

COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST

MAIN LANDING GEAR WHEEL AND TIRE INSTALLATION COMPONENTS

PART NUMBER 277A6000–1001, –1002, –1003, –1004, –1005, –1006, –1007, –1008, –1009, –101, –1010, –1011, –1012, –102, –103, –104, –105, –106, –107, –108, –109, –11, –110,

BOEING PROPRIETARY, CONFIDENTIAL, AND/OR TRADE SECRET

Copyright © 1995 The Boeing Company Unpublished Work - All Rights Reserved

Boeing claims copyright in each page of this document only to the extent that the page contains copyrightable subject matter. Boeing also claims copyright in this document as a compilation and/or collective work.

This document includes proprietary information owned by The Boeing Company and/or one or more third parties. Treatment of the document and the information it contains is governed by contract with Boeing. For more information, contact The Boeing Company, P.O. Box 3707, Seattle, Washington 98124.

Boeing, the Boeing signature, the Boeing symbol, 707, 717, 727, 737, 747, 757, 767, 777, 787, Dreamliner, BBJ, DC-8, DC-9, DC-10, KC-10, KDC-10, MD-10, MD-11, MD-80, MD-88, MD-90, P-8A, Poseidon and the Boeing livery are all trademarks owned by The Boeing Company; and no trademark license is granted in connection with this document unless provided in writing by Boeing.

PUBLISHED BY BOEING COMMERCIAL AIRPLANES GROUP, SEATTLE, WASHINGTON, USA A DIVISION OF THE BOEING COMPANY PAGE DATE: Jul 01/2009



Page 1 Jul 01/2009

BOEING®

PART NUMBER (Cont.)

277A6000-12, -301, -302, -303, -304, -41, -42, -701, -702, -703, -704, -705, -706



Page 2 Jul 01/2009 277A6000



COMPONENT MAINTENANCE MANUAL

Revision No. 11 Jul 01/2009

To: All holders of MAIN LANDING GEAR WHEEL AND TIRE INSTALLATION COMPONENTS 32-11-17.

Attached is the current revision to this COMPONENT MAINTENANCE MANUAL

The COMPONENT MAINTENANCE MANUAL is furnished either as a printed manual, on microfilm, or digital products, or any combination of the three. This revision replaces all previous microfilm cartridges or digital products. All microfilm and digital products are reissued with all obsolete data deleted and all updated pages added.

For printed manuals, changes are indicated on the List of Effective Pages (LEP). The pages which are revised will be identified on the LEP by an R (Revised), A (Added), O (Overflow, i.e. changes to the document structure and/or page layout), or D (Deleted). Each page in the LEP is identified by Chapter-Section-Subject number, page number and page date.

Pages replaced or made obsolete by this revision should be removed and destroyed.

ATTENTION

IF YOU RECEIVE PRINTED REVISIONS, PLEASE VERIFY THAT YOU HAVE RECEIVED AND FILED THE PREVIOUS REVISION. BOEING MUST BE NOTIFIED WITHIN 30 DAYS IF YOU HAVE NOT RECEIVED THE PREVIOUS REVISION. REQUESTS FOR REVISIONS OTHER THAN THE PREVIOUS REVISION WILL REQUIRE A COMPLETE MANUAL REPRINT SUBJECT TO REPRINT CHARGES SHOWN IN THE DATA AND SERVICES CATALOG.



277A6000



COMPONENT MAINTENANCE MANUAL

Location of Change

Description of Change

32-11-17 ASSEMBLY

Changed the data in the Consumable Materials list.





Subject/Page	Date	Subject/Page	Date	Subject/Page	Date
TITLE PAGE		32-11-17 DISASS	EMBLY (cont)	32-11-17 REPAIR	6-1
0 1	Jul 01/2009	305	Mar 01/2006	601	Nov 01/2006
02	Jul 01/2009	306	Mar 01/2006	602	Mar 01/2006
32-11-17 TRANS	MITTAL LETTER	307	Mar 01/2006	603	Mar 01/2006
0 1	Jul 01/2009	308	Mar 01/2006	604	Mar 01/2006
2	BLANK	309	Mar 01/2006	605	Mar 01/2006
32-11-17 HIGHLI	GHTS	310	BLANK	606	BLANK
0 1	Jul 01/2009	32-11-17 CLEANI	NG	32-11-17 ASSEM	BLY
2	BLANK	401	Nov 01/2006	R 701	Jul 01/2009
32-11-17 EFFEC	TIVE PAGES	402	BLANK	702	Nov 01/2006
1 thru 2	Jul 01/2009	32-11-17 CHECK		703	Nov 01/2006
		501	Nov 01/2006	704	Mar 01/2006
32-11-17 CONTE	NTS	502	BLANK	705	Mar 01/2006
1	Mar 01/2006	32-11-17 REPAIR	- GENERAL	706	Nov 01/2006
2	BLANK	601	Mar 01/2006	707	Mar 01/2006
32-11-17 TR AND) SB RECORD	602	BLANK	708	Nov 01/2006
1	Mar 01/2006	32-11-17 REPAIR	1-1	709	Mar 01/2006
2	BLANK	601	Nov 01/2006	710	Mar 01/2006
32-11-17 REVISIO	ON RECORD	602	BLANK	711	Mar 01/2006
1	Mar 01/2006	32-11-17 REPAIR	2-1	712	Mar 01/2006
2	Mar 01/2006	601	Nov 01/2008	713	Mar 01/2006
32-11-17 RECOR	D OF TEMPORARY	602	Mar 01/2007	714	Mar 01/2006
1	Mar 01/2006	603	Nov 01/2008	32-11-17 FITS AN	ID CLEARANCES
2	Mar 01/2006	604	BLANK	801	Mar 01/2006
		32-11-17 REPAIR	3-1	802	BLANK
1	Mar 01/2009	601	Nov 01/2006	32-11-17 SPECIA	L TOOLS, FIXTURES,
2	RI ANK	602	Mar 01/2006		
32-11-17 DESCB		32-11-17 REPAIR	4-1	901	Mar 01/2006
OPERATION		601	Nov 01/2006	902	
1	Nov 01/2006	602	Mar 01/2006	32-11-17 ILLUS1	RATED PARTS LIST
2	Nov 01/2006	603	Mar 01/2006	1001	Nov 01/2008
32-11-17 TESTIN	G AND FAULT	604	BLANK	1002	Nov 01/2006
ISOLATION		32-11-17 REPAIR	5-1	1003	Nov 01/2006
101	Mar 01/2006	601	Nov 01/2006	1004	NOV 01/2006
102	BLANK	602	Mar 01/2006	1005	Nov 01/2006
32-11-17 DISASS	SEMBLY	32-11-17 REPAIR	5-2	1006	Nov 01/2006
301	Mar 01/2006	601	Nov 01/2006	1007	NOV 01/2000
302	Mar 01/2006	602	Mar 01/2006	1000	NOV 01/2000
303	Mar 01/2006	603	Mar 01/2006	1009	Nov 01/2000
304	Mar 01/2006	604	Mar 01/2006	1010	INUV U 1/2000

A = Added, R = Revised, D = Deleted, O = Overflow

32-11-17 EFFECTIVE PAGES Page 1 Jul 01/2009



Subject/Page	Date	Subject/Page	Date	Subject/Page	Date
32-11-17 ILLUST (cont)	RATED PARTS LIST				
1011	Nov 01/2006				
1012	Nov 01/2006				
1013	Nov 01/2006				
1014	Nov 01/2006				
1015	Nov 01/2006				
1016	Nov 01/2006				
1017	Nov 01/2006				
1018	Nov 01/2006				
1019	Nov 01/2006				
1020	Nov 01/2006				
1021	Nov 01/2006				
1022	Nov 01/2006				
1023	Nov 01/2006				
1024	Nov 01/2006				
1025	Nov 01/2006				
1026	Nov 01/2006				
1027	Nov 01/2006				
1028	BLANK				

A = Added, R = Revised, D = Deleted, O = Overflow



277A6000



COMPONENT MAINTENANCE MANUAL

TABLE OF CONTENTS

Paragraph Title		Page
MAIN GEAR WHEELS, BRAKES, EQUIPMENT INSTALLATION - DESCRIPTION AND OPERATION		1
TESTING AND FAULT ISOLATION	(Not Applicable)	
DISASSEMBLY		301
CLEANING		401
CHECK		501
REPAIR		601
ASSEMBLY		701
FITS AND CLEARANCES		801
SPECIAL TOOLS, FIXTURES, AND EQUIPMENT	(Not Applicable)	
ILLUSTRATED PARTS LIST		1001





TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
		PRR 38051	MAR 01/98
		PRR 38175	MAR 01/98
		PRR 38234	MAR 01/99
		PRR 35385-8	MAR 01/99
		PRR 38295-8	NOV 01/99
		MC 3240MP3227	MAR 01/98
		MC 3240MP3258	MAR 01/98
		MC 3240MP3280	MAR 01/98
		MC 3240MP3284	MAR 01/98
		MC 3240MP3285	MAR 01/98
		MC 3240MP3288	MAR 01/98
		MC 3240MP3289	MAR 01/98
		MC 3240MP3295	MAR 01/98
		MC 3240MP3307	NOV 01/99
		MC 3240MP3031	MAR 01/98
		MC 3240MP3043	MAR 01/98
		MC 3240MP3048	MAR 01/98
		MC 3245MP3063F	NOV 01/99
		MC 3245MP3069F	NOV 01/99
		MC 3245MP3072F	NOV 01/99
		MC 3245MP3080G	NOV 01/99
		MC 3245MP3085G	NOV 01/99

32-11-17 TR AND SB RECORD Page 1 Mar 01/2006



All revisions to this manual will be accompanied by transmittal sheet bearing the revision number. Enter the revision number in numerical order, together with the revision date, the date filed and the initials of the person filing.

Rev	vision	Filed		Revision		Filed	
Number	Date	Date	Initials	Number	Date	Date	Initials

32-11-17 REVISION RECORD Page 1 Mar 01/2006



Rev	vision	Filed		Revision		Filed	
Number	Date	Date	Initials	Number	Date	Date	Initials

32-11-17 REVISION RECORD Page 2 Mar 01/2006



All temporary revisions to this manual will be accompanied by a cover sheet bearing the temporary revision number. Enter the temporary revision number in numerical order, together with the temporary revision date, the date the temporary revision is inserted and the initials of the person filing.

When the temporary revision is incorporated or cancelled, and the pages are removed, enter the date the pages are removed and the initials of the person who removed the temporary revision.

Temporary	Revision	Ins	serted	Rei	moved	Tempora	ary Revision	Inser	ted	Rer	noved
Number	Date	Date	Initials	Date	Initials	Date	Initials	Number	Date	Date	Initials

32-11-17 RECORD OF TEMPORARY REVISION Page 1 Mar 01/2006



Temporary	Revision	Ins	serted	Rei	moved	Tempora	ary Revision	Inser	ted	Rei	noved
Number	Date	Date	Initials	Date	Initials	Date	Initials	Number	Date	Date	Initials

32-11-17 RECORD OF TEMPORARY REVISION Page 2 Mar 01/2006



INTRODUCTION

1. General

- A. The instructions in this manual supply the data necessary to do the maintenance functions together with the test, fault isolation, repair, and replacement of the defective parts.
- B. This manual is divided into different parts:
 - (1) Title Page
 - (2) Transmittal Letter
 - (3) Highlights
 - (4) List of Effective Pages
 - (5) Table of Contents
 - (6) Temporary Revision & Service Bulletin Record
 - (7) Record of Revisions
 - (8) Record of Temporary Revisions
 - (9) Introduction
 - (10) Procedures & IPL Sections
- C. Components that can be repaired have a different repair number for each specified repair. To find the repair number location of a component, look in the Repair-General procedure at the beginning of the REPAIR section. The Repair-General procedure also has an explanation of the True Position Dimension symbols used.
- D. All dimensions, measures, quantities and weights included are in English units. When metric equivalents are given they will be in the parentheses that follow the English units.
- E. The introduction to the Illustrated Parts List (IPL) shows how the IPL data is used.
- F. Design changes, optional parts, configuration differences and Service Bulletin modifications may cause different part numbers. These part numbers are identified in the IPL with an alphabetical letter which is added to the end of the basic item number. This new item number is referred to as an alpha-variant. Throughout the manual, IPL basic item number references also apply to alpha-variants unless shown differently.
- G. The tool reference numbers found in the individual procedures and in the Special Tools, Fixtures, and Equipment section are used to identify if a tool is a standard tool (STD-XXXX), a commercial tool (COM-XXXX), or a Special Tool (SPL-XXXX). This reference number is also used to distinguish between tools with similar names in the same procedure. These reference numbers are for use in the documentation only. They are not to be used for ordering tools.





MAIN GEAR WHEELS, BRAKES, EQUIPMENT INSTALLATION - DESCRIPTION AND OPERATION

1. Description

A. The main landing gear wheels/brakes/equipment installation components include two outboard hubcap installations, two inboard hubcap installation, four in-axle installations, four wheel and tire assemblies, and four brake installations. The wheel and tire assemblies and the brake assemblies are made by either Allied Signal or BF Goodrich. The component maintenance and repair procedures for these assemblies are covered by the vendor component maintenance manuals.

2. Operation

A. The wheel and tire assemblies, the in-axle installations, and the brake assemblies hold up the airplane main landing gear during taxi, takeoff, and landing.







MLG Wheels/Brakes/Equipment Installation Components Figure 1

32-11-17 DESCRIPTION AND OPERATION Page 2 Nov 01/2006



TESTING AND FAULT ISOLATION

(NOT APPLICABLE)





DISASSEMBLY

1. General

- A. This procedure tells how to disassemble the main landing gear wheels/brakes/equipment installation components.
- B. Disassemble this component only sufficiently to isolate the defects, do the necessary repairs, and put the component back to a serviceable condition.
- C. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- D. Refer to IPL Figure 1 thru IPL Figure 4 for item numbers.

2. Disassembly

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
G01048	Lockwire - Corrosion Resistant Steel (0.032 In. Dia	.) NASM20995 [~]
		C32

B. References

Reference	Title
32-40-12	Component Maintenance Manual
32-40-13	Component Maintenance Manual
32-40-14	Component Maintenance Manual
32-40-15	Component Maintenance Manual
32-40-47	Component Maintenance Manual
32-40-48	Component Maintenance Manual
32-40-49	Component Maintenance Manual
32-40-50	Component Maintenance Manual
737 AMM 32-45-21-401	Aircraft Maintenance Manual

- C. Procedure
 - **NOTE**: For main landing gear wheel and tire removal, refer to 737 AMM 32-45-21-401. For main landing gear brake assembly removal, refer to . For main landing gear wheel assembly (allied signal), refer to 32-40-12. For main landing gear brake assembly (allied signal), refer to 32-40-13. For main landing gear wheel assembly (allied signal), refer to 32-40-13. For main landing gear wheel assembly (allied signal), refer to 32-40-14. For main landing gear brake assembly (allied signal), refer to 32-40-15. For main landing gear wheel assembly (allied signal), refer to 32-40-15. For main landing gear wheel assembly (allied signal), refer to 32-40-47. For main landing gear wheel assembly (allied signal), refer to 32-40-48. For main landing gear brake assembly (allied signal), refer to 32-40-49. For main landing gear brake assembly, refer to 32-40-50.
 - (1) Use standard industry procedures and the steps shown below to disassemble this component.
 - (2) Remove the lockwire from the bolts(10) (IPL Figure 4. Then remove the washers (15) and the inboard hubcap assembly (20) from the wheel and tire assembly (IPL Figure 1; 40) as shown in DISASSEMBLY, Figure 301.

32-11-17 DISASSEMBLY Page 301 Mar 01/2006



- (3) Remove the outboard hubcap assembly (IPL Figure 4; 60) from wheel and tire assembly (IPL Figure 1; 40) as shown in DISASSEMBLY, Figure 301.
 - (a) Turn the stud assemblies (IPL Figure 4; 70) 1/4 turn to remove the cover assembly (65) from the outboard hubcap assembly (90).
 - (b) Remove the lockwire from the bolts (10). Then remove the washers (15), and hubcap assembly (90) from the wheel and tire assembly (IPL Figure 1; 40).
- (4) Remove the bolts (IPL Figure 2; 10), the washers (15), the nuts (20) and the in-axle assemblies (25) from the main landing gear assembly as shown in DISASSEMBLY, Figure 302.
- (5) Disconnect the in-axle assembly (25) from the hydraulic fluid line.
- (6) Disassemble the in-axle assembly (25), as required.
 - (a) Remove the lockwire, G01048, the retainer nut (30), and the antiskid assembly (40) from the support transducer (35).
 - (b) Remove the lockwire, G01048, the bolt (45), the washer (50), and the dog (55) from the transducer (60).
- (7) Remove the wheel nuts (65), the washers (70), and the wheel and tire assemblies (IPL Figure 1; 40) as shown in DISASSEMBLY, Figure 302.
- (8) Remove the bolts (IPL Figure 3; 10), the washers (15), the nuts (20), and the retention cable (25) from the brake assemblies (35) as shown in DISASSEMBLY, Figure 303.







DISASSEMBLY Page 303 Mar 01/2006





VIEW ROTATED 7.49° CCW B-B

Hubcap Installation Disassembly Figure 301 (Sheet 2 of 3)





COMPONENT MAINTENANCE MANUAL



DISASSEMBLY Page 305 Mar 01/2006





277A6000-11 SHOWN 277A6000-12 OPPOSITE

In-Axle Installation Disassembly Figure 302 (Sheet 1 of 2)







32-11-17 DISASSEMBLY Page 307 Mar 01/2006





Brake Installation Disassembly Figure 303 (Sheet 1 of 2)

> **32-11-17** DISASSEMBLY Page 308 Mar 01/2006





B–B

ITEM NUMBERS REFER TO IPL FIG. 3

Brake Installation Disassembly Figure 303 (Sheet 2 of 2)





CLEANING

1. General

- A. This procedure tells how to clean the main landing gear wheels/brakes/equipment installation components.
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 thru IPL Figure 4 for item numbers.

2. Cleaning

A. References

Reference	Title
SOPM 20-30-03	GENERAL CLEANING PROCEDURES

- B. Procedure
 - (1) Clean all Boeing parts by standard industry procedures and the instructions in SOPM 20-30-03. Clean vendor parts by the applicable vendor's instructions.





CHECK

1. General

- A. This procedure tells how to find defects in the specified parts.
- B. Refer to FITS AND CLEARANCES for the design dimension and wear limits.
- C. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- D. Refer to IPL Figure 1 thru IPL Figure 4 for item numbers.

2. Check

A. References

Reference	Title
SOPM 20-20-01	MAGNETIC PARTICLE INSPECTION
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION

- B. Procedure
 - (1) Use standard industry procedures to do a visual check of all the parts for defects.
 - (2) Do a magnetic particle check (SOPM 20-20-01) of these parts:
 - (a) Dog (IPL Figure 2; 55)
 - (b) Washer (IPL Figure 2; 70)
 - (c) Wheel nut (IPL Figure 2; 65)
 - (3) Do a penetrant check (SOPM 20-20-02) of these parts:
 - (a) Nut (IPL Figure 2; 25)
 - (b) Support Transducer (IPL Figure 2; 35)





REPAIR

1. General

A. Instructions for repair, refinish, and replacement of the specified subassembly parts are included in each REPAIR when applicable:

Table 601:		
PART NUMBER	NAME	REPAIR
—	REFINISH OF OTHER PARTS	1-1
161A1311-1	WHEEL NUT	2-1
161T1209-1	RETAINER NUT	3-1
277A6110-3	HUBCAP	4-1
277A6111-3	HUBCAP	5-1
277A6111-4	HUBCAP	5-2
277A6112-2	TRANSDUCER SUPPORT	6-1

2. Dimensioning Symbols

A. Standard True Position Dimensioning Symbols used in the applicable repair procedures are shown in SOPM 20-00-00.



277A6000

BOEING®

COMPONENT MAINTENANCE MANUAL

REFINISH OF OTHER PARTS - REPAIR 1-1

1. General

- A. This procedure tells how to refinish the parts which are not given in other repairs.
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 thru IPL Figure 4 for item numbers.

2. Refinish of Other Parts

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I
D00110	Lubricant - Solid Film, Heat Cured, Corrosion Inhibiting	MIL-PRF-46010

B. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-60-02	FINISHING MATERIALS

- C. Procedure
 - **NOTE**: For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.
 - (1) Instructions for the repair of the parts listed in REPAIR 1-1, Table 601 are for replacement of the original finish.

IPL FIG. & ITEM	MATERIAL	FINISH
IPL Figure 2		
Nut (30)	Al alloy	Chromic acid anodize and apply primer, C00259 (F-18.13), but no primer on threads. Apply lubricant, D00110 lubricant (F-19.81) on threads.
Washer (50), Dog (55, 55A)	15-5PH CRES 150-170 ksi	Passivate (F-17.25, which replaces (F-17.09).
Tang Washer (70)	15-5PH CRES 180-200 ksi	Cadmium plate (F-16.06).
IPL Figure 4		
Washer (30, 100)	15-5PH CRES 150-170 ksi	Passivate (F-17.25, which replaces (F-17.09).

Table 601: Refinish Details

32-11-17 REPAIR 1-1 Page 601 Nov 01/2006 277A6000



COMPONENT MAINTENANCE MANUAL

WHEEL NUT - REPAIR 2-1

161A1311-1

1. General

- A. This procedure refinishes wheel nut (65).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 2 for item numbers.
- D. General repair details:
 - (1) Material: 4330M steel
 - (2) Heat Treat: 180-200 ksi

2. Wheel Nut Refinish

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
C00175	Primer - Urethane Compatible, Corrosion Resistant (Less Than 1% Aromatic Amines)	BMS10-79, Type III

B. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES

C. Procedure (REPAIR 2-1, Figure 601)

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01

(1) Chrome plate, cadmium titanium plate, and apply primer, C00175 as shown. Apply enamel coating, C00033 (F-19.39-707) to the external surfaces.







161A1311-1 Wheel Nut Repair Figure 601 (Sheet 1 of 2)

> **32-11-17** REPAIR 2-1 Page 602 Mar 01/2007





161A1311-1 Wheel Nut Repair Figure 601 (Sheet 2 of 2)

> **32-11-17** REPAIR 2-1 Page 603 Nov 01/2008



RETAINER NUT - REPAIR 3-1

161T1209-1

1. General

- A. This procedure tells how to refinish the retainer nut (30).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 2 for item numbers.
- D. General repair details:
 - (1) Material: Aluminum alloy

2. Retainer Nut Refinish

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I
D00110	Lubricant - Solid Film, Heat Cured, Corrosion Inhibiting	MIL-PRF-46010

B. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-41-02	APPLICATION OF CHEMICAL AND SOLVENT RESISTANT FINISHES
SOPM 20-50-08	APPLICATION OF BONDED SOLID FILM LUBRICANTS
SOPM 20-60-03	LUBRICANTS

- C. Procedure (REPAIR 3-1, Figure 601)
 - **NOTE:** For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For application of solvent and chemical resistant finishes, refer to SOPM 20-41-02. For application of bonded solid film lubricants, refer to SOPM 20-50-08. For lubricants, refer to SOPM 20-60-03.
 - (1) Chromate acid anodize and apply primer, C00259 (F-18.13) but no primer, C00259 on threads (flagnote 1).
 - (2) Apply lubricant, D00110 to the threads.









1 DO NOT PUT PRIMER ON THIS SURFACE APPLY MIL-L-46010, CLASS 1 DRY FILM LUBRICANT (F-19.81) 125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 2 ALL DIMENSIONS ARE IN INCHES

161T1209-1 Retainer Nut Repair Figure 601

> **32-11-17** REPAIR 3-1 Page 602 Mar 01/2006



HUBCAP - REPAIR 4-1

277A6110-3

1. General

- A. This procedure tells how to refinish the hubcap (55).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 4 for item numbers.
- D. General repair details:
 - (1) Material: Composite

2. Hubcap Refinish

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
C00766	Primer - Nonchromated (For Non-Metalic Composites)	BMS10-103, Type 1

B. References

Reference	Title
SOPM 20-10-06	REPAIR OF CONDUCTIVE COATINGS
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-60-02	FINISHING MATERIALS

- C. Procedure (REPAIR 4-1, Figure 601)
 - **NOTE:** For repair of conductive Ccoatings, refer to SOPM 20-10-06. For stripping of protective finishes, refer to SOPM 20-30-02. For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.
 - (1) Prepare the surface (SRF-14.672).
 - (2) Apply primer, C00766 (F-14.692).
 - (3) Apply enamel coating, C00033 (F-14.9813, which replaces SRF-14.9813).





A-A

277A6110-3 Hubcap Repair Figure 601 (Sheet 1 of 2)

> **32-11-17** REPAIR 4-1 Page 602 Mar 01/2006




1 NO FINISH ON THIS SURFACE. OVERSPRAY IS ALLOWED.

2 THE PART NUMBER IS FOUND HERE.

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY BREAK ALL SHARP EDGES ITEM NUMBERS REFER TO IPL FIG. 4 ALL DIMENSIONS ARE IN INCHES

277A6110-3 Hubcap Repair Figure 601 (Sheet 2 of 2)

> **32-11-17** REPAIR 4-1 Page 603 Mar 01/2006

277A6000



COMPONENT MAINTENANCE MANUAL

HUBCAP ASSEMBLY - REPAIR 5-1

277A6111-3

1. General

- A. This procedure tells how to repair the hubcap assembly (125).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 4 for item numbers.

2. Receptacle Replacement

- A. Procedure (REPAIR 5-1, Figure 601)
 - (1) Remove rivets (130) and the old receptacle(s) (135) from the hubcap (140).
 - (2) Install a replacement receptacle(s) (135) on the hubcap (140) with new rivets (130).





COMPONENT MAINTENANCE MANUAL



ITEM NUMBERS REFER TO IPL FIG. 1

277A6111-3 Hubcap Assembly Repair Figure 601

> **32-11-17** REPAIR 5-1 Page 602 Mar 01/2006



HUBCAP - REPAIR 5-2

277A6111-4

1. General

- A. This procedure tells how to refinish the hubcap (140).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 4 for item numbers.
- D. General repair details:
 - (1) Material: Composite

2. Hubcap Refinish

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
C00766	Primer - Nonchromated (For Non-Metalic Composites)	BMS10-103, Type 1

B. References

Reference	Title
SOPM 20-10-06	REPAIR OF CONDUCTIVE COATINGS
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-60-02	FINISHING MATERIALS

- C. Procedure (REPAIR 5-2, Figure 601)
 - **NOTE:** For repair of conductive Ccoatings, refer to SOPM 20-10-06. For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.
 - (1) Prepare the surface (SRF-14.672).
 - (2) Apply primer, C00766 (F-14.692).
 - (3) Apply enamel coating, C00033 (F-14.9813, which replaces SRF-14.9813).





277A6111-4 Hubcap Repair Figure 601 (Sheet 1 of 3)

> **32-11-17** REPAIR 5-2 Page 602 Mar 01/2006





277A6111-4 Hubcap Repair Figure 601 (Sheet 2 of 3)

> **32-11-17** REPAIR 5-2 Page 603 Mar 01/2006





Figure 601 (Sheet 3 of 3)

32-11-17 REPAIR 5-2 Page 604 Mar 01/2006 277A6000



COMPONENT MAINTENANCE MANUAL

TRANSDUCER SUPPORT - REPAIR 6-1

277A6112-2

1. General

- A. This procedure tells how to refinish the transducer support (35).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 2 for item numbers.
- D. General repair details:
 - (1) Material: Aluminum alloy

2. Support Transducer Refinish

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I
D00110	Lubricant - Solid Film, Heat Cured, Corrosion Inhibiting	MIL-PRF-46010

B. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-41-02	APPLICATION OF CHEMICAL AND SOLVENT RESISTANT FINISHES
SOPM 20-50-08	APPLICATION OF BONDED SOLID FILM LUBRICANTS
SOPM 20-60-03	LUBRICANTS

- C. Procedure (REPAIR 6-1, Figure 601)
 - **NOTE:** For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For application of solvent and chemical resistant finishes, refer to SOPM 20-41-02. For application of bonded solid film lubricants, refer to SOPM 20-50-08. For lubricants, refer to SOPM 20-60-03.
 - Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.35) unless shown by flagnotes 1 and 2.
 - (2) Apply primer, C00259 (F-20.03) unless shown by flagnotes 1 and 2. Apply lubricant, D00110 as shown.







277A6112-2 Transducer Support Repair Figure 601 (Sheet 1 of 4)

> **32-11-17** REPAIR 6-1 Page 602 Mar 01/2006

Deing.

COMPONENT MAINTENANCE MANUAL



32-11-17 REPAIR 6-1 Page 603 Mar 01/2006





277A6112-2 Transducer Support Repair Figure 601 (Sheet 3 of 4)

> **32-11-17** REPAIR 6-1 Page 604 Mar 01/2006





D-D

1 THE PART NUMBER IS FOUND HERE

NO PRIMER. APPLY MIL-L-46010 SOLID FILM LUBRICANT (F-19.81) 125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY BREAK ALL SHARP EDGES ITEM NUMBERS REFER TO IPL FIG. 2 ALL DIMENSIONS ARE IN INCHES

277A6112-2 Transducer Support Repair Figure 601 (Sheet 4 of 4)

> **32-11-17** REPAIR 6-1 Page 605 Mar 01/2006



ASSEMBLY

1. General

- A. This procedure tells how to assemble the main landing gear wheels/brakes/equipment installation components.
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 thru IPL Figure 4 for item numbers.

2. Assembly

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

	Reference	Description	Specification
I	C50056	Compound - Nondrying Resin Mix Corrosion Inhibiting Material	BMS 3-27
	D00233	Grease - Aircraft, General Purpose, Wide Temperature - Mobil 28	MIL-PRF-81322
	D00378	Grease - Aircraft, General Purpose, Wide Temperature - Aeroshell 22	MIL-PRF-81322
	G01048	Lockwire - Corrosion Resistant Steel (0.032 In. Dia.)	NASM20995 [~] C32

B. References

Reference	Title
SOPM 20-50-02	INSTALLATION OF SAFETYING DEVICES

- C. Procedure
 - (1) Use standard industry procedures and these steps.
 - (2) Install the brake assemblies (IPL Figure 3; 35) on the main landing gear assembly as shown in ASSEMBLY, Figure 701.
 - (a) Make sure that the brake sleeve is installed in the brake assemblies (35) as identified by flagnote 7.
 - (b) Apply a thin layer of Aeroshell 22 grease, D00378 or Mobil 28 grease, D00233 onto the brake axle bushings until the grooves in the bushing are completely filled with grease.
 - (c) Use the grease to hold the O-ring that comes with the brake assembly (35).
 - (d) Apply a thin layer of Aeroshell 22 grease, D00378 or Mobil 28 grease, D00233 to the mating lands of the brake sleeve as identified by flagnote 3.
 - (e) Remove unwanted grease.
 - (f) Slide the brake assembly (35) in position on the axle of the main landing gear assembly.
 - (3) Install the quick disconnect (30B) on the brake assembly (35) as shown in ASSEMBLY, Figure 701.
 - (a) Turn the quick disconnect (30B) clockwise until it snaps down.

32-11-17 ASSEMBLY Page 701 Jul 01/2009



WARNING: BMS 3-27 CORROSION INHIBITING COMPOUND CONTAINS SOLVENTS, CHROMATES, AND A SMALL AMOUNT OF BOUND ASBESTOS. CONSULT THE APPLICABLE SAFETY STANDARDS FOR APPROVED HANDLING PROCEDURES.

CAUTION: BMS 3-27 COMPOUND IS ONLY USED IN STATIC JOINTS WHERE GREASE CANNOT BE APPLIED. BMS 3-27 COMPOUND IN DYNAMIC JOINTS WILL NOT LET THEM MOVE FREELY.

- (b) Make sure that the lockwire, G01048 does not touch the outer diameter of the hose half as identified by flagnote 4.
- (4) Apply compound, C50056 to bolts (10), washers (15), and nuts (20).
- (5) Install retention cable (25) on the brake assemblies (35) with bolts (10), washers (15), and nuts (20).
- (6) Install the wheel and tire assembly (IPL Figure 1; 40) as shown in ASSEMBLY, Figure 702.
 - (a) Apply a Aeroshell 22 grease, D00378 or Mobil 28 grease, D00233 on the inside diameter of the wheel bearing and the mating lands of the axle as identified by flagnote 3.
 - (b) Put the wheel and tire assembly (40) on the main landing gear axle. Remove unwanted grease from the wheel bearings.
 - (c) Apply a thin layer of Aeroshell 22 grease, D00378 or Mobil 28 grease, D00233 to the faces of the washer (IPL Figure 2; 70), the wheel nut (65), and the axle threads as identified by flagnote 6.
 - (d) Turn the wheel. As the wheel turns, tighten the wheel nut (65) to 300-320 ft-lbs.
 - (e) Stop the wheel. Back off the wheel nut to 10-100 ft-lbs of torque.
 - (f) Tighten the wheel nut (IPL Figure 2; 65) to 140-160 ft-lbs until the locking bolt hole is aligned to the first available locking position as identified by flagnote 7.
 - (g) Remove unwanted grease from the wheel and tire assembly (IPL Figure 1; 40).
 - (h) If necessary, install lockwire, G01048 between inflation valve (60) and the lockwire, G01048 hole in the wheel. Use the double-twist procedure (SOPM 20-50-02).
- (7) Assemble the in-axle assemblies (IPL Figure 2; 25) as shown in ASSEMBLY, Figure 703.
 - (a) Install the dog (55) onto the transducer (6) with washer (50) and bolt (45).
 - (b) Install lockwire, G01048 on the bolt (45) and the dog (55). Use the double-twist procedure to install the lockwire, G01048 (SOPM 20-50-02).
 - (c) Install the anti-skid assembly (40) into support transducer (35) with retainer nut (30). Tighten the nut to 40-60 in-lbs.
 - (d) Install lockwire, G01048 on the retainer nut (30) and the support transducer (35). Use the double-twist procedure (SOPM 20-50-02).
- (8) Install the in-axle assemblies (25) into the main landing gear axle with the bolts (10), the washers (15), and the nuts (20) as shown in ASSEMBLY, Figure 704.
- (9) Install the outboard hubcap assembly (IPL Figure 4; 60) as shown in ASSEMBLY, Figure 705.
 - (a) Install the hubcap assembly (90) on the wheel and tire assembly (IPL Figure 1; 40) with the bolts (IPL Figure 4; 10) and the washers (15).
 - (b) Install lockwire, G01048 on the bolts (10). Use the double-twist procedure (SOPM 20-50-02).

32-11-17 ASSEMBLY Page 702 Nov 01/2006



- (c) Install the cover assembly (65) on the hubcap assembly (90). Turn the stud assemblies (70) 1/4 turn to hold the cover assembly (65) in position.
- (10) Install the inboard hubcap assembly (20) on the wheel and tire assembly (IPL Figure 1; 40) with bolts (IPL Figure 4; 10), and washers (15).
- (11) Install lockwire, G01048 onto the bolts (10). Use the double-twist procedure (SOPM 20-50-02).







MLG Wheels/Brakes/Equipment Assembly Figure 701 (Sheet 1 of 3)

> **32-11-17** ASSEMBLY Page 704 Mar 01/2006





32-11-17 ASSEMBLY Page 705 Mar 01/2006 **BOEING**®

COMPONENT MAINTENANCE MANUAL



- 1 SIMILAR: 277A6000-301,-303,-703, -705
- 2 SIMILAR: 277A6000-302,-304,-704, -706
- 3 APPLY THIN LAYER OF BMS 3-33 GREASE HERE.
- 4 MAKE SURE THAT THE LOCKWIRE DOES NOT TOUCH THE OUTER DIAMETER OF THE HOSE HALF.
- 5 LUBE FITTING FOR PERIODIC IN-SERVICE LUBRICATION WITH AEROSHELL 22 OR MOBIL 28

ITEM NUMBERS REFER TO IPL FIG. 3

MLG Wheels/Brakes/Equipment Assembly Figure 701 (Sheet 3 of 3)

> **32-11-17** ASSEMBLY Page 706 Nov 01/2006





Figure 702 (Sheet 1 of 2)

32-11-17 ASSEMBLY Page 707 Mar 01/2006





(BRAKE ASSEMBLIES NOT SHOWN) B-B

- 1 SIMILAR: 277A6000-101,-103,-105, -107,-109,-1003,-1005,-1007,-1009, -1011
- 2 SIMILAR: 277A6000-102,-104,-106, -108,-1004,-1006,-1008,-1010,-1012
- 3 APPLY A THIN LAYER OF AEROSHELL 22 OR MOBIL 28 GREASE HERE
- 4 ALWAYS REPLACE FILL VALVE ASSEMBLY WITH A NEW ONE. TIGHTEN TO 150-200 POUND-INCHES. INSTALL LOCKWIRE
- 5 MAKE SURE THAT ALL WHEEL AND TIRE ASSEMBLIES ON EACH AIRCRAFT ARE MADE BY THE SAME MANUFACTURER

- 6 APPLY A THIN LAYER OF AEROSHELL 22 OR MOBIL 28 GREASE TO FACES OF WASHER, AND TO THE WHEEL NUT AND AXLE THREADS
- 7 TIGHTEN THIS NUT TO 140-160 POUND-FEET, UNTIL THE LOCKING BOLT HOLE IS ALIGNED TO THE FIRST AVAILABLE LOCKING POSITION

Wheel and Tire Installation Assembly Figure 702 (Sheet 2 of 2)

> **32-11-17** ASSEMBLY Page 708 Nov 01/2006





In-Axle Installation Assembly Figure 703

> **32-11-17** ASSEMBLY Page 709 Mar 01/2006





In-Axle Assembly Installation Figure 704 (Sheet 1 of 2)

> **32-11-17** ASSEMBLY Page 710 Mar 01/2006





32-11-17

ITEM NUMBERS REFER TO IPL FIG. 2

ASSEMBLY Page 711 Mar 01/2006

In-Axle Assembly Installation Figure 704 (Sheet 2 of 2)

WASHER (15) NUT (20) (2 LOCATIONS)





32-11-17 ASSEMBLY Page 712 Mar 01/2006





B-B



Hubcap Assembly Installation Figure 705 (Sheet 2 of 3)

> **32-11-17** ASSEMBLY Page 713 Mar 01/2006





D-D

ITEM NUMBERS REFER TO IPL FIG. 4

Hubcap Assembly Installation Figure 705 (Sheet 3 of 3)





FITS AND CLEARANCES

REF IPL		NAME	TORQUE*		
FIG. NO.	ITEM NO.	NAME	POUND-INCHES	POUND-FEET	
1	60	Valve Assembly	150–200		
2	6	Wheel Nut		140-160	
2	20	Nut		140–160	
2	30	Retainer Nut		40-60	
4	25,95	Capscrew	15-20		
4	40,110	Bolt	30–35		

* REFER TO SOPM 20-50-01 FOR TORQUE VALUES OF STANDARD FASTENERS.

Torque Table Figure 801





SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

(NOT APPLICABLE)

32-11-17 SPECIAL TOOLS, FIXTURES, AND EQUIPMENT Page 901 Mar 01/2006



ILLUSTRATED PARTS LIST

1. Introduction

- A. The Illustrated Parts List (IPL) contains an illustration and a list of component parts you can repair or replace. The Illustrated Parts Catalog (IPC) shows how to use the Boeing part number system.
- B. This shows how parts are related: The relation of each item to its next higher assembly (NHA) is shown in the NOMENCLATURE column. Use the indenture system that follows:

1 2 3 4 5 0	1	2	3	4	5	6	7
-------------	---	---	---	---	---	---	---

- . Assembly
- . Attaching parts for assembly
- . Detail parts for assembly
- . . Subassembly
- . . Attaching parts for subassembly
- Detail parts for subassembly
- . . . Sub-subassembly
- . . . Attaching parts for subassembly
 - Details parts for sub-subassembly

Detail Installation Parts (Included only if installation parts may be sent to the shop as part of assembly)

- C. Each top assembly is given one use code letter (A, B, C, etc.) in the USAGE CODE column. All subsequent component parts in the list can have one or more of the use code letters to show effectivity to top assemblies. A component part without a use code applies to all top assemblies.
- D. An alphabetical letter is added after the item number for optional parts, parts changed by a Service Bulletin, configuration differences (except left-handed and right-handed parts), last engineering releases, and parts added between item numbers in a sequence. The alphabetical letter will not be shown on the illustration for equivalent parts of the same part number.
- E. Color-coded parts are identified with a single digit alpha following the dash number or with "SP" suffix. If the "SP" suffix is used, it represents consolidation of all color codes applicable for a given usage which are not separately listed. Orders for color-coded parts should include the registry number of the airplane for which the parts are ordered.
- F. If a part number is 15 characters long but will not fit in the part number column, the part number will be displayed with a "~" at the end of the line and will be continued on the next line. The "~" denotes that the part number continues on the next line.
- G. Parts changed by a Service Bulletin are shown by PRE SB XXXX and POST SB XXXX added to the NOMENCLATURE column.
 - (1) When a new top assembly is added by a Service Bulletin, PRE SB XXXX and POST SB XXXX will be added at the top assembly level only. The configuration differences at the detail part level are shown by use code letters.
 - (2) When the top assembly part number is not changed by the Service Bulletin, PRE SB XXXX and POST SB XXXX will be added at the detail level.
- H. Interchangeable Parts

32-11-17 ILLUSTRATED PARTS LIST Page 1001 Nov 01/2008





Optional (OPT)	The part is optional to and interchangeable with other parts that have the same item number.
Replaces, Replaced by and not interchangeable with (REPLACES, REPLACED BY AND NOT INTCHG/W)	The part replaces and is not interchangeable with the initial part.
Replaces, Replaced by (REPLACES, REPLACED BY)	The part replaces and is interchangeable with, or is an alternative to, the initial part.

VENDOR CODES

Code	Name
07649	SENIOR FLEXONICS METAL BELLOWS DIV 1075 PROVIDENCE HWY SHARON, MASSACHUSETTS 02067
0A1K8	MICHELIN AIRCRAFT TIRE CORP ONE PARKWAY SOUTH P. O. BOX 19001 GREENVILLE, SOUTH CAROLINA 29615-9001 FORMERLY IN AKRON, OH; IN CHARLOTTE, NC
11362	PARKER-HANIFFIN CORP STRATOFLEX DIV 3353 OLD CONEJO ROAD NEWBURY PARK, CALIFORNIA 91320-2162 FORMERLY SYMETRICS INC.
15653	ALCOA GLOBAL FASTENERS INC DIV KAYNAR PRODUCTS 800 S STATE COLLEGE BLVD FULLERTON, CALIFORNIA 92831-3001 FORMERLY VK6405 MICRODOT AEROSP LTD; FORMERLY KAYNAR TECH FORMERLY FAIRCHILD FASTENERS KAYNAR DIV
55284	HONEYWELL INTL INC DBA AIRCRAFT LANDING SYSTEMS/ALS/ 3520 WESTMOOR ST SOUTH BEND, INDIANA 46628-1373 FORMERLY ALLIED-SIGNAL BENDIX WHEELS & BRAKES DIV
62554	SIMMONDS MECAERO FASTENERS INC 1734 SEQUOIA AVENUE ORANGE, CALIFORNIA 92668

32-11-17 ILLUSTRATED PARTS LIST Page 1002 Nov 01/2006



Code	Name
71286	ALCOA GLOBAL FASTENERS INC 3014 W LOMITA BLVD TORRANCE, CALIFORNIA 90505 FORMERLY REXNORD INC SPECIALITY FASTENER DIV IN HASBROUCK HEIGHTS, NEW JERSEY; FORMERLY CAMLOC FASTENER CORP V08733
73842	GOODYEAR TIRE & RUBBER COMPANY 1144 EAST MARKET STREET AKRON, OHIO 44316-3011
81982	CRANE COMPANY HYDRO-AIRE DIV 3000 WINONA AVENUE PO BOX 7722 BURBANK, CALIFORNIA 91510 FORMERLY HYDRO-AIRE DIV CRANE CO AND ADEL VALVE V00502
91816	CIRCLE SEAL CONTROLS INC A WATTS INDUSTRIES INC CO 2301 WARDLOW CIRCLE PO BOX 3300 CORONA, CALIFORNIA 91718 FORMERLY BRUNSWICK CORP CIRCLE SEAL DIV BRUNSWICK VALVE FORMERLY CIRCLE SEAL DIV BRUNSWICK VALVE & CONTROL V27409; FORMERLY ZEVCO INC V62701
97153	GOODRICH BF ENGINEERED PRODUCTS GROUP PO BOX 340 WACO STREET TROY, OHIO 45373-3835
S4233	BRIDGESTONE TIRE CO LTD 1 KYOBASHI 1-CHROME CHUO-KU, TOKYO 104 JAPAN





NUMERICAL INDEX

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		1		1
		1		1
029-894-0		1	55	1
		1	55B	1
		1	55C	1
10-44		1	60	1
10-62237-11		1	45G	1
10-62237-16		3	35C	2
10-62237-18		3	35G	2
10-62237-2		3	35H	2
10-62237-3		1	45C	1
10-62237-4		3	35J	2
10-62237-5		1	45	1
10-62237-6		3	35B	2
10-62237-7		1	45F	1
140-025-1		2	60	1
140-025-2		2	60A	1
161A1311-1		2	65	2
161A1312-1		2	70	2
161T1209-1		2	30	1
161T1220-1		4	35	1
		4	105	1
161T1221-1		2	55	1
161T1221-3		2	55A	1
161T1222-1		2	50	1
161T1223-1		4	30	1
		4	100	1
165T0101-102		2	40	1
2-1586		3	35B	2
		3	35B	2
		3	35B	2
		3	35C	2
		3	35C	2
2-1586-1		3	35B	2

32-11-17 ILLUSTRATED PARTS LIST Page 1004 Nov 01/2006



PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		3	35B	2
		3	35C	2
		3	35C	2
		3	35C	2
2-1587-1		3	35G	2
2612301-2		1	45G	1
2612302-1		3	35H	2
2612311-1		1	45C	1
2612312-1		3	35J	2
277A6000-1001		1	1A	RF
277A6000-1002		1	5	RF
277A6000-1003		1	1B	RF
277A6000-1004		1	5A	RF
277A6000-1005		1	1C	RF
277A6000-1006		1	5B	RF
277A6000-1007		1	1D	RF
277A6000-1008		1	5C	RF
277A6000-1009		1	1K	RF
277A6000-101		1	1E	RF
277A6000-1010		1	5J	RF
277A6000-1011REVA		1	1N	RF
277A6000-1012REVA		1	5M	RF
277A6000-102		1	5D	RF
277A6000-103		1	1F	RF
277A6000-104		1	5E	RF
277A6000-105		1	1G	RF
277A6000-106		1	5F	RF
277A6000-107		1	1H	RF
277A6000-108		1	5G	RF
277A6000-109		1	1J	RF
277A6000-11		1	10	RF
		2	1	RF
277A6000-110		1	5H	RF
277A6000-111		1	1L	RF
277A6000-112		1	5K	RF

32-11-17 ILLUSTRATED PARTS LIST Page 1005 Nov 01/2006 277A6000



COMPONENT MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
277A6000-113		1	1M	RF
277A6000-114		1	5L	RF
277A6000-12		1	15	RF
		2	5	RF
277A6000-201		1	55A	1
277A6000-203		1	40F	2
277A6000-204		1	40G	2
277A6000-205		1	40D	2
277A6000-206		1	40E	2
277A6000-207		1	40H	2
277A6000-208		1	40K	2
277A6000-209		1	40L	2
277A6000-301		1	20	RF
		3	1	RF
277A6000-302		1	25	RF
		3	5	RF
277A6000-303		1	20A	RF
		3	1A	RF
277A6000-304		1	25A	RF
		3	5A	RF
277A6000-41		1	30	RF
		4	1	RF
277A6000-42		1	35	RF
		4	5	RF
277A6000-600		1	40	2
277A6000-601		1	40A	2
277A6000-602		1	40B	2
277A6000-603		1	40C	2
277A6000-604		1	40J	2
277A6000-605		1	40M	2
277A6000-701		1	20B	RF
		3	1B	RF
277A6000-702		1	25B	RF
		3	5B	RF
277A6000-703		1	20C	RF

32-11-17 ILLUSTRATED PARTS LIST Page 1006 Nov 01/2006



PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		3	1C	RF
277A6000-704		1	25C	RF
		3	5C	RF
277A6000-705		1	20D	RF
		3	1D	RF
277A6000-706		1	25D	RF
		3	5D	RF
277A6110-1		4	20	1
277A6110-3		4	55	1
277A6111-1		4	60	1
277A6111-2		4	90	1
277A6111-3		4	125	1
277A6111-4		4	140	1
277A6112-1		2	25	2
277A6112-2		2	35	1
277A6113-1		4	65	1
277A6113-2		4	85	1
3-1557		1	45	1
3-1558		1	45F	1
3-1654		1	45H	1
4002-0S		4	80	8
431K62-1		1	50	1
		1	50A	1
441K82-1		1	55	1
		1	55B	1
		1	55C	1
591300-32		3	30B	2
60B10055-4		1	60	1
84490-1		4	50	1
		4	120	1
APS06013		1	50	1
		1	50A	1
APS06015		1	55	1
		1	55B	1
		1	55C	1

32-11-17 ILLUSTRATED PARTS LIST Page 1007 Nov 01/2006



PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
APS06030		1	55D	1
BACB30NR4K14		2	10	4
BACB30NR4K9		3	10	2
BACC2A5D00145BB		3	25	1
BACG20X4C		4	80	8
BACN10YR4CD		2	20	4
		3	20	2
BACR11AV3C		4	135	8
BACR12X2		4	75	8
BACR15BA4A7C		4	130	16
BACS21ED9AR		4	70	8
BACW10BP3APU		4	45	2
		4	115	2
BACW10BP4CD		4	15	6
BACW10BP4DP		2	15	4
H52732-4CD		2	20	4
		3	20	2
M0DREF288973		1	1N	RF
M0DREF288974		1	5M	RF
NAS1149D0463J		3	15	4
NAS1352N08H10		4	25	2
		4	95	2
NAS6303-2H		4	40	2
		4	110	2
NAS6603H2		2	45	1
NAS6704H5		4	10	6
PLH54CD		2	20	4
		3	20	2
S161T102-5		4	50	1
		4	120	1
S274A102-32		3	30B	2
S277A015-132		1	50	1
		1	50A	1
S277A015-242		1	55	1
		1	55B	1

32-11-17 ILLUSTRATED PARTS LIST Page 1008 Nov 01/2006


PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		1	55C	1
S283T001-10		2	60	1
S283T001-15		2	60A	1







32-11-17 ILLUSTRATED PARTS LIST Page 1010 Nov 01/2006



FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
			INSTALLATION COMPONENTS		
			WHEEL/BRAKE/EQUIPMENT MLG		
–1A	277A6000-1001		WHEEL AND TIRE INSTL-L	А	RF
–1B	277A6000-1003		WHEEL AND TIRE INSTL-L	С	RF
–1C	277A6000-1005		WHEEL AND TIRE INSTL-L	Е	RF
–1D	277A6000-1007		WHEEL AND TIRE INSTL-L	G	RF
–1E	277A6000-101		WHEEL AND TIRE INSTL-L	J	RF
–1F	277A6000-103		WHEEL AND TIRE INSTL-L	L	RF
–1G	277A6000-105		WHEEL AND TIRE INSTL-L	Ν	RF
–1H	277A6000-107		WHEEL AND TIRE INSTL-L	Q	RF
–1J	277A6000-109		WHEEL AND TIRE INSTL-L	AG	RF
–1K	277A6000-1009		WHEEL AND TIRE INSTL-L	AJ	RF
–1L	277A6000-111		WHEEL AND TIRE INSTL-L	AL	RF
–1M	277A6000-113		WHEEL AND TIRE INSTL-L	AN	RF
–1N	M0DREF288973		WHEEL AND TIRE INSTL-L (277A6000-1011REVA)	AQ	RF
5	277A6000-1002		WHEEL AND TIRE INSTL-R	В	RF
–5A	277A6000-1004		WHEEL AND TIRE INSTL-R	D	RF
–5B	277A6000-1006		WHEEL AND TIRE INSTL-R	F	RF
–5C	277A6000-1008		WHEEL AND TIRE INSTL-R	Н	RF
–5D	277A6000-102		WHEEL AND TIRE INSTL-R	К	RF
–5E	277A6000-104		WHEEL AND TIRE INSTL-R	М	RF
–5F	277A6000-106		WHEEL AND TIRE INSTL-R	Р	RF
–5G	277A6000-108		WHEEL AND TIRE INSTL-R	R	RF
–5H	277A6000-110		WHEEL AND TIRE INSTL-R	AH	RF
–5J	277A6000-1010		WHEEL AND TIRE INSTL-R	AK	RF
–5K	277A6000-112		WHEEL AND TIRE INSTL-R	AM	RF
–5L	277A6000-114		WHEEL AND TIRE INSTL-R	AP	RF
–5M	M0DREF288974		WHEEL AND TIRE INSTL-R (277A6000-1012REVA)	AR	RF
-10	277A6000-11		IN AXLE INSTL-L (FOR DETAILS SEE FIG. 2)	S	RF

-Item not Illustrated

32-11-17 ILLUSTRATED PARTS LIST Page 1011 Nov 01/2006



FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
-15	277A6000-12		IN AXLE INSTL-R (FOR DETAILS SEE FIG. 2)	т	RF
-20	277A6000-301		BRAKE INSTL-L (FOR DETAILS SEE FIG. 3)	U	RF
–20A	277A6000-303		BRAKE INSTL-L (FOR DETAILS SEE FIG. 3)	W	RF
–20B	277A6000-701		BRAKE INSTL-L (FOR DETAILS SEE FIG. 3)	Y	RF
-20C	277A6000-703		BRAKE INSTL-L (FOR DETAILS SEE FIG. 3)	AA	RF
–20D	277A6000-705		BRAKE INSTL-L (FOR DETAILS SEE FIG. 3)	AC	RF
-25	277A6000-302		BRAKE INSTL-R (FOR DETAILS SEE FIG. 3)	V	RF
–25A	277A6000-304		BRAKE INSTL-R (FOR DETAILS SEE FIG. 3)	Х	RF
–25B	277A6000-702		BRAKE INSTL-R (FOR DETAILS SEE FIG. 3)	Z	RF
–25C	277A6000-704		BRAKE INSTL-R (FOR DETAILS SEE FIG. 3)	AB	RF
–25D	277A6000-706		BRAKE INSTL-R (FOR DETAILS SEE FIG. 3)	AD	RF
-30	277A6000-41		HUBCAP INSTL-L (FOR DETAILS SEE FIG. 4)	AE	RF
-35	277A6000-42		HUBCAP INSTL-R (FOR DETAILS SEE FIG. 4)	AF	RF
40	277A6000-600		. WHEEL AND TIRE ASSY-10-62237-5 WHLS/H43.5 X 16.0-21, 26 PR TIRES	А, В	2
-40A	277A6000-601		. WHEEL AND TIRE ASSY-10-62237-5 WHLS/H43.5 X 16.0-21, 26 PR TIRES	C, D	2
-40B	277A6000-602		. WHEEL AND TIRE ASSY-10-62237-7 WHLS/H43.5 X 16.5-21, 28 PR TIRES WITH 60B10055-4 FILL/ VALVE GAUGE	E, F	2
-40C	277A6000-603		. WHEEL AND TIRE ASSY-10-62237-7 WHLS/H43.5 X 16.5-21, 28 PR TIRE	G, H	2
-40D	277A6000-205		. WHEEL AND TIRE ASSY-10-62237-11 WHLS/H43.5 X 16.0-21, 26 PR, GY TIRES	J, K	2

-Item not Illustrated

32-11-17 ILLUSTRATED PARTS LIST Page 1012 Nov 01/2006



FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
-40E	277A6000-206		. WHEEL AND TIRE ASSY-10-62237-11 WHLS/H43.5 X 16.0-21, 26 PR, TIRES	L, M	2
-40F	277A6000-203		. WHEEL AND TIRE ASSY-10-62237-3 WHLS/H44.5 X 16.5-21, 28 PR, TIRES WITH 60B10055-4 FILL VALVE/GAUGE	N, P	2
-40G	277A6000-204		. WHEEL AND TIRE ASSY-10-62237-3 WHLS/H44.5 X 16.5-21, 28 PR, TIRES	Q, R	2
-40H	277A6000-207		. WHEEL AND TIRE ASSY-10-62237-11 WHL/H43.5 X 16.5-21, 26 PR, TIRES WITH 60B10055-4 FILL VALVE/GAUGE	AG, AH	2
-40J	277A6000-604		. WHEEL AND TIRE ASSY-10-62237-5 WHL/H43.5 X 16.0-21, 26 PR, TIRES WITH 60B10055-4 FILL VALVE/GAUGE	AJ, AK	2
-40K	277A6000-208		. WHEEL AND TIRE ASSY-BENDIX STD WHL/H44.5 X 16.0-21, 28 PR, TIRES	AL, AM	2
-40L	277A6000-209		. WHEEL AND TIRE ASSY-BENDIX HGW WHL/H43.5 X 16.0-21, 26 PR, TIRES	AN, AP	2
-40M	277A6000-605		. WHEEL AND TIRE ASSY-30PR, 235MPH TIRE	AQ, AR	2
45	3-1557		WHEEL ASSY-BFG STANDARD (V97153) (SPEC 10-62237-5)	A-D, AJ, AK	1
-45A	10-62237-7		DELETED		
–45B	10-62237-11		DELETED		
-45C	2612311-1		WHEEL ASSY-BENDIX HGW (V55284) (SPEC 10-62237-3)	J-R, AG, AH, AN, AP	1
-45D	2612301		DELETED		
-45E	2612301-1		DELETED		
-45F	3-1558		WHEEL ASSY-BENDIX HGW (V97153) (SPEC 10-62237-7)	E-H	1
-45G	2612301-2		WHEEL ASSY-BENDIX HGW (V55284) (SPEC 10-62237-11)	AL, AM	1
–45H	3-1654		WHEEL ASSY-GOODRICH (V97153)	AQ, AR	1

32-11-17 ILLUSTRATED PARTS LIST Page 1013 Nov 01/2006



FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
50	431K62-1		TIRE-43.5X16.0-21, 26PR, 225 MPH (V73842) (SPEC S277A015-132) (OPT APS06013 (VS4233))	A, B, L, M, AG- AK, AN, AP	1
–50A	APS06013		TIRE-43.5X16.0-21,26PR, 225 MPH (VS4233) (SPEC S277A015-132) (OPT 431K62-1 (V73842))	A, B, L, M, AG- AK, AN, AP	1
-55	APS06015		TIRE-H44.5X16.5-21, 28PR, 225MPH (VS4233) (SPEC S277A015-242) (OPT 029-894-0 (V0A1K8)) (OPT 441K82-1 (V73842))	C-H, N-R, AL, AM	1
55A	277A6000-201		TIRE-GOODYEAR 43.5X16.0-21, 26PR, 225 MPH	J, K	1
–55B	441K82-1		TIRE-H44.5X16.5-21, 28PR, 225MPH (V73842) (SPEC S277A015-242) (OPT APS06015 (VS4233)) (OPT 029-894-0 (V0A1K8))	C-H, N-R, AL, AM	1
–55C	029-894-0		TIRE-H44.5X16.5-21, 28PR 225MPH (V0A1K8) (SPEC S277A015-242) (OPT 441K82-1 (V73842)) (OPT APS06015 (VS4233))	C-H, N-R, AL, AM	1
–55D	APS06030		TIRE-H44.5X16.5X21, 30PR, 235MPH (VS4233)	AQ, AR	1
60	10-44		VALVE ASSY (V91816) (SPEC 60B10055-4)	E, F, N, P, AG- AK	1

32-11-17 ILLUSTRATED PARTS LIST Page 1014 Nov 01/2006



COMPONENT MAINTENANCE MANUAL



Main Gear Wheels, Brakes, Equipment Installation IPL Figure 2 (Sheet 1 of 2)

> 32-11-17 ILLUSTRATED PARTS LIST Page 1015 Nov 01/2006





Main Gear Wheels, Brakes, Equipment Installation IPL Figure 2 (Sheet 2 of 2)

> **32-11-17** ILLUSTRATED PARTS LIST Page 1016 Nov 01/2006



FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
2–					
-1	277A6000-11		IN AXLE INSTL-L	S	RF
5	277A6000-12		IN AXLE INSTL-R	Т	RF
10	BACB30NR4K14		. BOLT	S, T	4
15	BACW10BP4DP		. WASHER	S, T	4
20	H52732-4CD		. NUT (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))	S, T	4
25	277A6112-1		. IN AXLE ASSY	S, T	2
30	161T1209-1		NUT-RTNR	S, T	1
35	277A6112-2		TRANSDUCER-SPRT	S, T	1
40	165T0101-102		ANTISKID ASSY	S, T	1
45	NAS6603H2		BOLT	S, T	1
50	161T1222-1		WASHER	S, T	1
55	161T1221-1		DOG (OPT ITEM 55A)	S, T	1
-55A	161T1221-3		DOG (OPT ITEM 55)	S, T	1
60	140-025-1		TRANSDUCER (V81982) (SPEC S283T001-10) (OPT ITEM 60A)	S, T	1
–60A	140-025-2		TRANSDUCER (V81982) (SPEC S283T001-15) (OPT ITEM 60)	S, T	1
65	161A1311-1		. NUT-WHEEL	S, T	2
70	161A1312-1		. WASHER-TANG	S, T	2

32-11-17 ILLUSTRATED PARTS LIST Page 1017 Nov 01/2006





Main Gear Wheels, Brakes, Equipment Installation IPL Figure 3

32-11-17 ILLUSTRATED PARTS LIST Page 1018 Nov 01/2006



FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
3–					
-1	277A6000-301		BRAKE INSTL-L	U	RF
–1A	277A6000-303		BRAKE INSTL-L	W	RF
–1B	277A6000-701		BRAKE INSTL-L	Y	RF
–1C	277A6000-703		BRAKE INSTL-L	AA	RF
–1D	277A6000-705		BRAKE INSTL-L	AC	RF
5	277A6000-302		BRAKE INSTL-R	V	RF
–5A	277A6000-304		BRAKE INSTL-R	х	RF
–5B	277A6000-702		BRAKE INSTL-R	Z	RF
–5C	277A6000-704		BRAKE INSTL-R	AB	RF
–5D	277A6000-706		BRAKE INSTL-R	AD	RF
10	BACB30NR4K9		. BOLT	U-AD	2
15	NAS1149D0463J		. WASHER	U-AD	4
20	H52732-4CD		. NUT (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))	U-AD	2
25	BACC2A5D00145BB		. CABLE-RETENTION	U-AD	1
30	591300-12		DELETED		
–30A	591300-22		DELETED		
30B	591300-32		. DISCONNECT-QUICK HOSE HALF (V11362) (SPEC S274A102-32)	U-AD	2
35	261302-1		DELETED		
–35A	261312-1		DELETED		





FIG/		AIRLINE PART	NOMENCLATURE	USAGE	UNITS PER
2 2	FART NOWDER	NOWIDER	1234307	CODL	A331
з– 35В	2-1586		. BRAKE ASSY-BFG STANDARD CAPACITY (V97153) (SPEC 10-62237-6) (10-62237-16) (2-1586-1) (I/W 10-62237-6) (2-1586) (WITH CUSTOMER APPROVAL 10-62237-16) (2-1586-1) (IS LONGER LIFE WEIGHING APPROXIMATELY 21.1 POUNDS MORE THAN A 10-62237-6) (2-1586)	Υ, Ζ	2
-35C	2-1586-1		. BRAKE ASSY-BFG STANDARD CAPACITY SERVICE CONFIGURED (V97153) (SPEC 10-62237-16) (10-62237-16) (2-1586-1) (I/W 10-62237-6) (2-1586) (WITH CUSTOMER APPROVAL 10-62237-16) (2-1586-1) (IS LONGER LIFE WEIGHING APPROXIMATELY 21.1 POUNDS MORE THAN A 10-62237-6) (2-1586)	AA, AB	2
–35D	10-62237-8		DELETED		
–35E	2-1587		DELETED		
–35F	10-62238-18		DELETED		
-35G	2-1587-1		. BRAKE ASSY-BFG HIGH CAPACITY (V97153) (SPEC 10-62237-18)	AC, AD	2
–35H	2612302-1		. BRAKE ASSY-BENDIX STANDARD CAPACITY (V55284) (SPEC 10-62237-2)	U, V	2
–35J	2612312-1		. BRAKE ASSY-BENDIX HIGH CAPACITY (V55284) (SPEC 10-62237-4)	W, X	2

-Item not Illustrated

32-11-17 ILLUSTRATED PARTS LIST Page 1020 Nov 01/2006





32-11-17 ILLUSTRATED PARTS LIST Page 1021 Nov 01/2006





Main Gear Wheels, Brakes, Equipment Installation IPL Figure 4 (Sheet 2 of 5)

> **32-11-17** ILLUSTRATED PARTS LIST Page 1022 Nov 01/2006







Main Gear Wheels, Brakes, Equipment Installation IPL Figure 4 (Sheet 3 of 5)

> **32-11-17** ILLUSTRATED PARTS LIST Page 1023 Nov 01/2006





Main Gear Wheels, Brakes, Equipment Installation IPL Figure 4 (Sheet 4 of 5)

> **32-11-17** ILLUSTRATED PARTS LIST Page 1024 Nov 01/2006



COMPONENT MAINTENANCE MANUAL



Main Gear Wheels, Brakes, Equipment Installation IPL Figure 4 (Sheet 5 of 5)

> **32-11-17** ILLUSTRATED PARTS LIST Page 1025 Nov 01/2006



FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
4–					
-1	277A6000-41		HU CAP INSTL-L	AE	RF
-5	277A6000-42		HUBCAP INSTL-R	AF	RF
10	NAS6704H5		. BOLT	AE, AF	6
15	BACW10BP4CD		. WASHER	AE, AF	6
20	277A6110-1		. HUBCAP ASSY-INBD	AE, AF	1
25	NAS1352N08H10		SCREW-CAP	AE, AF	2
30	161T1223-1		WASHER	AE, AF	1
35	161T1220-1		CUP	AE, AF	1
40	NAS6303-2H		BOLT	AE, AF	2
45	BACW10BP3APU		WASHER	AE, AF	2
50	84490-1		COUPLING ASSY (V07649) (SPEC S161T102-5)	AE, AF	1
55	277A6110-3		HUBCAP	AE, AF	1
60	277A6111-1		. HUBCAP ASSY-OUTBD	AE, AF	1
65	277A6113-1		COVER ASSY	AE, AF	1
70	BACS21ED9AR		STUD ASSY	AE, AF	8
75	BACR12X2		RING-SNAP	AE, AF	8
80	4002-0S		GROMMET-PANEL (V71286) (SPEC BACG20X4C)	AE, AF	8
85	277A6113-2		COVER	AE, AF	1
90	277A6111-2		HUBCAP ASSY	AE, AF	1
95	NAS1352N08H10		SCREW-CAP	AE, AF	2
100	161T1223-1		WASHER	AE, AF	1
105	161T1220-1		CUP	AE, AF	1
110	NAS6303-2H		BOLT	AE, AF	2
115	BACW10BP3APU		WASHER	AE, AF	2
120	84490-1		COUPLING ASSY (V07649) (SPEC S161T102-5)	AE, AF	1
125	277A6111-3		HUBCAP ASSY	AE, AF	1
130	BACR15BA4A7C		RIVET	AE, AF	16

-Item not Illustrated

32-11-17 ILLUSTRATED PARTS LIST Page 1026 Nov 01/2006



FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
4–					
135	BACR11AV3C		RECEPTACLE-PANEL	AE, AF	8
140	277A6111-4		HUBCAP	AE, AF	1

