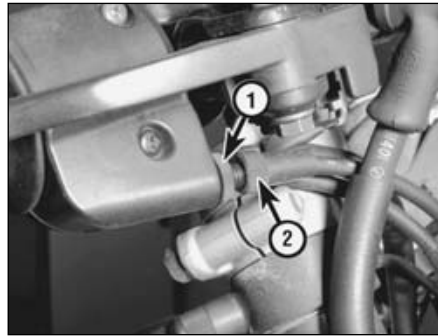
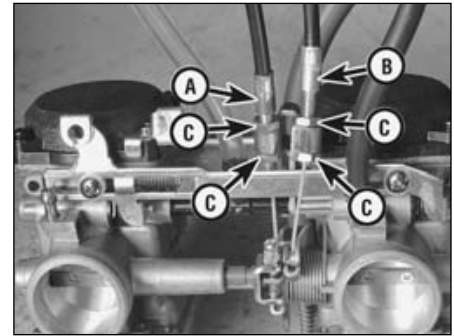




18.2 Measure throttle freeplay at the grip flange



18.3 Loosen the accelerator cable lockwheel (1) and turn the adjuster (2) in or out to obtain the correct throttle freeplay



18.5 Throttle cable connections at carburetors – accelerator cable (A), decelerator cable (B), adjuster nuts (C)

18 Throttle and choke operation/grip freeplay – check and adjustment



Throttle freeplay check

1 With the engine stopped, make sure the throttle grip rotates easily 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. If the throttle sticks, check the throttle cables for cracks or kinks in the housings. Also, make sure the inner cables are clean and well-lubricated.

2 Check for a small amount of freeplay at the grip and compare the freeplay to the value listed in this Chapter's Specifications (**see illustration**).

Throttle cable adjustment

Note: These motorcycles use two throttle cables – an accelerator cable and a decelerator cable.

3 Freeplay adjustments can be made at the throttle end of the cable. Loosen the lockwheel on the cable where it leaves the handlebar (**see illustration**). Turn the adjuster until the desired freeplay is obtained, then retighten the lockwheel.

4 If the cables can't be adjusted at the grip

end, adjust them at the lower ends. To do this, first remove the fuel tank (see Chapter 4).

5 Fully back off the upper adjuster nut towards the cable ferrul on each cable, then screw the lower adjuster nut up the thread (**see illustration**). This will create a large amount of freeplay at the throttle grip.

6 Make sure the throttle grip is in the fully closed position.

7 Working on the decelerator cable first, back off the lower adjuster nut, then thread the upper nut down the thread until the inner cable just becomes tight; tighten both nuts against the bracket.

8 Back off the accelerator cable lower nut and thread the upper nut down the thread until the desired freeplay is obtained at the throttle grip, then tighten both nuts against the bracket.

9 Make sure the throttle linkage lever contacts the throttle stop screw when the throttle grip is in the closed throttle position.



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.

Choke cable check

10 There should be a small amount of freeplay at the choke lever. Observe the

choke plunger end on the carburetors and very slowly operate the choke lever on the handlebar until the choke linkage shaft contacts the plunger (**see illustration**). Using a ruler measure the distance when the choke lever is in this position to its OFF position (**see illustration**). Compare with the value listed in this Chapter's Specifications.

11 If freeplay is incorrect, locate the cable adjuster inside the left-hand side of the fairing on EX models (**see illustration**) or under the fuel tank on ER models (**see illustration**). Loosen the locknut, turn the adjusting nut to set freeplay and tighten the locknut.



18.10a Operate the choke lever until the linkage shaft and plunger touch . . .



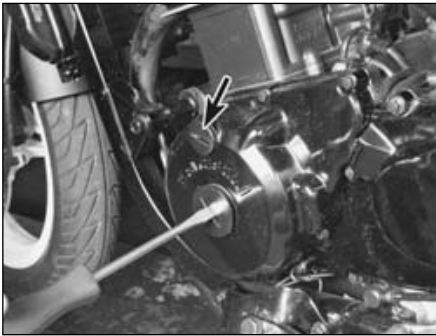
18.10b . . . then measure the amount of lever freeplay



18.11a Choke cable adjuster (arrowed) on EX models (fairing removed for clarity)



18.11b Choke cable adjuster (arrowed) on ER models



19.5 Unscrew the covers from the crankshaft rotation bolt and timing window



19.6a Turn the crankshaft clockwise with a socket . . .



19.6b . . . until the T mark on the rotor aligns with the timing notch . . .

19 Valve clearances – check and adjustment



1 The engine must be completely cool for this maintenance procedure, so let the machine sit overnight before beginning.

2 Disconnect the cable from the negative terminal of the battery (see Section 15).

3 Refer to Chapter 4 and remove the fuel tank.

4 Remove the valve cover (see Chapter 2).

5 Remove the covers from the crankshaft rotation bolt and timing inspection holes (see illustration).

6 Position the no. 1 piston (on the left-hand side of the engine) at Top Dead Centre (TDC) on the compression stroke. Do this by turning the crankshaft clockwise, with a socket placed on the crankshaft bolt, until the T mark on the rotor is aligned with the timing mark on the crankcase (see illustrations). Now, check the position of the no. 1 cylinder cam lobes – they should be pointing upward (see illustration). Piston no. 1 is now at TDC compression.

7 With the engine in this position, all of the valves for cylinder no. 1 can be checked.

8 Start with the no. 1 inlet valve clearance. Insert a feeler gauge of the thickness listed in this Chapter's Specifications between each

valve stem and adjuster screw (see illustration). Pull it out slowly – you should feel a slight drag. If there's no drag, the clearance is too loose. If there's a heavy drag, the clearance is too tight.

9 If the clearance is incorrect, loosen the adjuster screw locknut and turn the adjuster screw in or out, as needed. A small flat-bladed screwdriver and slim open-end spanner can be used to adjust the valves, although access is limited because of the oil lines. Alternatively, an aftermarket valve adjusting tool can be used (see illustration).

10 Hold the adjuster screw with a screwdriver (or the special tool) to keep it from turning and tighten the locknut. Recheck the clearance to make sure it hasn't changed.

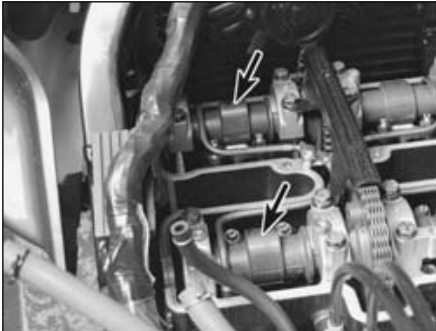
11 Now adjust the no. 1 exhaust valves, following the same procedure you used for the inlet valves. Make sure to use the correct size feeler gauge – the clearance differs for the exhaust valves.

12 Rotate the crankshaft clockwise to align the C mark on the rotor with the timing mark on the crankcase, which will position piston no. 2 at TDC compression (see illustration). The cam lobes for no. 2 cylinder should now point upward (see illustration).

13 Adjust all four valves on cylinder no. 2 as previously described.

14 Install the valve cover and all of the components that had to be removed to get it off.

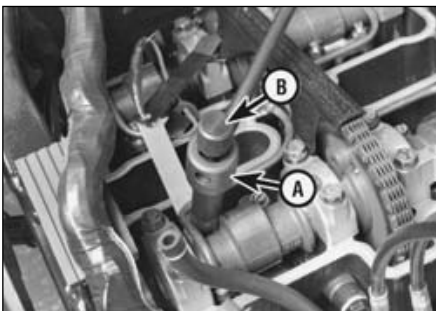
15 Install the fuel tank and reconnect the cable to the negative terminal of the battery.



19.6c . . . and the no. 1 cam lobes point upward



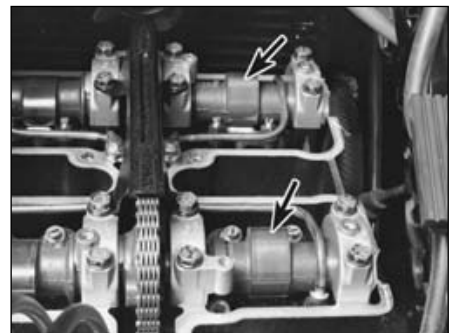
19.8 For the most accurate measurement, use a pair of feeler gauges because each rocker arm operates two valves



19.9 Adjusting the valves with an aftermarket tool - the socket (A) loosens and tightens the locknut while the screwdriver (B) turns the adjusting screw



19.12a Turn the crankshaft until the C mark on the rotor aligns with the timing notch . . .



19.12b . . . and the no. 2 cam lobes point upward