1-14 Minor service



7.13 Hose clamp can be used on the fuel inlet hose to prevent fuel flow

Monster models with carburettor engines

Early M900 models (up to VIN 004462)

10 The fuel filter is located forward of the right-hand side panel, and is held in a rubber mounting. Raise the fuel tank onto its prop and turn the fuel tap to the OFF position. Remove the right-hand side panel.

11 Have a rag handy to catch any fuel spills, then disconnect the two hoses from the fuel filter. Work the filter out of its rubber mounting and install the new one.

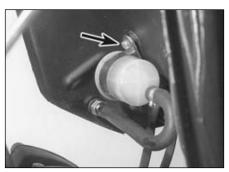
12 Reconnect the fuel pipes and secure them with their clamps. Turn the fuel tap ON and check that there are no fuel leaks. Refit all disturbed components.

Later M900 models (from VIN 004463) and all M600/750 models

13 The tank must either be drained of fuel via the drain bolt in its base, or a hose clamp applied to the fuel inlet hose to shut-off supply **(see illustration)**. If the tank is drained, remove it from the machine as described in Chapter 3 and store the fuel in a container which is suitable for petrol.

14 Have a rag handy to catch any fuel spills, then disconnect the two hoses from the fuel filter. Remove the mounting clamp screw to free the filter (see illustration).

15 Reconnect the fuel pipes to the filter stubs (outlet pipe to tap connects to the angled stub of the filter) and secure them with their



7.14 Filter is clamped to tank underside with a single screw (arrow)

clamps; if the clamps cannot be re-used replace them with new ones.

16 Refill the fuel tank with petrol, or release the hose clamp, and check that there are no leaks.

Monster models with fuel injected engines

Fuel injection models with metal fuel tank

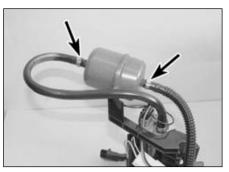
17 Refer to Steps 1 to 9.

Fuel injection models with plastic fuel tank

18 Remove the fuel pump assembly (see Chapter 3B).

19 Have a rag handy to catch any fuel spills, then release the clamps and disconnect the two hoses from the filter – where clip type clamps are used new ones should be fitted to secure the new filter (a special tool is required to joint the clamp ends – use suitable screw-type clamps as an alternative if required) (see illustration). Remove the mounting bracket screw to free the filter – note which way round the filter fits.

20 Fit the new filter, making sure it is the correct way round, and secure it to the bracket with the screw. Reconnect the fuel pipes to the filter stubs, and secure them with their clamps; if the clamps cannot be re-used replace them with new ones. Check that the arrow on the filter points in the direction of fuel flow (i.e. from the pump to the outlet on the mounting base) (see illustration).



7.19 Fuel filter clamps (arrowed)

21 Install the fuel pump assembly (see Chapter 3).

8 Throttle and choke cable freeplay – check

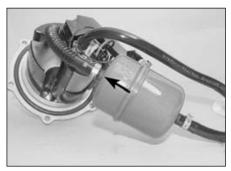


Throttle cable(s)

1 Make sure the throttle grip rotates easily from fully closed to fully open with the front wheel turned at various angles. The grip should snap shut automatically when released.

2 If the throttle sticks, this is probably due to a cable fault. Remove the cable(s) (see Chapter 3) and lubricate it/them. Install the cable, making sure that it is correctly routed. If this fails to improve the operation of the throttle, the cable must be replaced. Note that in very rare cases the fault could lie in the carburettors or throttle bodies rather than the cable, necessitating their removal and inspection of the throttle linkage (see Chapter 3).

3 With the throttle operating smoothly, check for a small amount of freeplay at the twistgrip **(see illustration)**. The amount of freeplay can be measured and should be as given in this Chapter's Specifications. The cable(s) is/are adjustable at either the throttle grip or the carburettor/throttle body. Minor adjustments should be made at the throttle grip end **(see illustrations)**.



7.20 Make sure the arrow points in direction of fuel flow

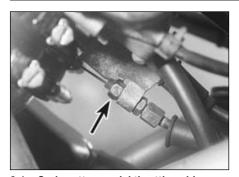


8.3a Check for a small amount of freeplay in the throttle twistgrip



8.3b Cable adjuster(s) is/are located below twistgrip housing – carburettor model shown

Minor service 1•15



8.4a Carburettor model throttle cables can also be adjusted at carburettor pulley (arrow)

4 To adjust freeplay, slacken the locknut on the cable adjuster and rotate the adjuster until the correct amount of freeplay is obtained, then tighten the locknut against the adjuster. If all the adjustment has been taken up at the throttle grip end, re-set the adjuster to give maximum freeplay and then set the correct amount of freeplay at the adjuster(s) on the carburettor/throttle body pulley (see illustrations). Slacken the locknut(s) and set the adjuster in the bracket as required, then retighten the locknut (s). Subsequent adjustments can now be made at the throttle grip.

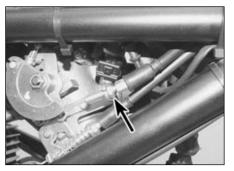
5 After adjustment check that the throttle twistgrip operates smoothly and snaps shut quickly when released.

6 With the engine idling, turn the handlebars through the full extent of their travel. The idle speed should not change. If it does, the cable(s) may be incorrectly routed.

7 After adjustment, check the idle speed and reset if necessary.

Choke cable

8 If the choke does not operate smoothly this is probably due to a cable fault. Remove the cable as described in Chapter 3 and lubricate it. Install the cable, routing it so it takes the smoothest route possible. If this fails to improve the operation of the choke, the cable must be replaced. Note that in very rare cases the fault could lie in the carburettors/throttle bodies rather than the cable, necessitating



8.4b On fuel injection models slacken the locknut (arrowed) and turn the adjuster as required

their removal and inspection of the choke valves (see Chapter 3).

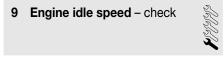
9 There should be a very small amount of freeplay at the choke lever or knob when the choke is in the OFF position; this ensures that the choke is not in operation when the engine is running normally. If adjustment is necessary, proceed with Step 10 or 11 according to your model. On fuel injection models also check the fast idle speed as in Step 11.

10 On carburettor models, a specified freeplay is available for the lever operated choke (see Specifications) and is measured at the cable outer on the adjuster (see illustration). If adjustment is necessary, slacken the locknut on the adjuster and screw the adjuster in or out to obtain the correct freeplay. No specific setting is available for the pull type choke, but adjustment can be made by repositioning the choke cable in its clamp on the carburettors.

11 On fuel injection models, with the choke lever in the fully open position make sure that the pulley cam is against the stop, and that with the engine running the speed is 2000 rpm. If not, turn the adjuster screw so that these conditions are met **(see illustration)**. Now make sure there is a small amount of freeplay as in Step 9. If necessary slacken the locknut on the cable adjuster and set the adjuster as required to provide a small amount of freeplay in the lever.



8.10 Choke cable adjuster is located below left-hand handlebar switch housing

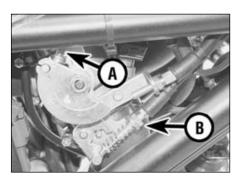


Carburettor models

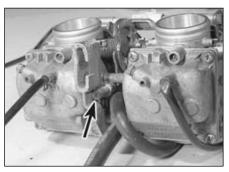
1 The idle speed should be checked and adjusted before and after the carburettors are synchronised and when it is obviously too high or too low. Before adjusting the idle speed, make sure the valve clearances and spark plug gaps are correct. Also, turn the handlebars back-and-forth and see if the idle speed changes as this is done. If it does, the throttle cables may not be adjusted correctly, or may be worn out. This is a dangerous condition that can cause loss of control of the bike. Be sure to correct this problem before proceeding.

2 The engine should be at normal operating temperature, which is usually reached after 10 to 15 minutes of stop and go riding. Place the motorcycle on its stand, or hold it upright, and make sure the transmission is in neutral.

3 With the engine idling, adjust the idle speed by turning the throttle stop screw in or out until the idle speed listed in this Chapter's Specifications is obtained. The throttle stop screw is located on the underside of the carburettor assembly (see illustration) and can only be accessed with a long cross-point screwdriver (see illustration).



8.11 Fast idle speed adjuster screw (A); cable locknut (B) and freeplay adjuster



9.3a Idle speed adjuster (throttle stop screw) location (arrow) – carburettors removed for clarity



9.3b A long handled Phillips screwdriver is necessary for idle speed adjustment