

**MOONEY AIRCRAFT, INC.**  
LOUIS SCHREINER FIELD • KERRVILLE, TEXAS

# Service Instruction



NUMBER: M20-24

DATE: 6-6-66

(FAA D.O. AUTHORIZATION SW-1 APPROVED)

TO: Distributors, Dealers, Service Centers

FROM: Customer Service

SUBJECT: Change in clearance for Main Gear Shock Discs

MODELS AFFECTED: (1) Lord discs, P/N 530021; 1966 M20C & E and previous year models retrofitted with this disc.  
(2) Firestone discs, P/N 3CRE 714; M20 C, D (constant speed prop) & E, all 1965 and earlier models.

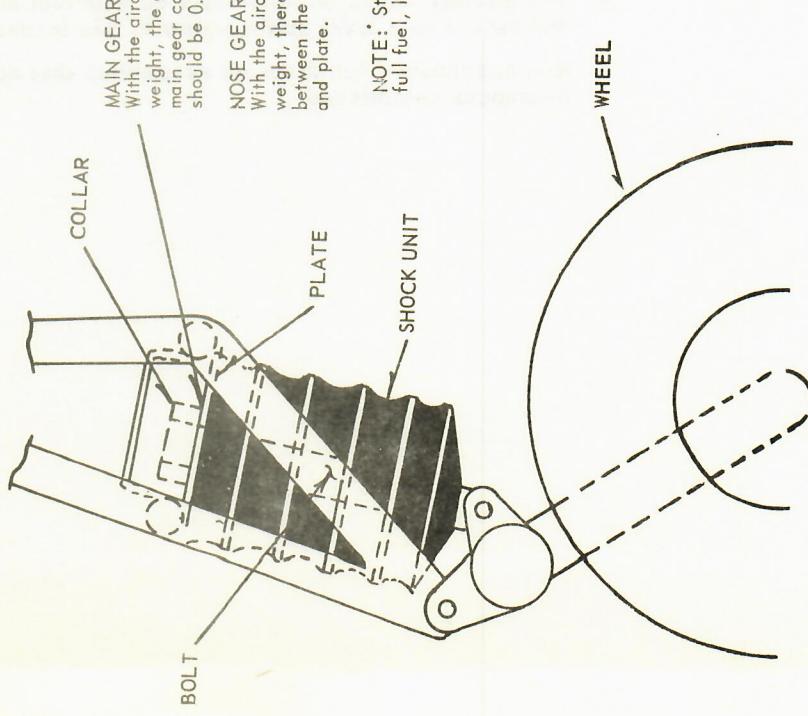
SERIAL NUMBERS AFFECTED: (1) Lord Discs J-11968-5 (Mooney Part #530021)  
M20C SN 3185 and on  
M20E SN 832 and on  
(2) Firestone Discs P/N 3CRE 714  
M20C SN 1852, 1940 through 3184  
M20D SN 1, 101 and on (with constant speed propeller)  
M20E SN 101 through 831

## INTRODUCTION:

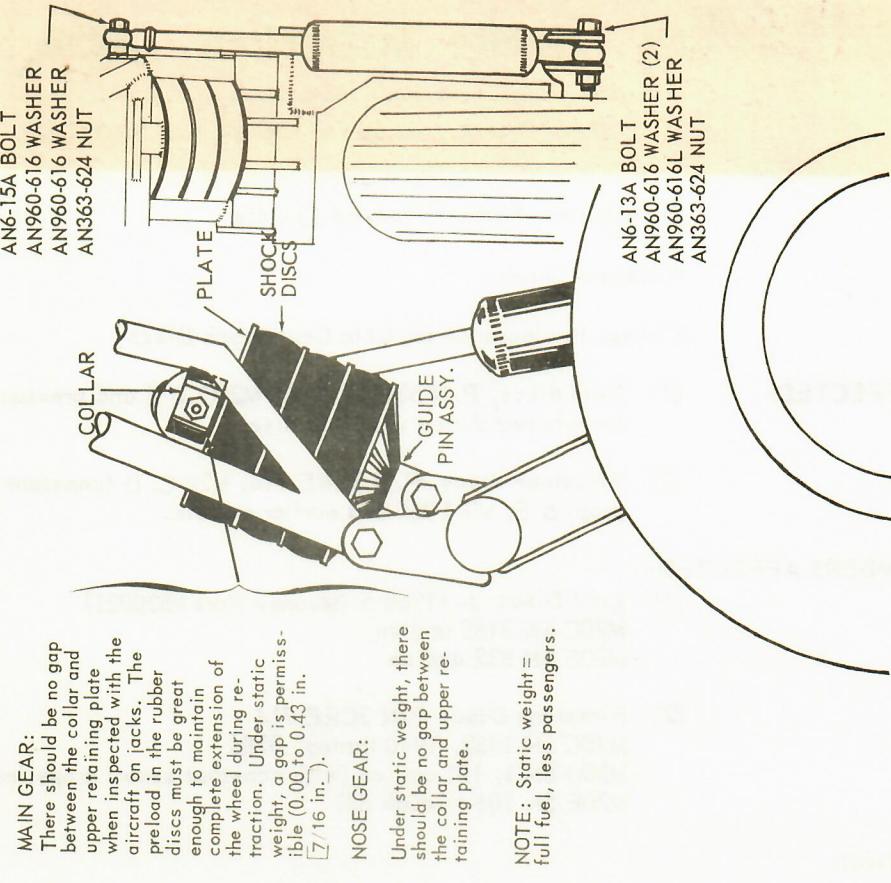
On Mooney M20 C, D (constant speed prop) & E type aircraft, an additional clearance at the main gear between the collar and the plate is allowed. (Fig. 1 & 2)

1. For 1966 Model M20 C & E with Lord Disc, P/N 530021, and those M20 C & E models retrofitted with Lord Discs, the maximum clearance between the 510049 collar and the plate on the main gear is 7/16 inches. (Fig. 2)
2. For those M20 C, D (constant speed propeller) & E with Firestone Discs, P/N 3CRE 714, installed, the maximum clearance between the 510027-8 or -9 collar and the plate on the main gear is 1/8 inches. (Fig. 1)
3. The clearance allowed between the collar and the plate at the nose gear remains zero.
4. The aircraft should be fully serviced with fuel and oil, cargo off-loaded and parked on a level surface prior to this inspection.
5. Replace those shock discs on assemblies that do not meet the clearance tolerances established.

**FIGURE 1 – LANDING GEAR SHOCK DISC INSPECTION DIAGRAM**  
**1962-'65 M20C INSTALLATION**  
**1963 & ON M20D INSTALLATION** (with constant speed propeller)  
**1964-'65 M20E INSTALLATION**



**FIGURE 2 – LANDING GEAR SHOCK DISC INSPECTION DIAGRAM**  
**1966 & ON M20C & E INSTALLATION**  
**(ALSO LORD DISC RETROFIT INSTALLATION)**



**MAIN GEAR:**

There should be no gap between the collar and upper retaining plate when inspected with the aircraft on jacks. The preload in the rubber discs must be great enough to maintain complete extension of the wheel during retraction. Under static weight, a gap is permissible (0.00 to 0.43 in. [7.16 in.]).

**NOSE GEAR:**

Under static weight, there should be no gap between the collar and upper retaining plate.

**NOTE:** Static weight = full fuel, less passengers.

**MAIN GEAR:**

With the aircraft at static weight, the gap between the main gear collar and plate should be 0.00 to 0.13 inches.

**NOSE GEAR:**

With the aircraft at static weight, there must be no gap between the nose gear collar and plate.

**NOTE:** Static weight = full fuel, less passengers.