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I. DESCRIPTION

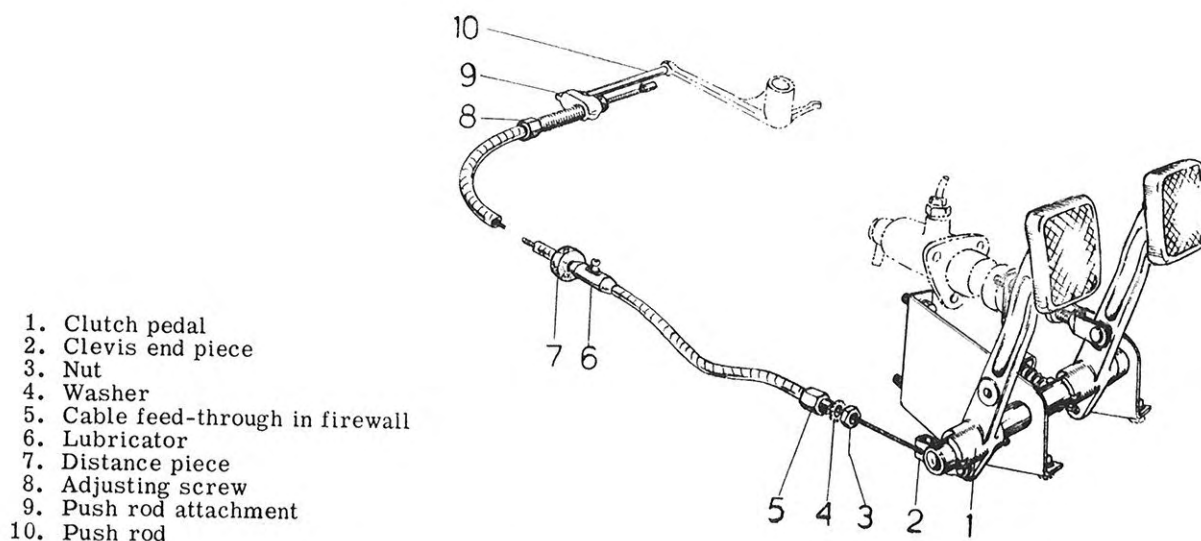


Fig. 1. Pedal unit and clutch cable

I.1. Pedals

The clutch and brake pedals are carried under the pedal board on a common shaft 11, Fig. 7, which in turn is carried in two sheet metal brackets 4 and 10. The pedal board has slots for the pedals arms. There is a return spring 3 for the brake pedal and a locking device for the pedal shaft, see Fig. 7. The pedal unit is held in place by six screws, two in floor plate 14 and four in the firewall 13.

The clutch pedal motion is transmitted to the clutch lever under the transmission by means of the clutch cable, which consists of a steel wire in a steel spiral sheath. On the clutch cable there is rubber piece which is protecting the clutch cable from chafing against the floor plate. A spring on the clutch lever provides the necessary force for returning the pedal when it is released.

The spiral sheath of the clutch cable is fixed at the firewall and its other end is connected to the clutch lever by a push rod. The push rod attachment to the spiral sheath serves also as adjusting device for the clutch pedal play.

The clutch wire stretches from the clutch pedal to an attachment on the engine, see Fig. 1. Turning the adjusting screw to the right or left respectively

increases and decreases the clutch pedal play.

The motion of the brake pedal is transmitted to the master cylinder by a push rod which is riveted to the pedal. The push rod consists of two parts with a screwed connection and lock nut to permit variation of its length.

The play of the brake pedal is adjusted by loosening the lock nut and rotating the inner part of the push rod on the clevis thread, see Chapter 9.

I.2. Controls

The handbrake control is described in Chapter 9, "Brake system".

I.2.1. Starter control

The starter control is located on the right under the instrument panel and is of pull-out type. It consists of a T-shaped handle to which the core of a Bowden cable is attached. The sheath of the cable is connected to the starter lever and the core is fixed to an attachment in the body in front of the starter.

10 PEDALS AND CONTROLS

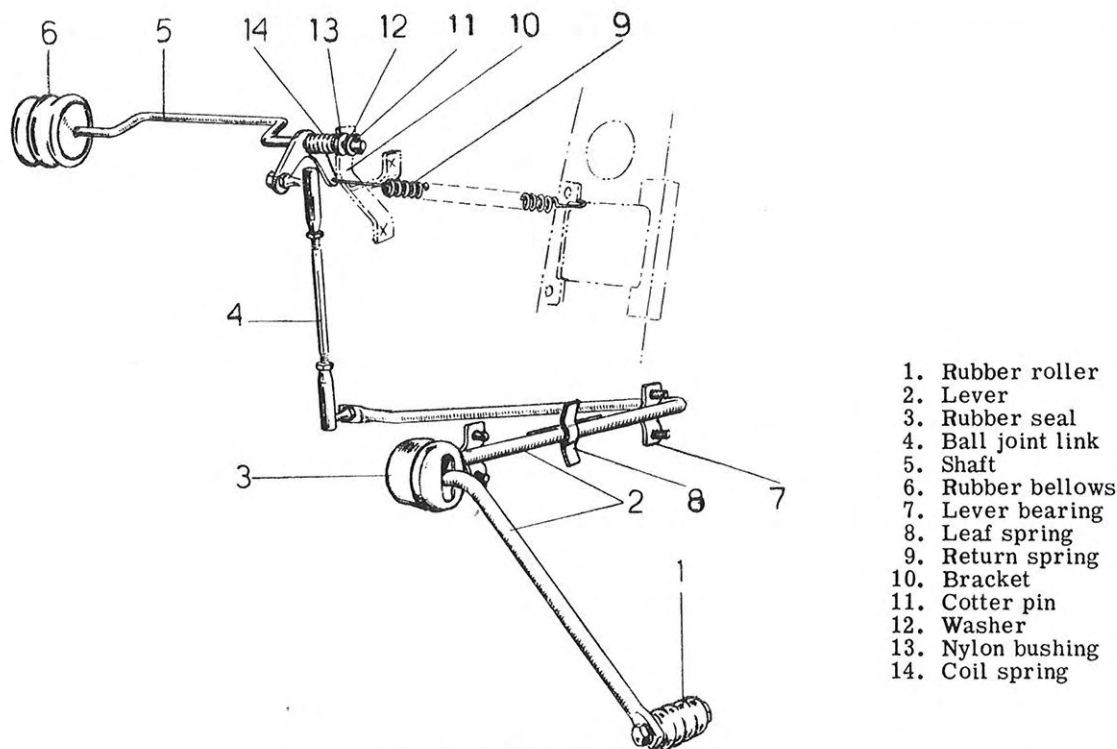


Fig. 2. Accelerator

1.2.2. Cold-start control

The cold-start control is of pull-out type and consists of a piano wire which runs in a Bowden sheath between a knob on the right of the instrument panel and the cold-start device on the carburetor.

In addition to neutral, the control has two positions which produce different mixture ratios in the carburetor, see Chapter 4, "Fuel system". The outermost of these positions, which is fitted with automatic return, gives the richest mixture.

1.2.3. Accelerator

The accelerator, Fig. 2, consists of a lever and a link with ball joints which connects the lever with a cranked shaft, the rear end of which is carried in a bracket attached to the radiator member and the front end is connected by a rubber bellows to a plate on the carburetor throttle lever. A coil spring running to a lever on the shaft serves as a return spring. The lever is carried in two bearings on the front of the firewall, and its backward-pointing part runs through a rubber seal in the firewall. The end of the lever carries a rubber roller mounted on a bolt.

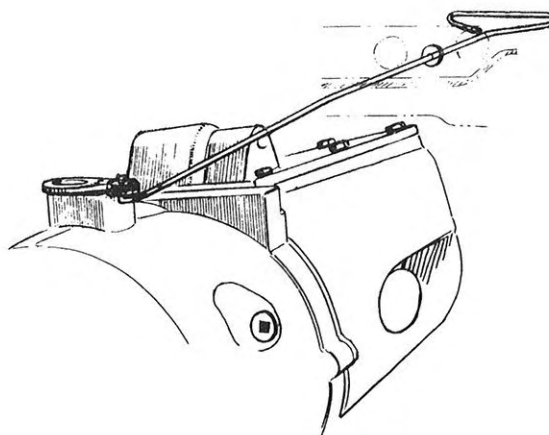


Fig. 3. Freewheel control

1.2.4. Freewheel control

The freewheel control, Fig. 3, is of pull-out type, one end being shaped as a handle and located to the left of the accelerator pedal. The control runs through a rubber seal in the firewall and is connected to the freewheel operating lever above the transmission.

2. TECHNICAL DATA

Distance from brake and clutch pedal foot plates to foot board (maximum pedal stroke) approx.	mm	160
Clutch pedal play measured at top of pedal	mm	20 - 25

Brake pedal play measured at top of pedal	mm	5 - 10
Accelerator, total stroke, approx.	mm	50

3. WORK ON CAR

3.1. Pedals

3.1.1. Adjustment of clutch pedal play

The clutch pedal play should be 20 - 25 mm measured at the top of the pedal. As the clutch linings wear, this play decreases, but it must not be less than 10 mm.

The clutch pedal play can be adjusted by means of the adjusting screw, Fig. 1, for the clutch cable. The screw is readily accessible in the left-hand section of the engine compartment under the engine.

The play increases if the adjusting screw is screwed in (turned to the right).

3.1.2. Adjustment of brake pedal play

See 3.1., Chapter 9, "Brake system".

3.1.3. Lubrication

The clutch and brake pedal bearings and the fork bearings for the brake pedal must be oiled. There are oil holes for the pedal bearings on the shaft to the right of the pedal arm, see Fig. 4.

3.2. Controls

3.2.1. Accelerator

The height of the accelerator pedal above the pedal board should be about 50 mm and can be adjusted by means of the ball joint link, see Fig. 5. This link consists of a rod, Fig. 6, with ball joints screwed onto both ends and locked with nuts. If the accelerator pedal, rubber roller, has to be raised, the link should be lengthened.

If the lever, Fig. 5, has become deformed so that the length adjustment of the link is insufficient to

give the desired position of the accelerator pedal, then the lever may be straightened. Take care not to strain its bearings while straightening. Fine adjustment can then be done by means of the ball joint link.

A leaf spring between the lever and the firewall prevents rattle from developing in the bearing, see Fig. 2.

If the nylon bushing in the shaft bearing at the bracket on the radiator member has become worn, it can easily be replaced if the cotter pin is removed.

If the rubber roller on the accelerator pedal is worn, it can be replaced by screwing off the nut and removing the bolt.

The bearings and ball joints for the accelerator should be lubricated with oil. Lubricate the rubber roller only when absolutely necessary, removing the roller and greasing the bearing lightly.

3.2.2. Handbrake

Instructions for checking and adjusting the handbrake are given in Chapter 9, "Brake system".

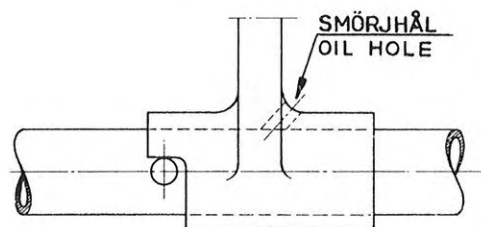


Fig. 4. Oil hole, pedals

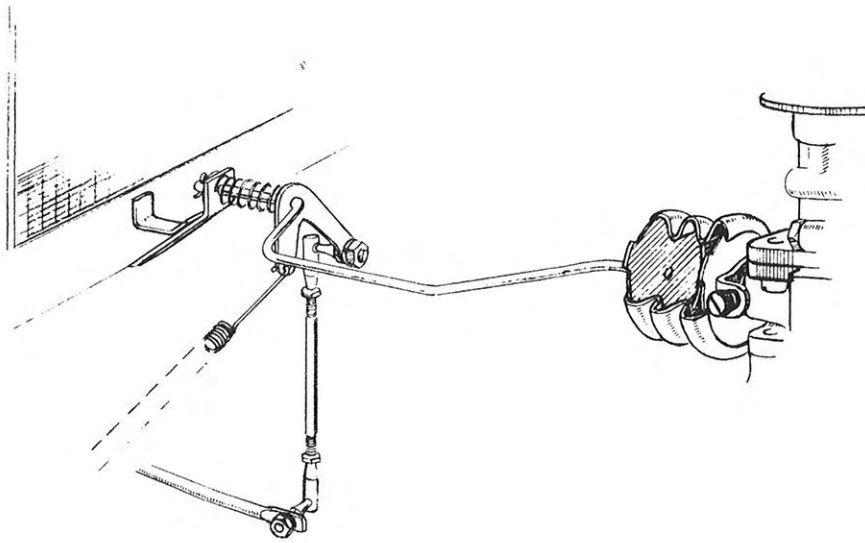


Fig. 5. Accelerator



Fig. 6. Ball joint link

4. INSPECTION WORK

4.1. Pedal unit

4.1.1. Removal

1. Take out the rubber flooring and remove the screws that hold down the pedal board.
2. Lift aside the two parts of the pedal board. Set the left-hand part up against the inner wall. If it is to be removed from the car, the foot-switch must be unscrewed.
3. Relieve the tension in the clutch cable by screwing in the adjusting screw at the front end of the cable (increase clutch pedal free play).
4. Disconnect the wire from the clevis end piece

at the clutch pedal. The end piece is slotted at one side to permit removal of the wire.

5. Disconnect the brake pedal from the master cylinder by loosening the lock nut, Fig. 7, and unscrewing the master cylinder push rod, the hexagonal head of which is visible outside the rubber bellows.

The brake pedal can also be disconnected from the master cylinder by pulling the push rod free from the rubber bellows. When the pedal unit is lifted out, the push rod will then come with it.

6. Remove the screws which hold the pedal unit

in place - two in the floor and four in the firewall - the entire pedal unit can then be removed. These screws also hold the master cylinder in place and the two uppermost screws in the firewall should therefore be replaced after removing the pedal unit so as not to disturb the position of the master cylinder.

4.1.2. Disassembly of pedal unit

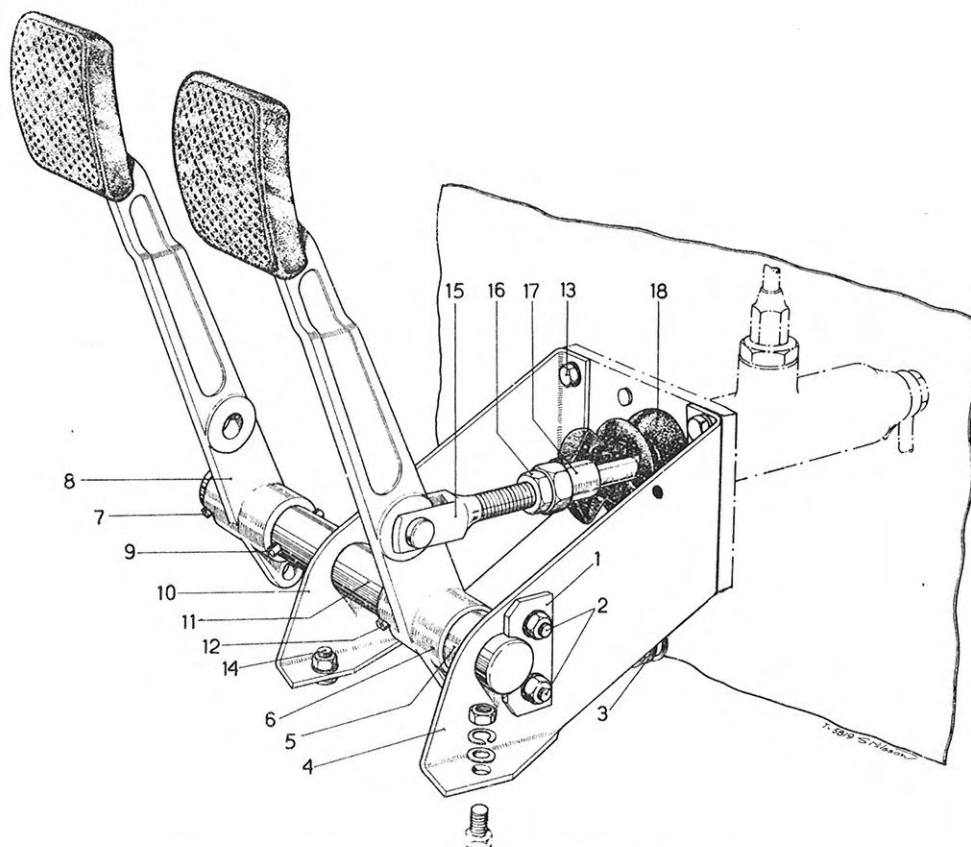
1. Remove locking plate 1, Fig. 7, by removing the two screws 2.
2. Unhook the brake pedal return spring 3. Remove bracket 4, spacer 5 and brake pedal 6.
3. Drive out slotted pin 7, which is located outside the clutch pedal, and remove the clutch pedal 8.
4. Drive out the slotted pin 9 and remove the bracket 10 from shaft 11.

4.1.3. Assembly of pedal unit

Replace worn or otherwise damaged parts, such as rubber covering of pedals or springs 3 (the turns lie tightly together on undamaged springs).

Use new slotted pins instead of the ones that were removed. They are all the same, see Fig. 8.

1. Insert slotted pin 9, Fig. 7, into shaft 11 and push on clutch pedal 8. Insert slotted pin 7.
2. Fit bracket 10, insert slotted pin 12 into shaft.
3. Install brake pedal, spacer 5 and bracket 4. Hook on return spring 3.
4. Install the locking plate 1 and screws 2 with nuts.



- | | |
|-------------------------------|--------------------------------|
| 1. Locking plate | 10. Bracket |
| 2. Attachment screw | 11. Pedal shaft |
| 3. Return spring, brake pedal | 12. Slotted pin |
| 4. Bracket | 13. Attachment screw, firewall |
| 5. Spacer | 14. Attachment screw, floor |
| 6. Brake pedal | 15. Clevis end piece |
| 7. Slotted pin | 16. Lock nut |
| 8. Clutch pedal | 17. Push rod |
| 9. Slotted pin | 18. Rubber bellows |

Fig. 7. Pedal unit

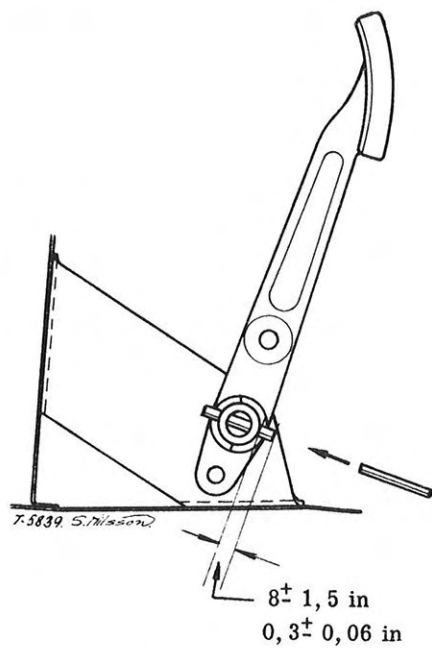


Fig. 8. Slotted pin

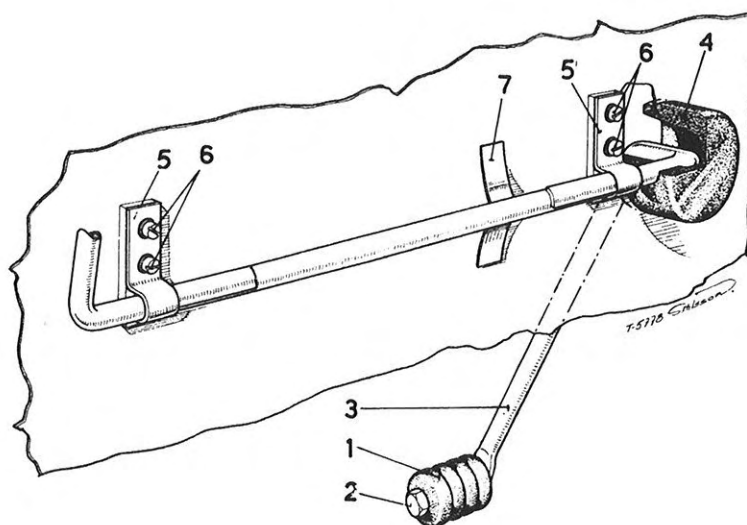


Fig. 10. Accelerator, seen from engine compartment

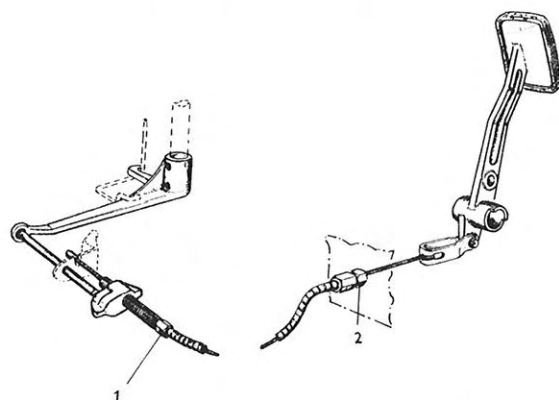


Fig. 9. Clutch cable

4.1.4. Installation of pedal unit

1. Place the pedal unit in position. If the master cylinder push rod has not been disconnected from the pedal clevis, insert the push rod into the cylinder and force the rubber bellows over the push rod.
2. Screw in the four screws 13 which attach the pedal unit to the firewall.
3. Screw in the two screws 14 which attach the pedal unit to the floor. These screws must be inserted from under the floor.
4. Connect the wire to the clutch pedal.
5. If the master cylinder push rod has been disconnected from the clevis during removal, screw the push rod onto the clevis. The brake pedal play must be adjusted before the lock nut is tightened. The pedal play measured at the top of the pedal should be 5 - 10 mm. See Chapter 9, "Brake system".
6. Tension the clutch cable with the adjusting screw and adjust the clutch pedal play. The play measured at the top of the pedal should be 20 - 25 mm, see 3.1.1.
7. Lay down the two parts of the pedal board, right-hand part first, and screw in the attachment screws. If the foot-switch was removed, it must be installed before the left-hand part of the pedal board is screwed down.
8. Lay in the rubber flooring.

4.2. Clutch cable

4.2.1. Removal

The clutch cable, Figs. 1 and 9, can be removed without removing the pedal unit.

1. Screw in the adjusting screw until the wire can be disconnected without difficulty from the attachment under the engine.
2. Remove the adjusting screw, its attachment and the push rod from the clutch cable.
3. Remove the left-hand pedal board.
4. Screw the nut off the cable feed-through in the firewall and remove the lock washer.
5. Remove the cable feed-through, which is slotted at one side, from the cable.
6. Disconnect the cable from the connection clevis at the clutch pedal. The clevis is slotted at one side

to permit removal of the cable.

7. Pull out the clutch cable forwards through the firewall.
8. Lay aside the nut and lock washer for the cable feed-through.

4.2.2. Installation of clutch cable

1. Insert clutch wire from the front through the hole in the firewall and slide on the lock washer and nut behind the firewall.
2. Connect the wire to the clevis on the clutch pedal.
3. Fit the cable feed-through with lock washer and lock it into position with the nut.
4. Screw the adjusting screw into the cable attachment.
5. Insert the push rod into the attachment.
6. Insert the front end of the clutch cable into the adjusting screw and connect the wire to the attachment on the underside of the engine. Don't forget the distance piece.
7. Make sure that the push rod is correctly positioned in the clutch lever.
8. Screw the adjusting screw out of the attachment until the clutch pedal has the right play (20 - 25 mm).

4.3. Accelerator

4.3.1. Removal

1. Remove the rubber roller, Fig. 10.
2. Unhook the return spring, see Fig. 2.
3. Disconnect the ball joint link from the shaft.
4. Loosen the screws for the two lever bearings, Fig. 10, and remove the leaf spring.
5. Disconnect the rubber seal from the firewall and take out the lever and seal forwards.
6. Remove the rubber seal from the lever.
7. Remove the cotter pin at the shaft bearing in the bracket on the radiator member, see Fig. 2.
8. Pull the shaft forwards out of the bearing and lay aside the flat washer, nylon bushing and spring.
9. Force the rubber bellows off the plate on the carburetor throttle shaft and remove the rubber bellows and shaft.

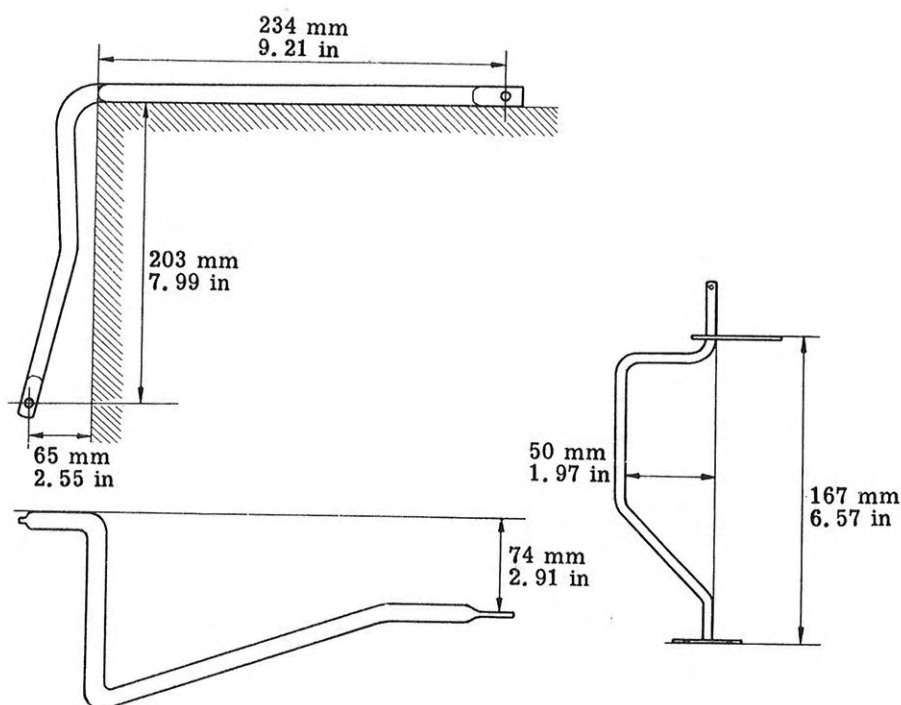


Fig. 11. Straightening of lever and shaft, accelerator.

4.3.2. Checking and adjustment

Worn or otherwise damaged parts must be replaced. If the lever or shaft has become deformed, it can be straightened as shown in Fig. 11.

4.3.3. Installation of accelerator

1. Install shaft, Fig. 2, with nylon bushing, spring, washer and cotter pin on bracket on radiator member.
2. Force rubber seal over lever and mount it on the front of the firewall. Don't forget the leaf spring.
3. Connect the ball joint link to lever and shaft.
4. Fit the return spring to the shaft.
5. Fit the rubber bellows between the plates on the shaft and the carburetor throttle shaft.
6. Mount the rubber roller on the lever.
7. Check that the throttle shaft has full movement when the accelerator pedal is pressed right down.

4.4. Freewheel control

4.4.1. Removal

1. Disconnect control, Fig. 3, from lever on transmission by removing cotter pin and washer.
2. Free rubber seal from firewall and remove control and seal backwards.
3. Remove rubber bushing from lever.

4.4.2. Installation

1. After inspection and replacement of damaged parts, fit seal, Fig. 3, to control, then insert control through firewall.
2. Install rubber bushing in lever.
3. Connect control with washer and cotter pin to lever.
4. Press rubber seal into place in firewall.

4.5. Starter control

4.5.1. Removal

1. Disconnect control wire from front attachment.
2. Disconnect cable sheath from starter lever.

3. Unscrew nut at attachment under instrument panel.
4. Remove cable and lay aside nut.

4.5.2. *Installation*

1. After inspection and replacement of damaged parts, grease wire so that it runs smoothly in the sheath and then insert control through attachment on instrument panel. Fit nut and push in control through seal in firewall.
2. Tighten nut.
3. Fix wire to front attachment.
4. Connect sheath to starter lever.

4.6. Cold-start control

4.6.1. *Removal*

1. Disconnect sheath and wire at carburetor.
2. Remove nut on inside of instrument panel.
3. Pull out control and lay aside nut from inside of panel.

4.6.2. *Installation*

Check that the feed-through in firewall is not damaged. If it is, replace it. After inspection and replacement of damaged parts, grease the wire so that it runs smoothly in the sheath.

1. Push the control into the instrument panel, fit the nut and insert the cable through seal in firewall.
2. Tighten nut on inside of panel.
3. Connect the sheath to the attachment on the carburetor cold-start device.
4. Connect the wire to the operating arm for the cold-start device on the carburetor. When doing this, make sure that the knob on the instrument panel is pushed right in when the operating arm is in the "closed" position.

NOTE. Inspect the spring at the carburetor and adjust it so that the control returns from the extreme position to the intermediate position when the knob is released.