

1969 SPRINT TUNEUP INFORMATION

There are several important differences between the 1969 and 1968 Sprint engines which make changes necessary in the tuneup procedures. Be sure to keep these changes in mind when servicing the 1969 model.

CARBURETOR

The new center bowl-dual float Dell'Orto Carburetor has the same three groove metering pin adjustment and idle speed adjustment as the 1968 model.

Idle Mixture

The idle mixture adjustment works the opposite way from 1968 models — it now richens the mixture when backed out, and leans the mixture when turned in. The normal idle mixture setting with the standard No. 55 idle jet is 1-3/4 turns open (this is specified as 3/4 turns open in the Rider Handbook and Service Manual which is an error). For ease of starting, it is very important that the idle speed is set at 1200 to 1300 rpm with the idle speed screw and the idle mixture screw adjusted for smooth operation at this speed. These adjustments should be made with a warm engine.

Choke

The choke has been replaced by a starting lever which allows the flow of the richer starting mixture to bypass the main venturi when the throttle is closed to idle speed position.

For this reason, ALWAYS START THE ENGINE WITH THE THROTTLE CLOSED (idle speed position).

Jets

The following carburetor jets are available for the new carburetor to take care of operating conditions which vary from normal conditions, such as higher altitude or climate.

Part No.	Jet	Size (MM)	Dia. (in.)	Cleaning Drill Size Gauge
27695-69P	High Speed	1.20	.047	56 (.0465 in.)
27696-69P	High Speed (STD)	1.18	.046	57 (.043 in.)
27697-69P	High Speed	1.15	.045	57 (.0430 in.)
27698-69P	High Speed	1.12	.044	57 (.0430 in.)
27603-69P	Low Speed	.70	.028	70 (.028 in.)
27606-69P	Low Speed	.60	.023	74 (.023 in.)
27607-69P	Low Speed (STD)	.55	.022	75 (.021 in.)
27725-69P	Starting (STD)	.60	.023	74 (.0225 in.)
27711-69P	Starting	.70	.028	70 (.028 in.)

NOTE: Minor adjustment of the high speed mixture can be made by moving high speed needle retainer from center groove to upper groove to lean mixture or to lower groove to richen mixture.

Float Setting

Float setting is measured from top of both floats to gasket surface with inlet valve seated, and should measure $31/32$ (.969) inch for both floats, as shown in Figure 1. A special gauge, part No. 94751-69, is included with this bulletin, for your use in checking this dimension.

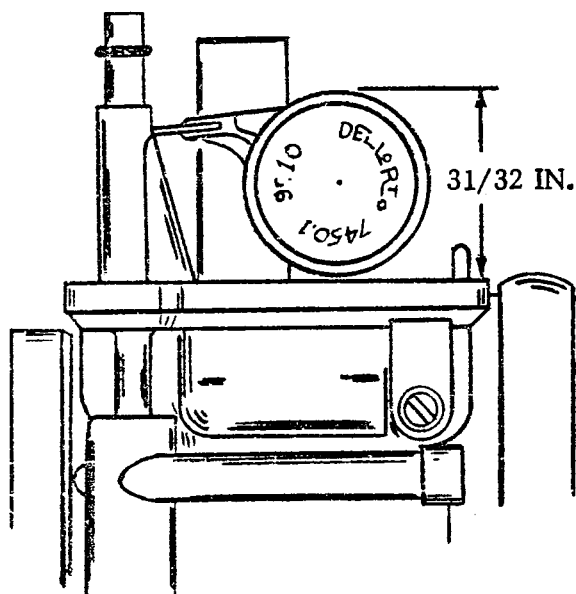


FIGURE 1

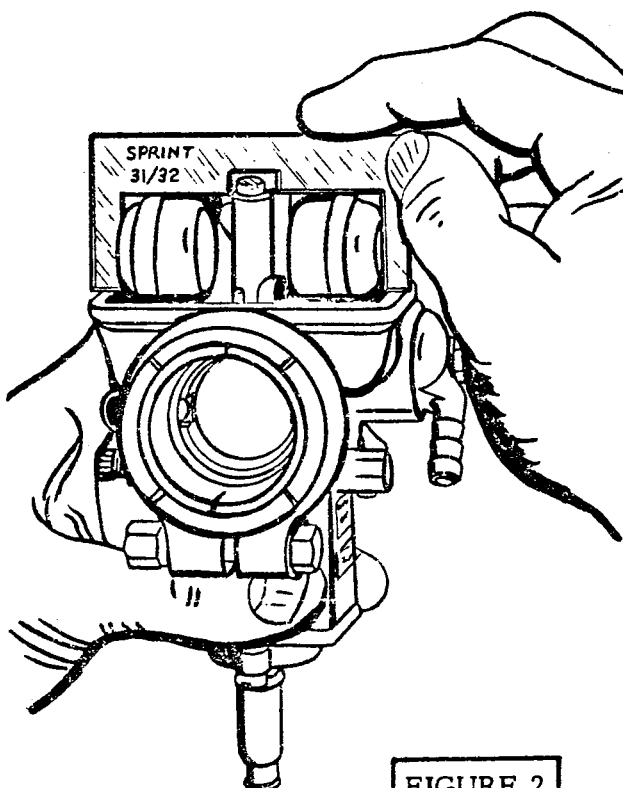
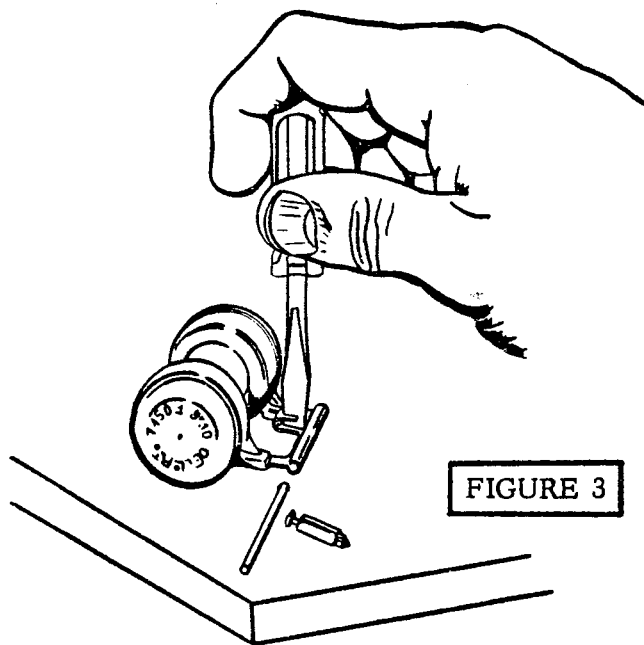


FIGURE 2

A high fuel level in the bowl can result in flooding, or rich mixture causing unsteady engine operation at any speed. A low fuel level could cause the engine to stop or slow down at the higher speeds.

If these conditions exist, remove carburetor bowl and check the float setting as shown in Figure 2. If setting is not correct, note float position, remove float pin and float for resetting as follows:



If float is too high, place float on the flat surface and bend ear downward the required amount as shown in Figure 3.

If float is too low, reverse position of float on surface and bend ear downward.

Reinstall float and recheck float setting. Also check to see that both floats are the same height (parallel with pin support when resting on flat surface as shown in Figure 3. Bend individual float brackets as necessary to correct.

IGNITION TIMING AND CIRCUIT BREAKER POINT GAP

Ignition timing specifications are as follows:

Automatic Advance Position 27° (7/32 in.) B. T. C.

Automatic Retard Position 7° (.005 in.) B. T. C.

Circuit Breaker Point Gap018 in.

Check to see that circuit breaker point gap is .018 in. when in high cam position.

Check ADVANCE ignition timing with engine running at 4500 rpm using strobe gun and degree indicator tool, part No. 95860-67P, installed on crankshaft. Procedure is described in detail in the 1969 Sprint Service Manual, page 5F-25. See that the ignition timing retards smoothly to 7° B. T. C. at idle speed. If it does not, the governor advance weights are probably sticking and should be freed.

TAPPET CLEARANCE

Cold tappet clearance remains at .002 for both intake and exhaust. Hot tappet clearance has increased to .007 intake and .009 exhaust from .006 for both.

HARLEY-DAVIDSON MOTOR CO.