

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS, UNITED STATES AIR FORCE
WASHINGTON

TECHNICAL ORDER
NO. 01-100LAA-24

30 March 1950

MODIFICATION OF LANDING GEAR - L-17A (RYAN)

This technical order supersedes kit copies of T. O. No. 01-100LAA-24, dated 15 November 1949.

By whom work will be accomplished:

Organizational maintenance activities, with the aid of field maintenance facilities if necessary.

When work will be accomplished:

As soon as possible, but not later than the next 100-hour inspection period.

AF form entry required:

60A.

1. PURPOSE.

To reduce the possibility of failure of the landing gear, all L-17A aircraft will be modified in accordance with the instructions contained in paragraph 2.

2. MODIFICATION DATA.

a. The instructions for reinforcing the nose gear drag brace attaching structure are as follows:

(1) Remove weight of aircraft from nose gear.

(2) Remove right-hand engine cooling gill cover.

(3) Through the gill opening, inspect forward end of support channel-nose gear drag brace bearing support, part No. 145-34161, for cracks in the radius of the flange where two bolts, part No. AN4-6A, attach part to firewall channel located on the opposite side. (See figure 1.)

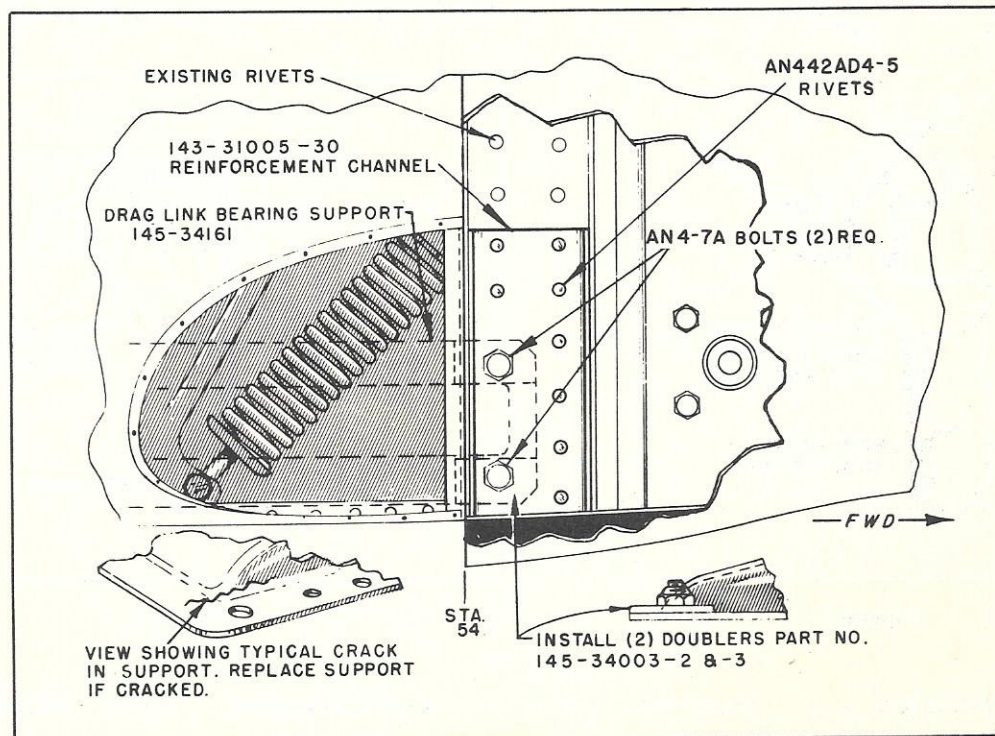


Figure 1

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(4) Replace if cracked. Use caution in removing rivets so as not to elongate holes.

(5) Remove bolts and rivets from lower end of the right-hand side of channel (firewall to nose gear torque box), part No. 143-31005-6, in area that would be covered by reinforcement channel, part No. 143-31005-30. (See figure 1.)

(6) Install reinforcement channel, part No. 143-31005-30, onto channel, part No. 143-31005-6, with eight rivets, part No. AN442AD4-5, using existing rivet holes.

(7) Replace bolts, part No. AN4-6A, with bolts, part No. AN4-7A. Under the nut of each bolt, install doubler, part Nos. 145-34003-2 and 145-34003-3, in lieu of AN washers. (See figure 1.)

(8) Reinstall gill opening cover.

b. The instructions for the installation of safety washers for right- and left-hand gear retracting link bearings are as follows:

(1) Install safety washer, part No. 2W1-40-44-62, on left and right main landing gear retracting link strut attaching bearing in lieu of washers, part No. AN960-1016. (See figure 2.)

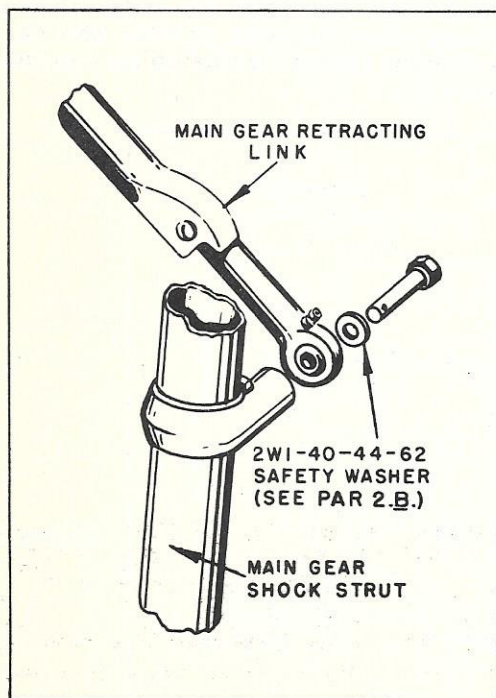


Figure 2

c. The instructions for the replacement of rivets with bolts in the nose gear retracting cylinder attaching cross member are as follows:

(1) Inspect the nose wheel well area, at the gear retracting cylinder attaching cross member, where the ends attach to nose wheel well side spar, right-hand side upper corner (figure 3), and determine if two proper 3/16-inch high shear rivets are installed. If two 1/8-inch rivets are installed, remove rivets and redrill holes using a No. 12 (.189-inch diameter) drill. Install two each bolts, part No. AN3-5A, washers, part No. AN960-10; and nuts, part No. AN365-1032.

(2) On the left-hand side, upper corner (opposite end of the above), determine if two proper 5/32-inch dural rivets are installed. If two 1/8-inch rivets are installed, drill out rivets and install two each rivets, part No. AN442AD5-5, or drill out holes with No. 12 (.189-inch diameter) drill, and install two each bolts, part No. AN3-5A; washers, part No. AN960-10; and nuts, part No. AN365-1032.

3. SUPPLY DATA:

a. The following parts are required per aircraft to accomplish this change. These parts will be furnished as complete kits for initial installation in L-17A aircraft assigned to the National Guard and will be shipped without requisition in accordance with instructions contained in letter, Headquarters, USAF, dated 26 April 1949, subject: "Modernization of L-16A and L-17A Airplanes," and letter, National Guard Bureau, dated 28 July 1949, same subject. Parts required for maintenance after the initial installation will be requisitioned from individual property classes.

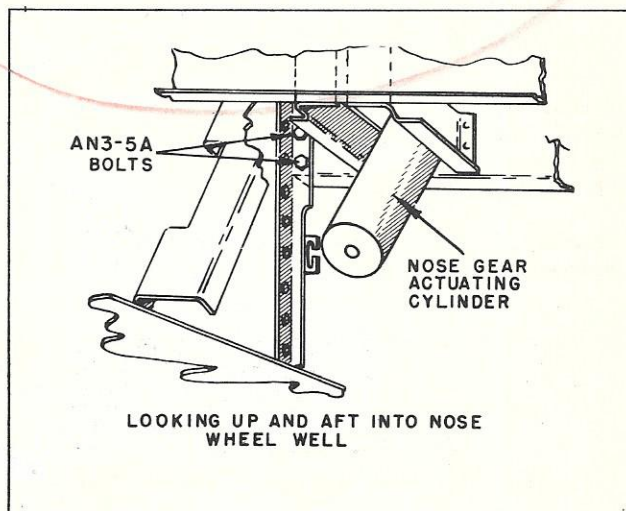


Figure 3

QTY	STOCK NO.	PART NO.	NOMENCLATURE	CLASS	SOURCE
1	1300TO-01-100LAA24		KIT, "Modification of Landing Gear - L-17A," consisting of the following parts: (UNIT COST \$3.65)	15	AF Stock

QTY	STOCK NO.	PART NO.	NOMENCLATURE	CLASS	SOURCE
1	0110-143-31005-30	143-31005-30	Reinforcement Channel	01-M	
1	0110-145-34161	145-34161	Drag Brace Channel	01-M	
1	0110-145-34003-3	145-34003-3	Doubler	01-M	
1	0110-145-34003-2	145-34003-2	Doubler	01-M	
2	6500-032440	AN-7A	Bolt - Aircraft plain steel 1/4-28 29/32 in. long	04-A	
8	6700-497796	AN442AD4-5	Rivet - Alum. alloy, FH type AD 1/8 in. x 5/16 in. long	29	
2	0110-2W1-40-44-62	2W1-40-44-62	Washer - Safety 5/8 inch ID x 1-3/8 in. OD x 1/16 in. thick Mfr from:	01-M	
4	6500-032020	AN3-5A	Bolt - Aircraft plain steel 10-32 21/32 in. long	04-A	
4	6500-984000	AN960-10	Washer - Plain steel No. 10 bolt size .064 in. thickness	04-A	
4	6500-514000	AN365-1032	Nut - Self locking steel 10-32	04-A	
2	6700-497844	AN442AD5-5	Rivet - Alum. alloy FH type AD 5/32 in. x 1/4 in. long	29	

b. Parts removed in accordance with the preceding instructions and not reinstalled, will be returned to stock if reparable or serviceable.

4. ESTIMATED MAN-HOURS.

Approximately 8 man-hours are required per aircraft to accomplish this modification.

5. WEIGHT AND BALANCE INFORMATION.

The weight and balance change resulting from the instructions contained herein is negligible.

BY ORDER OF THE SECRETARY OF THE AIR FORCE:

HOYT S. VANDENBERG
Chief of Staff
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Air Materiel Command

Prepared by Maintenance Technical Section,
Maintenance Div, Hq, AMC.

