



Pre-Paint>Fuselage>Undercarriage>Assemble main gear & brakes

Issue Revision Table

Issue	Date:	Change(s):	Issued by:
2	6/07/2021	Adopt "Section Only" Manual System, Add Issue Revision Table and model applicability. New pictures and drawings showing brake return springs	AS
3	14/09/2022	Add drawing 6102013-4	SW

Model Applicability

Aircraft Model	J-160	J-170	J-230	J-430
Document Applicability	Yes	Yes	Yes	Yes

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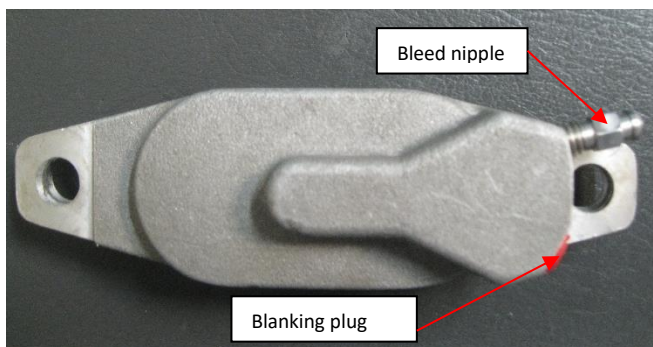
At this stage it is of benefit to mark the legs as left or right with a permanent marker pen. This may save confusion during the fitting of the main undercarriage gear. One should also note that at this stage the axles will likely not be correctly aligned on the undercarriage legs. This issue is dealt with in a later section ([Pre-Paint>Fuselage>Wheel alignment](#)).

Assemble the brake calipers

In this step you will assemble the hydraulic disc brake calipers. Cleanliness is essential when working with hydraulic brake parts, so clean your working area and your hands thoroughly before starting this step.



Use compressed air to clean any dust and dirt from the inside of the brake calipers and pistons. Apply rubber grease to the O-rings and fit one to each piston, then apply a smear of rubber grease to the inside of the caliper and fit both pistons into each caliper: press the pistons gently into the caliper with the cupped side of the pistons facing outwards.



Thread and tighten a bleed nipple into the appropriate fitting on the caliper and push a blanking plug the other fitting as shown at left – the brake lines will be fitted later in *Post-Paint* and the blanking plug will keep the caliper sealed until then.

Wash any grease off your hands with soap and water – it can irritate sensitive skin.



Refer to the drawing on the next page for an overview of the brake system.

ITEM	PART No.	DESCRIPTION	QTY
1	6A059C0D-1	MACHINED DUAL PISTON HOUSING RS MK3	1
2	6A055G0D-1	PERFORMANCE BRAKE PISTON	2
3	6100094-4	NIPPLE BRAKE BLEEDER	1
4	6207324-1	1.25" BRAKE CYLINDER FITTING	1
5	6A059E8D-1	LOCK TAB MK3 BRAKE	2
6	PD0082N	3/16" FERRULE (NYLON BRAKE LINE)	1
7	6A059E1D-2	CALIPER MOUNT PLATE MK3 BRAKE	1
8	6A059E2D-1	SLEEVE CALIPER MOUNT MK3 BRAKE	2
9	6A059E3D-1	INNER BRAKE PAD ASSY MK3 BRAKE	1
10	6A059E5D-1	OUTER BRAKE PAD ASSY MK3 BRAKE	1
11	PG4A002N-1	RV0214 O-RING	2
12	AN4-15A	1/4" BOLT	2
13	AN980-416L	1/4" THIN FLAT WASHER	2
15	PX4A003N-1	MK3 BRAKE CALIPER RETURN SPRING	2

SECTION B-B

DM	4	4/9/18
AS	3	28/01/14
JW	2	05/12/11
ISS.	1	26/07/2011
DATE		

ISS 4: RETURN SPRINGS ADDED
ISS 3: ASSEMBLE IN CORRECT DIRECTION

SCALE 1:2

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TITLE
BRAKE CALIPER ASSY RS MK3

DWG. No.
6A059E0D-4

SHEET 2 OF 2 A4

AVTECH P/L A.C.N. 010 786 973 HINKLER AIRPORT BUNDABERG 4670	DO NOT SCALE DRAWN APPR.	DIMENSIONS IN MILLIMETRES GENERAL TOLERANCES WHOLE NO.'S ± 0.5 ONE DEC. ± 0.25 TWO DEC. ± 0.05 ANGLES ± 0.5°
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Jabiru Construction Manual
Pre-Paint>Fuselage>Undercarriage>Assemble main gear & brakes>Procedure

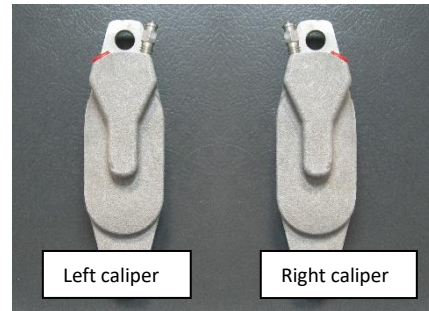
Parts List			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	6000594-4	EXTENSION STUB AXLE	1
2	6204023-1	MAIN UNDERCARRIAGE LEG J200/J400	1
3	6207023-3	INTEGRAL 1.25" CYLINDER BRAKE CALIPER ASSY (R.S.)	1
4	6212023-1	CAST MAIN WHEEL HUB ASSEMBLY (6")	1
5	6A0280D-3	SERIES II STUB AXLE	1
6	6A0280D-1	SERIES II STUB AXLE SPACER	1
7	6A039D0N-2	MOUNT BRACKET ASSY ONE PIECE WHEEL SPAT (R.S)	1
8	AN3-12A	3/16" BOLT	1
9	AN5-16A	5/16 BOLT	2
10	AN5-16A	5/16 BOLT	2
11	AN960-10L	3/16" FLAT WASHER (1/2 THICKNESS)	1
12	AN960-516	WASHER	3
13	AN960-516L	HALF PENNY WASHER	4
14	AN970-5	1/4" PENNY WASHER	1
15	MS20365-1032	3/16" NYLOC NUT	1
16	MS20365-524	5/16" NYLOC NUT	4

DS	4	14/12/11	SCALE	1	ISS. DATE	27/7/05
TF	3	6/10/11	NTS	2	DATE	
DS	2	7/9/09	THIS DRAWING IS COPYRIGHT AND MUST NOT BE COPIED WITHOUT THE CONSENT OF AVTECH P/L			
			TITLE			
			BRAKE & WHEEL ASSY 500 X 6 TYRE			
			CAST HUBS			
			DWG. NO.			
			6102013-4			
			SHEET 1 OF 1			
			A3			

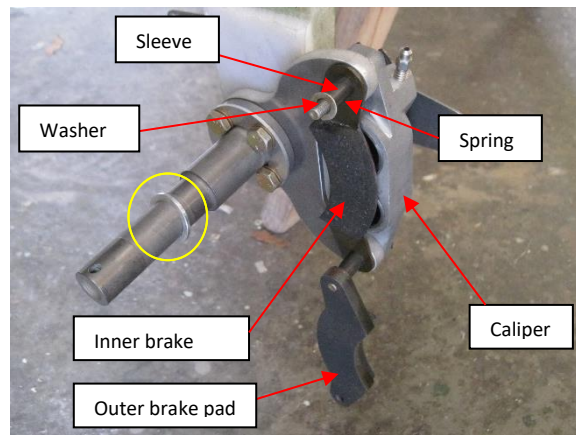
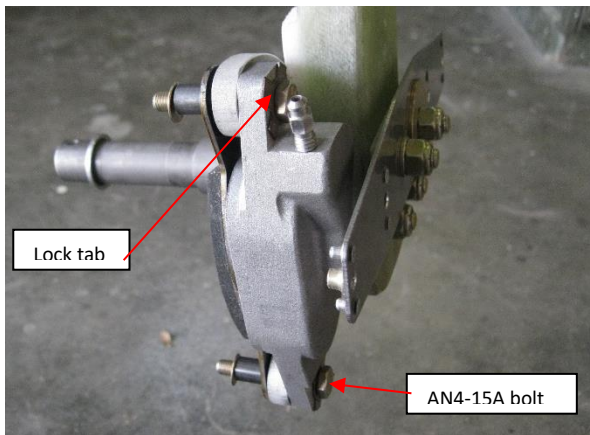


Assemble the brake and wheel

First place the break caliper on the inboard side of the mount plate and slide both caliper sleeves through the holes in the mount plate and calliper. The bleed and brake-line fittings on the caliper should face upwards. Ensure that you fit the correct caliper, since the left and right parts are different. The picture on the right identifies them.

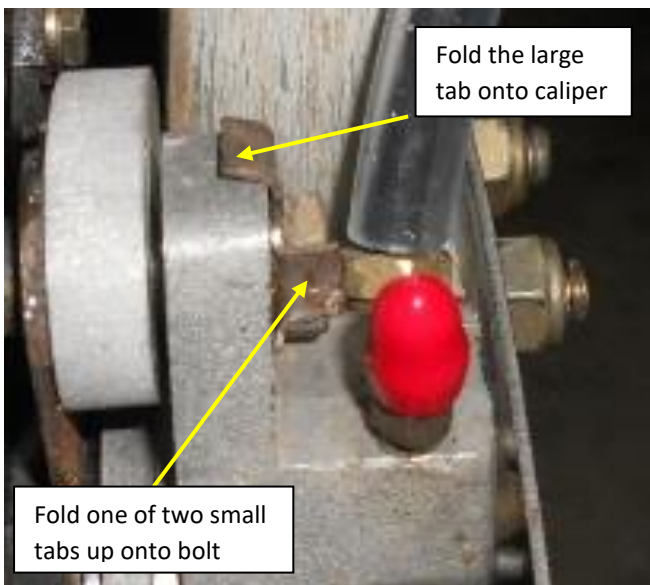


Now you can place the inboard brake pad over the caliper sleeves. Slide AN4-15A bolts into each sleeve with lock tabs under each bolt head, **insert brake returns springs over the caliper sleeves**, place thin 1/4" plain washers (AN960-416L) on the end of each bolt. Thread the outer brake pad onto the bottom bolt and leave it hanging down as pictured below on the



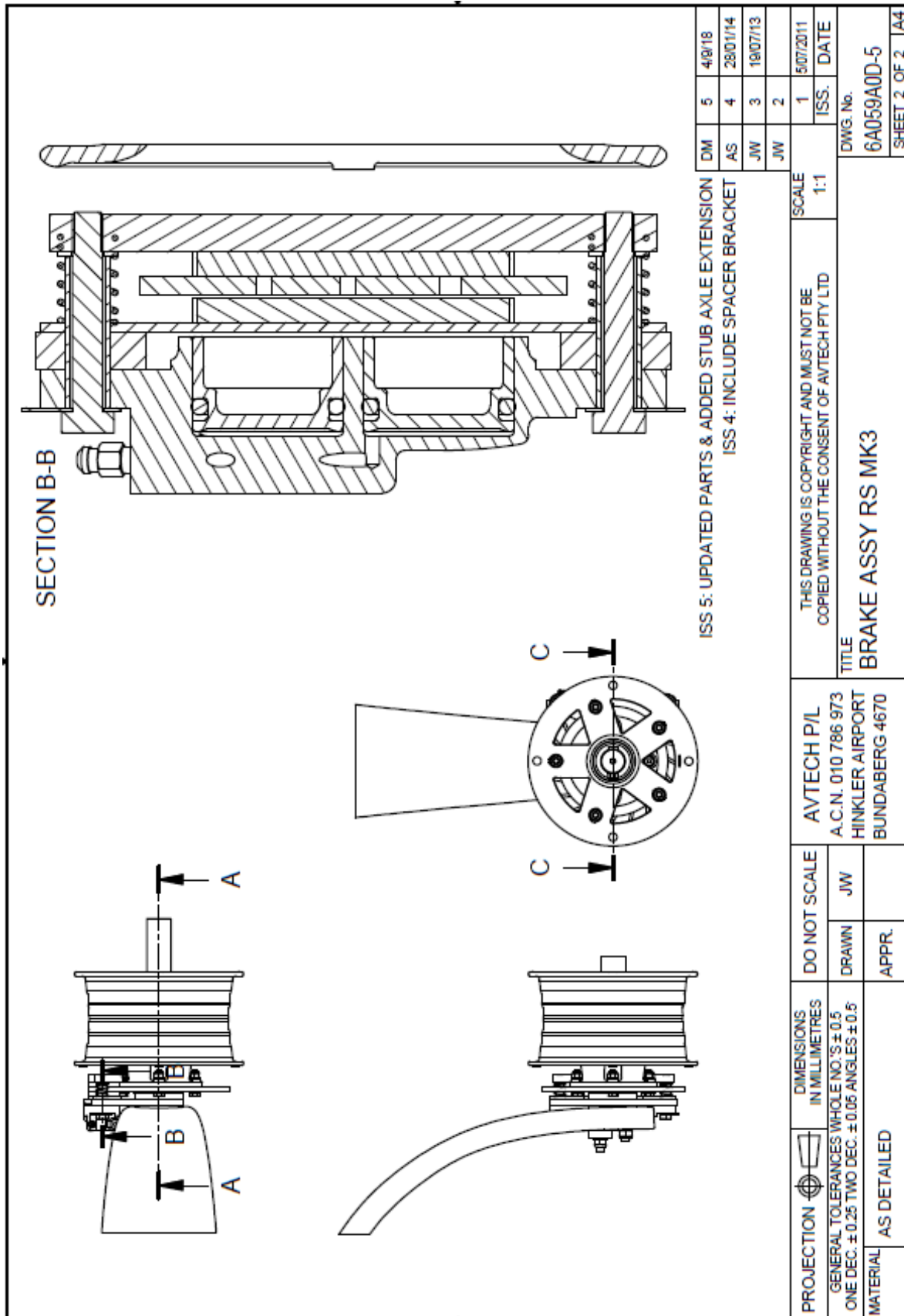
right.

Before installing the wheels, slide the stub axle spacer (circled in yellow above) onto the shaft, the flat face should be facing outboard to provide the wheel bearings with a nice square face to sit against. Now you can slide the wheel onto the stub axle. Slide it on all the way until the brake disc rests against the inner brake pad. Secure the wheel with the axle extension, fitting the AN3-12A bolt from the top with a washer and nyloc nut at the bottom.



Now swing the outer brake pad around and thread the top bolt into it. Tighten both bolts. Check that the wheel and disk runs smoothly and is not impeded by the brake pads. The distance between the disk and outer pad should be about 1 millimetre.

The picture to the left shows the completed brake assembly of the right hand undercarriage gear. The last step is to fold one of the small lock tab leaves up against the bolt head and the large tab onto the machined caliper housing. It is useful to refer to the drawings on the following pages during main undercarriage gear assembly.



This completes the *Pre-Paint>Fuselage>Undercarriage>Assemble main gear* task.

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