

Kit Installation Publication

Main Wheel & Brake Conversion Kit Aircraft Wheel and Brake, LLC Part No. 199-283

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Publication No. IM199-283, Revision C

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TO: HOLDERS OF IM199-283 INSTALLATION MANUAL FOR MAIN WHEEL ASSEMBLY PART NO. 40-480 AND MAIN BRAKE ASSEMBLY PART NO. 30-289.

Attached to this transmittal letter is Revision NC of IM199-283 (dated 2018-01-15)

Revision NC, Dated 2018-01-15

REVISION NC CONTAINS ALL PAGES OF THE MANUAL. Pages that have been added or revised are outlined below together with the highlights of the revision.

Please retain all **REVISION HIGHLIGHTS** pages, inserting them into the manual for future reference.

REVISION HIGHLIGHTS

Section/Page No.

Description Of Change

All Sections/All Pages	Initial Release (ECO-0088427)
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TO: HOLDERS OF IM199-283 INSTALLATION MANUAL FOR MAIN WHEEL ASSEMBLY PART NO. 40-480 AND MAIN BRAKE ASSEMBLY PART NO. 30-289.

Attached to this transmittal letter is Revision A of IM199-283 (dated 2018-10-16)

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REVISION A CONTAINS ALL PAGES OF THE MANUAL. Pages that have been added or revised are outlined below together with the highlights of the revision.

Please retain all **REVISION HIGHLIGHTS** pages, inserting them into the manual for future reference.

REVISION HIGHLIGHTS

Section/Page No.

Description Of Change

As follows	Per ECO-0097602
Title Page/T-1	Updated to reflect current revision
Record of Revisions/RR-1	Updated to reflect current revision
Pg 2	Section 2.3 Aircraft model applicability (add) modification compatibility note.

TO: HOLDERS OF IM199-283 INSTALLATION MANUAL FOR MAIN WHEEL ASSEMBLY PART NO. 40-480 AND MAIN BRAKE ASSEMBLY PART NO. 30-289.

Attached to this transmittal letter is Revision B of IM199-283 (dated 2019-11-22)

Revision B, Dated 2019-11-22

REVISION B CONTAINS ALL PAGES OF THE MANUAL. Pages that have been added or revised are outlined below together with the highlights of the revision.

Please retain all **REVISION HIGHLIGHTS** pages, inserting them into the manual for future reference.

REVISION HIGHLIGHTS

Section/Page No.

Description Of Change

As follows	Per ECO-0109321
Title Page/T-1	Updated to reflect current revision
Record of Revisions/RR-1	Updated to reflect current revision
Pg 13	Section 10.1 Brake conditioning procedure, Step 1 (now) Perform two [2] full stop braking applications from 30 to 35 knots, do not allow the brake discs to cool between each stop. Maximum pressure braking is not required for conditioning stops. (was) Perform two [2] full stop braking applications from 30 to 35 knots, allowing the brake disc to cool between each stop.

TO: HOLDERS OF IM199-283 INSTALLATION MANUAL FOR MAIN WHEEL ASSEMBLY PART NO. 40-480 AND MAIN BRAKE ASSEMBLY PART NO. 30-289.

Attached to this transmittal letter is Revision C of IM199-283 (dated 2023-08-21)

Revision C, Dated 2023-08-21

REVISION C CONTAINS ALL PAGES OF THE MANUAL. Pages that have been added or revised are outlined below together with the highlights of the revision.

Please retain all **REVISION HIGHLIGHTS** pages, inserting them into the manual for future reference.

REVISION HIGHLIGHTS

Section/Page No.

Description Of Change

As follows	Per CA-00000013
Title Page/T-1	Updated to reflect current revision
Record of Revisions/RR-1	Updated to reflect current revision
All Pages	Updated to AWB format. Removed Parker references from the document.
Page N-1, 3	Update AWB contact information.
Page N-1	Removed "Step 3: Return Registration Card" section from the notice.

[illegible]

STEP 1: VERIFY EQUIPMENT

VERIFY THAT THE ASSEMBLY PART NUMBERS AS LISTED ON THE KIT PARTS LIST MATCH THE PART NUMBERS AS INDICATED ON THE ASSEMBLY NAMEPLATES.

STEP 2: REVIEW KIT HIGHLIGHTS

REVIEW AIRCRAFT MODIFICATIONS (IF ANY), INSTALLATION HARDWARE, AND AIRCRAFT MODEL APPLICABILITY.

STEP 3: TECHNICAL ASSISTANCE

FOR TECHNICAL ASSISTANCE, CONTACT THE TECHNICAL SERVICES HOTLINE:

Aircraft Wheel and Brake, LLC
1160 Center Road
Avon, Ohio 44011 U.S.A.
Attn: Technical Services/Hotline

E-mail: clevelandwbhelp@kaman.com
Fax: (440) 937-5409
Tel: 1-800-BRAKING (1-800-272-5464)
Websites: www.kaman.com
www.kaman.com/cleveland
www.clevelandwheelsandbrakes.com

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1.0 INTRODUCTION

The 199-283 Kit is designed to replace the OEM equipment main wheels and brakes on the aircraft model listed in Table 1. The 199-283 Kit will retrofit one aircraft. Instructions are per landing gear.

 **SAFETY WARNING:** ALL TORQUE AND SPECIFIC LIMITS OR VALUES CONTAINED HEREIN MUST BE STRICTLY OBSERVED. IGNORING OF TORQUE LIMITS AND OTHER SPECIFIC VALUES GIVEN BY THIS MANUAL CAN CAUSE PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH.

CAUTION: READ THIS INSTALLATION MANUAL AND REVIEW THE INSTALLATION DRAWING, NO. 50-166, BEFORE DOING ANY WORK.

This manual provides the necessary procedures to accomplish the installation of an STC'd Aircraft Wheel & Brake Conversion Kit. It is published for the guidance of qualified maintenance personnel responsible for the installation of a Aircraft Wheel & Brake Conversion Kit.

Installation of this kit should be performed by a qualified, licensed Airframe and Powerplant mechanic (A & P).

Use the following publications in addition to this conversion kit publication for all kit component identification and installation instructions:

- Kit Parts List, P/N 199-283.
- Installation Drawing, No. 50-166.

The 199-283 Kit contains AWB brake assembly P/N 30-289 and wheel assembly P/N 40-480.

1.1 Warnings, cautions and notes

These adjuncts to the text shall be used to highlight or emphasize important points when necessary. Refer to the descriptions of these statements that follow:

- A “**SAFETY WARNING**” flagged by this symbol  , calls attention to possible serious or life threatening situations if procedures are not followed.
- A “**WARNING**” calls attention to use of materials, processes, methods, procedures, or limits which must be followed precisely to avoid injury to persons.
- A “**CAUTION**” calls attention to methods and procedures which must be followed to avoid damage to equipment.
- A “**NOTE**” calls attention to an essential operating or maintenance procedure, condition, or statement, which must be highlighted.

2.0 KIT HIGHLIGHTS

2.1 Modifications

There are no modifications required to the aircraft.

2.2 Installation hardware

Refer to Installation Drawing, No. 50-166 for hardware details such as:

- Replacement hardware included in this conversion kit
- Installation specific hardware required for this conversion kit
- Existing hardware that will be reused for this conversion kit

2.3 Aircraft model applicability

The equipment supplied under Kit No. 199-283 is applicable to the following aircraft.

Table 1 Aircraft model applicability

MAKE	MODEL
Piaggio	P.180**

****NOTE:** This modification has not been shown to be compatible with the antiskid system for the P.180 aircraft. If the antiskid system is installed, it must be removed or disabled prior to installation of this modification.

3.0 TSO NOTICE

The main wheel and brakes used in this conversion kit carry a “TSO” marking which identifies them as having been fully laboratory tested and qualified to meet the applicable Federal Aviation Agency (FAA) specifications and requirements.

Modifications to the wheel and brake assemblies provided in this kit or use of unapproved parts will void the TSO qualification and warranty for the wheel and brake assemblies.

4.0 PRODUCT REGISTRATION

A product registration card is included in the shipment of this conversion kit. The card is used to track the conversion kits and your guarantee of receiving any future airworthiness information applicable to Conversion Kit No. 199-283. Please fill out the registration card completely and return promptly. Postage is prepaid.

5.0 EQUIPMENT MAINTENANCE SUPPORT PUBLICATIONS

Refer to the following publications, published by, AWB, for illustrated parts list identification, service limits, maintenance, component overhaul and applicable related data. Always obtain the latest issue in effect.

- CM40-480 Component maintenance manual for 40-480 main wheel assembly
(Includes Illustrated Parts List)
- CM30-289 Component maintenance manual for 30-289 main brake assembly
(Includes Illustrated Parts List)

6.0 ORDERING INFORMATION

To order spare parts, contact the nearest, Aircraft Wheel & Brake distributor in your area, or contact Aircraft Wheel and Brake:

Aircraft Wheel and Brake, LLC
1160 Center Road
Avon, Ohio 44011 U.S.A.
Attn: Technical Services/Hotline

E-mail: clevelandwbhelp@kaman.com
Fax: (440) 937-5409
Tel: 1-800-BRAKING (1-800-272-5464)
Websites: www.kaman.com
www.kaman.com/cleveland
www.clevelandwheelsandbrakes.com

7.0 EQUIPMENT DESCRIPTION AND OPERATION

The brake assembly is a single fixed cylinder, six piston, hydraulically actuated. The brake is designed to operate with MIL-PRF-5606 hydraulic fluid.

The main wheel assembly is the primary interface between the main landing-gear strut and the tire during ground operation. The divided type design facilitates tire installation and removal. The wheel provides partial support of the weight of the aircraft and a means of steering control.

Braking action begins to occur when hydraulic pressure is applied to the brake, via the pilot's or co-pilot's braking input. As the hydraulic pressure reaches the brake it forces the pistons outward against the pressure plate assembly which compresses the brake stack against the torque tube assembly. This generated frictional force is transferred to the wheel/tire through the three rotor discs which have drive slots that engage the main wheel.

8.0 INSTRUCTIONS

Read this installation manual and review Installation Drawing, No. 50-166, before removing and installing components.



SAFETY WARNING: MAKE SURE THE AIRCRAFT IS SECURE AND STABLE BEFORE BEGINNING ANY WORK. WORKING AROUND AN AIRCRAFT THAT IS NOT SECURE AND STABLE CAN CAUSE INJURY OR DEATH.



SAFETY WARNING: FULLY DEFLATE THE TIRE BEFORE REMOVING THE VALVE CORE. THE AIR IN A TIRE PUTS PRESSURE ON THE VALVE CORE. THE VALVE CORE CAN EJECT WITH GREAT FORCE AND CAN CAUSE INJURY OR DEATH.



SAFETY WARNING: FOLLOW ALL SAFETY PRECAUTIONS AND WEAR PROTECTIVE CLOTHING AND SAFETY GLASSES WHEN WORKING WITH THE BRAKE ASSEMBLY AND HYDRAULIC FLUIDS. FAILURE TO COMPLY CAN RESULT IN PERSONAL INJURY.

CAUTION: ALWAYS CHECK THE CONDITION OF ORIGINAL EQUIPMENT HARDWARE THAT WILL BE RETAINED. REPLACE THESE ITEMS AS NEEDED.

8.1 Remove the original equipment

SAFETY WARNING: WEAR THE APPROPRIATE PROTECTIVE CLOTHING AND EYEWEAR BEFORE DOING THE WORK.

- 1 Refer to the airframe manufacturer's instructions to lift and support the aircraft.
- 2 Fully deflate the tire by depressing the valve stem plunger in the tube valve stem until air can no longer be heard escaping from the tube.
- 3 When all the tire pressure is released, then carefully remove the valve core from the valve stem.
- 4 Remove and retain the axle hardware.
- 5 Remove the wheel/tire unit from the axle.
- 6 Follow instructions per the airframe manufacturer's manual to disconnect and remove the brake assembly from the aircraft. Plug/cap all open lines and fittings.
- 7 Repeat steps 1 through 6 for the other landing gear wheels and brakes.

8.2 Brake assembly shuttle valve location

SAFETY WARNING: WEAR THE APPROPRIATE PROTECTIVE CLOTHING AND EYEWEAR BEFORE DOING THE WORK.

1. The shuttle valve is mounted to the brake housing in the right hand gear position. For left hand gear installation, the shuttle valve is reversed as follows.
 - 1.1 Remove the two bolts and washers that attach the shuttle valve to the brake housing.

NOTE: The bolts and washers have had anti-seize applied. If an additional application is needed after removal, then apply anti-seize per Figure 1.
 - 1.2 Check that the helical inserts in the housing have not backed out.
 - 1.3 Check that the preformed packing and two backup rings have not dislodged from the shuttle valve to brake housing connection on the shuttle valve manifold.
 - 1.4 Flip the valve to align with the hydraulic lines.
 - 1.5 Reinstall the bolts and washers. Torque the bolts to 40 to 50 in-lb.

NOTE:

1. APPLY ANTI-SEIZE COMPOUND TO THE FOLLOWING AREAS:

- A. CONTACT SURFACE UNDER THE BOLT HEAD.
- B. BOTH FACES OF THE WASHER.
- C. THREADS ON THE BOLT SHANK.

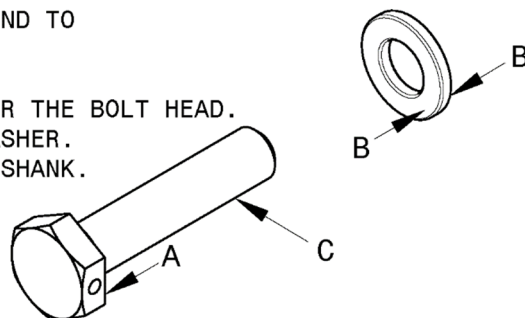


Figure 1 Apply anti-seize to shuttle valve mounting hardware

8.3 Apply anti-seize compound to the brake assembly mounting hardware.

CAUTION: DO NOT REINSTALL OLD BRAKE FASTENERS.

- 1 The brake assembly fasteners (6X bolts and 6X washers) are components of the brake assembly and are packaged in the kit. Remove the fasteners from the packaging. Prior to installing, lubricate the fasteners with anti-seize compound, per MIL-PRF-83483 as shown in Figure 2.

NOTE:

1. APPLY ANTI-SEIZE COMPOUND TO THE FOLLOWING AREAS:

- A. CONTACT SURFACE UNDER THE BOLT HEAD.
- B. BOTH FACES OF THE WASHER.
- C. THREADS ON THE BOLT SHANK.

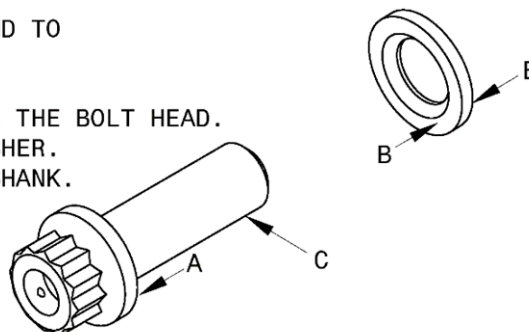


Figure 2 Apply anti-seize to brake assembly mounting hardware



SAFETY WARNING: MAKE SURE THE AIRCRAFT IS SECURE AND STABLE BEFORE BEGINNING ANY WORK. WORKING AROUND AN AIRCRAFT THAT IS NOT SECURE AND STABLE CAN CAUSE INJURY OR DEATH.

8.4 Install the AWB brake assembly, P/N 30-289

Reference: Installation Drawing, No. 50-166.



SAFETY WARNING: WEAR THE APPROPRIATE PROTECTIVE CLOTHING AND EYEWEAR BEFORE DOING THE WORK.

- 1 Refer to Figure 3. Position the brake assembly on the axle. The shuttle valve and inlets will be located at the top.

CAUTION: WASHER IS INSTALLED WITH THE COUNTERSINK FACING THE BOLT HEAD.

- 2 Make sure anti-seize has been applied to the brake assembly fasteners (see Figure 2) and attach the brake assembly to the axle flange with the six washers and bolts. Torque the bolts to 335 to 345 in-lb.
- 3 Install/connect existing hydraulic lines per airframe manufacturer's instructions.

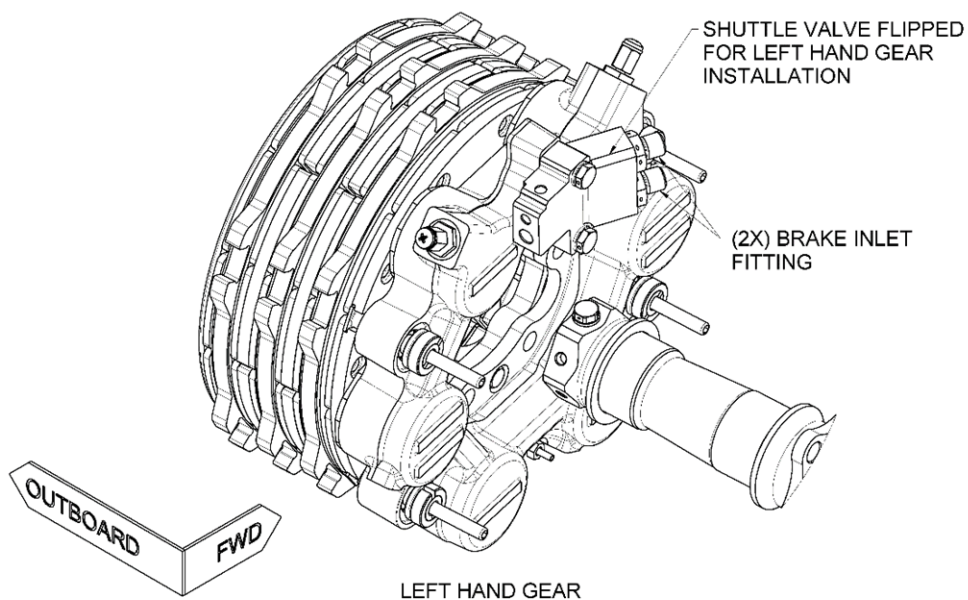
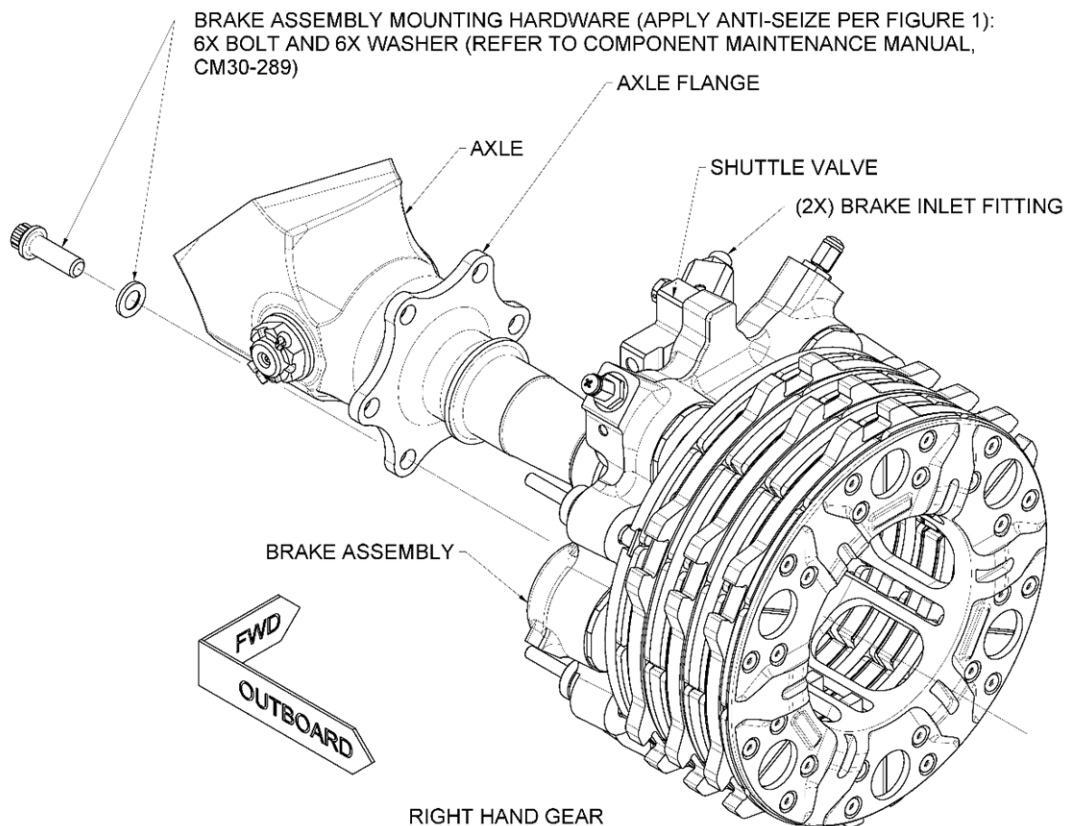


Figure 3 Install the brake assembly

8.5 Install the AWB wheel assembly, P/N 40-480

The wheel assembly must be disassembled to the level required for mounting a tire.

Refer to Figure 4 for identification of wheel assembly components. For complete parts identification, refer to Component Maintenance Manual, CM40-480.

NOTE: The wheel register preformed packing (6) is bagged for shipment.

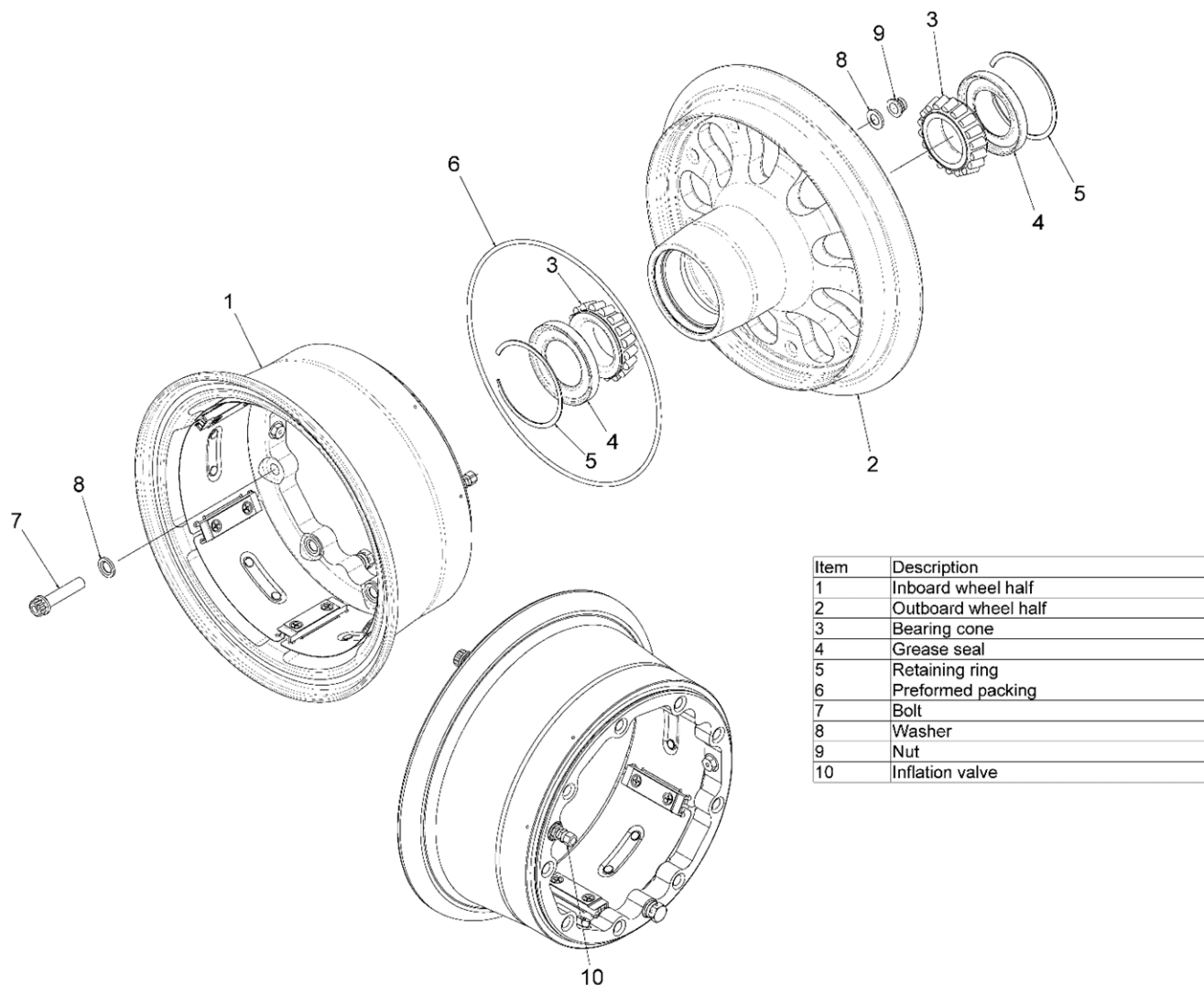


Figure 4 Disassemble the wheel assembly

8.6 Wheel and tire pre-assembly preparation

 **SAFETY WARNING:** WEAR THE APPROPRIATE PROTECTIVE CLOTHING AND EYEWEAR BEFORE DOING THE WORK.

CAUTION: HANDLE BEARING CONES WITH CARE TO PREVENT CONTAMINATION OR DAMAGE.

- 1 To prevent possible damage or contamination of the hub components, remove the following items from each hub end of the outboard wheel half subassembly.
 - Retaining ring (5), grease seal (4), and bearing cone (3).

CAUTION: DO NOT USE AN IMPACT WRENCH OR A POWER WRENCH TO REMOVE OR INSTALL THE WHEEL NUTS AND BOLTS. THESE TOOLS CAN DAMAGE THE EXTERNAL FEATURES OF THE NUTS AND BOLTS AND MATING COMPONENTS.

- 2 Remove the nuts (9), bolts (7), and washers (8).
- 3 Examine the bead seat area of the wheel halves. If necessary, remove all lubricant, grease or foreign material with a clean cloth moistened with a mild soap and water solution or with denatured alcohol.
- 4 The mating surfaces of the wheel halves should not have nicks, burrs, small dents, or other damage. Damaged mating surfaces can prevent the wheel halves from mating or sealing.
- 5 The preformed packing groove in each wheel half should be examined for damage or other debris that would prevent the packing (6) from properly seating. Remove any lubricant, grease or foreign material with a clean cloth moistened with a mild soap and water solution or with denatured alcohol.
- 6 Verify that the tire is clean inside. If it is not clean, then wipe the bead base with a clean cloth dampened with a mild dishwashing liquid and water solution or a suitable rubber cleaner.

8.7 Mount the tire

Refer to Figure 4 for identification of wheel assembly components. For complete parts identification, refer to Component Maintenance Manual, CM40-480.

 **SAFETY WARNING:** WEAR THE APPROPRIATE PROTECTIVE CLOTHING AND EYEWEAR BEFORE DOING THE WORK.

- 1 Position the inboard wheel half (1) with the register side facing up.
- 2 Examine the preformed packing (6) for damage such as cuts, tears, cracking. Replace if necessary.

CAUTION: THE PREFORMED PACKING MUST BE INSTALLED UNIFORMLY. IT SHOULD BE FREE OF KINKS AND TWISTS.

- 2.1 Apply a light coat of Dow Corning 55 O-ring lube to the preformed packing (6) and install the preformed packing carefully in the wheel register groove of the inboard wheel half without stretching or twisting.
- 3 Position the tire on the inboard wheel half being careful not to disturb the preformed packing (6).
- 4 Position the outboard wheel half (2) inside the tire and align the bolt holes of both wheel halves.
- 5 Align the red balance dot on the tire with the inflation valve (10).
 - 5.1 If there is no balance dot on the tire, then align the tire serial number with the inflation valve.

8.8 Attach the wheel halves

Refer to Figure 4 for identification of wheel assembly components. For complete parts identification, refer to Component Maintenance Manual, CM40-480.

SAFETY WARNING: WEAR THE APPROPRIATE PROTECTIVE CLOTHING AND EYEWEAR BEFORE DOING THE WORK.

- 1 Prior to installing, lubricate the wheel half fasteners (7), (8), (9), with anti-seize compound, per MIL-PRF-83483 as shown in Figure 5.

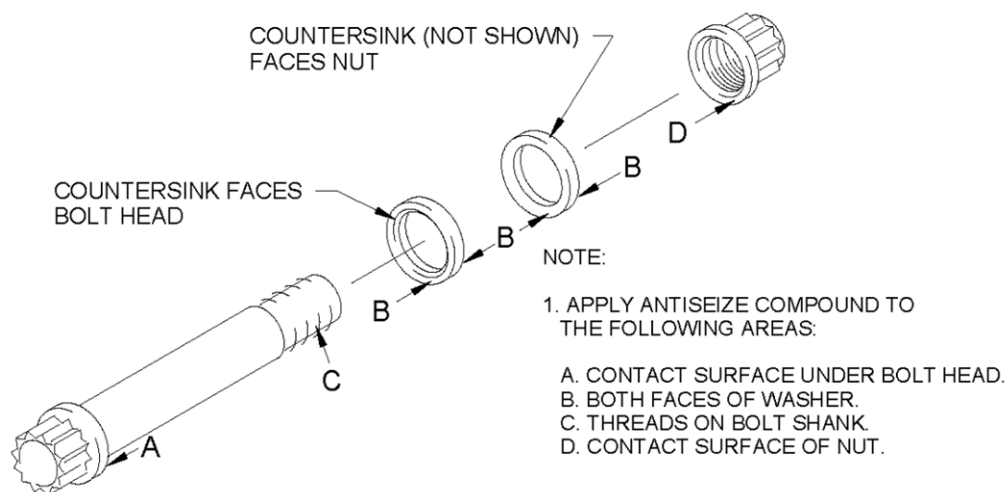


Figure 5 Apply anti-seize compound

CAUTION: WASHER (8) IS INSTALLED WITH THE COUNTERSINK FACING THE BOLT HEAD AND NUT.

- 2 Slide a countersunk washer (8) onto each bolt (7). Make sure the countersink side of the washer is facing the bolt head.
- 3 Install at least three bolts (7) [with washer (8)] into the inboard wheel half side. Compress the wheel halves together and install one washer (8) and nut (9) onto each bolt. Make sure the countersink side of the washer is facing the nut.

NOTE: The nuts (9) must be located on the outboard wheel half side.

- 4 Install the remaining bolts (7), washers (8) and nuts (9). Run the nuts down by hand as far as possible.

CAUTION: DO NOT USE POWER TOOLS FOR THE INSTALLATION OF WHEEL FASTENERS. POWER TOOLS CAN CAUSE OVER TIGHTENING.

CAUTION: THE FASTENERS MUST BE TIGHTENED BY APPLYING THE TORQUE TO THE NUT (9) WHILE SECURING THE BOLT HEAD.

CAUTION: DO NOT DAMAGE THE PREFORMED PACKING (6) DURING THE TORQUING PROCEDURE.

- 5 Wheel nuts should first be snugged in a criss-cross pattern to seat the flange. Apply the final torque evenly in a criss-cross pattern using calibrated tools until all nuts are properly torqued. Final torque is 335 to 345 in-lb.

8.9 Test the wheel/tire assembly

Refer to CM40-480, Component Maintenance Manual, for the wheel assembly.

- 1 Test the wheel/tire assembly. Refer to the TESTING AND FAULT ISOLATION section in Component Maintenance Manual, CM40-480.



SAFETY WARNING: ALWAYS FOLLOW PROPER TIRE INFLATION SAFETY PRACTICES. SERVICE THE TIRE WITH INFLATION SAFETY EQUIPMENT DESIGNED FOR THIS OPERATION.

8.10 Final assembly of the wheel

After successfully completing the 24-hour pressure retention test, complete the remaining assembly procedures as follows.



SAFETY WARNING: WEAR THE APPROPRIATE PROTECTIVE CLOTHING AND EYEWEAR BEFORE DOING THE WORK.



SAFETY WARNING: ALWAYS FOLLOW PROPER TIRE INFLATION SAFETY PRACTICES. SERVICE THE TIRE WITH INFLATION SAFETY EQUIPMENT DESIGNED FOR THIS OPERATION.

- 1 Apply a light coat of wheel bearing grease (Mobil Aviation Grease SHC 100) to the following:

NOTE: Make sure the bearing cones (3) have been packed with fresh, clean grease.

- Exposed surfaces of the bearing cups.
- The elastomer of the grease seals (4).

- 2 Install the following into each hub of the outboard wheel half in the order listed:

- Bearing cone (3).
- Grease seal (4). Observe '**This Side Out**' instruction on seal.
- Retaining ring (5). Install the end of the retaining ring into the groove in the inner hub of the wheel half and wind or spiral the ring into the groove.

 **SAFETY WARNING:** FOLLOW THE AIRFRAME MANUFACTURER'S INSTRUCTIONS AND SAFETY WARNINGS WHEN WORKING WITH AND AROUND THE AIRCRAFT.

 **SAFETY WARNING:** ALWAYS FOLLOW PROPER TIRE INFLATION SAFETY PRACTICES. SERVICE THE TIRE WITH INFLATION SAFETY EQUIPMENT DESIGNED FOR THIS OPERATION.

8.11 Inflate the tire

- 1 Inflate the tire to the airframe manufacturer's recommended inflation pressure.
 - 1.1 Install the inflation valve cap. The cap is the positive means of resisting pressure leakage and should always be used to prevent rapid deflation should a problem occur with the valve core.

8.12 Install the wheel/tire assembly

Reference: Installation Drawing, No. 50-166.

 **SAFETY WARNING:** MAKE SURE THE DRIVE KEYS ON THE INBOARD WHEEL HALF ENGAGE IN THE SLOTS ON THE BRAKE ASSEMBLY ROTOR DISCS. DAMAGE TO THE WHEEL, TO THE LANDING GEAR/AIRCRAFT; AND PERSONAL INJURY COULD RESULT IF THE DRIVE KEYS DO NOT ENGAGE THE SLOTS WHEN EQUIPMENT IS IN OPERATION.

- 1 Slide the wheel/tire unit onto the axle and align with the brake assembly.
 - 1.1 Make sure the drive keys on the inboard wheel half engage in the slots on the brake assembly rotor discs.
 - 1.2 Make sure the bearing cones are seated.
- 2 Install the axle hardware in accordance with the airframe manufacturer's manual.
 - 2.1 The recommended wheel bearing preload for AWB wheel assembly is 950 ±180 lb.

8.13 Completed installation

Refer to Figure 6.

- 1 Repeat installation instructions for the other side of the landing gear.

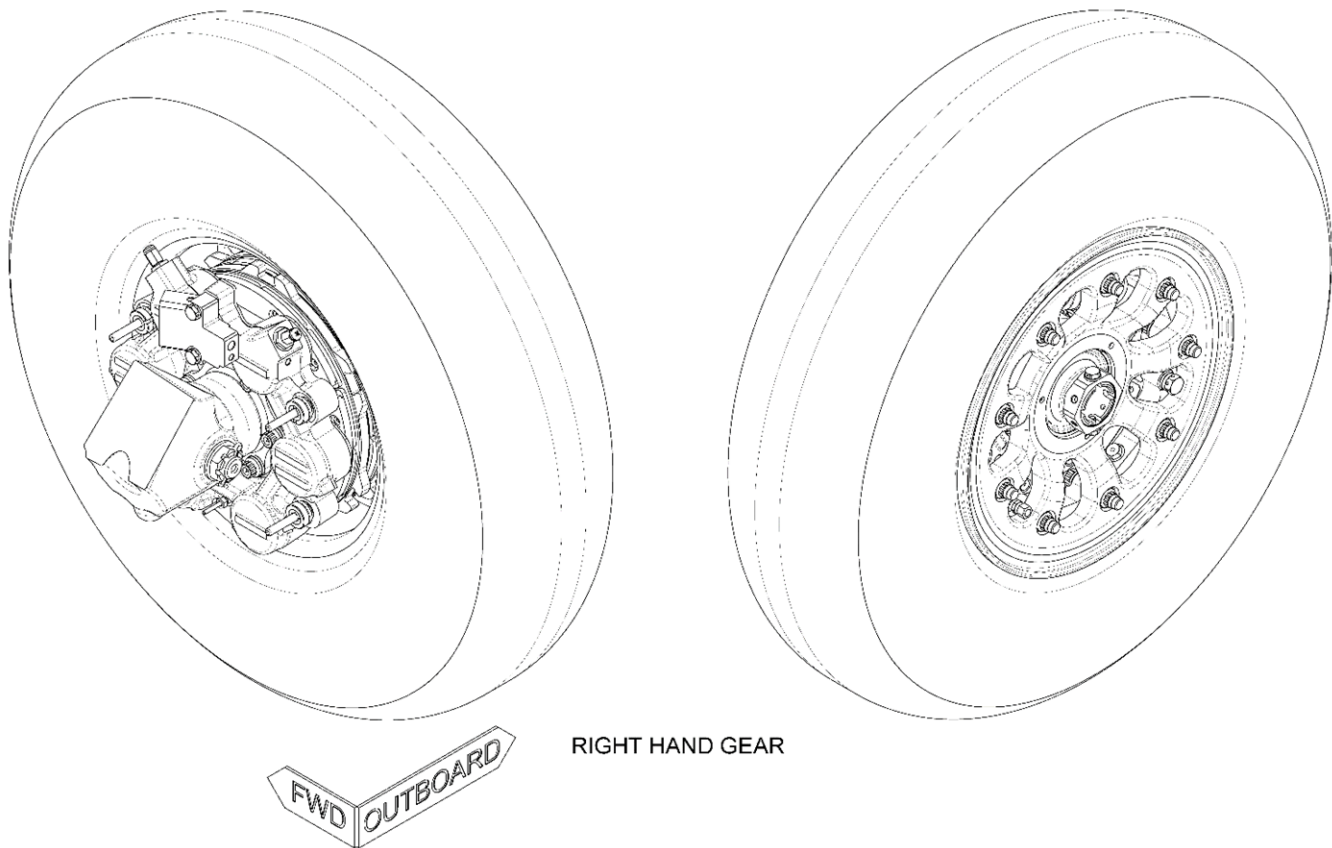


Figure 6 AWB equipment installed (right hand gear shown)

9.0 RETURN TO SERVICE AND SYSTEM CHECKS

- 1 After left and right hand brake assemblies have been installed and connected to the aircraft hydraulic system, bleed the hydraulic system and perform the following:
 - 1.1 Pressure test the brake assembly at 600 psig and check for leakage.
 - 1.2 Check the pedal for proper feel and travel.
 - 1.3 Check the mating wheel assemblies rotate freely. There should be no evidence of binding or excessive brake drag.
 - 1.4 Check for proper operation of main gear and that no hoses are binding.

10.0 BRAKE LINING CONDITIONING

The brake lining material must be properly conditioned (glazed) to provide optimum service life. Dynamometer tests have shown that at low braking energies, unglazed linings experience greater wear and the brake discs become severely scored.

10.1 Conditioning procedure

- 1 Perform two [2] full stop braking applications from 30 to 35 knots, do not allow the brake discs to cool between each stop. Maximum pressure braking is not required for conditioning stops.
- 2 This conditioning procedure will wear off high spots and generate sufficient heat to glaze the lining. Once the lining is glazed, the brake system will provide many hours of maintenance free service.
- 3 Avoid light use, such as taxiing, which will cause the glaze to be worn rapidly.

11.0 WEIGHT AND BALANCE COMPUTATIONS

Weights do not include the tire.

New installed (per gear leg):

Brake assembly: 35.5 lb. (maximum guaranteed)

Wheel assembly: 15.5 lb. (maximum guaranteed)

Complete FAA Form 337 and make the appropriate log book entries.

12.0 AIRCRAFT FLIGHT MANUAL AND EQUIPMENT LIST ENTRIES

Update the 'Weight and Balance' section of the Aircraft Flight Manual as well as the Aircraft Equipment List for the change in both weight and moment created by the installation of this conversion kit.