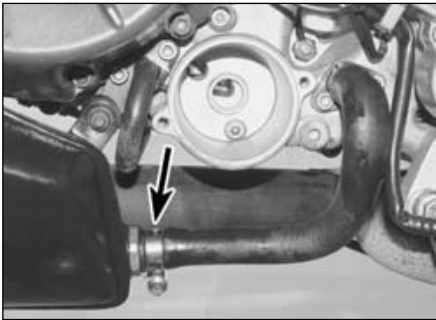


1•10 Every 4500 miles (7500 km)



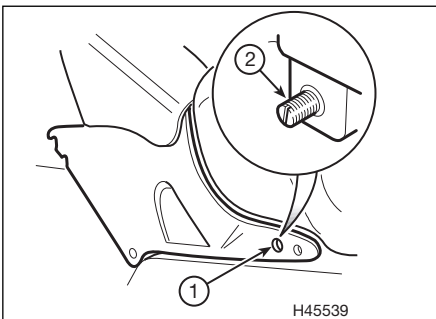
6.9a Release the clamp (arrowed) and detach the hose . . .

9 With every second oil and filter change you should clean the strainer that is located inside the oil tank. Release the clamp securing the oil hose to the strainer union on the rear of the tank (see illustration). Unscrew the strainer and withdraw it from the tank (see illustration). Discard the O-ring. Clean the strainer using a suitable solvent then blow it through with compressed air. Install the strainer using a new O-ring and tighten it to the specified torque setting. Fit the hose, making sure it is in condition (use a new one if there are any signs of cracking or hardening), onto the strainer union and tighten the clamp to secure it.

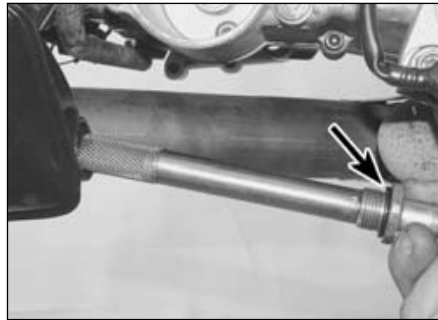
10 Refill the oil tank to the proper level using the recommended type and amount of oil (see *Daily (pre-ride) checks*). Install the filler cap (see illustration 6.3). Start the engine and let it run for two or three minutes (make sure that the oil pressure LED extinguishes after a few seconds). Shut it off, wait a few minutes, then check the oil level (see *Daily (pre-ride) checks*). If necessary, add more oil to bring the level in the pipe almost to the MAX line on the tank. Check around the drain bolts and the oil filter cover for leaks. A leak around the tank drain plug probably means a new washer is needed. A leak around the filter cover probably means a new O-ring is needed.



Saving a little money on the difference between good and cheap oils won't pay off if the engine is damaged as a result.



7.3 Insert a long screwdriver in the hole (1) to access the adjuster screw (2) - early models



6.9b . . . then unscrew, withdraw and clean the strainer - note the O-ring (arrowed)

11 The old oil drained from the engine cannot be re-used and should be disposed of properly. Check with your local refuse disposal company, disposal facility or environmental agency to see whether they will accept the used oil for recycling. Don't pour used oil into drains or onto the ground.



Check the old oil carefully - if it is very metallic coloured, then the engine is experiencing wear from break-in (new engine) or from insufficient lubrication. If there are flakes or chips of metal in the oil, then something is drastically wrong internally and the engine will have to be disassembled for inspection and repair. If there are pieces of fibre-like material in the oil, the clutch is experiencing excessive wear and should be checked.

7 Idle speed check and adjustment



1 The idle speed should be checked and adjusted before and after the throttle bodies are synchronised (balanced), after checking the valve clearances, and when it is obviously too high or too low. Before adjusting the idle speed, make sure the spark plugs are clean and the gaps correct, and the air filter is clean. If a valve clearance check is part of the

service you are performing, do that first (see Section 24). Also, turn the handlebars from side-to-side and check the idle speed does not change as you do. If it does, the throttle cables may not be adjusted or routed 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 sidestand, and make sure the transmission is in neutral.

3 On early models up to frame no. ZD4MEE009YS000292 the idle speed adjuster is a screw on the throttle bodies that can be accessed using a long flat-bladed screwdriver via the rear of two small holes in the right-hand fuel tank trim panel, or alternatively by raising the fuel tank (see Chapter 4) and using a short screwdriver (see illustration).

4 On all other models the idle speed adjuster is a knurled knob located on the right-hand side of the motorcycle between the fuel tank and the main frame beam (see illustration). With the engine idling, adjust the speed by turning the screw or knob until the idle speed listed in this Chapter's Specifications is obtained. Turn the adjuster clockwise to increase idle speed, and anti-clockwise to decrease it.

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

6 If a smooth, steady idle can't be achieved, the throttle bodies may need synchronising (see Section 17), or there could be a problem with the fuel injection system (see Chapter 4). Also check the intake duct rubbers for cracks or a loose clamp that will cause an air leak, resulting in a weak mixture.

8 Throttle and fast idle cable check



Throttle cables

1 Make sure the throttle grip rotates smoothly and freely from fully closed to fully open with the front wheel turned at various angles. The grip should return automatically from fully open to fully closed when released.

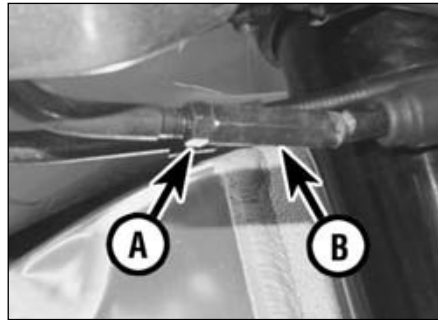
2 If the throttle sticks, this is probably due to a cable fault. Remove the cables (see Chapter 4) and lubricate them (see Section 15). Check that the inner cables slide freely and easily in the outer cables. If not, replace the cables with new ones. With the cables removed, make sure the throttle twistgrip rotates freely on the handlebar. Install the cables, making sure they are correctly routed. If this fails to improve the operation of the throttle, the cables must be replaced with new ones. Note that in very rare cases the fault could lie in the



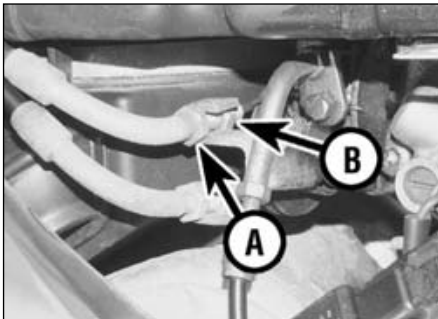
7.4 Idle speed adjuster knob (arrowed) - late models



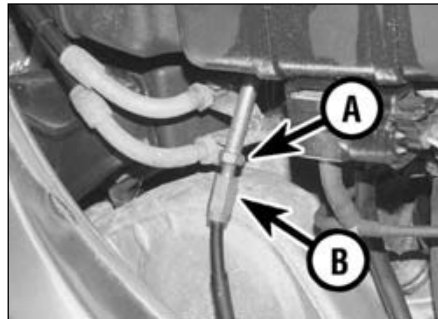
8.3 Twist the throttle and measure the amount of free rotation



8.4 Slacken the adjuster locknut (A) and turn the adjuster (B) as described



8.5 Throttle cable adjuster locknut (A) and adjuster (B)



8.8 Fast idle cable adjuster locknut (A) and adjuster (B)

throttle bodies rather than the cables, necessitating their removal and inspection (see Chapter 4).

3 With the throttle operating smoothly, check for a small amount of freeplay in the cables, measured in terms of the amount of twistgrip rotation before the throttle opens, and compare the amount to that listed in this Chapter's Specifications (**see illustration**). If it's incorrect, adjust the cables to correct it as follows.

4 Pull the rubber boot off the adjuster in the opening cable after it leaves the housing on the handlebar. Loosen the locknut then turn the adjuster until the specified amount of freeplay is obtained (**see this Chapter's Specifications**) (**see illustration**). Retighten the locknut then slide the boot back on.

5 If the adjuster has reached its limit, or if major adjustment is required, reset the adjuster so that the freeplay is at a maximum

(i.e. the adjuster is fully turned in), then raise the fuel tank, and if required for best access remove the air filter housing (see Chapter 4), and adjust the cable at the throttle body end. Slacken the adjuster locknut on the top cable in the bracket and thread it fully up to the cable elbow (**see illustration**). Push the adjuster into the bracket so the captive nut becomes free, then thread it up or down the adjuster as required until the freeplay is as specified – thread it towards the elbow to increase freeplay and away from it reduce it. Locate the adjuster in the bracket so the nut becomes captive then tighten the locknut against the bracket. Any fine alteration can be made at the handlebar end as in Step 4. 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.

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

Fast idle cable

7 If the fast idle lever does not operate smoothly this is probably due to a cable fault, but also check the action at the throttle body end. If necessary remove the cable (see Chapter 4) and lubricate it (see Section 15). Check that the inner cable slides freely and easily in the outer cable. If not, replace the cable with a new one. With the cable removed, make sure the lever is able to move freely. Install the cable, making sure it is correctly routed.

8 With the lever operating smoothly, check for a small amount of freeplay in it before the cable actuates the mechanism, and compare the amount to that listed in this Chapter's Specifications. Adjust it if necessary using the adjuster at the throttle body end of the cable – raise the fuel tank (see Chapter 4) to access it. Slacken the locknut, then turn the adjuster as required until the specified amount of freeplay is evident, then retighten the locknut (**see illustration**).

9 Clutch check

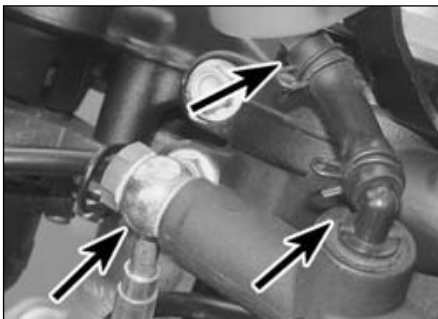


1 All models are fitted with an hydraulic clutch, for which there is no method of adjustment.

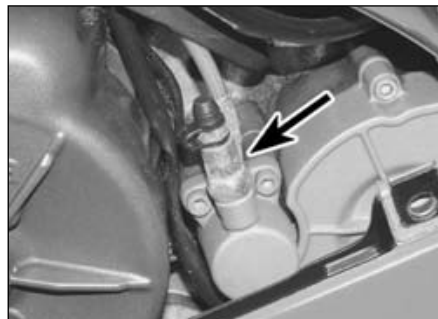
2 Check the fluid level in the reservoir (see *Daily (pre-ride) checks*).

3 Inspect the hydraulic and reservoir hoses and their connections for signs of fluid leakage, cracking, deterioration and wear (**see illustrations**). Also check around the master cylinder pushrod end and the release cylinder body for leaks (**see illustration**). Replace worn or damaged components with new ones (see Chapter 2).

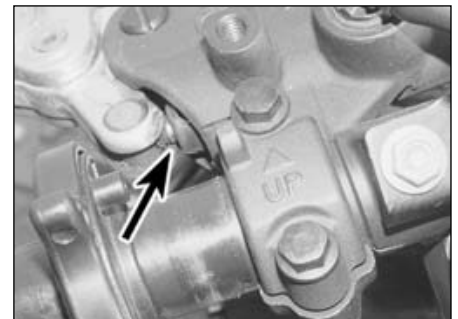
4 Change the clutch fluid every two years (see Section 29), and replace the hose with a new one either if damaged or deteriorated, or



9.3a Check around the master cylinder and reservoir hose unions (arrowed) ...



9.3b ... and the release cylinder hose union (arrowed) for leaks



9.3c A leak around the pushrod end (arrowed) indicates a worn cup and seal