



Jabiru Construction Manual
Pre-Paint>Fuselage>Undercarriage>Assemble main wheels

Pre-Paint>Fuselage>Undercarriage>Assemble main wheels

Issue Revision Table

Issue	Date:	Change(s):	Issued by:
1			
2	6/07/2021	Adopt "Section Only" Manual System, Add Issue Revision Table and model applicability.	AS

Model Applicability

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

This document is controlled while it remains on the Jabiru server. Once this no longer applies it becomes uncontrolled.

Issue:	0	1	2							Issued by: AS	Page: 1 of 4 15 October 2021
--------	---	---	---	--	--	--	--	--	--	---------------	------------------------------



Pre-Paint>Fuselage>Undercarriage>Assemble main wheels>Procedure

Objectives of this task:

In this task you will assemble the main wheels and tyres and fit the brake discs.

Materials required:

- Cards # 28JT 'Main wheels MK3'
- Talcum powder for fitting the inner tube

Assemble the main wheels

Use a press or a vise to press a bearing (#PB0029N-1) into each half of the wheel rim – use a socket with a slightly smaller diameter than the outer race of the bearing to press them in.



Both the inner and outer bearings should lie flush with the inner and outer wheel rims respectively as shown in the picture to the right.

Do **not** press on the inner race – the bearing is not designed to take pressure in that direction.

Sprinkle some talcum powder inside the tyre and insert the inner tube. Slightly inflate the inner tube to prevent it becoming pinched then fit tyre and tube over the inner wheel rim and fit the outer wheel rim to the inner wheel rim with the inner tube inflation valve facing the outer wheel rim. Make sure the bolt holes between each wheel rim half are aligned and place the brake disc mount on the inner wheel rim such that the bolt holes are also aligned with those of both wheel rim halves.

Bolt the brake disc mount, inner wheel rim and outer wheel rim with five AN4-17A bolts; placing 1/4" flat washers (AN960-416) under both the bolt and nyloc nut. The bolts are inserted through the brake disc mount. Before tightening the nuts, make sure that the inner tube is not being pinched, this is done by rotating the tyre and tube holding the wheel still.

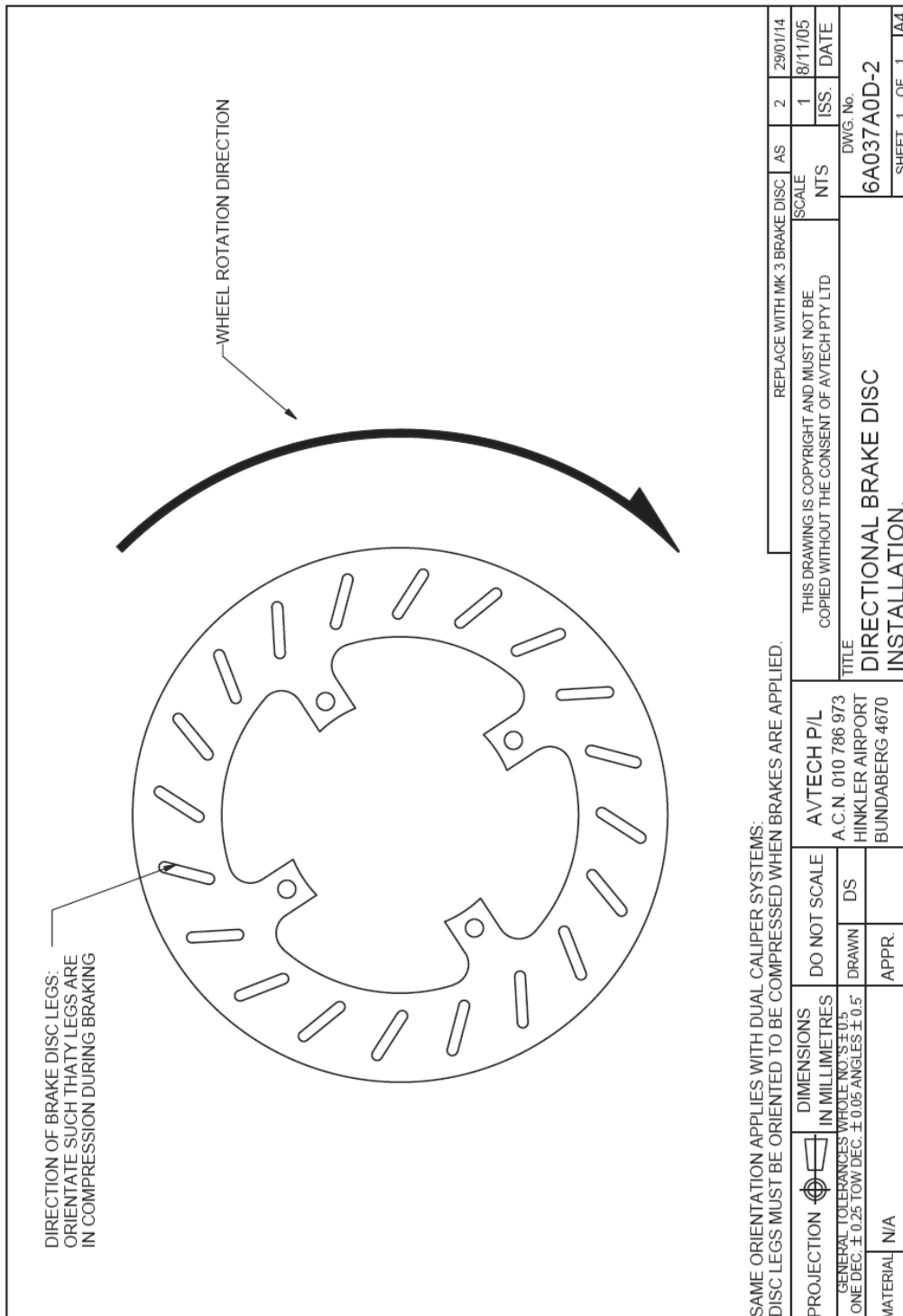
Fit the inner tube inflation valve through the hole in the outer wheel rim and then tighten the five bolts to secure the wheel assembly. Inflate the inner tube to a pressure of 45psi – the tyre will pop out to the final seated position on the rims so keep fingers away while inflating.



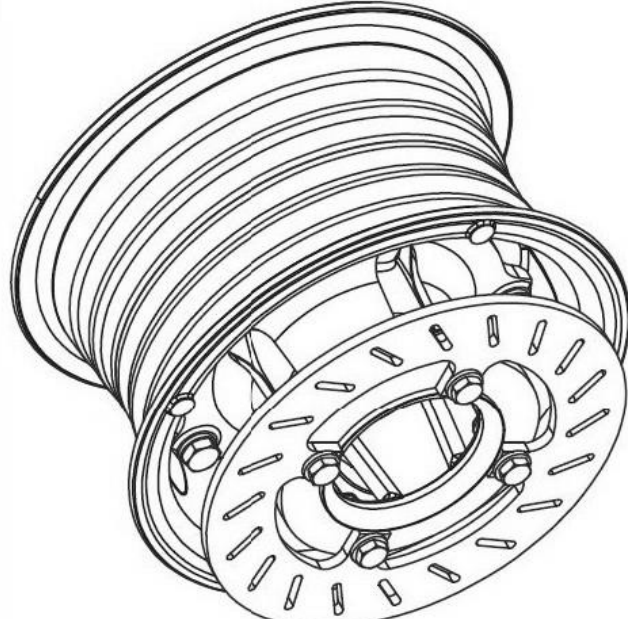
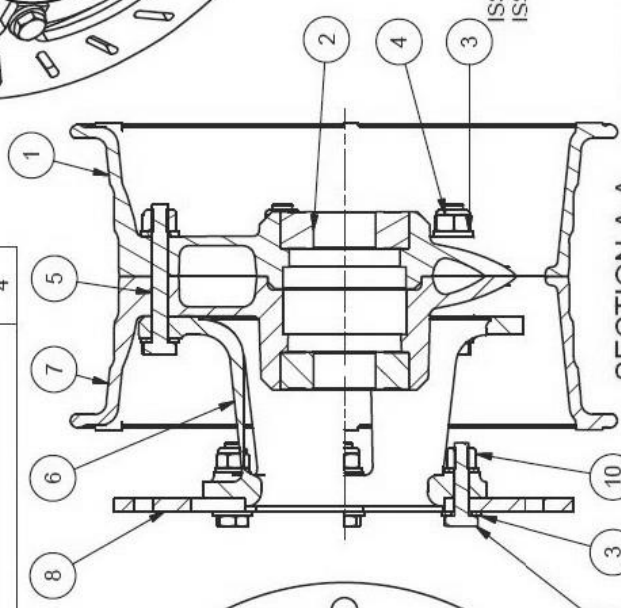
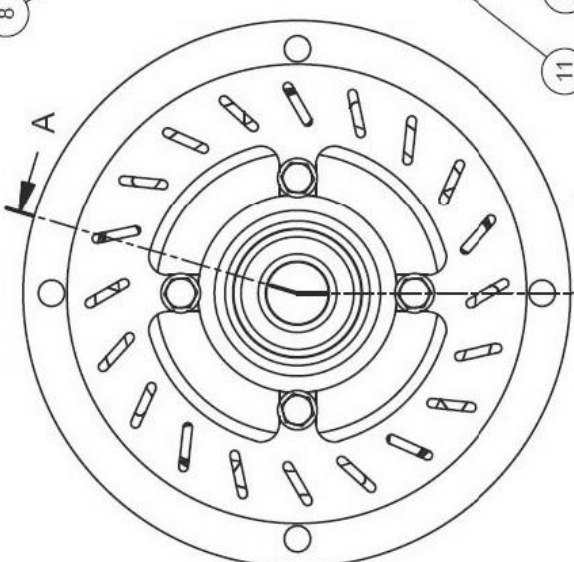


Fit the brake disc to each wheel. It is important that each disc is fitted in the correct direction of rotation as shown in the photos on the preceding page and in the drawing below. Fit each of the four AN3-7A bolts though from the disc towards the wheel and secure with AN960-10 (3/16") flat washers under each bolt head and Nyloc nut. Tighten firmly. Use chalk to mark each wheel as being either a left or a right wheel.

It is useful to refer to the drawing on the following page during the main wheel assembly.



ITEM	PART No.	DESCRIPTION	QTY
1	6A054D0D-2	CAST 6" WHEEL RIM HALF MACHINED OUTER	1
2	PB0029N-1	BEARING	2
3	AN960-416	1/4" FLAT WASHER	14
4	MS20365-428	1/4" NYLOC NUT	5
5	AN4-17A	BOLT	5
6	6A060B0D-4	DISC MOUNT HOUSING MACHINED MK3 BRAKE	1
7	6A054C0D-4	DIE CAST 6" WHEEL RIM HALF MACHINED INNER	1
8	6A060D0D-1	BRAKE DISC MK3 BRAKE	1
9	AN960-10	3/16" FLAT WASHER	4
10	MS20365-1032	3/16" NYLOC NUT	4
11	AN3-7A	3/16" BOLT	4

ISS 2: HARDWARE CHANGED FOR THICKER FLANGES
ISS 5: DISK CHANGED TO CORRECT DIRECTION

NOTE: REMOVE BURRS AND SHARP EDGES

SCALE: 1:2

THIS DRAWING IS COPYRIGHT AND MUST NOT BE COPIED WITHOUT THE CONSENT OF AVTECH P/L

AVTECH P/L
A.C.N. 010 786 973
HINKLER AIRPORT
BUNDABERG 4670

DO NOT SCALE

DIMENSIONS IN MILLIMETRES

GENERAL TOLERANCES WHOLE NO.'S ± 0.5
ONE DEC. ± 0.25 TWO DEC. ± 0.05 ANGLES ± 0.5

PROJECTION

AS DETAILED

AS 28/01/14
JW 19/07/13
JW 10/12/12
JW 06/12/11

ISS. DATE

11/07/2011

DWG. No. 6A060A0D-5

SHEET 1 OF 1 JA4

TITLE: BARE MAIN WHEEL ASSY TO SUIT MARK 3 BRAKE

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

This document is controlled while it remains on the Jabiru server. Once this no longer applies it becomes uncontrolled.										
Issue:	0	1	2						Issued by: AS	Page: 4 of 4 15 October 2021