

# Service-Information



BMW MOTORRAD GMBH Service R-VK-10 vdw-ho	Motorcycles R65-R100RS/RT Technic	Munich, July 78 11 008 78(1053R)
--	--------------------------------------	-------------------------------------

For U.S. and Canada only

Subject: Maintenance of the Exhaust Emission Control System for  
1979 Models

Ladies and Gentlemen,

All motorcycles manufactured by BMW for the U.S. market after 1/1/78 are subject to the regulations issued by the United States Environmental Protection Agency.

The emission values for our motorcycles 1979 amount to 14 g/km HC and 17 g/km CO. In order to guarantee that these values are observed, the CO output at idle speed and operating temperature must amount to 2 % + 0,5 % CO. This specification appears on a durable label on the rear fender under the seat (Vehicle Emission Control Information). Please follow exactly the prescribed servicing schedule during delivery inspection, the 600 miles inspection as well as all other servicing in regular intervals.

The Clean Air Act prohibits a manufacturer from specifying that a customer must take his motorcycle only to an authorized dealer for emission related service.

But in order to avoid eventual legal or technical difficulties to the customers, it makes good sense to advise them to have the maintenance performed by an authorized BMW dealer.

Referring to warranty there exists an additional item that all emission related devices on our motorcycles are covered by 5 years or 30.000 km (18.641 miles), which ever occurs first.

All maintenance information necessary to insure proper functioning of the emission control system must be available to anyone without discrimination.

Following we indicate the required operations to adjust the exhaust emission system, which are up-to-date. Please note the detail modifications being already in series production:

...

Kennntnis genommen - Pris connaissance - Noted - Tomado nota - Preso conoscenza				Ablage - Archives - File - Archivo	
Betriebsleitung	Werkstatt	KD-Annahme	Gewahlr -Sachb	Teiledienst	Betriebsleitung Werkstatt

### Adjusting Dwell Angle

Take off engine cover and breaker housing cover. Turn engine with spark plugs removed clockwise (facing against direction of travel) with the aid of Allen head bolt used to secure rotor. Dwell angle is  $120^{\circ} \pm 3\%$ . Without dwell angle meter adjust as follows:

Contact breaker arm (hammer) must lift fully. Check points gap with feeler gauge:  $0,45 \text{ mm} \pm 0,05 \text{ mm}$ . If necessary replace points.

Slacken off locking screw at anvil point, insert screwdriver in slot of anvil point. Adjust points gap by turning screwdriver.

Recheck gap.

### Ignition Timing

Connect stroboscope lamp. Start engine and increase engine speed up to 3500 rpm. After loosening the two Allen head bolts turn contact breaker housing until white spot appears in inspection hole when lighting with stroboscope lamp at flywheel. Turning in sense of engine rotation retards, against sense of engine rotation advances ignition. Tighten Allen head bolts. To check ignition timing, turn wheel on stroboscope lamp until TDC mark appears. The actual ignition angle (Spec.:  $32^{\circ} \pm 1^{\circ}$ ) can be read from the lamp's scale.

### Engine Idle Speed and CO Level Adjusting

Check that the engine is at normal operating temperature, throttle twist grip is completely closed, cable play 4 mm (0,16 in), choke being in "off" position, choke arm at carburetors is pressed into its lower end position.

Adjust idle mixture control screw and throttle stop screw of both carburetors to their basic settings: Tighten idle mixture control screw completely for this purpose and then loosen it by 1/2 turn.

Tighten throttle stop screw until it just touches throttle lever, then keep on tightening by one more turn.

Use Duo Test unit, BMW No. 13 0 700, to synchronize the carburetors by alternating between the throttle stop screw and idle mixture control screw. Correct engine speed can be adjusted by turning both throttle stop screws uniformly in clockwise or counterblockwise direction.

...

In conjunction with this, CO-level has to be adjusted to  $2 \pm 0,5 \%$  at idle speed with the idle mixture control screw.

For checking the CO-level we urge you to use a CO tester which operates on the principle of non-dispersive infrared (NDIR) analyzing, since this is the only method known to us which produces a sufficiently exact result. Insert its sensor alternately in the left and right muffler approx. 50 cm (20 in). Spark plugs must not be sooted for CO-level test. Every adjustment of the throttle stop screw requires a CO-level readjustment.

To adjust accelerator cables, increase engine speed slightly by turning the throttle twist grip. Use the above mentioned Duo Test Unit to synchronize cables.

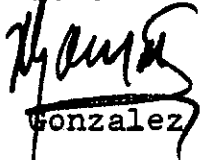
Never let engine run longer than 10 minutes in stationary state without sufficient cooling.

Very truly yours,

BMW MOTORRAD GMBH  
München

i.V.

i.V.

  
Gonzalez

  
Blank