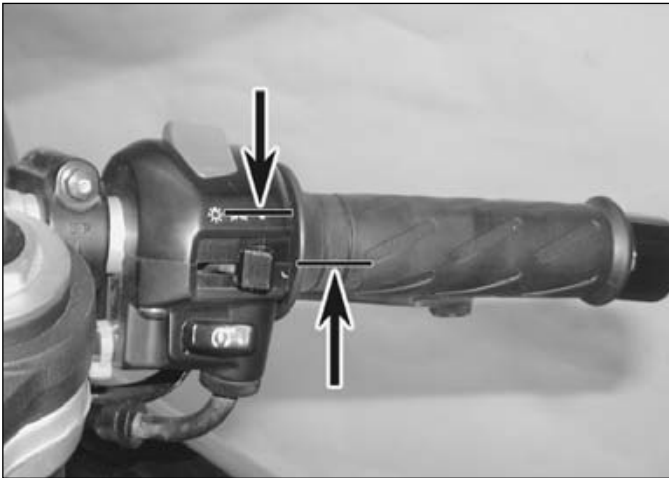
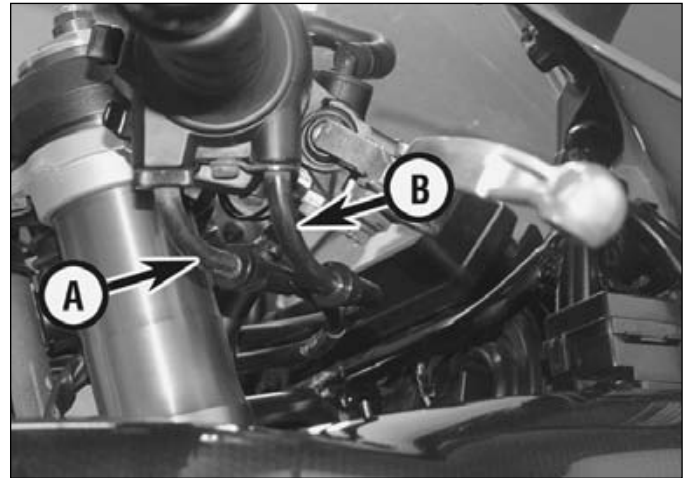


1•10 Every 4000 miles or 12 months



7.4 Throttle cable freeplay is measured in terms of twistgrip rotation



7.5a Decelerator (A) and accelerator (B) throttle cables

decrease it. **Note:** On GSX-R1000K2 models the fast idle mechanism is actuated automatically by the STV servo when the engine is cold and should cancel when engine coolant temperature reaches 40 to 50°C. 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 17).

7 Throttle cables – check and adjustment



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 15). If the inner cables still do not run smoothly in the outer cables, renew the cables.

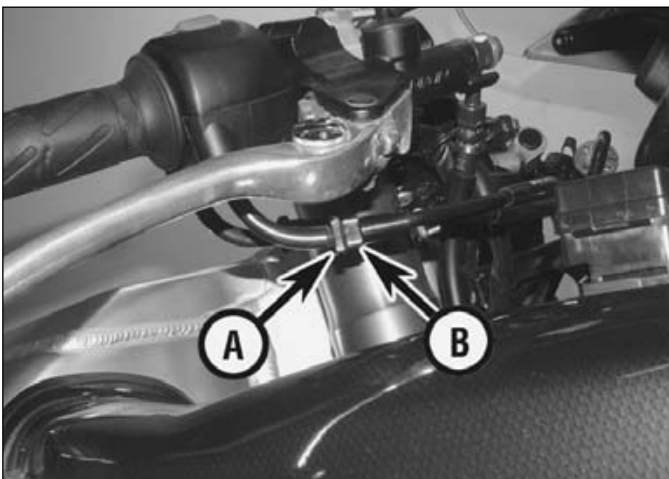
3 With the cables removed, check that the twistgrip turns smoothly around the handlebar– dirt combined with a lack of lubrication can cause the action to be stiff. Clean and lightly grease the twistgrip pulley and the inside of the twistgrip housing. Install the lubricated or new cables, making sure 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 for a small amount of freeplay in the cables, measured in terms of the amount of twistgrip

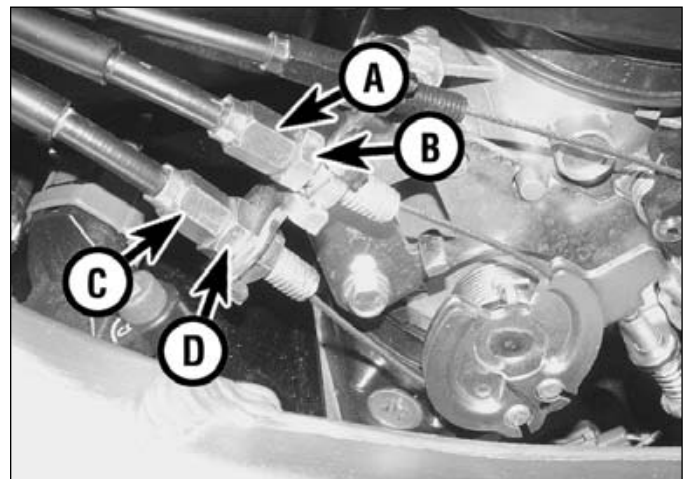
rotation before the throttle opens, and compare the amount to that listed in this Chapter's Specifications (see illustration). If it is incorrect, adjust the cables.

5 Minor adjustment can be made at the twistgrip end of the cables. Loosen the locking on the decelerator (throttle closing) cable adjuster and turn the adjuster fully in (see illustrations). Now loosen the locking on the accelerator (throttle opening) cable and turn the adjuster until the specified amount of freeplay is obtained, then retighten the locking. Hold the twistgrip in the fully closed position and turn the decelerator cable adjuster out until resistance can just be felt in the cable – at this point all the freeplay has been taken up. Tighten the locking.

6 If the adjusters have reached their limit, or if major adjustment is required, raise the fuel tank and adjust the cables at the throttle body end. Loosen the locknut on the decelerator cable adjuster and turn the adjuster until all freeplay has been taken up in the cable (see illustration). Now loosen the locknut on the



7.5b Throttle cable locking (A) and adjuster (B)



7.6a Accelerator cable adjuster (A) and locknut (B). Decelerator cable adjuster (C) and locknut (D)

accelerator cable and turn the adjuster until the specified amount of freeplay is obtained, then retighten the locknut. Hold the twistgrip in the fully closed position and slowly turn the decelerator cable adjuster to obtain 1 mm deflection in the inner cable, then tighten 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 – check and adjustment

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 15). 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).

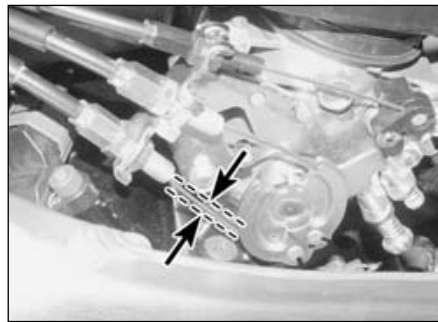
3 If the lever itself is stiff, remove the lever from its bracket (see Chapter 6) and check for damage or distortion, or any other cause, and remedy as necessary. Clean and lubricate the pivot bolt and contact areas (see Section 15).

4 Adjustment of the clutch cable is necessary to compensate for stretch in the cable. Check that the clutch lever freeplay is within the specifications listed 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. The adjuster spring should hold the adjuster in place once adjustment has been made (see illustration).

Release mechanism adjustment

6 Periodic adjustment of the clutch release



7.6b Decelerator cable deflection measurement

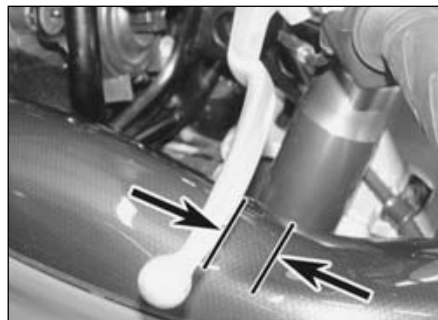
mechanism is necessary to compensate for wear of the clutch plates and ensure smooth operation of the clutch and transmission.

7 Turn the cable adjuster at the handlebar lever fully in (see illustration 8.5). Note: There should be no tension in the clutch cable while the release mechanism is being adjusted. If necessary, turn the adjuster in at the lower end of the cable as well.

8 Remove the left-hand fairing side panel (see Chapter 8) and remove the clutch release mechanism cover from the engine sprocket cover (see illustration).

9 Loosen the release mechanism adjuster locknut and turn the adjuster out two or three turns, then turn the adjuster in until resistance can just be felt (see illustration). Now turn the adjuster out 1/4 turn and hold the adjuster to prevent it turning while the locknut is tightened.

10 Loosen the locknut on the adjuster at the



8.4 Measuring clutch lever freeplay

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. 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.

11 Install the clutch release mechanism cover and the fairing side panel (see Chapter 8).

9 Cooling system – check

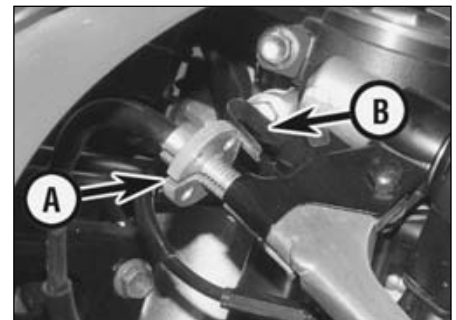


Warning: The engine must be cool before beginning this procedure.

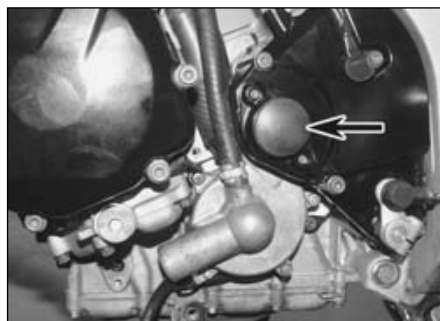
1 Check the coolant level (see Daily (pre-ride) checks).

2 Remove the fairing side panels (see Chapter 8) and check the cooling system for evidence of leaks. Examine each coolant hose along its entire length. Look for cracks, abrasions and other damage. Squeeze each hose at various points. They should feel firm, yet pliable, and return to their original shape when released. If they are cracked or hard, fit new ones (see Chapter 3).

3 Check for evidence of leaks at each cooling system joint and ensure the hose clips are tightened securely. On GSX-R600 and 750 models, check the hoses to the oil cooler at the front of the engine. Check around the bottom of the water pump, which is on the



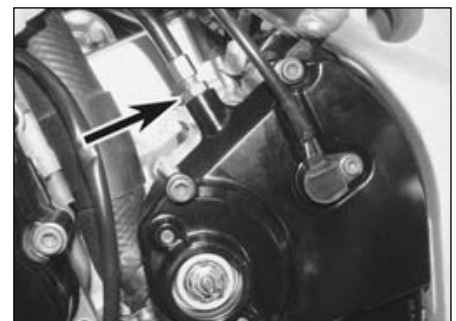
8.5 Clutch handlebar lever adjuster (A) and spring (B)



8.8 Prise off the cover (arrowed) . . .



8.9 . . . then loosen the locknut and turn the adjuster screw as described



8.10 Adjuster on the lower end of the clutch cable