

Beechcraft

CLASS I

SERVICE INSTRUCTIONS

24

No. 0481-241
ATA Code 71-40

Kit No. 23-9009 S

SUBJECT: POWER PLANT - ATTACH FITTINGS - MODIFICATION OF THROTTLE CONTROL INSTALLATION.

EFFECTIVITY: BEECHCRAFT Model A24R, serials MC-2 through MC-95, except MC-79, MC-80, MC-82, and MC-87; Sierra A24R, serials MC-96 through MC-103, except MC-100 and MC-101.

REASON: To preclude the possibility of interference of the nose gear steering yoke with the throttle control installation.

COMPLIANCE: As soon as practical after receipt of these Service Instructions, but within the next 25 hours of operation.

DESCRIPTION: A new fuel injector unit throttle control arm and a new throttle control support bracket are installed. The throttle control and fuel injector unit throttle control arm are adjusted for full throttle travel. Left turn is adjusted with the nose gear left travel limit stop.

APPROVAL: FAA Approved - DOA CE-2.

MANPOWER: The following information is for planning purposes only.
Estimated man-hours: 1.5 hours.
Suggested number of men: 1 man.

MATERIAL: The parts required to accomplish this modification are contained in Kit No. 23-9009 S. The kit is available through the BEECHCRAFT Sales and Service Outlets. Warranty credit will be allowed for Kit No. 23-9009 S, and for labor not to exceed 1.5 man-hours. Receipt of the existing fuel injector unit throttle control arm by Beech Aircraft Corporation prior to September 1, 1972 is required for qualification for warranty credit. All kit orders should be accompanied by the information that the kit is on warranty request.

SPECIAL TOOLS: None.

WEIGHT AND BALANCE: None.

AW-745, AW-773
272

1 of 4

Beech Aircraft Corporation issues service information for the benefit of owners and fixed base operators in the form of three classes of Service Instructions. CLASS I (Red Border) are changes, inspections, and modifications that could affect safety. The factory considers compliance mandatory. CLASS II (Green Border) covers changes, modifications, improvements or inspections the factory feels will benefit the owner and although highly recommended, they are not considered mandatory compliance, unless specified at the time of issuance. Class I and II are mailed to:

- BEECHCRAFT Aero or Aviation Centers and International Distributors and Dealers
- Owners of record on the FAA Registration list and the

BEECHCRAFT International Owner Notification Service List.
(c) Those having a publications subscription.

CLASS III (No Border) covers changes which are optional maintenance aids, product improvement kits and miscellaneous service information. Compliance is at the owner or operator's prerogative. Copies of Class III are distributed per a and c above. Information on Owner Notification Service or Subscriptions can be obtained through any BEECHCRAFT Aero or Aviation Center, International Distributor and Dealer, or the Factory. As Service Instructions are issued, temporary notation in the index should be made until the index is revised. Warranty will be allowed only when specifically defined in the Service Instructions and in accordance with Beech Warranty Policy.

98-34239D



Member of GAMA
General Aviation
Manufacturers Association

CLASS I

Service Instructions No. 0481-241

REFERENCES: BEECHCRAFT 19, 23, and 24 Series Shop Manual, P/N 169-590015D or subsequent.

PUBLICATIONS AFFECTED: It is recommended that a note be made on Figure 241E of all parts catalog copies to "See Service Instructions No. 0481-241."

ACCOMPLISHMENT

INSTRUCTIONS: This modification may be accomplished as described in the following procedure.

1. Disconnect the throttle control rod end from the fuel injector unit throttle control arm.

NOTE

On most airplanes the attaching parts securing the throttle control rod end to the fuel injector unit throttle control arm should be discarded. However, if the MS27039-1-13 screw, MS20364-1032 nut, and AN960-10L washer (Step 7) were installed at an earlier date, they may be used to install the new throttle control arm.

2. Remove the throttle control arm from the fuel injector unit. Retain the throttle control arm for return to Beech Aircraft Corporation, and retain the attaching parts at this end of the arm for installation of the new arm.
3. Using existing attaching parts, attach a new 169-910017-49 throttle control arm to the fuel injector unit. Do not tighten the attaching parts at this time.
4. Remove the 169-910017-23 throttle control bracket on the bottom of the crankcase by removing the two bolts in the crankcase and the bolt securing the throttle control support clamp to the -23 bracket. Discard the -23 bracket and the attaching parts for the throttle control support clamp, but retain the attaching parts for the -23 bracket.
5. Replace the 169-910017-23 bracket with a 169-910017-45 bracket. (Refer to Figure 1.) Place the edge of the -45 bracket between the ears of the throttle control support clamp and secure the clamp to the -45 bracket with an AN3-6 /M/ bolt (head of bolt down), an AN320-3 nut, an AN960-10 washer, and an MS24665-134 cotter pin. Secure the -45 bracket to the bottom of the crankcase with the existing attaching parts, and safety the two attaching bolts with MS20995C41 lock wire.
6. Check the location of the eyebolt to which the aft end of the nose gear centering spring is attached. The eyebolt should be 1-1/4 inches below the top of the engine mount gusset. Relocate the eyebolt if necessary.

NOTE

With the nose gear turned to extreme right travel, minor interference of the bolt in the throttle control support clamp with the ends of the centering spring cables is acceptable.

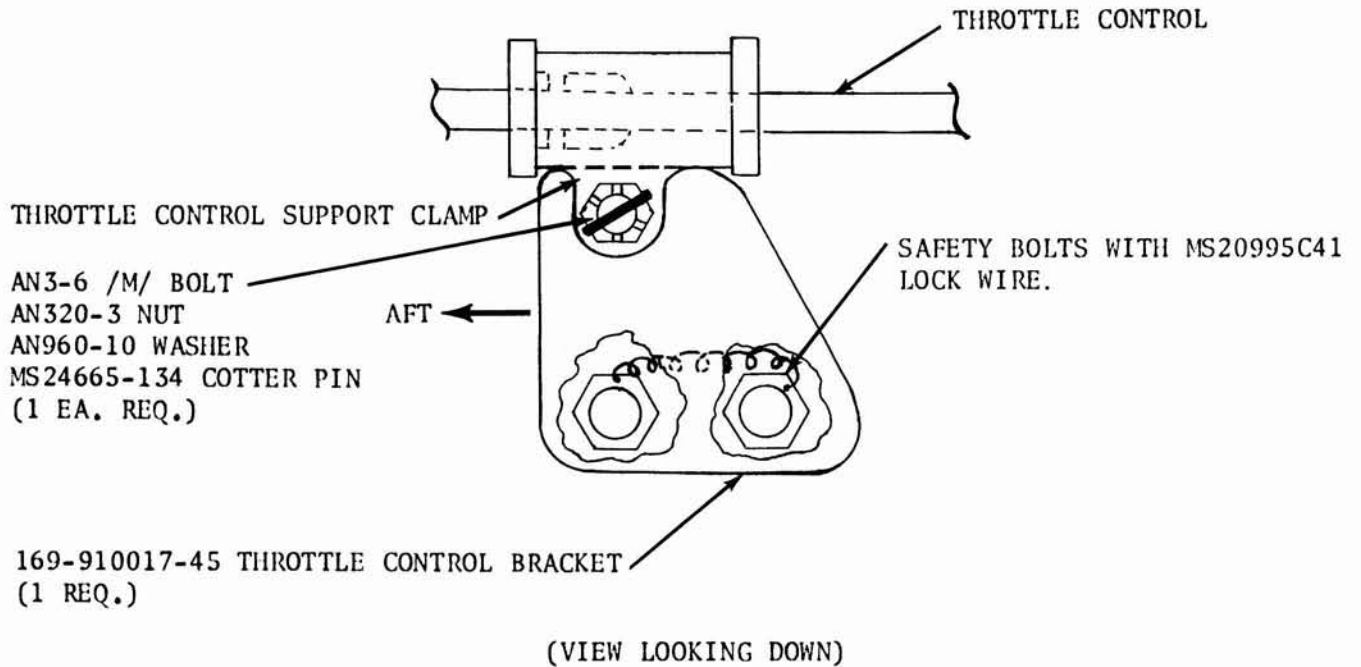


Figure 1. Installation of 169-910017-45 Throttle Control Bracket

- Attach the throttle control rod end to the 169-910017-49 throttle control arm with an MS27039-1-13 screw, an MS20364-1032 nut, and an AN960-10L washer. (See Figure 2.)

CAUTION

Install the throttle control rod end and the head of the MS27039-1-13 screw on the inboard side of the 169-910017-49 throttle control arm as shown in Figure 2 to prevent possible interference with the landing gear warning horn switch bracket.

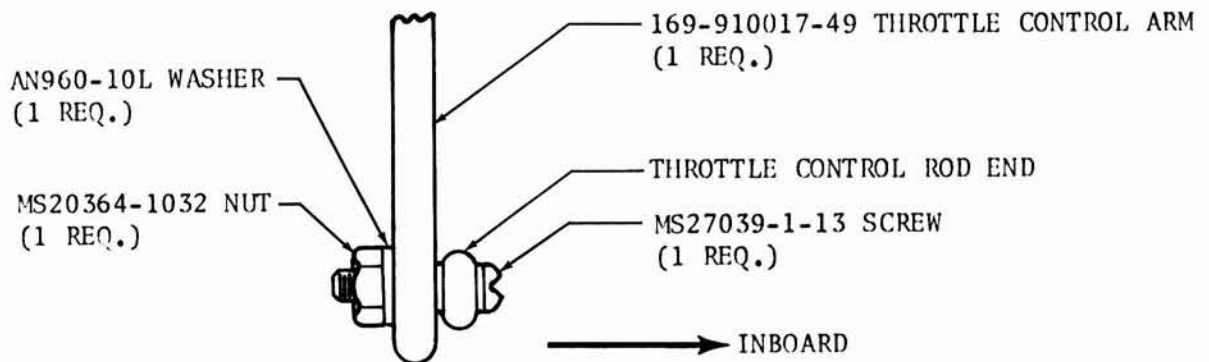


Figure 2. Installation of 169-910017-49 Throttle Control Arm

Service Instructions No. 0481-241

8. Adjust the throttle control and the fuel injector unit throttle control arm to obtain full throttle travel from stop to stop (refer to the throttle control rigging procedure in the shop manual), and secure the throttle control arm in place at the fuel injector unit.
9. Adjust the nose gear left travel limit stop to obtain a maximum of $27^{\circ} \pm 2^{\circ}$ of left turn. With full left steering applied, check clearances through full throttle travel. Minimum clearance between the 169-910017-49 throttle control arm and the centering spring cable attaching bolt should be 1/2 inch.

RECORD COMPLIANCE:

Upon completion of this modification, make an appropriate maintenance record entry, specifying the kit identification number and kit serial number, and return a completed compliance card to Beech Aircraft Corporation. It is recommended that the parts list contained in the kit be filed for future reference until the listing of parts has been incorporated into the parts catalog.

COMPLIANCE CARD RETURN REQUESTED