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TIME LIMITS AND MAINTENANCE SCHEDULE

The **Time Limits and Maintenance Schedule - Chapter 5**, are prepared according to requirements of section 23.1529 of EASA Certification Specification CS23.

1. General

A. This document is a guide to familiarize persons with P.180 inspection items.

B. Definition of Terms

(1) The term "Inspect for **General Condition**" means:
to make a visual survey of a component or system in order to locate any of the following conditions:

- external damage
- cracks, fractures, distortion
- corrosion
- contamination, deterioration, discoloration due to overheating
- loose, sheared or missing rivets and fasteners
- wear, chafing, fraying scoring
- insecurity or wear of attachment or attaching parts
- insecurity of attached parts (clips, pipes, bonding straps, etc.)
- leaks (oil, grease, fuel, hidraulic fluid, refrigerant, etc.
- fault or broken locking devices
- cuts, isolation damage, burning, of electrical wires .
- insecurity of installation and burning of electrical connectors.

(2) The term "**Functional Test**" means:
the procedure required to ascertain that a system or unit is functioning in all aspects in accordance with minimum acceptable system or unit design specifications. These tests may require ground support equipment and are more detailed than an operational test.

(3) The term "**Operational Test**" means:
the procedure required to ascertain whether an item of the equipment is operational. This test requires no material or equipment other than that of the airplane.

(4) The term "**Visual Inspection/Check**" means:
the procedure required to determine the condition of a system, an item of equipment or a structure in relation to the design standard.

(5) The term "**On Condition**" means:
the type of component maintenance which subjects the component to scheduled operations or continuous monitoring, if applicable, to ascertain its work condition, only being undergone if condition is found to be unsatisfactory. Criteria used to determine whether the component may be maintained according to its condition are the following:

- possibility of evaluating the condition degradation as a rule (without removal or disassembly), through visual inspections, measurement of significant parameters, tests, etc.
- definition, in the maintenance document, of the limiting values of significant parameters or tolerances established in respect to quality performance, wear or increase in fault susceptibility, requiring additional work on the inspected component.

When this mode of maintenance is selected for a specific item of equipment, it is mandatory that the task required for checking the condition and the periodicity of the task is mentioned in this Maintenance Manual.

(6) The term "**Condition Monitoring**" means:
the concept that qualifies the type of component maintenance for which only the symptom of defect provides justification for remedial treatment.
This type of maintenance is applicable only to items whose failure has no effect on airworthiness or to components whose operation is directly under crew supervision.
Maintenance with condition monitoring requires the use of appropriate monitoring equipment in order to reveal components with unsatisfactory operational safety level. This implies consideration of the actual incidents occurring during utilization, in order to discover the origin, the consequences and the frequency of the fault.
Consideration of the incidents provides means of updating the maintenance policy.

NOTE: The "Condition Monitoring" components are not listed in this chapter, since condition monitoring is not performed by maintenance persons.

(7) The term "**Scheduled Maintenance**" means:
the maintenance performed at defined intervals to retain an item in a serviceable condition by systematic inspection, detection, replacement of wearout items, adjustment, calibration, cleaning, etc.

(8) The term "**Unscheduled Maintenance**" means:
the maintenance performed to restore an item to a satisfactory condition by providing correction of a known or suspected malfunction and/or defect.

(9) The term "**Special Maintenance**" means:
those maintenance operations, to be normally performed, not to be included in the "Inspection Program" for their particular time limits.

(10) The term "**Inspection/Check**" means:
the action required to determine the condition of a system, an item of equipment or a structure in relation to the design standard.

(11) The term "**Bench Check/Test**" means:
a functional check of an item in the shop to determine whether or not the item may be returned to service, or whether it requires adjustment, repair or overhaul.

(12) The term "**Airplane Operating Cycle**" means:
a completed take-off and landing sequence.
Touch and go landings are counted as Airplane Operating Cycles.

(13) The term "**Engine Operating Cycle**" means:
a complete engine thermal cycle including the application of take-off power.

(14) The term "**Whichever Occurs First**" **(WOF)** refers to:
a maintenance requirement to be performed at the expiring of either a flight hours limit or a calendar time limit whichever of the two prescribed limits occurs first.

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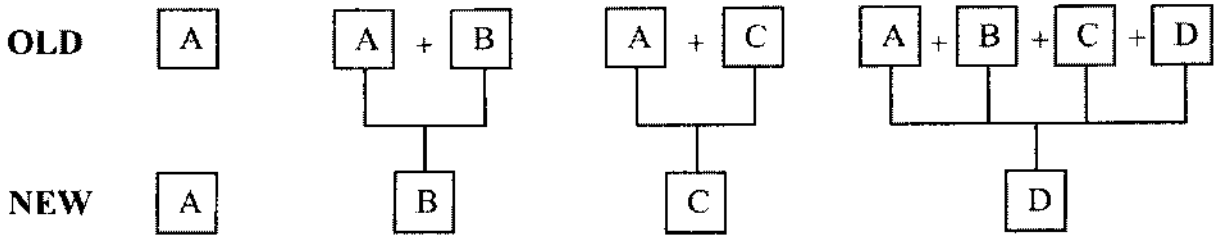
INSPECTION PROGRAM

1. Foreword

When the mandatory or non-mandatory documentation reports a reference to "A", "B", "C" or "D" check (i.e. AD's, PA's, Consignes de Navigabilité, Service Bulletins, Service Letters, Manuals etc.) the compliance shall be interpreted as, respectively, "150 FH", "600 FH", " 1500 FH" and "3000 FH".

The new Schedule interpretation is as follows:



2. General

A. This inspection program consists of individual maintenance checks, performed at 150, 600, 1500, 3000 flight hour intervals, and of other flight hour and calendar scheduled inspections:

A - Every 150 Flight Hours except when B, C, D inspections occur

B - Every 600 Flight Hours except when D inspection occurs

C - Every 1500 Flight Hours except when D inspection occurs

D - Every 3000 Flight Hours

All the tasks are grouped in function of ATA-100 code. There are five columns:

- Column A : if a "X" is indicated in this column, the task must be performed at each "A" inspection
- Column B : if a "X" is indicated in this column, the task must be performed at each "B" inspection
- Column C : if a "X" is indicated in this column, the task must be performed at each "C" inspection
- Column D : if a "X" is indicated in this column, the task must be performed at each "D" inspection

  (if there are more crossed boxes it means that the task has to be accomplished at different inspections)

- Column -Interval- : it provides some indications. Some examples follow:
  - 1M/3M/6M mean that the task has to be accomplished every 1/3/6 months
  - 1Y/2Y/3Y/5Y mean that the task has to be accomplished every 1/2/3/5 years
  - 2A means that the task has to be accomplished every 2A inspections (i.e. 300 FH)
  - 3A means that the task has to be accomplished every 3A inspections (i.e. 450 FH)
  - 2D means that the task has to be accomplished every 2D inspections (i.e. 6000 FH)
  - 3D/4D mean that the task has to be accomplished at 9000/12000 FH
  - * means that the interval is set mandatory by the Airworthiness Authority of the country in which the airplane is registered.

If a task is prescribed at both flight hour and calendar limits, it must be complied with when one of these two limits occurs first.

B. Calendar times begin for each airplane on the original certification date (if not otherwise specified), recorded in the airplane logbook.

C. Owners and operators must adhere as closely as possible to all inspection intervals.

To facilitate scheduling inspections, an inspection interval tolerance of +/- 10FH for A checks may be used. For example the first A check, that is due at 150FH, may be accomplished between 140FH and 160FH. Next inspection will still be due at 300FH (+/- 10FH).

For B, C, D inspections the tolerance is +/- 30FH.

Tolerance for calendar inspections is +/- 10% or +/- 30 days whichever the less.

If an inspection is completed earlier than applicable tolerance, next inspection must be scheduled in accordance with the following formula:

next inpection due Time/Date = Time/Date of inspection + standard inspection interval.

If for example the initial 150FH inspection is completed at 100FH, next 150FH inspection must be scheduled at 250FH. All subsequent inspections must be readjusted accordingly.

If an inspection is completed later than applicable tolerance next inspection must be scheduled at the regular subsequent inspection interval.

If for example the initial 150FH inspection is overflown to 170FH the next 150FH inspection must be scheduled at 300FH.

NOTE 1: The Maintenance Schedule is shown in the following Graph 5-20.

NOTE 2: For Engine maintenance checks refer to P&WC EMM Chapter 72-00-00. Engine routine checks shall be performed during the airplane preflight check and minor checks shall be performed in conjunction with "150 FH" Interval Inspection.
The checks must be complied within the limits specified by P&WC if not otherwise specified by Piaggio Maintenance Schedule.

NOTE 3: For improved hot section durability P&WC recommends a functional test of the fuel adapter and nozzles (refer to P&WC EMM 72-00-00, Periodic Inspection)

NOTE 4: NDT's and Acceptance Criteria are detailed in Piaggio's Report N° 180-MAN-0300-01107 Non Destructive Test Manual. The detected acceptable defects must be recorded and maintained in a map.

NOTE 5: For airplanes flown under Category II Operations Rules refer to the additional inspection requirements listed in the applicable "Special Scheduled Inspections for Category II Operations" Table at the end of this Section.

(*): Some engine tasks are required initially at intervals not aligned with A/C scheduled maintenance inspections, and can be extended based on inspection results. It is suggested to analyze engine maintenance schedule, anticipating initial engine inspections during A/C scheduled maintenance tasks.

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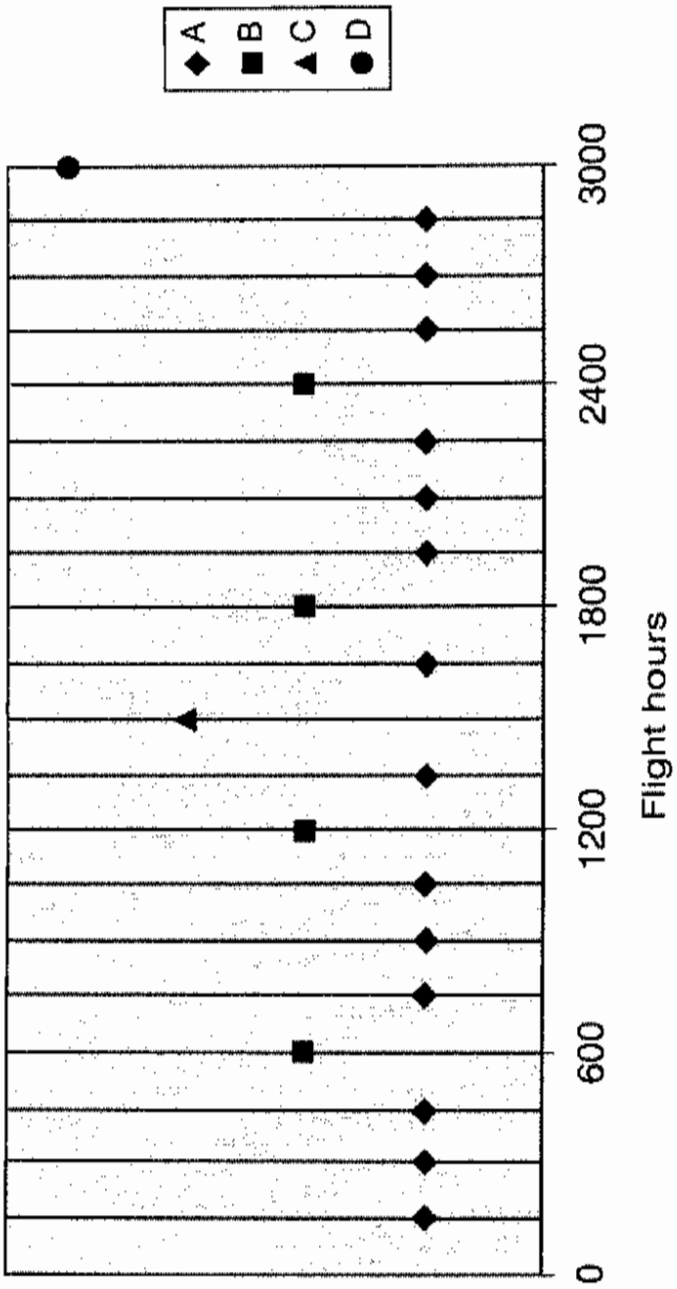

Graph 5-20. P180 Maintenance Schedule

ATA Ch.	Item	Requirement	A	B	C	D	Inter.
Chapter 32-00-00 Landing Gear							
32-00-00	Landing Gear	Operational Test					1Y
32-00-00	Landing Gear	Perform hand pump gear extension.		X		X	1Y
32-00-00	Landing Gear	Functional test (Ref. to AMM Chapter 32-00-00 Page Block 500).			X	X	
32-00-00	Landing Gear	Check the wiring connected to the microswitches for general condition and security of installation. Check electrical bonding for general condition and security of installation.	X	X	X	X	
32-10-00	Landing Gear	Lubricate (Ref. to AMM Chapter 12-21-01 Page Block 300).	X	X	X	X	
32-10-00	Landing Gear Door Adjustable Linkages	Check the adjustable ends and rods for wear and corrosion. Nose: (Ref. to AMM Chapter 32-20-00 Page Block 200.) Main: (Ref. to AMM Chapter 32-11-00 Page Block 200)				X	
32-10-00	Main Landing Gear Strut(s)	Check Nitrogen Pressure (Ref. to AMM Chapter 12-10-03 Page Block 300).	X	X	X	X	
32-11-00	Main Landing Gear	Inspect for general condition and security of installation	X	X	X	X	
32-11-00	Main Landing Gear Door Mechanism	Inspect for general condition and security of installation (Ref. to AMM Chapter 32-11-00 Page Block 500)	X	X	X	X	

ATA Ch.	Item	Requirement	A	B	C	D	Inter.
32-20-00	Nose Landing Gear	Inspect for general condition and security of installation	X	X	X	X	
32-20-00	Nose Landing Gear Door Mechanism	Inspect for general condition and security of installation (Ref. to AMM Chapter 32-20-00 Page Block 200).	X	X	X	X	
32-20-00	Nose Landing Gear Strut	Check Nitrogen Pressure (Ref. to AMM Chapter 12-10-02 Page Block 300).	X	X	X	X	1Y
32-30-00	Emergency Extension System	Inspect selector handle and valve for general condition ande security of installation.		X		X	
32-30-00	Service Selector Valve	Inspect for general condition and security of installation.		X		X	

ATA Ch.	Item	Requirement	A	B	C	D	Inter.
32-40-00	Brake Pumps	Inspect for general condition and security of installation.			X	X	
32-40-00	Brake System Rods	Inspect for general condition (Ref. to AMM Chapter 32-42-00).		X		X	
32-40-00	Brakes	Inspect for security of installation (Ref. to AMM Chapter 32-42-00 Page Block 200).	X	X	X	X	
32-40-00	Main Gear Wheels	Inspect for general condition and security of installation (Ref. to AMM Chapter 32-41-00 Page Block 200).		X		X	
32-40-00	Normal and Emergency Brake Valve	Inspect for general condition and security of installation.		X		X	
32-40-00	Normal and Emergency Parking Lines	Inspect for general condition and security of installation.		X		X	

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ATA Ch.	Item	Requirement	A	B	C	D	Inter.
32-40-00	Nose Gear Wheels	Inspect for general condition and security of installation (Ref. to AMM Chapter 32-41-00 Page Block 200).		X		X	
32-40-00	Parking Brake	Inspect control knob and cable for security of installation.			X	X	
32-40-00	Parking Valve and Three-Way Valve	Inspect for general condition and security of installation.			X	X	
32-40-00	Tires	Inspect for wear, cuts, inflation, cleanliness and evidence of damage (Ref. to AMM Chapter 32-41-00 Page Block 200).	X	X	X	X	1Y
32-50-00	Steering Filter	Inspect for general condition and security of installation.		X		X	
32-50-00	Steering System	Operational test (Ref. to AMM Chapter 32-00-00 Page Block 501).		X		X	
32-50-00	Steering System	Inspect for general condition and security of installation	X	X	X	X	

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POSITION AND WARNING - ADJUSTMENT/TEST

1. General

WARNING: BE CAREFUL WHEN YOU OPERATE THE LANDING GEAR. MAKE SURE ALL PERSONS AND EQUIPMENT ARE CLEAR OF THE LANDING GEAR. INJURY TO PERSONS AND/OR DAMAGE TO EQUIPMENT CAN OCCUR.

2. Landing Gear Warning Test (Airplane without S.L. 80-0020) (Ref. to Fig. 501)

Airplane without optional service letter 80-0020

NOTE: If the result is incorrect refer to trouble shooting (Page Block 101) to identify the fault.

A. Referenced Information

Maintenance Manual Chapter 07-00-00
Maintenance Manual Chapter 24-00-00
Maintenance Manual Chapter 29-00-00

B. Procedure

(1) Lift the airplane on jacks until the wheels are clear of the ground (Refer to 07-00-00).
(2) Make sure electrical power is available (Refer to 24-00-00).
(3) Pressurize the hydraulic system (Refer to 29-00-00).

NOTE: The landing gear control and the flap control lever are initially in the "DN" and "UP" respectively; the power levers must be advanced to the "MAX PWR" position.

(4) Do the test:

Action	Result
(a) Retard the LH power lever to G.I.	No sound shall be generated by the aural warning system.
(b) Retard the RH power lever to G.I.	No sound shall be generated by the aural warning system.
(c) Advance both power levers to MAX PWR.	
(d) Set the flap control lever to MID.	No sound shall be generated by the aural warning system.
(e) Set the flap control lever to UP.	

Action	Result
(f) Retract the landing gear.	
(g) Retard the LH power lever to the G.I. position.	A steady tone (326 Hz) shall be generated by the aural warning system.
(h) Press the GEAR MUTE button on the LH power lever.	The aural warning shall be silenced.
(i) Retard the RH power lever to the G.I. position.	A steady tone shall be generated by the aural warning system.
(j) Press the GEAR MUTE button on the LH power lever.	The aural warning shall be silenced.
(k) Advance both power levers to the MAX PWR position.	
(l) Retard the RH power lever to the G.I. position.	A steady tone shall be generated by the aural warning system.
(m) Extend the landing gear.	The aural warning shall be silenced.
(n) Retract the landing gear and advance both power levers to MAX PWR.	
(o) Set the flap control lever to MID.	No sound shall be generated by the aural warning system.
(p) Retard the LH Power lever to F.I.	A steady tone shall be generated by the aural warning system.
(q) Press the GEAR MUTE button on the LH power lever.	The sound shall be continued.
(r) Extend the landing gear.	The aural warning shall be silenced.
(s) Retract the landing gear.	No sound shall be generated.
(t) Set the flap control lever to UP and advance both power levers toMAX PWR.	No sound shall be generated.

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Action	Result
(u) Set the flap control lever to DN.	A steady tone shall be generated.
(v) Extend the landing gear.	The aural warning shall be silenced.

(5) Depressurize the hydraulic system (Refer to 29-00-00).
(6) Remove the electrical power (Refer to 24-00-00).
(7) Lower the airplane to the ground and remove the jacks (Refer to 07-00-00).

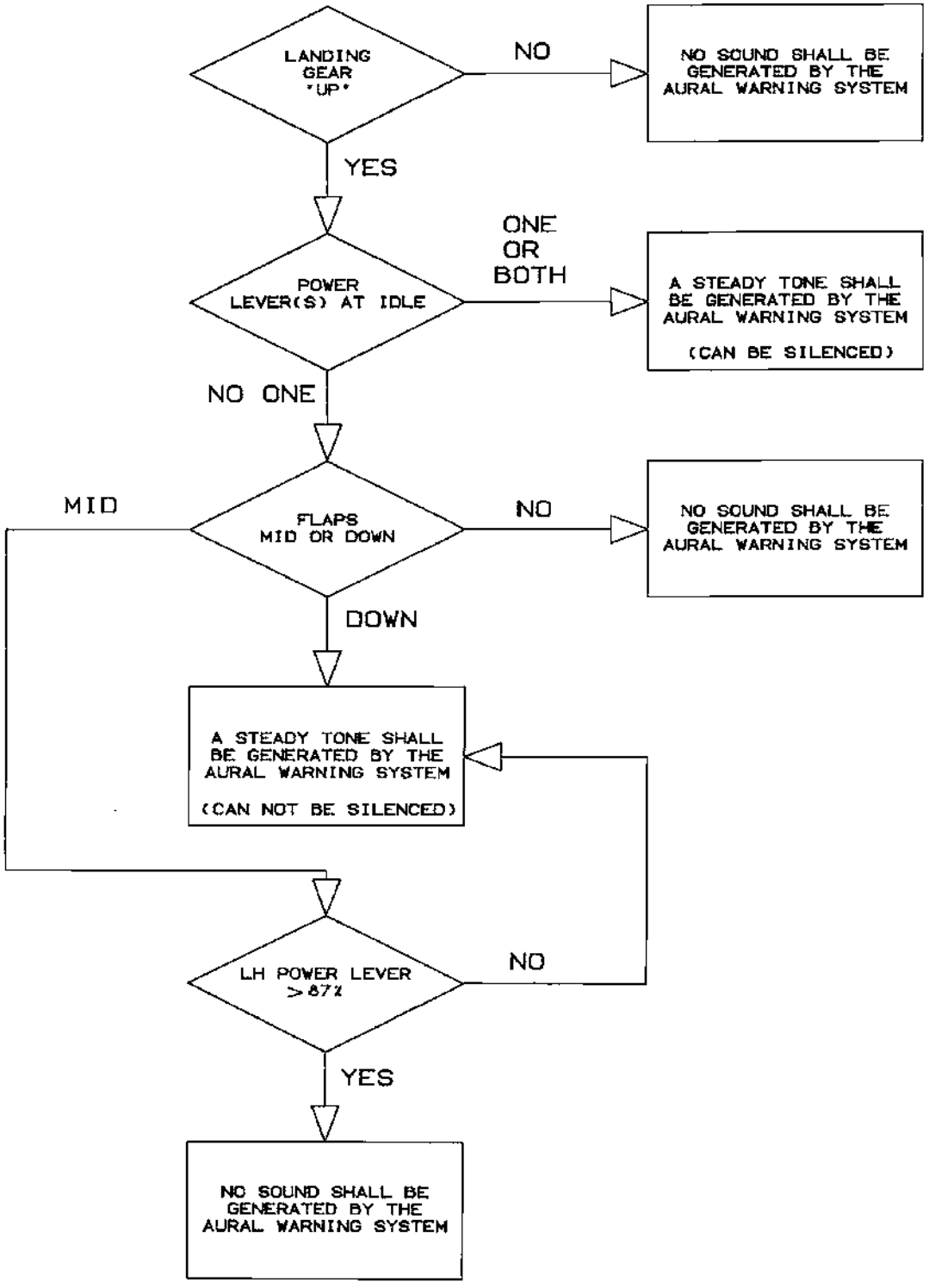

Fig. 501 - Landing Gear Warning Diagram
Airplane without optional service letter 80-0020

3. Landing Gear Warning Test (Airplane with S.L. 80-0020) (Ref. to Fig. 502)

NOTE: If the result is incorrect refer to trouble shooting (Page block 101) to identify the fault.

A. Referenced Information

Maintenance Manual Chapter 07-00-00
Maintenance Manual Chapter 24-00-00
Maintenance Manual Chapter 29-00-00

B. Procedure

(1) Lift the airplane on jacks until the wheels are clear of the ground (Refer to 07-00-00).
(2) Make sure electrical power is available (Refer to 24-00-00).
(3) Pressurize the hydraulic system (Refer to 29-00-00).

NOTE: The landing gear control and the flap control lever are initially in the "DN" and "UP" respectively; the power levers must be advanced to the "MAX PWR" position.

(4) Do the test:

Action	Result
(a) Retard the LH power lever to G.I.	No sound shall be generated by the aural warning system.
(b) Retard the RH power lever to G.I.	No sound shall be generated by the aural warning system.
(c) Advance both power levers to MAX PWR.	
(d) Set the flap control lever to MID and wait at least for 30seconds.	No sound shall be generated by the aural warning system.
(e) Set the flap control lever to UP.	
(f) Retract the landing gear.	
(g) Retard the LH power lever to the G.I. position.	A steady tone (326 Hz) shall be generated by the aural warning system.
(h) Press the GEAR MUTE button on the LH power lever.	The aural warning shall be silenced.

Action	Result
(i) Retard the RH power lever to the G.I. position.	A steady tone shall be generated by the aural warning system.
(j) Press the GEAR MUTE button on the LH power lever.	The aural warning shall be silenced.
(k) Advance both power levers to the MAX PWR position.	
(l) Retard the RH power lever to the G.I. position.	A steady tone shall be generated by the aural warning system.
(m) Extend the landing gear.	The aural warning shall be silenced.
(n) Retract the landing gear and advance both power levers to MAX PWR.	
(o) Set the flap control lever to MID.	A steady tone (326 Hz) shall be generated by the aural warning system.
(p) Press the GEAR MUTE button on the LH power lever.	The sound shall continue.
(q) Extend the landing gear.	The aural warning shall be silenced.
(r) Retract the landing gear.	No sound shall be generated for about 25 seconds. After 25 secondsapproximately, the aural warning system shall generate a steady sound.
(s) Set the flap control lever to UP.	The aural warning shall be silenced.
(t) Set the flap control lever to DN.	A steady tone shall be generated by the aural warning system.
(u) Extend the landing gear.	The aural warning shall be silenced.

(5) Depressurize the hydraulic system (Refer to 29-00-00).
(6) Remove the electrical power (Refer to 24-00-00).
(7) Lower the airplane to the ground and remove the jacks (Refer to 07-00-00).

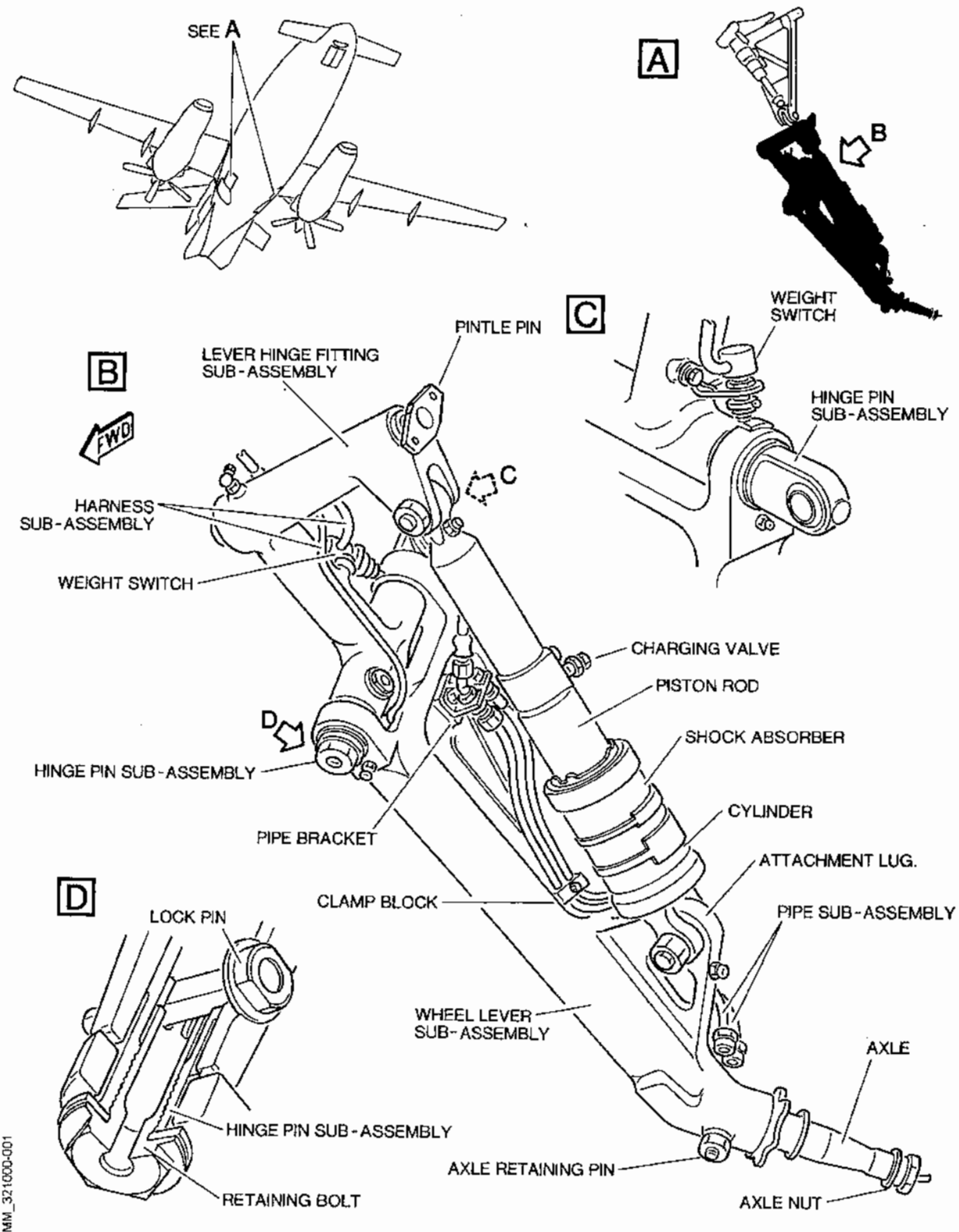

Fig. 1 - Main Gear and Doors - Component Recognition/Identification

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(3) The valve, when selected connects the handpump line to the landing gear up line for service retraction tests. To retract the landing gear the normal landing gear control selector must be selected to up.

3. Operation

A. Normal retraction

(1) When the flight crew set the landing gear control switch to UP the directional control valve in the hydraulic package operates (energizes) to open the landing gear up line. At the same time the depressurizing valve de-energizes to give a hydraulic delivery pressure of 3,000 psi. The first pressure unlocks the internal locks of the actuator and the gear retracts.

(2) The landing gear UNSAFE annunciators on the landing gear panel come on while the landing gear is in motion. When the uplocks are engaged the annunciators go off. When the landing gear is up the uplocks close and the uplock limit switches operate. When the uplock limit switches operate the pump relay coil of the hydraulic pack de-energize and stops hydraulic power.

B. Normal extension

(1) When the flight crew set the landing gear control switch to ON the directional control valve in the hydraulic package is de-energized and the valve moves under spring pressure to open the gear down line. The depressurizing valve is de-energized to give a hydraulic delivery pressure of 3000 psi from the hydraulic package.

(2) First pressure unlocks the internal actuator up locks and the gear extends. The landing gear UNSAFE annunciators on the control panel come on until the gear is down and locked. The downlock limit switches operate and the UNSAFE annunciators go off and the green LOCKED ON annunciators come on.

(3) The depressurizing valve on the hydraulic package is energized and the pump delivery pressure reduces to 1000 psi and stays at 1000 psi until the hydswitch is set to off or another gear selection is made.

C. Emergency extension

(1) When the emergency selector is pulled out the auxiliary hydraulic (handpump) line is connected to the emergency down port on the valve block of each actuator. Operation of the handpump operates shuttle valves in the valve blocks to part hydraulic pressure to unlock and extend the gear.

D. Servicing operation

(1) For retraction of the landing gear with handpump pressure (for maintenance purposes), operation of the service valve connects the handpump pressure line to the landing gear up line.

(2) The landing gear normal-down line becomes the return line. The landing gear normal up selection must be made to close the directional control valve to enable pressurization of the up line.

(3) 28 Vdc from the ESSENTIAL BUS supplies electrical power to the landing gear through a 3 A LDG CONT circuit breaker.

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POSITION AND WARNING - DESCRIPTION AND OPERATION

1. General (Ref. to Fig. 1)

   A. The position and warning system shows the flight crew the position and condition of the landing gear and associated systems.

   B. The position and warning system has these main components:
   - The nose gear harness subassembly
   - The landing gear limit switches
   - The weight switches
   - The landing gear control panel

   The system has a control function for these systems:
   - The hydraulic power system (Refer to 29-10-00)
   - The autofeather warning system (Refer to 61-00-00)
   - The autopilot system (Refer to 22-00-00)
   - The nosewheel steering system (Refer to 32-50-00)
   - The digital clock (Refer to 31-20-00)
   - The air data system (Refer to 34-12-00)
   - The wing anti-ice system (Refer to 30-10-00)
   - The pressurization system (Refer to 21-30-00)
   - The stall warning system (Refer to 27-30-00)
   - The DC generation system (Refer to 24-30-00).

2. System Description

   A. Nose gear harness subassembly

   (1) The harness subassembly connects the weight switch, the nosewheel steering servo valve, the steering select/bypass valve and, the steering feedback potentiometer to the airplane electrical system.

   (2) The cable has individual wires contained in a conduit connectors connect the wires to the applicable component and to the electrical system. The connectors are sealed with a heat shrink boot.

   B. Landing gear limit switches

   (1) The limit switches are two position plunger operated microswitches. They are attached to housings on the landing gear actuators.

   (2) When the actuators are fully extended or retracted a striker mechanism in the actuator operates the applicable switch.

   C. Weight switches

   (1) The weight switches (one for each gear) are two position multi contact microswitches. They operate when the airplane weight is on the ground.

   (2) The main gear switches are on brackets on the lever hinge fittings and are operated by cam plates on the wheel lever assemblies. The nose gear switch is on a bracket on the top of the nose gear main fitting. A striker, operated by the valve block assembly, operates the switch.

3. System Operation

A. With the system locked down the downlock switches connect the position light circuit of the LOCKED ON annunciators to ground and the green annunciators come on.

B. With the system unlocked the down limit switch changes over and connects the unsafe lights to ground. The red UNSAFE annunciators come on.

C. With the system locked up the uplock limit switch changes over and open circuits the light circuit and no lights will show.

D. With the weight on wheels the weight switches change over. The change over causes system limitations on the systems listed in 1. above. For individual system operation refer to the chapters listed above.

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POSITION AND WARNING - MAINTENANCE PRACTICES

1. General

   A. This page block contains the following maintenance practices:
   - A removal/installation of the nose gear harness
   - A removal/installation of the main landing gear (MLG) weight switch.
   - A removal/installation of the nose landing gear (NLG) weight switch.

2. Nose Gear Harness - Removal (Ref. to Fig. 201)

   A. Referenced Information

   Maintenance Manual Chapter 07-00-00
   Maintenance Manual Chapter 52-81-00

   B. Procedure

   (1) Lift the airplane on jacks until the wheels are clear of the ground (Refer to 07-00-00).
   (2) Open, tag and safety the NOSE STRG circuit breaker on the pilot circuit breaker panel.
   (3) Disconnect the NLG doors (Refer to 52-81-00).
   (4) Disconnect the electrical connector (4) at the bulkhead STA 0.
   (5) Disconnect the electrical connector of the servo valve cable (5) at the receptacle on the steering manifold (1).
   (6) Disconnect the select/bypass valve connector (3) at the steering manifold (1).
   (7) Disconnect the potentiometer connector (9) from the receptacle, on the bracket (8).
   (8) Cut and remove the lockwire from the locknut of the potentiometer cable end (6) and remove the locknut from the receptacle on the cable end and the bracket (8).
   (9) Cut and remove the lockwire from the locknuts on the weight switch (2).
   (10) Remove one locknut to release the switch (2) from the NLG bracket and remove the switch (2) from the bracket.
   (11) Cut and remove any cable wraps from the cable assembly and remove the assembly from the NLG well.

3. Nose Gear Harness - Installation (Ref. to Fig. 201)

   A. Fixtures, Test and Support Equipment

Continuity tester	Not Specified
Nose wheel jack	02-0517-0132
Special platen with bearing	Not Specified

B. Referenced Information

Maintenance Manual Chapter 07-00-00
Maintenance Manual Chapter 32-50-00
Maintenance Manual Chapter 52-81-00

C. Procedure

(1) Put the harness assembly in position on the NLG.
(2) Install the receptacle of the linear feed back potentiometer cable (6) into the bracket (8) and attach it with the locknut.
(3) Safety the locknut with lockwire.
(4) Connect the potentiometer connector (9) to the receptacle on the bracket (8).
(5) Connect the servo valve connector for the cable (5) to the receptacle on the steering manifold (1).
(6) Connect the select/bypass valve connector (3) to the receptacle on the steering manifold (1).
(7) Install the weight switch (2) into the bracket on the NLG and attach it with the locknut.
(8) Put the jack and the platen below the jacking adapter on the NLG.

WARNING: MAKE SURE THE AIRPLANE DOES NOT LIFT OFF. THE AIRPLANE JACKS WHEN THE NOSE JACK COMPRESSES THE SHOCK ABSORBER. IF THE AIRPLANE FALLS OFF THE JACKS INJURY TO PERSONS AND/OR DAMAGE TO EQUIPMENT CAN OCCUR.

(9) Use the jack to compress the NLG strut 0.10 in (2.54 mm).
(10) Connect a continuity tester between pins F and G of the connector (4).
(11) Adjust the locknut of the weight switch (2) until the tester indicates continuity.
(12) Check that continuity exists between the following pins:
- F to G
- J to K
- M to N
- R to S

(13) Release the nose wheel jack pressure and remove the jack and the platen.
(14) Check that continuity exists between the following pins of the connector (4):
- F to H
- J to L
- M to P
- R to T

(15) If the checks in (12) and (14) are not correct refer to page block 101 for trouble shooting.
(16) Safety the locknuts with lockwire.
(17) Connect the connector (4) at bulkhead STA O.
(18) Do a test of the steering system (Refer to 32-50-00).
(19) Connect the NLG doors (Refer to 52-81-00).
(20) Lower the airplane to the ground and remove the jacks (Refer to 07-00-00).

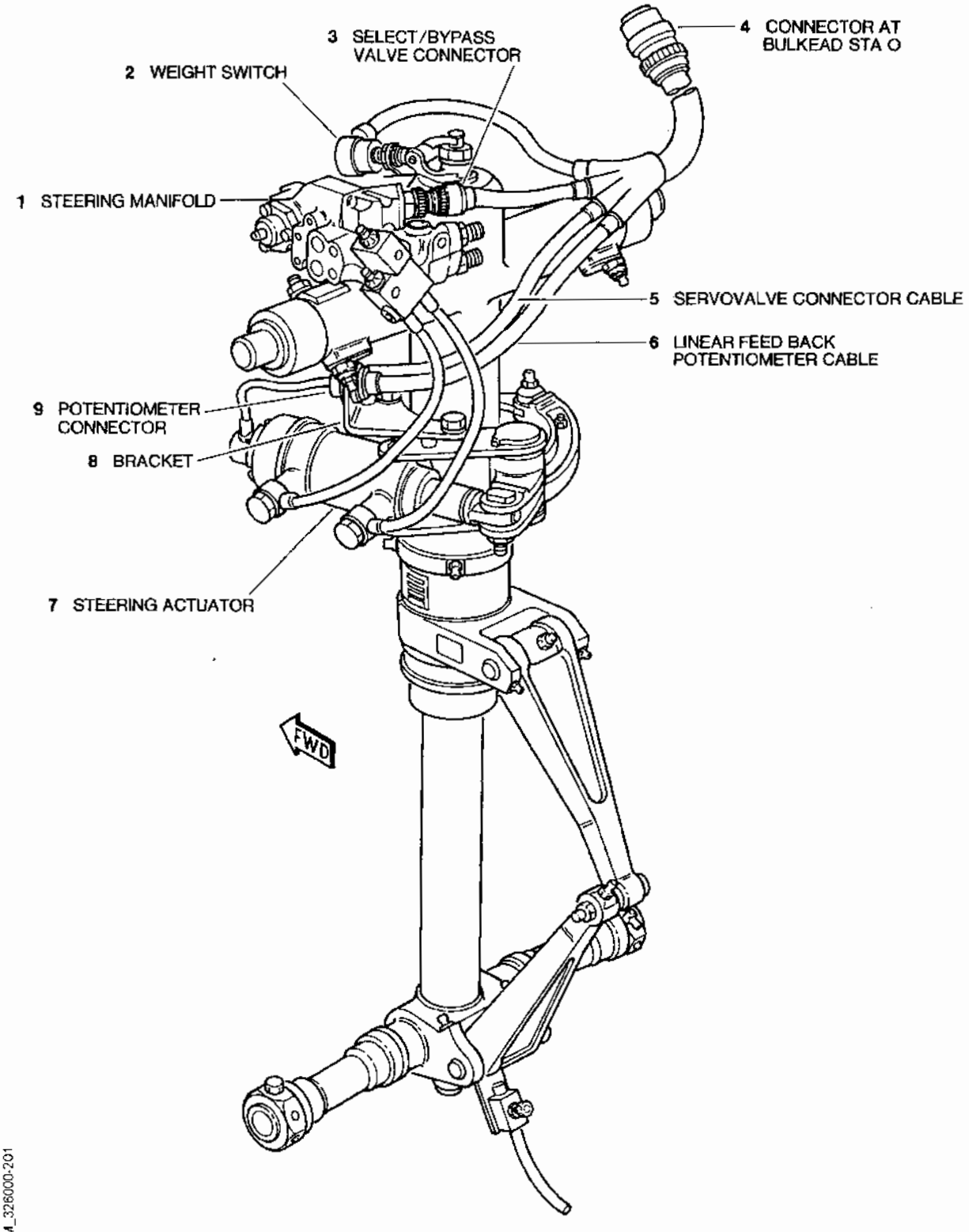


Fig. 201 - NLG Harness - Removal/Installation

4. Limit Switches - Removal/Installation (Ref. to Fig. 202)

NOTE: For removal and installation of the NLG and MLG uplock and downlock limit switches refer to Dowty Maintenance Manual.

5. Limit Switches - Adjustment (Ref. to Fig. 202)

NOTE: For Adjustment of the NLG and MLG uplock and downlock limit switches refer to Dowty Maintenance Manual.

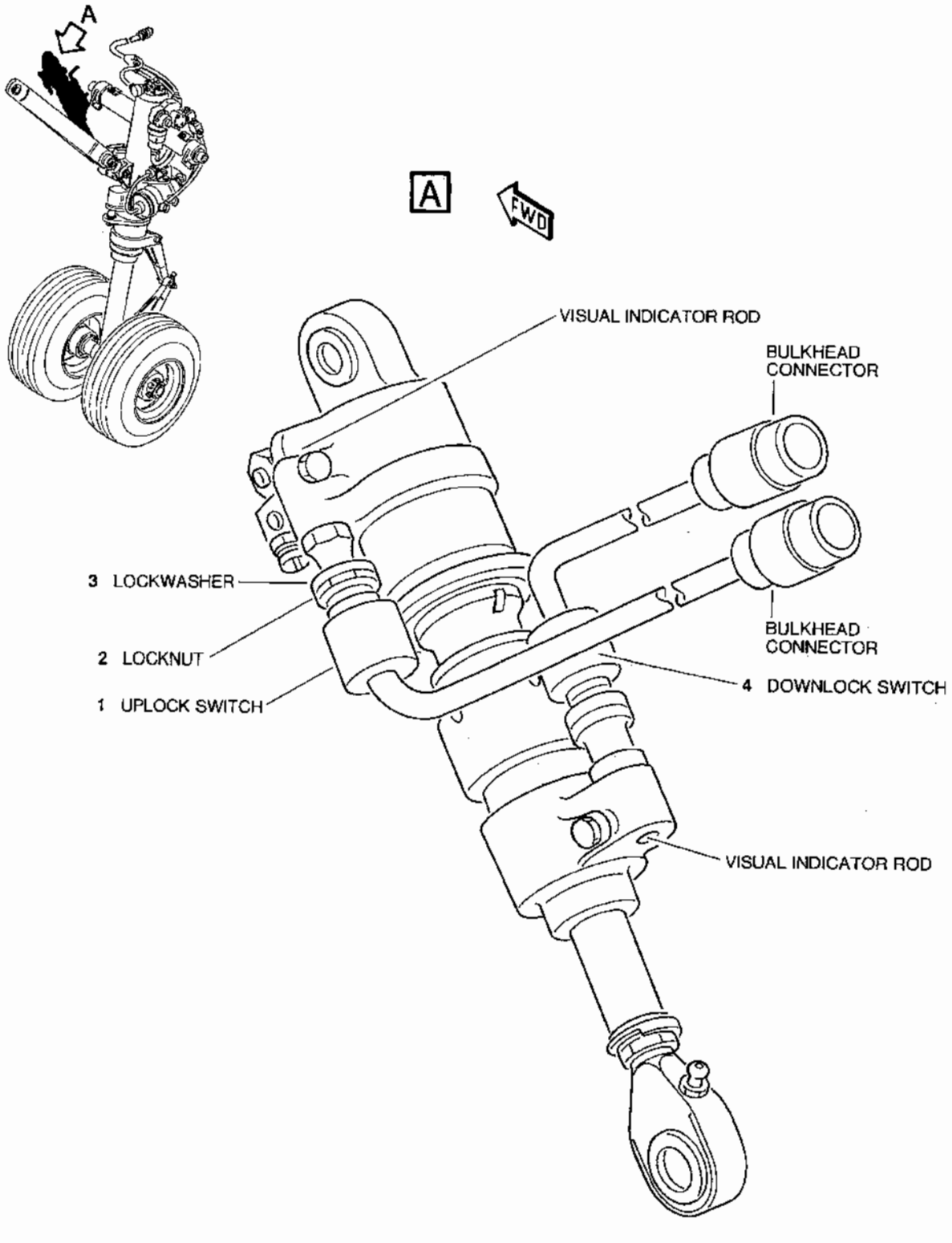
6. MLG Weight Switch - Removal (Ref. to Fig. 203)

A. Referenced Information

Maintenance Manual Chapter 07-00-00

B. Procedure

(1) Lift the airplane on jacks until the wheels are clear of the ground (Refer to 07-00-00).
(2) Disconnect the electrical connector of the switch (1) from the receptacle on the bulkhead STA 6000.
(3) Remove the spring clip (6) and loosen the end cap (7).
(4) Remove the locknut (5) and the washer (4) and remove the switch (19 complete with the lockwasher (3) and the locknut (2) from the bracket (8).



MM_326000-202

Fig. 202 - Limit Switches (Typical)

7. MLG Weight Switch - Installation (Ref. to Fig. 203)

A. Fixtures, Test and Support Equipment

Lamp Box	460001720

B. Referenced Information

Maintenance Manual Chapter 07-00-00

C. Procedure

(1) Install the switch (1) together with the locknut (2) and the lockwasher (3) into the bracket (8).
(2) Adjust the locknut (2) until the roller of the switch is in contact with the wheel lever subassembly.
(3) Install the second tab washer (4) the locknut (5) and the endcap (7).
(4) Connect the connector of the weight switch to the receptacle of the lamp box (Tool N° 460001720).
(5) Adjust the locknuts (2) and (5) until the switch operates (the light on the lamp box comes on).
(6) Adjust again until the lamp goes off and the roller of the switch is aligned with the cam plate.
(7) Tighten the locknuts.
(8) Tighten the end cap (7) and install the spring clip (6).
(9) Disconnect the connector of the switch from the lamp box and connect it to the airframe receptacle.
(10) Lower the airplane to the ground and remove the jacks (Refer to 07-00-00).
(11) Make sure the roller of the switch is in contact with the cam plate.

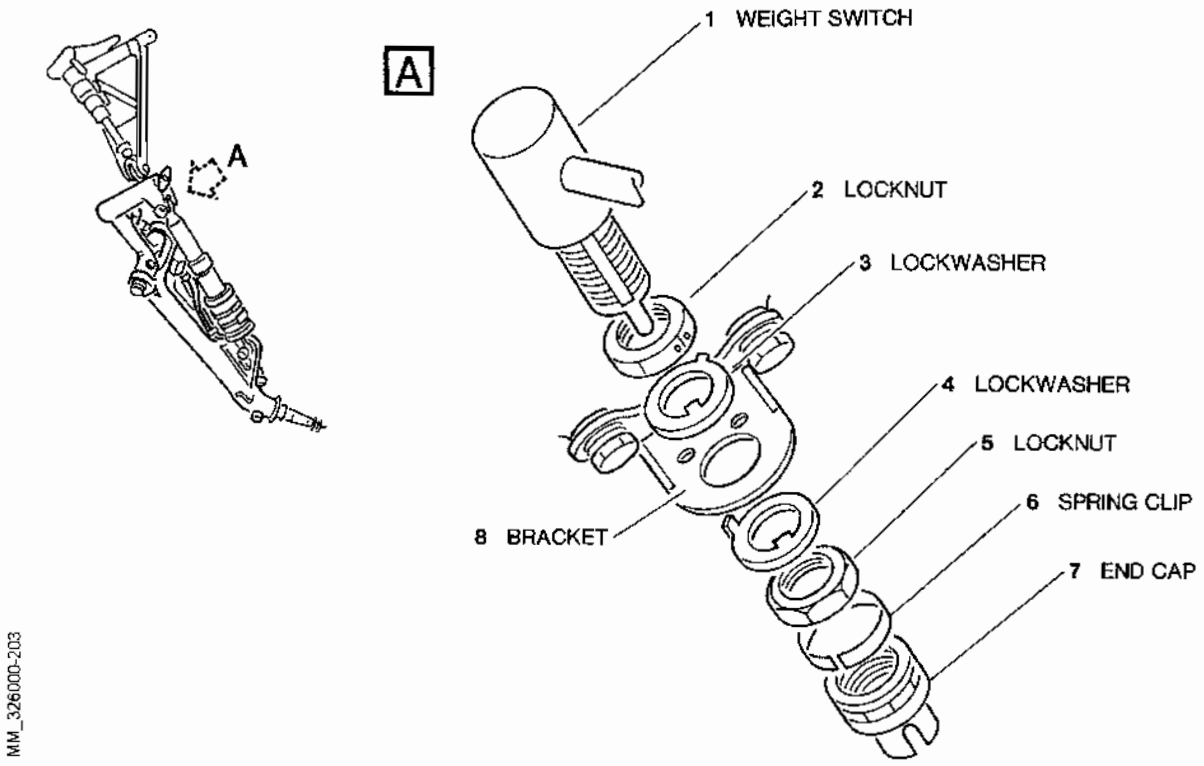


Fig. 203 - MLG Weight Switch - Removal/Installation

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