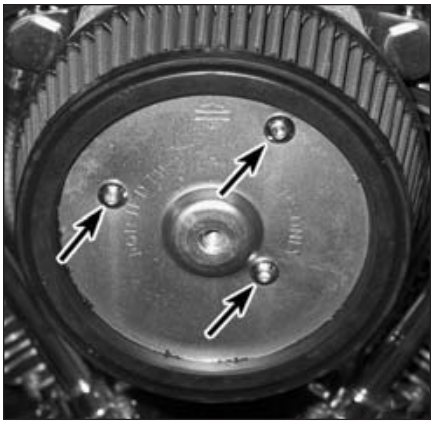
9.1 Remove the center screw and take off the air cleaner cover . . .



9.2 . . . then remove the three screws, the bracket and the filter element

9.3 Wipe the inside of the housing with a clean rag, then place a clean rag in the opening to keep out dirt and foreign objects

be replaced with new ones. Loose spokes can be tightened with a spoke wrench (see illustration), but be careful not to overtighten and distort the wheel rim.

9 Air filter element - servicing

1 Remove the cover screw and lift off the air filter cover and its O-ring **(see illustration)**.

2 Remove the Torx screws and take off the air filter bracket **(see illustration)**. Disconnect the breather tubes from the back of the element, then remove the element and gasket.

3 Wipe out the housing and cover with a clean rag, then place a clean rag in the carburetor or throttle body opening to keep out dirt **(see illustration)**.

4 Wash the element in soap and lukewarm water. Don't tap the element on a hard surface to remove the dirt. Finish cleaning by blowing low-pressure compressed air from the inside of the element to the outside, or else let it air dry.

5 After cleaning, hold the element up to a bright light. The light should pass evenly through the element (any darker areas are still dirty).

6 Check the gasket, cover O-ring and breather tubes for damage or deterioration and replace them as needed. If you're working on a carbureted California model, make sure the door for the evaporative emission control system moves freely.

7 Reinstall the filter by reversing the removal procedure. Make sure the element is seated properly and securely connected to the breather tubes in the filter housing before installing the cover.

10 Throttle operation/grip freeplay - check and adjustment

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.

Adjustment

Note: *These motorcycles use two throttle cables - a throttle (pull) cable and an idle (push) cable*.

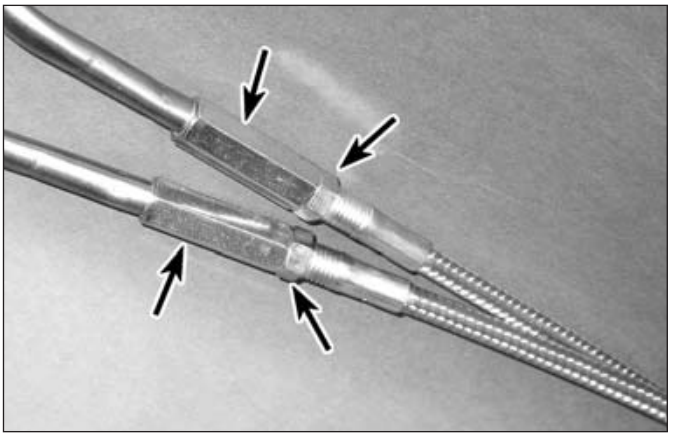
3 Start freeplay adjustments at the throttle end of the cables. Loosen the locknut on each cable where it leaves the handlebar **(see illustrations)**. Turn the adjusters to eliminate all throttle grip play, but leave the locknuts loose for the time being.

4 While holding the throttle wide open, make sure the cam on the throttle pulley just touches its stop. If necessary, turn the adjuster on the throttle cable to change the position of the throttle pulley cam. Once this is done, tighten the throttle cable locknut.

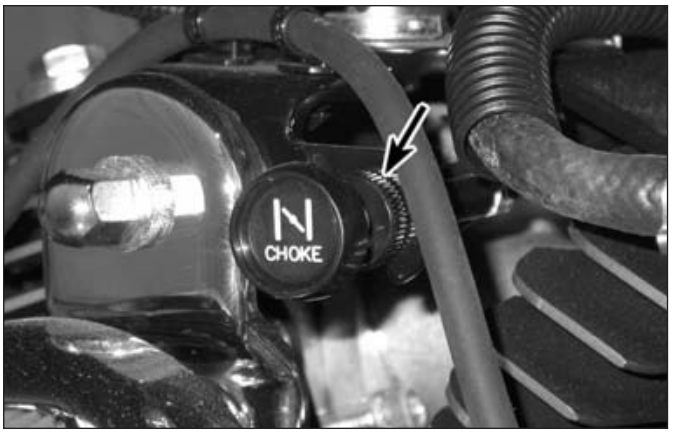
5 Release the throttle grip and turn the handlebars all the way to full right lock.

6 Turn the idle cable adjuster at the handlebar while watching the cable housing at the carburetor or throttle body. The adjustment is correct when the cable housing just

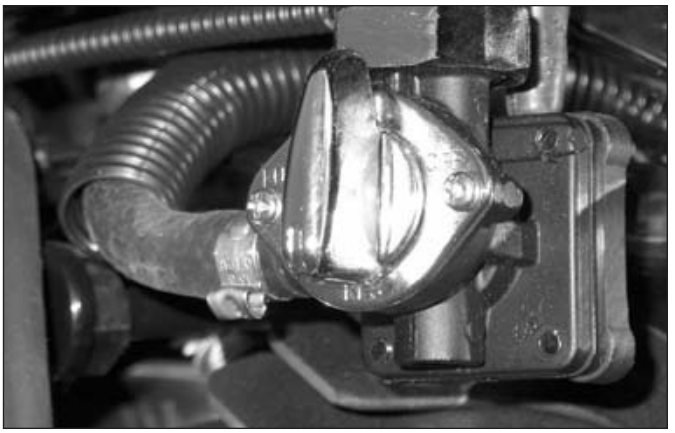
10.3a Pull back the rubber covers from the throttle cable adjusters (arrow) . . .



10.3b . . . loosen the locknuts (right arrows) and turn the adjusters (left arrows)



11.1 Loosen the hex nut behind the bracket, then turn the knurled nut (arrow) to set choke knob tension



12.1 Check the fuel valve (carbureted models) and its line for leaks

touches the spring inside the cable tube on the cable bracket.

7 Make sure the throttle pulley returns to idle 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*.

11 Choke knob (carbureted models) - check

1 Inspect the choke knob and cable **(see illustration)**. The choke should pull out easily and stay out by itself.

2 If the knob doesn't operate correctly, loosen the hex nut behind the mounting bracket. Hold the cable with a wrench on the cable flats and adjust the knob's tension with the plastic knurled nut behind the knob. If this doesn't help, check the plunger bushing for wear or damage and replace as necessary. Don't lubricate the cable.

12 Fuel system - check

Warning 1: *Gasoline is extremely flammable, so take extra precautions when you work on any part of the fuel system. Don't smoke or allow open flames or bare light bulbs near the work area, and don't work in a garage where a natural gas-type appliance (such as a water heater or clothes dryer) is present. If you spill any fuel on your skin, rinse it off immediately with soap and water. When you perform any kind of work on the fuel system, wear safety glasses and have a fire extinguisher suitable for a class B type fire (flammable liquids) on hand*.

Warning 2: *Before disconnecting any fuel lines on fuel injected models, relieve fuel system pressure (see Chapter 3)*.

1 Check the fuel tank, the fuel supply valve (carbureted models only), the lines and the carburetor or fuel rail and injectors for leaks and evidence of damage **(see illustration)**. **Note:** *Injectors may also leak fuel into the engine, which won't be visible from the outside. Refer to Chapter 3 to test the injectors for internal leaks*.

2 If carburetor gaskets are leaking, the carburetor(s) should be disassembled and rebuilt by referring to Chapter 3.

3 If the fuel supply valve is leaking on carbureted models, tightening the screws may help. If leakage persists, the valve should be disassembled and repaired or replaced with a new one.

4 If the fuel lines are cracked or otherwise deteriorated, replace them with new ones.

13 Evaporative emission control system (California models only) - check

1 This system, installed on California models to conform to stringent emission control standards, routes fuel vapors from the fuel system into the engine to be burned, instead of letting them evaporate into the atmosphere. When the engine isn't running, vapors are stored in a carbon canister.

Hoses

2 To begin the inspection of the system, remove the seat and fuel tank (see Chapters 3 and 7 if necessary). Inspect the hoses from the fuel tank, carburetor or throttle body and air cleaner housing (carbureted models) to the canister for cracking, kinks or other signs of deterioration.

Component inspection

3 Label and disconnect the hoses, then remove the canister from the machine (see Chapter 3).

4 Inspect the canister for cracks or other signs of damage. Tip the canister so the nozzles point down. If fuel runs out of the canister, the liquid/vapor separator is probably bad. The fuel inside the canister has probably caused damage, so it would be a good idea to replace it.

14 External oil lines - check

1 Follow the external lines from the oil tank to the engine and check them for leaks.

2 If the bike is equipped with rubber hoses, replace them if they're cracked or deteriorated. Use new hose clamps.

3 If leaks can be seen on a bike equipped with metal lines, disconnect the lines with a hose disconnection tool (see Chapter 2) and check the fitting O-rings. Replace as needed.

15 Fasteners - check

1 Since vibration of the machine tends to loosen fasteners, all nuts, bolts, screws, etc. should be periodically checked for proper tightness.

2 Pay particular attention to the following:

Spark plugs
Oil drain plugs
Oil filter
Gearshift lever
Footpegs and sidestand
Engine mount bolts
Shock absorber mount bolts
Front axle and clamp bolt(s)
Rear axle nut

3 If a torque wrench is available, use it along with the torque specifications at the beginning of this, or other, Chapters.