

Technical Note TN.JS-013

14 January 2013

TITLE

Replacement of High Pressure Wheel Brake Hose

DESCRIPTION

Replace and reroute the high pressure brake hose in the wheel box.

INSTRUCTIONS

1. Place the JS Fuselage on a Belly stand.
2. Ensure the main landing gear is extended and locked.
3. Drain the brake fluid from the wheel brake system as per JS1 Maintenance Manual.
4. Remove the seatback (1A-1.02.30) in cockpit as per JS1 Maintenance Manual, for access to the access hole below the brake fluid reservoir.
5. Open the access hole below the brake fluid reservoir by removing the B5 cover plate (1A-1.03.53).
6. Ensure that the straight side of the high pressure hose 90° elbow (5.3.06 Elbow Male-Male Long: 6J9-0404) is parallel to the bulkhead lip, facing toward the top of the glider as depicted in Figure 1. Do not remove or loosen any hoses from the access hole side.

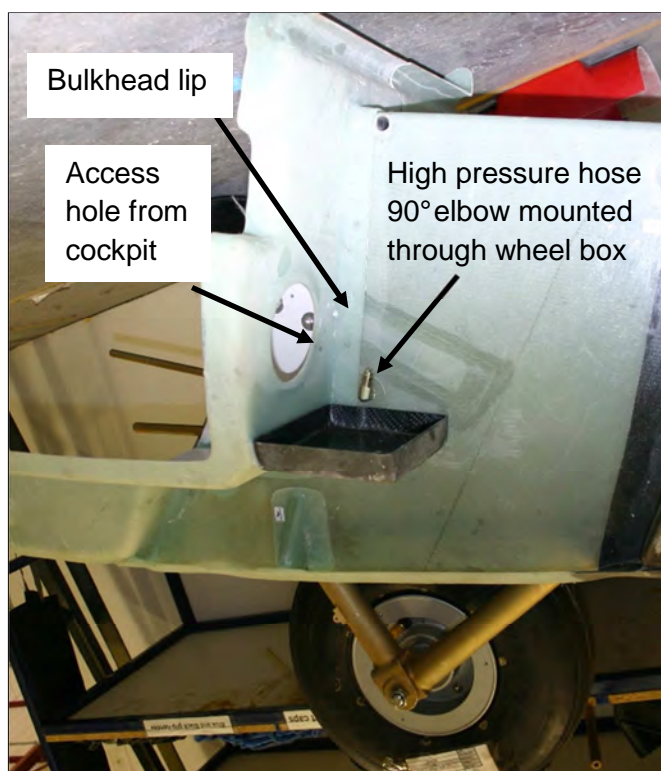


Figure 1: Access to High pressure hose 90° elbow going into wheel box

7. Hold the elbow (5.3.06) in position from the access hole from cockpit side, using a spanner, and secure the elbow with the anchor nut from inside of the wheel box. See Figure 2. Ensure it is tight enough to prevent the elbow straight side from rotating. If the elbow still rotates after tightening contact Jonker Sailplanes.

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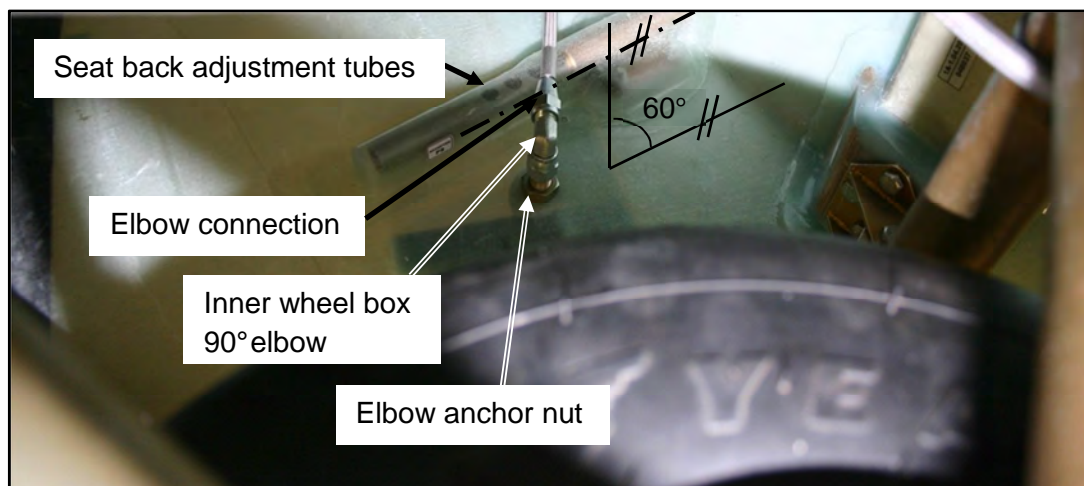


Figure 2: High Pressure Brake Hose entering into wheel box

8. Hold the wheel box-mounted elbow (5.3.06) through the access hole from cockpit side, using a spanner. Remove the flexible hose at the elbow (5.3.07), depicted in Figure 2, then at the caliper, depicted in Figure 3.

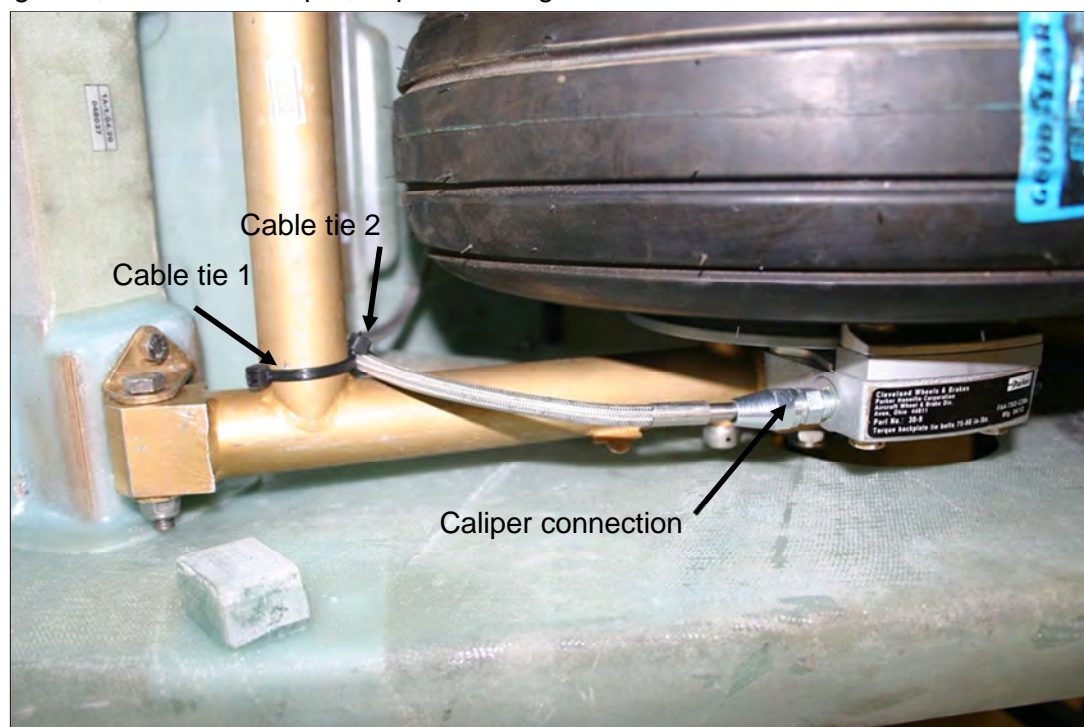


Figure 3: High Pressure Brake Flexible hose connected to caliper and fixed to landing gear arm

9. Still holding the wheel box-mounted elbow (5.3.06) through the access hole from cockpit side, adjust the angle of elbow inside the wheel box (5.3.07 Elbow Female/Male: 1J9-0404) as depicted in Figure 2, pointing toward the top of the glider and slightly forward, inclined approximately 60° relative to the seat back adjustment tubes, as shown in Figure 2, or approximately parallel to the belly hook brackets. Once the angle is set correctly, tighten the inner elbow's union (5.3.07).

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10. With the landing extended, route the high pressure brake flexible hose (5.3.04 Brake hose 7mm: KN 600) from the inner elbow (5.3.07), upward in the wheel box, across the landing gear arms, then down toward the brake caliper, as shown in the figures below. Leave sufficient clearance to allow the flexible hose (5.3.04) to rotate with the landing gear arms without touching the wheel box or the tyre, see Figure 4 and Figure 5.

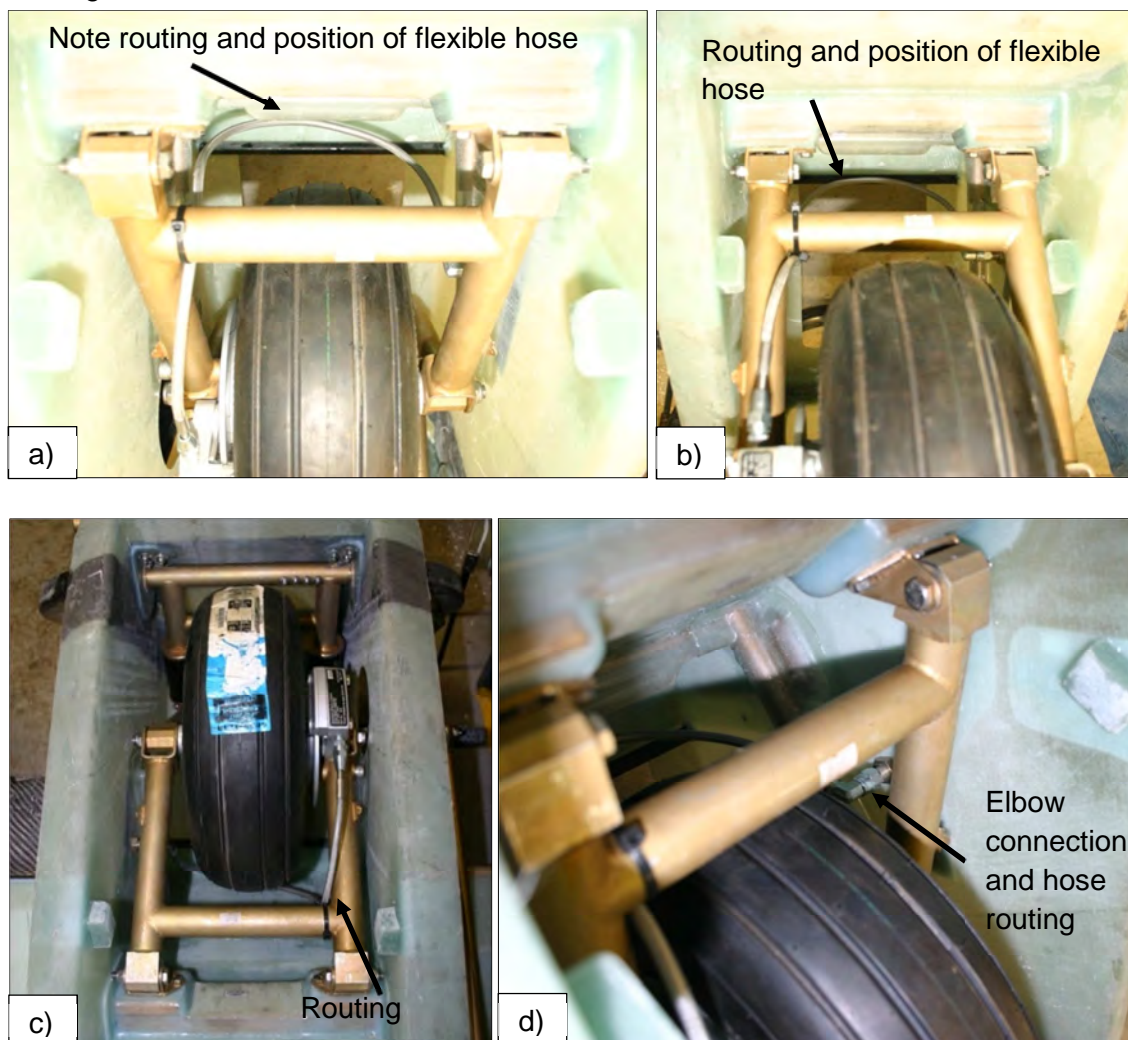


Figure 4: a) Main gear from front retracted. b) Main gear from front extended. c) Main gear from front below retracted. d) Main gear from front close up retracted.

Note: The figure of the wheel brake system in JS1 Maintenance Manual is for illustrative purposes only and does not depict the routing accurately.

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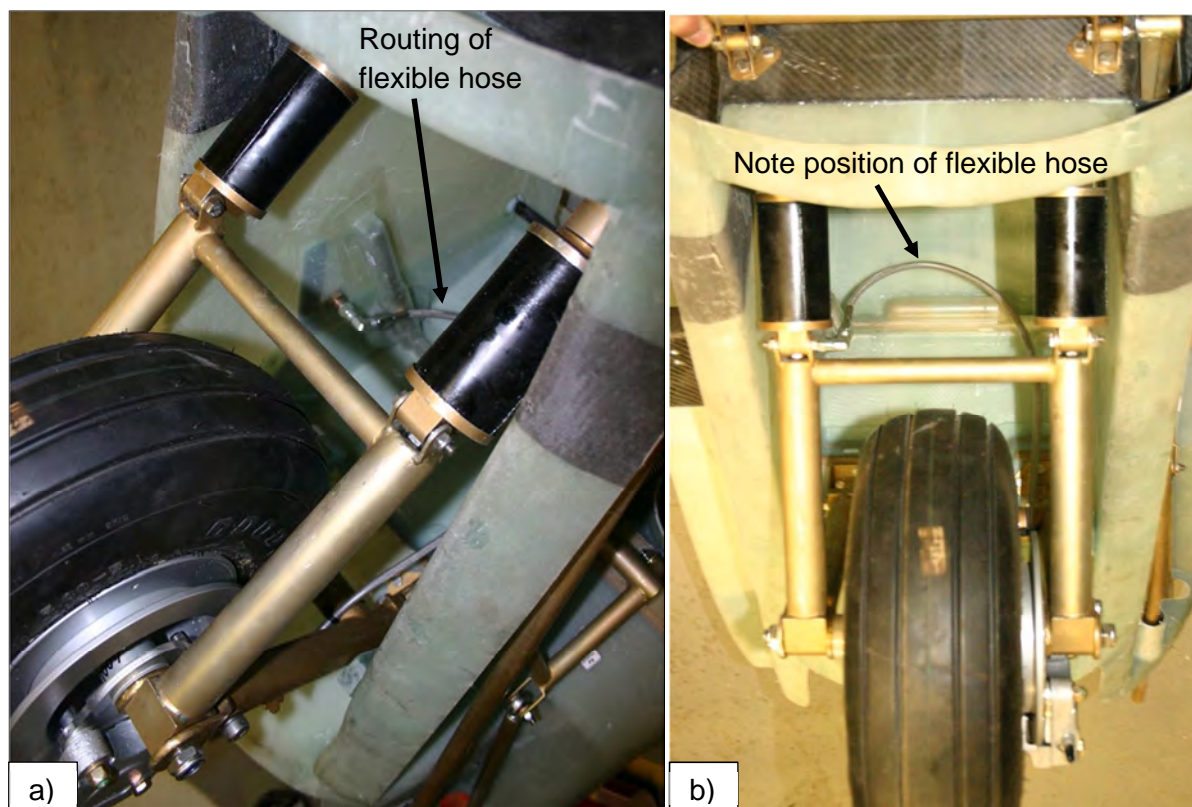


Figure 5: a) Main gear from rear below extended. b) Main gear from rear extended.

11. Connect the flexible hose (5.3.04) securely to the elbow (5.3.07), and lightly to the caliper. Counter twist the flexible hose a small amount, and then secure the flexible hose to the caliper. The flexible hose must be untwisted after installation.
12. Apply the cable ties as shown in Figure 3. Tie one cable tie loosely around the crossbar. Secure the flexible hose (5.3.04) to the first cable tie with a second cable tie, and then secure the first cable tie to the landing gear arm.
13. Retract and extend the landing gear slowly and check that the flexible hose (5.3.04) moves freely and without any tight bends or kinking.
14. Close the access hole below brake fluid reservoir by reinstalling the B5 cover plate (1A-1.03.53).
15. Reinstall the seatback (1A-1.02.30) in cockpit as per JS1 Maintenance Manual.
16. Bleed and test wheel brake system according to the JS1 Maintenance Manual.

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SUPPLIED MATERIAL

1x 5.3.04 Brake hose 7mm:KN600

1x 5.3.07 Elbow female/male 1J9-0404

2x Cable ties

MASS AND BALANCE

No effect on mass and balance

NOTES

This Technical Note must be accomplished by approved maintenance personnel.

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