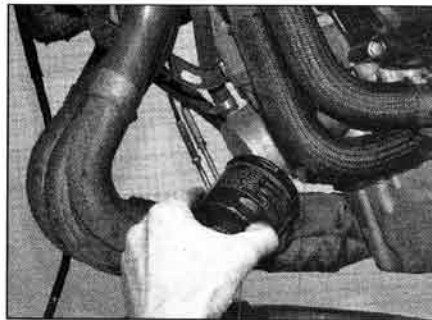
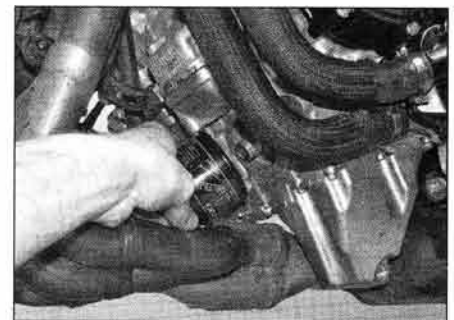


5.10a Unscrew the filter . . .



5.10b . . . and drain it into the tray



5.11 Smear the seal with clean oil then thread the filter onto the engine

Oil and oil filter change

Special tool: A filter removing tool is necessary for this job.



Warning: Be careful when draining the oil, as the exhaust pipes, the engine, and the oil itself can cause severe burns.

8 Remove the left-hand fairing side panel (see Chapter 7).

9 Drain the engine oil as described above.

10 Now place the drain tray below the oil filter, which is on the front, left-hand side of the engine. Clean the crankcase around the filter, then unscrew the filter using a filter adapter (Suzuki service tool (Pt. No. 09915-40610) or an aftermarket alternative), or a strap or chain type filter removing tool, and tip any residual oil into the drain tray (see illustrations).

11 Smear clean engine oil onto the seal of the new filter, then screw it onto the engine by hand until the seal just seats (see illustration). Using a filter adapter (DO NOT use a strap or chain type removing tool), tighten the filter to the torque setting specified at the beginning of the Chapter if you have the correct tools, or by a further two whole turns.

12 Wipe any oil off the exhaust pipes to prevent smoking when the engine is started and refill the engine with oil as described in Step 6.

6 Idle speed



K6 and K7 models

1 Start the engine and run it up to normal operating temperature.

2 Place the motorcycle on its sidestand, with the engine idling and the transmission in neutral. Check that the engine speed shown by the tachometer is within the range given in the Specifications at the beginning of this Chapter.

3 If adjustment is required, for easiest access to the adjuster remove the left-hand fairing side panel (see Chapter 7), but note that it can be reached without doing so (see illustration). Turn the adjuster until the correct idle speed is shown on the tachometer. Turn

the screw clockwise to increase idle speed, and anti-clockwise to decrease it. **Note:** The fast idle mechanism for cold starting is actuated automatically by the STV servo and should cancel when engine coolant temperature, ambient temperature and lapsed time parameters are reached. If the idle speed cannot be adjusted correctly, check for a possible fault in the coolant temperature sensor or sensor wiring (see Chapter 4, Section 11). Details on adjusting the fast idle speed are given in Chapter 4, Section 16.

4 Snap the throttle open and shut a few times, then recheck the idle speed. If necessary, repeat the adjustment procedure.

5 If a smooth, steady idle can't be achieved, the throttle valves may need synchronising (see Section 14).

K8 and K9 models

6 Idle speed is controlled automatically by the ECU via the idle speed control valve (ISCV) in the throttle bodies. It is not adjustable manually, and can only be reset electronically using the Suzuki diagnosis system (SDS) equipment. If engine idle speed is not within the range given in the Specifications at the beginning of this Chapter refer to Chapter 4 for checks that can be made on the ISCV.

7 Throttle cables



1 Make sure the throttle twistgrip rotates easily from fully closed to fully open with the

front wheel turned at various angles. The twistgrip should return automatically from fully open to fully closed when released.

2 If the throttle sticks, this is probably due to a cable fault. Remove the cables (see Chapter 4) and lubricate them (see Section 13). If the inner cables still do not run smoothly in the outer cables, replace them with new ones.

3 With the cables removed, check that the twistgrip turns smoothly around the handlebar – dirt combined with a lack of lubrication can cause the action to be stiff. Remove, clean and lightly grease the twistgrip pulley and the inside of the twistgrip housing if necessary (see Chapter 5, Section 5). Install the lubricated or new cables, making sure they are correctly routed (see Chapter 4). If this fails to improve the operation of the throttle, the fault could lie in the throttle bodies. Remove the air filter housing and check the action of the throttle pulley (see Chapter 4).

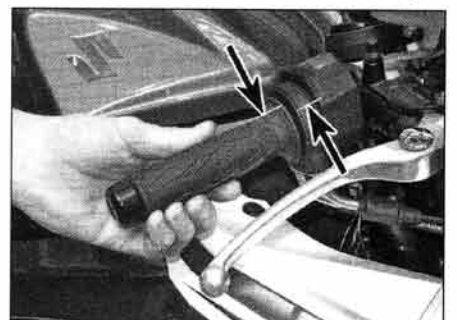
4 With the throttle operating smoothly, check that the amount of freeplay in the cables, measured in terms of twistgrip rotation before the throttle opens, is within the range given in the specifications at the beginning of this Chapter (see illustration). If it is incorrect, adjust the cables as follows.

5 Where fitted, pull the rubber boot off the cable adjuster (see illustration 7.6).

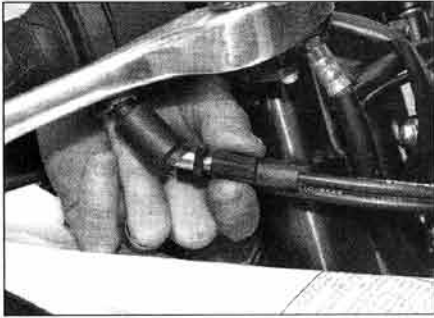
6 Loosen the locknut on the accelerator (throttle opening) cable and turn the adjuster until the specified amount of freeplay is



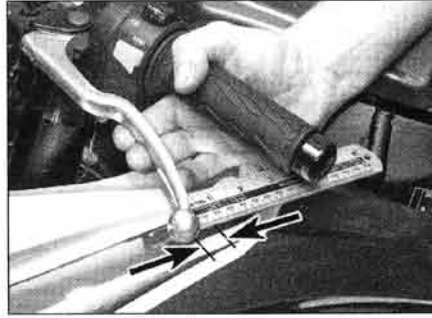
6.3 Idle speed adjuster (arrowed) on K6 and K7 models



6.4 Throttle cable freeplay is measured in terms of twistgrip rotation



8.6 Loosen the locknut and turn the adjuster as required



8.4 Measuring clutch lever freeplay



8.5 Adjusting clutch lever freeplay

obtained, then retighten the locknut (see illustration).

7 If the cables cannot be adjusted as specified, install new ones (see Chapter 4).

Warning: Turn the handlebars all the way through their travel with the engine idling. Idle speed should not change. If it does, the cables may be routed incorrectly. Correct this condition before riding the bike.

8 Check that the throttle twistgrip operates smoothly and snaps shut quickly when released.

8 Clutch



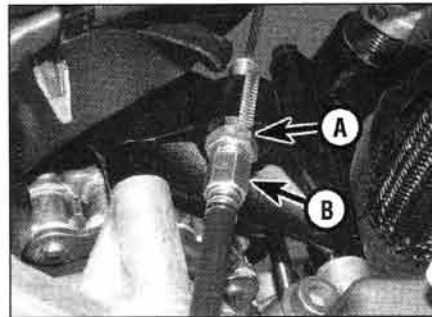
Cable adjustment

1 Check that the clutch lever operates smoothly and easily.

2 If the lever action is heavy or stiff, remove the cable (see Chapter 2) and lubricate it (see Section 13). If the inner cable still does not run smoothly in the outer cable, fit a new cable. Install the lubricated or new cable (see Chapter 2).

3 If the lever itself is stiff, remove the lever from its bracket (see Chapter 5) and check for damage or distortion, or any other cause, and remedy as necessary. Clean and lubricate the pivot bolt and contact areas (see Section 13).

4 Adjustment of the clutch cable is necessary to compensate for stretch in the cable. Check



8.9 Slacken the locknut (A) and turn the adjuster (B) as required



8.10 Unscrew the cover . . .

that the clutch lever freeplay, measured at the end of the lever, is within the range given in the specifications at the beginning of this Chapter (see illustration).

5 If adjustment is required, turn the handlebar lever adjuster in or out until the correct amount of freeplay is obtained (see illustration). The adjuster spring will hold the adjuster in place once adjustment has been made. If the adjuster is nearly all the way out of the lever bracket, follow the release mechanism adjustment procedure given in the following Steps.

Release mechanism adjustment

6 Periodic adjustment of the clutch release mechanism is necessary to compensate for wear of the clutch plates and ensure smooth operation of the clutch and transmission.

7 Turn the cable adjuster at the handlebar lever fully in (see illustration 8.5).

8 Raise the fuel tank (see Chapter 4).

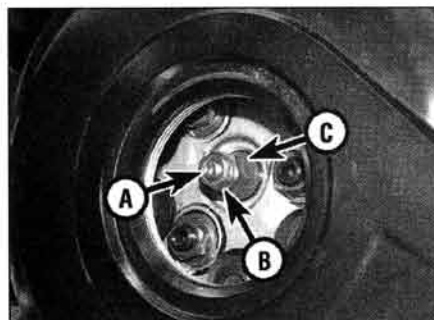
9 Loosen the locknut on the adjuster at the lower end of the cable and turn the adjuster until the specified amount of freeplay is obtained at the clutch lever (see illustration). Tighten the locknut.

10 Unscrew the clutch release mechanism cap from the clutch cover on the right-hand side of the engine (see illustration).

11 Counter-hold the release mechanism adjuster screw and loosen the locknut (see illustrations). Counter-hold the hex on the pushrod piece and turn the adjuster out two or three turns, then turn the adjuster in until resistance can just be felt, and finally turn the adjuster out 1/2 turn. Now hold the adjuster to prevent it turning and tighten the locknut. Again loosen the locknut on the adjuster at the lower end of the cable and turn the adjuster until the specified amount of freeplay is obtained at the clutch lever (see illustration 8.9). Tighten the locknut.

12 Subsequent adjustments can be made using the lever adjuster only (see Step 5). If the specified amount of freeplay cannot be obtained at the clutch lever, fit a new cable.

13 Check the condition of the O-ring on the release mechanism cap and fit a new one if necessary, then thread the cap into the clutch cover and tighten it to the torque setting specified at the beginning of the Chapter (see illustration 8.10).



8.11a . . . to access the adjuster screw (A), locknut (B) and pushrod piece hex (C) . . .



8.11b . . . and adjust as described