MODELS 47J-2 & 47J-2A
MAINTENANCE AND OVERHAUL INSTRUCTIONS
TEMPORARY REVISION 47-16-3

REFERENCE: Alert Service Bulletin 47-15-27 R1
REASON: To improve integrity check of the Throttle Linkage and graphically clarify proper safety wire installation of the Throttle Linkage.

SAFETY WIRING OF THROTTLE CONTROL LINKAGE

Revise the Maintenance and Overhaul Instructions as follows:

- Remove "Models 47J-2 & 47J-2A Maintenance and Overhaul Instructions Temporary Revision 47-15-2" from the M&O manual, then record as removed on the "RECORD OF ACTIVE TEMPORARY REVISIONS" page.

- Section I, Daily Inspection, Page 1-50, Rev 2, 1 December 1974
  POWER PLANT AND ENGINE COMPARTMENT
  Revise Step 8 to address throttle linkage-carburetor security check:

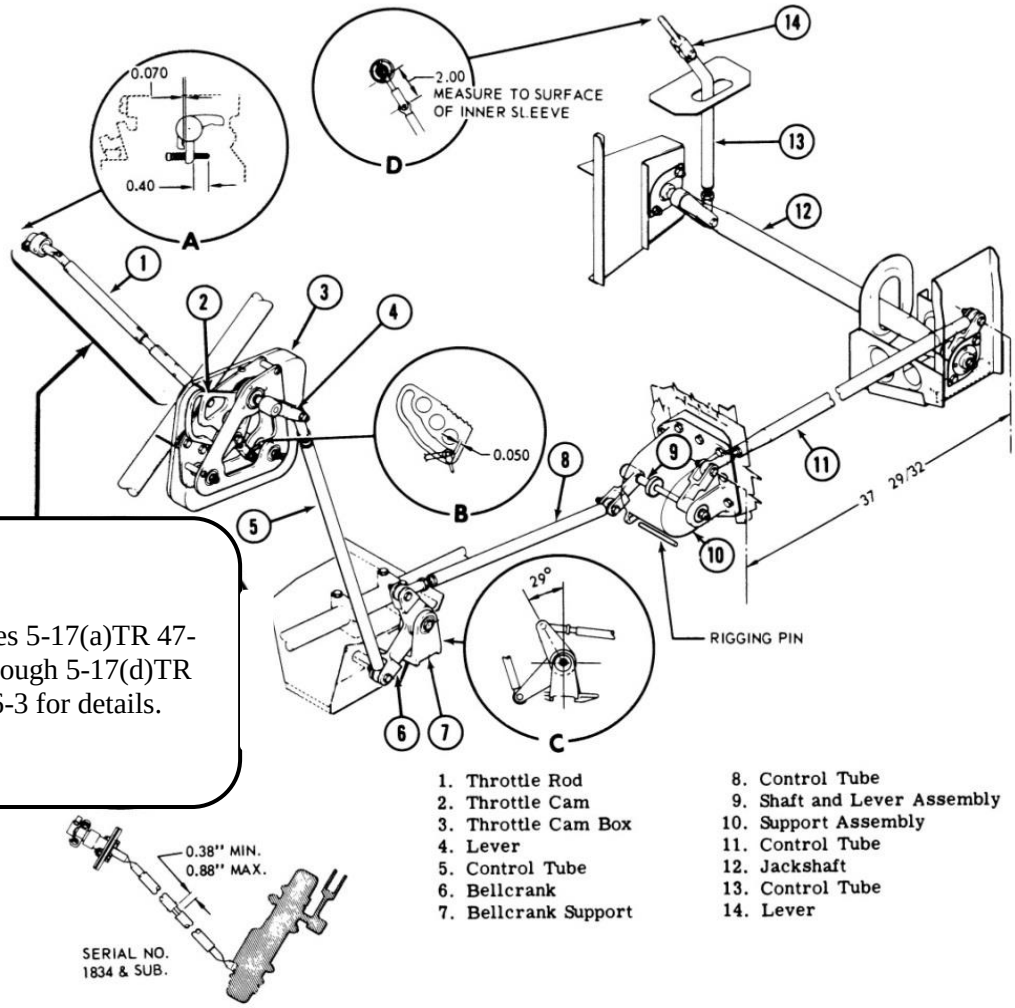
  8. Inspect throttle, mixture, carburetor heat and fuel shut-off controls for general condition and security. Check controls for freedom of operation and full operating range. Check the throttle linkage-carburetor attachment for condition and security, for the presence and correct installation of the safety wire, and for intact Anti-Sabotage Lacquer. If Anti-Sabotage Lacquer is found fractured, prior to further flight perform inspection to determine cause, then perform corrective action. Re-apply Anti-Sabotage Lacquer.

- Section V, Page 5-17, Rev 7, 15 July 1981
  Remove Page 5-17. Insert pages 5-17TR 47-16-3 through 5-17(d)TR 47-16-3 (Appendix 1 of this document).

- Enter "Models 47J-2 & 47J-2A Maintenance and Overhaul Instructions Temporary Revision 47-16-3" on the "RECORD OF ACTIVE TEMPORARY REVISIONS" page.

Appendix 1

This Temporary Revision replaces page 5-17, inserts pages 5-17(a)TR 47-16-3 through 5-17(d)TR 47-16-3 linked to paragraph 5-53 p. "Adjusting - Throttle Control", and revises verbiage on page 1-50.



See pages 5-17(a)TR 47-16-3 through 5-17(d)TR 47-16-3 for details.

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Figure 5-11. Throttle Rigging

d. Check open position of throttle to be not more than 0.070 inch off open stop and not preloaded. Adjust link (item 6, figure 5-12) from its initial dimension of 2.10 inches as necessary until throttle just touches idle stop and is from 0.070 off open stop to just touching open stop. It may be necessary to reindex throttle rod (1, figure 5-11) on throttle serrations.

e. Secure throttle rod (1) to throttle arm with two screws in serrated adapter. Safety wire heads of screws.

f. Disconnect control tube (13) from lever (14).

g. Adjust control tube (11) to 37 29/32 inches.

h. Remove bolt through control tube (8) and lever (9) and install a rigging pin through lever, rod end and support.

i. Close throttle control and lock collective in low pitch. Adjust lever (14) (View D) to 2.0 inches.

j. Adjust control tube (13) to fit between jackshaft lever (12) and lever (14) and install.

k. Adjust control tube (8) to position bellcrank (6) at 29 degrees from vertical. (View C.)

l. With throttle closed, adjust and install control tube (5), maintaining a minimum clearance of 0.050 inch (View B).

m. Remove rigging pin and install and safety all bolts and nuts.

Acceptable Means of installing Throttle Linkage Safety Wire

Note: The intent of the safety wire to be added is to:

a) to secure the Throttle Linkage Adapter to the Carburetor Stop Arm
b) to prevent the Throttle Linkage Adapter Screws from loosening

Warning:
Without proper safety wire in place, a separation between the Carburetor to Cam Box Shaft Assembly and the Serrated Shaft can occur, resulting in loss of throttle control!

The following instructions are intended as a guideline. Rigging of the Throttle Controls must be performed as instructed in Section 5-52 and 5-53. As the Throttle is rigged starting from the Throttle Control Cam Box Assembly, the orientation of the Throttle Linkage Adapter at the Carburetor Stop Arm may vary and not be exactly as depicted below, resulting in slight configuration variations. However, the intent firmly remains to utilize **two** (2) separate safety wire runs to:

a) secure the Throttle Linkage Adapter to the Carburetor Stop Arm
b) safety the Throttle Linkage Adapter Screws to prevent them from loosening

Both of these two steps must be performed to reduce the likelihood of separation of the Throttle Linkage Adapter from the Serrated Shaft.

- Prior to applying safety wire, ensure that the Aircraft Throttle Control is rigged as instructed in Section 5-52 and 5-53. Ensure that Carburetor Stop Arm is resting firmly against the properly adjusted Idle Stop Screw.

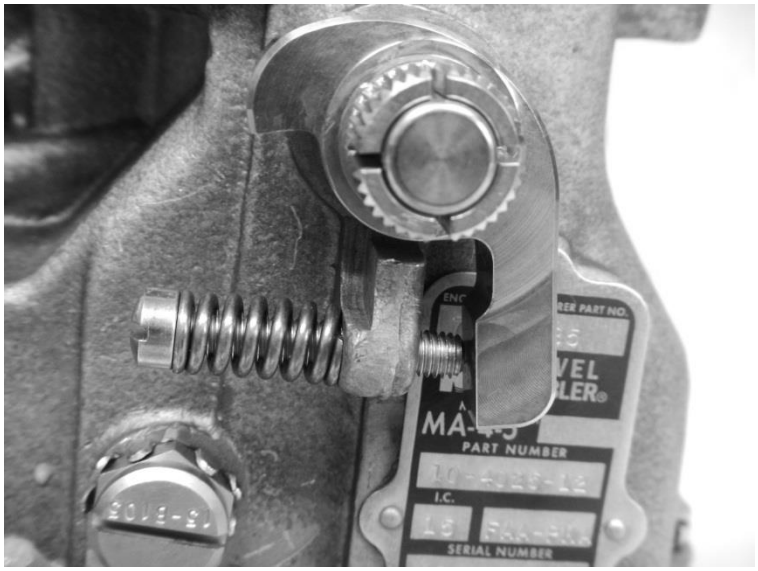

Figure 5-11a: Idle Position

Set Proper Clocking of Throttle Linkage Adaptor with Carburetor Stop Arm

Caution: Ensure that Serrated Shaft and mating surfaces are free of oil and lubricants.

- Ensure that both Throttle Linkage Adapter Screw heads are facing aft and Throttle Linkage Adaptor is clocked vertical as much as possible while Carburetor Stop Arm remains firmly set against the Idle Stop Screw. Tighten Throttle Linkage Adaptor Screws.

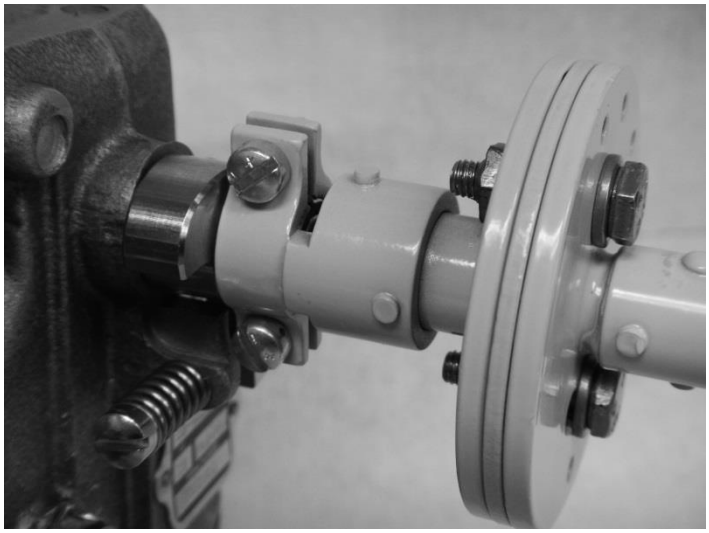

Figure 5-11b: Proper Positioning of Carburetor Stop Arm and Throttle Linkage Adaptor

Safety Wiring of Throttle Linkage Adapter Screws

- Safety Wire Throttle Linkage Adapter Screws in accordance with AC 43.13-1B.
  No neutral-pulls are permitted!

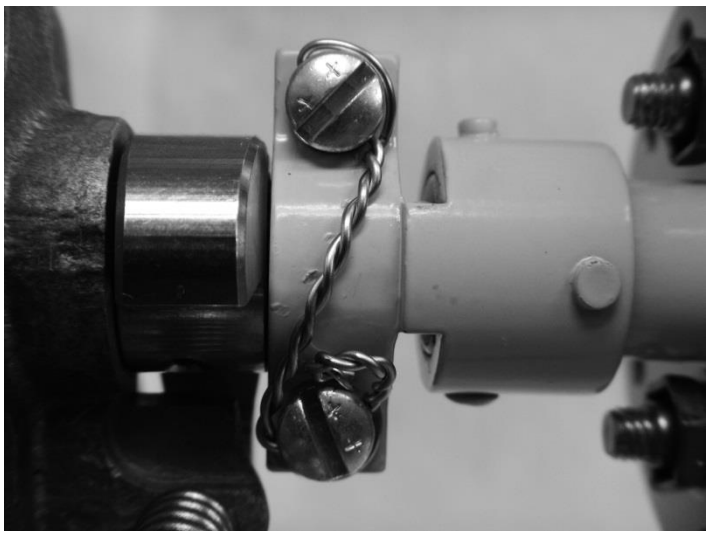

Figure 5-11c: Safety Wiring of Throttle Linkage Adapter Screws

Secure Throttle Linkage Adaptor to Carburetor Stop Arm with Safety Wire

Note: This step is crucial for flight safety.

- Originating at the Carburetor Stop Arm, wrap 0.032" Safety Wire around Carburetor Stop Arm twice, twist, then wrap ends twice around the notched area of the Throttle Linkage Adapter. All safety wiring is to be performed in accordance with AC 43.13-1B.

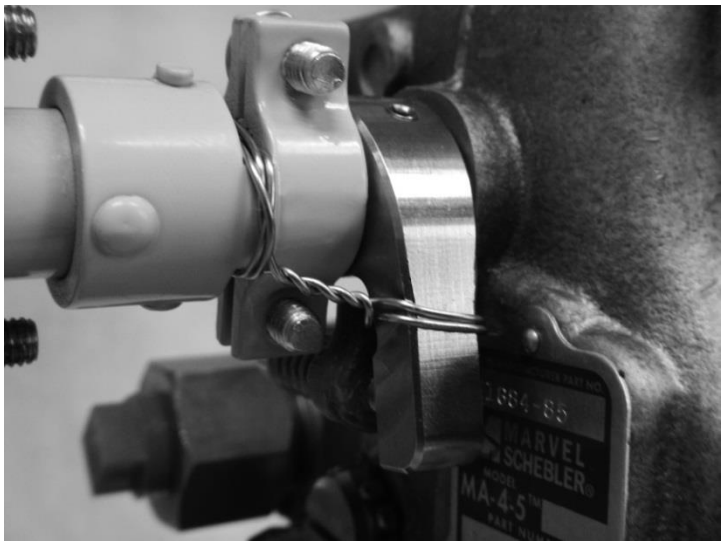

Figure 5-11d: Securing Throttle Linkage Adapter to Carburetor Stop Arm with Safety Wire

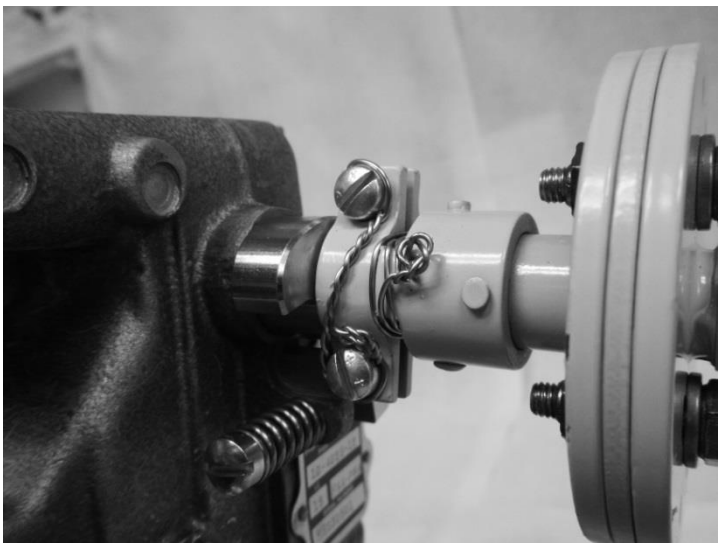

Figure 5-11e: Securing Throttle Linkage Adapter to Carburetor Stop Arm with Safety Wire

- Move throttle linkage from idle to the wide open throttle position several times to verify full freedom of motion.

NOTE: If the procedure described above for securing the Throttle Linkage Adapter to the Carburetor Stop Arm with Safety Wire cannot be followed exactly as shown, preclude joint separation by applying the shown intent.

Apply Anti-Sabotage Lacquer to Adapter and Carburetor Stop Arm

- Apply Anti-Sabotage Lacquer (Torque-Seal or equivalent) between the Throttle Linkage Adapter and the Carburetor Stop Arm, as well as between the Throttle Linkage Adaptor and the Throttle Linkage Adapter Screws (areas shown in white below).

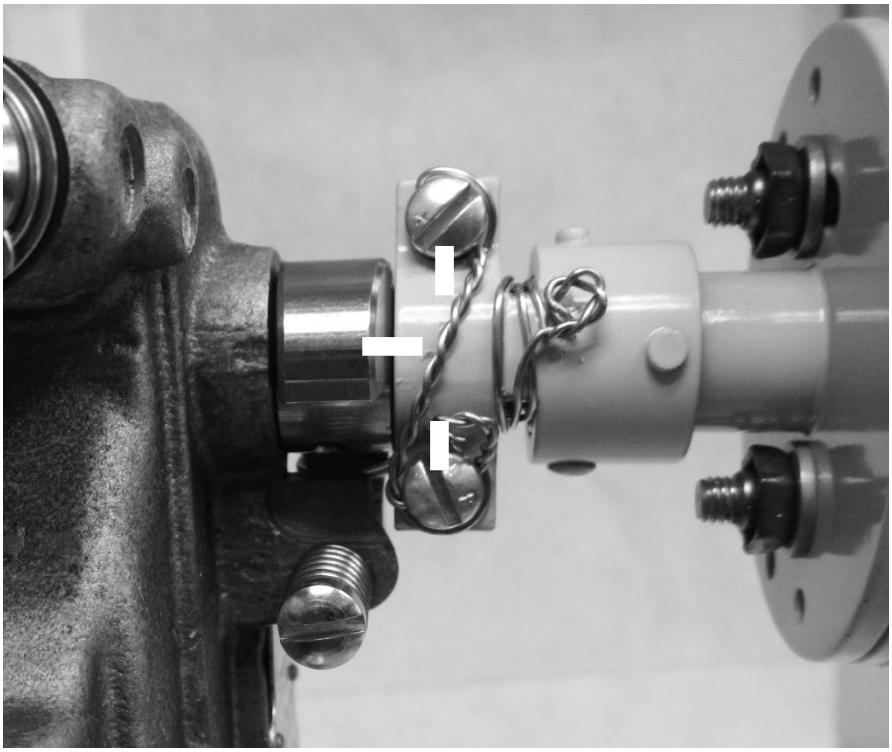

Figure 5-11f: Application of Anti-Sabotage Lacquer