

AG-CAT MAINTENANCE MANUAL

4-37 SPRING-LEG REMOVAL (Cont'd)

NOTE

Remove gear in this sequence to avoid chance of the spring-leg dropping and damaging the stud assembly if support plate bar is removed first.

WARNING

Personnel should be available to steady fuselage against any unexpected movement or swaying that may result in injury to personnel and aircraft.

h. Remove nut (18) washer (17) and bolt (15) attaching wheel alignment shim (16) to support plate (2). Remove shim.

NOTE

G164C model utilize a forward and rear shim as shown in figure 4-5. Remove both shims.

i. Remove axle from spring-leg on G164A & B models Figure 4-5 as follows:

1. Remove wheel from axle in order to hold countersunk bolt from slipping.

2. Remove nut (30) washer (29) while holding countersunk bolt (27) with screwdriver.

3. Remove internal wrenching bolts (24), tow lug (22) securing axle to spring-leg. Remove axle.

j. Remove axle from spring-leg on G164C Figure 4-5 as follows:

NOTE

It is recommended that the wheel be removed first in order to obtain adequate clearance to hold nuts from slipping while removing bolts.

(.) Remove nuts, washers, tow lug (22) and internal wrenching bolts (24) securing axle (30) and torque plate to spring-leg.

The spring-leg is heat treated and shot peened. As with all hard structures, the slightest nick or scratch can cause high stress concentrations. The slightest indication of a crack should be checked with a magnaflux unit. If a crack is detected, the spring-leg should be replaced. Refer to figure 4-6 for repair instructions.

a. Inspect spring-leg bolt holes for evidence of cracks, scores, scratches, wear, and corrosion.

b. Inspect forward and aft edges of spring-leg for evidence of cracks, nicks, scores, scratches, wear, and corrosion.

c. Inspect outer and inner flats of spring-leg for evidence of cracks, nicks, scores, scratches, wear and corrosion.

4-39 REPAIRS

Repairs to the spring-leg are limited to scratches, nicks, scores and corrosion to a specified depth as indicated in Figure 4-6. Damage that exceeds these dimensions calls for replacing the spring-leg. Remove scratches, and nicks with an abrasive paper to form shallow saucer shaped depressions and polish with crocus cloth so that removal of metal will not form a depression more than the allowable depth of the damage.

CAUTION

Always rub spring-leg in the longitudinal direction, never crosswise, when making repairs to scratches, nicks, and corrosion.

Repairs in zone 1 are confined to the upper and lower flats to within 1/4 inch of the spring-leg edges as shown in Figure 4-6. Outside this area if any scratches, scores, nicks or corrosion are detected, replace spring-leg.

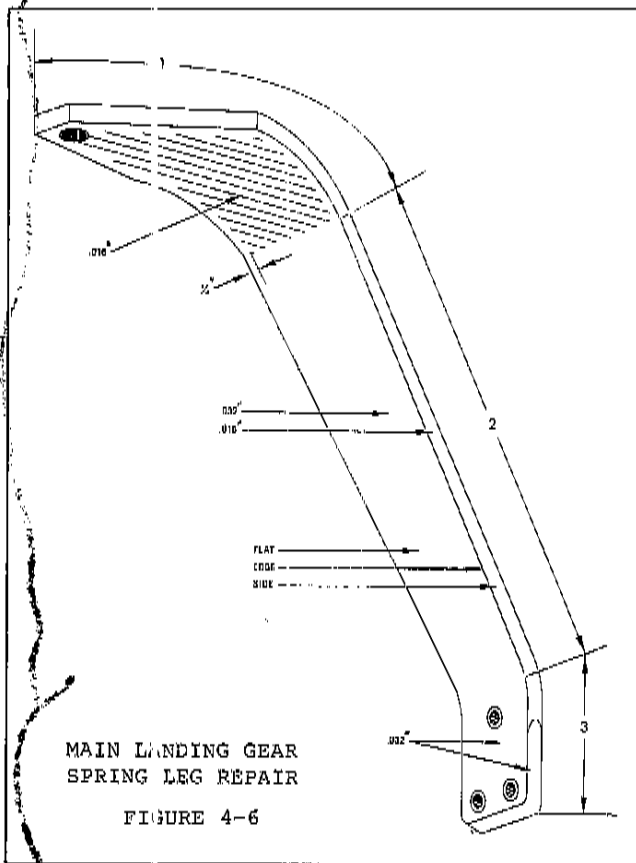
NOTE

If for any reason, the spring is bent beyond its original configuration, this is an indication that its elastic limit

4-38 INSPECTION

BASIC
LCA

AG-CAT MAINTENANCE MANUAL



MAIN LANDING GEAR
SPRING LEG REPAIR

FIGURE 4-6

4-39 REPAIRS (Cont'd)

has been exceeded and cause for replacement.

CAUTION

Gear Springs are heat treated. NO welding is permissible.

4-40 INSTALLATION

4-18

a. Attach axle to spring-leg on G164 A & B models by following steps (1) through (5).

NOTE

Observe large corner radius of internal wrenching bolt heads. Install washers with concave side against bolt head to ensure adequate bearing area.

1. Place new "o" ring seals (26) (28) Figure 4-5 into bolt hole chamfers on spring-leg.
2. Apply plastikon rubber putty grade 21 or other suitable material to axle base, in order to seal torque plate bolt holes (23).
3. Place axle and tow lug into position on spring-leg. Insert counter sunk bolt (27) through spring-leg and axle and secure with washer (29) and nut (30). Torque nut to 13 to 16 foot pounds.
4. Insert internal wrenching bolts (24) with washers (25) through tow lug (22), and spring leg. Thread bolts into axle base (21) and torque bolts to 60 to 70 foot lbs. Safety bolt heads with lock wire.

(5) Install collar and torque plate on axle and secure with bolts and washers. Torque bolts to 125 inch pounds and safety bolt heads with lockwire.

b. Attach axle to spring leg on G164C model by following steps (1) through (3)

1. Place new "O" ring seals (26) (28) Figure 4-5 into bolt hole chamfers on spring-leg.
 2. Place axle and tow lug into position on spring-leg. Insert internal wrench bolts (24) with washers through spring-leg and axle flange.
 3. Install torque plate and secure bolts with washers and nuts. Torque nuts to 92 to 108 ft. lbs.
- c. Install metal spacer (7) Figure 4-5 on tapered upper end of spring-leg.