



HUGHES SERVICE INFORMATION NOTICE

NOTICE NO. N-50
DATE May 8, 1968
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SUBJECT: RETROFIT - THROTTLE, GOVERNOR CONTROL SYSTEM

MODELS AFFECTED: 269A (TH-55A) Helicopter Serial Nos. 0337 through 0667

TIME OF COMPLIANCE: At owners and operators discretion.

PREFACE: To remove components of 269A4899 throttle governor control system and retrofit aircraft to the 269A3420 standard throttle control system configuration.

Reference

269A/A-1/TH-55A Handbook of Maintenance Instruction, Reissued 15 Dec. 1967

Parts List

<u>Nomenclature</u>	<u>Part No.</u>	<u>Qty.</u>	<u>Mfgr.</u>
Retrofit Kit - Governor, Throttle Control System	M10023	1	HTC-AD

PROCEDURE

NOTE

Refer to Figure 1 for removal of existing RPM governor components; refer to Figure 2 for installation of retrofit components.

- a. Set battery switch, governor switch, and all other electrical switches in OFF position.
- b. Remove lower forward fairing from aircraft.
- c. Remove lower end of existing throttle control cable assembly (1) from bellcrank (2); remove tie rod (3) from linkage assembly. (See Figure 1)
- d. Remove two nuts securing throttle control cable bracket (16) to engine accessory housing oil filter pad; reinstall nuts.
- e. Cut lockwire; remove two jam nuts securing throttle cable to bracket, remove bracket from cable.
- f. Remove extension (4) from bellcrank and upper cable assembly.
- g. Remove throttle actuator (5) and bracket (6).
- h. Remove safety wire from locknuts on cable at bracket (7) under seat panel; back off upper locknut and washer.
- i. Withdraw cable downward through bracket and cover plate in firewall panel; remove cable from aircraft.

NOTE

Lower locknut and washer must be removed while withdrawing cable to permit passage of cable through coverplate.

- j. Remove coverplate and grommet from firewall panel; replace with SS or BS48143 plug button and seal with Stabond HT4. (See Figure 2)
- k. Remove clamps securing intake duct to adapter (8); remove mixture control cable from adapter.
- l. Remove existing adapter and bellcrank from aircraft; replace with 8423 adapter, using existing hardware.

NOTE

Inspect adapter gasket for wear or damage; replace if necessary.

- m. Reinstall mixture control cable and intake duct to new adapter, using existing hardware.
- n. Disconnect electrical connector from throttle governor control unit (9) mounted on underside of floor panel; remove control unit from aircraft.
- o. Remove electrical cable assembly, including connector, electrical wiring, splicer and terminal lugs.
- p. Remove collective actuator (10) and attaching hardware from collective control stick.
- q. Remove rudder actuator (11) and attaching hardware from rudder pedal.
- r. Remove drive motor (12), bracket (13) and attaching hardware at end of torque tube.
- s. Remove universal joint (14) and adapter (15) from torque tube; replace adapter with HS13D1000-875R500 bushing, bolt and nut.
- t. Install doubler (0.032 thick thermoplastic sheet cut to size) to cover one-inch hole in 4031-5 boot; use MP500 cement.
- u. Remove RPM pot, knob bolt light, fuse holder and switch from control panel between pilot and copilot seats. (See Detail A, Figure 2)
- v. Install plug buttons in control panel.
- w. Enlarge cover plate on floor panel to 0.62 inch radius, or replace existing plate with 4226-5 plate and grommet; seal with Stabond HT4, (See Detail B, Figure 2).
- x. Install new extension to bellcrank.
- y. Insert upper end of new cable assembly through coverplate on floor panel, and grommet in forward seat panel; install lower locknut and washer and insert cable through bracket under seat panel.
- z. Install upper locknut and washer to cable assembly; connect cable to extension; secure cable to bracket with locknuts and safetywire locknuts.

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- aa. Install lower cable assembly to adapter with locknuts and washers; safetywire locknuts.
- ab. Install lower end of cable assembly to linkage assembly.

NOTE

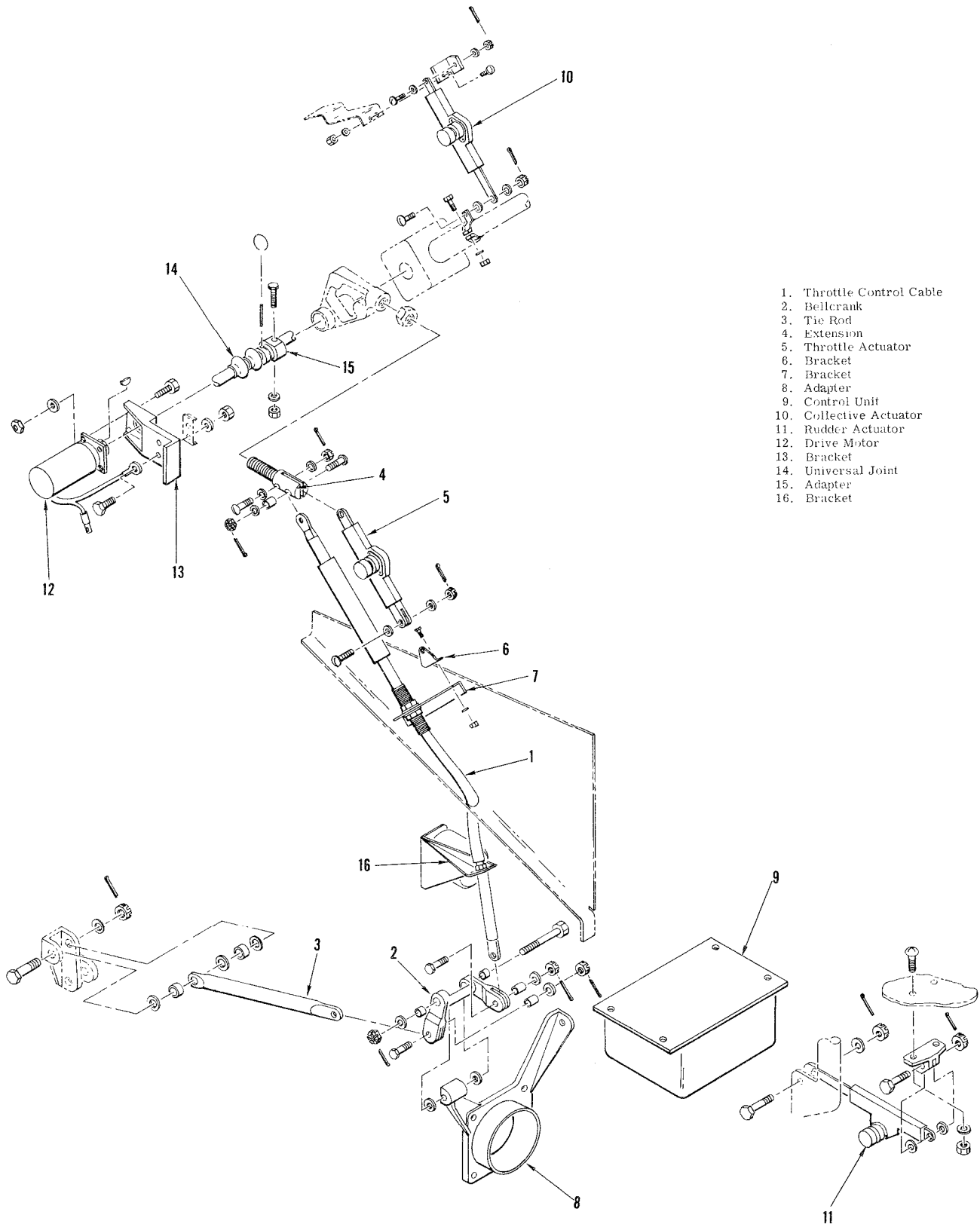
Route throttle control cable to provide smooth radius to prevent binding of throttle cable.

- ac. Drill hole in beam; position clamp on cable and install clamp to beam. (See Detail C, Figure 2)
- ad. Check throttle control installation for discrepancies.
- ae. Reinstall lower forward fairing.
- af. Perform throttle control rigging instructions (See reference, paragraph 3-82).

Weight & Balance Data

Wt. reduced by 7.0

Arm 76.5



1. Throttle Control Cable
2. Bellcrank
3. Tie Rod
4. Extension
5. Throttle Actuator
6. Bracket
7. Bracket
8. Adapter
9. Control Unit
10. Collective Actuator
11. Rudder Actuator
12. Drive Motor
13. Bracket
14. Universal Joint
15. Adapter
16. Bracket

Figure 1. Exploded View - Existing RPM Governor Installation

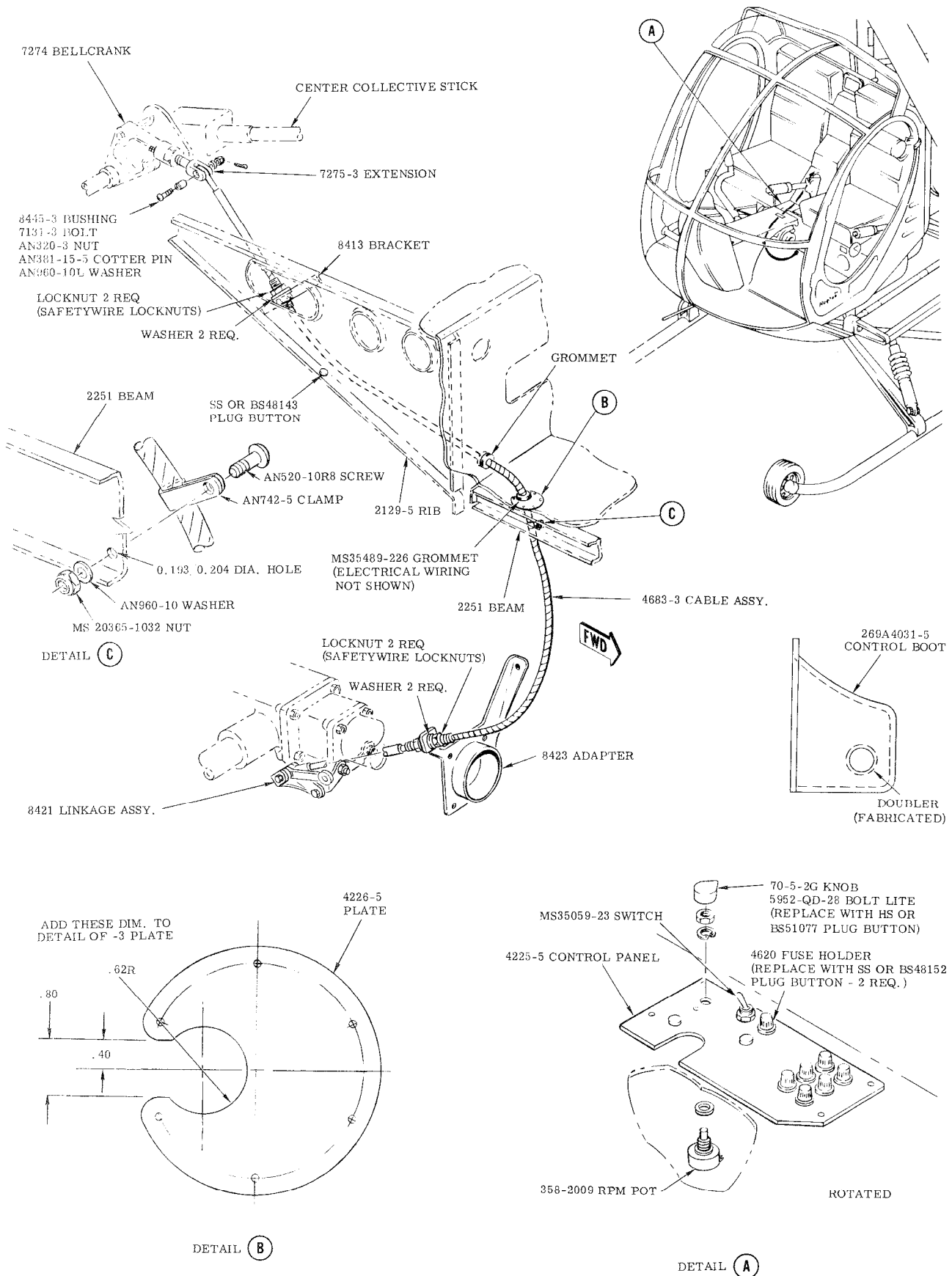


FIGURE 2. RETROFIT-THROTTLE CONTROL SYSTEM