MODEL 47J
MAINTENANCE AND OVERHAUL INSTRUCTIONS
TEMPORARY REVISION 47-16-2

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

SECURING OF THE THROTTLE CONTROL LINKAGE

Revise the Maintenance and Overhaul Instructions as follows:

- Add the "RECORD OF ACTIVE TEMPORARY REVISIONS" (page TR) immediately prior to the "LIST OF EFFECTIVE PAGES" (page A) in the M&O manual.

- Remove "Model 47J Maintenance and Overhaul Instructions Temporary Revision 47-15-1" 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 0, 1 November 1965
  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 throttle arm lock bolt, washer, self-locking nut and 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 III, Page 3-17, Rev 0, 1 November 1965
  Replace Page 3-17 with Page 3-17TR 47-16-2

- Section III, Page 3-20, Rev 0, 1 November 1965
  Modify Paragraph 3-55 (i) as follows:

  Delete: "Secure all attachments and safety".

  Replace with: "Install Throttle Arm Lock Bolt, Washer and Self-Locking Nut, add Safety Wire, then apply Anti-Sabotage Lacquer as shown on pages 3-19(a)TR 47-16-2 through 3-19(e)TR 47-16-2.

- Insert pages 3-19(a)TR 47-16-2 through 3-19(e)TR 47-16-2 (Appendix 1 of this document).
- Enter "Model 47J Maintenance and Overhaul Instructions Temporary Revision 47-16-2" on the "RECORD OF ACTIVE TEMPORARY REVISIONS" page.

RECORD OF ACTIVE TEMPORARY REVISIONS

Revision Number	Chapter/Page Number	Issue Date	Date Inserted	By	Date Removed	By
47-15-1	1-50	02/11/2015				
47-15-1	3-17	02/11/2015				
47-16-2	1-50	11/01/2016				
47-16-2	3-17TR 47-16-2	11/01/2016				
47-16-2	3-20	11/01/2016				
47-16-2	3-19(a) TR 47-16-2 thru 3-19(e) TR 47-16-2	11/01/2016				

Appendix 1

This Temporary Revision replaces page 3-17, inserts pages 3-19(a)TR 47-16-2 through 3-19(e)TR 47-16-2 linked to paragraph 3-55 i. "Adjusting Throttle Control", and revises verbiage on pages 1-50 and 3-20.

See pages 3-19(a)TR 47-16-2 through 3-17(e)TR 47-16-2 for details.

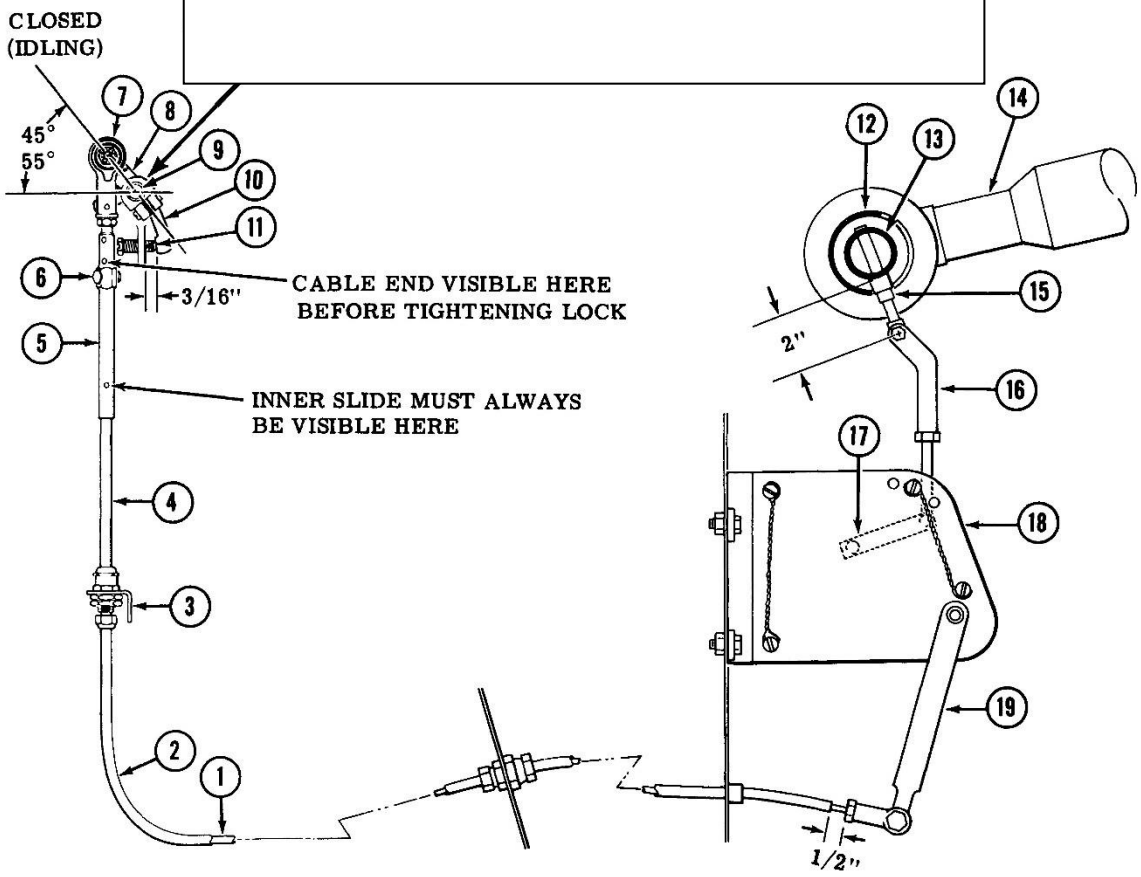

Figure 3-11. Throttle Linkage Adjustment

Acceptable Means of securing the Throttle Linkage

Note: The intent of securing the Throttle Linkage is to firmly safety the Throttle Arm to the Carburetor Stop Arm.

> **Warning:**
> **Without properly securing the Throttle Linkage, a separation between the Throttle Arm and the Serrated Shaft can occur, resulting in loss of throttle control!**

The securing of the Throttle Linkage consists of:

a) Installation of the Throttle Arm to the Serrated Shaft with a bolt, washer and self-locking nut.

b) Safetying the Throttle Arm to the Carburetor Stop Arm with Safety Wire.

Both steps must be performed in order to prevent separation between the Throttle Arm and the Carburetor Stop Arm.

- Prior to securing the Throttle Linkage, ensure that the Aircraft Throttle Control is rigged as instructed in Paragraph 3-55. Ensure that Carburetor Stop Arm is resting firmly against the properly adjusted Idle Stop Screw.

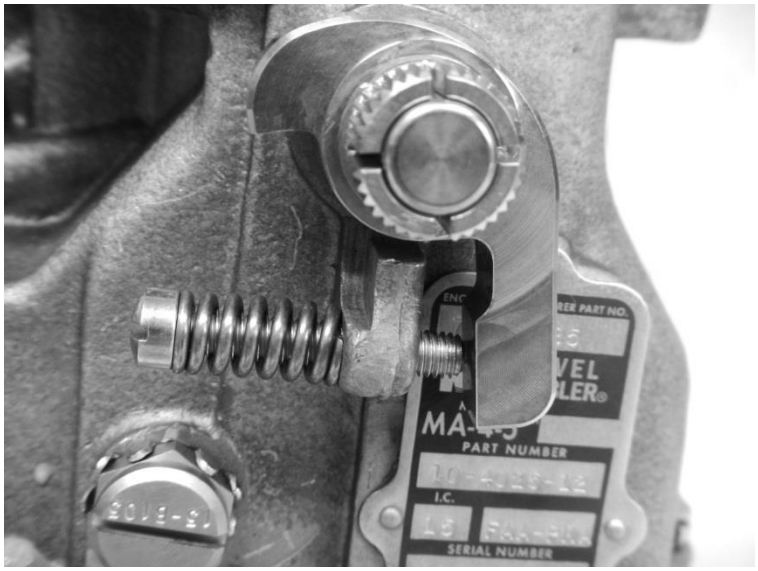

Figure 5-11a: Idle Position

Installation of the Throttle Arm to the Serrated Shaft

Note: This step is crucial for flight safety.
Caution: Ensure that Serrated Shaft and mating surfaces are free of oil and lubricants.

- Ensure that Throttle Arm is clocked as described in Paragraph 3-55(g) and as shown in Figure 3-11 while Carburetor Stop Arm remains firmly set against the Idle Stop Screw.

- If not previously performed, drill-through both Throttle Arm holes with a #11 drill bit (.1910"). Install AN3-10A Bolt, NAS1149F0332P Washer, and MS21042-3 Self-Locking Nut as shown in Figure 5-11b. Torque to 20-25 inch/lbs.

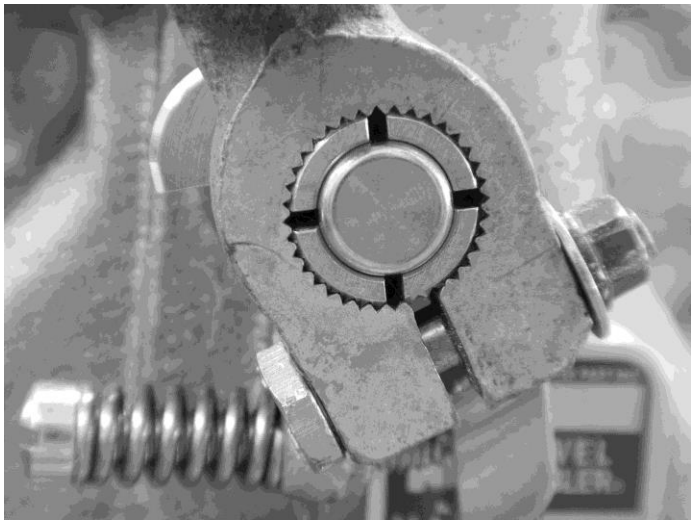

Figure 5-11b: Proper installation of Throttle Arm to the Serrated Shaft

Safety Wiring of Throttle Arm to Carburetor Stop Arm

Note: This step is crucial for flight safety.

- Originating at the Carburetor Stop Arm, route 0.032" Safety Wire around Carburetor Stop Arm and Throttle Arm as shown in Figures 5-11c thru 5-11e. All safety wiring is to be performed in accordance with AC 43.13-1B.

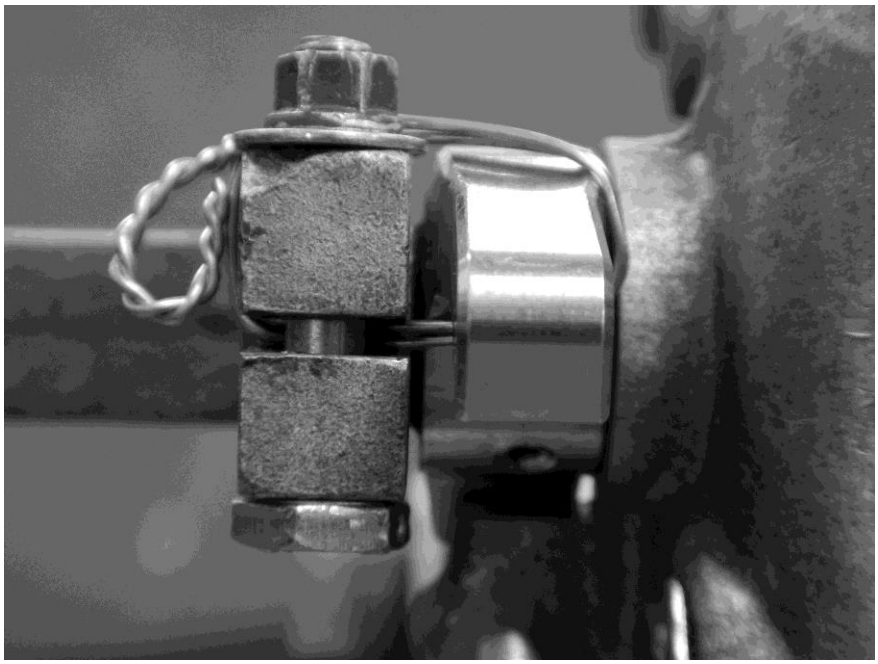

Figure 5-11c: Safety Wiring of Throttle Arm to Carburetor Stop Arm

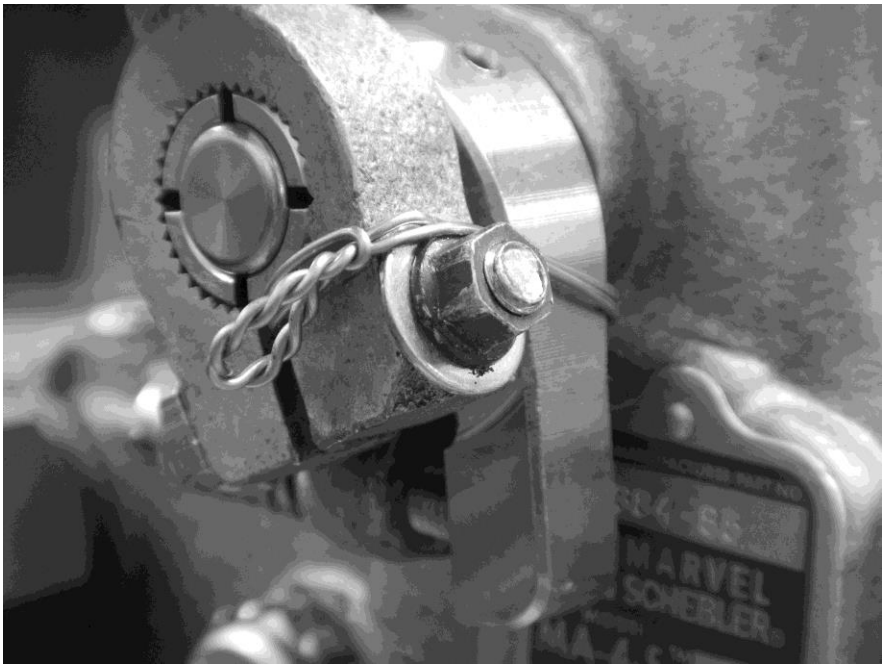

Figure 5-11d: Safety Wiring of Throttle Arm to Carburetor Stop Arm

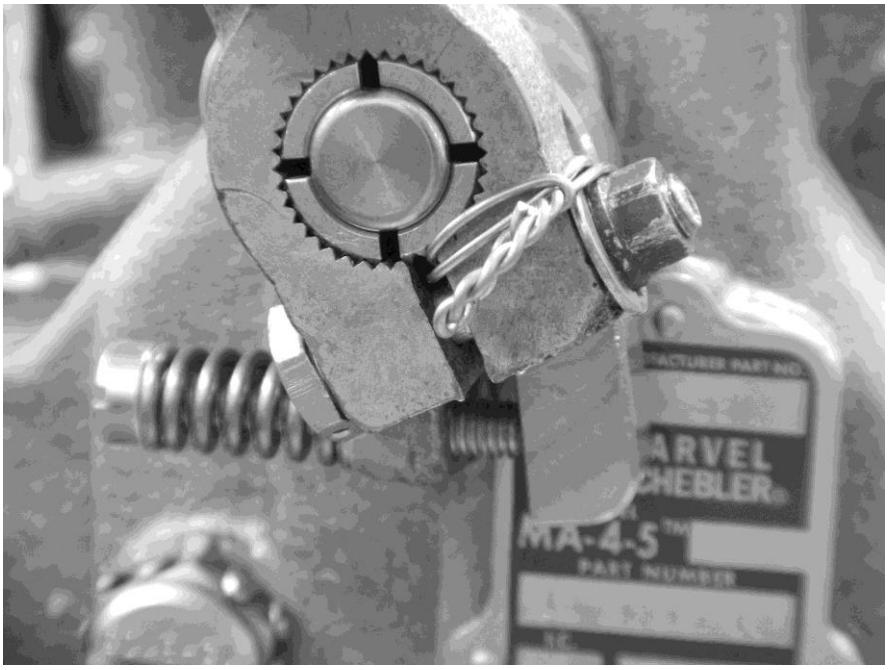

Figure 5-11e: Safety Wiring of Throttle Arm to Carburetor Stop Arm

Functionality Check

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

Apply Anti-Sabotage Lacquer to Throttle Linkage

- Apply Anti-Sabotage Lacquer (Torque-Seal or equivalent) between the Throttle Arm and the Serrated Shaft, as well as between the Self-Locking Nut and the Throttle Arm (areas shown in white in Figure 5-11f).

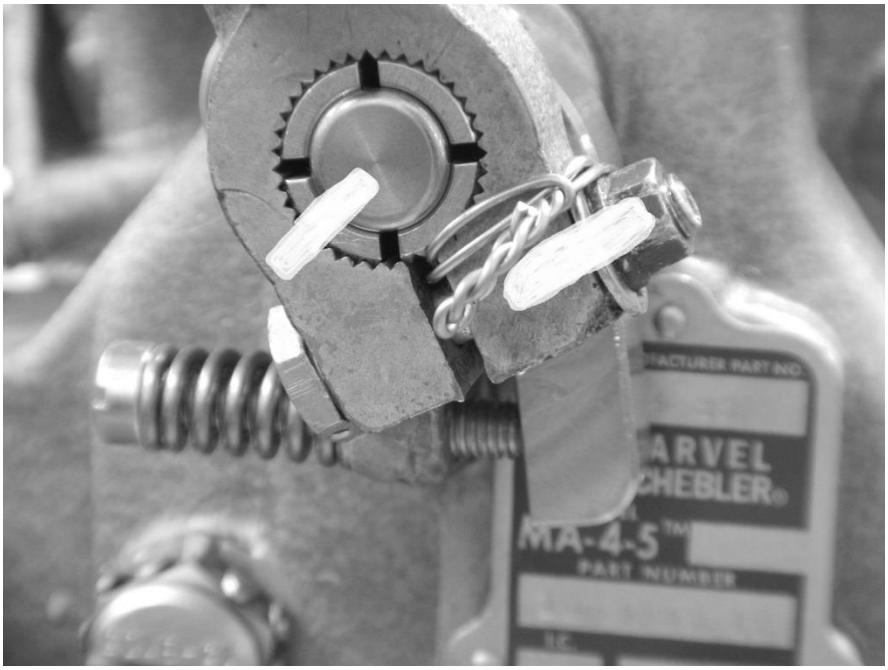

Figure 5-11f: Application of Anti-Sabotage Lacquer