AIR CYLINDER REPAIR

Key numbers in text refer to figure 7.

Disassembly

1. Disconnect air line from air cylinder.
2. Remove two socket-head bolts which mount cylinder on governor cover, then remove air cylinder.
3. Remove two screws and lock washers (6 and 7) which secure cap (4) on cylinder (1). Remove cap (4) and spring (3) from piston rod.
4. Pull piston and rod assembly out of cylinder.
5. Clean and inspect components.

Assembly

1. Lubricate piston cup (2) and bore in cylinder (1).
2. Insert piston and rod assembly into cylinder bore using care to prevent damage to piston cup (2).
3. Install spring (3) on piston rod, then install cap (4) on cylinder. Use lock washers (7) under heads of cap screws (6) and tighten screws to secure cap (4) on cylinder (1).
4. Install the cylinder assembly on governor cover, and connect air line to cylinder.

FAST IDLE AIR CYLINDER

A fast idle air cylinder (fig. 9) is installed in governor as shown in figure 8. Function of cylinder is to accelerate engine speed when vehicle is stopped at terminals. The additional engine RPM are required to keep air conditioning system functioning during terminal stops.

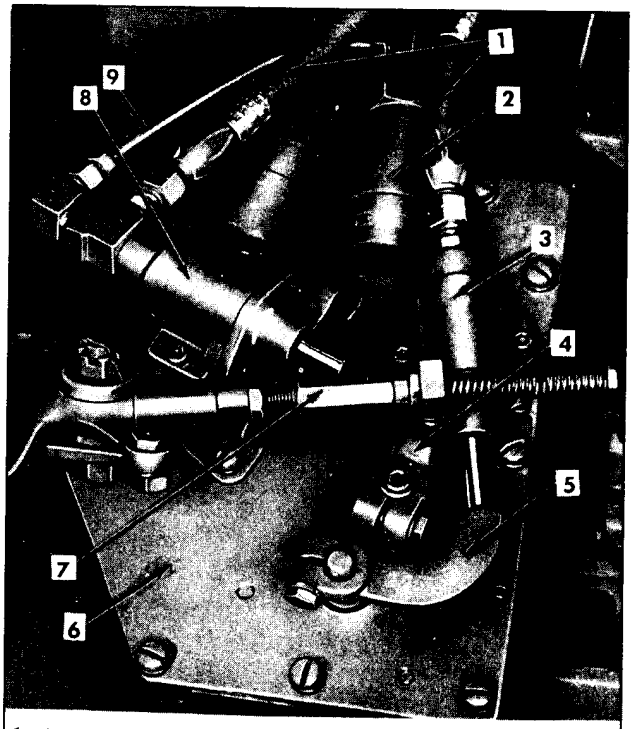
Air cylinder operates only when a toggle switch at left of driver is in "FAST IDLE" position and parking brake is in applied position.

REPAIR

Key numbers in text refer to figure 9.

Disassembly

1. Disconnect air line from cylinder.
2. Loosen jam nut (3), then thread assembly out of governor housing.
3. Remove plunger (2) from cylinder.
4. Remove retainer ring (11) from end of cylinder.
5. Remove inlet plug (12) and O-ring (10) from cylinder.
6. Remove piston (7), and O-ring (10) assembly, also spring (9).
7. Remove follower retaining ring (5) from piston, then remove follower (6), and spring (8) from piston.
8. Remove O-ring from inlet plug and piston, and discard.



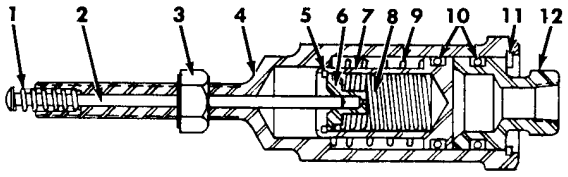
1 Air Lines
2 Fast Idle Air Cylinder
3 Engine Stop Air Cylinder
4 Throttle Lever
5 Stop Lever
6 Governor Cover
7 Throttle Link
8 Fast Idle Limiting Air Cylinder
9 Air Tube

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Figure 8—Governor Cover and Controls

Assembly

1. Clean all parts in suitable cleaning fluid to remove all trace of oil or dirt, then dry.
2. Lubricate cylinder walls and O-rings with Lubriplate or equivalent.
3. Install spring (8), and follower (6) in piston and secure with ring (5).
4. Install O-rings (10) in piston and inlet plug.



1 Plunger Spring
2 Plunger
3 Jam Nut
4 Cylinder
5 Follower Ring
6 Spring Follower
7 Piston
8 Follower Spring
9 Piston Spring
10 O-Rings
11 Retaining Ring
12 Inlet Plug

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Figure 9—Fast Idle Air Cylinder