TO 1C-17A-2-32JG-40-1

TECHNICAL MANUAL

JOB GUIDE
ORGANIZATIONAL MAINTENANCE

LANDING GEAR WHEELS AND BRAKES
(32-40-00 THROUGH 32-42-11)

USAF SERIES
C-17A
AIRCRAFT

MCDONNELL DOUGLAS CORPORATION
MILITARY TRANSPORT AIRCRAFT
F33657-81-C-2108
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Basic and all changes have been merged to make this a complete publication.
Published under authority of the Secretary of the Air Force

1 AUGUST 2022

TO 1C-17A-2-32JG-40-1

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T-2 **1 AUGUST 2022**

INSERT LATEST CHANGED PAGES. DESTROY SUPERSEDED PAGES.

LIST OF EFFECTIVE PAGES

NOTE: The portion of the text affected by the changes is indicated by a vertical line in the outer margins of the page. Changes to illustrations are indicated by miniature pointing hands.

Dates of issue for original and changed pages are:

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TABLE OF CONTENTS

INTRODUCTION

SCOPE.

This manual contains maintenance procedures for the operational checkout, removal, installation, and repair of landing gear wheels and brakes system components.

MODEL(S) COVERED.

All

ABBREVIATIONS.

The following is a list of non-standard abbreviations used throughout this manual:

GS	General System
IPI	In-Process Inspection
PLCS	Places

CHANGE REQUEST.

Recommended changes to this manual shall be submitted in accordance with TO 00-5-1.

C-17 TO INFORMATION.

General C-17 TO/eTO, TO Manager, Supplement and finalized Recommended Change (RC) information can be found in the Enhanced Technical Information Management System (ETIMS), System of Record.

LIST OF TIME COMPLIANCE TECHNICAL ORDERS (TCTO).

This list of TCTO's contains all current TCTO's that affect the technical content of text or illustrations found in this manual.

TCTO NUMBER	TITLE	TCTO DATE	APPLICABILITY

SECTION 1

GENERAL INFORMATION (32-40-00)

1-1. GENERAL INFORMATION.

1-2. This section provides general information that is essential for ensuring complete and safe maintenance procedures contained throughout this volume set.

1-3. All packings shall be lubricated with hydraulic fluid prior to installation unless otherwise specified.

1-4. When operating an auxiliary motor pump below 15 degrees Fahrenheit a 30 seconds on/30 seconds off duty cycle for a maximum 10 cycles may be required to reach full hydraulic pressure of 3800 to 4200 psi. Allow ten minutes for cooling and repeat cycles.

1-5. Hydraulic system No. 2 may require 45 seconds before reaching full hydraulic pressure of 3800 to 4200 psi.

1-6. All adhesive sealants, sealants, and compounds used in this manual are listed with a primary part number and/or primary specification number. Any suitable substitutes and/or interchangeable adhesive sealants, sealants, and compounds may be used unless otherwise specified. Suitable substitutes and/or interchangeable adhesive sealants, sealants, and compounds are listed in the system peculiar corrosion control manual (Refer to TO 1C-17A-23, Chapter 1, Section III).

1-7. All part numbers listed in the supplies page throughout this manual are considered primary numbers. Secondary, alternate, and/or suitable substitute part numbers may be found in the system's Illustrated Parts Breakdown (IPB) manual (Refer to TO 1C-17A-4-32).

1-8. All part numbers listed in the support equipment page throughout this manual are considered primary numbers. All approved test equipment, special tools, locally manufactured equipment, secondary, alternate, and/or suitable substitute part numbers may be found in the system's General System (GS) manual (Refer to TO 1C-17A-2-32GS-00-1, Chapter 4).

1-9. GENERAL WARNINGS, CAUTIONS, AND NOTES.

WARNING

- Avoid standing on/or applying force to Main Landing Gear (MLG) components. When this is necessary to accomplish a task, the MLG downlock safety pins shall be installed prior to standing on MLG components or applying force to MLG actuating components. Failure to comply may cause injury to personnel and damage to aircraft.

- All flight control surfaces and thrust reversers shall be clear of personnel and equipment prior to applying or removing hydraulic power. Failure to comply may cause injury to personnel and damage to aircraft.

CAUTION

Air in a hydraulic system can cause numerous malfunctions, from a total system failure to a minor indication problem. When you suspect air has been inducted into a system by removing a hydraulic component or a line, refer to the hydraulic system bleed procedure (12-29-08). Failure to comply may cause damage to aircraft.

SECTION 2

ANTI-SKID/BRAKE TEMPERATURE SYSTEM INTERROGATION (32-40-01)

GENERAL MAINTENANCE INPUT CONDITIONS:

Applicability:

	Task
All	All

Additional information:

This procedure consists of the following tasks:

01-1. View faults.
01-2. Erase faults.
01-3. Return to service.
01-4. Current fault mode.

Additional data:

	Task
TO 1C-17A-2-10JG-60-1	All

Personnel recommended:

	Task
One	All

Safety conditions:

	Task
NA	--

Support equipment:

Nomenclature	PN	Specification	Qty	Task
NA	--	--	--	--

Supplies:

Nomenclature	PN	Specification	Qty	Task
NA	--	--	--	--

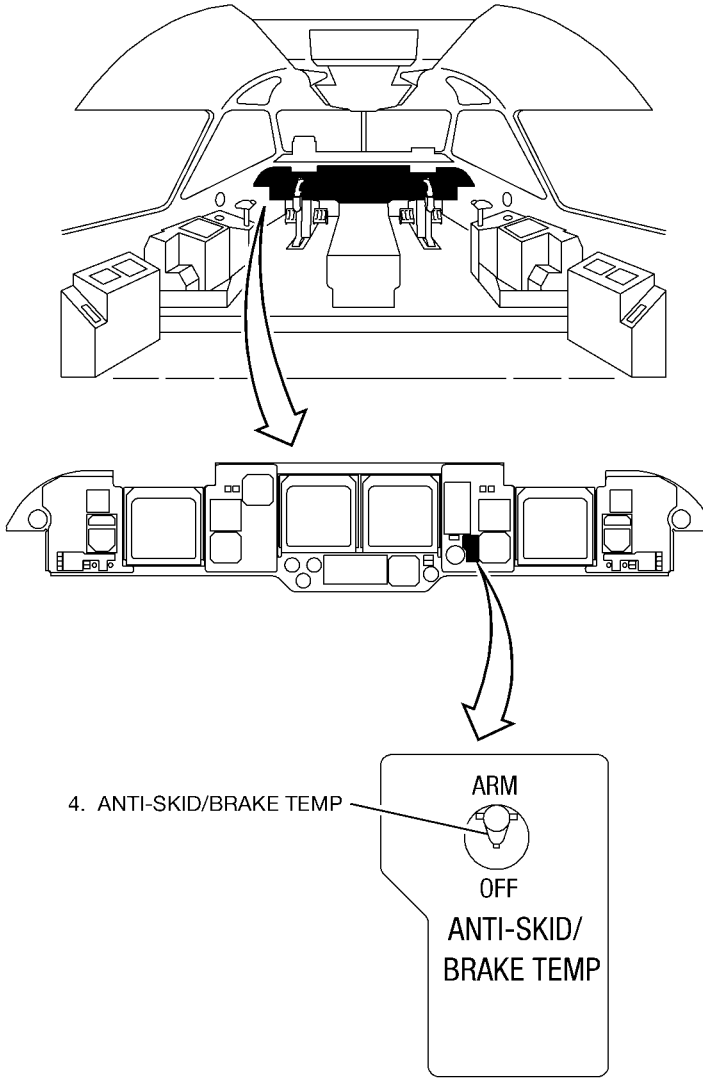
01-1. VIEW FAULTS.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″General Maintenance Input Conditions″ page for task specific safety conditions.

3. Connect external electrical power (10-61-01, task 01-1).

4. Position **ANTI-SKID/BRAKE TEMP** switch to **ARM**.



ICN-88277-G3240001-002-01

5. Unlatch and open avionics rack door assembly (231AZD).

NOTE

Current faults may be displayed by scrolling down to current fault menu.

6. Press **TEST ON/OFF** pushbutton on **ANTI-SKID/BRAKE TEMPERATURE MONITOR CONTROL UNIT**.

   - **FAULT DATA** is displayed.

7. Press **VERIFY** pushbutton.

   - Display reads fault message.

NOTE

Down arrow pushbutton scrolls the display backwards until all faults are displayed.

8. Press down arrow pushbutton.

   - **END OF LIST** is displayed.

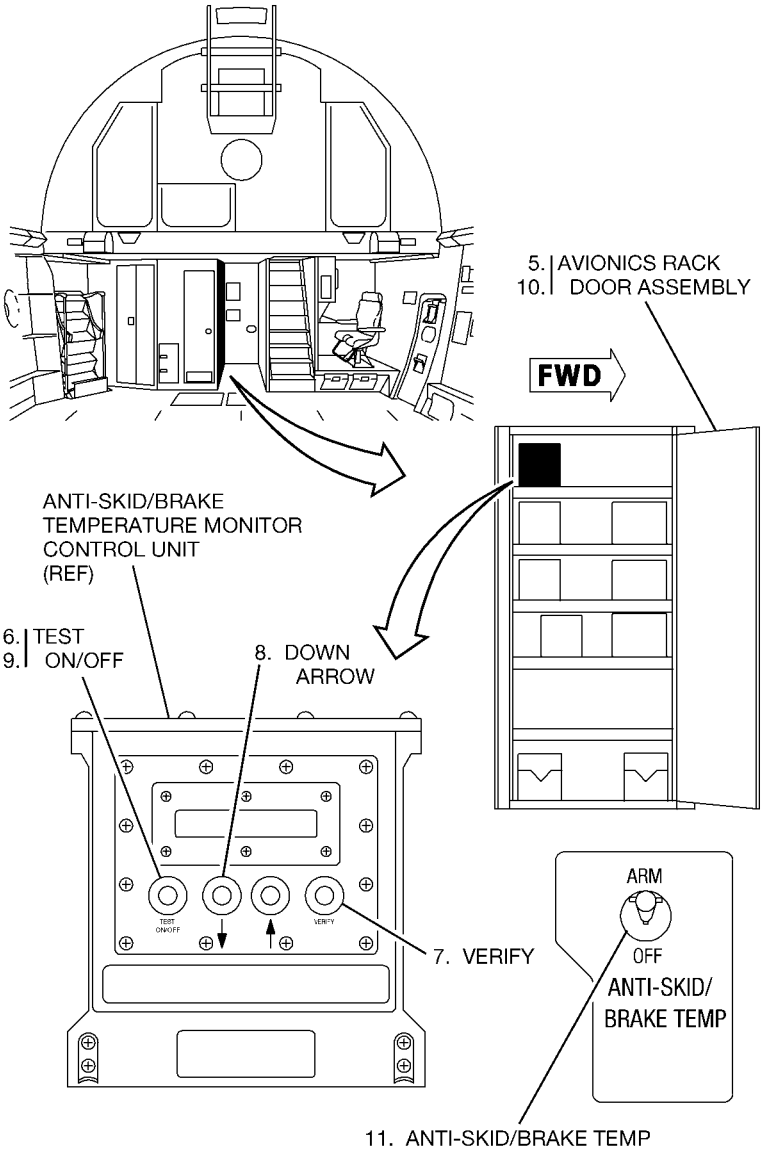
9. Press **TEST ON/OFF** pushbutton.

   - Display goes blank.

10. Close and latch avionics rack door assembly (231AZD).

11. Position **ANTI-SKID/BRAKE TEMP** switch to **OFF**.

12. Disconnect external electrical power (10-61-01, task 01-2).



ICN-88277-G3240002-002-01

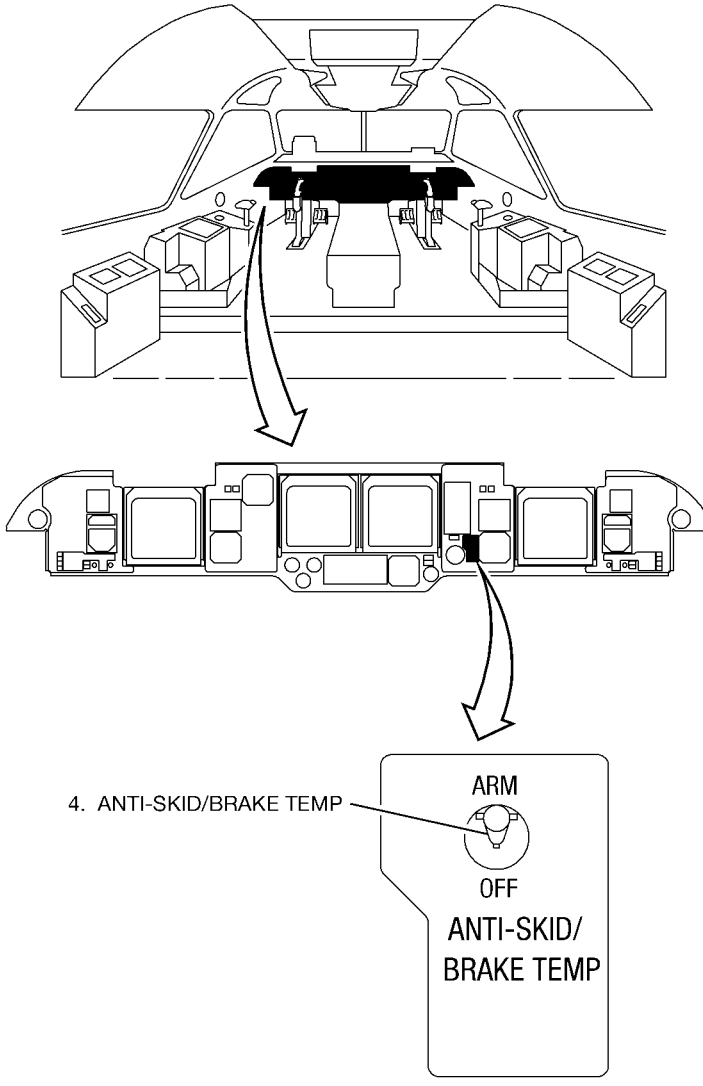
01-2. ERASE FAULTS.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″General Maintenance Input Conditions″ page for task specific safety conditions.

3. Connect external electrical power (10-61-01, task 01-1).

4. Position **ANTI-SKID/BRAKE TEMP** switch to **ARM**.



ICN-88277-G3240003-002-01

5. Unlatch and open avionics rack door assembly (231AZD).

NOTE

Current faults may be displayed by scrolling down to current fault menu.

6. Press **TEST ON/OFF** pushbutton on **ANTI-SKID/BRAKE TEMPERATURE MONITOR CONTROL UNIT**.

   - **FAULT DATA** is displayed.

7. Press down arrow pushbutton.

   - **ERASE FAULTS?** is displayed.

8. Press **VERIFY** pushbutton.

   - **ERASE FAULTS LIST BEGINNING** is displayed.

9. Press down arrow pushbutton.

   - Faults are displayed.

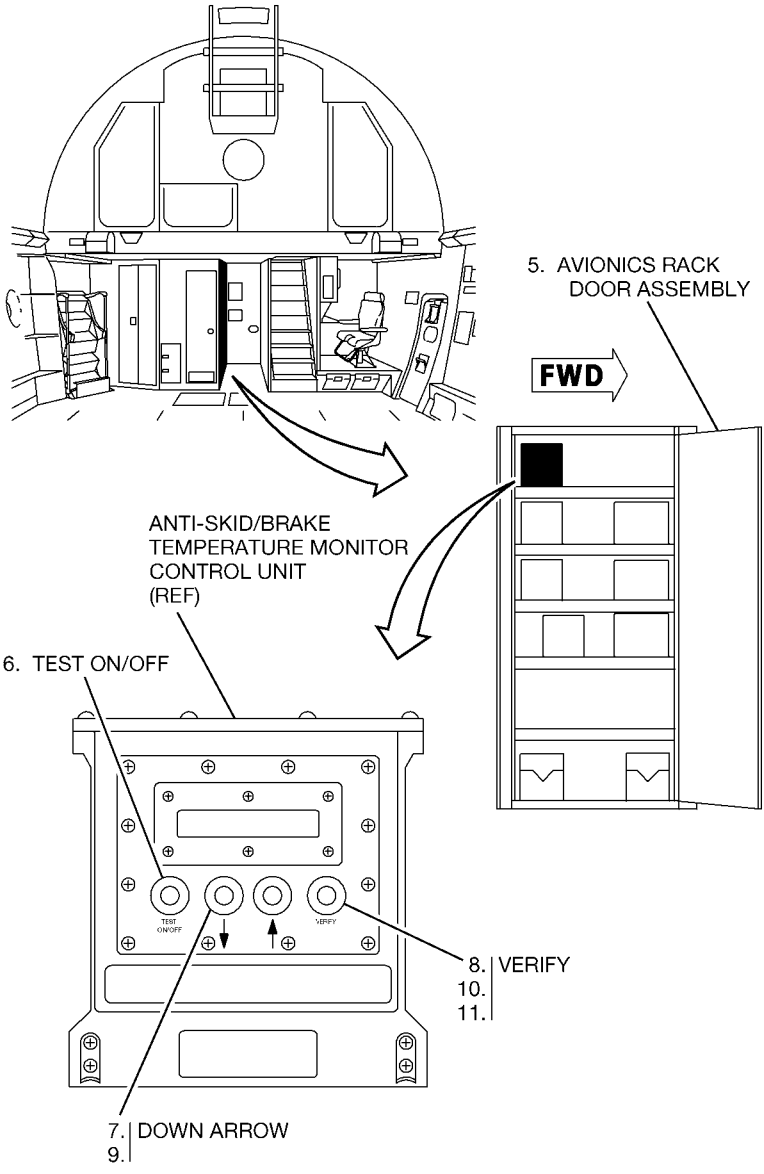
10. Press **VERIFY** pushbutton.

    - **ERASE FAULTS?** and fault message is displayed.

11. Press **VERIFY** pushbutton.

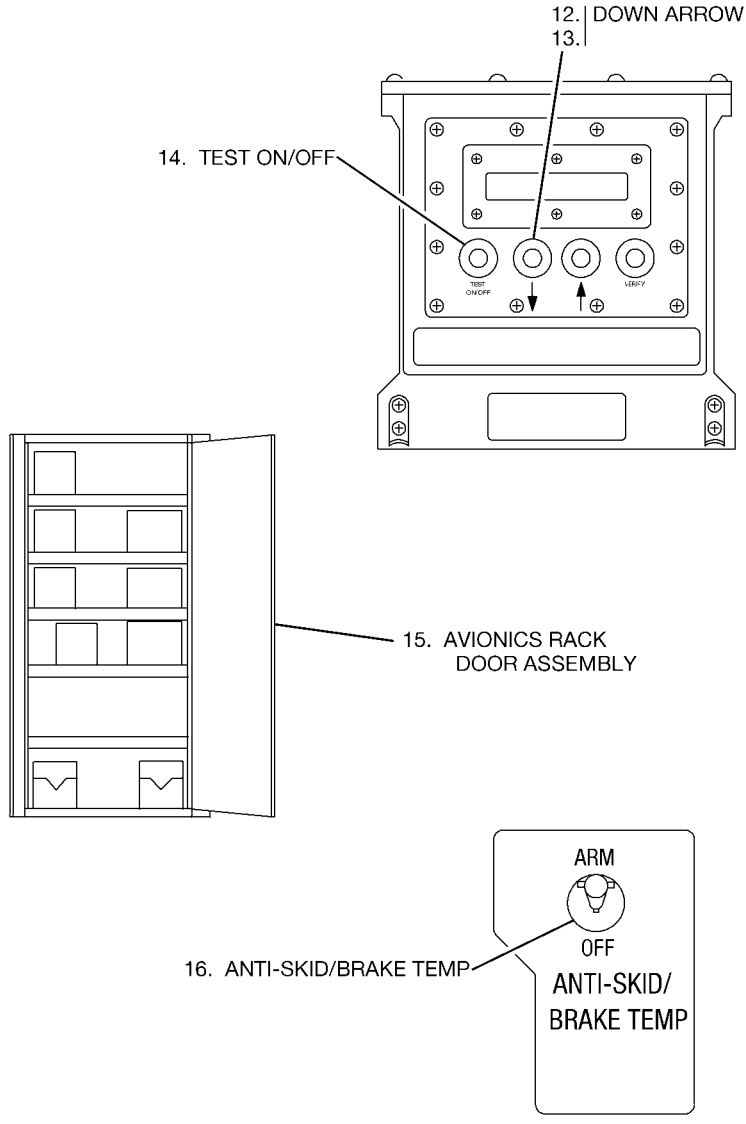
    - **ERASE FAULT** is displayed.

    - **FAULT ERASED** is displayed.



ICN-88277-G3240004-002-01

12. Press down arrow pushbutton.
    - **ERASE FAULTS** is displayed.
    - **END OF LIST** is displayed.
13. Press down arrow pushbutton.
    - **ERASE FAULTS?** is displayed.
14. Press **TEST ON/OFF** pushbutton.
    - Display goes blank.
15. Close and latch avionics rack door assembly (231AZD).
16. Position **ANTI-SKID/BRAKE TEMP** switch to **OFF**.
17. Disconnect external electrical power (10-61-01, task 01-2).



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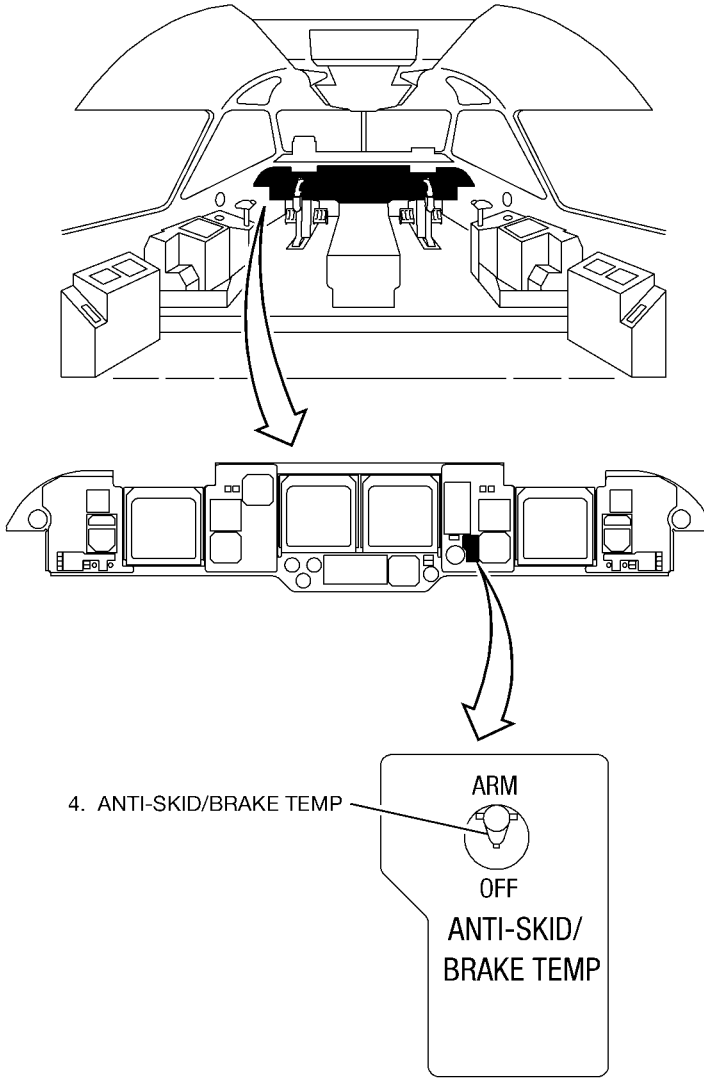
01-3. RETURN TO SERVICE.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″General Maintenance Input Conditions″ page for task specific safety conditions.

3. Connect external electrical power (10-61-01, task 01-1).

4. Position **ANTI-SKID/BRAKE TEMP** switch to **ARM**.



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5. Unlatch and open avionics rack door assembly (231AZD).

6. Press **TEST ON/OFF** pushbutton on **ANTI-SKID/BRAKE TEMPERATURE MONITOR CONTROL UNIT**.

   - **FAULT DATA** is displayed.

7. Press down arrow button.

   - **RTS** is displayed.

8. Press **VERIFY** pushbutton.

   - **Cycle Box Power** is displayed.

NOTE

When **FAILED** is displayed on **ANTI-SKID/BRAKE TEMPERATURE MONITOR CONTROL UNIT**, perform current fault mode (task 01-4).

9. Position **ANTI-SKID/BRAKE TEMP** switch to **OFF**, and back to **ARM**.

   - **PLEASE WAIT 20 SECONDS** is displayed on **ANTI-SKID/ BRAKE TEMPERATURE MONITOR CONTROL UNIT**.

   - **RTS TEST PASSED** or **FAILED** is displayed.

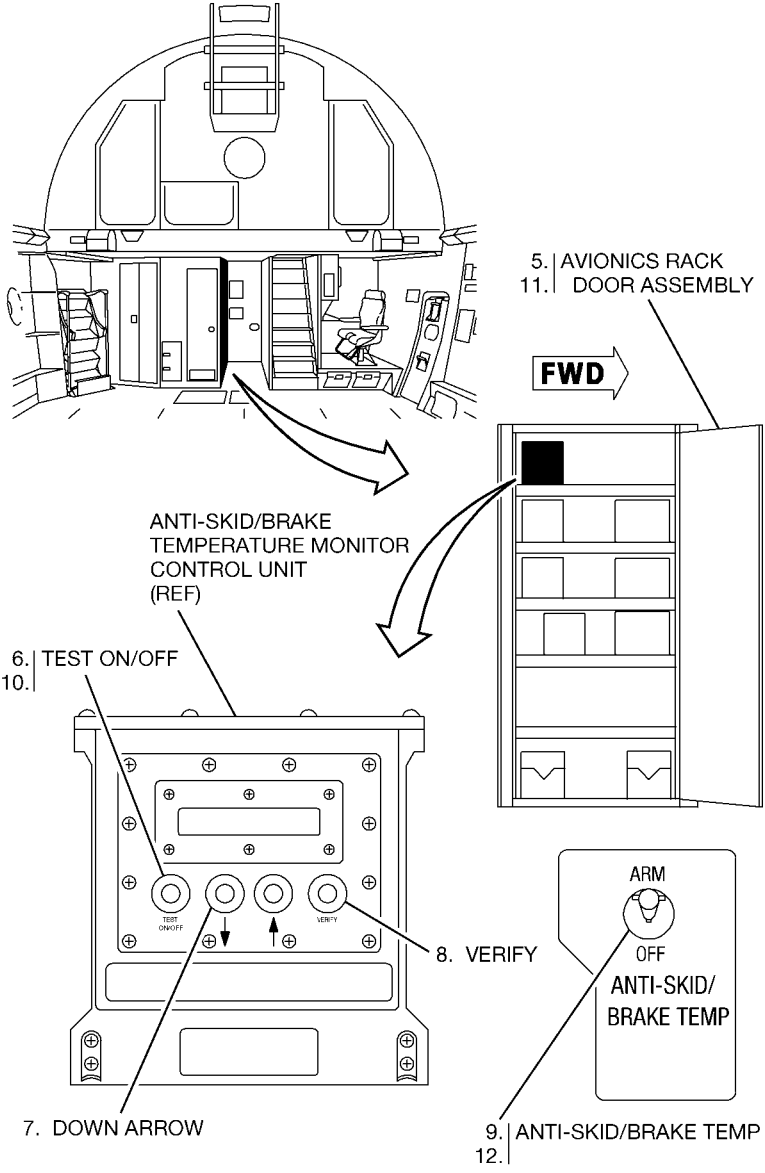
10. Press **TEST ON/OFF** pushbutton.

    - Display goes blank.

11. Close and latch avionics rack door assembly (231AZD).

12. Position **ANTI-SKID/BRAKE TEMP** switch to **OFF**.

13. Disconnect external electrical power (10-61-01, task 01-2).



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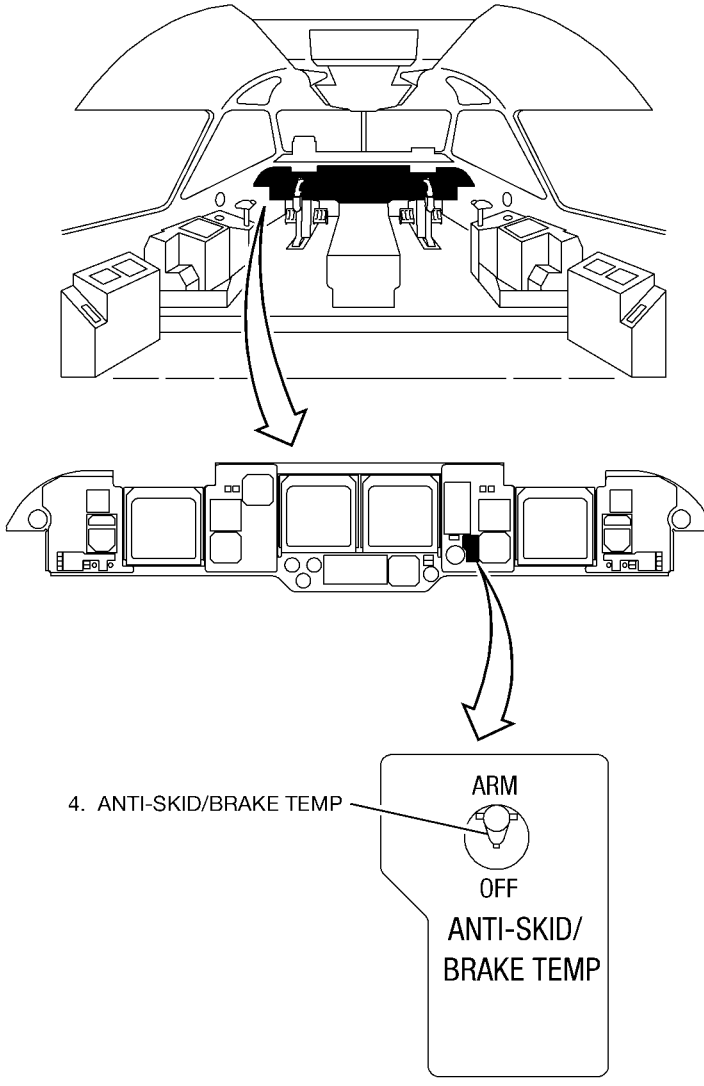
01-4. CURRENT FAULT MODE.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″General Maintenance Input Conditions″ page for task specific safety conditions.

3. Connect external electrical power (10-61-01, task 01-1).

4. Position **ANTI-SKID/BRAKE TEMP** switch to **ARM**.



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5. Unlatch and open avionics rack door assembly (231AZD).

6. Press **TEST ON/OFF** pushbutton on **ANTI-SKID/BRAKE TEMPERATURE MONITOR CONTROL UNIT**.

   - **FAULT DATA** is displayed.

7. Press down arrow pushbutton.

   - **ERASE FAULTS?** is displayed.

8. Press down arrow pushbutton.

   - **CURRENT FAULTS** is displayed.

9. Press **VERIFY** pushbutton.

   - Display reads fault message.

NOTE

Down arrow pushbutton scrolls the display backwards until all faults are displayed.

10. Press down arrow pushbutton.

    - Fault is displayed.

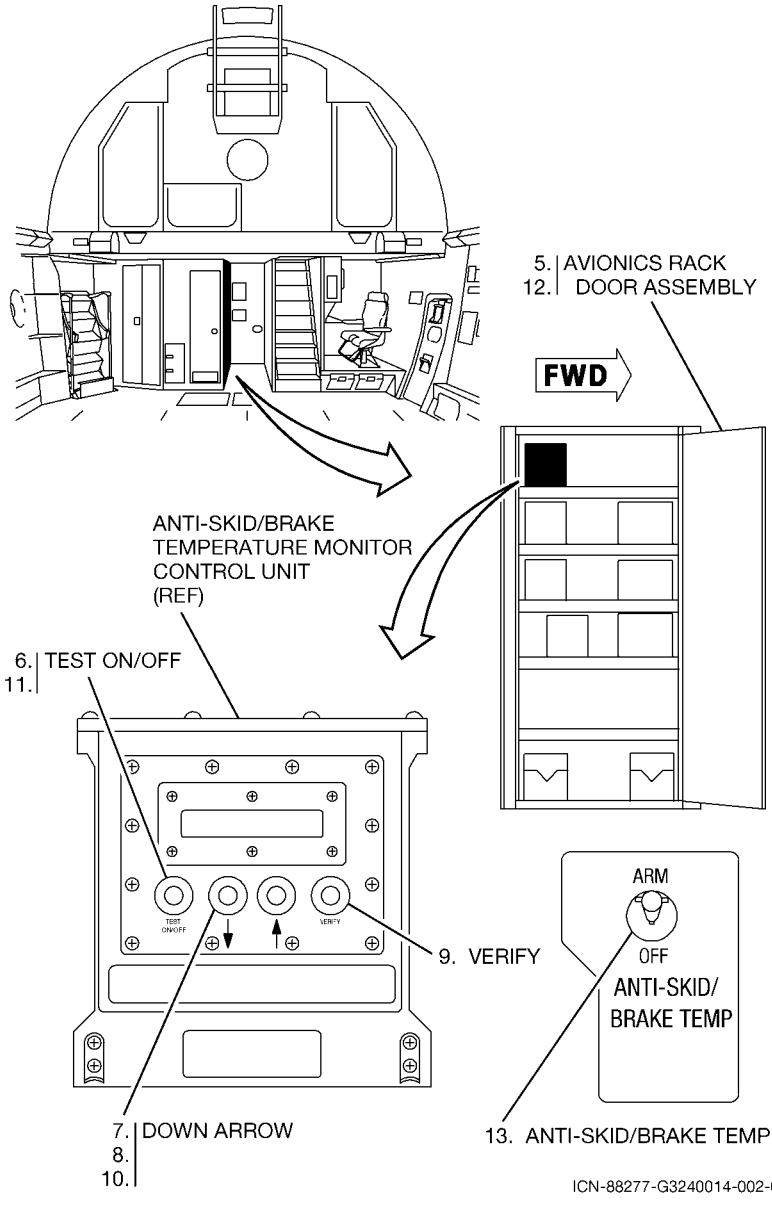
11. Press **TEST ON/OFF** pushbutton.

    - Display goes blank.

12. Close and latch avionics rack door assembly (231AZD).

13. Position **ANTI-SKID/BRAKE TEMP** switch to **OFF**.

14. Disconnect external electrical power (10-61-01, task 01-2).


5. AVIONICS RACK
12. DOOR ASSEMBLY
FWD
ANTI-SKID/BRAKE
TEMPERATURE MONITOR
CONTROL UNIT
(REF)
6. TEST ON/OFF
11.
9. VERIFY
ARM
OFF
ANTI-SKID/
BRAKE TEMP
7. DOWN ARROW
8.
10.
13. ANTI-SKID/BRAKE TEMP
ICN-88277-G3240014-002-01

BRAKE PRESSURE OPERATIONAL CHECKOUT (32-40-02)

GENERAL MAINTENANCE INPUT CONDITIONS:

Applicability:

	Task
All	All

Additional information:

This procedure consists of the following task:

02-1. Operational checkout.

Additional data:

	Task
TO 1C-17A-2-12JG-29-1	All
TO 1C-17A-2-12JG-32-1	All
TO 1C-17A-2-29FI-00-1	All
TO 1C-17A-2-32FI-00-1	All

Personnel recommended:

	Task
Two	All

Person (A) performs task.

Person (B) assists person (A).

Safety conditions:

	Task
NA	--

Support equipment:

Nomenclature	PN	Specification	Qty	Task
Pail, Utility	--	A-A-59253	AR	All
Tester, Brake System	17G133027-503	--	1	All

Supplies:

Nomenclature	PN	Specification	Qty	Task
NA	--	--	--	--

02-1. OPERATIONAL CHECKOUT.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″General Maintenance Input Conditions″ page for task specific safety conditions.

3. Verify brake accumulators are serviced (12-32-04).

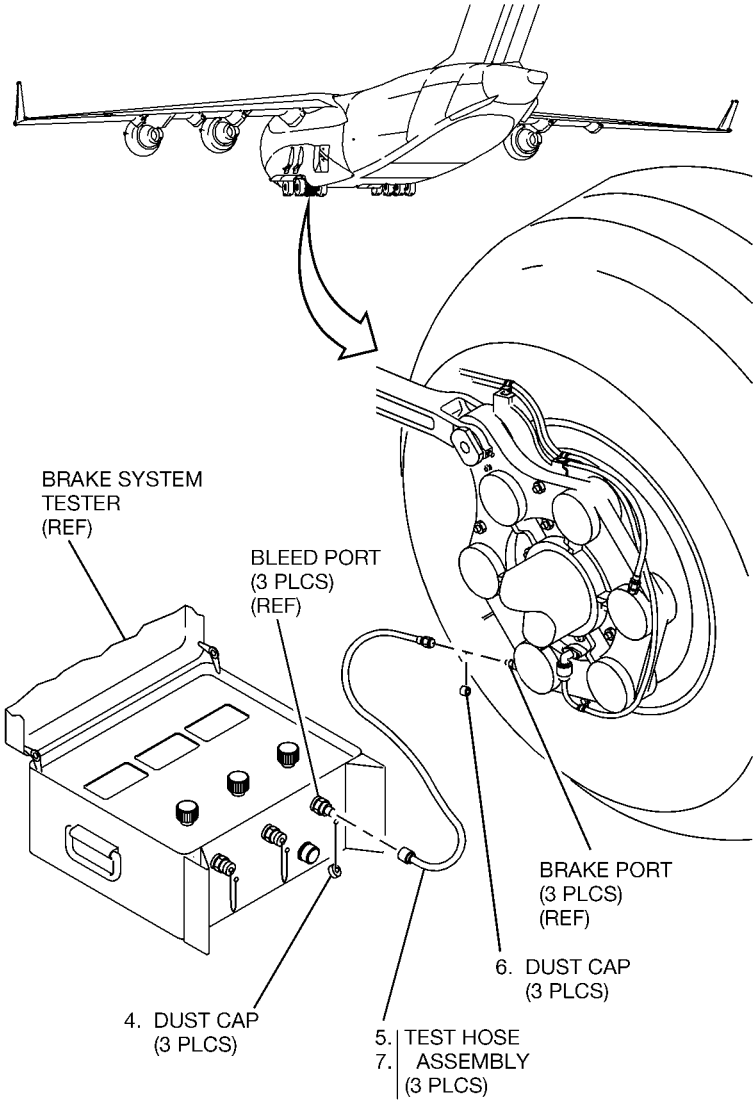
4. (A) Remove dust caps from bleed ports on brake system tester.

5. (A) Connect test hose assemblies to bleed ports.

6. (A) Remove dust caps from spare brake ports.

7. (A) Connect test hose assemblies to brake ports.

8. Observe hydraulic systems Nos. 2 and 3 reservoir sight gauge for fluid quantity (TO 1C-17A-2-12JG-29-1, 12-29-00, para 1-9).



(TYPICAL)

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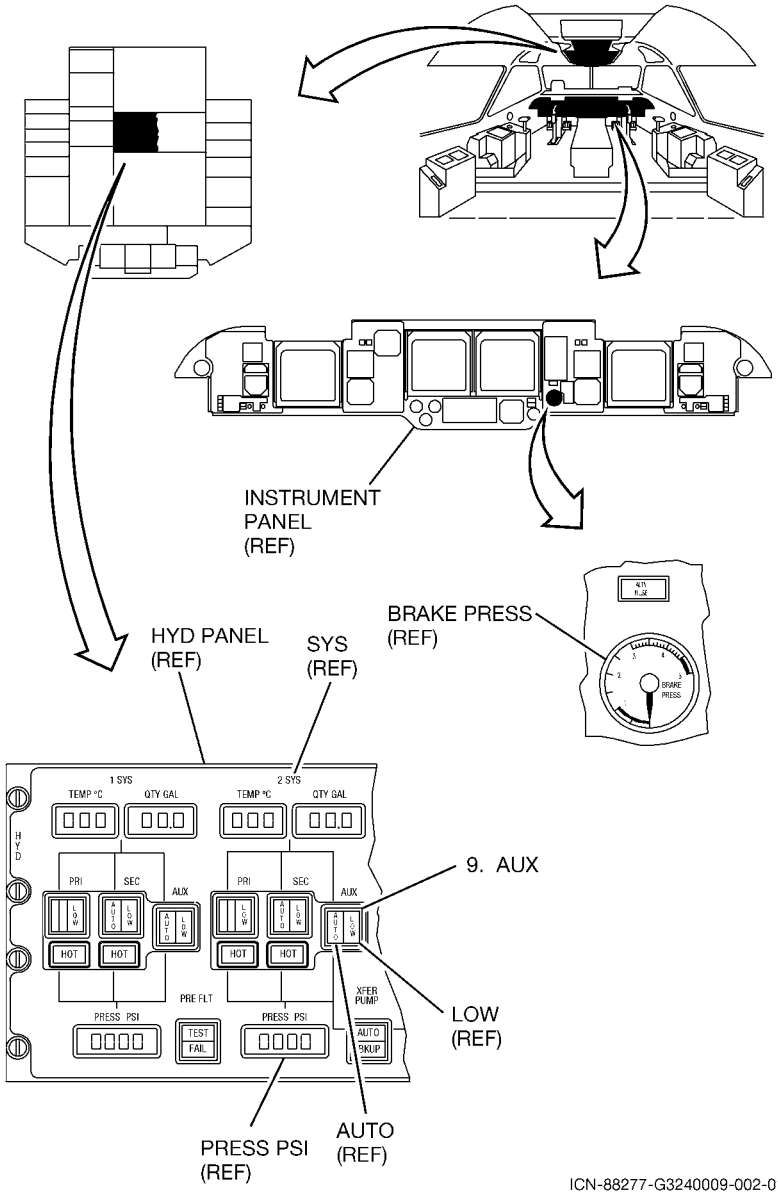
9. (B) Press **2 SYS, AUX** switchlight, on **HYD** panel.

   - **AUTO** light comes on (29-30-AD-01).
   - **LOW** light stays off (29-21-AA-02).
   - **PRESS PSI** indicator reads 3800-4200 (29-21-AB-02).
   - **BRAKE PRESS** indicator reads 3800-4200 (32-44-AA-00).



ICN-88277-G3240009-002-01

10. (A,B) Depress and hold brake pedals.

    - Pressure gauges read 3800-4200 (32-44-AP-00).

11. (A,B) Position **PARK BRAKE** levers to **ON** and release brake pedals.

    - Pressure gauges read 1200-2300 (32-44-AP-00).

WARNING

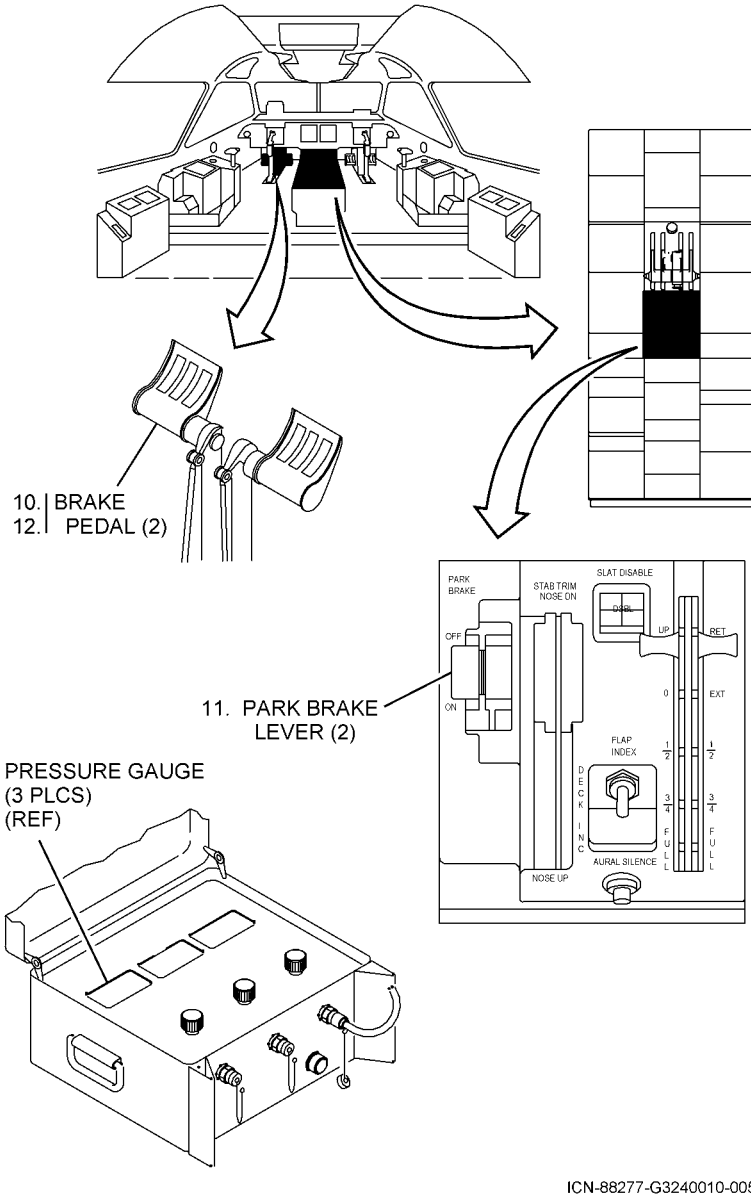
Before releasing parking brakes, make sure personnel, stands, vehicles, or obstructions are clear of Nose Landing Gear (NLG), Main Landing Gear (MLG), and aircraft. Aircraft will roll FWD or AFT depending on the apron surface and weather conditions. Failure to comply may cause injury to personnel or damage to aircraft.

CAUTION

Personnel shall prevent park brake levers from moving to the forward position on their own during brake release. Failure to comply may cause damage to aircraft.

12. (A,B) Depress and release brake pedals.

    - Pressure gauges read less than 110 (32-44-AP-00).



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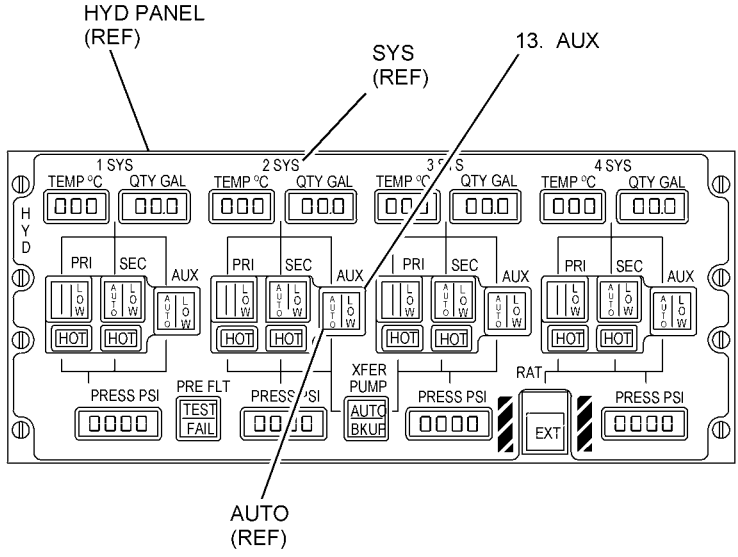
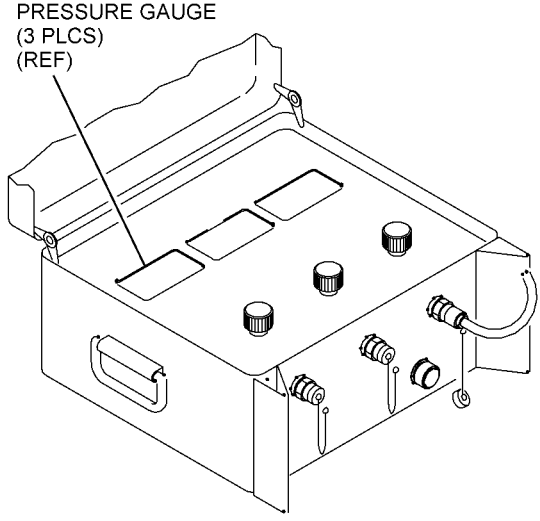
NOTE

Allow three to five minutes for system to stabilize prior to turning off **2 SYS, AUX** pump. Monitor pressure gauges and **HYD** panel for pressure drop or increase.

13. (A) Press **2 SYS, AUX** switchlight, on **HYD** panel.

- **AUTO** light goes off.





ICN-88277-G3240016-002-01

14. (B) Press **3 SYS, AUX** switchlight.

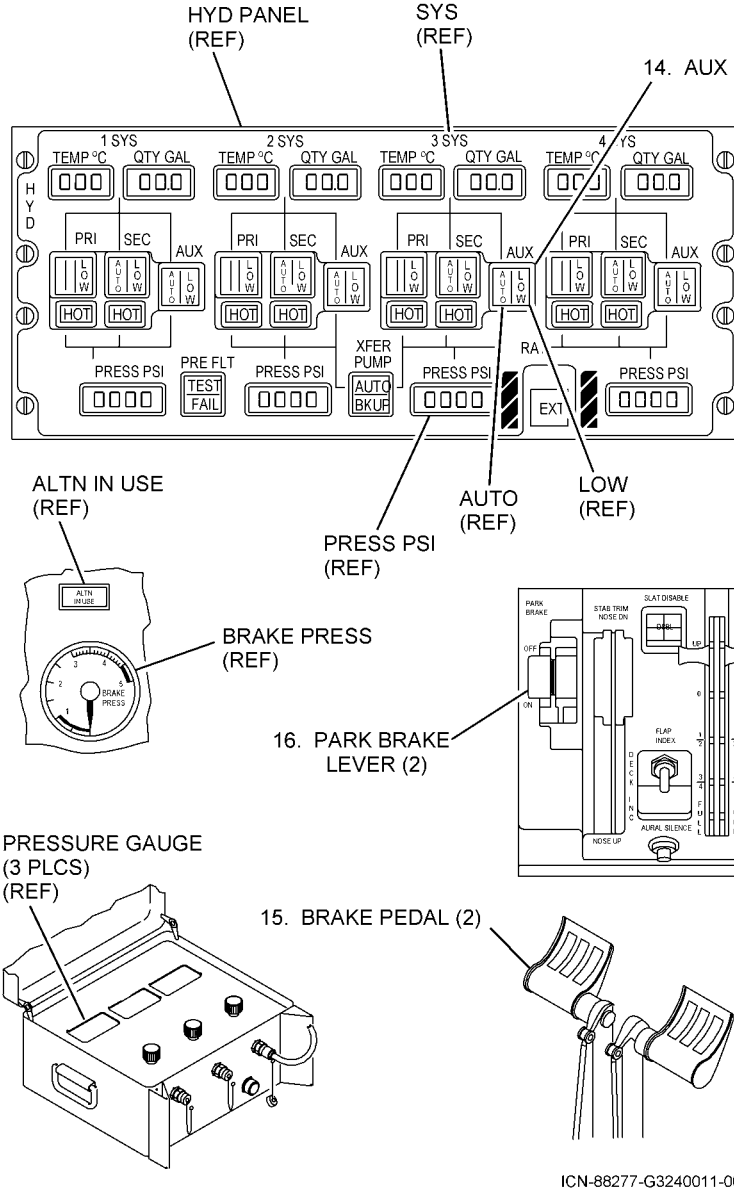
    - **AUTO** light comes on (29-30-AD-02).
    - **LOW** light stays off (29-21-AA-03).
    - **PRESS PSI** indicator reads 3800-4200 (29-21-AB-03).
    - **BRAKE PRESS** indicator reads 3800-4200 (32-44-AA-00).
    - **ALTN IN USE** light comes on (32-44-AH-00).

15. (A,B) Depress and hold brake pedals.

    - Pressure gauges read 3800-4200 (32-44-AP-00).

16. (A,B) Position **PARK BRAKE** levers to **ON** and release brake pedals.

    - Pressure gauges read 1200-2300 (32-44-AP-00).



ICN-88277-G3240011-006-01

WARNING

Before releasing parking brakes, make sure personnel, stands, vehicles, or obstructions are clear of NLG, MLG, and aircraft. Aircraft will roll FWD or AFT depending on the apron surface and weather conditions. Failure to comply may cause injury to personnel or damage to aircraft.

CAUTION

Personnel shall prevent park brake levers from moving to the forward position on their own during brake release. Failure to comply may cause damage to aircraft.

17. (A,B) Depress and release brake pedals.

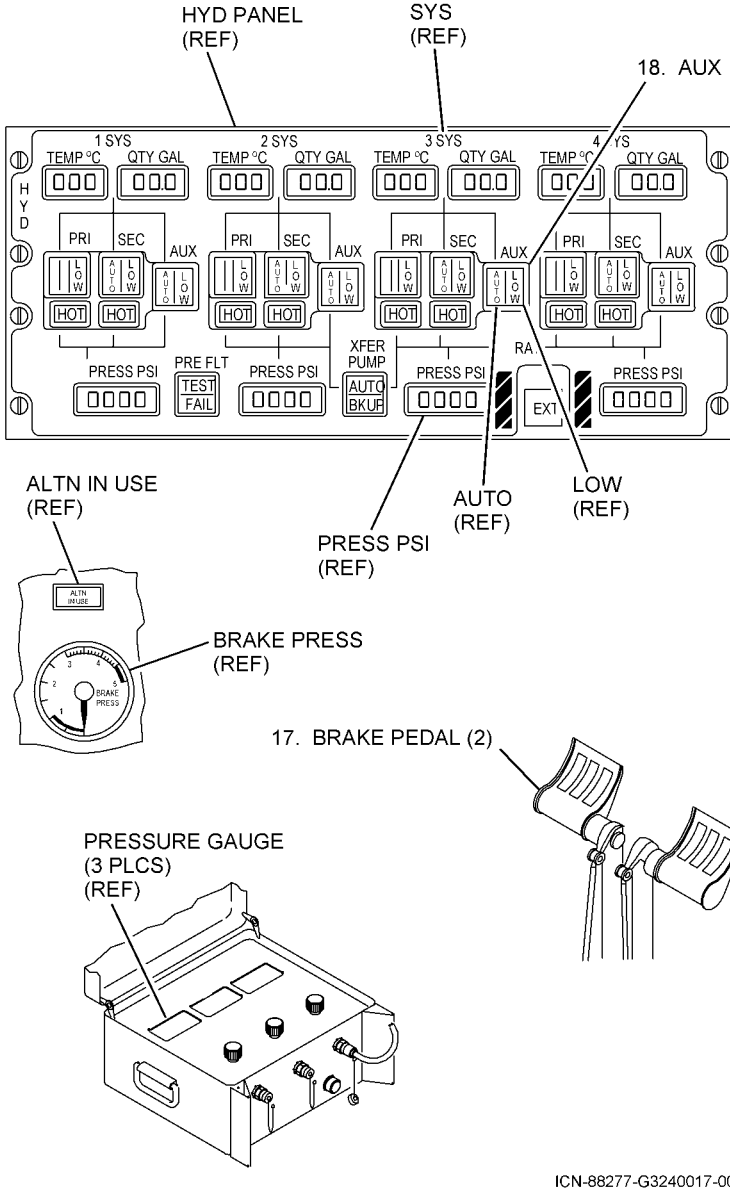
- Pressure gauges read less than 110 (32-44-AP-00).

NOTE

Allow three to five minutes for system to stabilize prior to turning off **3 SYS, AUX** pump. Monitor pressure gauges and **HYD** panel for pressure drop or increase.

18. (A) Press **3 SYS, AUX** switchlight, on **HYD** panel.

- **AUTO** light goes off.



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19. (A) Disconnect test hose assemblies from brake ports.

20. (A) Install dust caps on brake ports.

21. (A) Remove test hose assemblies from brake system tester.

22. (A) Install dust caps on bleed ports.

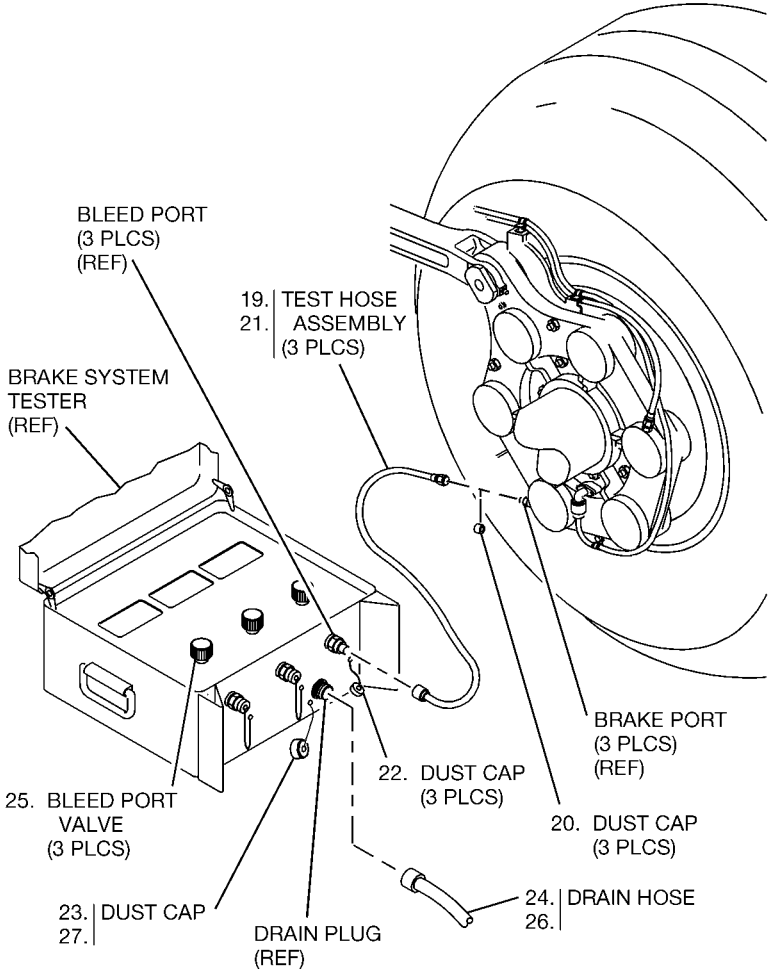
23. (A) Remove dust cap from drain plug.

24. (A) Install drain hose.

25. (A) Open bleed port valves to drain brake system tester.

26. (A) Remove drain hose from drain plug.

27. (A) Install dust cap.



(TYPICAL)

ICN-88277-G3240012-003-01

MAIN LANDING GEAR WHEEL AND TIRE ASSEMBLY (32-41-10)

MASTER INPUT CONDITIONS:

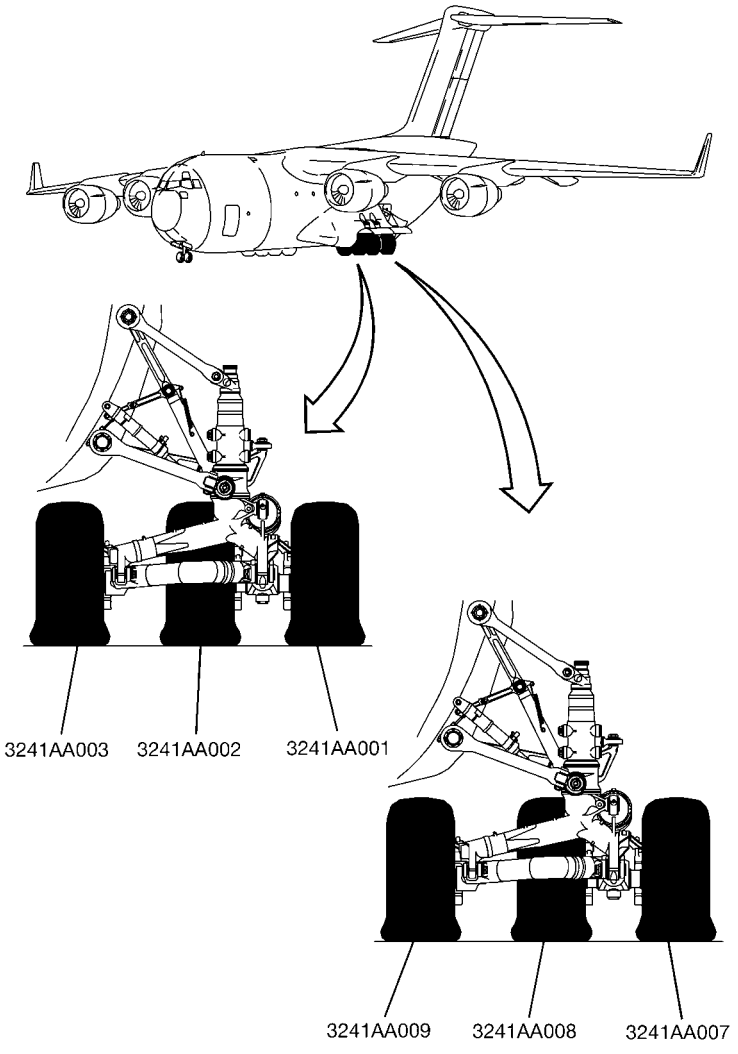
Reference designators:

3241AA001	Left Forward Main Landing Gear Outboard Wheel and Tire Assembly
3241AA002	Left Forward Main Landing Gear Center Wheel and Tire Assembly
3241AA003	Left Forward Main Landing Gear Inboard Wheel and Tire Assembly
3241AA004	Right Forward Main Landing Gear Inboard Wheel and Tire Assembly
3241AA005	Right Forward Main Landing Gear Center Wheel and Tire Assembly
3241AA006	Right Forward Main Landing Gear Outboard Wheel and Tire Assembly
3241AA007	Left Aft Main Landing Gear Outboard Wheel and Tire Assembly
3241AA008	Left Aft Main Landing Gear Center Wheel and Tire Assembly
3241AA009	Left Aft Main Landing Gear Inboard Wheel and Tire Assembly
3241AA010	Right Aft Main Landing Gear Inboard Wheel and Tire Assembly
3241AA011	Right Aft Main Landing Gear Center Wheel and Tire Assembly
3241AA012	Right Aft Main Landing Gear Outboard Wheel and Tire Assembly

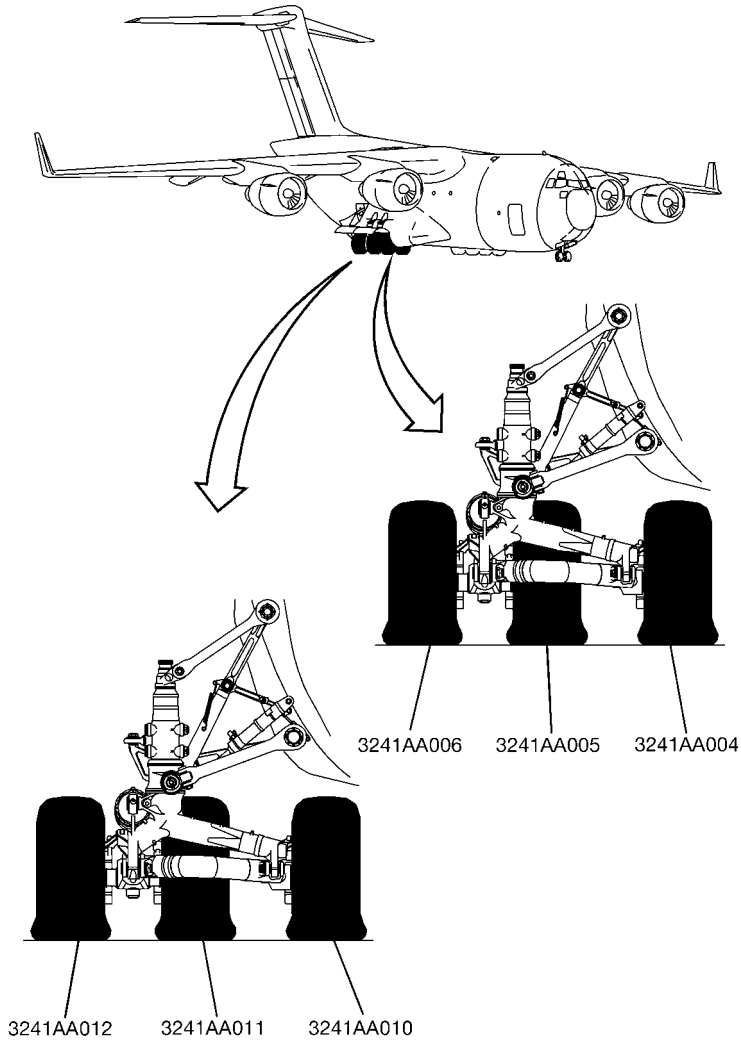
Applicable functions:

-2 Removal.
-3 Installation.

Access data:



ICN-88277-G3241001-002-01



ICN-88277-G3241002-002-01

MAIN LANDING GEAR WHEEL AND TIRE ASSEMBLY REMOVAL (32-41-10-2)

FUNCTIONAL INPUT CONDITIONS:

Applicability:

	Task
All	All

Additional information:

This procedure consists of the following tasks:

2-1. Preparation.
2-2. Removal.

NOTE	Task
• This is a typical removal task for all main landing gear wheel and tire assemblies.	All
• This task contains In-Process Inspection (****IPI****) requirements.	2-2

Additional data:

	Task
TO 1C-17A-2-07JG-10-1	2-1
TO 1C-17A-2-07JG-10-2	2-1
TO 1C-17A-2-10JG-60-1	2-1
TO 1C-17A-2-32JG-40-3	All
TO 1C-17A-2-32FI-00-1	2-1
TO 1C-17A-2-32GS-00-1	2-1
TO 1C-17A-3-1	2-2

Personnel recommended:

	Task
One	2-1

	Task
Three	2-2
Person (A) performs task.	
Person (B) assists person (A).	
Person (C) assists person (A).	

Safety conditions:

	Task
NA	--

Support equipment:

Nomenclature	PN	Specification	Qty	Task
Cover, Wheel Bearing	17G133457-1	--	1	2-2
Fixture, Hoist	17G130440-501	--	1	--
Adapter, Axle	17G131444-3	--	1	2-2
Adapter, Wheel	17G131444-33	--	1	2-2
Harness	17G131443-501	--	1	2-2
Strap, Adjustable	17G131443-55	--	4	2-2
Wrench	17G131444-37	--	1	2-2
Tool, Palmer Safe Core Valve	968RB	--	1	2-2
Wrench, Spanner	17G130003-1	--	1	2-2

Supplies:

Nomenclature	PN	Specification	Qty	Task
Grease, Aircraft	--	MIL-PRF-81322	AR	2-2
Paper, Grease Proof	--	MIL-B-121B	AR	2-2
Tape	7510-00-266-6711	--	AR	2-2

2-1. PREPARATION.

NOTE

When Main Landing Gear (MLG) tire is showing evidence of antiskid degrading through severe flat spotting, refer to (TO 1C-17A-2-32FI-00-1 32-45-AA-00).

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″Functional Input Conditions″ page for task specific safety conditions.

3. Connect external electrical power (10-61-01, task 01-1).

NOTE

When performing fuselage jacking, perform step 4 and skip steps 5 thru 12. When performing integral jacking, skip step 4 and perform steps 5 thru 12.

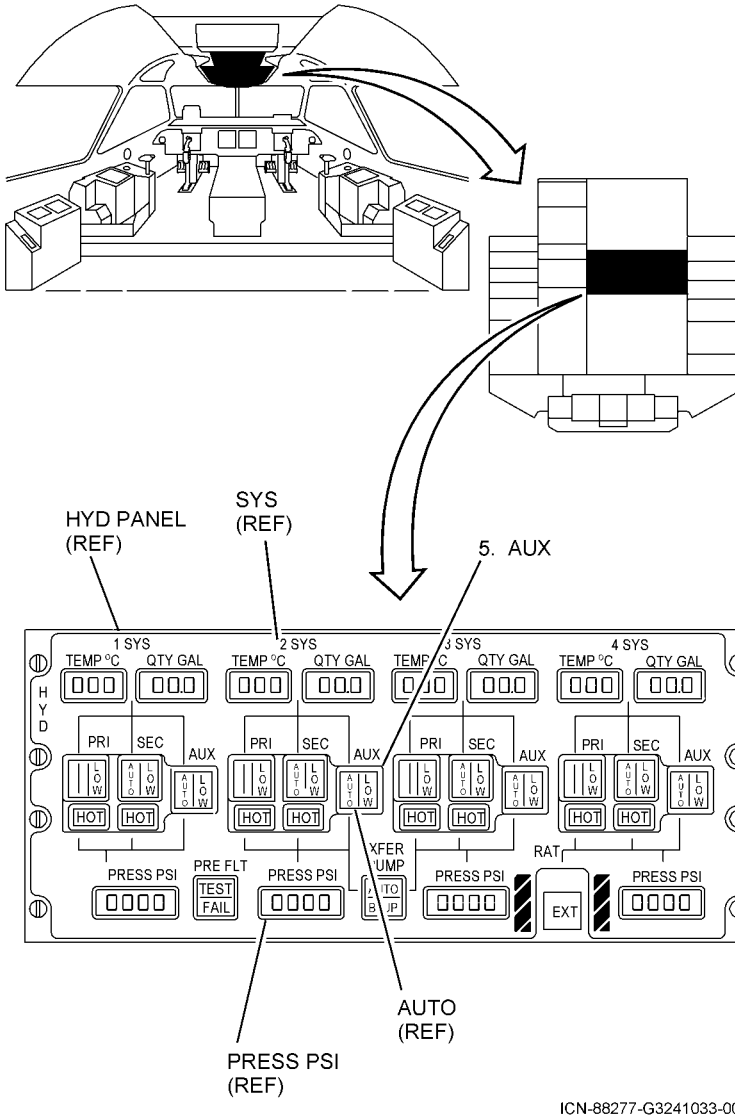
4. Perform complete fuselage jacking - checklist (07-11-02).

WARNING

When removing wheel and tire to facilitate brake removal, do not perform steps 5 thru 11. Failure to comply may cause injury to personnel or damage to aircraft.

5. Press **2 SYS, AUX** switchlight, on **HYD** panel.

   - **AUTO** light comes on.
   - **PRESS PSI** indicator reads 3800-4200.



ICN-88277-G3241033-005-01

6. Press and hold brake pedal on the side of aircraft where wheel and tire assembly will be removed.

7. Set **PARK BRAKE** levers to **ON** and release brake pedal.

8. Inspect quick-disconnect for proper seating.

NOTE

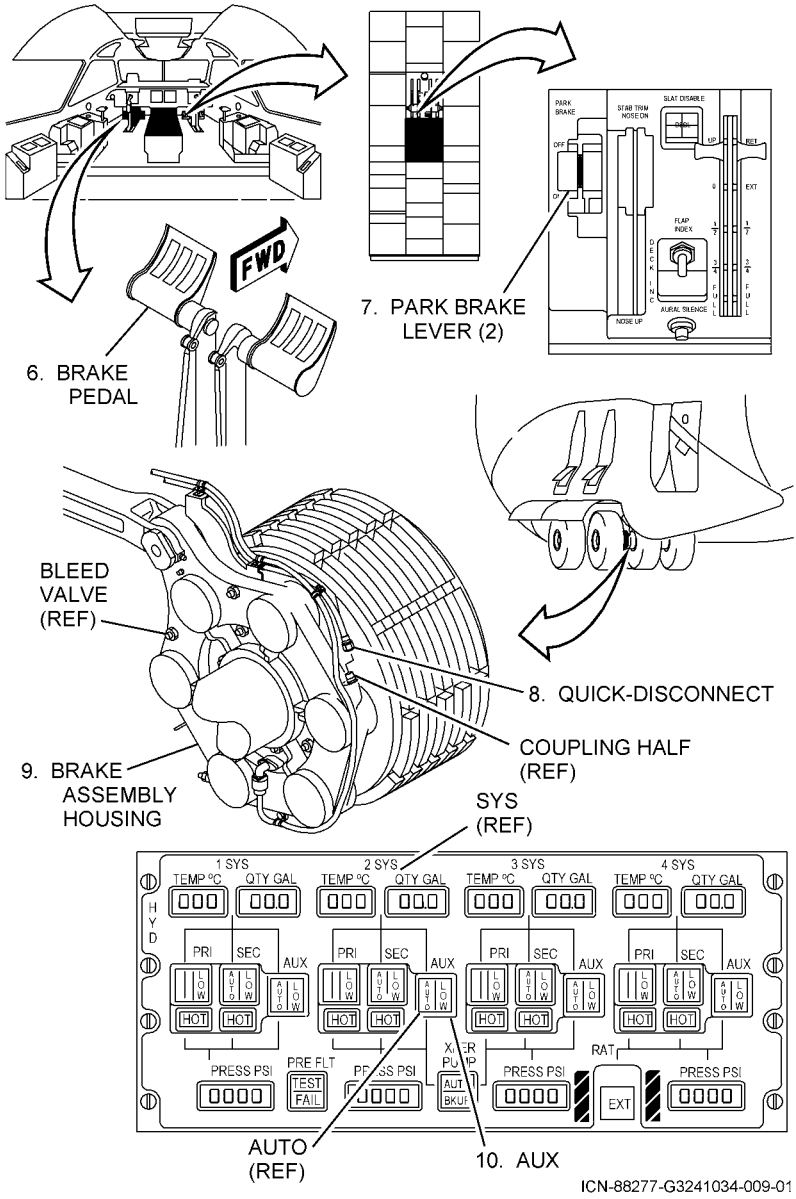
Seepage which forms a drop within 10 minutes is acceptable.

9. Inspect brake assembly housing for hydraulic leaks.

   - No leakage allowed at bleed valve (TO 1C-17A-2-32JG-40-3, 32-43-10, task 4-1).
   - No leakage allowed at coupling half (TO 1C-17A-2-32JG-40-3, 32-43-10, task 4-2).
   - No leakage allowed at other areas on the brake assembly (TO 1C-17A-2-32JG-40-3, 32-43-10).

10. Press **2 SYS, AUX** switchlight, on **HYD** panel.

    - **AUTO** light goes off.



ICN-88277-G3241034-009-01

WARNING

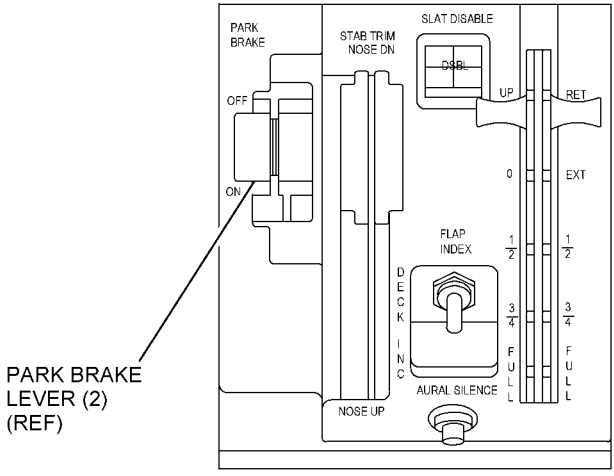
Before releasing parking brakes, make sure personnel, stands, vehicles, or obstructions are clear of Nose Landing Gear (NLG), Main Landing Gear (MLG), and aircraft. Aircraft will roll FWD or AFT depending on the apron surface and weather conditions. Failure to comply may cause injury to personnel or damage to aircraft.

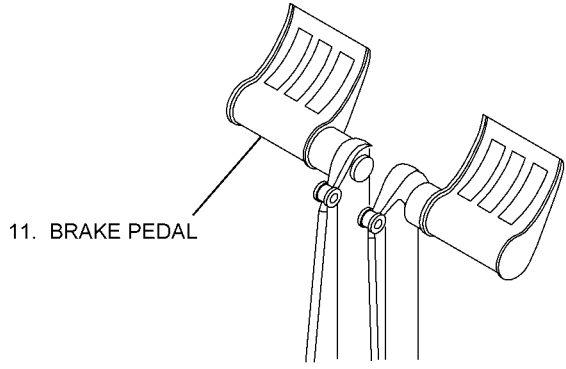
CAUTION

Personnel shall prevent park brake levers from moving to the forward position on their own during brake release. Failure to comply may cause damage to aircraft.

11. Press brake pedal on the side of aircraft where wheel and tire assembly will be removed.

    - Park brake lever releases.





ICN-88277-G3241055-002-01

WARNING

- When removing MLG wheel and tire assembly, it is a requirement for either center or outboard wheel/tire assembly, fully inflated, to remain in place. Failure to comply may cause injury to personnel and damage to the aircraft.

- When center and outboard MLG wheel and tire assemblies are flat (regardless of condition of inboard wheel/tire assembly), a secondary restraint to prevent sudden shock strut extension or axle rotation, is required. When secondary restraint is required, perform compressing main landing gear shock strut assembly using P/N 17G130485 (TO 1C-17A-2-32GS-00-1, Chapter 2). Failure to comply may cause injury to personnel or damage to aircraft.

12. Perform integral jacking - checklist (07-12-01, tasks 01-1 and 01-2 or 01-3).

2-2. REMOVAL.

WARNING

- Tire pressure shall be deflated to ″0 psi″ (zero) prior to leaving vicinity of aircraft. Failure to comply may cause injury to personnel and damage to aircraft.

- Proper eye protection must be utilized. Failure to comply may cause injury to personnel.

NOTE

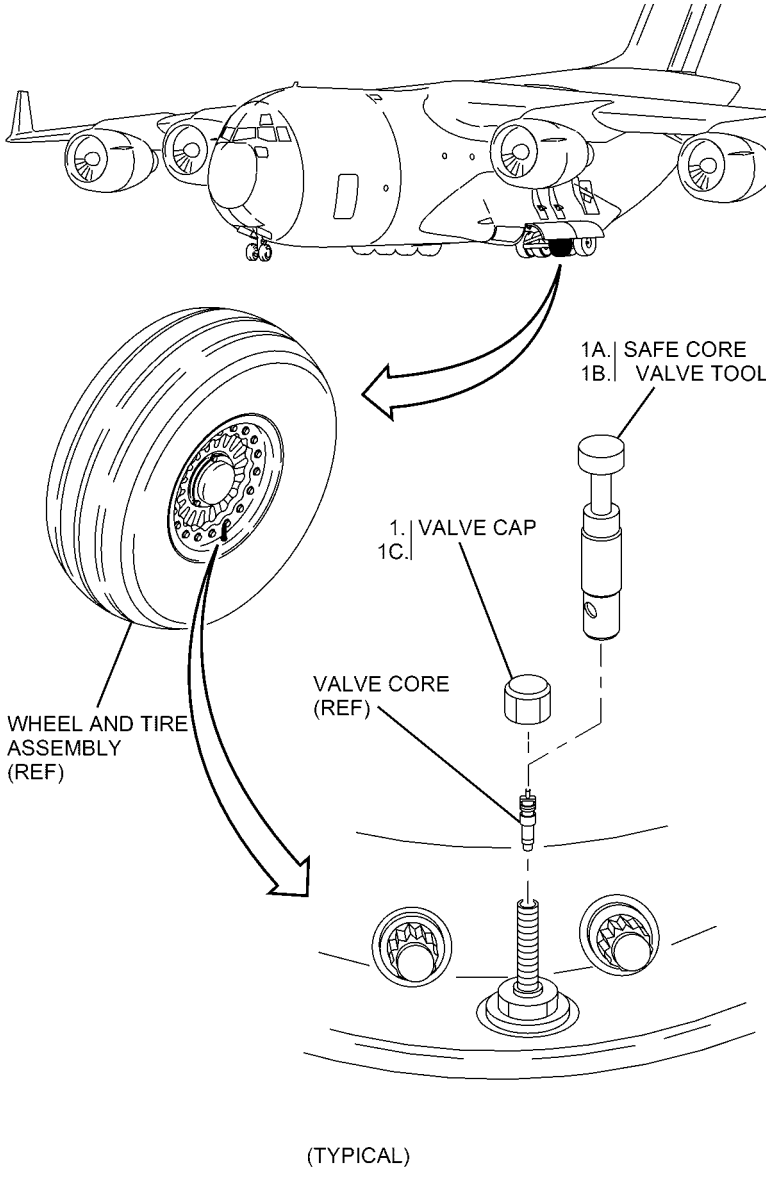
Tire does not need to be deflated to 0 psi when wheel and tire assembly is going to be removed for other maintenance and same wheel and tire assembly is going to be installed.

1. (A) Remove valve cap from valve stem.

1A. (A) Using safe core valve tool, loosen valve core to deflate wheel and tire assembly to 0 psi.

1B. (A) Remove safe core valve tool and valve core.

1C. (A) Install valve cap on valve stem.



ICN-88277-G3241004-008-01

NOTE

- Ensure hoist fixture is positioned against brake side of Main Landing Gear (MLG) wheel and tire assembly.

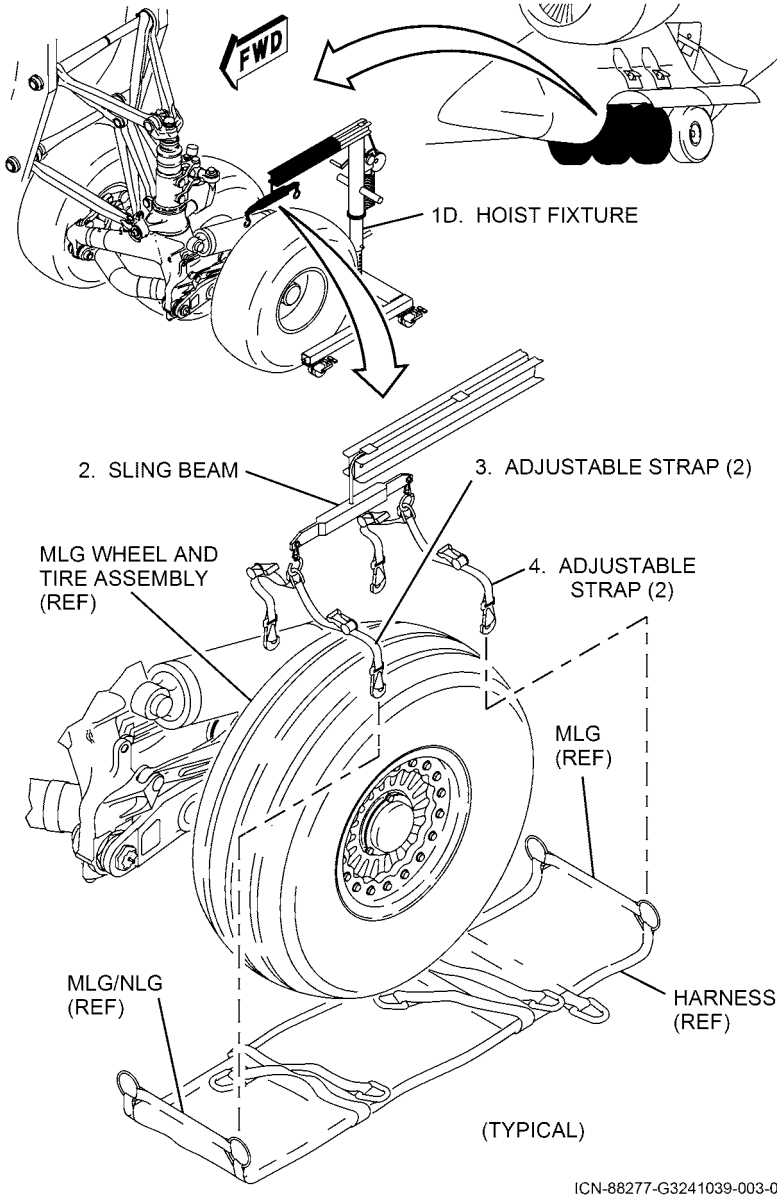
- When the hoist fixture is not available, the wheel and tire assembly may be removed manually. This can be accomplished using three persons; two persons supporting/removing the wheel and tire assembly and the third person carefully guiding the wheel and tire assembly off axle.

1D. (A) Position hoist fixture.

2. (A) Lower sling beam to rest on top of wheel and tire assembly.

3. (A) Attach adjustable straps from **MLG/NLG** on harness to sling beam on hoist fixture and adjust for proper fit.

4. (A) Fold **BRAKE** straps between tire and harness; then attach adjustable straps from **MLG** on harness to sling beam on hoist fixture and adjust for proper fit.

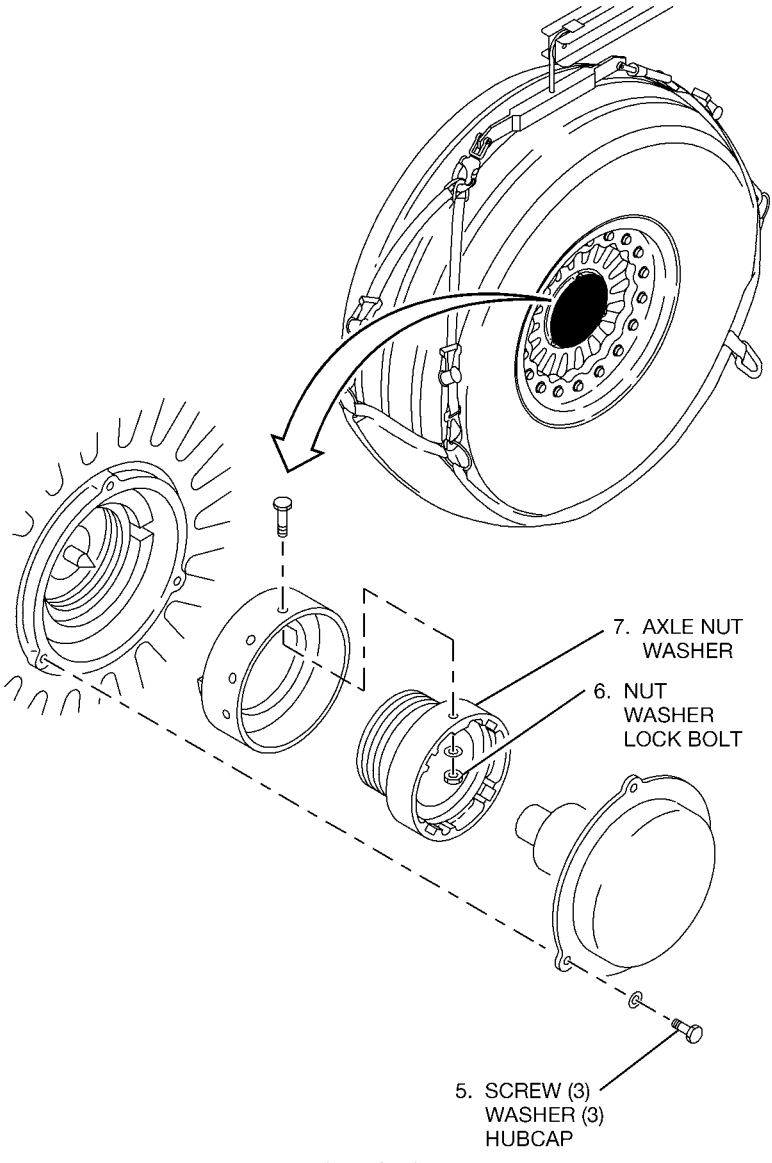


ICN-88277-G3241039-003-01

5. (A) Remove safety wire, screws, washers, and hubcap.

6. (A) Remove nut, washer, and lock bolt.

7. (A) Remove axle nut and washer.

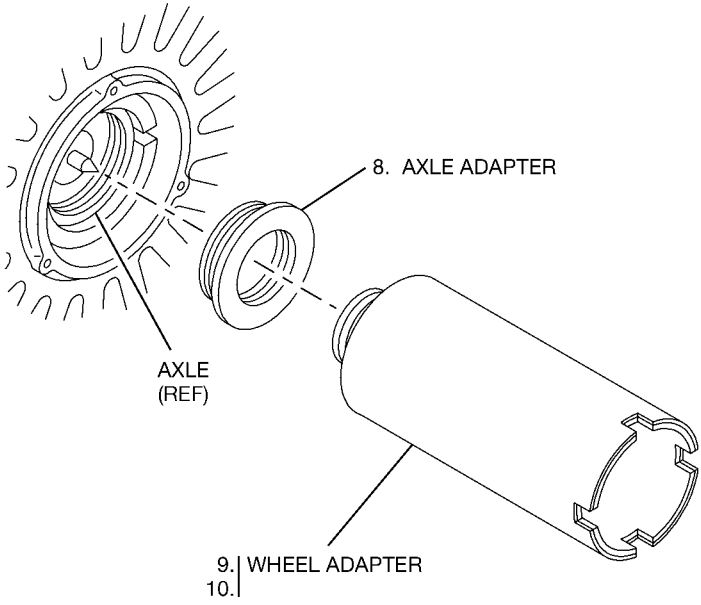


ICN-88277-G3241040-002-01

8. (A) Install axle adapter onto axle.

9. (A) Lubricate wheel adapter with aircraft grease.

10. (A) Install wheel adapter hand tight onto axle adapter.



(TYPICAL)

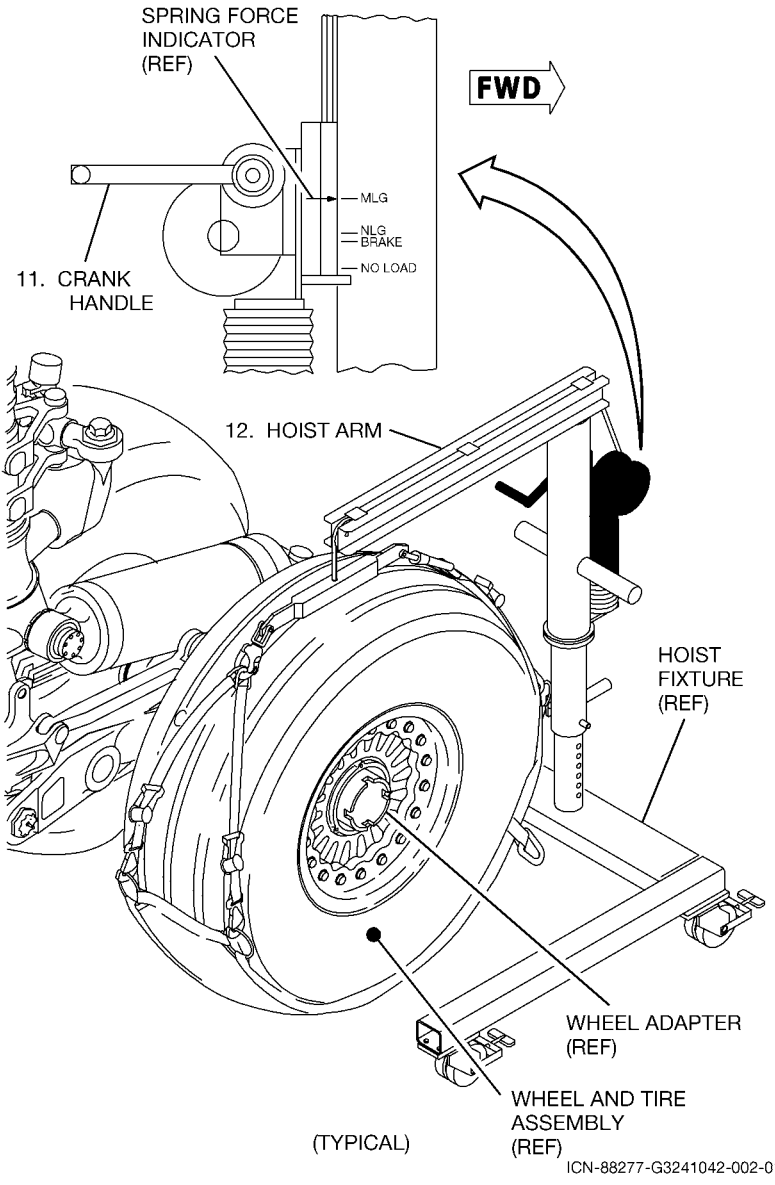
ICN-88277-G3241041-002-01

11. (A) Operate crank handle until spring force indicator indicates **MLG**.

CAUTION

- When wheel and tire assembly hangs at the axle adapter/wheel adapter interface, back off axle adapter 1/4 turn. Failure to comply may cause damage to axle.
- Ensure spring force indicator always points to **MLG** during removal. Failure to comply may cause damage to axle.
- Ensure hoist fixture cable is on pulley prior to applying tension to cable. Failure to comply may cause damage to equipment.

12. (A,B,C) Slowly swing hoist arm and maneuver hoist fixture while moving wheel and tire assembly onto wheel adapter keeping spring force indicator pointing to **MLG**.


SPRING FORCE INDICATOR (REF)
FWD
MLG
NLG BRAKE
NO LOAD
11. CRANK HANDLE
12. HOIST ARM
HOIST FIXTURE (REF)
WHEEL ADAPTER (REF)
WHEEL AND TIRE ASSEMBLY (REF)
(TYPICAL)
ICN-88277-G3241042-002-01

13. (A) Remove wheel adapter from axle adapter.

14. (A,B,C) Remove wheel and tire assembly.

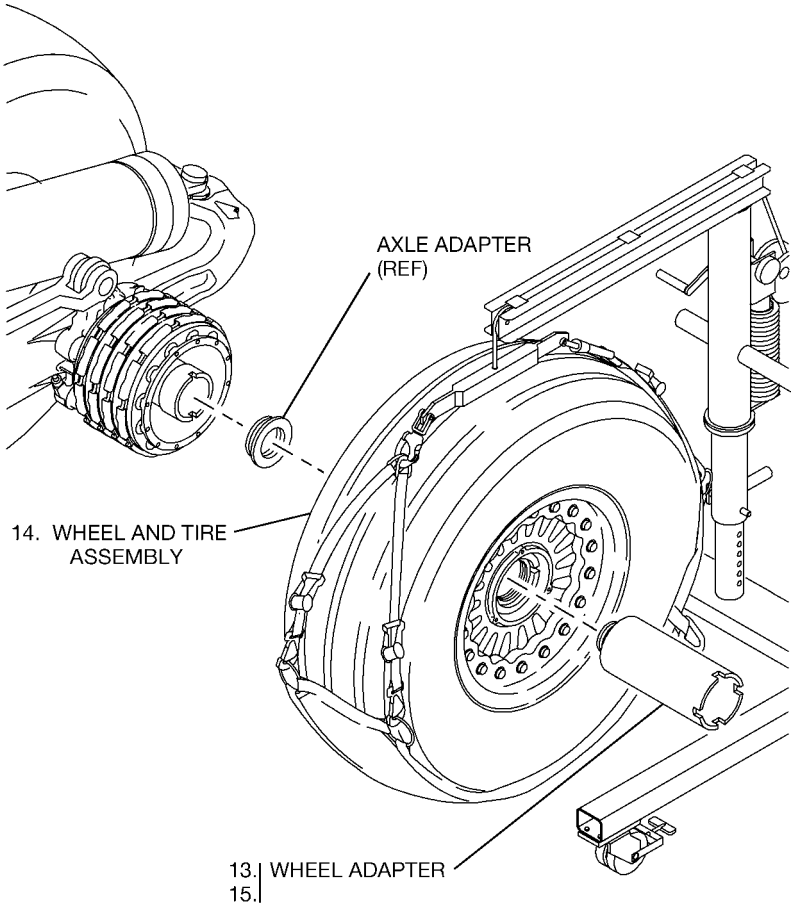
15. (A) Remove wheel adapter and axle adapter.

16. Deleted.

17. Deleted.

18. Deleted.

19. Deleted.



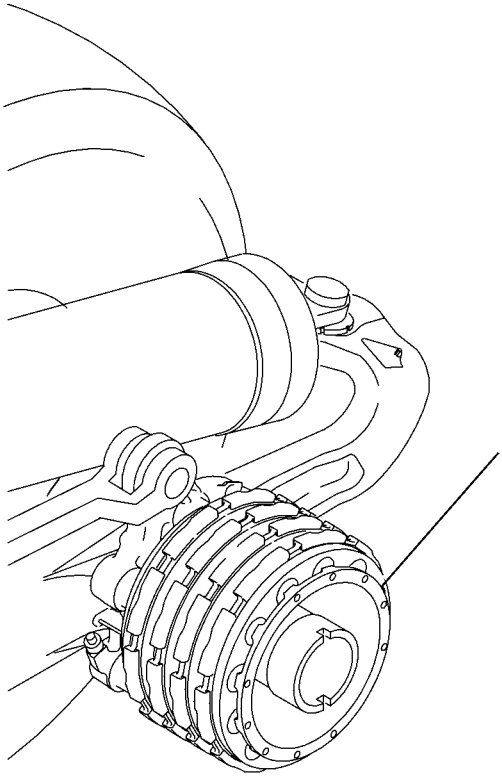
(TYPICAL)

ICN-88277-G3241043-003-01

20. ****IPI**** Perform main landing gear brake assembly inspection (TO 1C-17A-2-32JG-40-3, 32-43-10, task 6-2).

21. (A) Brake shall be properly positioned on the axle, by ensuring there is no gap between the brake inner bearing sleeve and the axle inner shoulder assembly.

22. Perform landing gear axle damage/limits and repair (TO 1C-17A-3-1, 32-00-00).



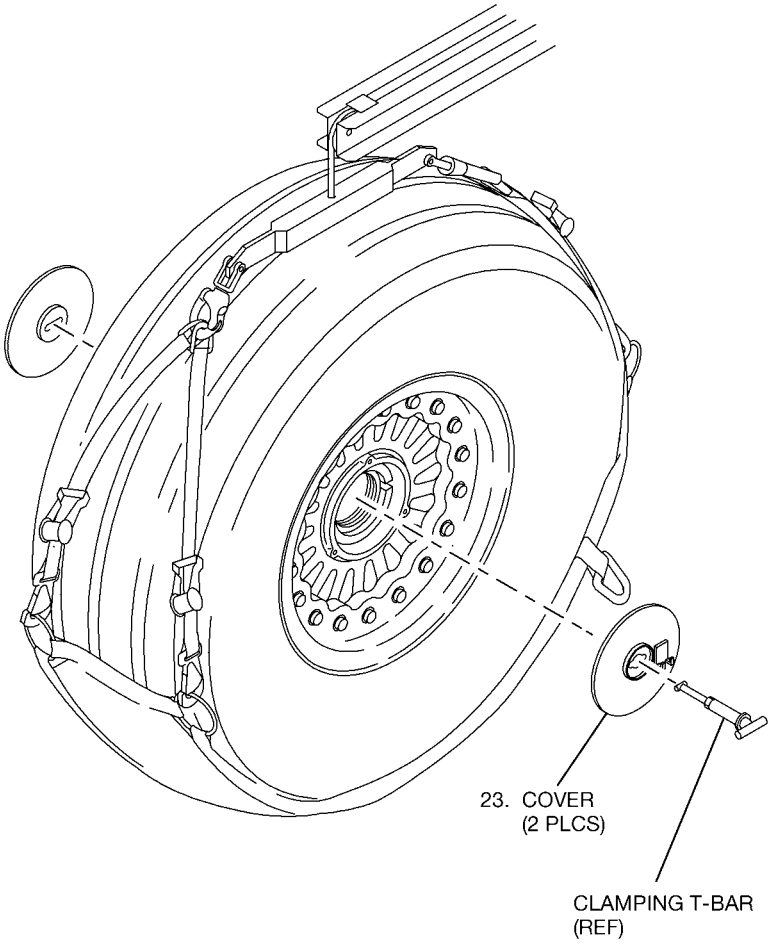
(TYPICAL)

ICN-88277-G3241054-002-01

NOTE

When wheel covers are not available, use of grease proof paper and tape may be used to ensure wheel bearing are protected against weather elements.

23. (A) Position covers and secure with clamping T-bar.



(TYPICAL)

ICN-88277-G3241044-003-01

MAIN LANDING GEAR WHEEL AND TIRE ASSEMBLY INSTALLATION (32-41-10-3)

FUNCTIONAL INPUT CONDITIONS:

Applicability:

	Task
All	All

Additional information:

This procedure consists of the following task:

3-1. Installation.

NOTE	Task
• This is a typical installation task for all main landing gear wheel and tire assemblies.	All
• This task contains In-Process Inspection (****IPI****) requirements.	All

Additional data:

	Task
TO 1C-17A-2-07JG-10-1	All
TO 1C-17A-2-07JG-10-2	All
TO 1C-17A-2-12JG-32-1	All
TO 4W-1-61	All

Personnel recommended:

	Task
Three	All

Person (A) performs task.

Person (B) assists person (A).

Person (C) assists person (A).

Safety conditions:

	Task
NA	--

Support equipment:

Nomenclature	PN	Specification	Qty	Task
Burnishing Tool	2755-009GT	--	1	All
Fixture, Hoist	17G130440-501	--	1	--
Adapter, Axle	17G131444-3	--	1	All
Adapter, Wheel	17G131444-33	--	1	All
Harness	17G131443-501	--	1	All
Strap, Adjustable	17G131443-55	--	4	All
Wrench	17G131444-37	--	1	All
Inflator Gauge, Pneumatic	M85352/5	--	1	All
Wrench, Spanner	17G130003-1	--	1	All
Wrench, Torque	--	(0-150 in-lb)	1	All
Wrench, Torque	--	(0-250 ft-lb)	1	All

Nomenclature	PN	Specification	Qty	Task
Wrench, Torque	--	(0-600 ft-lb)	1	All

Supplies:

Nomenclature	PN	Specification	Qty	Task
Grease, Aircraft	--	MIL-PRF-81322	AR	All
Wire, Safety	900010-32C	--	AR	All

3-1. INSTALLATION.

NOTE

When the hoist fixture is not available, the wheel and tire assembly may be installed manually. This can be accomplished using three persons; two persons supporting/removing the wheel and tire assembly and the third person carefully guiding the wheel and tire assembly onto axle.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″Functional Input Conditions″ page for task specific safety conditions.

3. Ensure that Main Landing Gear (MLG) wheel tire counter has proper date stamp. Mark counter, as required, per (TO 4W-1-61).

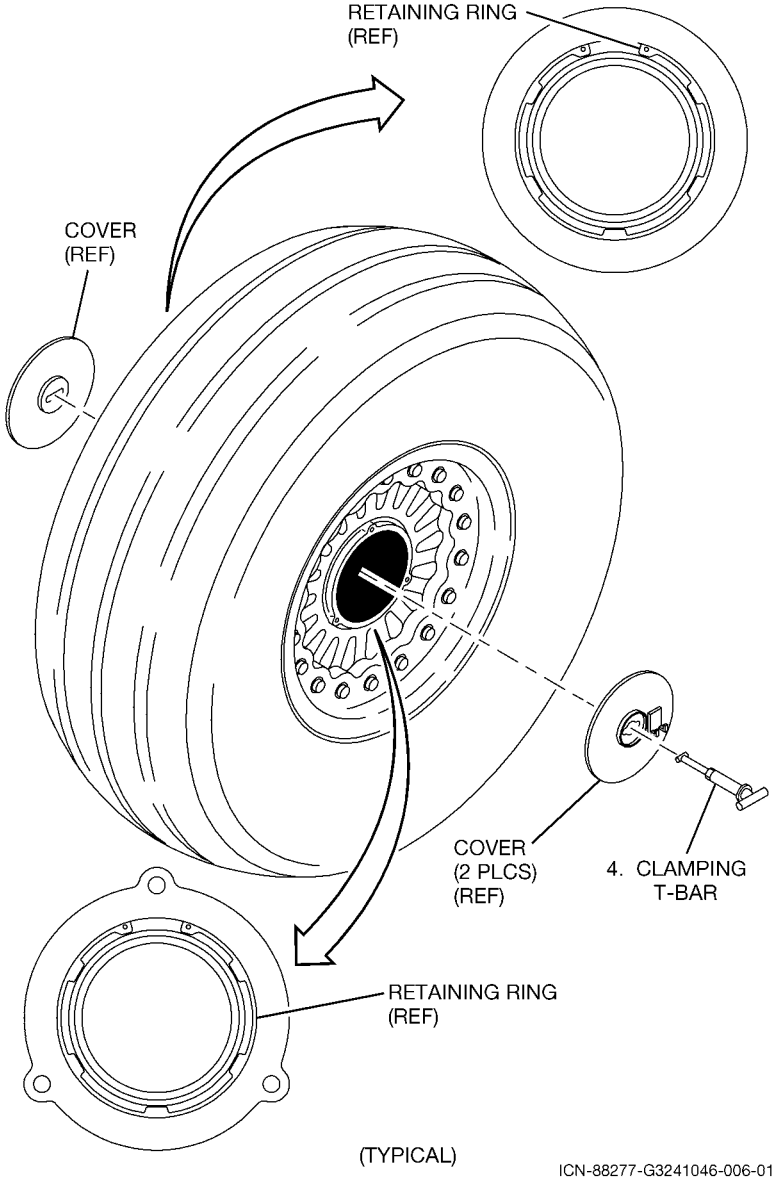
CAUTION

Ensure inboard and outboard bearing/seal retaining rings are installed. Failure to comply may cause damage to aircraft.

NOTE

When applicable, remove grease proof paper and tape.

4. (A) Remove clamping T-bar and covers.


RETAINING RING
(REF)
COVER
(REF)
COVER
(2 PLCS)
(REF)
4. CLAMPING
T-BAR
RETAINING RING
(REF)
(TYPICAL)
ICN-88277-G3241046-006-01

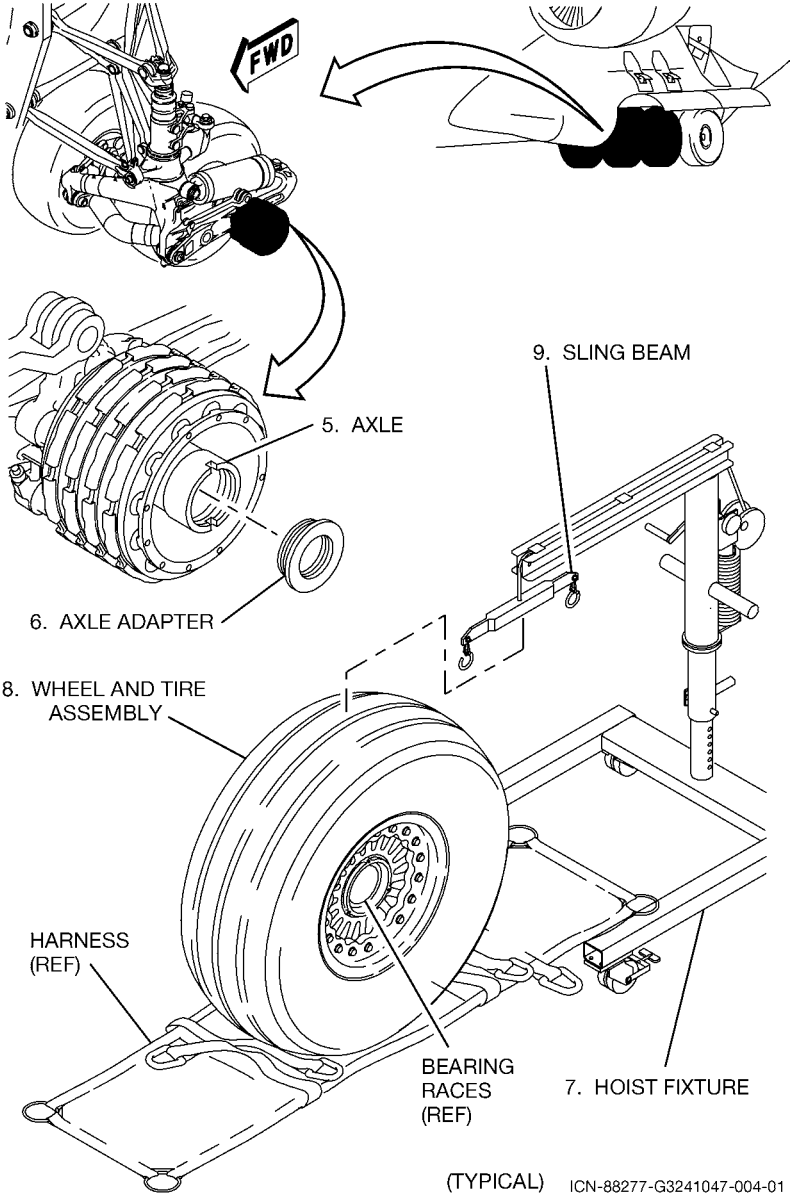
5. (A) Lubricate axle and bearing races with aircraft grease.

6. (A) Install axle adapter.

7. (A) Position hoist fixture.

8. (A) Position and center wheel and tire assembly in harness.

9. (A) Lower sling beam to rest on top of wheel and tire assembly.


FWD
9. SLING BEAM
5. AXLE
6. AXLE ADAPTER
8. WHEEL AND TIRE ASSEMBLY
HARNESS (REF)
BEARING RACES (REF)
7. HOIST FIXTURE
(TYPICAL)
ICN-88277-G3241047-004-01

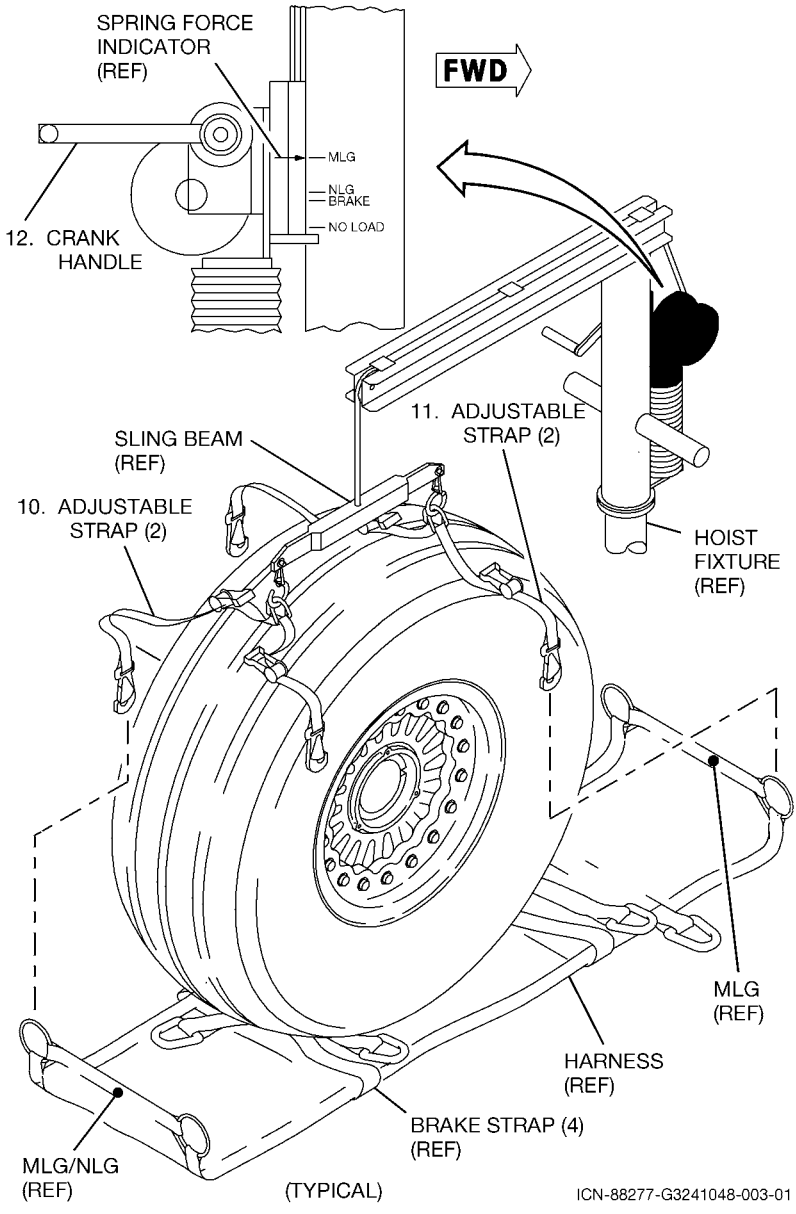
10. (A) Attach adjustable straps from **MLG/NLG** on harness to sling beam on hoist fixture and adjust for proper fit.

11. (A) Fold **BRAKE** straps between tire and harness; attach adjustable straps from **MLG** on harness to sling beam on hoist fixture and adjust for proper fit.

CAUTION

Ensure hoist fixture cable is on pulley prior to applying tension to cable. Failure to comply may cause damage to equipment.

12. (A) Operate crank handle until the wheel hub and axle are centered and spring force indicator indicates **MLG**.


SPRING FORCE INDICATOR (REF)
MLG
NLG BRAKE
NO LOAD
12. CRANK HANDLE
FWD
11. ADJUSTABLE STRAP (2)
SLING BEAM (REF)
10. ADJUSTABLE STRAP (2)
HOIST FIXTURE (REF)
MLG (REF)
HARNESS (REF)
BRAKE STRAP (4) (REF)
MLG/NLG (REF)
(TYPICAL)
ICN-88277-G3241048-003-01

13. (A) Lubricate and install wheel adapter through wheel and tire assembly into axle adapter.

WARNING

Do not align brakes with hands or fingers. Failure to comply may cause injury to personnel.

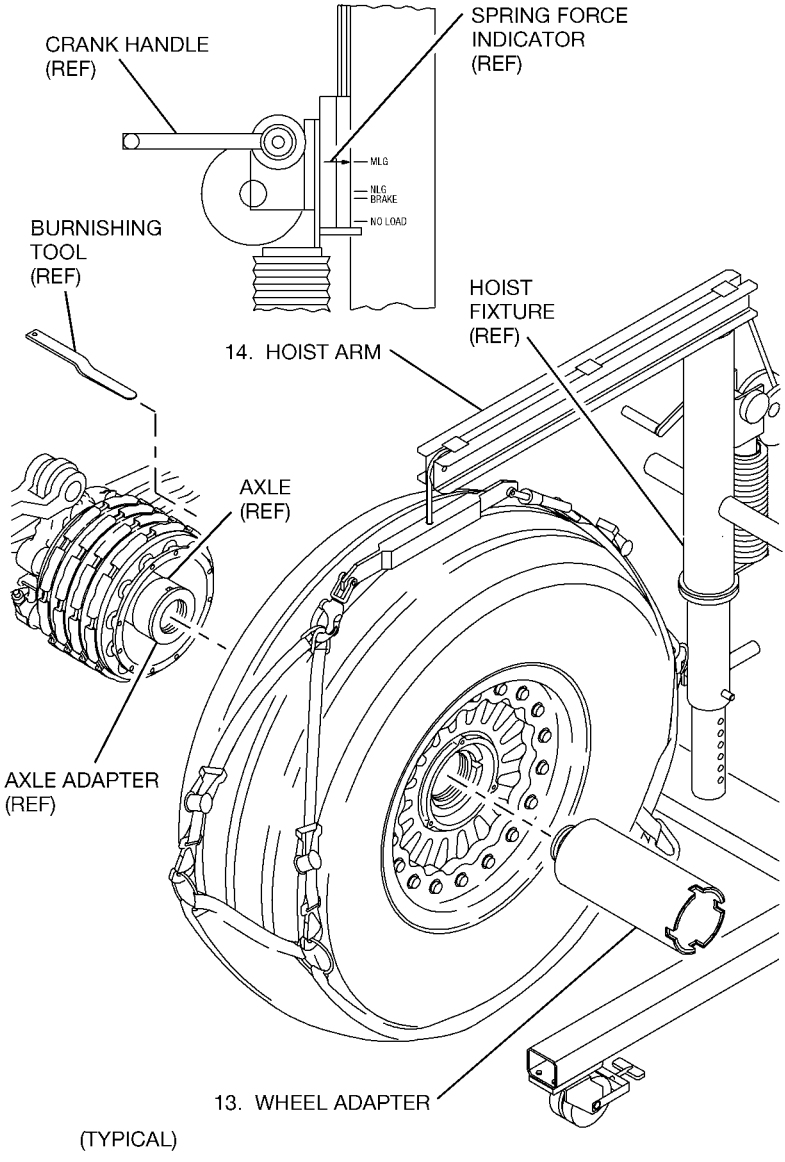
CAUTION

- Ensure proper use of hoist fixture and maintenance procedures are used. Failure to comply may cause damage to equipment.
- Ensure spring force indicator always points to **MLG** during installation. Failure to comply may cause damage axle.

NOTE

For center MLG wheel and tire installation, position hoist fixture against inboard wheel.

14. (A,B,C) Slowly swing hoist arm and maneuver hoist fixture while moving wheel and tire assembly onto axle while aligning brakes using burnishing tool while keeping spring force indicator pointing to **MLG**.



ICN-88277-G3241049-003-01

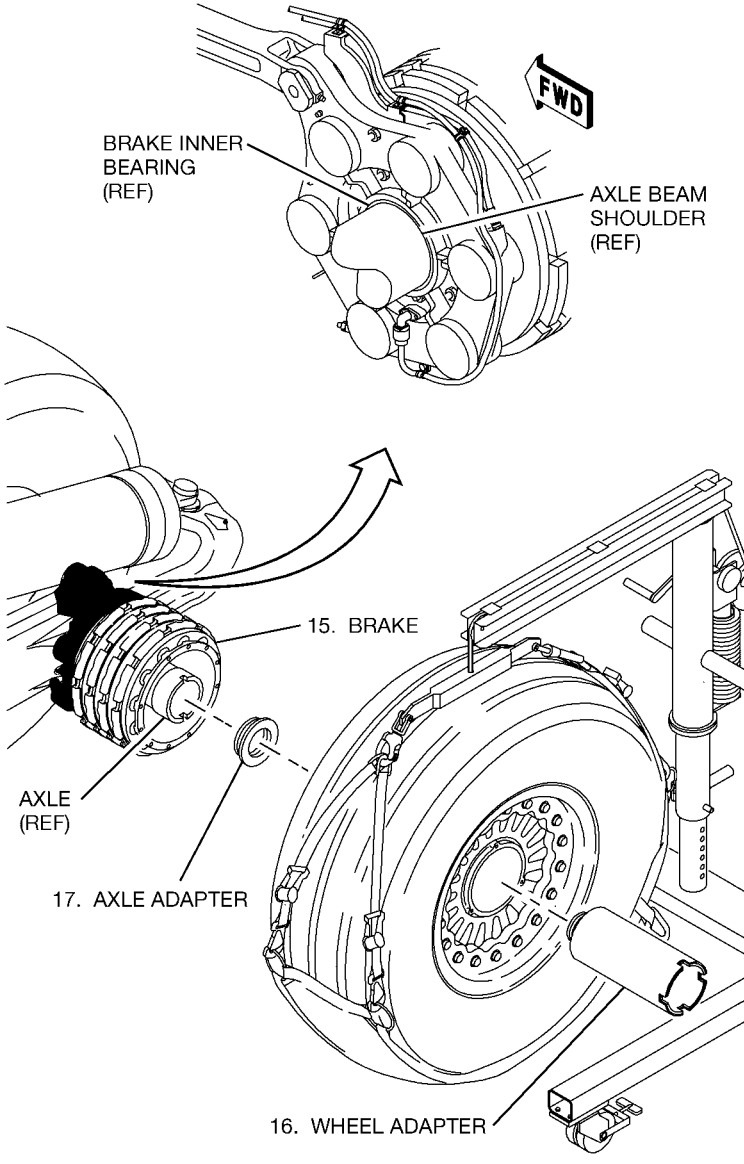
CAUTION

Incorrect brake position can be indicated by a visible gap between brake inner bearing and axle beam shoulder area. Correct the condition before continuing or damage to the aircraft axle could occur. Failure to comply may cause damage to aircraft.

15. (A) Ensure brake is properly seated and is not seized on the axle.

16. (A) Remove wheel adapter from axle adapter.

17. (A) Remove axle adapter using wrench (PN 17G131444-37).



ICN-88277-G3241050-003-01

18. (A) Lubricate axle nut threads with aircraft grease.

CAUTION

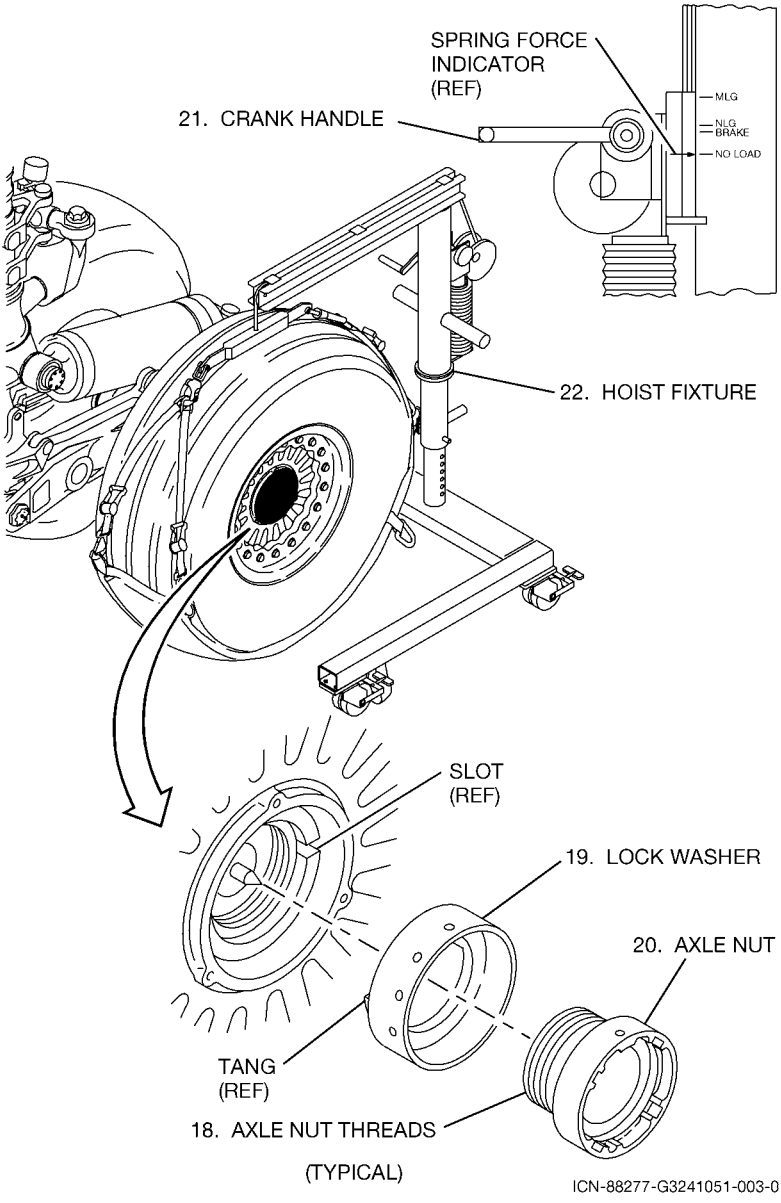
Ensure the two positioning tangs of the lock washer engage into the two slots in the axle. The tangs are fully engaged into the axle slots when there is no rotational movement, clockwise or counterclockwise, between the lock washer and the axle. Failure to comply may cause damage to equipment.

19. ****IPI**** (A,B,C) Install lock washer onto axle. Ensure washer tangs are inserted into axle slots.

20. (A) Install and hand tighten axle nut while holding lock washer engaged with axle.

21. (A) Operate crank handle until spring force indicator indicates **NO LOAD**.

22. (A) Remove hoist fixture.


SPRING FORCE
INDICATOR
(REF)
MLG
NLG
BRAKE
NO LOAD
21. CRANK HANDLE
22. HOIST FIXTURE
SLOT
(REF)
19. LOCK WASHER
20. AXLE NUT
TANG
(REF)
18. AXLE NUT THREADS
(TYPICAL)
ICN-88277-G3241051-003-01

23. ****IPI**** (A,B,C) Torque axle nut **350-400 ft-lb** while rotating wheel and tire assembly in opposite direction of torquing.

24. (A) Loosen axle nut 1/4 turn.

NOTE

When axle nut lock bolt hole does not align with hole in lock washer after torquing, axle nut may be turned clockwise to nearest hole.

25. ****IPI**** (A,B,C) Install lock bolt, washer, and nut.

26. ****IPI**** (A,B,C) Apply reverse torque (counterclockwise) of **425 ft-lb** to axle nut.

- Axle nut shall not rotate - If axle nut rotates during reverse torque, tangs may not be engaged, correct condition before continuing.

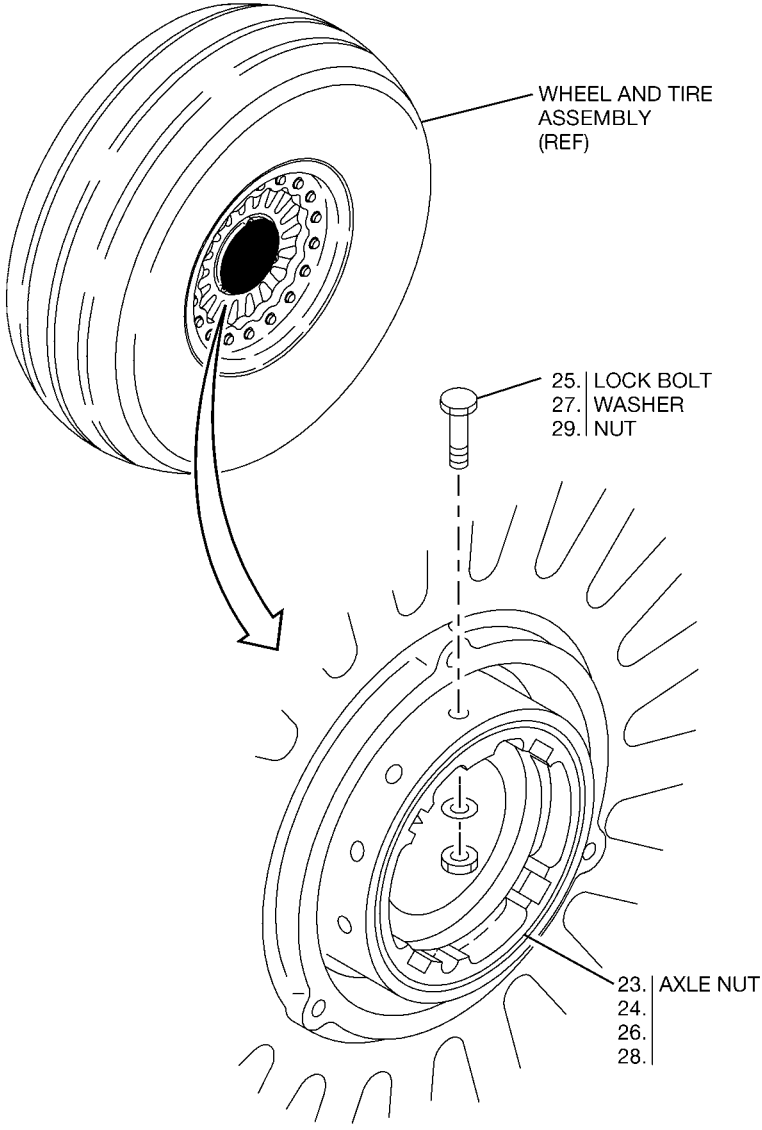
27. (A,B,C) Remove lock bolt, washer, and nut.

28. ****IPI**** (A,B,C) Torque axle nut **225 ft-lb** while rotating wheel and tire assembly in opposite direction of torquing.

NOTE

When axle nut lock bolt hole does not align with hole in lock washer after torquing, axle nut may be turned clockwise to nearest hole.

29. ****IPI**** (A,B,C) Install lock bolt, washer, and nut with head of bolt facing exterior side of axle nut and washer.



ICN-88277-G3241052-003-01

CAUTION

Properly aligned hubcap should have an outward spring force preventing it from being seated flush against the wheel. Failure to comply may cause damage to aircraft.

NOTE

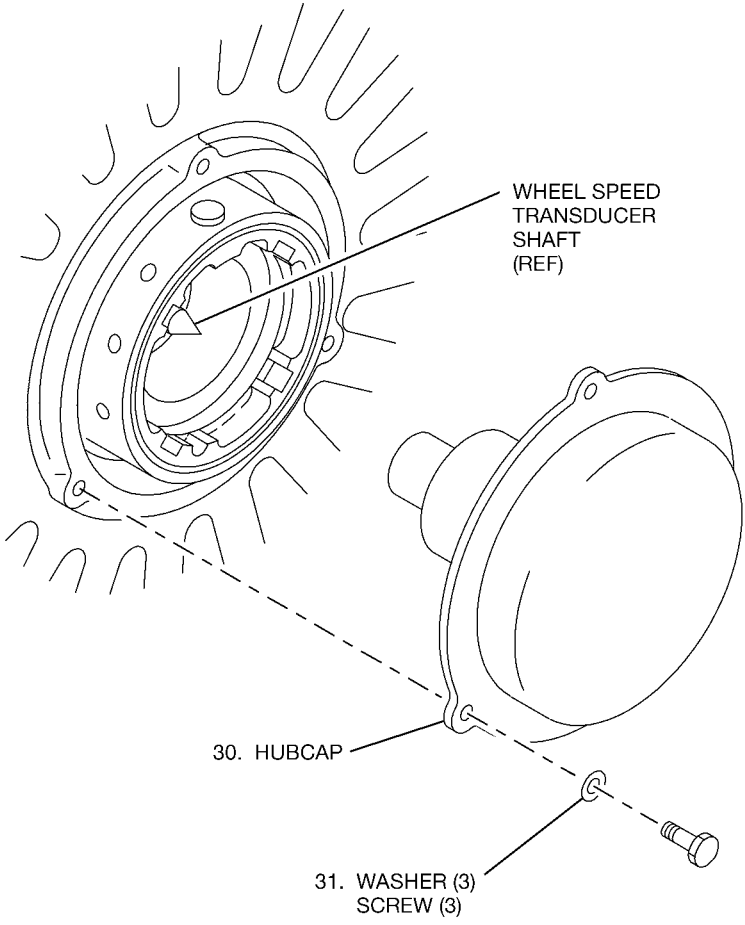
Hubcap assembly and its mating surface shall be free of grease and dirt prior to installation.

30. (A) Position hubcap over wheel speed transducer shaft.

31. (A) Install washers and screws; torque **25-30 in-lbs** and secure with safety wire.

32. Perform aircraft tire servicing (12-32-03).

33. Perform integral jacking - checklist (07-12-01, task 01-4) or complete fuselage jacking checklist (07-11-02, task 02-5 or 02-6 and 02-7).



(TYPICAL)

ICN-88277-G3241053-003-01

MAIN LANDING GEAR HUBCAP ASSEMBLY (32-41-11)

MASTER INPUT CONDITIONS:

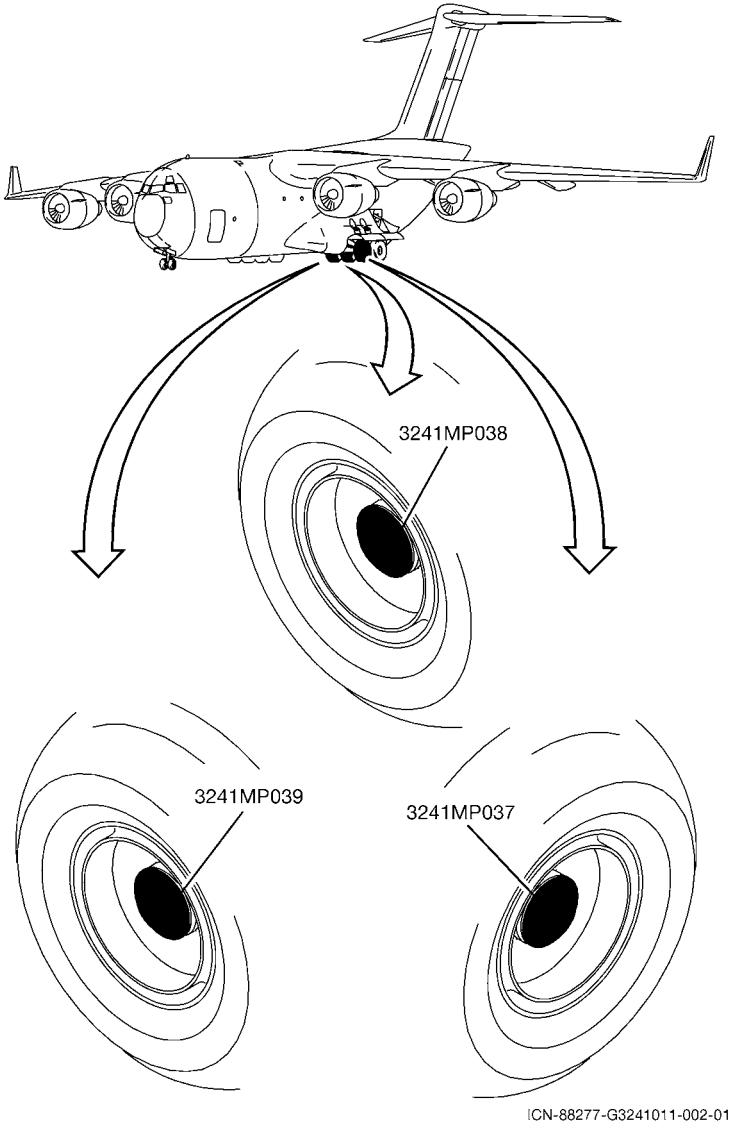
Reference designators:

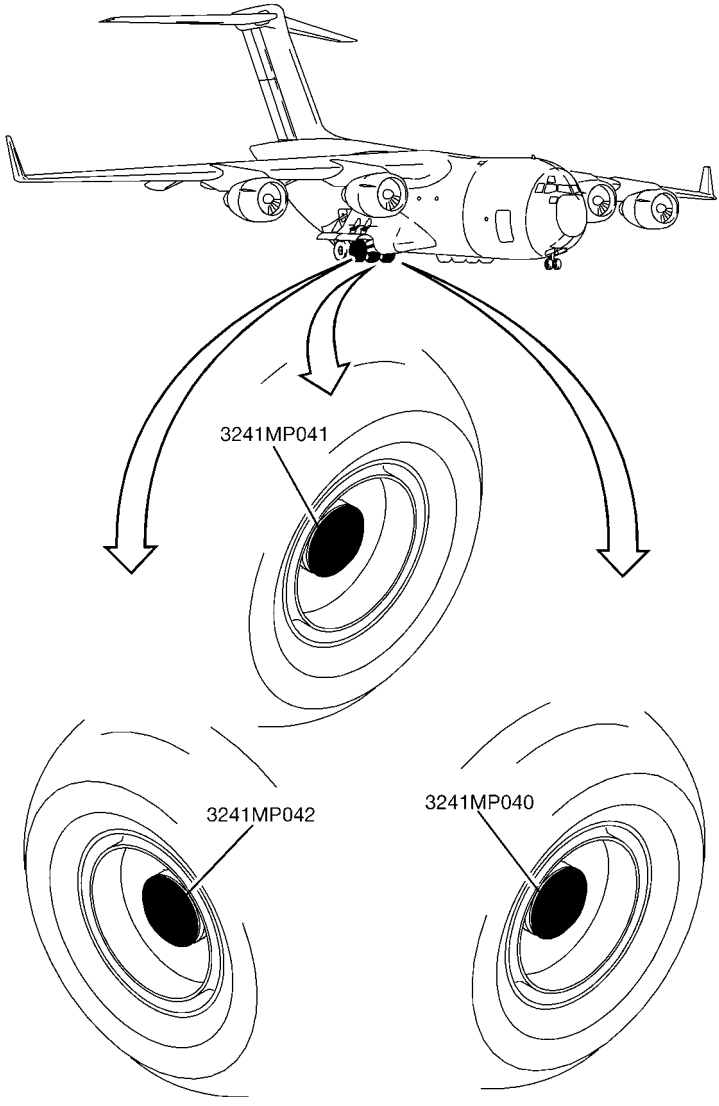
3241MP037	Left Forward Main Landing Gear Outboard Hubcap Assembly
3241MP038	Left Forward Main Landing Gear Center Hubcap Assembly
3241MP039	Left Forward Main Landing Gear Inboard Hubcap Assembly
3241MP040	Right Forward Main Landing Gear Inboard Hubcap Assembly
3241MP041	Right Forward Main Landing Gear Center Hubcap Assembly
3241MP042	Right Forward Main Landing Gear Outboard Hubcap Assembly
3241MP043	Left Aft Main Landing Gear Outboard Hubcap Assembly
3241MP044	Left Aft Main Landing Gear Center Hubcap Assembly
3241MP045	Left Aft Main Landing Gear Inboard Hubcap Assembly
3241MP046	Right Aft Main Landing Gear Inboard Hubcap Assembly
3241MP047	Right Aft Main Landing Gear Center Hubcap Assembly
3241MP048	Right Aft Main Landing Gear Outboard Hubcap Assembly

Applicable functions:

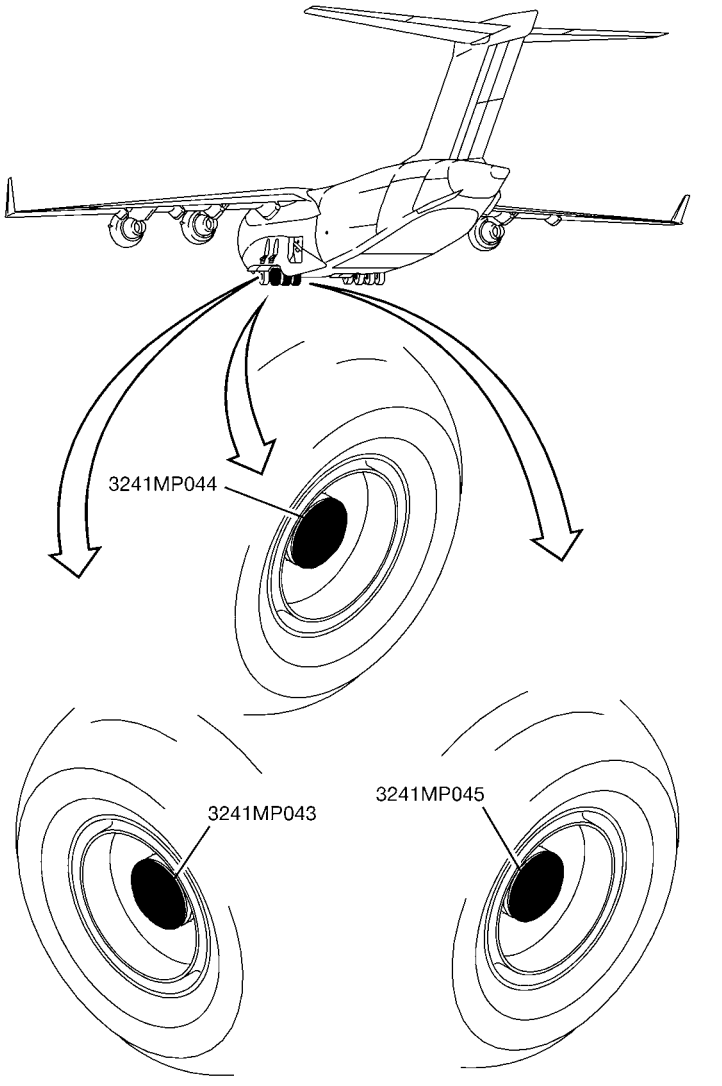
-2 Removal.
-3 Installation.
-4 Repair.

Access data:

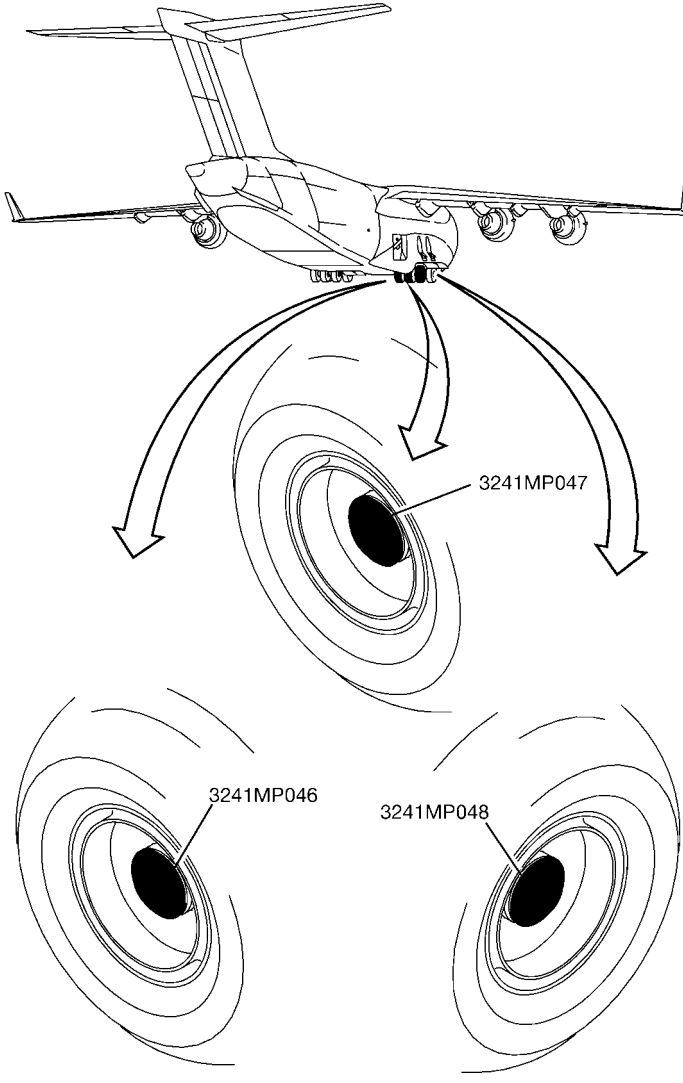




ICN-88277-G3241012-002-01



ICN-88277-G3241015-002-01



ICN-88277-G3241016-002-01

MAIN LANDING GEAR HUBCAP ASSEMBLY REMOVAL (32-41-11-2)

FUNCTIONAL INPUT CONDITIONS:

Applicability:

	Task
All	All

Additional information:

This procedure consists of the following task:

2-1. Removal.

	Task
NOTE	
This is a typical removal task for all main landing gear hubcap assemblies.	All

Additional data:

	Task
NA	--

Personnel recommended:

	Task
One	All

Safety conditions:

	Task
NA	--

Support equipment:

Nomenclature	PN	Specification	Qty	Task
NA	--	--	--	--

Supplies:

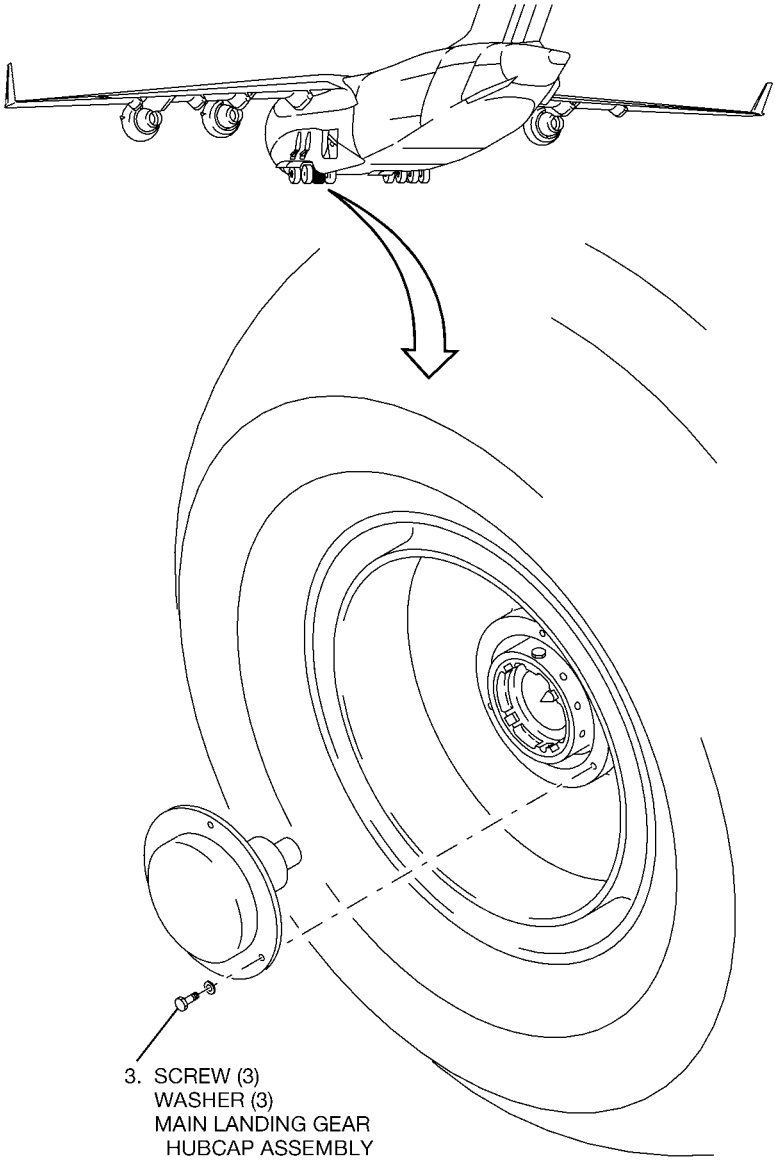
Nomenclature	PN	Specification	Qty	Task
NA	--	--	--	--

2-1. REMOVAL.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″Functional Input Conditions″ page for task specific safety conditions.

3. Remove safety wire, screws, washers, and main landing gear hubcap assembly.


3. SCREW (3)
WASHER (3)
MAIN LANDING GEAR
HUBCAP ASSEMBLY
(TYPICAL)
ICN-88277-G3241013-003-01

MAIN LANDING GEAR HUBCAP ASSEMBLY INSTALLATION (32-41-11-3)

FUNCTIONAL INPUT CONDITIONS:

Applicability:

	Task
All	All

Additional information:

This procedure consists of the following task:

3-1. Installation.

NOTE	Task
This is a typical installation task for all main landing gear hubcap assemblies.	All

Additional data:

	Task
NA	--

Personnel recommended:

	Task
One	All

Safety conditions:

	Task
NA	--

Support equipment:

Nomenclature	PN	Specification	Qty	Task
NA	--	--	--	--

Supplies:

Nomenclature	PN	Specification	Qty	Task
Wire, Safety	900010-32C	--	AR	All

3-1. INSTALLATION.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″Functional Input Conditions″ page for task specific safety conditions.

CAUTION

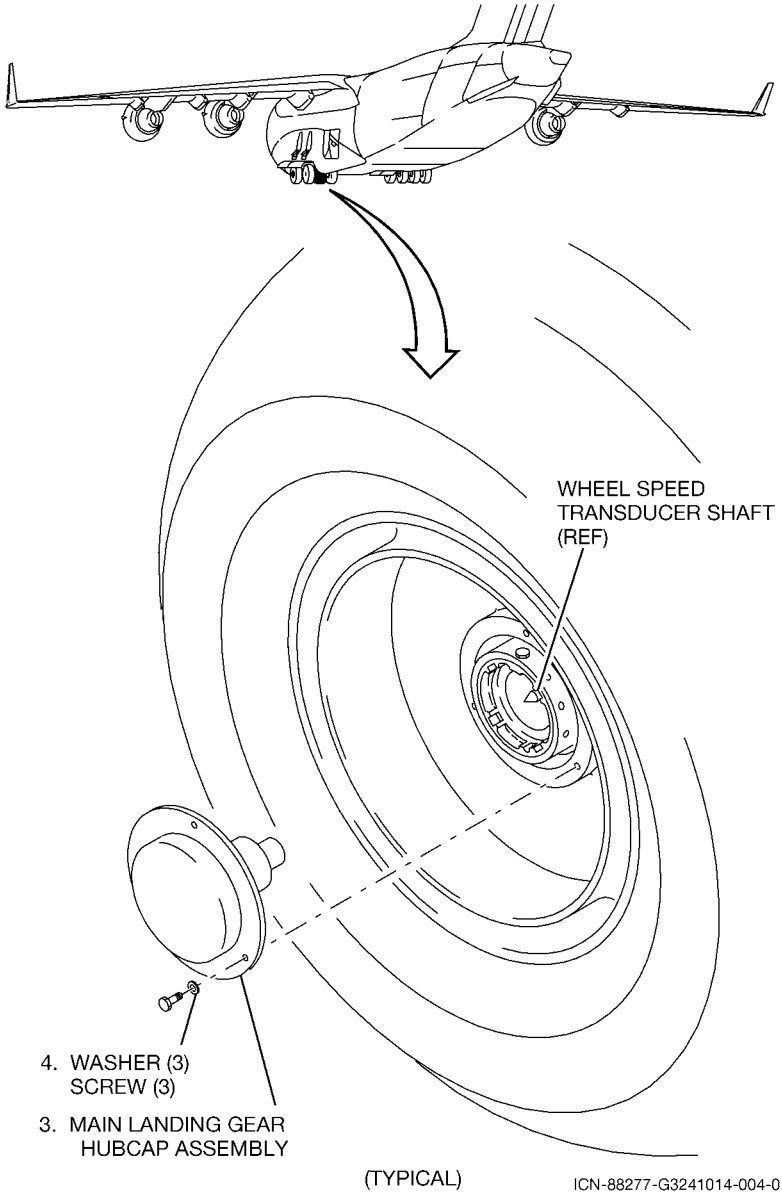
Properly aligned hubcap should have an outward spring force preventing it from being seated flush against the wheel. Failure to comply may cause damage to aircraft.

NOTE

Hubcap assembly and its mating surface on the wheel shall be free of grease and dirt prior to installation.

3. Position main landing gear hubcap assembly over wheel speed transducer shaft.

4. Install washers and screws; torque **25-30 in-lbs** and secure with safety wire.


WHEEL SPEED
TRANSDUCER SHAFT
(REF)
4. WASHER (3)
SCREW (3)
3. MAIN LANDING GEAR
HUBCAP ASSEMBLY
(TYPICAL)
ICN-88277-G3241014-004-01

MAIN LANDING GEAR HUBCAP ASSEMBLY REPAIR (32-41-11-4)

FUNCTIONAL INPUT CONDITIONS:

Applicability:

	Task
All	All

Additional information:

This procedure consists of the following task:

4-1. Repair main landing gear hubcap assembly by replacing drive coupling/hubcap.

	Task
NOTE This is a typical repair task for all main landing gear hubcap assemblies.	All

Additional data:

	Task
NA	--

Personnel recommended:

	Task
One	All

Safety conditions:

	Task
NA	--

Support equipment:

Nomenclature	PN	Specification	Qty	Task
Wrench, Torque	--	(0-50 in-lb)	1	All

Supplies:

Nomenclature	PN	Specification	Qty	Task
Plate, Identification	140-11153-1	--	1	All
Wire, Safety	900010-32C	--	AR	All
Wire, Safety	MS20995C20	--	AR	All

4-1. REPAIR MAIN LANDING GEAR HUBCAP ASSEMBLY BY REPLACING DRIVE COUPLING/HUBCAP.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″Functional Input Conditions″ page for task specific safety conditions.

3. Remove safety wire, screws, washers, and main landing gear hubcap assembly.

4. Remove safety wire, screws, and drive coupling.

5. Remove screws and identification plate.

6. Position identification plate on new hubcap and install screws.

7. Position drive coupling on hubcap and install screws; torque **35-45 in-lb** and secure with safety wire (PN MS20995C20).

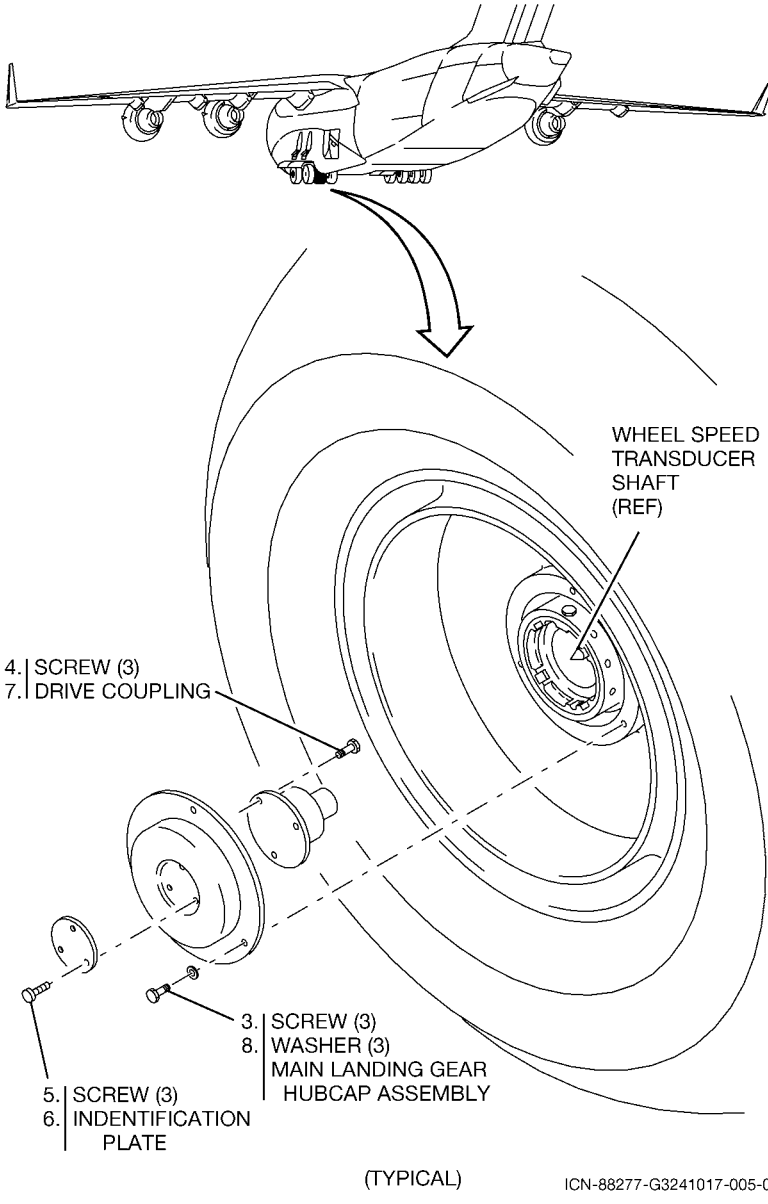
CAUTION

Properly aligned hubcap should have an outward spring force preventing it from being seated flush against the wheel. Failure to comply may cause damage to aircraft.

NOTE

Hubcap assembly and its mating surface on the wheel shall be free of grease and dirt prior to installation.

8. Position hubcap over wheel speed transducer shaft and install washers and screws; torque **25-30 in-lb** and secure with safety wire (PN 900010-32C).


WHEEL SPEED TRANSDUCER SHAFT (REF)
4. SCREW (3)
7. DRIVE COUPLING
3. SCREW (3)
8. WASHER (3)
MAIN LANDING GEAR HUBCAP ASSEMBLY
5. SCREW (3)
6. INDENTIFICATION PLATE
(TYPICAL)
ICN-88277-G3241017-005-01

NOSE LANDING GEAR WHEEL AND TIRE ASSEMBLY (32-42-10)

MASTER INPUT CONDITIONS:

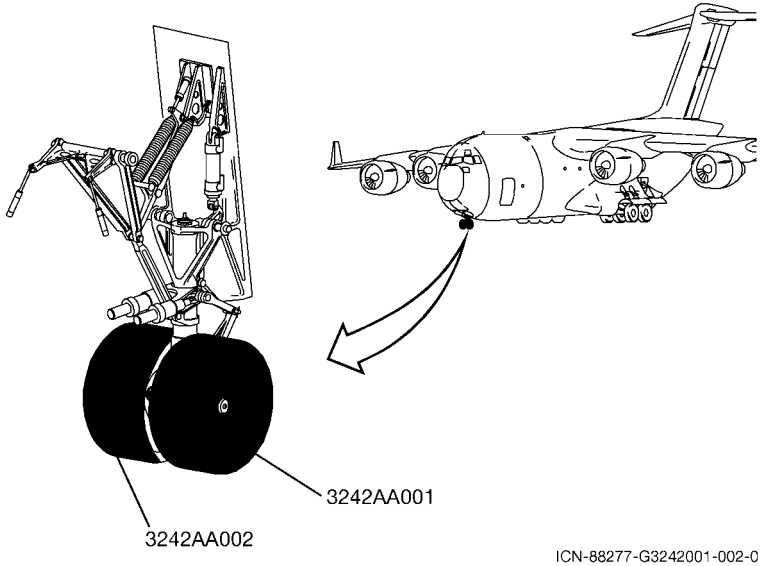
Reference designators:

3242AA001	Left Nose Landing Gear Wheel and Tire Assembly
3242AA002	Right Nose Landing Gear Wheel and Tire Assembly

Applicable functions:

-2 Removal.
-3 Installation.

Access data:



ICN-88277-G3242001-002-01

NOSE LANDING GEAR WHEEL AND TIRE ASSEMBLY REMOVAL (32-42-10-2)

FUNCTIONAL INPUT CONDITIONS:

Applicability:

	Task
All	All

Additional information:

This procedure consists of the following tasks:

2-1. Preparation.
2-2. Removal using hoist fixture.
2-3. Removal using rhino jack.

NOTE	Task
This is a typical removal task for all nose landing gear wheel and tire assemblies.	All

Additional data:

	Task
TO 1C-17A-2-07JG-10-1	2-1
TO 1C-17A-2-07JG-10-2	2-1
TO 1C-17A-3-1	2-2, 2-3

Personnel recommended:

	Task
One	2-1, 2-2
Three	2-3

Person (A) performs task.

Person (B) assists person (A).

	Task
Person (C) assists person (A).	

Safety conditions:

	Task
NA	--

Support equipment:

Nomenclature	PN	Specification	Qty	Task
Adapter, Axle	17G130044-1	--	1	2-2, 2-3
Cover, Wheel Bearing	17G133457-1	--	1	2-2, 2-3
Fixture, Hoist	17G130440-501	--	1	--
Harness	17G131443-501	--	1	2-2
Strap, Adjustable	17G131443-55	--	4	2-2
Tool, Palmer Safe Core Valve	968RB	--	1	2-2

Supplies:

Nomenclature	PN	Specification	Qty	Task
Grease, Aircraft	--	MIL-PRF-81322	AR	2-2, 2-3

Nomenclature	PN	Specification	Qty	Task
Paper, Grease Proof	--	MIL-B-121B	AR	2-2, 2-3
Tape	7510-00-266-6711	--	AR	2-2, 2-3

2-1. PREPARATION.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″Functional Input Conditions″ page for task specific safety conditions.

WARNING

Remove one wheel and tire assembly at a time in the event that axle jack fails. Failure to comply may cause injury to personnel and damage to aircraft.

NOTE

- Ensure nose landing gear is jacked to a height of 4 inches.

- If aircraft is to be raised by fuselage jacks proceed to step 4.

3. Perform nose landing gear axle jacking - checklist (07-12-02, task 02-1).

4. Perform forward fuselage jacking checklist (07-11-01) or complete fuselage jacking checklist (07-11-02).

2-2. REMOVAL USING HOIST FIXTURE.

NOTE

- When the hoist fixture is not available, the wheel and tire assembly may be removed manually. This can be accomplished using three persons; two persons supporting/removing the wheel and tire assembly and the third person carefully guiding the wheel and tire assembly off axle.

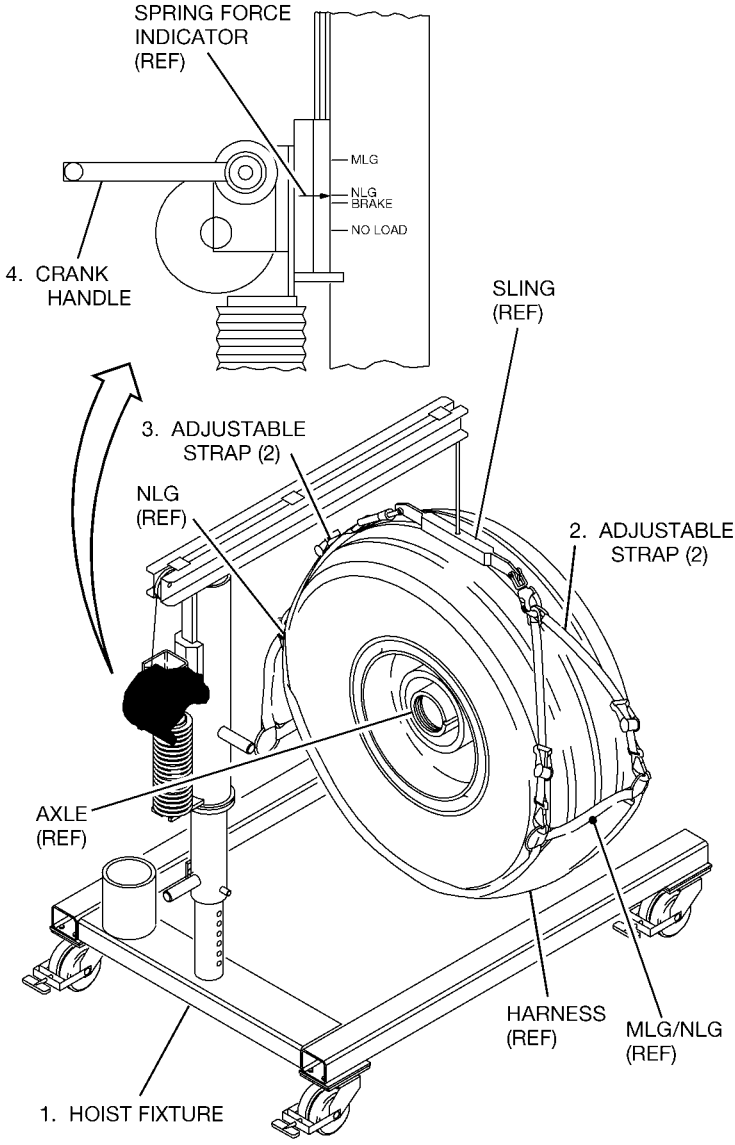
- Tire does not need to be deflated to 0 psi when wheel and tire assembly is going to be removed for other maintenance and same wheel and tire assembly is going to be installed.

1. Position hoist fixture.

2. Attach adjustable straps from **MLG/NLG** on harness to sling beam on hoist fixture and adjust for proper fit.

3. Fold harness **BRAKE** straps between harness and tire; attach adjustable straps from **NLG** on harness to sling beam on hoist fixture and adjust for proper fit.

4. Operate crank handle until spring force indicator indicates **NLG**.



ICN-88277-G3242028-006-01

WARNING

- Tire pressure shall be deflated to 0 psi prior to wheel and tire leaving vicinity. Failure to comply may cause injury to personnel and damage to aircraft.

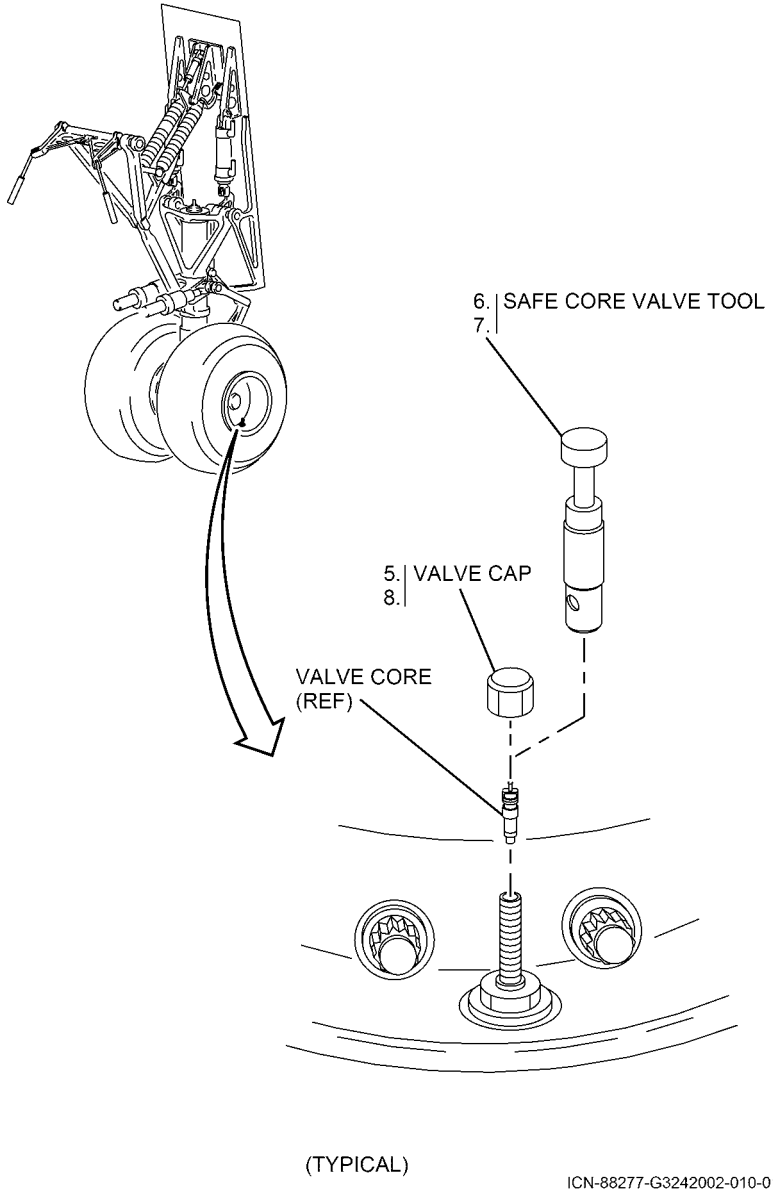
- Proper eye protection must be utilized. Failure to comply may cause injury to personnel.

5. Remove valve cap from valve stem.

6. Using safe core valve tool, loosen valve core to deflate wheel and tire assembly to 0 psi.

7. Remove safe core valve tool and valve core.

8. Install valve cap on valve stem.



(TYPICAL)

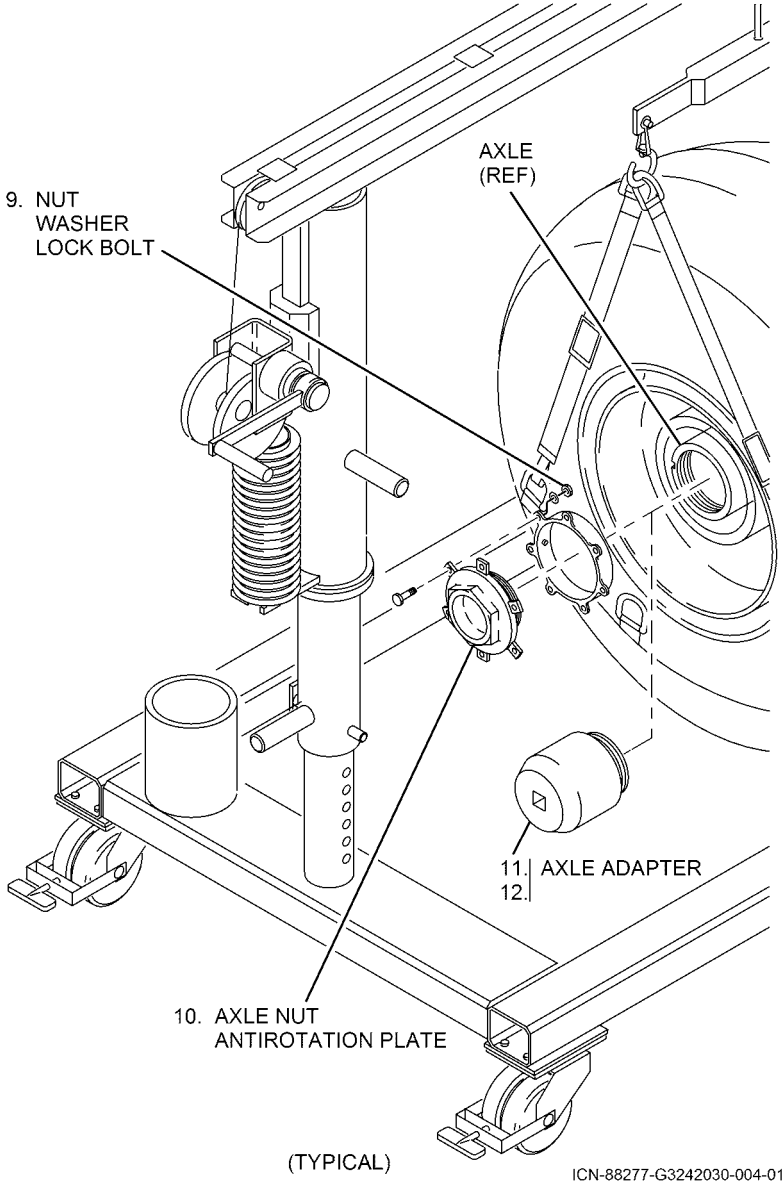
ICN-88277-G3242002-010-01

9. Remove nut, washer, and lock bolt.

10. Remove axle nut and antirotation plate.

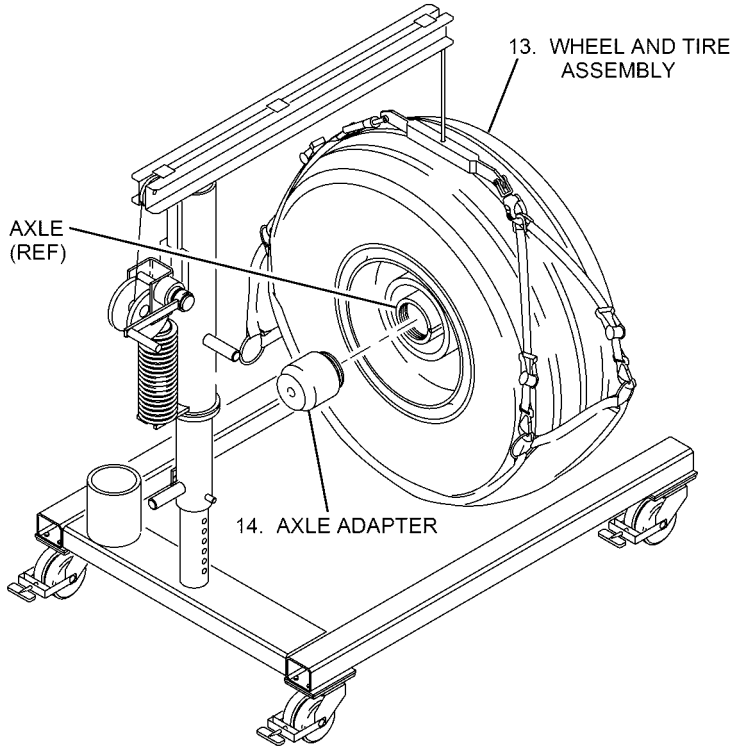
11. Install axle adapter on axle.

12. Lubricate axle adapter with light coat of aircraft grease.


AXLE
(REF)
9. NUT
WASHER
LOCK BOLT
11.
12.
AXLE ADAPTER
10. AXLE NUT
ANTIROTATION PLATE
(TYPICAL)
ICN-88277-G3242030-004-01

13. Remove wheel and tire assembly from axle.

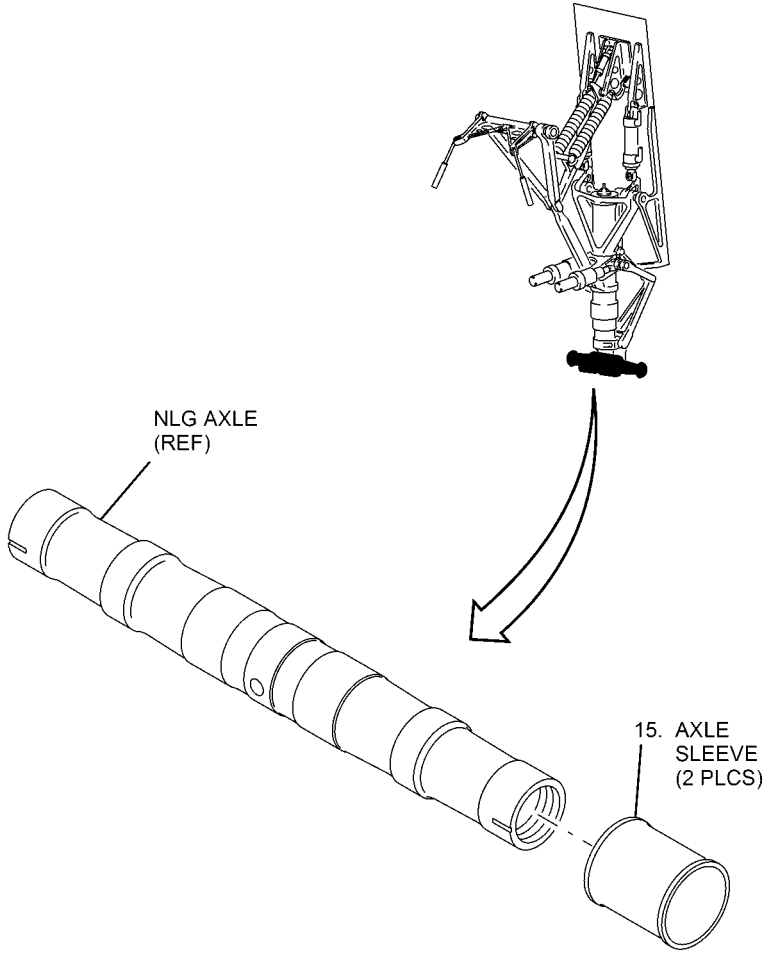
14. Remove axle adapter.



(TYPICAL)

ICN-88277-G3242032-004-01

15. Remove axle sleeve.



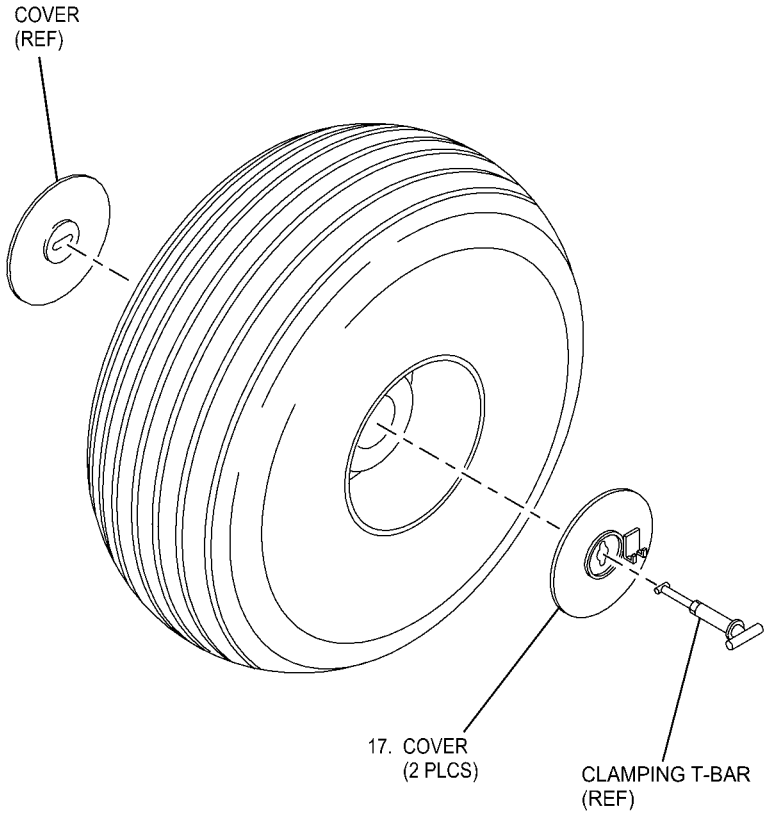
ICN-88277-G3242034-003-01

16. Perform landing gear axle damage/wear limits and repair (TO 1C-17A-3-1, 32-00-00).

NOTE

When wheel covers are not available, use of grease proof paper and tape may be used to ensure wheel bearings are protected against weather elements.

17. Position covers and secure with clamping T-bar.



ICN-88277-G3242019-004-01

2-3. REMOVAL USING RHINO JACK.

NOTE

- When using Rhino jack, wheel and tire assembly shall be removed manually. This shall be accomplished using three persons; two persons supporting and removing wheel and tire assembly and third person carefully guiding the wheel and tire assembly off axle.

- Tire does not need to be deflated to 0 psi when wheel and tire assembly is going to be removed for other maintenance and same wheel and tire assembly is going to be installed.

1. (A) Remove nut, washer, and lock bolt.

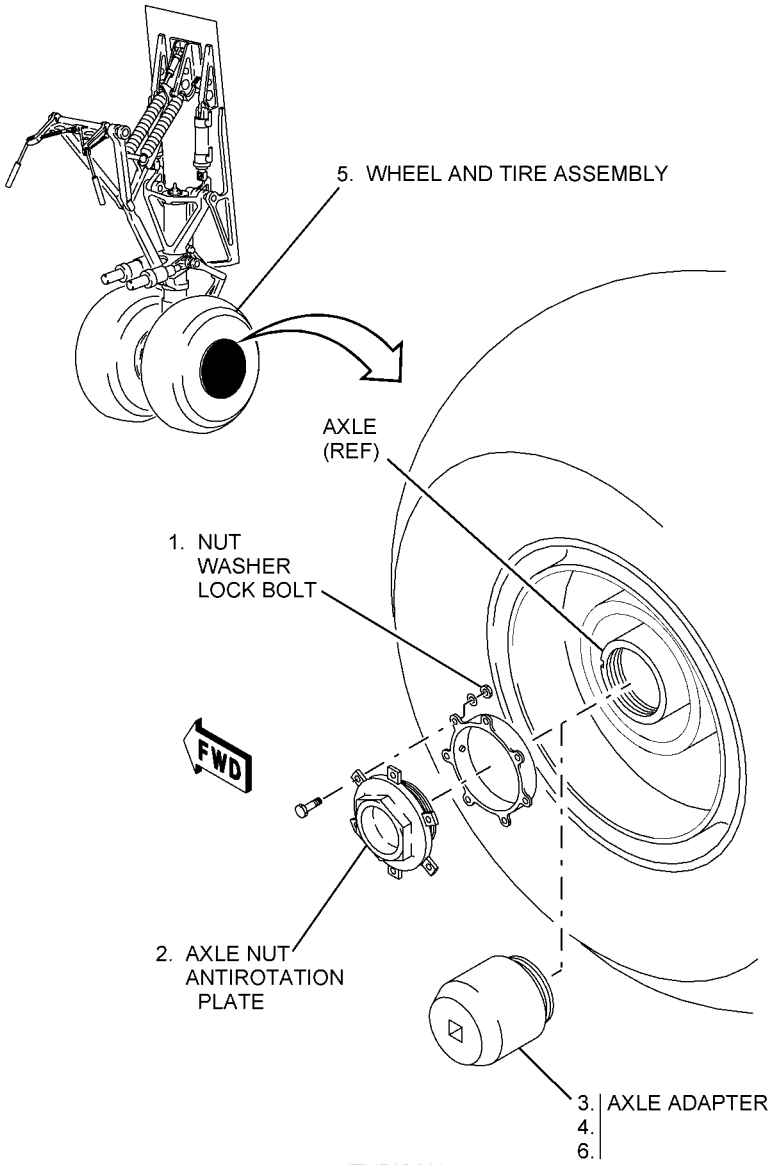
2. (A) Remove axle nut and antirotation plate.

3. (A) Install axle adapter.

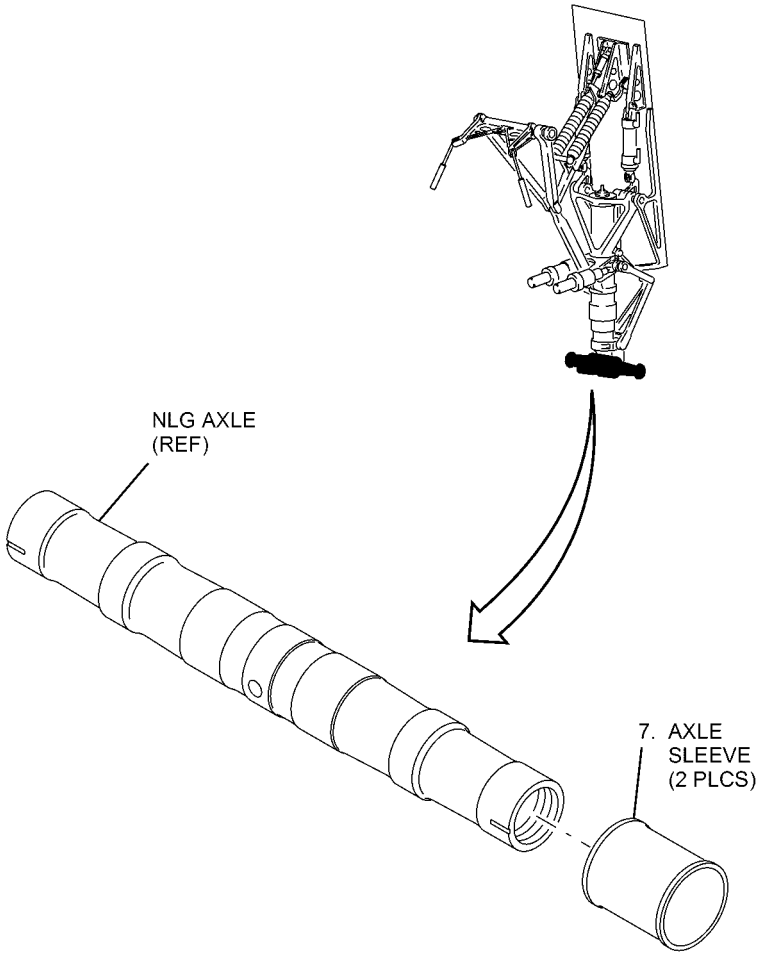
4. (A) Lubricate axle adapter with light coat of aircraft grease.

5. (A,B,C) Remove wheel and tire assembly from axle.

6. (A) Remove axle adapter.


5. WHEEL AND TIRE ASSEMBLY
AXLE
(REF)
1. NUT
WASHER
LOCK BOLT
FWD
2. AXLE NUT
ANTIROTATION
PLATE
3.
4.
6.
AXLE ADAPTER
(TYPICAL)
ICN-88277-G3242021-003-01

7. (A) Remove axle sleeve.



ICN-88277-G3242035-002-01

WARNING

- Tire pressure shall be deflated to 0 psi prior to wheel and tire leaving vicinity. Failure to comply may cause injury to personnel and damage to aircraft.

- Proper eye protection must be utilized. Failure to comply may cause injury to personnel.

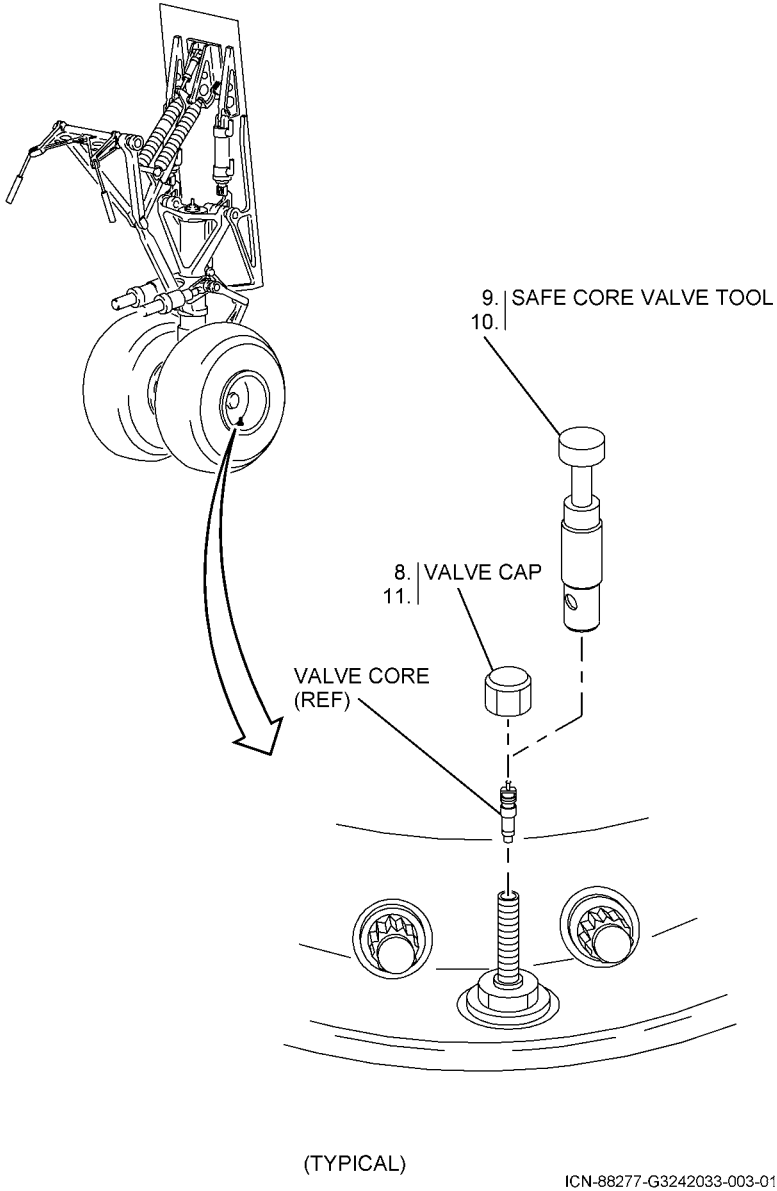
8. (A) Remove valve cap from valve stem.

9. (A) Using safe core valve tool, loosen valve core to deflate wheel and tire assembly to 0 psi.

10. (A) Remove safe core valve tool and valve core.

11. (A) Install valve cap on valve stem.

12. Perform landing gear axle damage/wear limits and repair (TO 1C-17A-3-1, 32-00-00).

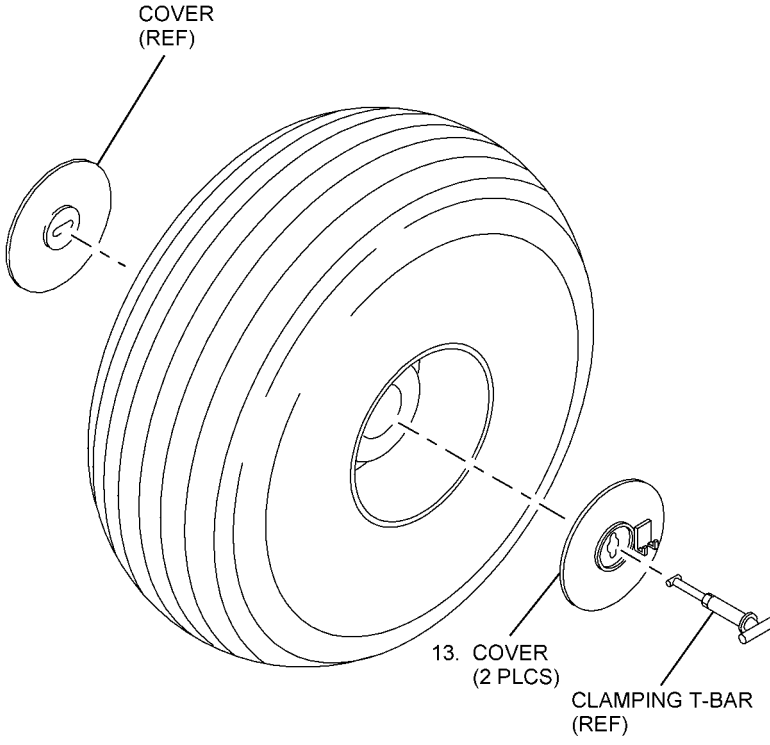


ICN-88277-G3242033-003-01

NOTE

When wheel covers are not available, use of grease proof paper and tape may be used to ensure wheel bearings are protected against weather elements.

13. (A) Position covers and secure with clamping T-bar.



ICN-88277-G3242022-004-01

NOSE LANDING GEAR WHEEL AND TIRE ASSEMBLY INSTALLATION (32-42-10-3)

FUNCTIONAL INPUT CONDITIONS:

Applicability:

	Task
All	All

Additional information:

This procedure consists of the following tasks:

3-1. Installation using hoist fixture.
3-2. Installation using rhino jack.

NOTE

	Task
• This is a typical installation task for all nose landing gear wheel and tire assemblies.	All
• This task contains In-Process Inspection (****IPI****) requirements.	All
• Messier-Bugatti and Honeywell wheel and tire assembly may be installed on the nose landing gear at the same time.	All

Additional data:

	Task
TO 1C-17A-2-07JG-10-1	3-1
TO 1C-17A-2-07JG-10-2	All
TO 1C-17A-2-12JG-32-1	All

Personnel recommended:

	Task
Two	3-1
Three	3-2

	Task
Person (A) performs task.	
Person (B) assists person (A).	
Person (C) assists person (A).	

Safety conditions:

	Task
NA	--

Support equipment:

Nomenclature	PN	Specification	Qty	Task
Adapter, Axle	17G130044-1	--	1	All
Fixture, Hoist	17G130440-501	--	1	--
Harness	17G131443-501	--	1	3-1
Strap, Adjustable	17G131443-55	--	4	3-1
Wrench, Torque	--	(0-100 ft-lb)	1	All
Wrench, Torque	--	(0-250 ft-lb)	1	All

Supplies:

Nomenclature	PN	Specification	Qty	Task
Grease, Aircraft	--	MIL-PRF-81322	AR	All

3-1. INSTALLATION USING HOIST FIXTURE.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″Functional Input Conditions″ page for task specific safety conditions.

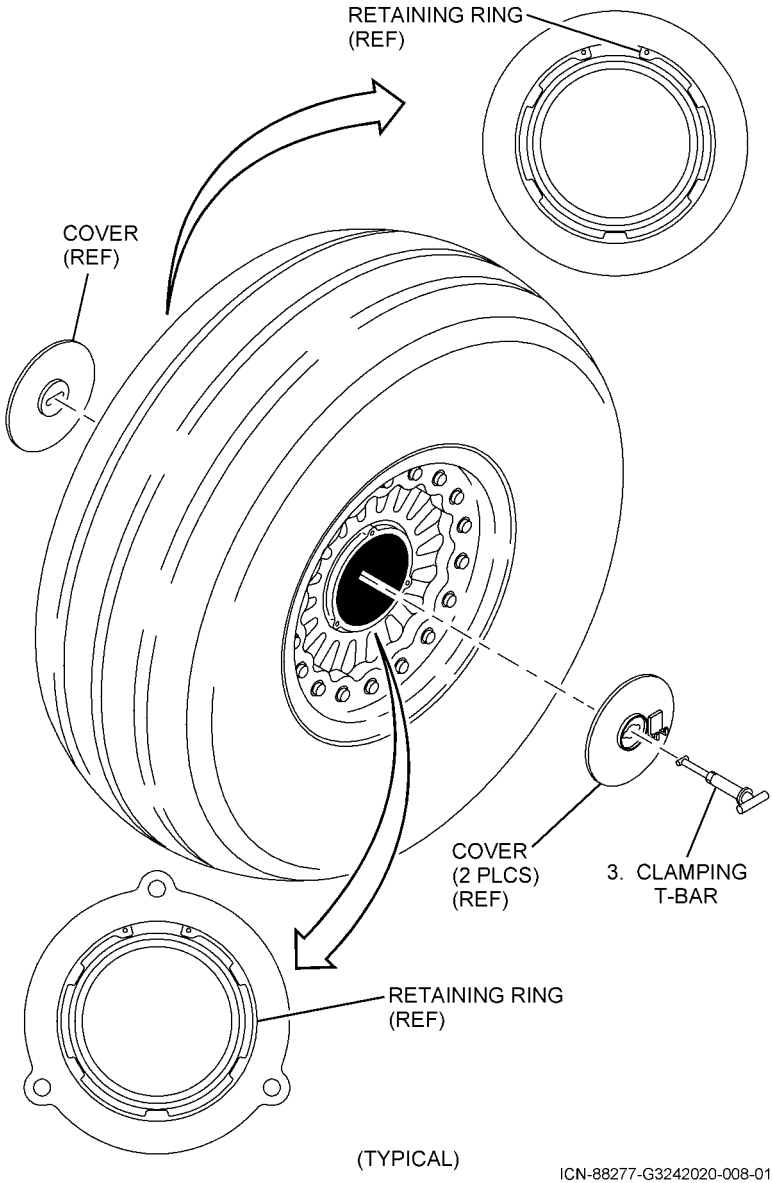
CAUTION

Ensure inboard and outboard bearing/seal retaining rings are installed. Failure to comply may cause damage to aircraft.

NOTE

When applicable, remove grease proof paper and tape.

3. (A) Remove clamping T-bar and covers.


RETAINING RING
(REF)
COVER
(REF)
COVER
(2 PLCS)
(REF)
3. CLAMPING
T-BAR
RETAINING RING
(REF)
(TYPICAL)
ICN-88277-G3242020-008-01

4. (A) Attach adjustable straps from **NLG** on harness to sling beam on hoist fixture and adjust for proper fit.

5. (A) Fold harness **BRAKE** straps between harness and tire; then, attach adjustable straps from **MLG/NLG** on harness to sling beam on hoist fixture and adjust for proper fit.

6. (A) Position hoist fixture.

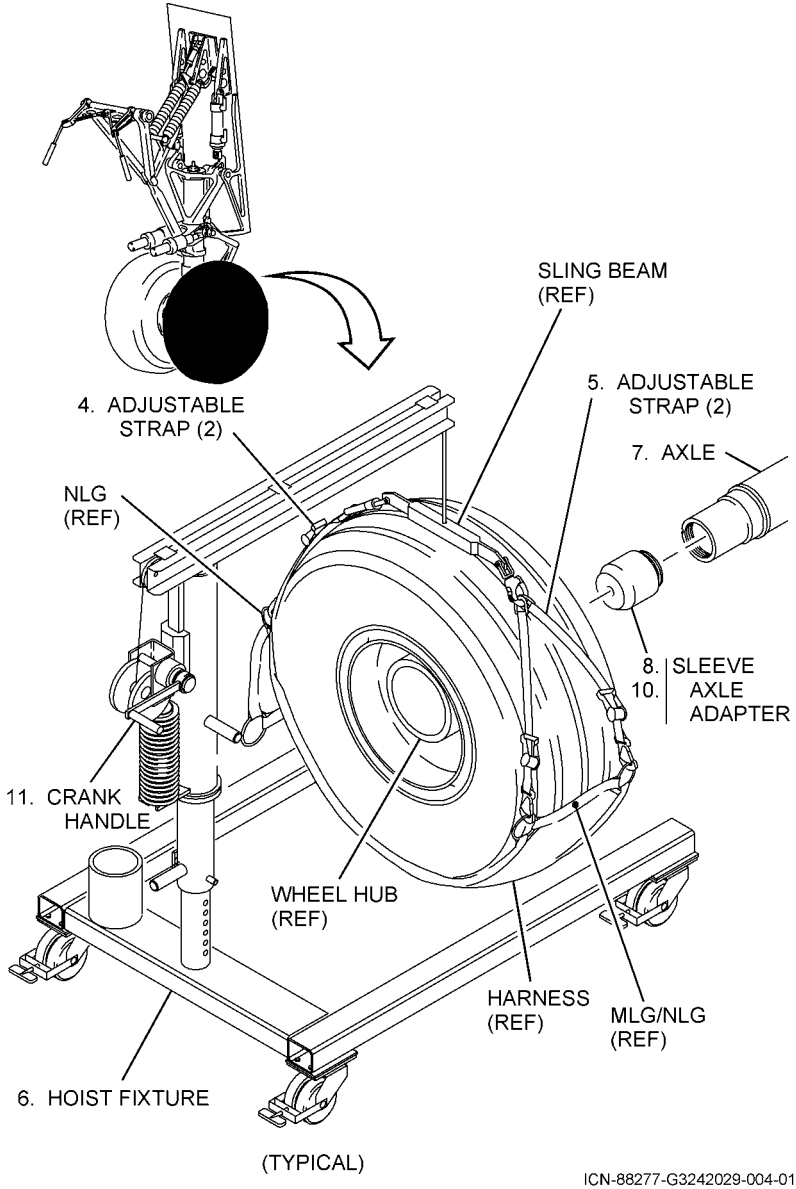
7. (A) Lubricate axle with light coat of aircraft grease.

8. (A) Install axle sleeve.

9. (A) Lubricate axle adapter with aircraft grease.

10. (A) Install axle adapter.

11. (A) Operate crank handle until the wheel hub and axle are centered.



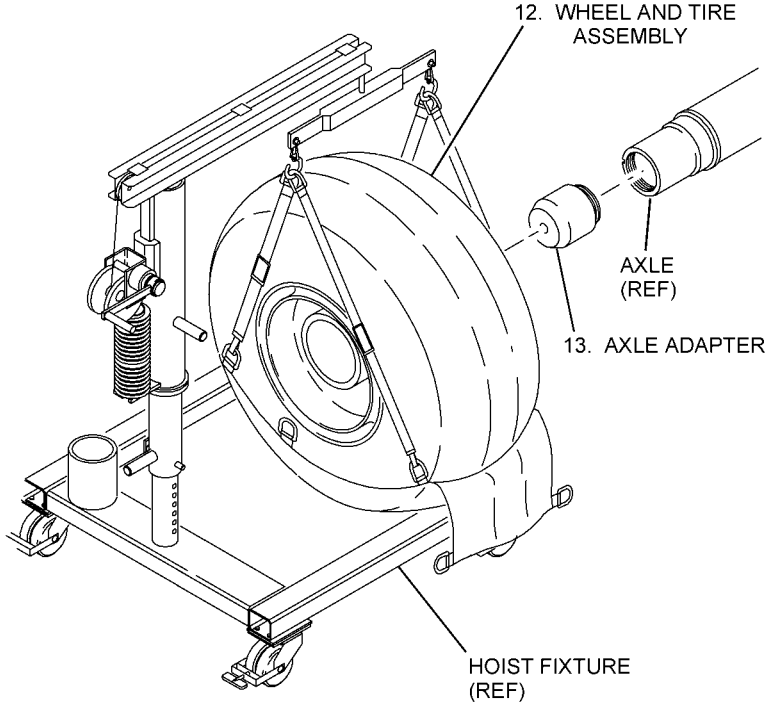
ICN-88277-G3242029-004-01

CAUTION

Improper use of hoist fixture or not following maintenance procedures may result in damage to axle bearing surfaces or unseating of nose wheel bearing retaining ring. Failure to comply may cause damage to aircraft.

12. (A,B) Position wheel and tire assembly on axle.

13. (A) Remove axle adapter.



(TYPICAL)

ICN-88277-G3242017-005-01

14. (A) Lubricate antirotation plate with aircraft grease.

15. ****IPI**** (A,B) Align and engage pin with slot and install antirotation plate.

16. (A) Lubricate axle nut with aircraft grease.

CAUTION

When wheel is fully seated on axle and axle nut fails to spin freely (hand torque) for four to five turns, investigate the cause. Failure to comply may cause damage to the aircraft

17. (A) Install axle nut; ensure axle nut spins freely (hand torque) onto axle four to five turns.

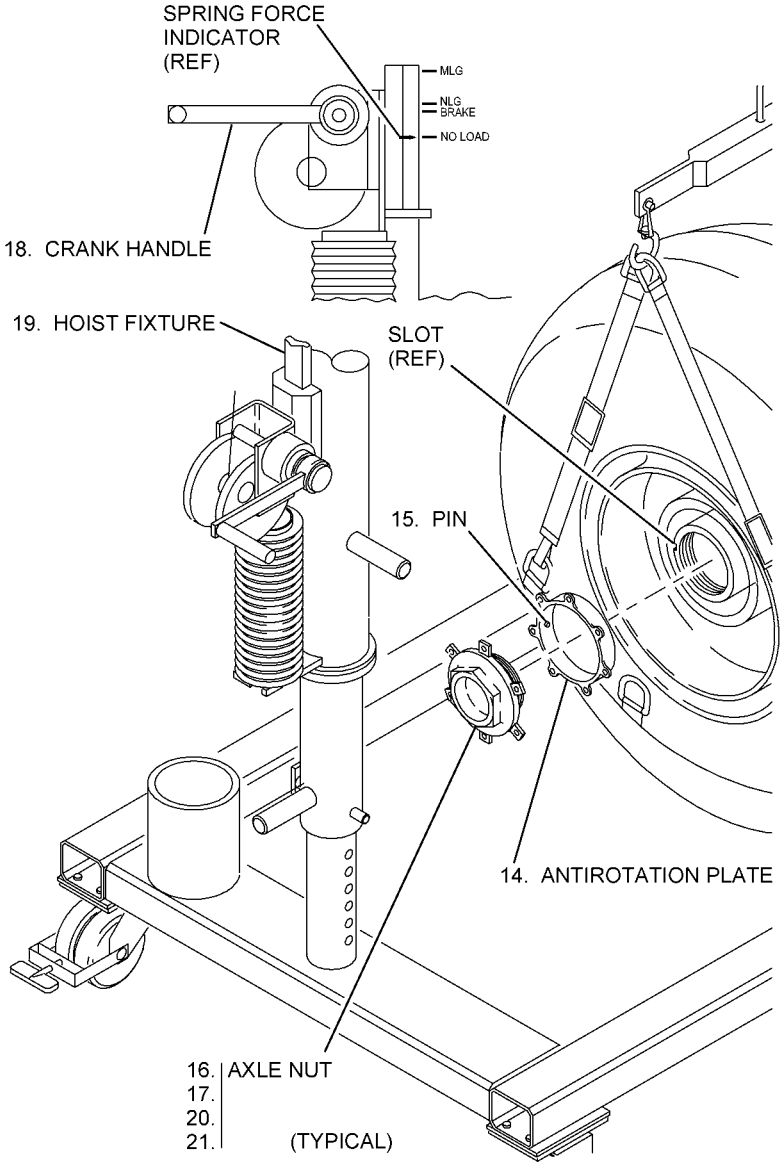
    - Axle nut rotates freely (hand torque) for four full rotations.

18. (A) Operate crank handle until spring force indicator indicates **NO LOAD**.

19. (A) Remove hoist fixture.

20. ****IPI**** (A,B) Torque axle nut **155 ft-lb** while rotating wheel and tire assembly in opposite direction of torquing.

21. (A) Loosen axle nut to **0 ft-lb**.


SPRING FORCE INDICATOR (REF)
MLG
NLG BRAKE
NO LOAD
18. CRANK HANDLE
19. HOIST FIXTURE
SLOT (REF)
15. PIN
14. ANTIROTATION PLATE
16. AXLE NUT
17.
20.
21. (TYPICAL)
ICN-88277-G3242018-007-01

NOTE

When axle nut lock bolt hole is not aligned, axle nut may be turned clockwise to nearest hole.

22. (A) Install lock bolt, washer, and nut.

23. ****IPI**** (A,B) Apply reverse torque (counterclockwise) of **155 ft-lb** to axle nut.

    - Axle nut shall not rotate.
    - If axle nut rotates during reverse torque, pin may not be engaged, correct condition before continuing.

24. (A) Remove nut, washer, and lock bolt.

25. ****IPI**** (A,B) Torque axle nut **80 ft-lb** while rotating wheel and tire assembly in opposite direction of torquing.

NOTE

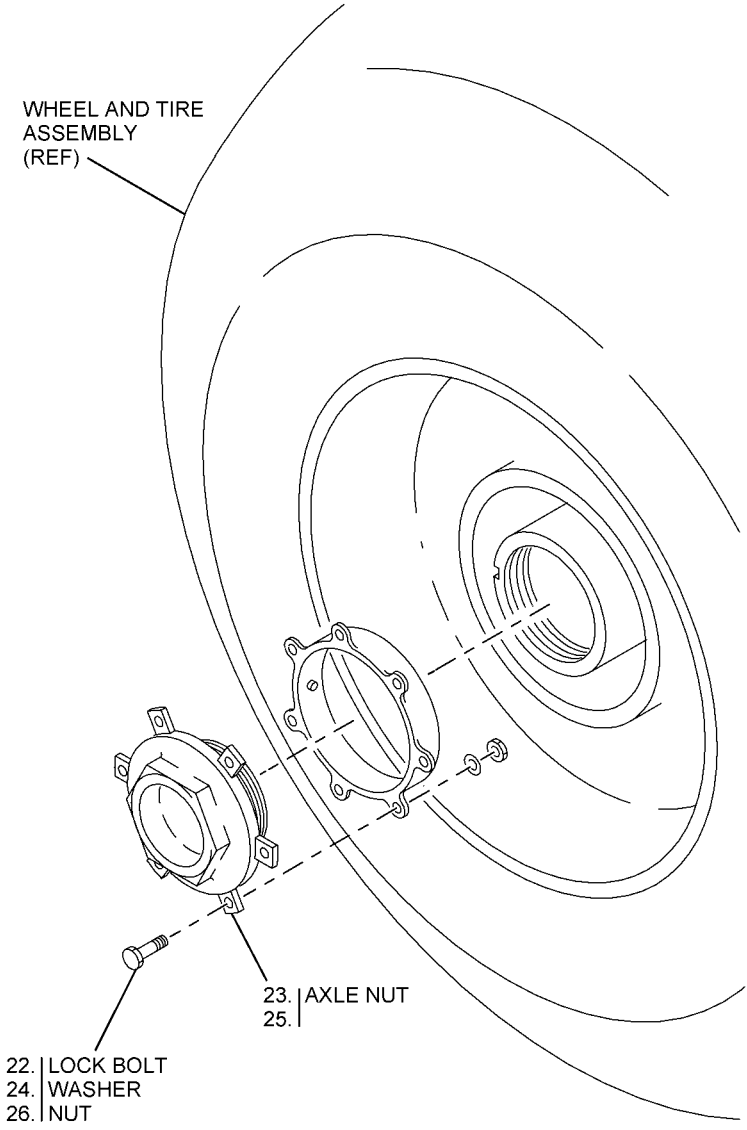
When axle nut lock bolt hole is not aligned, axle nut may be turned clockwise to nearest hole.

26. (A) Install lock bolt, washer, and nut.

27. Perform aircraft tire servicing (12-32-03).

28. Perform nose landing gear axle jacking - checklist (07-12-02, task 02-2).

29. Perform full fuselage jacking checklist (07-11-02, tasks 02-5 and 02-6) or forward fuselage jacking checklist (07-11-01, tasks 01-5 and 01-6).



(TYPICAL)

ICN-88277-G3242026-003-01

3-2. INSTALLATION USING RHINO JACK.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″Functional Input Conditions″ page for task specific safety conditions.

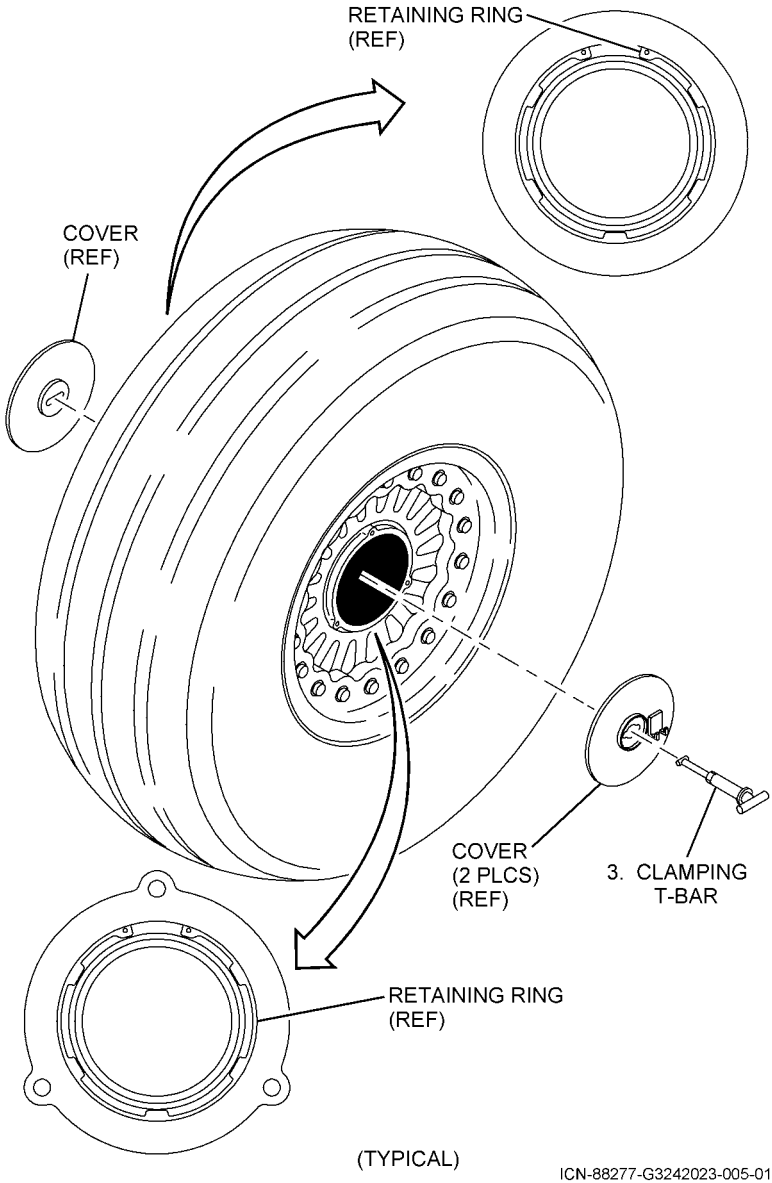
CAUTION

Ensure inboard and outboard bearing/seal retaining rings are installed. Failure to comply may cause damage to aircraft.

NOTE

When applicable, remove grease proof paper and tape.

3. (A) Remove clamping T-bar and covers.


RETAINING RING
(REF)
COVER
(REF)
COVER
(2 PLCS)
(REF)
3. CLAMPING
T-BAR
RETAINING RING
(REF)
(TYPICAL)
ICN-88277-G3242023-005-01

4. (A) Lubricate axle with light coat of aircraft grease.

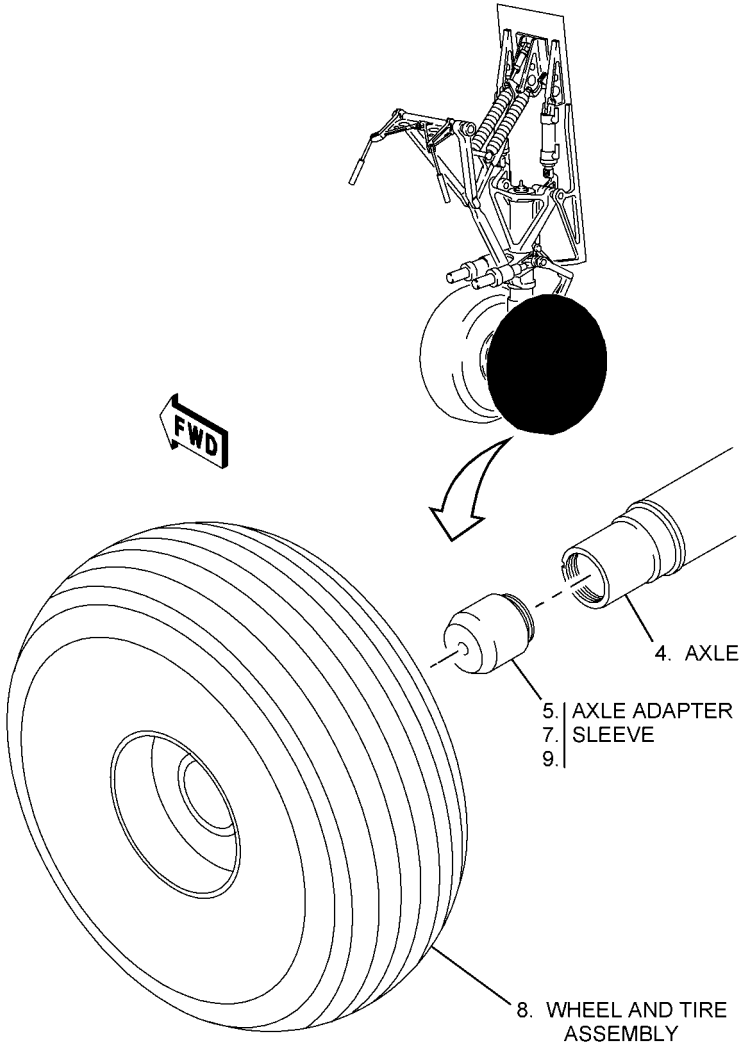
5. (A) Install axle sleeve.

6. (A) Lubricate axle adapter with aircraft grease.

7. (A) Install axle adapter.

8. (A,B,C) Position wheel and tire assembly on axle.

9. (A) Remove axle adapter.



ICN-88277-G3242024-003-01

10. (A) Lubricate antirotation plate with aircraft grease.

11. ****IPI**** (A,B) Align and engage pin with slot and install antirotation plate.

12. (A) Lubricate axle nut with aircraft grease.

CAUTION

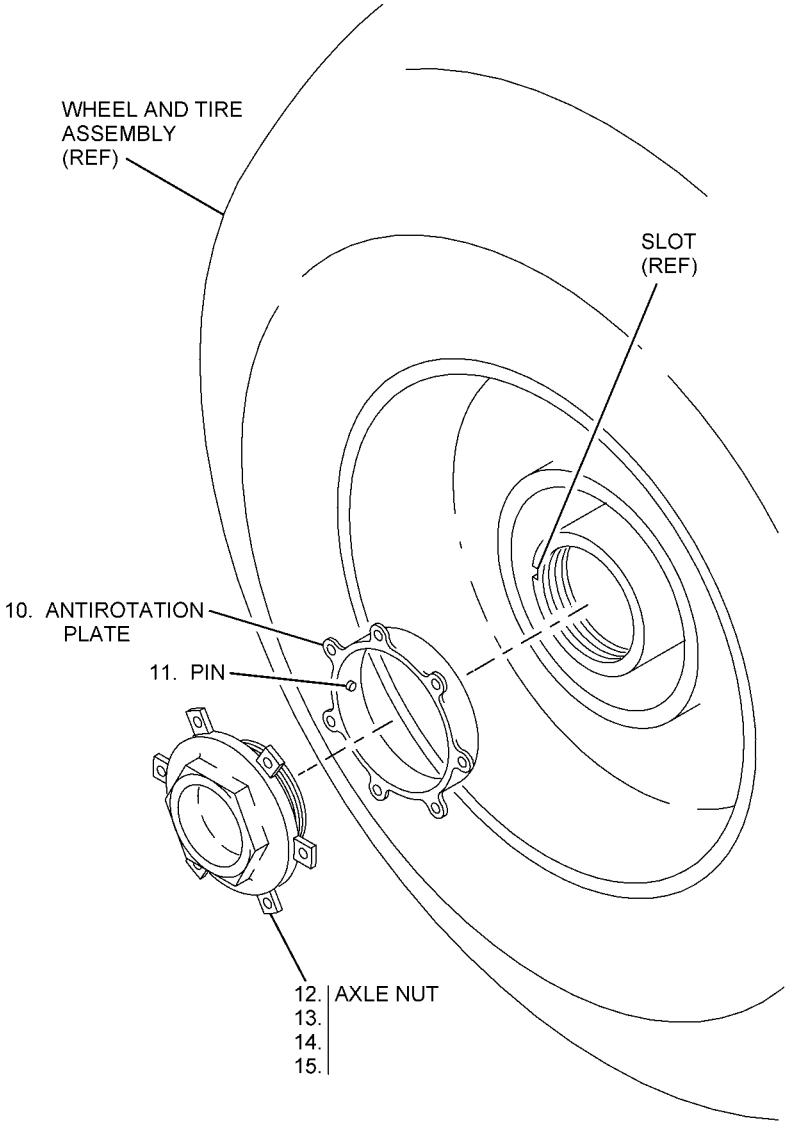
When wheel is fully seated on axle and axle nut fails to spin freely (hand torque) for four to five turns, investigate the cause. Failure to comply may cause damage to the aircraft.

13. (A) Install axle nut; ensure axle nut spins freely (hand torque) onto axle four to five turns.

    - Axle nut rotates freely (hand torque) for four full rotations.

14. ****IPI**** (A,B) Torque axle nut **155 ft-lb** while rotating wheel and tire assembly in opposite direction of torquing.

15. (A) Loosen axle nut to **0 ft-lb**.


WHEEL AND TIRE ASSEMBLY (REF)
SLOT (REF)
10. ANTIROTATION PLATE
11. PIN
12. AXLE NUT
13.
14.
15.
(TYPICAL)
ICN-88277-G3242025-004-01

NOTE

When axle nut lock bolt hole is not aligned, axle nut may be turned clockwise to nearest hole.

16. (A) Install lock bolt, washer, and nut.

17. ****IPI**** (A,B) Apply reverse torque (counterclockwise) of **155 ft-lb** to axle nut.

    - Axle nut shall not rotate.
    - If axle nut rotates during reverse torque, pin may not be engaged, correct condition before continuing.

18. (A) Remove nut, washer, and lock bolt.

19. ****IPI**** (A,B) Torque axle nut **80 ft-lb** while rotating wheel and tire assembly in opposite direction of torquing.

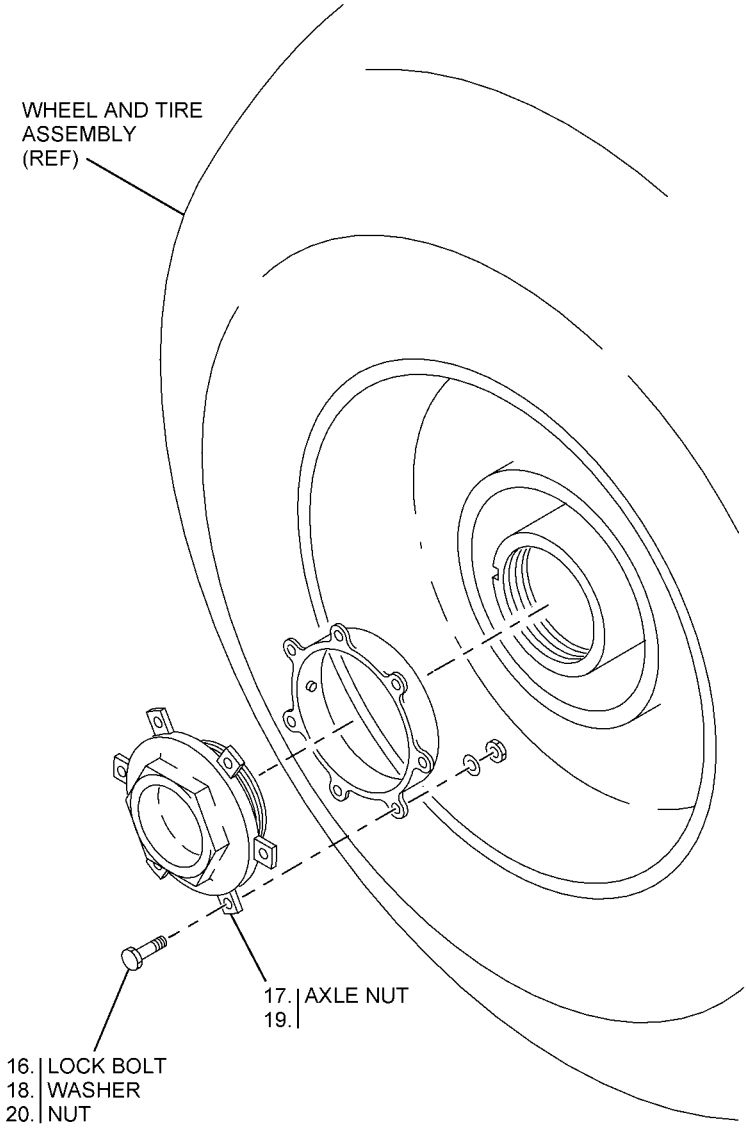
NOTE

When axle nut lock bolt hole is not aligned, axle nut may be turned clockwise to nearest hole.

20. (A) Install lock bolt, washer, and nut.

21. Perform aircraft tire servicing (12-32-03).

22. Perform nose landing gear axle jacking - checklist (07-12-02, task 02-2).


WHEEL AND TIRE ASSEMBLY (REF)
17. 19. AXLE NUT
16. 18. 20. LOCK BOLT WASHER NUT
(TYPICAL)
ICN-88277-G3242027-003-01

NOSE WHEEL SPIN BRAKE STRAP ASSEMBLY (32-42-11)

MASTER INPUT CONDITIONS:

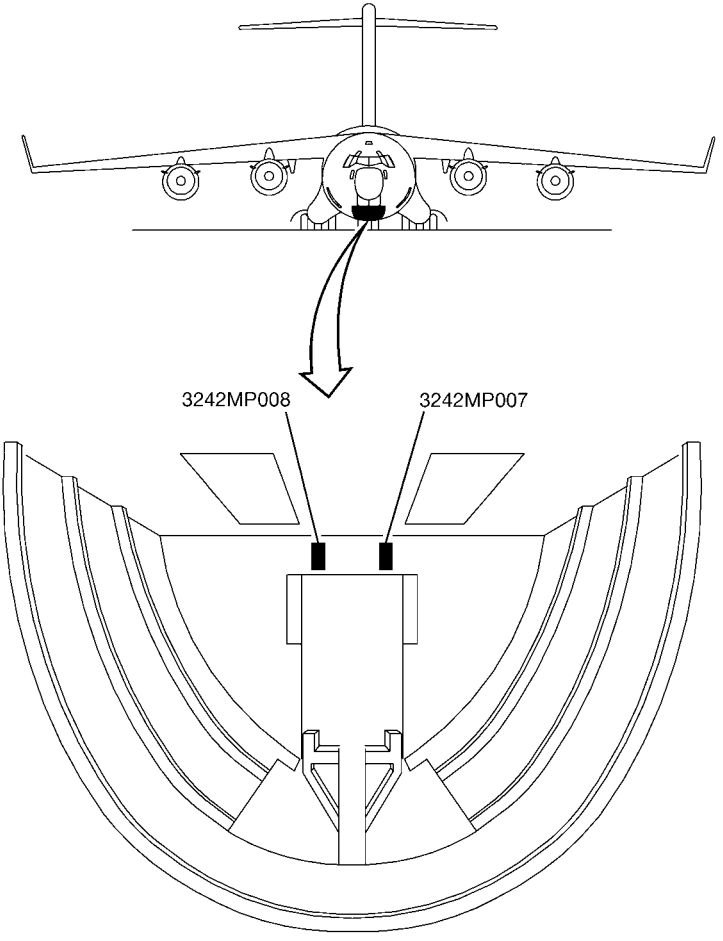
Reference designators:

3242MP007	Left Nose Wheel Spin Brake Strap Assembly
3242MP008	Right Nose Wheel Spin Brake Strap Assembly

Applicable functions:

-2 Removal.
-3 Installation.
-4 Repair.

Access data:



ICN-88277-G3242006-002-01

NOSE WHEEL SPIN BRAKE STRAP ASSEMBLY REMOVAL (32-42-11-2)

FUNCTIONAL INPUT CONDITIONS:

Applicability:

	Task
All	All

Additional information:

This procedure consists of the following tasks:

2-1. Preparation.
2-2. Removal.

	Task
NOTE	
This is a typical removal task for all nose wheel spin brake strap assemblies.	All

Additional data:

	Task
NA	--

Personnel recommended:

	Task
One	All

Safety conditions:

	Task
NA	--

Support equipment:

Nomenclature	PN	Specification	Qty	Task
NA	--	--	--	--

Supplies:

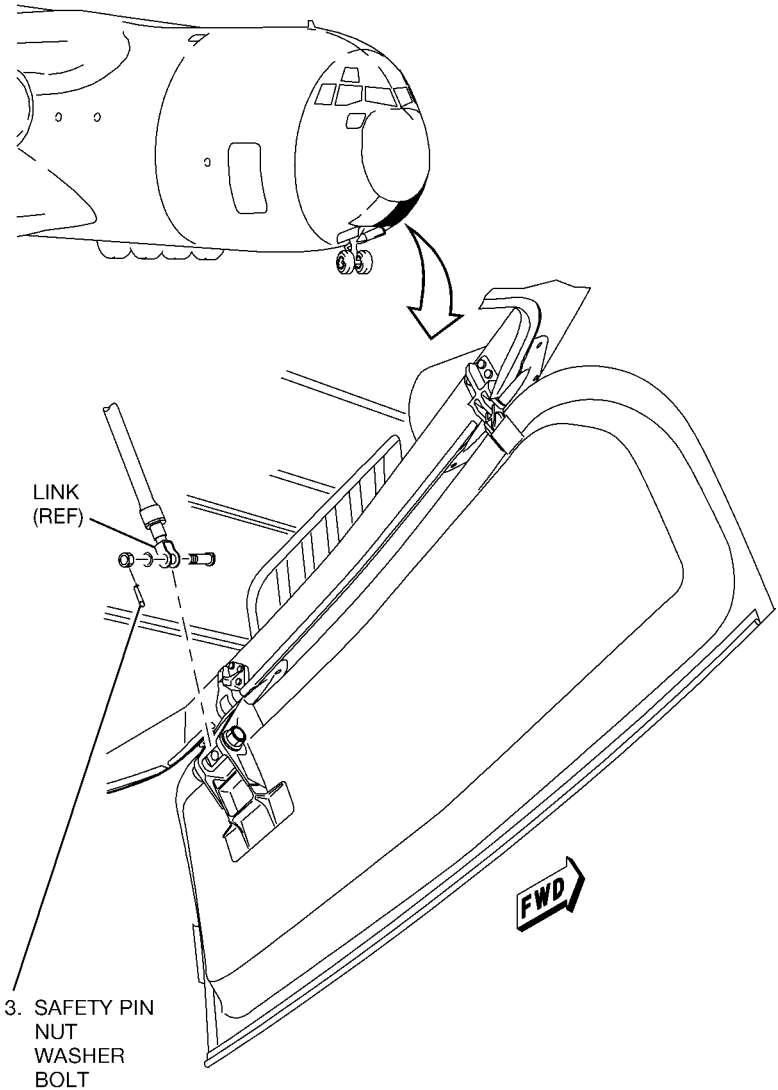
Nomenclature	PN	Specification	Qty	Task
NA	--	--	--	--

2-1. PREPARATION.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″Functional Input Conditions″ page for task specific safety conditions.

3. Remove safety pins, nuts, washers, bolts and disconnect link; open Nose Landing Gear (NLG) forward door assemblies.



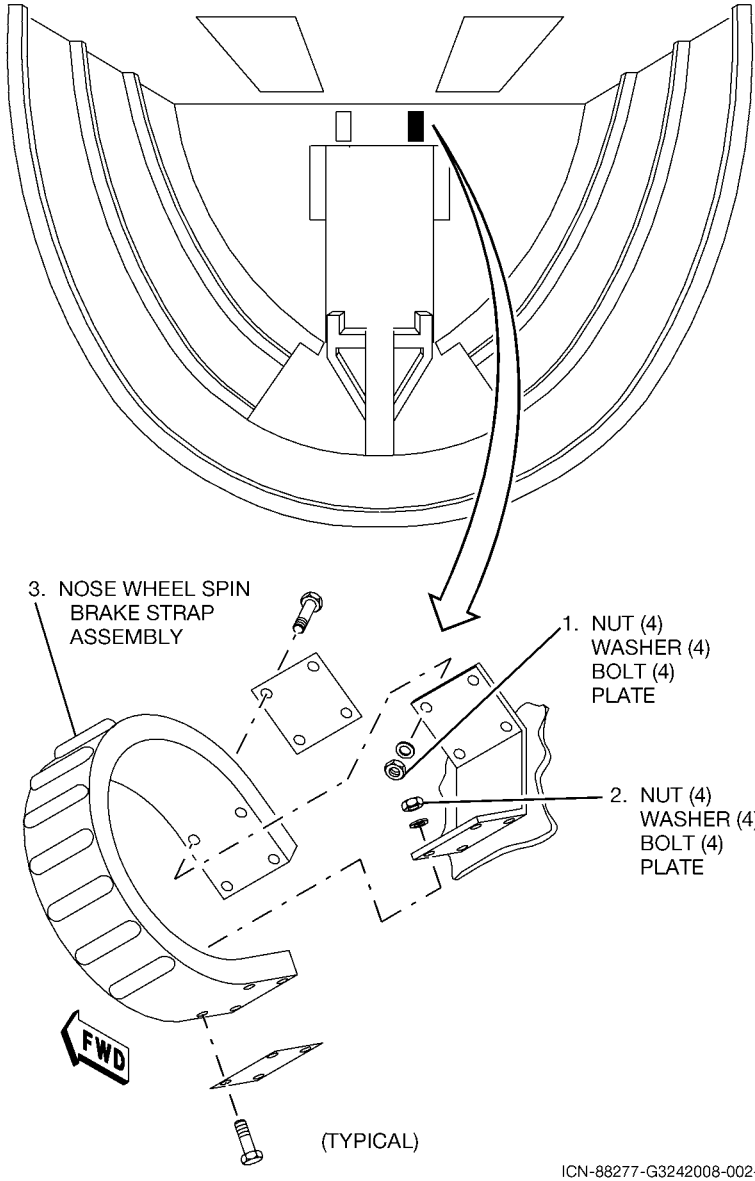
ICN-88277-G3242007-003-01

2-2. REMOVAL.

WARNING

Nose wheel spin brake strap assembly is under tension. Failure to comply may cause injury to personnel and damage to aircraft.

1. Remove nuts, washers, bolts, and plate.
2. Remove nuts, washers, bolts, and plate.
3. Remove nose wheel spin brake strap assembly.



ICN-88277-G3242008-002-01

NOSE WHEEL SPIN BRAKE STRAP ASSEMBLY INSTALLATION (32-42-11-3)

FUNCTIONAL INPUT CONDITIONS:

Applicability:

	Task
All	All

Additional information:

This procedure consists of the following tasks:

3-1. Installation.
3-2. Follow-on maintenance.

	Task
NOTE This is a typical installation task for all nose wheel spin brake strap assemblies.	All

Additional data:

	Task
TO 1C-17A-23	3-1

Personnel recommended:

	Task
One	All

Safety conditions:

	Task
NA	--

Support equipment:

Nomenclature	PN	Specification	Qty	Task
NA	--	--	--	--

Supplies:

Nomenclature	PN	Specification	Qty	Task
Compound, Jointing, Corrosion Inhibitive, Fuel Resistant, One-Part Non-Curing	CA-1000	Commercial	AR	3-2
Sealant	PR-1775	AMS 3265	AR	3-1

3-1. INSTALLATION.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″Functional Input Conditions″ page for task specific safety conditions.

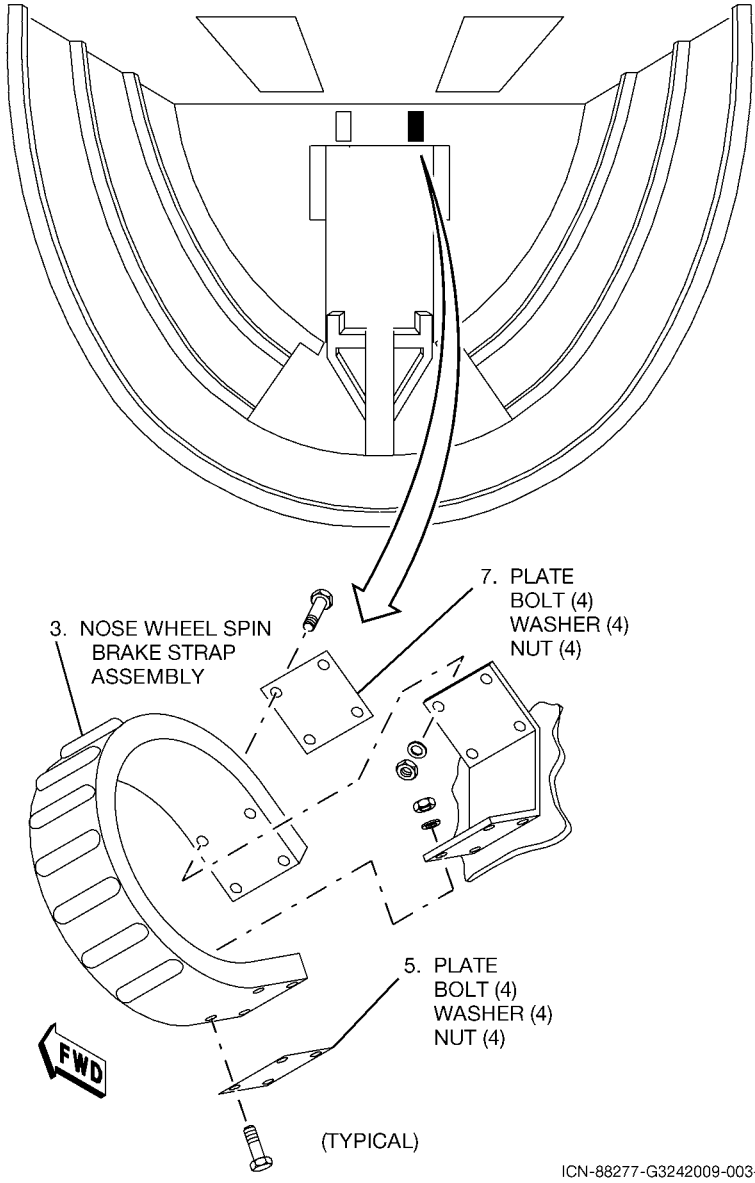
3. Position nose wheel spin brake strap assembly.

4. Perform wet fastener installation (TO 1C-17A-23, Chapter 1, Section III).

5. Install plate, bolts, washers, and nuts.

6. Perform wet fastener installation (TO 1C-17A-23, Chapter 1, Section III).

7. Install plate, bolts, washers, and nuts.



ICN-88277-G3242009-003-01

3-2. FOLLOW-ON MAINTENANCE.

1. Close Nose Landing Gear (NLG) forward door assembly and position link.

2. Coat nut threads using jointing compound.

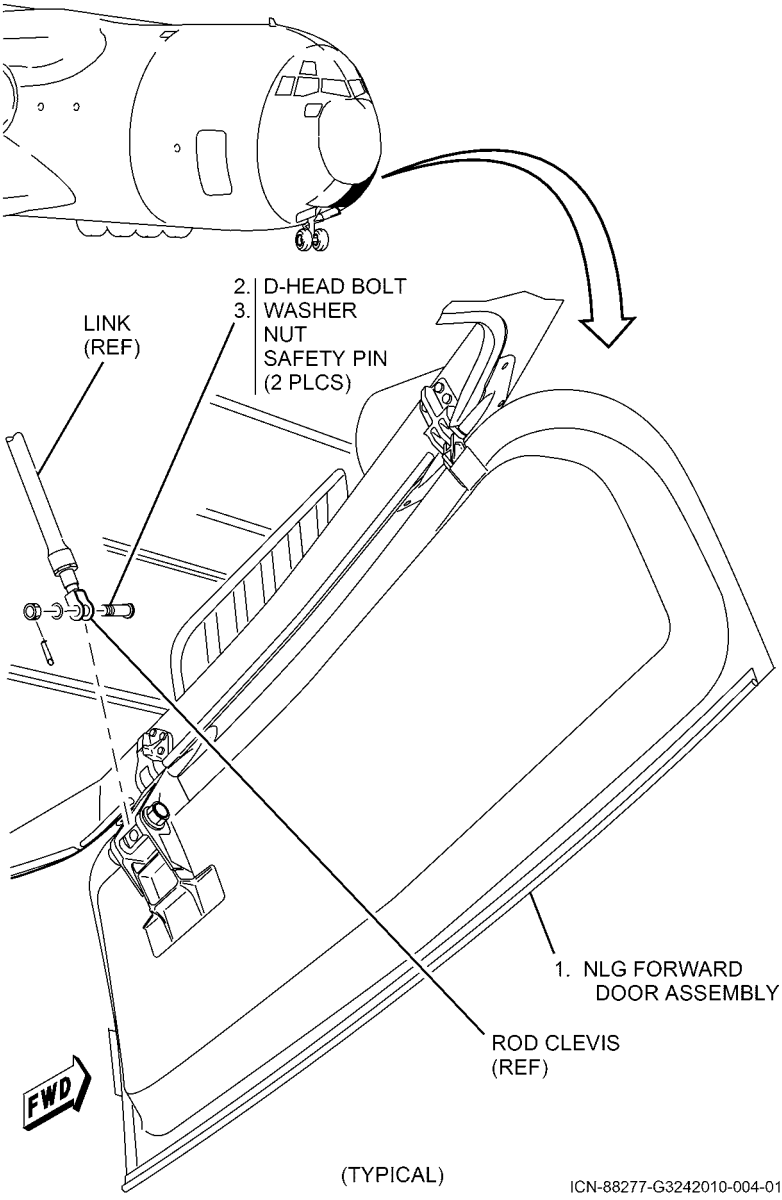
CAUTION

Ensure D-head bolts face outboard and are seated correctly in the matching lugs on NLG door rod clevises. Failure to comply may cause damage to aircraft.

NOTE

Tighten nut until washer bottoms on D-head bolt shoulder then back off to align nearest slot with hole in bolt.

3. Install D-head bolt, washer, nut, and safety pin.


2. D-HEAD BOLT
3. WASHER
NUT
SAFETY PIN
(2 PLCS)
LINK
(REF)
1. NLG FORWARD
DOOR ASSEMBLY
ROD CLEVIS
(REF)
FWD
(TYPICAL)
ICN-88277-G3242010-004-01

NOSE WHEEL SPIN BRAKE STRAP ASSEMBLY REPAIR (32-42-11-4)

FUNCTIONAL INPUT CONDITIONS:

Applicability:

	Task
All	All

Additional information:

This procedure consists of the following task:

4-1. Repair nose wheel spin brake strap assembly by replacing pad.

Additional data:

	Task
NA	--

Personnel recommended:

	Task
One	All

Safety conditions:

	Task
NA	--

Support equipment:

Nomenclature	PN	Specification	Qty	Task
NA	--	--	--	--

Supplies:

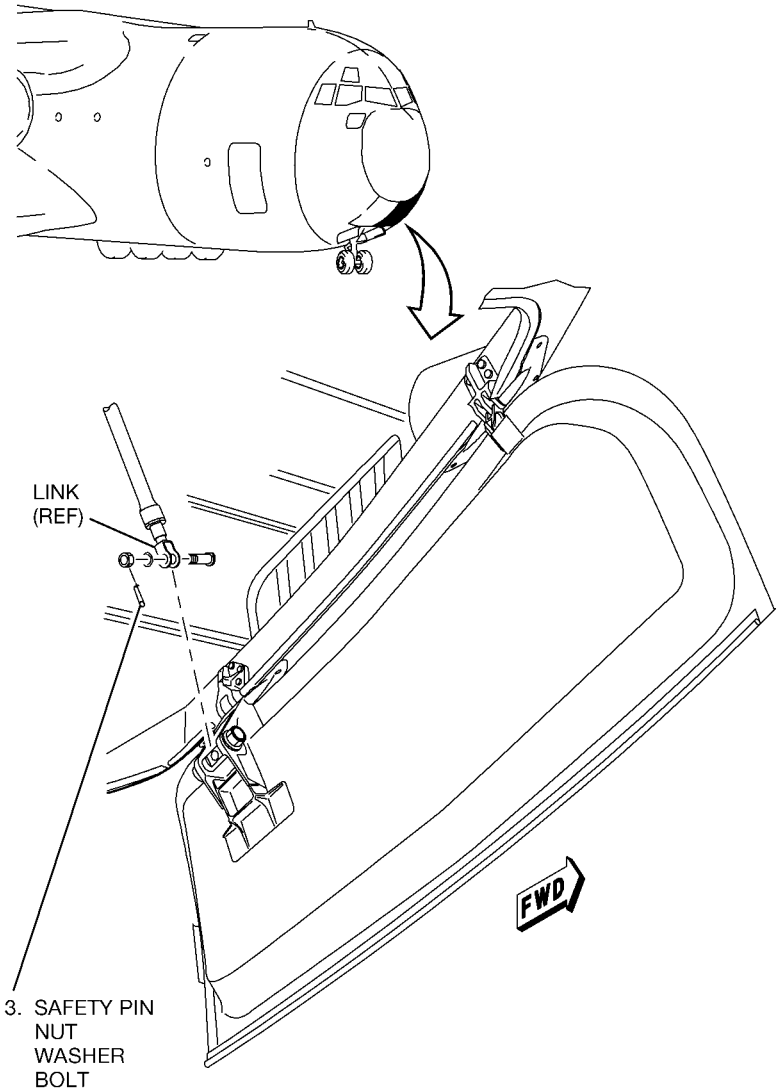
Nomenclature	PN	Specification	Qty	Task
Compound, Jointing, Corrosion Inhibitive, Fuel Resistant, One-Part Non-Curing	CA-1000	Commercial	AR	4-1
Pad, Friction	17P1C2052-1	--	9	All
Pin	3D0008-5-10	--	18	All
Plate, Structural	17P1C2166-1	--	18	All

4-1. REPAIR NOSE WHEEL SPIN BRAKE STRAP ASSEMBLY BY REPLACING PAD.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″Functional Input Conditions″ page for task specific safety conditions.

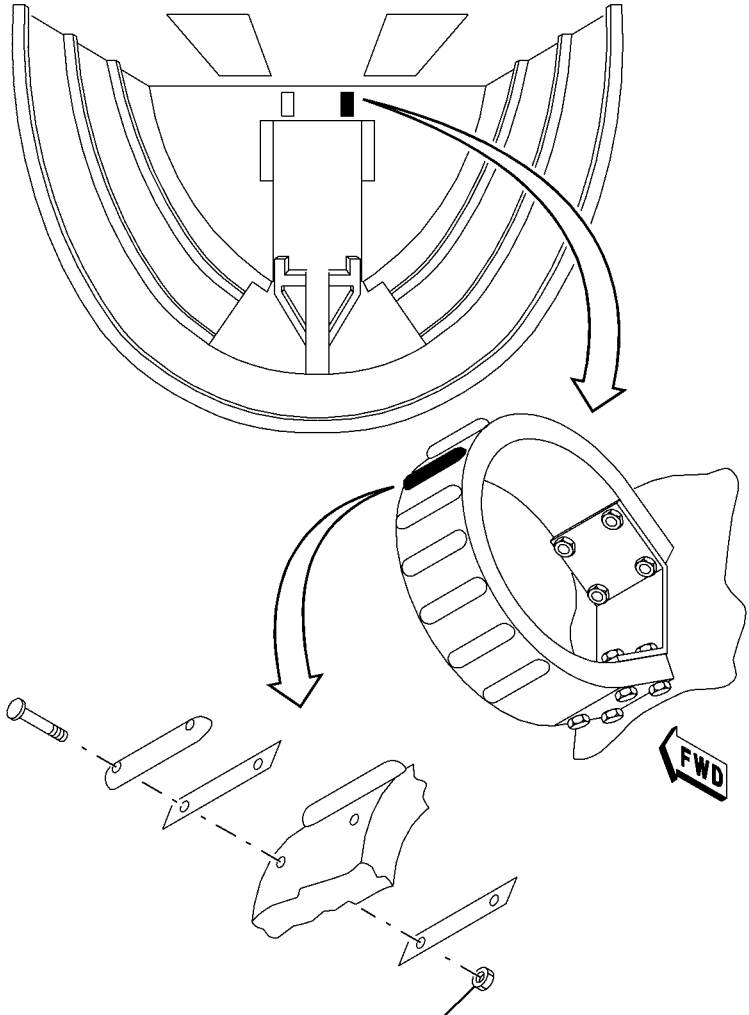
3. Remove safety pins, nuts, washers, bolts, and disconnect link; lower Nose Landing Gear (NLG) forward door assemblies.



ICN-88277-G3242011-003-01

4. Remove nuts, pins, pad, and plates.

5. Install plates, pad, pins, and nuts.



ICN-88277-G3242012-002-01

6. Close NLG forward door assembly and position link.

7. Coat nut threads using jointing compound.

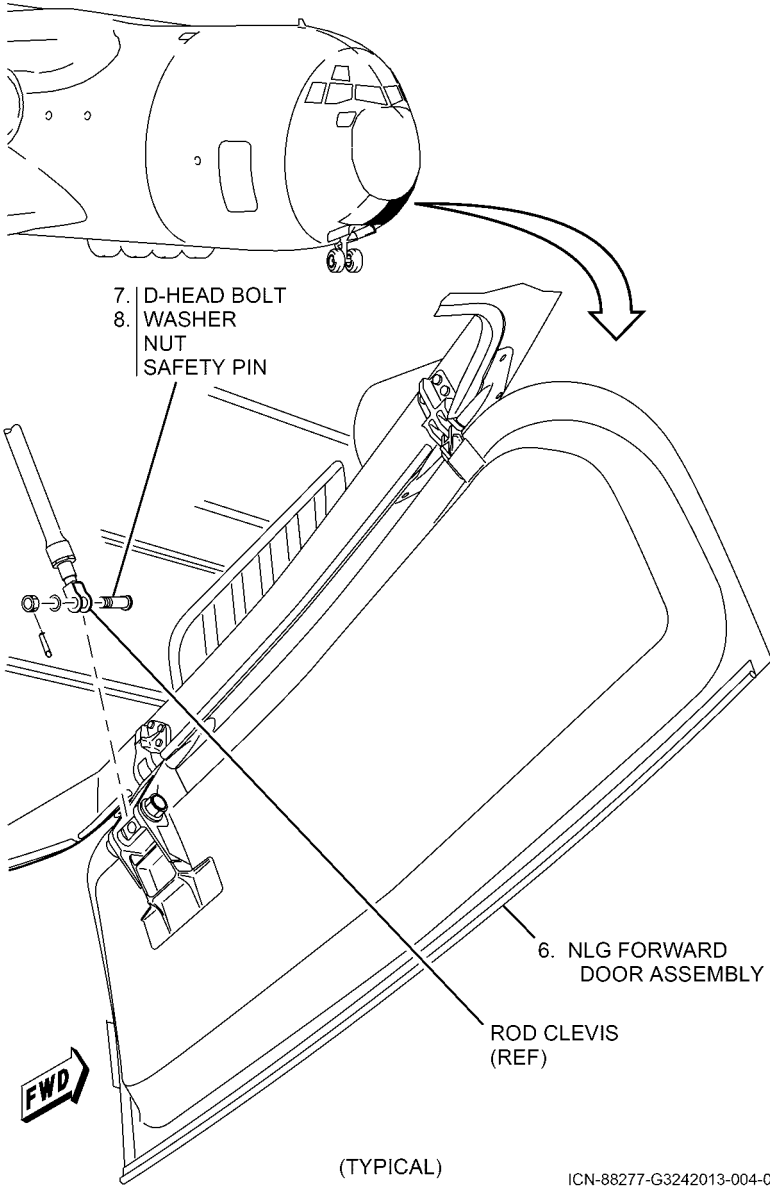
CAUTION

Ensure D-head bolts face outboard and are seated correctly in the matching lugs on NLG door rod clevises. Failure to comply may cause damage to aircraft.

NOTE

Tighten nut until washer bottoms on D-head bolt shoulder then back off to align nearest slot with hole in bolt.

8. Install D-head bolt, washer, nut, and safety pin.


7. D-HEAD BOLT
8. WASHER
NUT
SAFETY PIN
6. NLG FORWARD DOOR ASSEMBLY
ROD CLEVIS (REF)
FWD
(TYPICAL)
ICN-88277-G3242013-004-01