



## Service Bulletin SB.JS-006

16 June 2011

### TITLE

Inspection of sliding bush on the landing gear handle

### APPLICABILITY

MODEL	SERIAL NUMBERS
JS1A	1A-001 to 1A-003, 1A-005, 1A-009
JS1B	1B-004, 1B-006-1B-008, 1B-010-1B-025

### REASON

It was reported by a customer that the landing gear could not be fully extended and locked down after retraction. This may lead to the collapse of the main landing gear during landing. Investigations showed that the front sliding brass bush bonded to the landing gear arm unseated and slid out during retraction. During the subsequent extension of the landing gear the bush prevented the landing gear arm from moving all the way forward.



Figure 1: Landing gear handle with unseated brass bush

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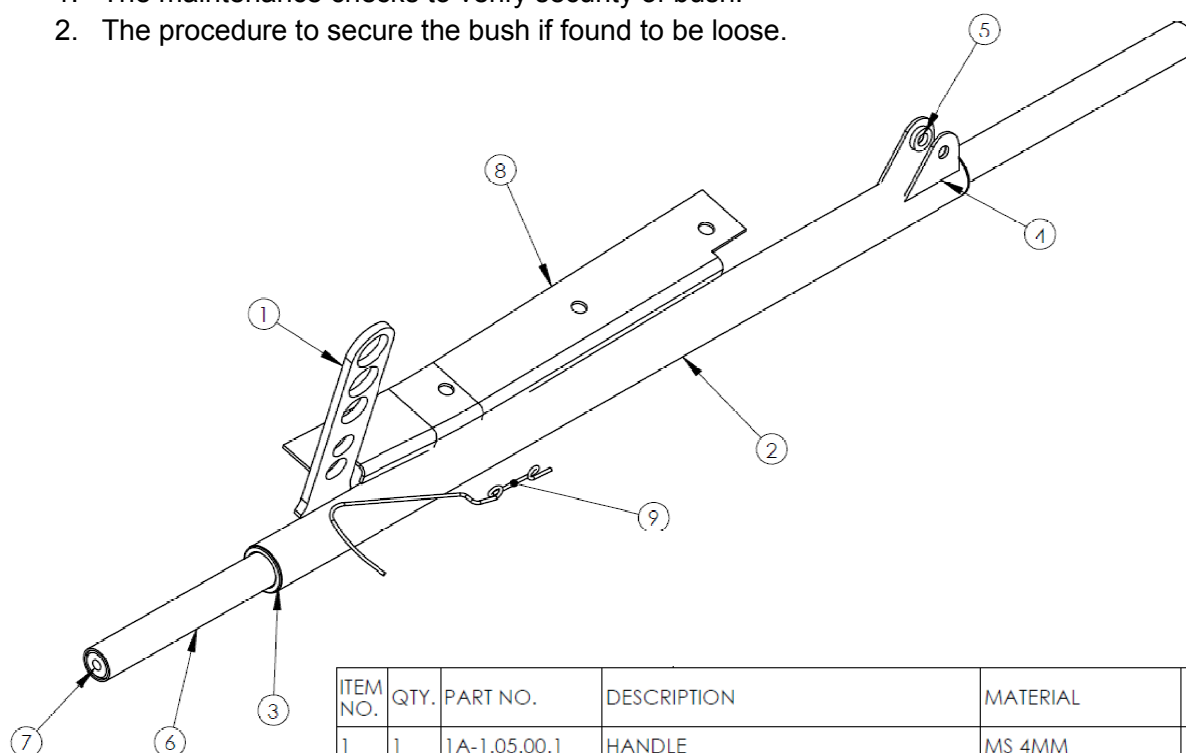
## DESCRIPTION

The landing gear retraction handle consists of the Main Tube (Figure 2, Item 2) with Brass Bushes (Figure 2, Item 3) bonded into each end of the tube. This handle travels on the Slide Beam (Figure 2, Item 6) when the landing gear is operated.

The brass bushes (Bush Type 1, Part number 1A-1.27.50) are bonded into each end of the Main Tube with Loctite 648.

This Service Bulletin explains:

1. The maintenance checks to verify security of bush.
2. The procedure to secure the bush if found to be loose.



ITEM NO.	QTY.	PART NO.	DESCRIPTION	MATERIAL	EXT. REF.
1	1	1A-1.05.00.1	HANDLE	MS 4MM	
2	1	1A-1.05.00.2	MAIN TUBE	4130 7/8" x 0.058"	
3	2	1A-1.27.50	BUSH TYPE 1	BRASS	D1A-1.27.50
4	2	1A-1.05.00.4	REAR LUG	4130 1.6MM	
5	2	1A-1.27.70	STANDARD LUG SPACER	4130 2.5MM	D1A-1.27.40
6	1	1A-1.05.01.1	SLIDE BEAM	4130 5/8" x 0.035"	
7	2	1A-1.05.01.2	WELD INSERT 13.8 X M6	EN8	
8	1	1A-1.05.02	HANDLE LOCK PLATE	SS 1.6MM	
9	1	1A-1.05.03	HANDLE LOCK SPRING	PIANO WIRE OD1.5 200MM	

Figure 2: Landing gear handle

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## COMPLIANCE

MANDATORY: This service bulletin must be complied with before the next flight.

## INSTRUCTIONS

### *Inspection procedure*

Procedure to inspect security of brass bush:

1. Remove the seat pan.
2. Lift the fuselage sufficiently to enable landing gear operation.
3. Wedge a sharp chisel between the bush and the main tube. Apply a prying force by hand. If the bush gives any indication of movement, the compulsory maintenance actions are required. Repeat this inspection procedure for the bush bonded to the rear of the main tube.
4. Check that landing gear operation is smooth, and that the slide beam is lubricated.
5. If no movement between the bush and the main tube can be detected and the operation is smooth, the seat pan can be replaced and the aircraft may be released to service.

### *Maintenance instructions on landing gear arm*

The following maintenance actions are required if the inspection procedure reveals a loose bush:

1. Undo the Landing gear pushrod connection to the rear lug (Figure 2, Item 4)
2. Undo the bolt attached to the front of the slide beam (Figure 2, Item 7)
3. Turn the slide beam anti-clockwise to undo the bolt attaching the slide beam to the fuselage.
4. Remove the landing gear handle by sliding it off the slide beam.
5. Remove the loose bush.
6. Clean the outside bonding surface with a combination of soaking in a Loctite solvent (<http://65.213.72.112/tds5/docs/7063-EN.PDF>) and mechanical abrasion such as a wire brush.
7. Clean the inside of the main tube using the procedure explained in the previous step.
8. Apply Loctite 648 adhesive on the bonding area of the bush and the inside of the main tube and use a rotating motion during assembly to ensure good coverage.
9. Allow bush to cure as specified in LOCTITE TDS <http://65.213.72.112/tds5/docs/648-EN.PDF>
10. Re-assemble landing gear mechanism.
11. Check that landing gear operation is smooth, and that slide beam is lubricated.
12. Check that the bush is secure, using the inspection procedure described previously.
13. If no movement between the bush and the main tube can be detected and the operation is smooth, the seat pan can be replaced and the aircraft may be released to service.

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## MATERIAL AND PARTS

### Part description

### Part number

- Landing gear handle parts 1A-1.05.00
- Bush type 1 1A-1.27.50

### Material description

- LOCTITE® 648™
- LOCTITE® 7063™ solvent cleaner

## MASS AND BALANCE

Not affected

## MANUALS

Approved Maintenance Schedule: Inspection line added for landing gear handle