UTC Aerospace Systems

Landing Systems - Landing Gear

Goodrich Aerospace Canada Ltd
1400 South Service Road West
Oakville, Ontario L6L 5Y7
Canada
Tel: +1 905 825 1515
Fax: +1 905 825 1583
www.customers.utcaerospacesystems.com
CAGE: 02121

SERVICE BULLETIN

MAIN LANDING GEAR SHOCK STRUT PISTON/AXLE - INSPECTION

REVISION NO. 1 – Feb 26/18

Service Bulletin 49200-32-85 Revision 1 supersedes Service Bulletin 49200-32-85, dated Jul 23/14 and is reissued in its entirety with the changes listed below.

The compliance in the previous issue of this Service Bulletin is not affected by this revision. No additional rework is introduced by this revision.

Please destroy all copies of Service Bulletin 49200-32-85, dated Jul 23/14.

Page/Para	Change
Page 3, Para. 2.B.	CIC added to the list of consumables.
Page 4, Para. D.	Reference for corrosion inhibiting compound revised.
Page 8, Figure 3.	Reference for corrosion inhibiting compound revised

INTENTIONALLY BLANK

UTC Aerospace Systems

Landing Systems - Landing Gear

Goodrich Aerospace Canada Ltd
1400 South Service Road West
Oakville, Ontario L6L 5Y7
Canada
Tel: +1 905 825 1515
Fax: +1 905 825 1583
www.customers.utcaerospacesystems.com
CAGE: 02121

SERVICE BULLETIN

MAIN LANDING GEAR SHOCK STRUT PISTON/AXLE - INSPECTION

1. PLANNING INFORMATION

A. Effectivity

Piston/Axle PN 49203-7/-9 all serial numbers.

B. Concurrent Requirements

NA

C. Reason

Problem/Condition
Potential degradation of the surface protection coating at the piston/axle thrust face area, may result in the possibility for corrosion.

Evidence
Analysis of inspection results of the sampling program has resulted in this Service Bulletin action.

Objective/Benefit
Accomplishment of this Service Bulletin will make sure that surface protection at the piston/axle thrust face area meets the original design requirements.

D. Description

The wheel and tire assembly are removed, as required. The brake assembly is removed. The inboard axle sleeves are removed.

The piston/axle thrust face assembly is inspected for condition of surface protection. Any evidence of corrosion is removed and surface protection is re-applied.

The axle sleeves are re-installed. As required, the wheel and tire assembly and brake assembly are re-installed (Ref. Paragraph 3, ACCOMPLISHMENT INSTRUCTIONS).

E. Compliance

Goodrich Landing Gear recommends accomplishment of this Service Bulletin at times specified in Bombardier Aerospace Service Bulletin 670BA-32-048

F. Approval

The technical content of this Service Bulletin has been reviewed and accepted by Bombardier Aerospace.

G. Manpower

Approximately 6.0 manhours are required to accomplish this service bulletin. Additional manpower may be required if inspection reveals that rework is required.

NOTE: Goodrich Landing Gear will credit operators for manpower expended.

H. Weight and Balance

N/A

I. Electrical Load Data

N/A

J. Software Accomplishment Summary

N/A

K. References

UTC Aerospace Systems Component Maintenance Manual (CMM) 32-11-05
UTC Aerospace Systems Component Maintenance Manual (CMM) 32-11-06
Bombardier Aerospace (BA) Aircraft Maintenance Manual (AMM) CSP B-001
Bombardier Aerospace (BA) Service Bulletin (SB) 670BA-32-048

L. Other Publications Affected

UTC Aerospace Systems Component Maintenance Manual 32-11-05
UTC Aerospace Systems Component Maintenance Manual 32-11-06

2. MATERIAL INFORMATION

A. Material Required for Each Component

N/A

B. Consumables

MATERIAL	SPECIFICATION
Cleaning Solvent	Acetone, ASTM-D-329, Isopropyl Alcohol, TT-I-735, Methyl-ethyl-ketone,
Cloth, Lint Free	Commercially Available
Corrosion Inhibiting Compound	CA 1000 or Mastinox 6856K

C. Tooling (Refer to CMM 32-11-05/06)

TOOL PN	DESCRIPTION
GE-56726	Axle Sleeve Puller
RD-256	Enerpac Actuator

3. ACCOMPLISHMENT INSTRUCTIONS

A. General

Refer to Component Maintenance Manual 32-11-05/06

NOTES

1. Item numbers in parenthesis ( ) refer to CMM 32-11-05/06 IPL Figure-Item number.

2. This Service Bulletin can be accomplished on-wing, refer to Bombardier Aerospace (BA) Aircraft Maintenance Manual (AMM) for component removal/ installation instructions.

B. Disassembly

(1) Remove the wheel and tire assembly and brake assembly. (Ref. CMM 32-11-05/-06, DISASSEMBLY).

NOTE: This Service Bulletin can be accomplished on-wing, refer to BA AMM for component removal/installation instructions**.**

(2) Remove inboard axle sleeve (3-1730) (Ref. Fig. 1):

NOTE: This Service Bulletin can be accomplished on-wing, refer to BA AMM for component removal/installation instructions**.**

(a) Remove wheel speed transducer retainer (3-970). Withdraw and disconnect wheel speed transducer (1-50), withdraw wheel speed transducer sleeve (3-980) (Ref. CMM 32-11-05/-06).

(b) Insert plug of puller tool GE-56726 into axle. Install puller, inboard sleeve collar, pins, and assemble to guide, with threaded rod and nuts as shown in Figure 1.

(c) Assemble Enerpac Actuator RD-256 to puller tool GE-56726. Operate actuator to remove inboard axle sleeve from journals on axle.

C. Inspection (Ref. Figure 2)

NOTE: Make sure inspection surfaces are clean. Wipe with a clean cloth moistened in solvent**.**

(1) Inspect piston/axle root radius, thrust face surface and adjacent area.

(a) Inspect condition of topcoat, primer and cadmium plate for freedom from damage with no missing paint or exposed base material.

NOTES **1.** Primer/topcoat must overlap the chrome plate runout.

2. If paint is not visible or base material is visible, inspect for evidence of corrosion.

(2) If no damage is found, assemble and re-identify in accordance with paragraph D and paragraph E.

(3) If damage or corrosion is found, refer to aircraft manufacturer's appropriate documentation.

D. Assembly (Ref. Figure 3)

NOTE: This Service Bulletin can be accomplished on-wing, refer to BA AMM for component removal/installation instructions.

CAUTION: USE PROTECTIVE EQUIPMENT WHEN WORKING WITH CORROSION INHIBITING COMPOUNDS. SKIN CONTACT CAN BE HAZARDOUS TO YOUR HEALTH.

(1) Apply a liberal coat of corrosion inhibiting compound (CIC) all over root radius and journal radius of piston/axle. Apply a thin layer of CIC on chrome plated journal (Ref. Fig. 3).

(2) Heat axle sleeve to 240 - 370°F (140 - 190°C).

(3) Install the axle sleeve (3-1730) on piston/axle and allow axle sleeve to cool to room temperature (Ref. CMM 32-11-05/-06, ASSEMBLY).

NOTES **1.** Make sure the axle sleeve remains in contact with piston/axle thrust face. Do not let the axle sleeve move as it cools to room temperature.

2. After axle sleeve installation check for ‘squeeze out’ of CIC.
Remove any excess CIC with a dry lint free cloth.
Make sure temperature plate on piston/axle is visible.

(4) Install wheel speed transducer sleeve (3-980), connect and insert transducer (1-50) and transducer retainer (3-970) (Ref. CMM 32-11-05/-06, ASSEMBLY).

NOTE: This Service Bulletin can be accomplished on-wing, refer to BA AMM for component removal/installation instructions**.**

(5) As necessary, install the wheel and tire assembly and brake assembly. (Ref. CMM 32-11-05/-06, ASSEMBLY).

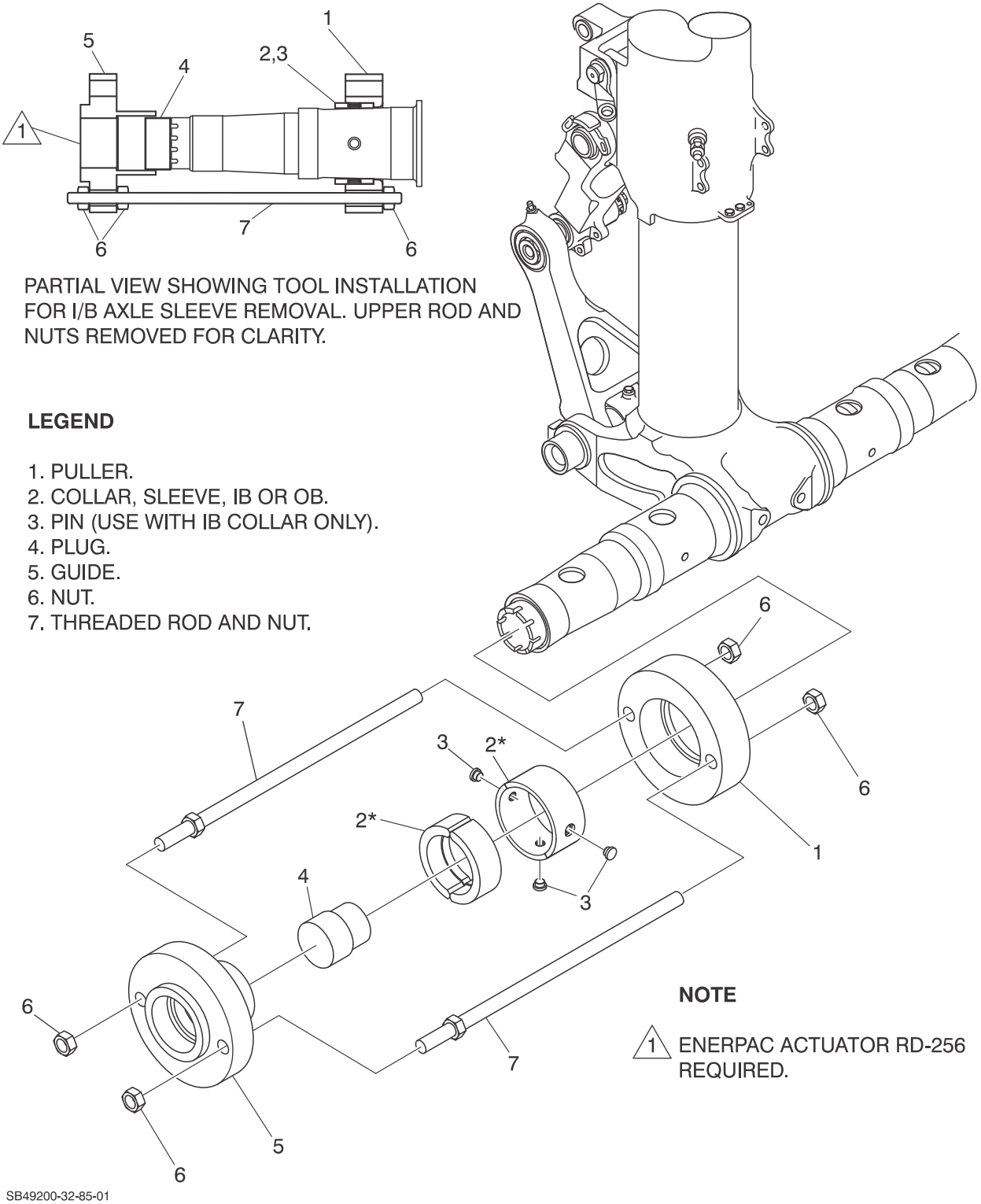
NOTE: This Service Bulletin can be accomplished on-wing, refer to BA AMM for component removal/installation instructions**.**

E. Re-Identification

(1) On first incorporation of this service bulletin, ink stamp SB 32-85 on piston/axle near the part number.

(2) On second, and subsequent inspections, append the letter "A", "B" and so on to SB 32-85.

(3) Apply an overcoat of clear enamel to ink stamp per MIL-PRF-85285

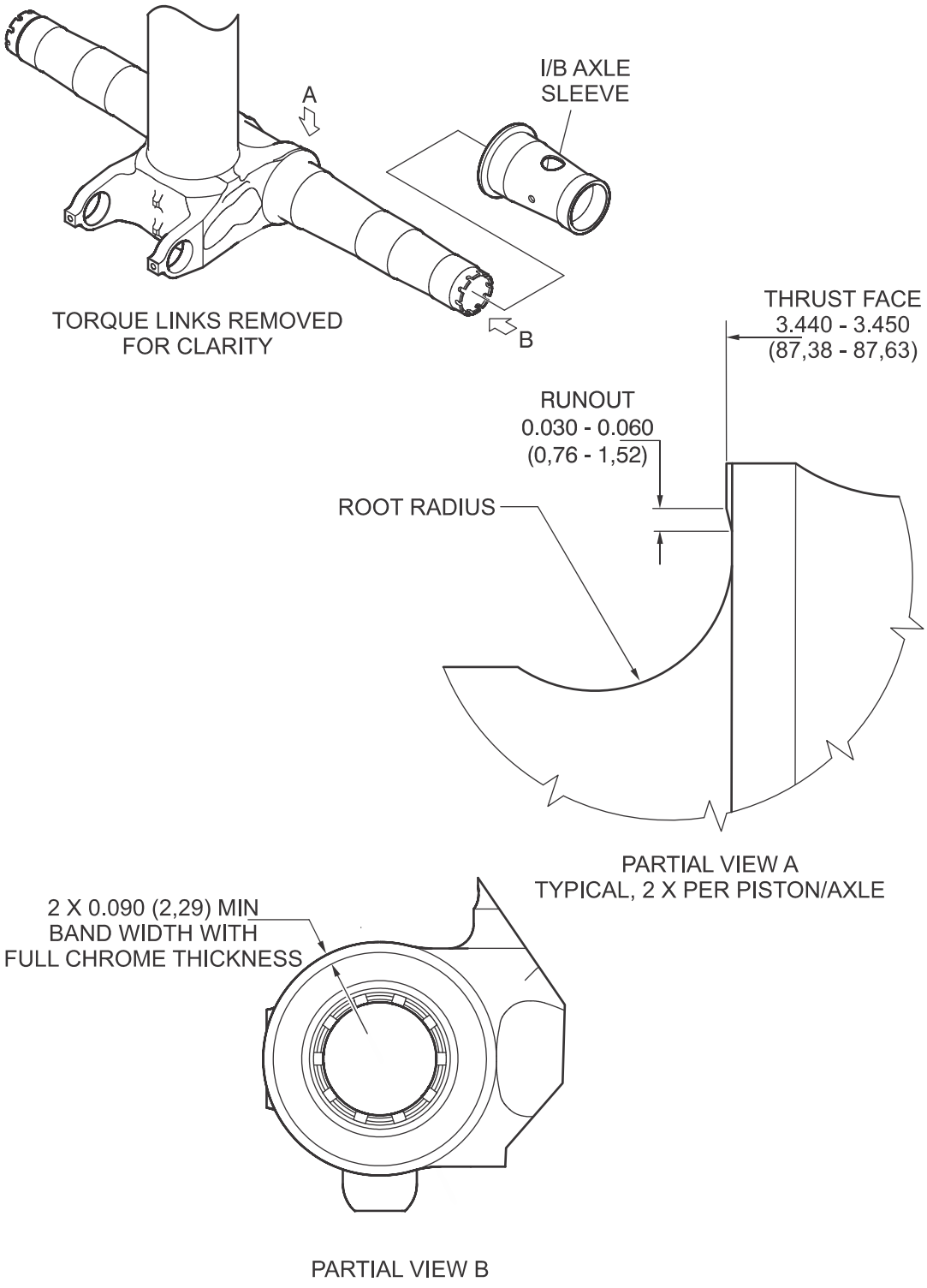


PARTIAL VIEW SHOWING TOOL INSTALLATION FOR I/B AXLE SLEEVE REMOVAL. UPPER ROD AND NUTS REMOVED FOR CLARITY.

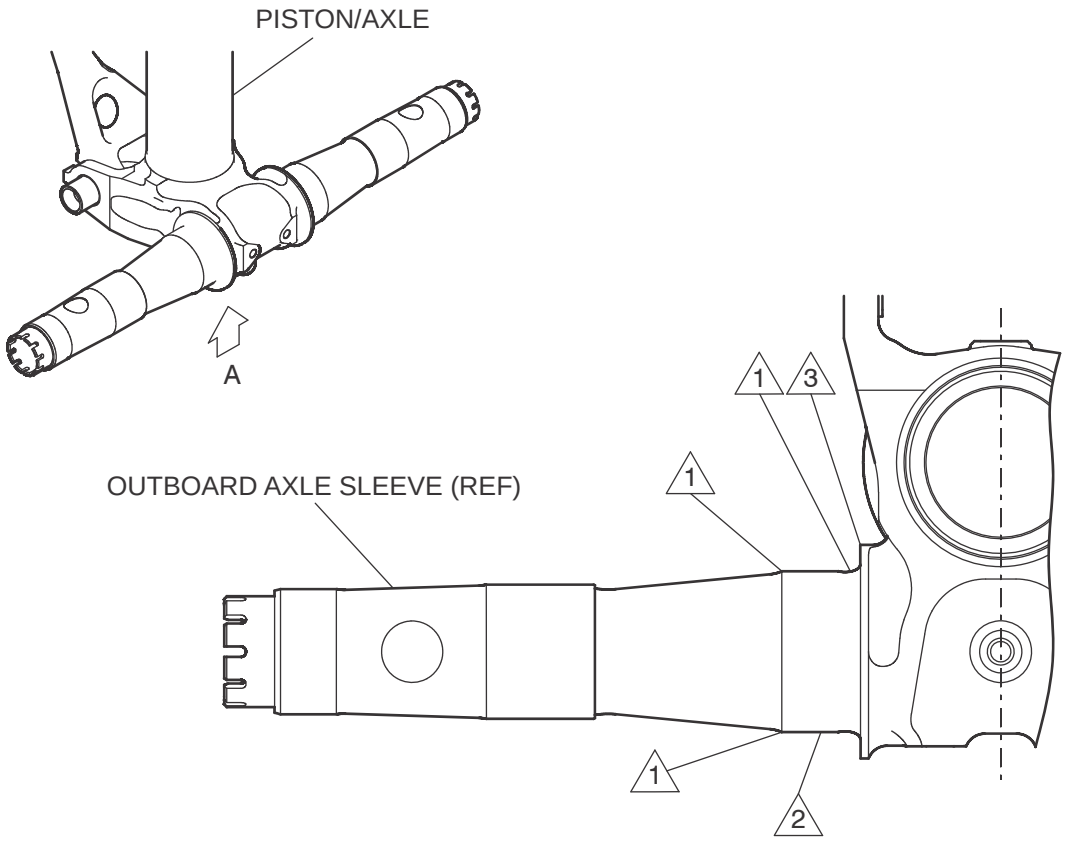
LEGEND

1. PULLER.
2. COLLAR, SLEEVE, IB OR OB.
3. PIN (USE WITH IB COLLAR ONLY).
4. PLUG.
5. GUIDE.
6. NUT.
7. THREADED ROD AND NUT.

Piston/Axle Inspection - Removal of Inboard Axle Sleeve
Figure 1



Piston/Axle Inspection
Figure 2



PARTIAL VIEW A

LEFT SIDE SHOWN
RIGHT SIDE SIMILAR

NOTE

1. APPLY A LIBERAL COAT OF CORROSION INHIBITING COMPOUND (CIC) TO ROOT RADIUS AND JOURNAL RADIUS.

2. APPLY A LIGHT COAT OF CIC TO AXLE JOURNALS.

3. AT ASSEMBLY OF AXLE SLEEVES CHECK FOR CIC SQUEEZE OUT . REMOVE EXCESS CIC WITH A DRY LINT FREE CLOTH.

SB 49200-32-85-02A

Piston/Axle Inspection - Assembly
Figure 3