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INSTALLATION AND MAINTENANCE MANUAL

Manuel référence :
BRG-ALTP-02

Référence document :
MM-STC-006

			Statut (à compléter, terminé, approuvé)	Signature du responsable conception
Equipment reference: STC-006				
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1. General

The BERINGER wheel-brake system is designed for a standard use on the aircraft. All other use of these parts is not allowed.

CAUTION: Disassembly of BERINGER parts without respecting the procedures may cause the failure of the system and cancel the warranty

CAUTION: Use of other parts than BERINGER approved ones may cause the failure of the system and cancel the warranty

Component list :

Part number	Description
EA-007N	Brake caliper (left) including disc
EA-007.1N	Brake caliper (right) including disc
AV-ROB-002	Disc Drive hub
AV-ROB-004	Half Shell
VIS-005	Wheel assembly screw
C-AR-005	Circlip
AV-ROB-007.1	Brake line
HYD-003P	Banjo bolt
HYD-005B	Copper seal
AV-ROB-006	Drill template
-	Safety wire
-	Drill Ø5mm
-	Drill Ø10mm

2. Installation

2.1 Removal – modification of the old system

Removal of the old system :

- fairing
- wheel and brake
- flexible brake line

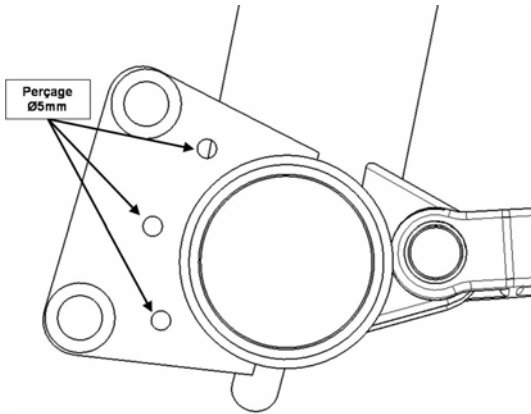


Landing gear leg before modification

Modification of the brake fixing plate :

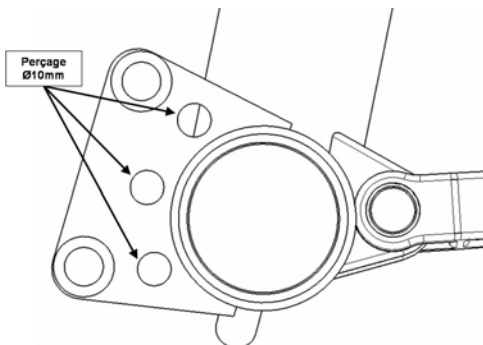


- a) Insert the drill template AV-ROB-006 onto the axle and position the small holes as per next drawing :



- b) Drill the 3 holes Ø5mm

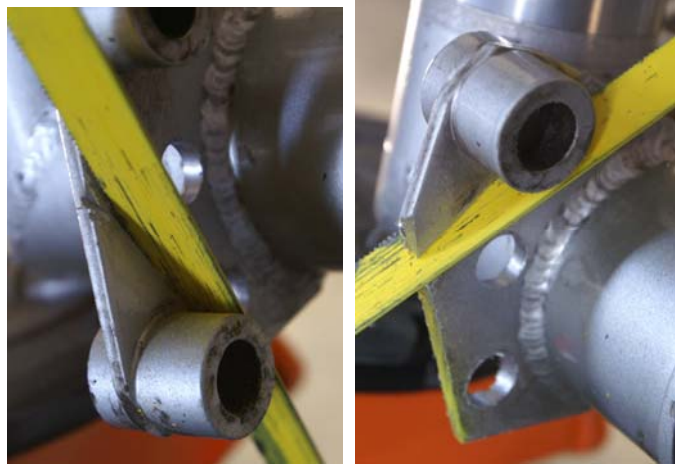
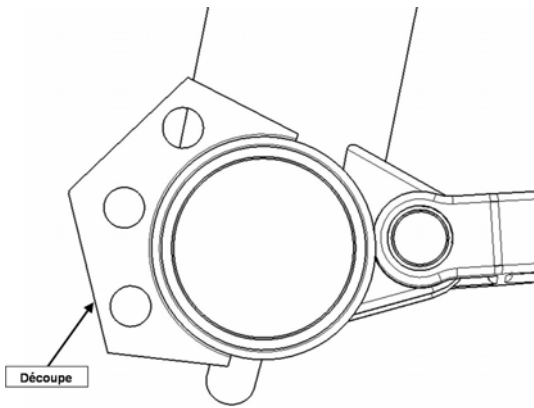
- c) Turn the drill template AV-ROB-006 onto the axle and position the bigger holes as per next drawing :



- d) Drill the 3 holes Ø10mm, then the fixing plate looks like next picture:



- e) Cut the steel plate with a metal saw as per next drawing and pictures:



- f) Remove burr and prepare for paint.

- g) Apply primer and paint on the areas where original paint has been removed as on the picture next :

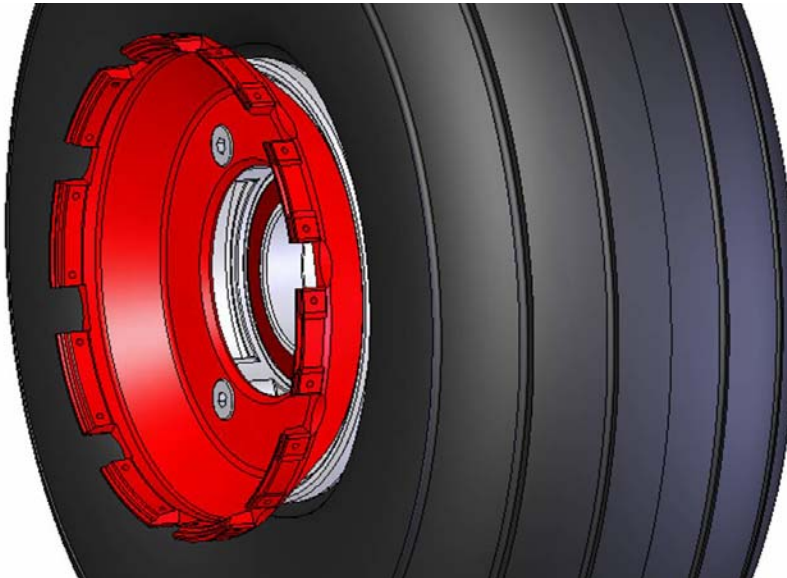


- h) The landing gear is now ready for receiving the new brake system.

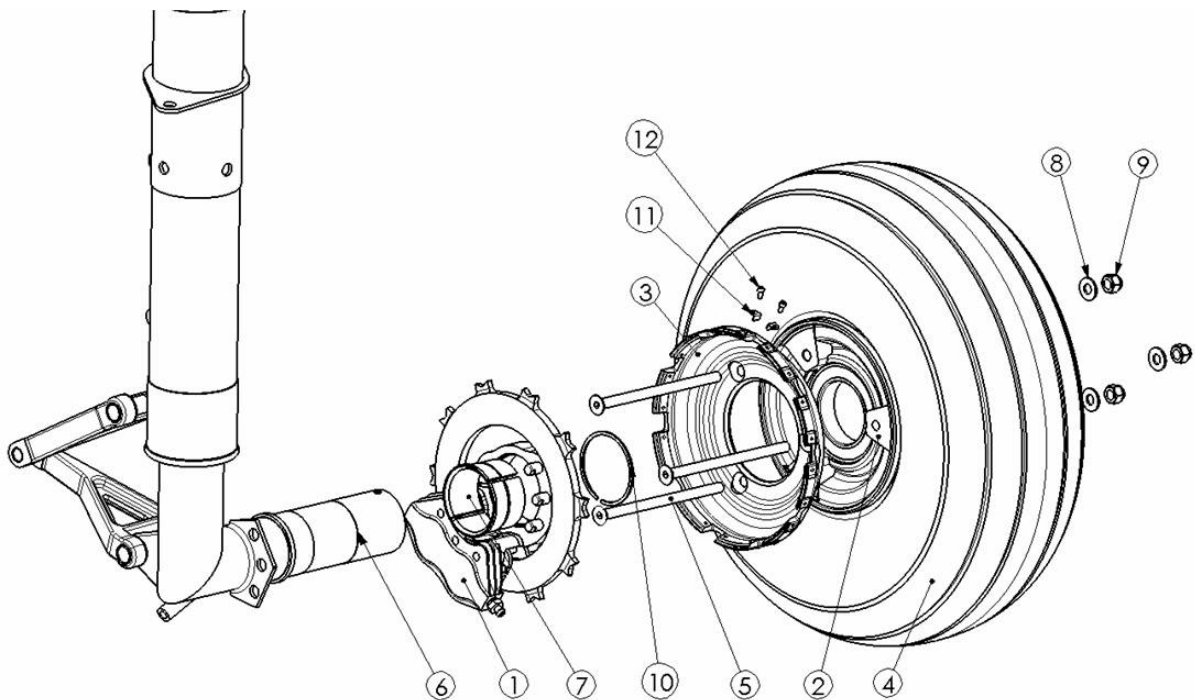
2.2 Wheel assembly

- Deflate tire and tube
- Remove the steel disc from the wheel
- Present the new Drive hub on the wheel and insert the 3 screws (P/N:VIS-005) delivered in the kit.

- d) Use appropriate nuts and washers and torque tighten to required torque. Refer to the aircraft maintenance manual.
- e) Check that Drive hub is turning properly without unbalanced defect. If necessary place washers between wheel and drive hub to compensate the defect.



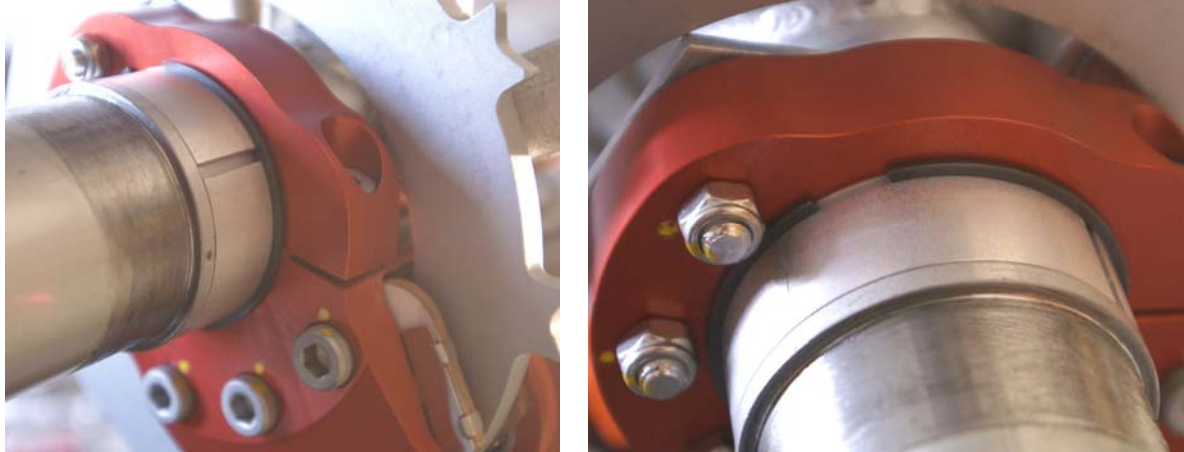
2.3 Brake positioning and fixing



- a) Place the 2 half shell (P/N: AV-ROB-004) onto the axle
- b) Insert the caliper onto the axle and slide it around the 2 half shell.

NOTE: Calipers are not identical; one is for left gear and the other for right gear.

- c) Place the Circlip in the groove as per next pictures:



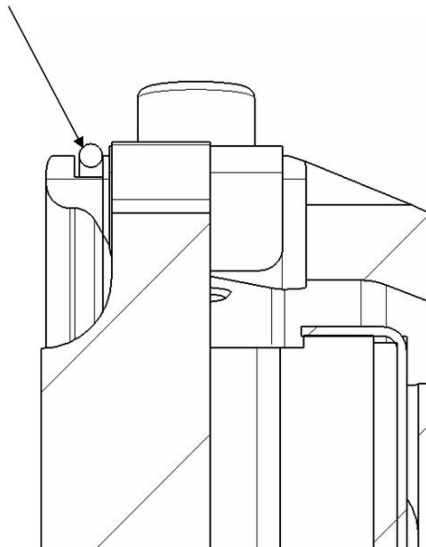
- d) The brake must be as close as possible to the wheel bearing.
- e) Torque tighten the Brake retaining screw to 25 N.m as per next picture:



2.4 Wheel – Brake Installation

- a) Insert the wheel onto the axle and locate the disc in the slots.
- b) Check that disc is in place as on the picture next and then place the safety wire.

Safety wire
Ø1mm (0.040 in)



CAUTION: The safety wire prevents the disc from going out the slots and must be in place.

- c) Place and screw the part retaining the wheel as per the aircraft maintenance manual.
- d) Then install the hydraulic brake line AV-ROB-007.1 as per next pictures:



- e) Torque tighten the hydraulic fittings to 15-17N.m
- f) Bleed the system with fire resistant fluid MIL-PRF-87257; do not use the standard MIL-H-5606 fluid.
- g) The inner fairing must be cutter around the caliper. A clearance of 5 to 10mm is recommended all around the caliper as on the picture next:



3. Maintenance procedures

Please refer to the document MC-STC-006(0).