly lower aircraft to ground and check that an open circuit is obtained across terminals 1 and 2 just before contact is broken between the microswitch actuating plunger and the oleo leg.
- (6) Disconnect continuity tester from terminals 1 and 2 of terminal block TB53.
- (7) Move jacking equipment clear of aircraft (Ref MM 7-00-00).

### 3. Material Information

#### A. Parts Required per Aircraft

- (1) One kit P/N NMD-32-12-1 is required for each aircraft.
- (2) Each kit P/N NMD-32-12-1 comprises the following items:

<u>Item P/N</u>	<u>Title</u>	<u>Qty</u>
MS27212-1-6	Terminal board assembly	1
MS21083-D04	Nut, self-locking	2
1/N-40-934	Bracket	1
MS35206-217	Screw	4
AN960-4	Washer, flat	4
MS21083-N04	Nut, self-locking	4
1/N-81-694	Retract safety switch assembly	1
MS3367-5-9	Strap, tiedown	5

#### B. Parts Modified and Re-identified by the Operator

None.

#### C. Parts Required to Modify Spares

None.

D. Removed parts

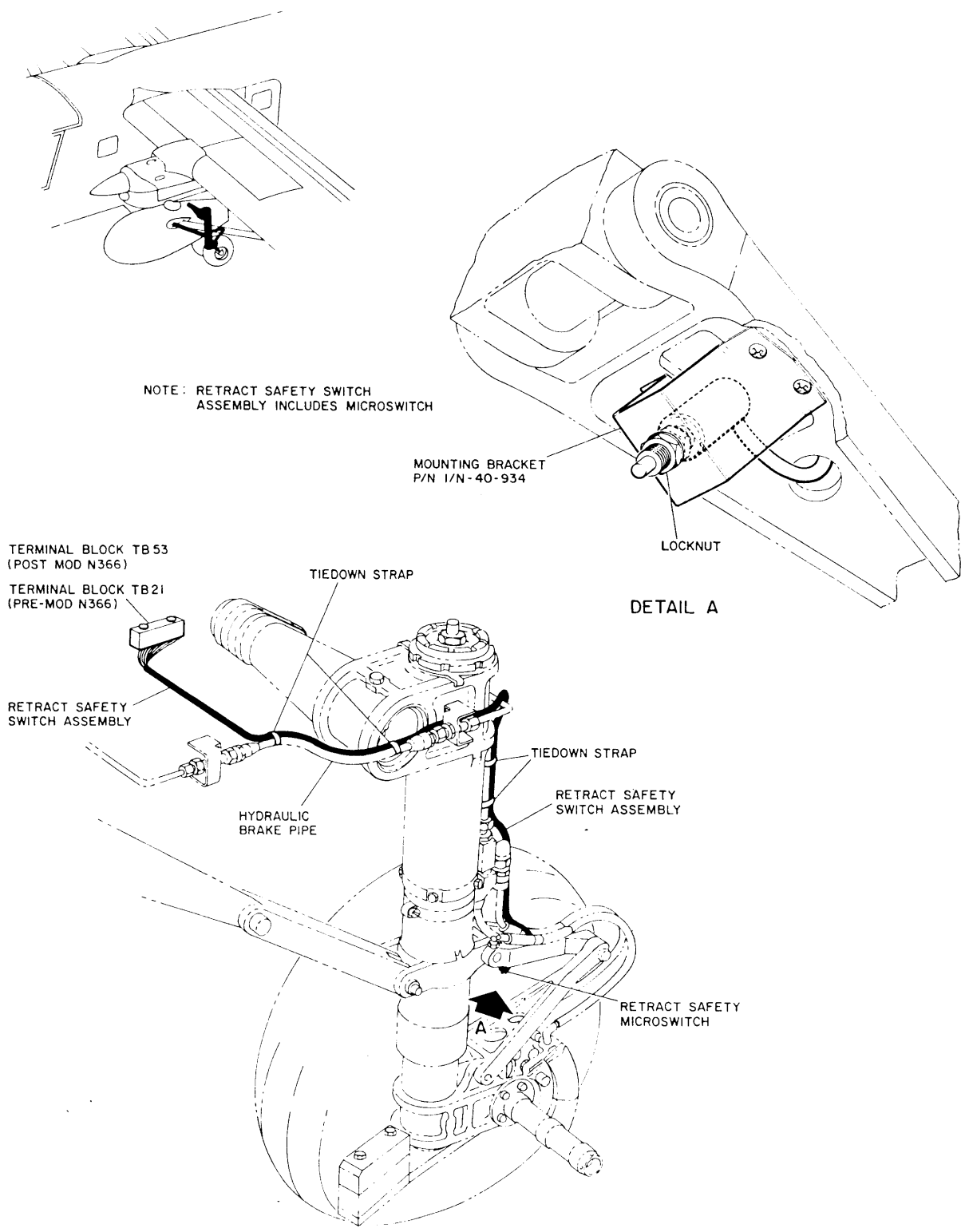
<u>Item P/N</u>	<u>Title</u>	<u>Qty</u>	<u>Recommended Disposition</u>
1/N-81-343	Cable assembly	1	Scrap
5750	Microswitch	1	Scrap
MS3367-5-9	Strap, tiedown	5	Scrap
MS21083-D04	Nut, self-locking	2	Scrap
MS27212-1-4	Terminal board assembly	1	Scrap
1/N-40-649	Bracket	1	Scrap
1/N-40-648	Bracket	1	Scrap
MS21083-N06	Nut, self-locking	2	Scrap
AN960-PD6	Washer, flat	2	Scrap
MS35206-229	Screw	2	Scrap

E. Special Tools and Equipment Required

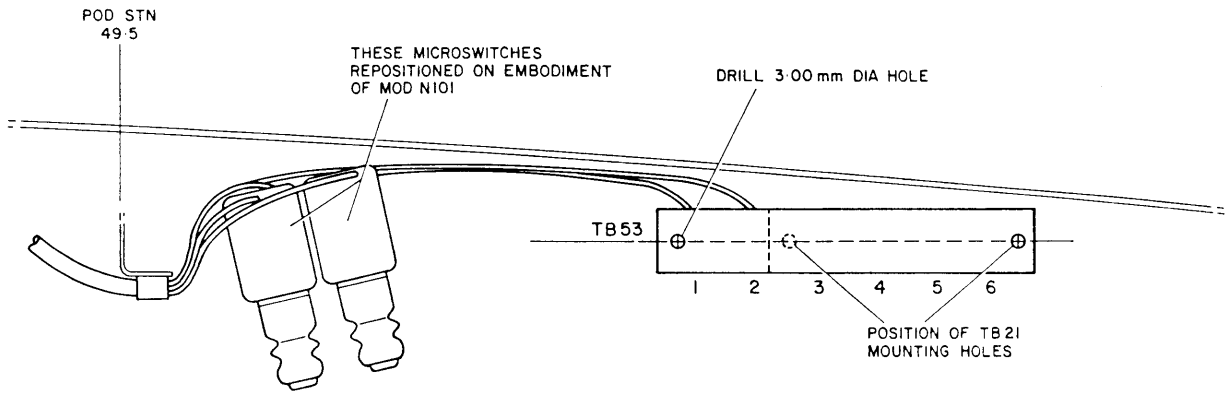
None.

4. Recording Action

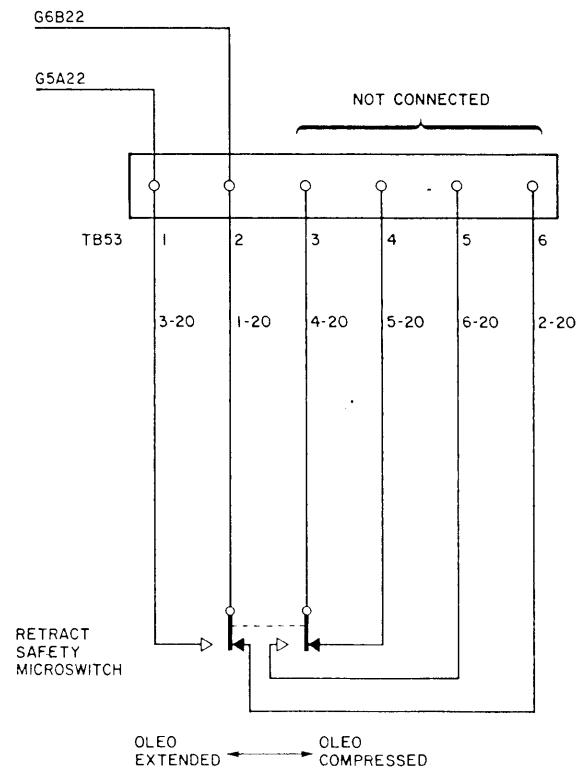
Record compliance with S/B NMD-32-12 in the airframe log book



Installation of Landing Gear Retract  
Safety Switch Assembly  
Figure I



Installation of TB53 in LH Wheel Pod  
Figure 2



Connections to TB53  
Figure 3