

CAP MAINTENANCE SUR SYSTEMES D'AERONEFS**SESSION 2007****Epreuve EP 2****PREPARATION DU TRAVAIL ET ANGLAIS****INFORMATIONS POUR LE CANDIDAT**

Ce sujet comprend :

- un dossier " TECHNIQUE " composé de pages numérotées de 1 à 18.
- un dossier " REPONSES " composé de pages numérotées de 1 à 8, et comportant 25 questions.

Le dossier Technique est un extrait du manuel de maintenance de l'ATR42.

Ce dossier explique : la dépose, repose et essai de fonctionnement de la bielle de relevage du train d'atterrissage avant.

En vous aidant de ce dossier technique, répondre aux questions du dossier Réponses.

Le lexique du dossier technique (page 18) comporte un certain nombre de traductions.

Le dossier Réponses est à rendre intégralement à la fin de l'épreuve après avoir correctement complété la cartouche du haut de la page 1/8. (Nom, prénom, date de naissance et n° de candidat)

BAREME : Indiqué après chaque question

Total des points : 60

Dictionnaires et documents personnels interdits.

C.A.P. Maintenance sur Systèmes d'Aéronefs	Code : 50 25304	Session 2007	Page de garde
Epreuve EP2 : Préparation du travail & Anglais	Durée : 3 heures	Coefficient : 3	Page 1/1

DANS CE CADRE

Académie :	Session :
Examen :	Série :
Spécialité/option :	Repère de l'épreuve :
Epreuve/sous épreuve :	
NOM :	
(en majuscule, suivi s'il y a lieu, du nom d'épouse)	
Prénoms :	N° du candidat <input type="text"/>
Né(e) le :	(le numéro est celui qui figure sur la convocation ou liste d'appel)

NE RIEN ÉCRIRE

Appréciation du correcteur :

Il est interdit aux candidats de signer leur composition ou d'y mettre un signe quelconque pouvant indiquer sa provenance.

ÉPREUVE EP2

DOSSIER RÉPONSES

BARÈME DE NOTATION :

QUESTION	BARÈME	QUESTION	BARÈME
N°1	/ 4	N°13	/ 5
N°2	/ 1	N°14	/ 2
N°3	/ 1	N°15	/ 4
N°4	/ 1	N°16	/ 4
N°5	/ 2	N°17	/ 2
N°6	/ 2	N°18	/ 1
N°7	/ 2	N°19	/ 1
N°8	/ 1	N°20	/ 2
N°9	/ 2	N°21	/ 1
N°10	/ 1	N°22	/ 4
N°11	/ 1	N°23	/ 2
N°12	/ 3	N°24	/ 1
		TRADUCTION	/ 10
TOTAL		/ 60	

Répondez en français aux questions pages suivantes

C.A.P. Maintenance sur Systèmes d'Aéronefs	Code : 50 25304	Session 2007	SUJET
EPREUVE EP2 : Préparation du travail & Anglais	Durée : 3 heures	Coefficient : 3	Page 1/8

NE RIEN ÉCRIRE DANS CETTE PARTIE

QUESTION N°1 :

/4

Quels sont les quatre composants du train avant ? (Pages 2/18-3/18, paragraphe 1)

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QUESTION N°2 :

/1

De quel type est le train avant ? (Page 2/18, paragraphe 1)

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QUESTION N°3 :

/1

A quel cadre est liée la jambe de train ? (Page 2/18, paragraphe 2)

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QUESTION N°4 :

/1

Quel est le type d'amortisseur du train avant ? (Page 3/18, paragraphe C)

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QUESTION N°5 :

/2

Quel est le rôle de l'amortisseur quand l'avion roule au sol ? (Page 3/18, paragraphe C)

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NE RIEN ÉCRIRE DANS CETTE PARTIE

QUESTION N°6 :

/2

Quels sont les deux éléments qui composent l'amortisseur ? (Page 3/18, paragraphe C)

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QUESTION N°7 :

/2

Quels sont les produits nécessaires à l'entretien de l'amortisseur ? (Page 3/18, paragraphe C)

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QUESTION N°8 :

/1

Quels sont les éléments permettant l'alignement exact des roues pendant la rétraction du train ?
(Page 3/18, paragraphe C)

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QUESTION N°9 :

/2

Quel est le rôle de la bielle de relevage rabattable ? (Page 3/18, paragraphe D)

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QUESTION N°10 :

/1

Dans quel chapitre du manuel de maintenance trouve-t-on l'opération de mise sur vérin de l'avion ?
(Page 5/18)

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NE RIEN ÉCRIRE DANS CETTE PARTIE

QUESTION N°11 :

/ 1

Que signifie le sigle JIC ? (Page 5/18)

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QUESTION N°12 :

/ 3

Quels sont les outillages nécessaires pour la phase de dépose et pose ? (Page 5/18)

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QUESTION N°13 :

/ 5

Quels consommables seront utilisés ? (Page 5/18)

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QUESTION N°14 :

/ 2

Quelle précaution faut-il appliquer avant d'entreprendre tout travail de maintenance sur avion ?
(Page 6/18, paragraphe 002)

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NE RIEN ÉCRIRE DANS CETTE PARTIE

QUESTION N°15 :

/ 4

Quelles sont les quatre règles de sécurité à respecter ? (Page 6/18, paragraphe 002)

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QUESTION N°16 :

/ 4

Quelles sont les opérations de maintenance décrites dans les titres des paragraphes 004, 005, 006 et 007 ? (Pages 6/18 - 7/18)

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QUESTION N °17 :

/ 2

Que faut-il vérifier lors de la repose de la bielle de relevage ? (Page 8/18)

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QUESTION N°18 :

/ 1

A quoi sert le White Spirit ? (Page 8/18)

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NE RIEN ÉCRIRE DANS CETTE PARTIE

QUESTION N°19 :

/ 1

Quelle est la référence du type de graisse qu'il faut utiliser ? (Page 8/18)

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QUESTION N°20 :

/ 2

Quelles sont les deux étapes de la repose ? (Page 10/18)

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QUESTION N°21 :

/ 1

A quel document faut-il se référer pour effectuer l'essai de fonctionnement de la sortie en chute libre du train ? (Page 10/18)

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QUESTION N°22 :

/ 4

Vérifiez les informations suivantes sur la page IPC. Corrigez-les si nécessaire. (Page 14/18)

- Le P/N du boulon est NTA113546-4.
- Il y a cinq types de rondelle pour l'installation de la bielle de relevage.
- L'Item 10B030 correspond à un écrou.
- Il faut deux boulons pour le caisson de verrouillage train.

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NE RIEN ÉCRIRE DANS CETTE PARTIE

QUESTION N°23 :

/ 2

Lors de la préparation pour l'essai de fonctionnement, pourquoi faut-il déconnecter au moins un contacteur de fin de course? (Page 15/18)

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QUESTION N°24 :

/ 1

Lors de l'essai de fonctionnement, quel est l'appareil de mesure dont vous aurez besoin ?
(Page 16/18, paragraphe 004)

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TRADUCTION :

/ 10

Traduire en français la partie " Removal of drag brace (structure attachment point) " Paragraphe 007
(Titre + contenu) / (Page 7/18)

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NE RIEN ÉCRIRE DANS CETTE PARTIE

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ÉPREUVE EP2

DOSSIER TECHNIQUE

Ce sujet comprend un extrait d'AMM d'ATR (ATA 32) :

- 1 partie descriptive : Nose gear ;
- 1 carte de travail : Nlg drag brace removal and installation ;
- 1 essai de fonctionnement.

C.A.P. Maintenance sur Systèmes d'Aéronefs	Code : 50 25304	Session 2007	Dossier Technique
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Section 32-21 : NOSE GEAR

1. General

The nose landing gear is of forward retractable type. It consists of a leg strut and a drag brace. The leg strut incorporating the shock absorber and the nose wheel steering actuating system is composed of the barrel and the turning tube.

The latter, driven by the steering actuator, turns the wheels on ground.

The drag brace supports the gear and keeps it locked down. The nose landing gear also incorporates provisions for the installation of two proximity switches (one for WOW 1 system, the second for WOW 2 system) and wiring for flight/ground signals.

(Ref. Fig. 001)

2. Component Description

A. Leg Assy 6510 GM

NLG leg is of barrel type with two ribbed arms connected to frame 6 by two pivot pins. On the right ribbed arm a swivel steering valve is installed and on the left ribbed arm a universal joint transmits the pilot control to the steering control valve. This one is fitted on the barrel together with the steering actuating cylinder.

The left ribbed arm incorporates also the attachment point for the hydraulic actuator assy, while the barrel incorporates the fittings for the drag brace and for the aft doors actuation links

B. Turning Tube

The turning tube is housed within the barrel and supported by two bearings. Its drive mechanism is of rack-pinion type, actuated by the steering cylinder. The turning tube is provided with attachments for :

- a torque link upper arm which transmits the steering torque to the wheel axle ;
- a steering follow up lever ;
- the tow bar lugs.

The shock absorber sliding rod is located into the turning tube.

C. Shock Absorber

The nose gear shock absorber is of the oleo-pneumatic double acting type. It absorbs landing energy and provides an elastic suspension when the aircraft taxis. The shock absorber consists of an inner tube and a sliding rod. The inner tube housed into the barrel and fixed to it, is provided with filling/inflating single valve which allows the servicing of the shock absorber with dry nitrogen and hydraulic fluid AIR 3520 (MIL-H-5606). The nitrogen charging pressure value is 25 bar (362 psi) at 15°C (59°F) with airplane on jacks. The sliding rod carries an axle on which two wheels are mounted side by side. It moves within the turning tube and is turned with it by means of two torque links, furthermore it is equipped with a drain valve which is located in its lower part.

Two cams, one shaped on the lower part of the inner tube and the other shaped on the sliding rod inner face ensure the nose wheels exact alignment during gear retraction.

(Ref. Fig. 002)

D. Drag Brace 6500 GM

The folding drag brace is installed between the fuselage and NLG leg to support and lock the NLG in down position. The downlock is obtained by two alignments :

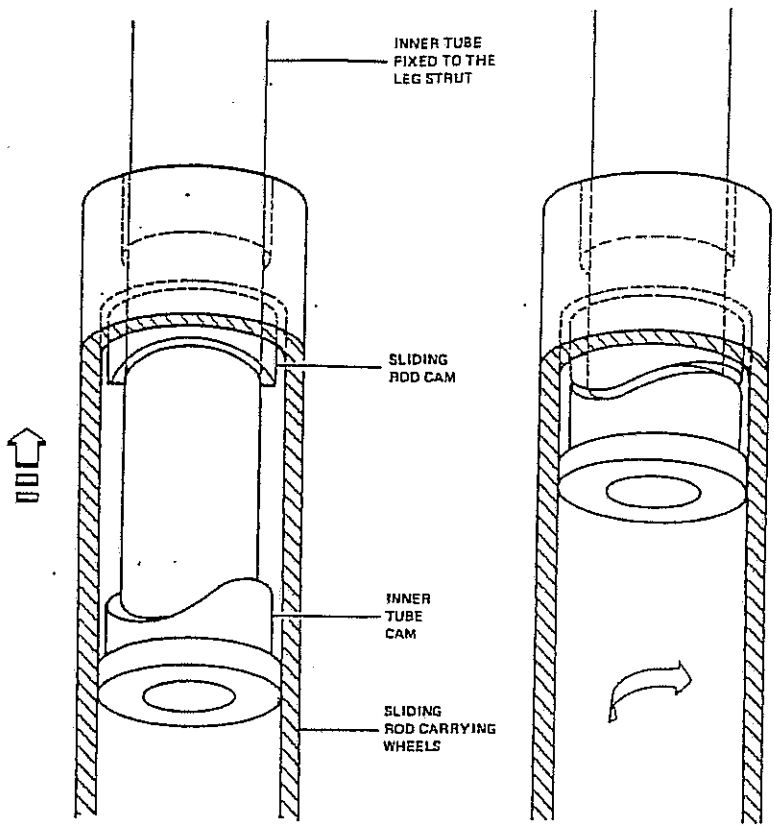
- a main alignment including an upper Y shaped arm pivoted to the fuselage structure and a lower arm hinged to the leg. The upper arm includes attachments for NLG actuator assy and for the forward door mechanism. The upper arm and the lower arm are connected by a universal joint ;
- a secondary alignment acting between the upper arm and the joint.

Two locking springs between the upper arm and the secondary alignment ensure the downlocking of NLG, while a hydraulic actuator provides for down unlocking. On ground a safety pin can be installed in two holes on the secondary alignment, to prevent NLG accidental retraction during maintenance operations.

A roller pin is provided at the horizontal hinge of the universal joint to ensure uplocking, engaging itself in an "UP LOCK BOX" under the nose well ceiling.

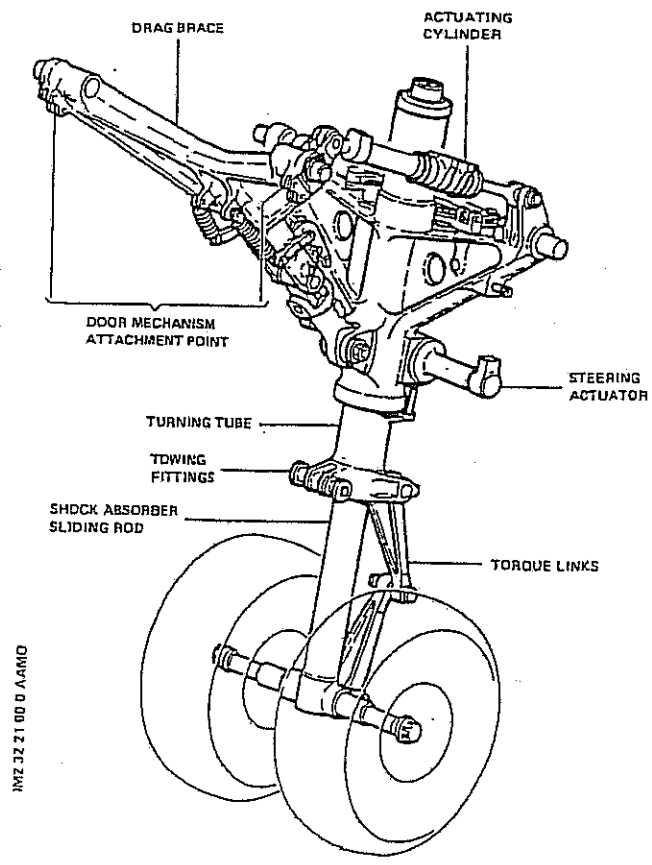
Two proximity switches detect the downlocking of NLG (one for primary downlock system, the second for secondary downlock system).

1. 111111 1. 111111 1. 111111 -AA



DETAIL 1
WHEELS STEERABLE WITH
SHOCK ABSORBER COMPRESSED

DETAIL 2
WHEELS RETURN TO AIRCRAFT
LONGITUDINAL AXIS WITH SHOCK
ABSORBER EXTENDED



1M2 32 21 00 0 A.A.M.O

NLG DRAG BRACE REMOVAL AND INSTALLATION

** ON A/C ALL

TECHNICAL DATA

ZONING DATA

ZONE :

210

711

PREPARATION

WORK	SKILL	MEN	MAN-HOURS
	MECHANIC	01	
GSE :	01 NLG BRACE PIN EXTRACTOR		H46834
	01 NLG BRACE INSTL CONE		H46835
	01 NLG LEG PIN EXTRACTOR		H21968

SPARES :	02 SPECIAL WASHER	322110-15B-020
	02 " "	-030
	02 " "	-040
	02 " "	-050
	02 " "	-060
	02 " "	-065

BULK MATERIAL :

WHITE SPIRIT 11-002
SYNTH GREASE (SEE TEXT)
RUBBER SEALANT09-001
MASTINOX D 4005-047
MEK11-003

PUBLICATIONS

JIC : 07-11-00-JUP-10000

JIC : 32-31-13-RAI-10000

JIC : 32-31-12-RAI-10000

JIC : 24-46-00-EAD-10000

JIC : 32-31-13-CHK-10000

JIC : 32-33-00-FUT-10000

TASK DESCRIPTION

001 AIRCRAFT JACKING UP

SEE JOB INSTRUCTION CARD

JIC : 071100-JUP-10000

002 WARNING

REF. FIG. :324111-RAI-00110

1. BEFORE UNDERTAKING MAINTENANCE WORK ON A/C DISPLAY WARNING NOTICES IN FLT COMPARTMENT ON PANEL 404VU (B) PROHIBITING THE OPERATION OF EITHER HYDRAULIC SYSTEM OR LANDING GEAR AND/OR ASSOCIATED CONTROLS.
2. WHEN PERFORMING OPERATIONAL TESTS MAKE CERTAIN THAT THE FOLLOWING SAFETY RULES ARE OBSERVED:
 - SAFETY PINS ARE IN POSITION AND THEIR RED MARKER FLAGS VISIBLE
 - A SAFETY BARRIER IS PLACED TO RESTRICT AREAS SO AS UNAUTHORIZED PEOPLE CANNOT ACCIDENTALLY OBSTRUCT ROTARY OR ANGULAR MOVEMENT OF LANDING GEARS CAUSING PERSONNEL INJURY
 - BEFORE PERFORMING ANY TYPE OF MANEUVERS WARN SURROUNDING PERSONNEL OF YOUR INTENTIONS
 - NEVER MAKE ADJUSTMENT WITHOUT FIRST ISOLATING HYDRAULIC POWER AND POSITIONING SAFETY PINS.

003 PREPARATION

REF. FIG. :324111-RAI-00110
(FIG.1)

REF. FIG. :323113-CHK-00100
(FIG.2)

1. OPEN SAFETY CLIP AND TAG THE FOLLOWING CIRCUIT BREAKER:
ON PANEL 121VU (FIG. 1)
 - 1GA LDG GEAR/CTL & PRIM IND
2. OPEN NLG FWD DOORS (FIG.2) ACTING ON THE OPENING MECHANISM AND MAKE CERTAIN THAT THE FORMER ARE KEPT OPEN DURING THE OPERATION.

004 REMOVAL OF NLG FWD DOORS OPENING MECHANISM (DOOR PIVOT POINT)

SEE JOB INSTRUCTION CARD
JIC : 323113-RAI-10000

005 REMOVAL OF NLG ACTUATOR ASSY

SEE JOB INSTRUCTION CARD
JIC : 323112-RAI-10000

006 REMOVAL OF DRAG BRACE (LEG ATTACHMENT POINT)

REF. FIG. :322112-RAI-00100

DETAIL A

1. UNPLUG PROXIMITY SWITCH ELECTRICAL CONNECTORS, PROTECT THEM WITH BLANKING CAPS AND REMOVE THE ELECTRICAL HARNESES FROM THE TAXI LIGHT SUPPORTS.
2. REMOVE COTTER PIN (1).
3. UNSCREW NUT (2) AND RECOVER WASHER (3).
4. WITHDRAW BOLT (4) WITH GREASE SUPPLY DUCT.
NOTE: IF NECESSARY, USE EXTRACTOR H46834 TO REMOVE BOLT (4).
5. CONTROL BY HAND THE MOVEMENT OF DRAG BRACE AND GEAR LEG UNTIL THEY TAKE UP AN EQUILIBRIUM POSITION.

007 REMOVAL OF DRAG BRACE (STRUCTURE ATTACHMENT POINT)

REF. FIG. :322112-RAI-00100

DETAILS B AND C

NOTE: - MAKE CERTAIN THAT THE BEADS OF RUBBER SEALING COMPOUND HAS BEEN REMOVED FROM ATTACHMENT POINTS, OTHERWISE PERFORM THE OPERATION USING A SPATULA, TAKING CARE NOT TO DAMAGE THE PROTECTIVE TREATMENT

- THE REMOVAL OPERATIONS OF THE HINGE PINS (8/13) ARE IDENTICAL

1. DISCONNECT HYDRAULIC PIPES FROM THE SWIVEL FITTING AND BLANK OFF ALL OPENINGS WITH APPROPRIATE CAPS.
2. REMOVE COTTER PINS (10/20).
3. UNSCREW CASTELLATED NUTS (11/19) WITH WASHERS (12/18).
4. WITHDRAW BOLTS (5/17).
5. HOLD UP BY HAND THE DRAG BRACE ASSY AND WITHDRAW THE HINGE PINS (8/13) WITH THE SWIVEL FITTING ATTACHED TO GREASE SUPPORT DUCT (6/16).

NOTE: IF THE HINGE PIN REMAINS LOCKED USE THE EXTRACTOR H21968 TO REMOVE THEM.

6. REMOVE WASHERS (9/15).

008 INSTALLATION OF DRAG BRACE (STRUCTURE ATTACHMENT POINT)

REF. FIG. :322112-RAI-00100

DETAILS B AND C

NOTE: IF A NEW ITEM MUST BE INSTALLED FIRST REMOVE THE PROTECTIVE STORAGE ITEMS. IF THE REMOVED DRAG BRACE MUST BE INSTALLED AGAIN MAKE CERTAIN THAT ALL THE COMPONENTS ARE IN GOOD CONDITION OR REPLACE ALL THE DAMAGED PARTS.

1. CLEAN THE ATTACHMENT PARTS USING WHITE SPIRIT OR SOLVENT MEK WHERE THE MASTINOX HAS BEEN APPLIED.
2. LIGHTLY SMEAR GREASE (TYPE 04-004B) ON THE EXTERNAL SURFACE OF THE ATTACHMENT PIN (13) (DETAIL C) AND INSERT THIS ONE IN THE A/C STRUCTURE.
3. ALIGN DRAG BRACE ASSY TO THE A/C STRUCTURE AND AT THE SAME TIME INSERT ATTACHMENT PIN (8) (DETAIL B) IN A WAY SUFFICIENT TO KEEP EQUIPMENT IN POSITION.
4. PUSH THE DRAG BRACE ASSY TO ONE SIDE. ON THE OTHER SIDE MEASURE GAP "Y". THE MEASURE OBTAINED WILL BE DIVIDED BY 2 AND THE RESULTING VALUE WILL BE THE THICKNESS OF THE NEW SHIM WASHERS (9) AND (15) THAT MUST BE FITTED TO THE ATTACHMENT PINS (DETAILS B AND C).

NOTE: THE SPECIAL WASHERS ARE PROVIDED IN 7 DIFFERENT THICKNESSES

! P/N ! "X" (MM) ! REF. FIG. IPC !

!-----!-----!-----!

! -200 ! 3.5 +/- 0.05 ! 322110-15B-010 !

! -204 ! 3.7 " ! 065 !

! -206 ! 3.9 " ! 020 !

! -208 ! 4.1 " ! 030 !

! -210 ! 4.3 " ! 040 !

! -212 ! 4.5 " ! 050 !

! -214 ! 4.7 " ! 060 !

AFTER SHIMMING, THE MAX GAP "Z" SHOULD BE 0.2 MM (0.0079 IN).

5. HOLD UP BY HAND THE DRAG BRACE ASSY AND WITHDRAW THE ATTACHMENT PIN (8) OF DETAIL B FROM STRUCTURE BEARING.
6. REMOVE THE DRAG BRACE ASSY BY WITHDRAWING ATTACHMENT PIN (13) OF DETAIL C.

7. ALIGN THE DRAG BRACE ASSY TO THE A/C STRUCTURE. POSITION AND HOLD BY HAND SHIM WASHERS (9) AND (15) BETWEEN DRAG BRACE AND STRUCTURE BEARING. AT THE SAME TIME INSERT ATTACHMENT PIN (8) OF DETAIL B WITH THE SWIVEL FITTING ATTACHED TO THE GREASE SUPPLY DUCT (6).

INSERT ATTACHMENT PIN (13) WITH GREASE SUPPORT DUCT (16) (DETAIL C).

8. ALIGN THE HOLES OF THE HINGE PIN AND OF THE DRAG BRACE TO INSERT BOLT (5/17).

9. INSERT BOLT WITH ITS HEAD UP AND TAKING CARE NOT TO FORCE THE HOLES OUT OF POSITION.

10. INSTALL WASHER (12/18) AND NUT (11/19). TIGHTEN NUT WITH A TORQUE VALUE BETWEEN 0.85 AND 1 MDAN (75 AND 88 LBF.IN).

11. LOCK NUT BY NEW COTTER PIN (10/20).

12. REMOVE THE BLANKING CAPS FROM HYDRAULIC PIPES AND FROM THE OPENINGS ON THE SWIVEL FITTING AND CONNECT THEM (DETAIL B).

13. REPLACE THE COATING OF RUBBER SEALING COMPOUND AS INDICATED ON FIGURE.

009 INSTALLATION OF DRAG BRACE (LEG ATTACHMENT POINT)

REF. FIG. :322112-RAI-00100

DETAIL A

1. CLEAN ALL THE ATTACHMENT PARTS USING WHITE SPIRIT.

2. ALIGN THE HOLES OF THE ATTACHMENT PARTS EITHER OF THE DRAG BRACE OR THE NLG LEG.

3. INSERT BOLT (4) WITH GREASE SUPPLY DUCT ON L SIDE OF THE A/C.

NOTE: IF NECESSARY, USE BRACE INSTALLATION CONE H46835 TO ALIGN ATTACHMENT PARTS.

4. INSTALL WASHER (3) AND NUT (2). TIGHTEN NUT WITH A TORQUE VALUE BETWEEN 0,5 AND 3 DAN.M (44 AND 265 LBF.IN).

5. LOCK NUT BY A NEW COTTER PIN (1).

6. LUBRICATE THE DRAG BRACE ATTACHMENT POINT (04-004B).

7. INSTALL THE ELECTRICAL HARNESSSES ON THE TAXI LIGHT SUPPORTS. REMOVE BLANKING CAPS FROM ELECTRICAL CONNECTORS AND PLUG THEM TO PROXIMITY SWITCH CONNECTORS.

010 INSTALLATON OF NLG ACTUATOR ASSY

SEE JOB INSTRUCTION CARD

JIC : 323112-RAI-10000

011 INSTALLATION OF NLG FWD DOORS OPENING MECHANISM (DOOR PIVOT POINT)

SEE JOB INSTRUCTION CARD
JIC : 323113-RAI-10000

012 CLOSE UP

REF. FIG. :324111-RAI-00110
(FIG.1)

REF. FIG. :323113-CHK-00100
(FIG.2)

1. CLOSE THE NLG FWD DOORS (FIG.2).
2. REMOVE SAFETY CLIP AND TAG AND CLOSE THE FOLLOWING CIRCUIT BREAKER:
ON PANEL 121VU (FIG. 1)
- 1GA

013 ENERGIZATION OF AIRCRAFT DC AND AC CONSTANT FREQUENCY NETWORK

SEE JOB INSTRUCTION CARD
JIC : 244600-EAD-10000

014 NLG FWD DOORS PRE-LOAD CHECK

SEE JOB INSTRUCTION CARD
JIC : 323113-CHK-10000

015 FUNCTIONAL TEST OF L/G FREE FALL EXTENSION

SEE JOB INSTRUCTION CARD
JIC : 323300-FUT-10000

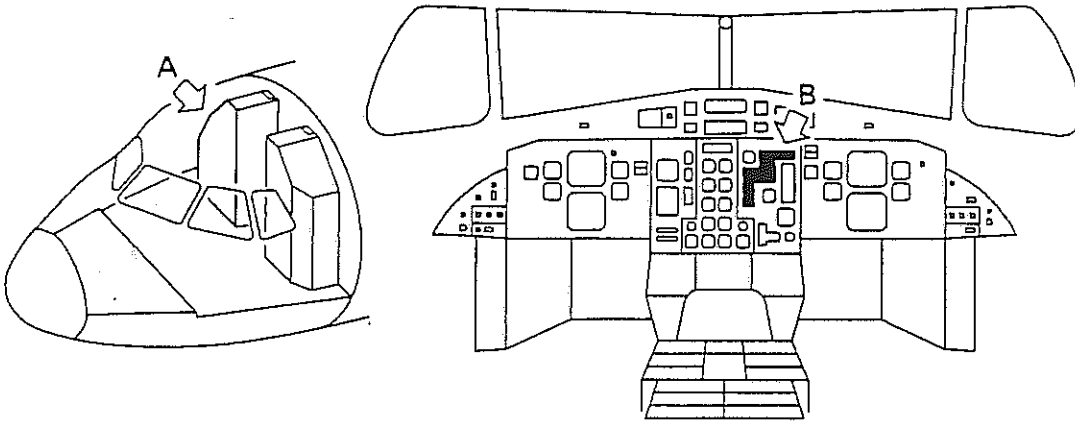
016 DE-ENERGIZATION OF AIRCRAFT DC AND AC CONSTANT FREQUENCY NETWORK

SEE JOB INSTRUCTION CARD
JIC : 244600-EAD-10000

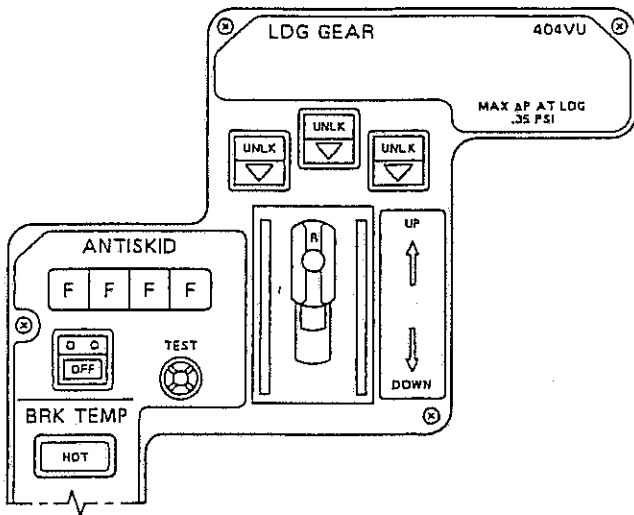
017 LOWERING OF AIRCRAFT ONTO ITS WHEELS

SEE JOB INSTRUCTION CARD
JIC : 071100-JUP-10000

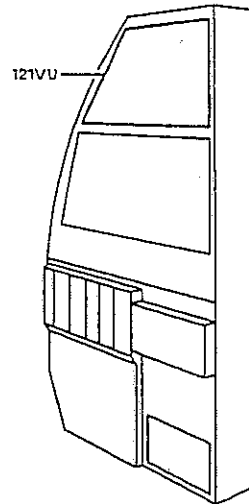
(Ref Fig. 32-21-12 DRAG BRACE REMOVAL AND INSTALLATION)
(Ref Fig. 32-21-12 UPLOCK ROLLER ADJUSTMENT)



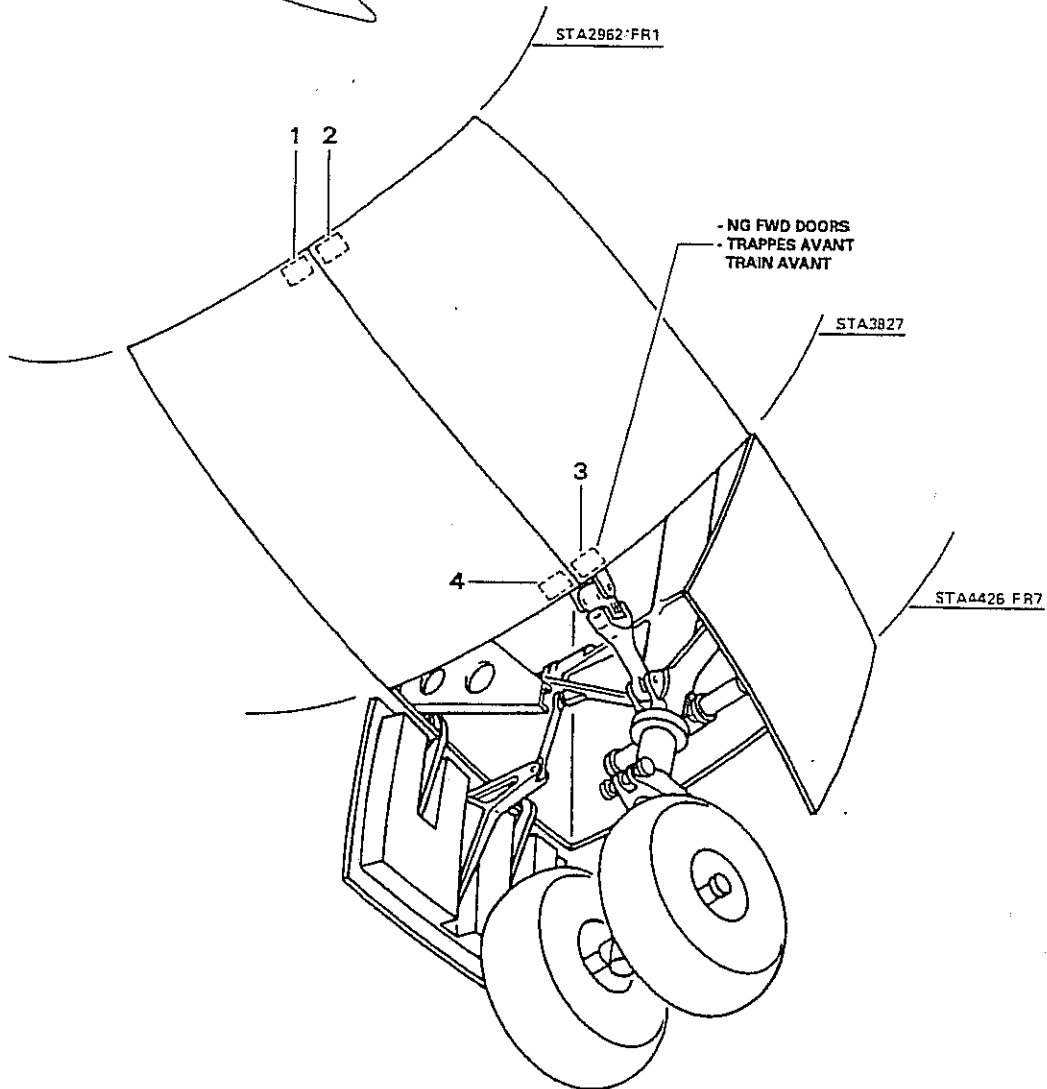
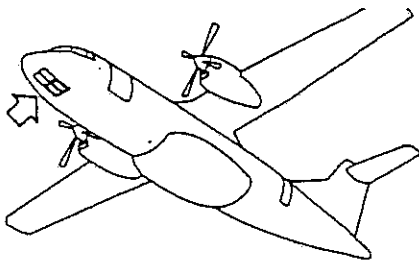
B 404VU



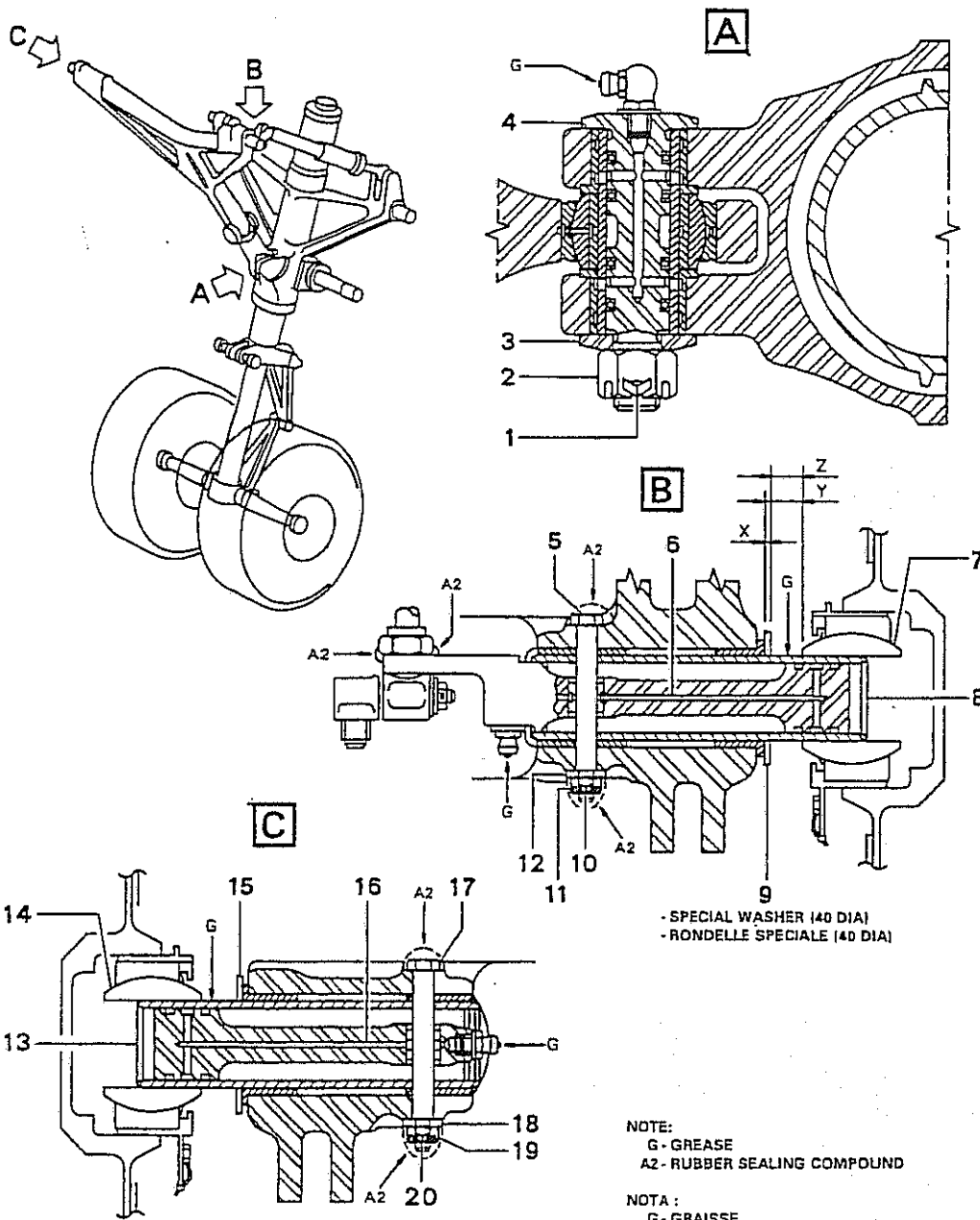
A 120VU
 - AC/DC POWER CENTER
 - COEUR ELECTRIQUE AC/DC



9SMJ 324111 RAI 00110 - 002 AAA
 FAA



9SMJ 323113 CHK 00100 -- 001 AAB/FAB



- SPECIAL WASHER (40 DIA)
 - RONDELLE SPECIALE (40 DIA)

NOTE:
 G - GREASE
 A2 - RUBBER SEALING COMPOUND

NOTA:
 G - GRAISSE
 A2 - PRODUIT D'ETANCHEITE
 A BASE DE CAOUTCHOUC

9SMJ 322112 RAI 00100 - 004 AAA/FAA



Customer : RO Type : ATR42-500 Rev. Date : Aug 01/05	Manual: IPC Selected effectivity: ALL
32-21 - NOSE GEAR	

** ON A/C ALL

32-21-10-10B LOCK UPBOX INSTL- N L G , Z110				
FIG - ITEM	PART NUMBER	NOMENCLATURE	FIN ACCESS/PANEL	UNIT PER ASSY
10B -001C	S3228000501262 (NP)	LOCK UPBOX INSTL- N L G , Z110		REF
10B 010	NAS6704-2	.BOLT		001
10B 020	AN960KD416L	.WASHER		001
10B 030	NTA11354-4	.NUT		001
10B 040B	D22698500-1	.LEG ASSY-NLG SEE 32-21-11-01A FOR DET	6510GM	001
10B 045	S531R007120000	.WASHER (40 DIA X 3, 5 TH)		002
10B 050	S531R007120000	.WASHER (40 DIA X 3, 5 TH)		002
10B 060	S5317212120400	.WASHER (40 DIA X 3, 7 TH)		002
10B 070	S5317212120600	.WASHER (40 DIA X 3, 9 TH)		002
10B 080	S5317212120800	.WASHER (40 DIA X 4, 1 TH)		002
10B 090	S5317212121000	.WASHER (40 DIA X 4, 3 TH)		002
10B 100	S5317212121200	.WASHER (40 DIA X 4, 5 TH)		002
10B 110	S5317212121400	.WASHER (40 DIA X 4, 7 TH)		002

32-21-10-15B BRACE INSTL- DRAG N L G , Z711				
FIG - ITEM	PART NUMBER	NOMENCLATURE	FIN ACCESS/PANEL	UNIT PER ASSY
15B -001A	S3228000500063 (NP)	BRACE INSTL- DRAG N L G , Z711		REF
15B 010	S531R007120000	.WASHER (40 DIA X 3, 5 TH)		002
15B 020	S5317212120600	.WASHER (40 DIA X 3, 9 TH)		002
15B 030	S5317212120800	.WASHER (40 DIA X 4, 1 TH)		002
15B 040	S5317212121000	.WASHER (40 DIA X 4, 3 TH)		002
15B 050	S5317212121200	.WASHER (40 DIA X 4, 5 TH)		002
15B 060	S5317212121400	.WASHER (40 DIA X 4, 7 TH)		002
15B 065	S5317212120400	.WASHER (40 DIA X 3, 7 TH)		002
15B 070A	D22703500	.BRACE ASSY-DRAG, NLG SEE 32-21-12-01A FOR DET	6500GM	001

FUNCTIONAL TEST OF L/G FREE FALL EXTENSION

** ON A/C ALL

TECHNICAL DATA

ZONING DATA

ZONE :

	210
	212
	711
	731
	741

PREPARATION

WORK	SKILL	MEN	MAN-HOURS
	MECHANIC	01	

PUBLICATIONS

JIC : 07-11-00-JUP-10000

JIC : 29-00-00-PAD-10010

TASK DESCRIPTION

001 AIRCRAFT JACKING UP

SEE JOB INSTRUCTION CARD

JIC : 071100-JUP-10000

002 PREPARATION

1. PLACE SAFETY BARRIER TO LIMIT THE LANDING GEAR AREA
2. DISCONNECT THE R OR L MLG UPLOCK BOX LIMIT SWITCH PLUG, SECURING IT TO AVOID DAMAGES DURING OPERATION

NOTE: WITH ONE LIMIT SWITCH DISCONNECTED THE UP LINE OF L/G SELECTOR CONTROL VALVE REMAINS PRESSURIZED WHEN LANDING GEAR IS IN UP POSITION. THIS IS NECESSARY TO CHECK THE EFFECTIVENESS OF THE EMERGENCY BY PASS OF THE L/G SELECTOR CONTROL VALVE DURING L/G EMERGENCY EXTENSION.

3. CHECK THE FREE FALL ASSISTERS FOR CORRECT PRE-CHARGE (RED MARKER NOT VISIBLE ON PRESSURE LOSS INDICATOR). IF NECESSARY REF JIC

JIC : 121432-SRV-10040

4. MAKE CERTAIN THAT THE L/G GROUND SAFETY PINS ARE REMOVED

5. SET TO "OFF" POSITION THE GPWS (GARDED) SWITCH 9WZ ON THE L CENTER INSTRUMENT PANEL

6. ON PANEL 121VU MAKE CERTAIN THAT THE FOLLOWING CIRCUIT BREAKERS ARE CLOSED:

1GA LDG GEAR/CTL & PRIM IND

18GB LDG GEAR/SEC IND

20GB LDG GEAR/WOW SYS 2

21GB LDG GEAR/WOW SYS 1

003 PRESSURIZATION OF GREEN AND/OR BLUE HYDRAULIC SYSTEM (S) WITH ELECTRIC PUMP (S)

SEE JOB INSTRUCTION CARD

JIC : 290000-PAD-10010

004 FUNCTIONAL TEST

1. SET L/G CTL LEVER 4GA TO "UP" POSITION

2. ON PANELS 25VU AND 404VU CHECK THAT:

- ARROW LEGENDS OF NLG, L AND R MLG POSITION ANNS 5GB, 3GB AND 4GB (SEC SYS) 8GB, 7GB AND 6GB (PRIM SYS) GO OFF

- ALL UNLK LEGENDS OF SAME ANNS COME ON

- AT THE END OF THE SEQUENCE THE UNLK LEGENDS GO OFF EXCEPT THE UNLK LEGENDS RELEVANT TO THE LIMIT SWITCH DISCONNECTED WHICH REMAIN ON

3. INSTALL THE ADAPTER ON THE EMERGENCY HANDLE

4. BY A DYNAMOMETER ON THE ADAPTER, PULL THE EMERGENCY HANDLE FOR THE CHECK OF THE MAXIMUM EFFORT (<14 DAN)

5. START TIMING UNTIL ARROW LEGENDS OF ANNS 3GB 4GB, 6GB AND 7GB COME ON FOR THE CHECK OF THE FREE FALL EXTENSION OPERATING TIME (19-20 SECS)

6. INSTALL THE ADAPTER ON THE NLG WHEEL AXLE

7. BY A DYNAMOMETER ON THE ADAPTER, PULL AFT THE NLG UNTIL THE DOWN-LOCKING FOR THE CHECK OF THE MAXIMUM EFFORT (5-6 DAN)

8. DETACH THE ADAPTER

9. SET THE EMERGENCY HANDLE TO RETRACT POSITION

10. ON PANELS 25VU AND 404VU CHECK THAT:

- ARROW LEGENDS OF ANNS 5GB, 3GB AND 4GB (SEC SYS) 8GB, 6GB AND 7GB (PRIM SYS) GO OFF

- UNLK LEGENDS OF SAME ANNS COME ON

- AT THE END OF SEQUENCE THE UNLK LEGENDS GO OFF EXCEPT THE UNLK LEGENDS RELEVANT TO THE LIMIT SWITCH DISCONNECTED WHICH REMAIN ON

11. SET L/G CTL LEVER 4GA TO "DOWN" POSITION
12. INSTALL MLG GROUND SAFETY PINS
13. CONNECT THE MLG UP LOCK BOX LIMIT SWITCH PLUG
14. REMOVE GROUND SAFETY PINS
15. SET L/G CTL LEVER 4GA TO "UP" POSITION
16. ON PANELS 25VU AND 404VU CHECK THAT:
 - ARROWS LEGENDS OF ANNS 5GB, 3GB AND 4GB (SEC SYS) 8GB, 6GB AND 7GB (PRIM SYS) GO OFF
 - ALL UNLK LEGENDS OF SAME ANNS COME ON
 - AT THE END OF SEQUENCE ALL UNLK LEGENDS GO OFF
17. SET L/G CTL LEVER 4GA TO "DOWN" POSITION
18. ON PANELS 25VU AND 404VU CHECK THAT:
 - ALL UNLK LEGENDS OF ANNS 5GB, 3GB AND 4GB (SEC SYS) 8GB, 6GB AND 7GB (PRIM SYS) GO OFF
 - ALL ARROW LEGENDS OF SAME ANNS COME ON
 - AT THE END OF SEQUENCE ALL UNLK LEGENDS GO OFF

005 DEPRESSURIZATION OF GREEN AND BLUE HYDRAULIC SYSTEM AND STOP ELECTRIC PUMPS

SEE JOB INSTRUCTION CARD
JIC : 290000-PAD-10010

006 CLOSE UP

1. INSERT L/G GROUND SAFETY PINS
2. SET TO "ON" POSITION GPWS (GARDED) SWITCH 9WZ ON THE L CENTER INSTRUMENT PANEL
3. REMOVE SAFETY BARRIER

007 LOWERING OF AIRCRAFT ONTO ITS WHEELS

SEE JOB INSTRUCTION CARD
JIC : 071100-JUP-10000
 (Ref Fig. 32-33-00 EMERGENCY EXTENSION FUNCTIONAL TEST)

LEXIQUE :

• Brace	bielle
• Cam	came, bossage
• Circuit-breaker	disjoncteur
• Double acting	à double effet
• Folding	rabattable, pliant
• Harnesses	faisceau de câbles
• Hinged	articulé
• Lug	bride, chape
• Limit switch	contacteur de fin de course
• Pin	goupille, axe
• Pinion	pignon, engrenage
• Rack	cremaillère, support
• Ribbed	nervuré, strié
• Rod	bielle
• Shimming	cale, entretoise
• Spring	ressort
• Steering	direction
• Swivel	pivot, tourillon, rotule
• Uplock	verrouillage train rentré
• Well	logement, puits