

MOONEY AIRCRAFT, INC.

SERVICE LETTER 20 51  
(This Service Letter is FAA Approved)

DATE: August 19, 1959

SUBJECT: INSPECTION OF LANDING GEAR SHOCK RETAINER COLLAR AND BOLT

MODELS AFFECTED: M-20 AND M-20A - ALL SERIAL NUMBERS

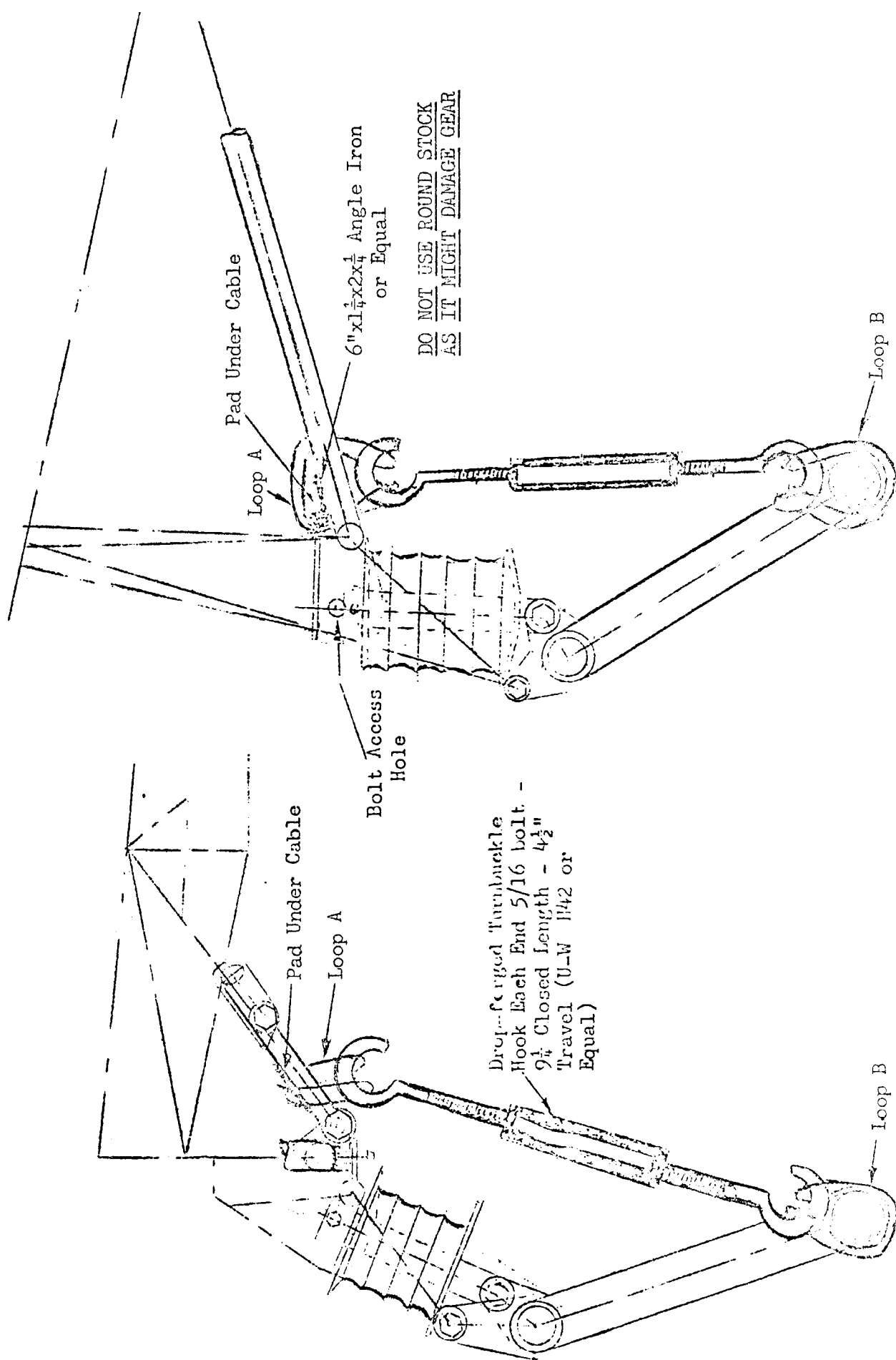
TIME OF COMPLIANCE. AS NOTED

INTRODUCTION:

Several reports have been sent to us of wear and bending or failure of the landing gear shock retainer collars and bolts. This damage is possibly the result of wheel and spindle rebound during hard landings or rough field usage. In the event of failure of either of these parts, the landing gear could become jammed in the wheel well and prevent extension of the gear. It is, therefore, necessary that the parts be inspected periodically as noted in the instructions.

INSTRUCTIONS:

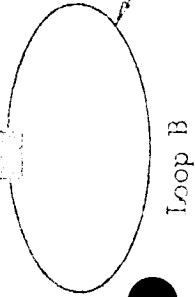
1. Visually inspect collars and bolts on nose gear and main gears for bent condition immediately and at subsequent 50 hour inspections or more often if aircraft is subjected to hard landings or rough field usage.
2. Remove collars and bolts at each annual inspection and inspect for bends, wear, and cracks. Replace if necessary. It is suggested that spare parts be obtained prior to this inspection. Do not replace a bolt without replacing the collar, or a collar without replacing the bolt.
3. Suggested method of compressing the shock disks for bolt and collar removal is as follows. Plane should be elevated on jacks to accomplish this. Tools needed are shown on enclosed sketch.
  - A. Nose Gear
    - (1) Remove wheel from axle and disconnect gear doors from retraction links.
    - (2) Tighten turnbuckle (see sketch) until collar is just clear of plate.  
Remove bolt and collar.
  - B. Main Gear
    - (1) Remove wheel and inner section of brake housing from axle.
    - (2) Disconnect gear door retraction links from retraction arms and remove doors from hinges.
    - (3) Loosen forward retracting arm clamps on gear leg and slide back.
    - (4) Tighten turnbuckle until collar retaining bolt alligns with access hole shown in sketch. Remove bolt and collar.



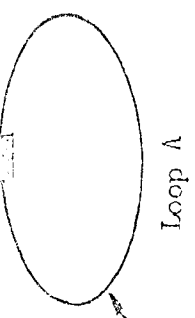
MAIN GEAR

Cable Clamps  
Nico Press or Equal

NOSE GEAR



Loop B



Loop A

1/8" Dia. Aircraft Cable  
15" Long

1/8" Dia. Aircraft Cable  
18" Long