



AEROMOT MOTORGLIDER: LANDING GEAR SERVICE/REPAIR.

1. MOVABLE STRUT REMOVAL

- 1.1 Put the motorglider on the jacks and lift it to **extend** completely the landing gear shock absorbers.
- 1.2 Release the flexible hose of the brake caliper.
- 1.2 Release the pressure from the shock absorber system thru the pressurization valve (item 34).
- 1.3 Remove bolts (item 22) and split the "Torque Link" (item 18).

Warning:

Be **careful** with the **internal** spring, it's compressed.

- 1.4 Remove the nuts (item 17), the washers (item 16) and the bolts (item 15) **and** remove the flange from the fixed strut.
- 1.5 Remove the movable strut (item 13) from the fixed strut(item 1).
ATTENTION: Put a metallic tray under the landing gear wheels to collect the hydraulic oil when removing the movable strut.
- 1.6 Clean all parts, inspect and **replace** damaged parts.

2. MOVABLE STRUT DISASSEMBLY

- 2.1 Remove the retaining ring (item 8), the spacer (item 9), and the **o-ring** (item 11).
- 2.2 Remove the **spacer (item 7)** of the movable strut (item 13).
- 2.3 Remove the **o-rings** (10 and 11) from the **spacer (item 7)**.
- 2.4 Remove the **plate (item 14)** and the cleaner ring (item 12).
- 2.5 Remove the fork (item 27) from the moving strut (item 13) by removing the **bolts (item 28)**

3. DISASSEMBLY OF THE FIXED STRUT PARTS

- 3.1 Remove the piston (item 4) from the inside of the fixed strut (item 1).

NOTE: remove it using an extractor if necessary.

- 3.2 Remove the **o-rings** (6 and 10) from the piston (item 4).

4. ASSEMBLY OF THE SHOCK ABSORBER OF THE LANDING GEAR

- 4.1 Install new **o-rings** (6 and 10) in the piston (item 4).
- 4.2 Install the cleaner ring (item 12) in the **plate (item 14)**.
- 4.3 Install the plate (item 14) in the movable strut (item 13).



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- 4.4 Install new o-rings (10 and 11) in the spacer (item 7).
 - 4.5 Install the spacer (item 7) in the movable strut (item 13). Spacer must be installed with the bigger part facing down, see in figure 1.
 - 4.6 Install new o-ring (item 11) in the movable strut (item 13).
 - 4.7 Install the spacer (item 9) in the movable strut (item 13). Spacer must be installed with the rim upward.
 - 4.8 Install new retaining ring (item 8).
 - 4.9 Insert the spring (item 5) inside the movable strut (item 13).
 - 4.10 Insert the piston (item 4) inside the fixed strut (item 1).
 - 4.11 Install the movable strut assy. (item 13) inside of the fixed strut (item 1) by using the special tool n° 32350-A-23F as shown in Figure 2. Align the holes of the fixed strut (item 1) with the plate (item 14) with six bolts (item 15), washers (item 16) and nuts (item 17).
- NOTE: the bolts must be tightened with torque of 1,2 to 1,6 kgf-m (105 to 138 lbf-ft).
- 4.12 Install bolt (item 22) in the torque link with the washer (item 29), the bushing (item 23), the
 - 4.13
 - 4.13 Fill the shock absorber with 375ml of the hydraulic oil AEROSHELL FLUID 41 in the hole of the air valve. Fill it slowly so that the oil to spread in the internal chamber of the shock absorber.
 - 4.14 Install the air valve and pressurize the shock absorber with Nitrogen (101 psi if temperature >0°C, 114 psi if <0°C).
 - 4.15 Install the fork (item 27) in the moving strut (item 13) and the support (item 26) by placing the bolts (item 28), washers (item 29) and nuts (item 30).

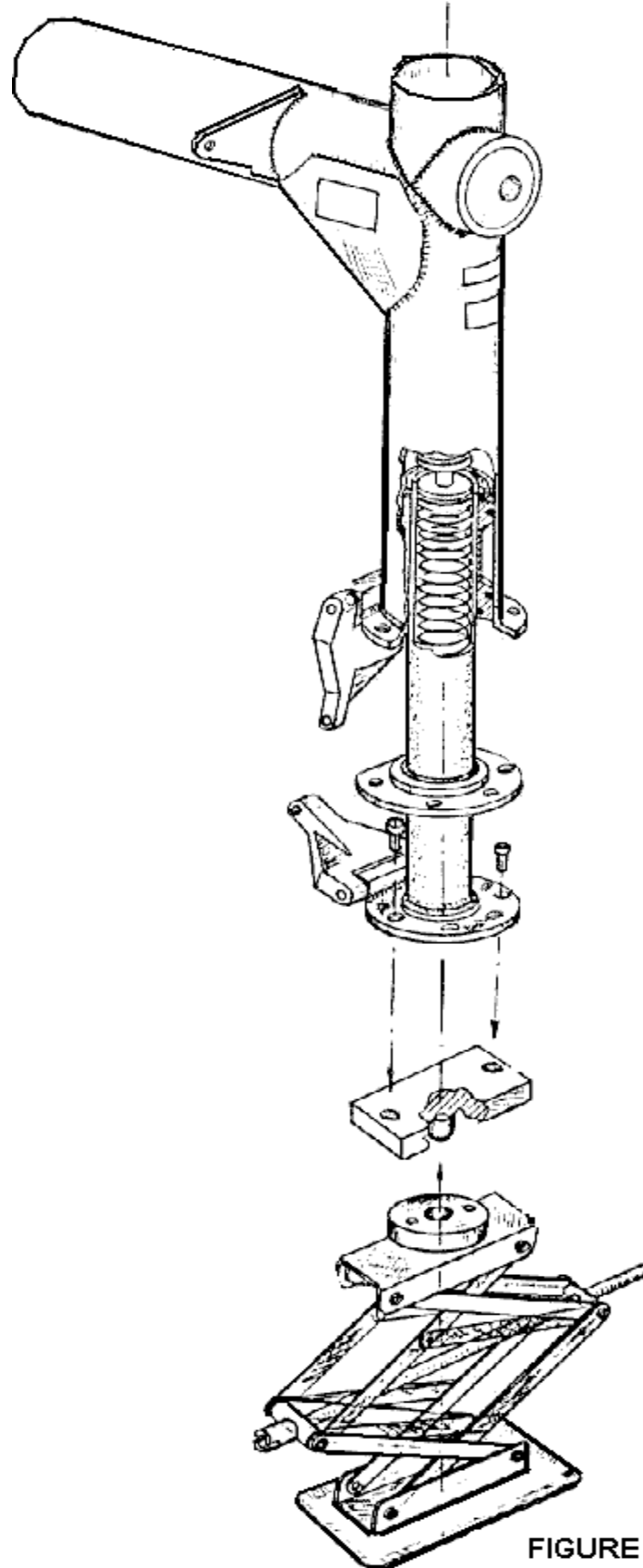


FIGURE 2