

Project No: **BDHRN002**Job Card No **0049**

Notif.No.: 10049100

Activity: **1003**

Rev No: 20000622

Model.: F900EX

Sheet 1 of 1

A/C Regn: **D-AHRN**

Serial No.: 096

Type: F900EX

Starting Phase: Routine

Starting Work Centre: FALCON A/C TEAM

Job Description: **CHK NLG Mech Emer Release Cntrl Force**

ETOPS A/C: No

RVSM A/C: No

Warranty: -

ATA: 32

Check Type: 2A+ Inspection

Work Center	
FALCON A/C	

Zone: 100,200,700**Access Required for this task:**

113EZ,113FZ,113HZ,731AB,741AB,PAX

Corrective Action

0001	Task carried out in accordance with the attached Customer Card that quotes the Operator code detailed below.					 Order: 80069337 Operation: 0010 Phase: Routine - scheduling activity Work Center:FALCON A/C TEAM
	Accomplished		Inspected			
	Pers. No.	Date	Pers. No.	Date		
	Stamp		Stamp			

Completed & Confirmed on SAP IAW MOE 2.13.

Defect Card Raised

Components Removed/Installed

	Part Number	Part Name	S/N	Location	Comm. Off/On
OFF					
ON					
OFF					
ON					
OFF					
ON					
OFF					
ON					

Occurance Report Raised? YES ☐

Operations Above & Notifications Completed IAW MOE 2.13.



OEM Code: 32-32-00-640-801

Operator Code: 32-32-00-640-801-02

Form No: JA-SAP-MTX-002

Printed by: ADAMOVIC G



Printed: 03.09.2012

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Print No: 1

Operator: **HERON AVIATION**

Work Card No.: **32-32-00-640-801-02**

Serial No.: **096**

Model: **FALCON 900EX**

PKG # 12 2A+ INSPECTION

Reg No.: **D-AHRN**

Workorder No.: _____

	Date	A/C HRS	AFL	APH			
Due At	25-NOV-2012						
Accomplished							

TECHNICIAN SIGNATURE: _____ KIND OF CERTIFICATE & NO.: _____

INSPECTED BY: _____ KIND OF CERTIFICATE & NO.: _____

TECH	INSP	LABOR-HRS HRS.MINS
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**>32-32-00-640-801-02 CHECK OF THE NOSE LANDING GEAR (NLG) MECHANICAL
EMERGENCY RELEASE CONTROL ACTUATION FORCE**

REMARKS : _____

AMM 32-32-00-640-801

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TASK 32-32-00-640-801 SERVICING OF THE LANDING GEAR MECHANICAL EMERGENCY RELEASE CONTROL

1. OVERVIEW OF THE JOB

Operation codes:

- | | |
|-----------------------|------------------------------------------|
| • 32-32-00-640-801-01 | Lubrication of the NLG control |
| • 32-32-00-640-801-02 | Check of the NLG control actuation force |
| • 32-32-00-640-801-03 | Lubrication of the MLG controls |
| • 32-32-00-640-801-04 | Check of the MLG control actuation force |

NOTE: It is recommended to apply SB F900EX-299 when performing this procedure.

2. LOGISTICS

A. References

Reference	Designation
• 20-35-02-910-802	GENERAL INSTRUCTIONS AND REPAIR APPLICABLE TO "TELEFORCE" FLEXIBLE CONTROL CABLES
• 32-10-00-860-801	MANUAL OPENING / CLOSING OF THE MLG DOORS
• 32-12-29-900-801	REMOVAL / INSTALLATION OF THE MLG DOOR UPLOCK BOXES
• 32-32-09-820-801	ADJUSTMENT OF THE NLG MECHANICAL EMERGENCY RELEASE CONTROL CABLE

B. Tools and Ground Support Equipment

Reference	Designation	Quantity
• F7XC202000008	TOOL BOX	
• TO-20-040	SPRING SCALE - CAPACITY 25 DAN (60 LBF)	

C. Ingredients and Consumable Products

Designation	Additional designation
• LUBRICATING OIL	
• SYNTHETIC GREASE	MIL-PRF-81322

D. Additional Spare Parts

Reference	Designation	Quantity
• MS24665-155	COTTER PIN	6
• 23310CA015015	PIN	3

E. Access

Reference	Designation
• 113EZ	COCKPIT FLOOR
• 113FZ	COCKPIT FLOOR
• 113HZ	COCKPIT FLOOR
• 731AB	LH MLG MAIN DOOR

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- **741AB** RH MLG MAIN DOOR
- **PAX** PASSENGER DOOR

F. Miscellaneous

- CLEAN AND DRY CLOTH (LOCAL MANUFACTURE)

3. PRELIMINARY STEPS

Refer to **fig. 1**

A. In the cockpit

- (1) Disengage "L/G CONTROL" circuit breaker (**1GA**).
- (2) Safety disengaged "L/G CONTROL" circuit breaker (**1GA**) with a circuit breaker lockout.
- (3) Place a "DO NOT OPERATE" safety placard on L/G control lever (**2GA**).
- (4) Remove floor panels (**113EZ**), (**113FZ**) and (**113HZ**).

- B. Manually open main L/G doors (**731AB**)/(**741AB**) (Refer to **TASK 32-10-00-860-801**, paragraph "Manual Opening of Main Landing Gear Doors").

4. NOSE LANDING GEAR CONTROL

Refer to **fig. 2**

A. Check of the control handle installation

- (1) Check that spring (5) is installed outside nose L/G emergency extension control handle (**513GA**) so that it pulls nose L/G emergency extension control handle (**513GA**) into its recess (**fig. 2**, view as per F).
- (2) Check that bolt head (6) faces forward (**fig. 2**, view as per F).

B. Lubrication of the NLG control

- (1) Pull nose L/G emergency extension control handle (**513GA**).
- (2) Check that the linkage operates perfectly and without hard point.
- (3) Check the nose landing gear unlocking control links for condition:
 - correct tightening of nuts and locknuts,
 - presence of **cotter** pins and lockwashers,
 - correct safetying of nuts.
- (4) Clean rod (1) using a clean and dry cloth.
- (5) Slightly lubricate rod (1) with **lubricating oil**.
- (6) Slightly lubricate the linkage pins and the pressure seal marked on the figure with **lubricating oil**.
- (7) Lubricate the pin of bellcrank (2) with **synthetic grease** (**fig. 2**, cross-section A).
- (8) Set nose L/G emergency extension control handle (**513GA**) to rest position.

C. Check of the NLG control actuation force

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- (1) Manually close the hook of nose L/G leg uplock box (**13GA**).
- (2) Attach the spring scale to nose L/G emergency extension control handle (**513GA**).
- (3) Measure the traction force required (≤ 2.5 daN (5.6 lbf)) to unlock the hook of nose L/G leg uplock box (**13GA**).
- (4) If the obtained force reading is > 2.5 daN (5.6 lbf):
 - (a) Uncouple rod (1) from nose L/G leg uplock box (**13GA**).
 - (b) Check the control linkage for hard points.
 - (c) Check that the actuation force, by pulling nose L/G emergency extension control handle (**513GA**) is ≤ 1 daN (2.2 lbf).
 - (d) If the force is > 1 daN (2.2 lbf):
 - 1 Remove the linkage and bellcrank (2).
 - 2 Clean and lubricate the linkage assembly with **lubricating oil**.
 - 3 Suppress the friction spots, if any.
NOTE: If required, replace the defective element with a new one.
 - 4 Install the linkage and bellcrank (2).
 - (e) If the above force is correct (≤ 1 daN (2.2 lbf)), replace nose L/G leg uplock box (**13GA**).
NOTE: The maximum acceptable force value on control lever (4) of nose L/G leg uplock box (**13GA**) is 3 daN (7 lbf).
 - (f) Couple rod (1) to nose L/G leg uplock box (**13GA**).
 - (g) Safety rod (1) with a new pin (**23310CA015015**).
- (5) Remove the spring scale.
- (6) Check the control adjustment and clearance J between stop (3) and lever (4) (Refer to **TASK 32-32-09-820-801**, paragraph "Control Adjustment").
- (7) Set nose L/G emergency extension control handle (**513GA**) to rest position.
- (8) Check that the hook of nose L/G emergency extension control handle (**513GA**) is in the open position.

5. MAIN LANDING GEAR CONTROLS

Refer to **fig. 3**

A. Lubrication of the MLG controls

- (1) Pull main L/G emergency mechanical extension control handles (**L514GA**) and (**R514GA**).
- (2) Check that each control assembly operates perfectly and without hard point.
CAUTION: DO NOT LUBRICATE SLIDING END-FITTING (1).
- (3) Clean sliding end-fitting (1) of each main L/G emergency extension flexible control (**L515GA**) and (**R515GA**) with a clean and dry cloth. **Do not lubricate.**
- (4) Check the main landing gear unlocking control links for condition:
 - correct tightening of nuts and locknuts,

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- presence of **cotter** pins and lockwashers,
- correct safetying of nuts.

(5) Slightly lubricate the marked points with **lubricating oil** (**fig. 3**, detail A).

(6) Lubricate each bellcrank (2) with **synthetic grease** (**fig. 3**, detail A).

(7) In the main L/G **◆** well

CAUTION: DO NOT USE THE CONTROL HANDLES IN THE COCKPIT.

(a) Gently pull each main L/G emergency extension flexible control (**L515GA**) and (**R515GA**) by means of bellcranks (4).

CAUTION: DO NOT LUBRICATE SLIDING END-FITTING (3).

(b) Clean sliding end-fitting (3) with a clean and dry cloth. **Do not lubricate.**

(c) Slightly lubricate the marked points with **lubricating oil** (**fig. 3**, detail B).

(d) Return both control handles (**L514GA**) and (**R514GA**) to rest position (using bellcranks (4) as required).

B. Check of the MLG control actuation force

(1) Manually close the hook of LH main L/G leg uplock box (**L7GA**) and main door uplock box (**L14GA**).

(2) Attach the spring scale to LH main L/G emergency mechanical extension control handle (**L514GA**).

(3) Measure the traction force required (≤ 11 daN (25 lbf)) to unlock the hooks (LH landing gear/LH door).

(4) If the force reading is > 11 daN (25 lbf)

(a) Uncouple flexible control (**L515GA**) from bellcrank (4) (**fig. 3**, detail B)

1 Remove and discard the **cotter** pin safetying the castellated nut.

2 Remove the castellated nut.

3 Remove the washer.

4 Remove the screw to uncouple bellcrank (4) from end-fitting (5).

CAUTION: DO NOT USE THE CONTROL HANDLES IN THE COCKPIT.

(b) Exert traction on the flexible control (**L515GA**) to return main L/G emergency mechanical extension (**L514GA**) to rest position.

(c) Using the spring scale (attached to the control handle) measure the traction force required to actuate the control.

(d) If the force reading is ≤ 8 daN (18 lbf)

1 Uncouple link rod (7) from control lever (8) of main L/G leg uplock box (**L7GA**) (**fig. 3**, detail C)

Remove and discard the **cotter** pin.

For A/C with SB F900EX-299 :

- Remove the washer,

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- remove the straight pin fitted with its washer, to uncouple end-fitting (6) from control lever (8).

For A/C without SB F900EX-299 :

- Remove the castellated nut,
- remove the washer,
- remove the screw, to uncouple end-fitting (6) from control lever (8).

- 2 Check that there is no hard point in the linkage connecting the flexible control (**L515GA**) to main L/G leg uplock box (**L7GA**) and to main door uplock box (**L14GA**).

- 3 If the result is correct

Check the actuating forces on control lever (8) of main L/G uplock box (**L7GA**) (≤ 5 daN (11 lbf)).

- If required, replace main L/G uplock box (**L7GA**).

Check the actuating forces on control lever (10) of main door uplock box (**L14GA**) (≤ 8.75 daN (19.7 lbf) at 80 mm (3.15 in)).

- If required, replace main door uplock box (**L14GA**) (Refer to **TASK 32-12-29-900-801**).

- (e) If the force reading is > 8 daN (18 lbf)

- 1 Uncouple flexible control (**L515GA**) from relay bellcrank (2) (**fig. 3**, detail A).

Remove and discard the **cotter** pin safetying the castellated nut.

Remove the castellated nut.

Remove the washer.

Remove the screw to uncouple relay bellcrank (2) from end-fitting (9).

- 2 Check relay bellcrank (2) for hard points.

- 3 Check the condition of flexible control (**L515GA**).

NOTE: If the required sliding force is excessive, the flexible control protective sheath may be incriminated and can be repaired (Refer to **TASK 20-35-02-910-802**).

- (f) Remove the spring scale.

CAUTION: DO NOT USE THE CONTROL HANDLES IN THE COCKPIT.

- (5) Exert traction on flexible control (**L515GA**) to return main L/G emergency mechanical extension control handle (**L514GA**) to rest position.
- (6) If uncoupled, couple flexible control (**L515GA**) to relay bellcrank (2) (**fig. 3**, detail A).
 - (a) Install the screw to couple relay bellcrank (2) to end-fitting (9).
 - (b) Install the washer.
 - (c) Fully screw the castellated nut by hand.
 - (d) Unscrew so as to line up a locking notch of the castellated nut with the hole in the axle.
 - (e) Safety the castellated nut with a new **cotter** pin (**MS24665-155**).
- (7) If uncoupled, couple link rod (7) to control lever (8) of main L/G leg uplock box (**L7GA**) (**fig. 3**, detail C)

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- (a) For A/C with SB F900EX-299 :
 - install the straight pin fitted with its washer, to couple end-fitting (6) to control lever (8).
- (b) For A/C without SB F900EX-299 :
 - install the screw, to couple end-fitting (6) to control lever (8).
- (c) Manually close the hook of main L/G leg uplock box (**L7GA**).
- (d) Check that clearance J2 is 4.5 to 5 mm (0.17 to 0.19 in) (**fig. 3**, detail C).
- (e) If not, adjust the length of link rod (7).
- (f) Manually open the hook of main L/G leg uplock box (**L7GA**) using control lever (8).
- (g) Install the washer.
- (h) For A/C with SB F900EX-299
 - 1 Safety the straight pin with a new pin (**23310CA015015**).
- (i) For A/C without SB F900EX-299
 - 1 Fully screw the castellated nut by hand.
 - 2 Unscrew so as to line up a locking notch of the castellated nut with the hole in the axle.
 - 3 Safety the castellated nut with a new **cotter** pin (**MS24665-155**).
 - 4 Make sure by hand that the screw-nut assembly rotates freely.
- (8) If uncoupled, couple flexible control (**L515GA**) to bellcrank (4) (**fig. 3**, detail B)
 - (a) Install the screw to couple bellcrank (4) to end-fitting (5).
 - (b) Install the washer.
 - (c) Fully screw the castellated nut by hand.
 - (d) Unscrew so as to line up a locking notch of the castellated nut with the hole in the axle.
 - (e) Safety the castellated nut with a new **cotter** pin (**MS24665-155**).
 - (f) Manually close the hook of main door uplock box (**L14GA**).
 - (g) Check that clearance J1 is 2 to 2.5 mm (0.08 to 0.10 in) between the roller of bellcrank (4) and control lever (10) of main door uplock box (**L14GA**) (**fig. 3**, detail B).
 - (h) If not, adjust the flexible control ball-joint.
 - (i) Manually open the hook of main door uplock box (**L14GA**) using control lever (10).
- (9) Perform on RH side the same operations as described for the LH side (see paragraph 5.B.).

6. FINAL STEPS

Refer to **fig. 1**

- A. Manually close main L/G doors (**731AB**)/(**741AB**) (Refer to **TASK 32-10-00-860-801**, paragraph "Closing of Main Landing Gear Doors").
- B. In the cockpit
 - (1) Install floor panels (**113EZ**) and (**113FZ**).

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- (2) Remove the "DO NOT OPERATE" safety placard from L/G control lever (**2GA**).
- (3) Remove the circuit breaker lockout from the disengaged "L/G CONTROL" circuit breaker (**1GA**).
- (4) Engage "L/G CONTROL" circuit breaker (**1GA**).

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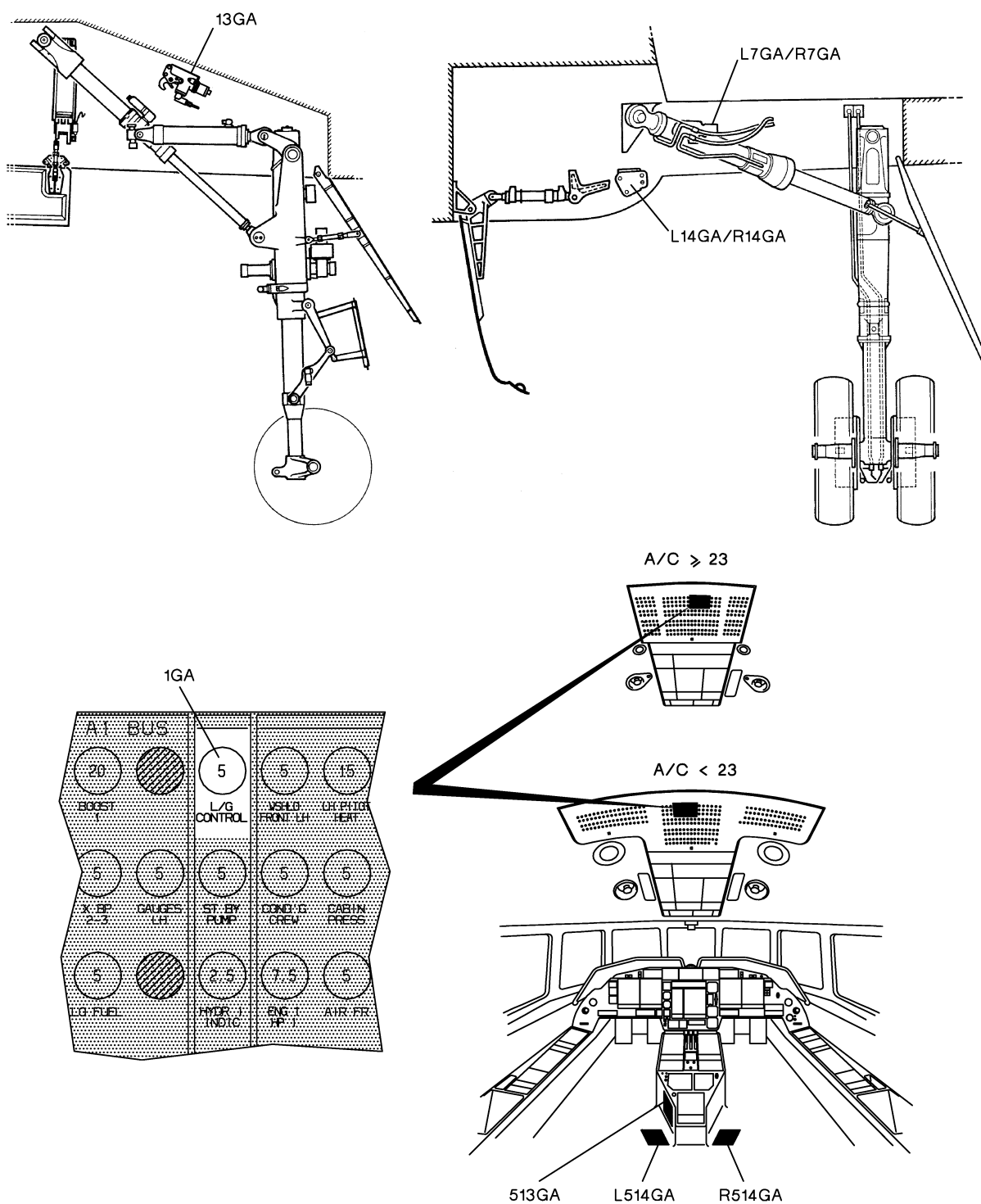


Figure 1: LOCATION OF COCKPIT CONTROLS

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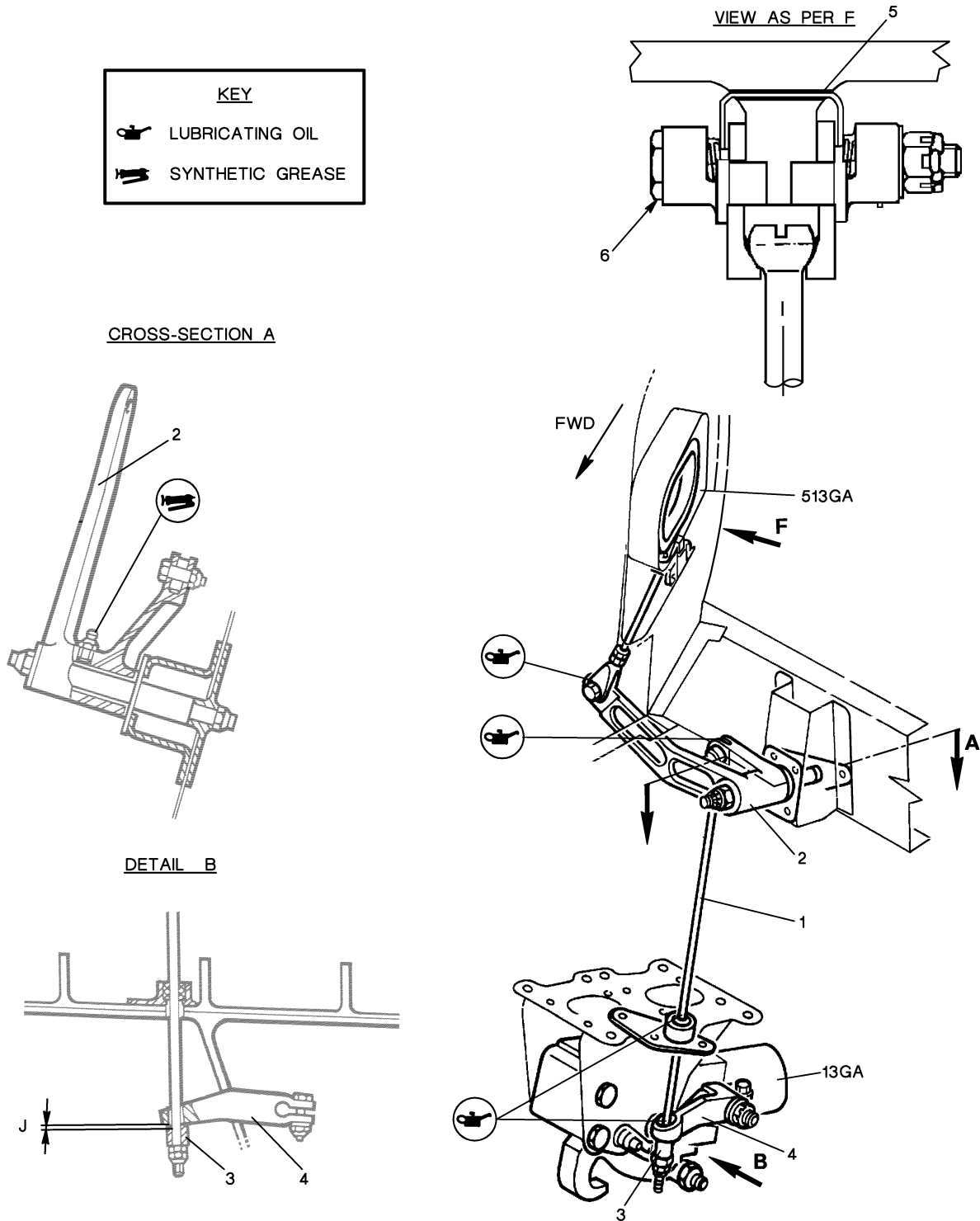


Figure 2: NOSE LANDING GEAR CONTROL

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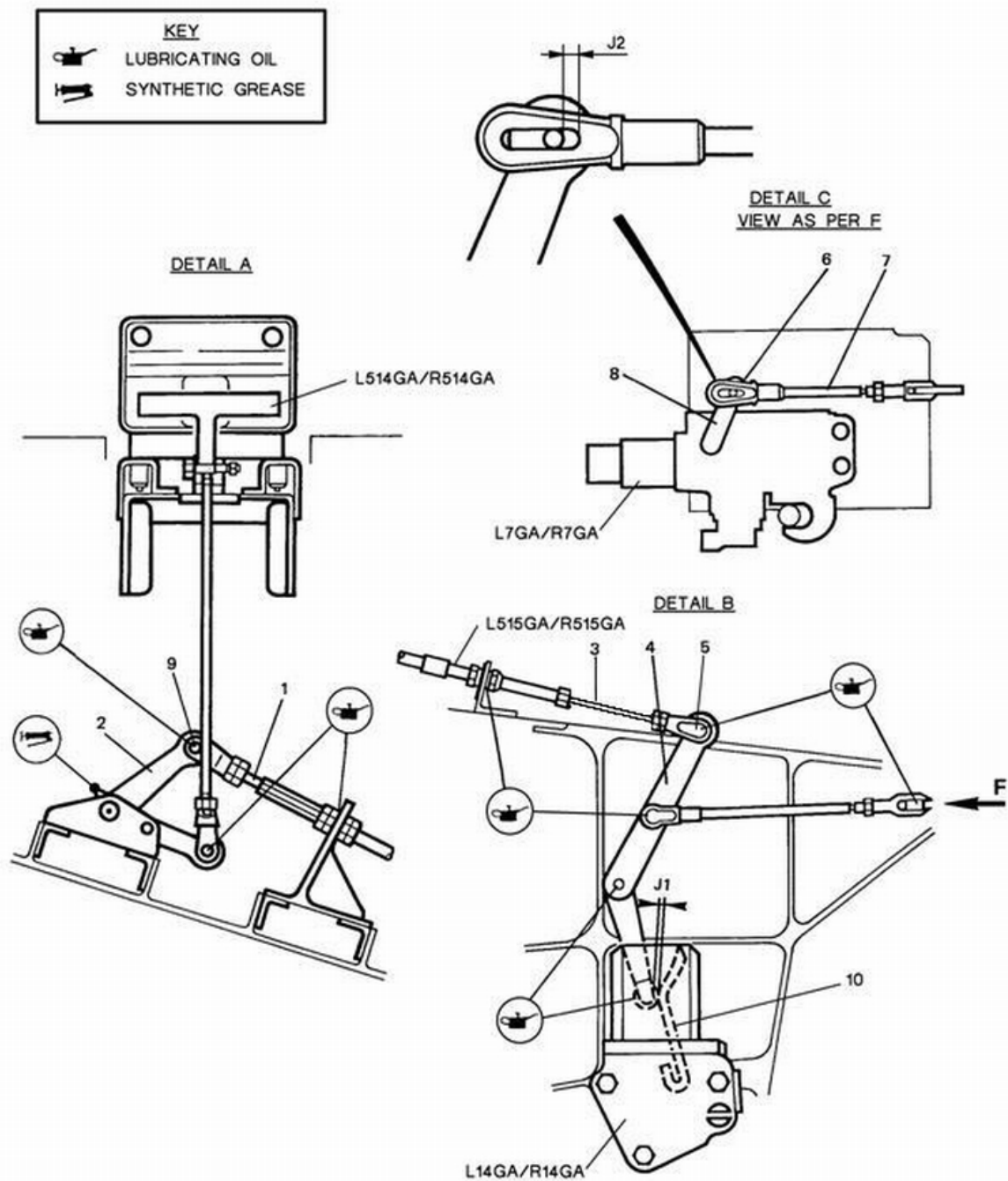


Figure 3: MAIN LANDING GEAR AND DOOR CONTROLS