SERVICE BULLETIN

SERVICE DEPARTMENT

DODGE

DIVISION OF CHRYSLER CORPORATION

TO ALL DODGE DIRECT DEALERS AND DEALERS:

Nov. 29, 1946

No. D-177

FUEL

CARBURETOR

DASH POT

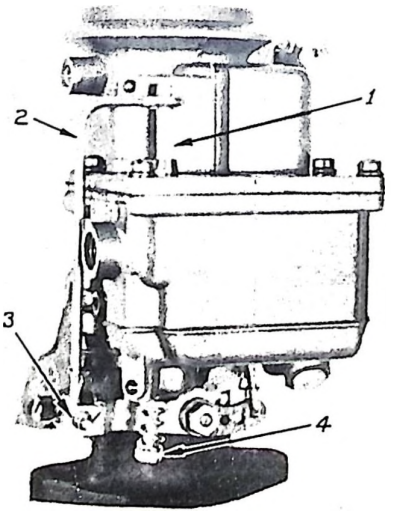
Model D-24

During the last few months complaints have reached the Service Department of so-called axle "clunk," which occurs when the accelerator pedal is released suddenly. In the majority of cases this has been wrongly diagnosed as an excessive backlash in the drive line. In some cases the blame for this noise has even been placed on weak springs, bad shock absorbers, etc.

Actually, the noise comes from the rapid take-up of the normal clearance in the drive train which are necessary for proper operation. This condition, which is not harmful in any way, exists in all cars and must be minimized by some mechanical device.

Dodge engineers have seen fit to do this by a carburetor dash pot, which controls the rapid return of the engine to idle taking up these drive train clearances more gradually, and at the same time, preventing engine stalling. By properly adjusting this dash pot and the throttle return spring, this noise can be lowered to a point where it is no longer noticeable under all normal driving operations.

The dash pot mechanism is clearly visible in the photograph at the right. Arrow #1 indicates the rod of the dash pot plunger which extends outside the carburetor body. Connected to the top of the rod is the linkage, #2, which joins the dash pot plunger to the throttle shaft. Whenever the throttle is opened the dash pot is moved upward by spring, #3, until adjusting screw, #4, comes in contact with the throttle body. As the accelerator pedal is released, the rod moves back downward slowing the return of the throttle by metering a small quantity of fuel through a jet in the dash pot plunger within the carburetor.



READ & CHECK	
DEALER	
MANAGER	
SERVICE MGR.	
PARTS MGR.	
MECHANICS	

(Over)

14239
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14765

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DASH POT

Model D-24

ADJUSTING THE DASH POT ACTION

1. The first step in adjusting the dash pot should be the visual inspection of the action of the plunger. If the plunger does not move upward to the limit of the stop screw when the throttle is opened, the plunger rod, #1, probably needs cleaning. If, after cleaning, it still does not move all the way upward, more tension can be placed on the spring, #3, by bending it downward. The rod should then operate satisfactorily in this respect.

2. The next point to be checked is the rod action on the downward stroke. First, remove the clip holding the rod to the linkage. The rod should remain in the upward position when free from the linkage, and should move downward slowly when a slight pressure is placed on the top of the rod with the finger. If it does not do so the plunger is probably damaged, and should be replaced. Be sure there is gasoline in the carburetor when this test is made.

3. The adjusting screw, #4, should be adjusted for a total travel of the dash pot rod of approximately 5/16 to 11/32 inches.

4. The throttle mechanism should next be inspected for binding, and all joints lubricated with Lubriplate. It is important that the throttle return spring does not apply an excessive amount of tension to the return of the throttle. At idle the spring length should be 7 5/8 inches from the hook on the air cleaner bracket to the notch in the bellcrank. Early production cars had the spring anchored to a bracket clamped around the ignition wire tubes, which made the pullback spring length at idle approximately 7 inches. This distance should be measured and if found greater than 7 5/8 inches, the bracket should be bent to bring the spring length down to the specified distance.

With the dash pot functioning properly and the spring length set correctly, axle "clunk" should not be noticeable under normal driving conditions. Of course, it is possible that the throttle return may still be too rapid, in which case the tension on the throttle return spring should be reduced. This is done by removing the spring and stretching it out until it takes a permanent set or becomes longer.

For a short period a Carter carburetor was used in place of the specified Stromberg. The dash pot arrangement is somewhat different, but in general the principle of operation is the same.

B. B. SETTLE
Director of Service
DODGE DIVISION

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