Nomad
SERVICE BULLETIN

Reference No 242

TRANSMITTAL LETTER
FOR
SERVICE BULLETIN ANMD-32-8 Rev 1

INSTALLATION OF STOP RING ASSEMBLY TO MAIN LANDING GEAR OLEO PLUNGER (MOD N157 AND N770)

Reason

1. To provide a resilient buffer for the oleo plunger when the main landing gear oleo leg extends.

2. Revision 1 incorporates Mod N770 which issues a revised material specification for stop ring assembly PN 1/N–40–892 fitted by Mod 157.

Instructions

3. Remove Service Bulletin ANMD-32-8, dated 8 Oct 82 from Service Bulletin binder and insert the attached Service Bulletin ANMD-32-8 Rev 1, dated 21 May 92. Annotate the Service Bulletin Index accordingly.

Revision Status

Original	8 Oct 82
Revision 1	21 May 92

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INSTALLATION OF STOP RING ASSEMBLY TO MAIN LANDING GEAR OLEO PLUNGER (MOD N157 AND N770)

1. PLANNING INFORMATION

A. Effectivity

(1) Aircraft Affected.

All Nomad N22-series, except N22 Floatplane, and N24A-series aircraft whose log books do not already record the embodiment of Mod N157, Mod N770 or compliance with Service Bulletin NMD-32-8 Rev 1.

Pre-certification implementation of the intent of the original service bulletin is recorded in the airframe log book as Mod N157.

(2) Spares Affected.

N22	Main Landing Gear Oleo Leg LH	PN 1/N-40-901
	Main Landing Gear Oleo Leg RH	PN 1/N-40-902
N24A	Main Landing Gear Oleo Leg LH	PN 201/N-40-906
	Main Landing Gear Oleo Leg RH	PN 201/N-40-907

B. Reason

(1) To provide a resilient buffer for the oleo plunger when the main landing gear oleo leg extends.

(2) Reason for Revision 1.

Modification N770 issues a revised material specification for stop ring assembly PN 1/N-40-892 fitted by Mod N157.

C. Description

A bonded metal/elastomeric polyurethane stop ring assembly is fitted to the oleo plunger of the main landing gear oleo leg.

NOTE

It is recommended that this bulletin be complied with at the same time as Service Bulletin NMD-32-13, Main Landing Gear Oleo Lower Cap — Revision to O-Ring Groove (Mod N450).

D. Compliance

Compliance with this service bulletin is recommended at the next overhaul or repair of the main landing gear oleo following availability of parts.

E. Approval

The modifications detailed herein have been approved pursuant to Civil Air Regulation 35 and conforms with the type certification requirements.

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F. **Manpower**

15 man–hours each leg plus time required for leakage checks. No extra manhours required if incorporated at overhaul.

G. **Material–Price and Availability**

Contact ASTA General Aviation for price and availability of Stop Ring Assembly PN 1/N–40–952. All other parts are to be obtained from own stock or local sources.

H. **Tooling - Price and Availability**

None Required.

I. **Weight and Balance**

None.

J. **References**

Maintenance Manual Chapter 32–10–11
Component Maintenance Manual Chapter 32–01–01

K. **Publications Affected**

Maintenance Manual
Illustrated Parts Catalogue
Component Maintenance Manual

2. **ACCOMPLISHMENT INSTRUCTIONS**

A. Remove the main gear oleo leg (Ref MM Chap 32-10-11).

B. **Disassembly of the main gear oleo leg.**

The main gear oleo leg is to be disassembled as necessary to enable the stop ring assembly PN 1/N–40–952 to be fitted to the oleo plunger. The oleo leg is to be disassembled in accordance with Component Maintenance Manual, Chapter 32-01-01 with the following exceptions:

(1) Carry out Para 1.B(3) and 1.B(4) for the lower torque link only.

(2) Disregard Para 1.B(5) and 1.B(6).

(3) Disregard Para 1.D.

(4) After carrying out Para 1.E. clean off all old pigmented jointingcompound from the top cap retaining nut (3) and air charging valve locking washer (4).

(5) Disregard Para 1.G.

C. **Fit Stop Ring Assembly to Oleo Plunger (Ref Fig 1)**

(1) Before assembly of stop ring PN 1/N–40–952 to the top end of the oleo plunger carefully break the edges of the semi-circular cut-outs, in the top edge of the oleo plunger, with a 0.020 to 0.030 in radius in the area of the tabs on the stop ring.

(2) Ensure there are no burrs or scores on the stop ring tabs.

(3) Assemble the stop ring to the top of the oleo plunger, torque to 140–160 lb in. Bend the tabs in to the semi-circular cut-outs just sufficient to clear the top surface of the oleo plunger (Ref Fig 1).

(4) Minor tears to the edge of the tab up to 0.040 in long are acceptable after assembly.

D. **Assemble Main Gear Oleo Leg**

Assemble the main gear oleo leg in accordance with Component Maintenance Manual, Chapter 32-01-01 - Assembly, Para 1 (General Assembly Instructions) and Para 2 (Procedures) with the following exceptions:

(1) Disregard Para 2.B(1) to (14) inclusive.

(2) Disregard Para 2.C.

(3) When carrying out Para 2.D(11) and (12) check also for signs of fluid leakage between the top cap and the oleo outer casing.

E. If no sign of gas or fluid leakage is evident (Ref Para 2.D(3) of this bulletin), lay the oleo leg in a horizontal position on a bench and leave overnight.

F. Repeat Para 2.D(3) of this bulletin and re-check the oleo leg inflation pressure.

NOTE

If the ambient temperature changes between pressure checks, allowance should be made for the effect of the temperature change on the oleo leg pressure. The pressure will rise or fall approximately 0.2% for each degree Fahrenheit increase or decrease in temperature.

G. If there are no fluid or air leaks, refit the oleo leg to the aircraft (Ref MM Chap 32-10-11).

H. Remove old serial plate PN SD 340.

I. Stamp serial number and PN 2/N-40-901 LH or PN 2/N-40-902 RH for N22 and 202/N-40-906 LH or PN 202/N-40-907 RH for N24A (where CO G274 is fitted).

J. Affix to oleo leg using Araldite AW103 and 8% HY951 Hardener.

3. **MATERIAL INFORMATION**

A. Parts Required Per MLG Oleo Leg.

New Part No	Qty	Description	Old Part No	Instruction/Disposition
Parts to be obtained from ASTA General Aviation				
1/N-40-952	1	Assembly, Stop ring	1/N-40-892	Discard old part
	1	Plate, Serial	SD 340	Replace old Serial Plate
Parts to be obtained from own stock or local source				
	1	Stat-o-Seal	600-015-3/4	Replace
	1	Ring, Back-up (Pre-Mod N450	8-139N300-9	Replace
	1	Ring, Back-up (Post-Mod N450	8-227N300-9	Replace
	1	Ring, Back-up	8-234N300-9	Replace
	2	Ring, Back-up	8-335N300-9	Replace

New Part No	Qty	Description	Old Part No	Instruction/Disposition
	1	Pin, Cotter, 1/16 in (Post CO G274)	MS24665–132	Replace
	1	Pin, Cotter, 1/16 in (Pre CO G274)	MS24665–134	Replace
	1	Pin, Cotter, 1/16 in (Pre CO G274)	MS24665–136	Replace
	1	Pin, Cotter, 5/64 in (Post CO G274)	MS24665–212	Replace
	1	Packing, Preformed, O-ring	MS28775–139	Replace
	1	Packing, Preformed, O-ring	MS28775–234	Replace
	1	Packing, Preformed, O-ring	MS28775–335	Replace
	1	Excluder, Shamban	S30395–27G	Replace

B. Cleaning fluids and lubricants or suitable equivalents as detailed in the Component Maintenance Manual, Chapter 32-01-01 are to be obtained from the operator's stock or from local sources.

4. **SPECIAL TOOLS AND EQUIPMENT**

Refer to Component Maintenance Manual Chapter, 32-01-01 for special tool and equipment requirements.

5. **RECORDING ACTION**

Record compliance with Service Bulletin NMD-32-8 Revision 1 by entering Mod N770 in the airframe log book and quote Serial Numbers of oleo legs reworked.

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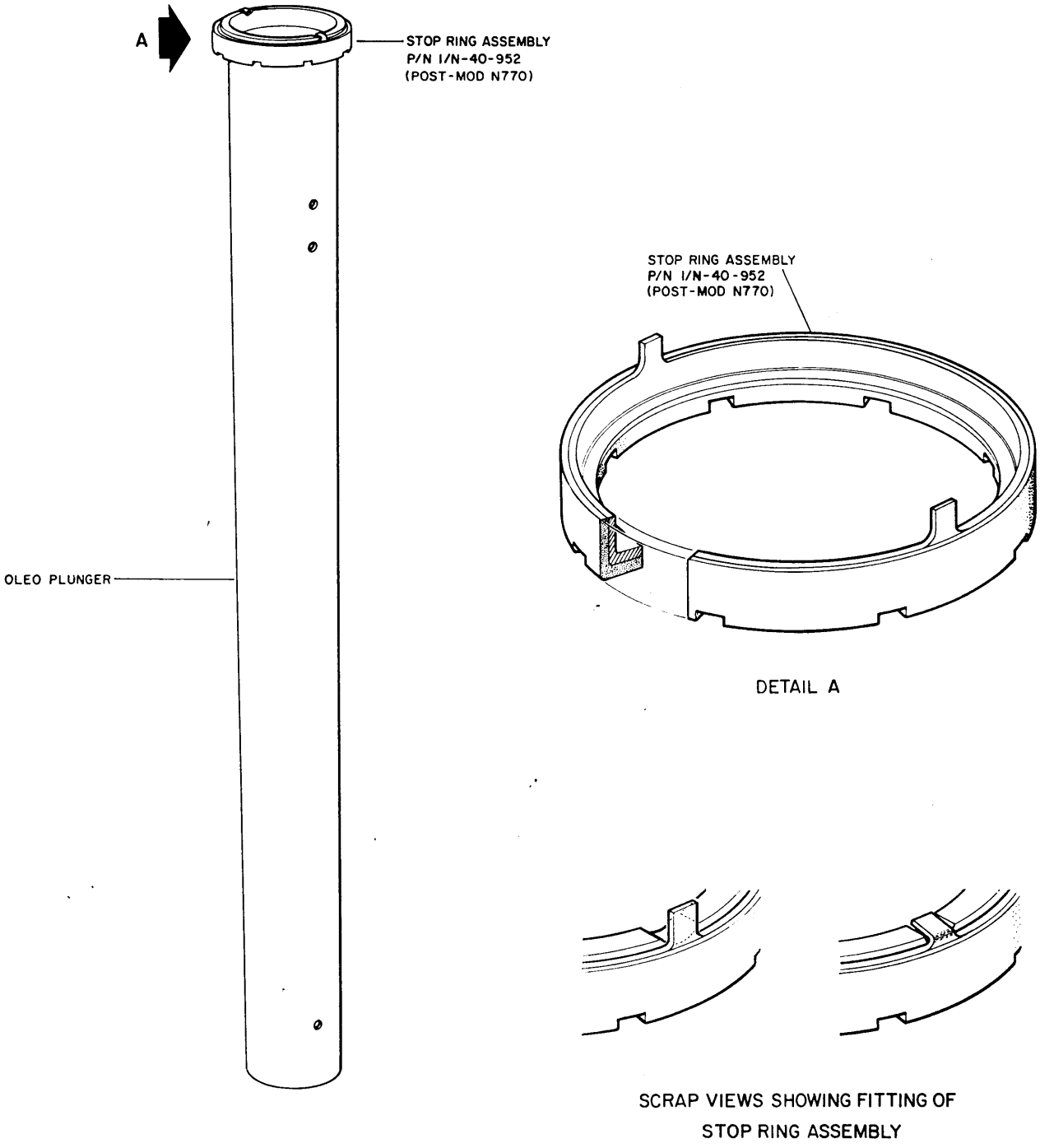

Figure 1 Mod N157 Installation with Mod N770 Stop Ring Assembly