

NU45A

Fig. 93—Center Crossmember and Rear Engine Mount (Dart)

(11) Install crossmember (Fig. 93 or 94) and tighten attaching bolts to 30 foot-pounds. Lower transmission so extension housing is aligned and rests on rear mount. Install bolts and tighten to 40 foot-pounds.

(12) Install gearshift torque shaft and connect gearshift rod to the transmission lever.

**Console Shift:** Align gearshift torque shaft lower bracket with the extension housing. Install the two retaining bolts and tighten securely. Connect gearshift rod to the transmission lever.

(13) Carefully guide sliding yoke into extension housing and on the output shaft splines. Align marks made at removal. Then connect propeller shaft to rear axle pinion shaft yoke.

(14) Connect oil cooler lines to the transmission and install oil filler tube. Connect the speedometer cable.

(15) Connect throttle rod to the transmission throttle lever.

(16) Connect wire to the back-up light and neutral starting switch.

(17) Install cover plate in front of the converter assembly.

(18) Install the transmission case to cylinder block brace. **The converter cover plate must be between case and brace. The oil line bracket is attached in front of the brace. Tighten bolts holding brace to the case before attaching brace to the cylinder block.**

(19) Refill transmission with Automatic Transmission Fluid AQ-ATF Suffix "A" or (Dexron).

### GEARSHIFT LINKAGE ADJUSTMENT (Column Shift) (Fig. 95 or 96)

(1) Assemble all linkage parts leaving adjustable rod end free.

(2) Place gearshift selector lever in PARK position and lock steering column with ignition key.

(3) Move shift control lever on transmission all the way to rear (in PARK detent) (Fig. 97).

(4) Set adjustable rod to proper length and install with no load in either direction on linkage.

(5) Check Adjustment as follows:

(a) Shift effort must be free and detents feel crisp. All gate stops must be positive.

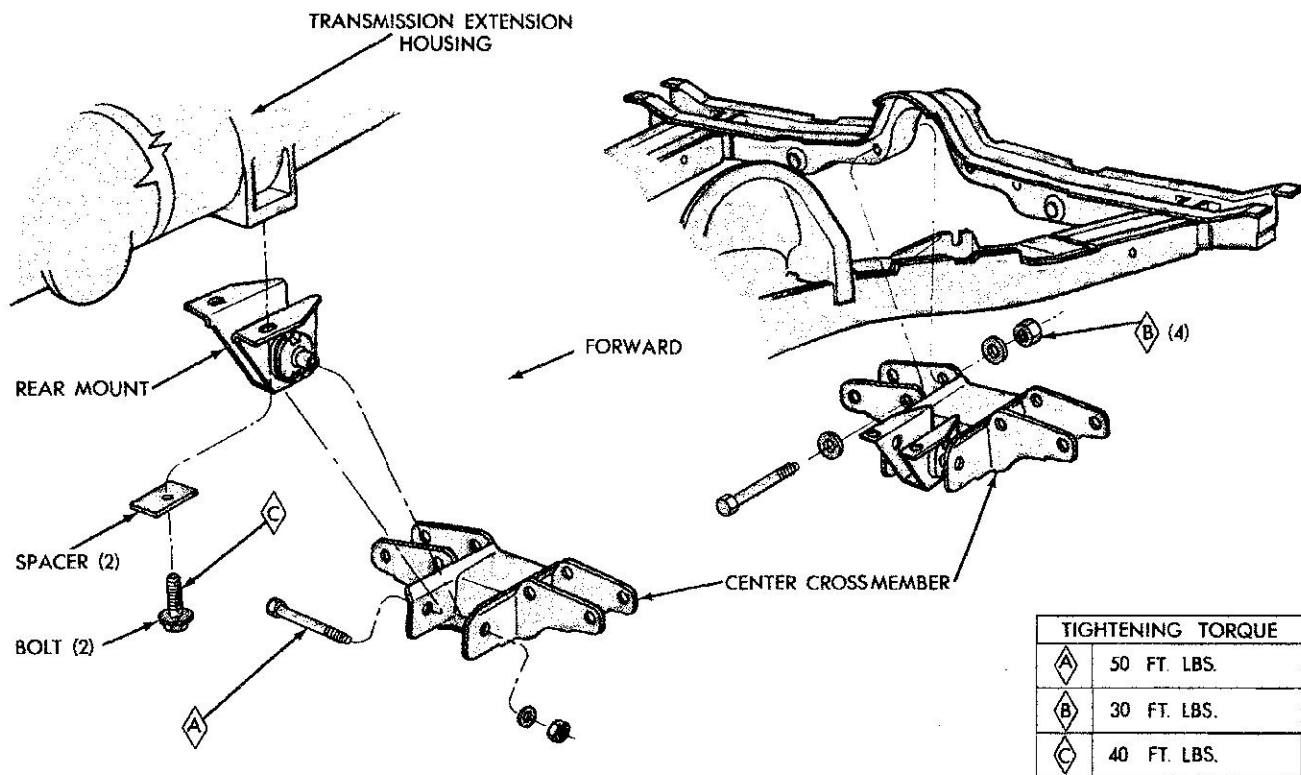
(b) Detent position must be close enough to gate stops in neutral and drive to assure that hand lever will not remain out of detent position when placed against gate and then released.

(c) Key start must occur with shift lever held down against the park gate.

### LINKAGE ADJUSTMENT (Console Shift) (Fig. 98 or 99)

(1) Assemble all linkage parts leaving adjustable rod ends free.

(2) At steering column upper end, line up locating slots in bottom of shift housing and bearing housing. Install suitable tool to hold this alignment and lock column with ignition key.



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**Fig. 94—Center Crossmember and Rear Engine Mount (Challenger)**

(3) Place console lever in PARK and move shift control lever on transmission all the way to the rear (in PARK detent).

(4) Set adjustable rods to proper length with no load applied in either direction on linkage.

(5) Check adjustment as follows:

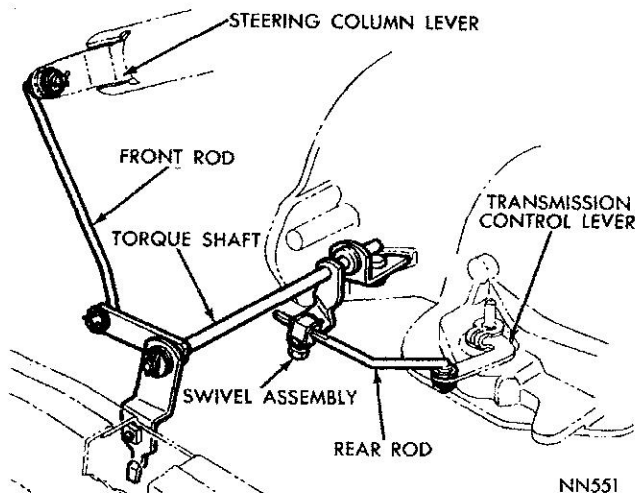
(a) Shift effort should be free enough so detents feel crisp.

(b) Detent position must be close enough to gate stops in neutral and drive to assure that hand lever will not remain out of detent position when placed against gate and then released.

(c) Key start and locking must occur with shift lever held back against the park gate.

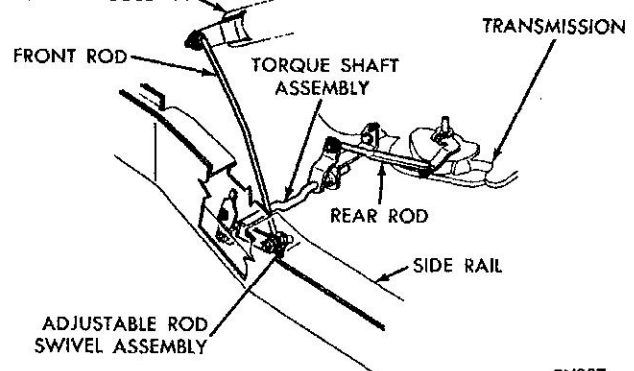
(6) If console removal is required, disconnect battery ground cable. Remove set screw and shift knob or handle. Proceed as outlined in Body Section 23.

(7) After console is in place, install shift knob as follows: with gearshift lever in NEUTRAL, thread STEERING COLUMN



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**Fig. 95—Column Gearshift Linkage (Dart)**



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**Fig. 96—Column Gearshift Linkage (Challenger)**



**Fig. 97—External Controls and Adjustments**

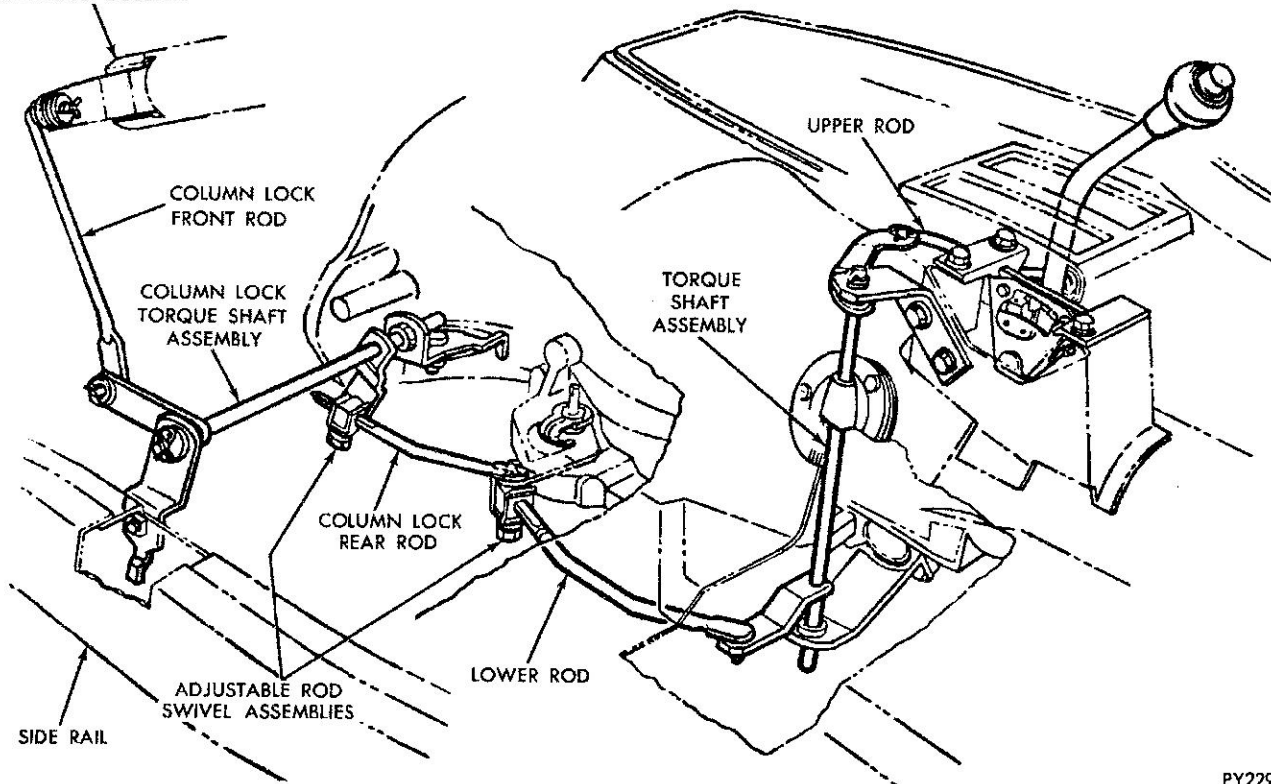
button, spring and knob assembly on the cable end until dimension from top of button to top of knob is 13/32" (Fig. 100). Secure knob with set screw.

(8) Connect battery ground cable.

### THROTTLE ROD ADJUSTMENT

With engine at operating temperature and carburetor off fast idle cam, adjust idle speed of engine using a tachometer. Refer to "Fuel System" Group 14, for idle speed Specifications and carburetor linkage adjustment.

STEERING COLUMN



**Fig. 98—Console Gearshift Linkage (Dart)**

### 6 Cylinder Models (Fig. 101)

(1) Follow detailed instructions in Lubrication Section for linkage lubrication of all models.

(2) Disconnect choke (4) at carburetor or block choke valve in full open position. Open throttle slightly to release fast idle cam, then return carburetor to curb idle.

(3) Hold transmission lever (9) firmly forward against its stop while performing the next two steps. It is important that the lever remain firmly against the stop during these steps to insure a correct adjustment.

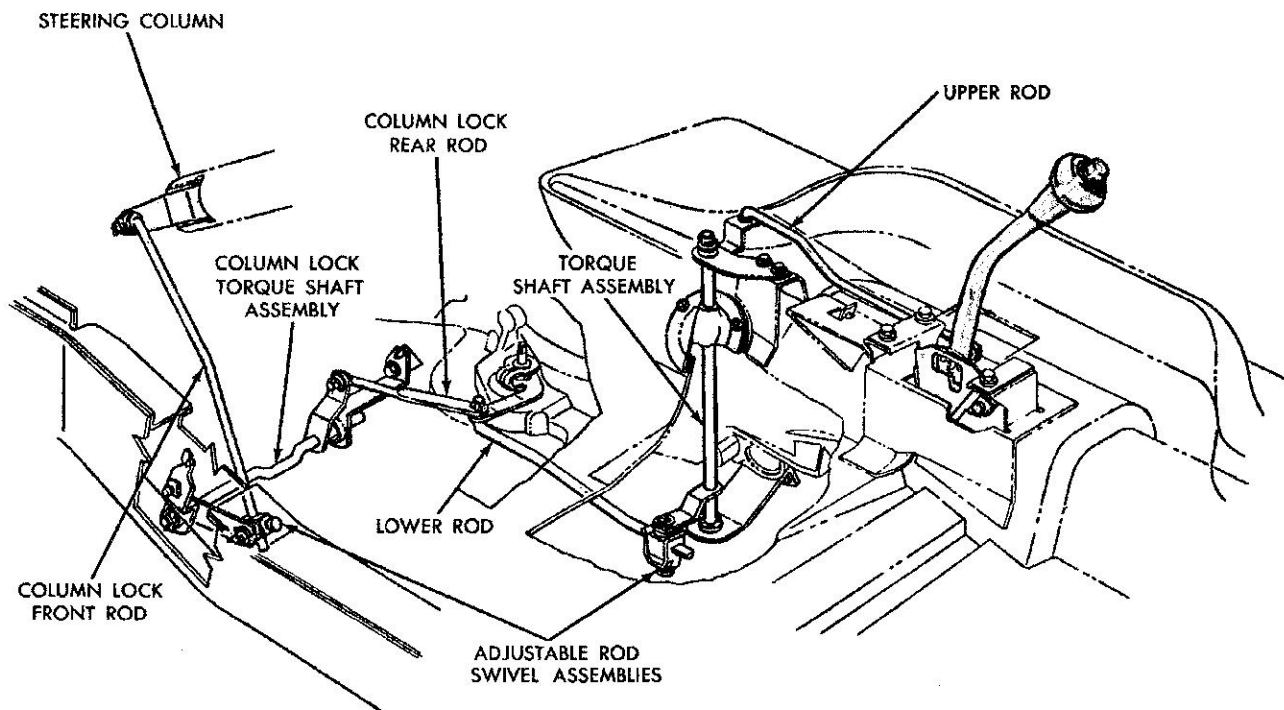
(4) To make transmission rod length adjustment, loosen the slotted link lock bolt (12). Pull forward on the slotted adjuster link (7) so that it contacts carburetor lever pin.

(5) Tighten transmission rod adjustment lock bolt (12) to 95 inch-pounds. To check transmission linkage freedom of operation move slotted adjuster link to the full rearward position, then allow it to return slowly, making sure it returns to the full forward position.

(6) When carburetor throttle is opened, the transmission lever (9) should begin its travel at the same time.

(7) Loosen cable clamp nut (5), adjust position of cable housing ferrule (6) in the clamp so that all slack is removed from the cable with carburetor at curb

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Fig. 99—Console Gearshift Linkage (Challenger)

idle. To remove slack from cable, move ferrule (6) in the clamp in direction **away** from carburetor lever.

(8) Back off ferrule (6) 1/4 inch. This provides 1/4 inch free play of cable, with carburetor at curb idle condition. Tighten cable clamp nut to 45 inch-pounds.

(9) Connect choke rod (4) or remove blocking fixture.

### 8 Cylinder Models with Three Section Throttle Rod (Fig. 102)

(1) Follow detailed instructions in Lubrication Section for linkage lubrication of all models.

(2) Disconnect choke (8) at carburetor or block choke valve in full open position. Open throttle slightly to release fast idle cam, then return carburetor to curb idle.

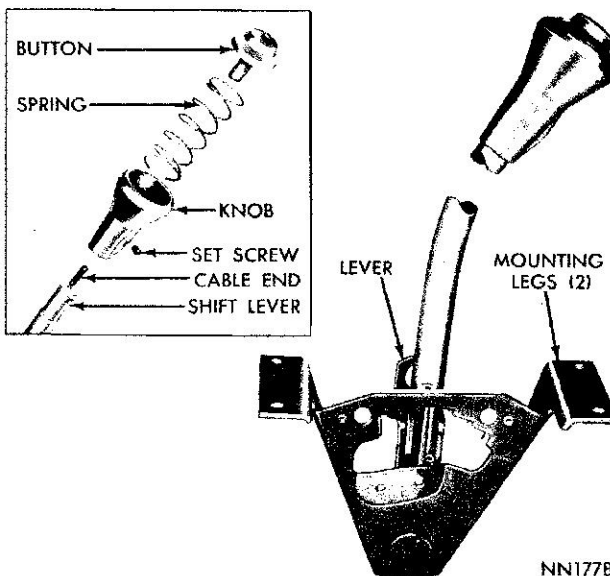
(3) **Hold transmission lever (11) firmly forward against its stop, while performing adjustments in the next four steps. It is important that the lever remains against the stop during these steps to insure a correct adjustment. (On engines with solenoid idle stop, the solenoid plunger must be in fully extended position).**

(4) With a 3/16" diameter rod (9) placed in the holes provided in the upper bellcrank (6) and lever, adjust length of intermediate transmission rod (10) by means of threaded adjustment (2) at upper end. The ball socket (2) must line up with the ball end

with a slight downward effort on rod.

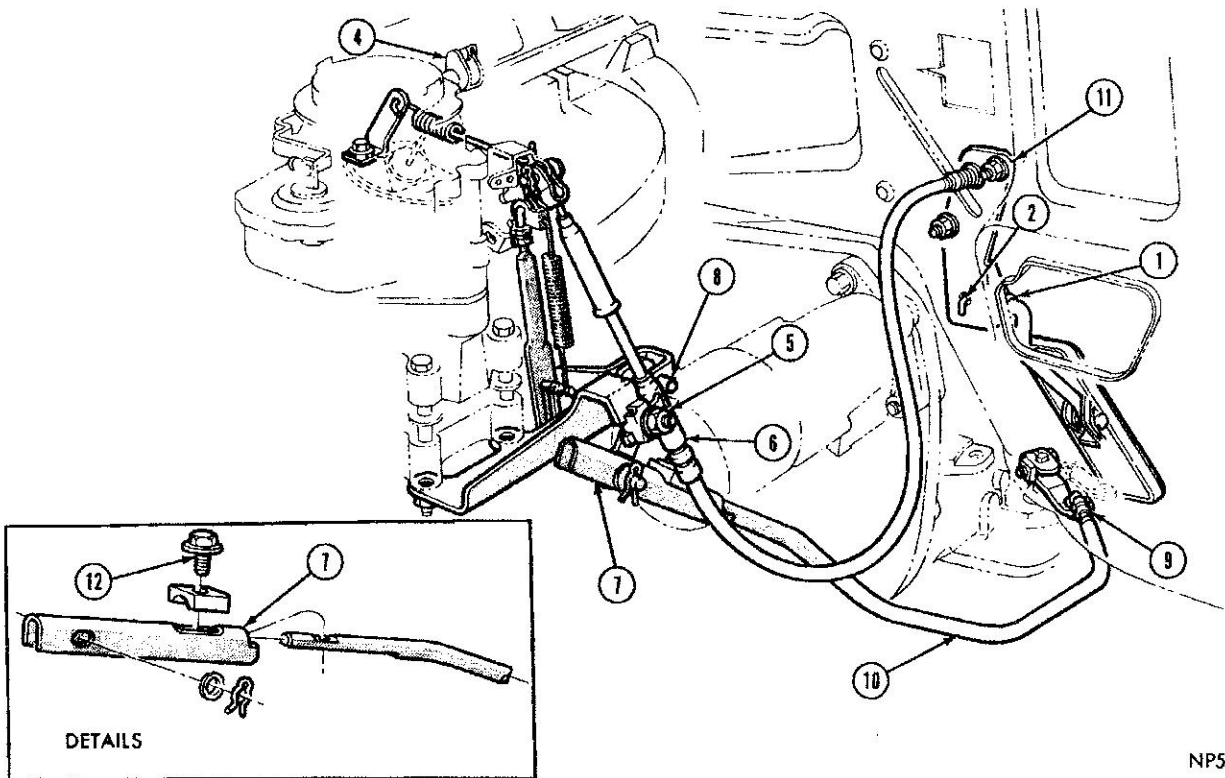
(5) Assemble ball socket (2) to ball end and remove 3/16" rod (9) from upper bellcrank and lever.

(6) Disconnect clip, washer and return spring (13), then adjust length of carburetor rod (12) by pushing



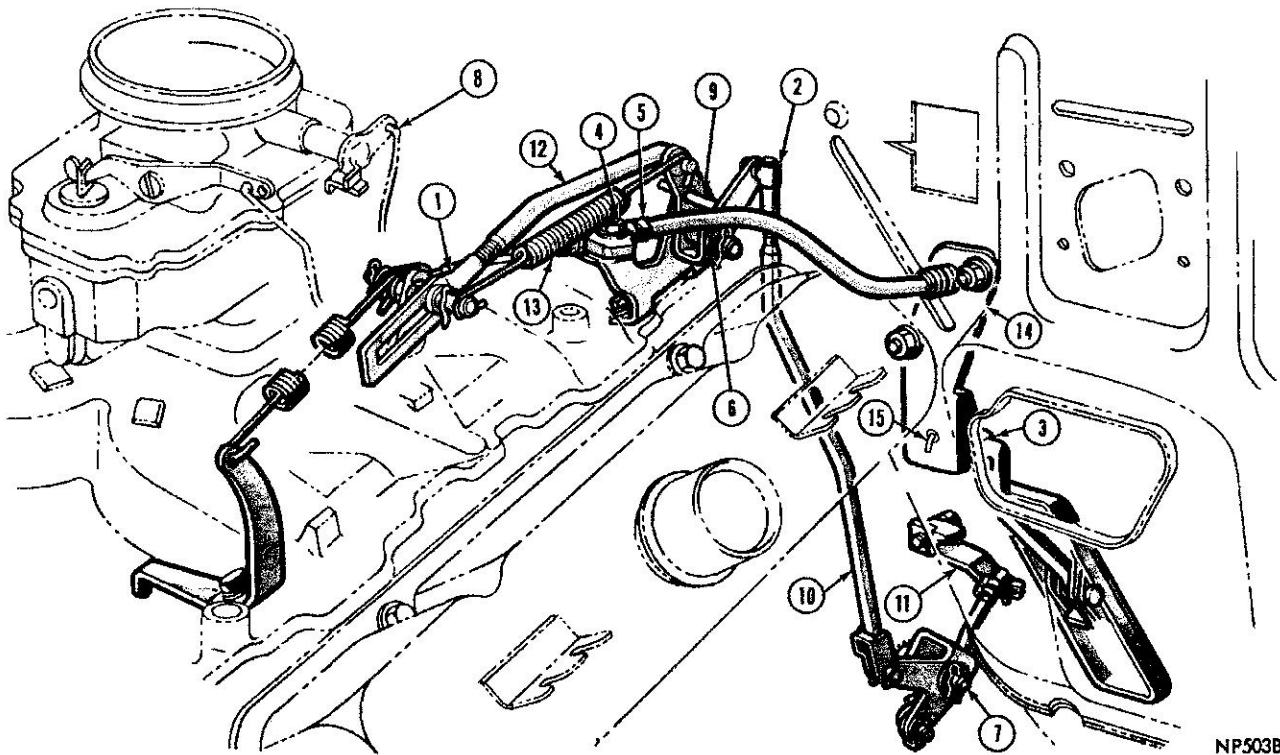
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Fig. 100—Console Gearshift Unit



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**Fig. 101—Throttle Rod Adjustment (6 Cylinder Models)**



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**Fig. 102—Throttle Rod Adjustment (8 Cylinder Models with 3 Section Throttle Rod)**

rearward on rod with a slight effort and turning the threaded adjustment (1). The rear end of slot should contact carburetor lever pin without exerting any forward force on pin when slotted adjuster link (1) is in its normal operating position against lever pin nut.

(7) Assemble slotted adjustment (1) to carburetor lever pin and install washer and retainer clip. Assemble transmission linkage return spring (13) in place.

(8) To check transmission linkage freedom of operation, move slotted adjuster link (1) to full rearward position, then allow it to return slowly, making sure it returns to full forward position.

(9) Loosen cable clamp nut (4), adjust position of cable housing ferrule (5) in the clamp so that all slack is removed from cable with carburetor at curb idle. To remove slack from cable, move ferrule (5) in the clamp in direction **away** from carburetor lever.

(10) Back off ferrule (5) 1/4". This provides 1/4" free play of cable, with carburetor at curb idle condition. Tighten cable clamp nut (4) to 45 inch-pounds.

(11) Connect choke (8) rod or remove blocking fixture.

### 8 Cylinder Models with Single Section Throttle Rod (Fig. 103)

(1) Follow detailed instructions in Lubrication Sec-

tion for linkage lubrication of all models.

(2) Disconnect choke at carburetor or block choke valve in full open position. Open throttle slightly to release fast idle cam, then return carburetor to curb idle.

(3) Loosen the transmission throttle rod adjustment lock screw.

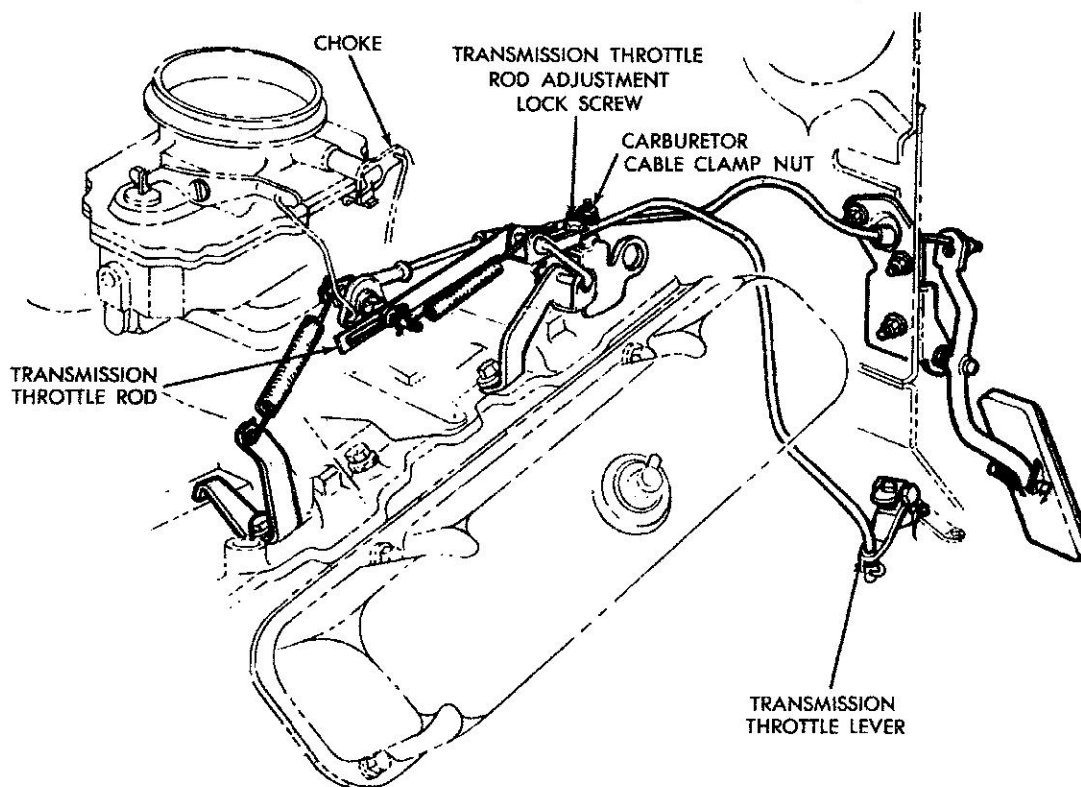
(4) Hold the transmission lever forward against its stop while adjusting the transmission linkage. (On engines with solenoid idle stops, the solenoid plunger must also be in its fully extended position).

(5) Adjust the transmission rod by pulling forward on the slotted link with a slight effort so that the rear edge of the slot is against the carburetor lever pin. Tighten transmission rod adjusting locking screw.

Note: The slotted link and transmission lever must be held forward while the locking screw is being tightened.

(6) To check transmission linkage freedom of operation, move slotted link to the full rearward position, then allow it to return slowly, making sure it returns to the full forward position.

(7) Loosen carburetor cable clamp nut. Adjust position of cable housing ferrule in the clamp so that all slack is removed from cable with carburetor at curb idle. To remove slack from cable, move ferrule in the clamp in direction away from carburetor lever.



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**Fig. 103—Throttle Rod Adjustment (8 Cylinder Models with Single Section Throttle Rod)**



(8) Back off ferrule 1/4". This provides 1/4" free play. Tighten cable clamp nut to 45 inch-pounds.

(9) Connect choke rod or remove blocking fixture.

### Models With 426 Cu. In. Eng. (Fig. 104)

(1) Follow detailed instructions in Lubrication Section for linkage lubrication of all models.

(2) Block choke valve in full open position. Open throttle slightly to release fast idle cam, then return carburetor to curb idle.

(3) Hold transmission lever (10) firmly forward against its stop, while performing adjustments in the next four steps. It is important that the lever remains against the stop during these steps to insure a correct adjustment. (On engines with solenoid idle stop, the solenoid plunger must be in fully extended position).

(4) With a 3/16" diameter rod (8) placed in the holes provided in upper bellcrank and lever (15), adjust length of intermediate transmission rod (9) by means of threaded adjustment at upper end. The ball socket must line up with the ball end with a slight downward effort on rod.

(5) Assemble ball socket to ball end and remove 3/16" rod (8) from upper bellcrank and lever (15).

(6) Disconnect return spring (11), adjust length of rod (20) by pushing rearward on rod with a slight effort and turning threaded adjuster link (2). The rear end of slot should contact carburetor lever stud without exerting any forward force on the stud when

slotted adjuster link is in its normal operating position.

(7) Assemble slotted adjuster link (2) to carburetor lever stud and install washer and retainer pin. Assemble transmission linkage return spring (11) in place.

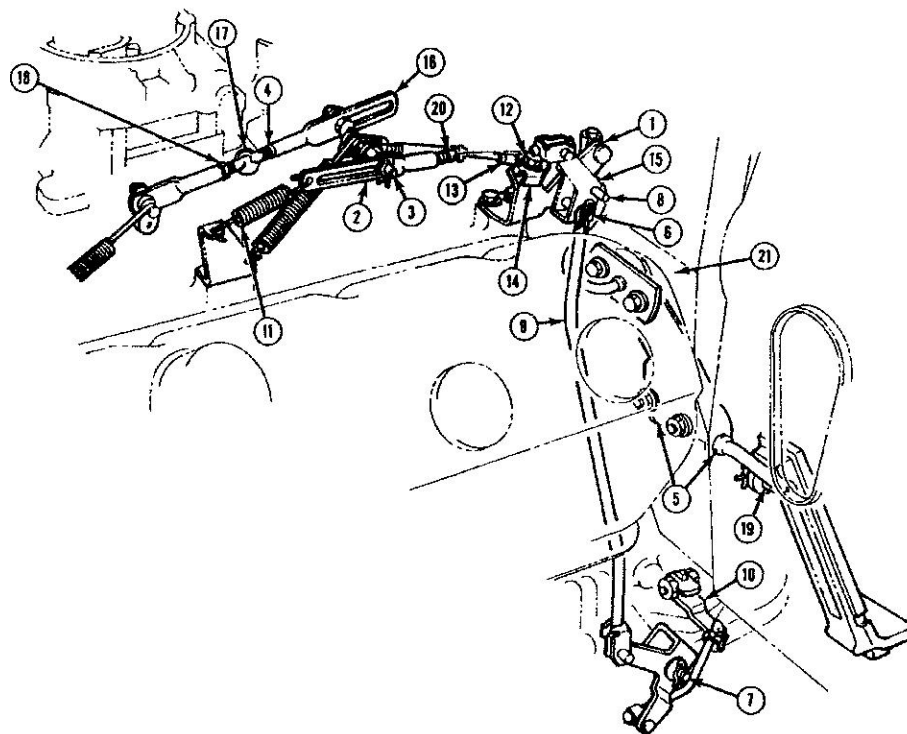
(8) To check transmission linkage freedom of operation, move slotted adjuster link (2) to full rearward position, then allow it to return slowly, making sure it returns to the full forward position against the stud.

(9) Loosen cable clamp nut (12), adjust position of cable housing ferrule (13) in the clamp (14) so that all slack is removed from cable with rear carburetor at curb idle. (To remove slack from cable, move ferrule (13) in clamp (14) in direction away from carburetor lever.)

(10) Back off ferrule (13) 1/4". This provides 1/4" free play of cable, with carburetor at curb idle condition. Tighten clamp nut (12) to 45 inch-pounds.

(11) Route cable so it does not interfere with carburetor rod (20) or upper bellcrank (15) throughout full throttle linkage travel.

(12) Attach carburetor rod assembly (4) between the carburetors with slotted rod end (16) attached to outboard side of inboard lever on rear carburetor. With rear carburetor at wide open throttle, adjust length of connector rod (4) so that front carburetor is also at wide open throttle. To lengthen this rod (4), turn adjusting stud (17) clockwise as viewed from



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Fig. 104—Throttle Rod Adjustment (With 426 Cu. In. Eng.)