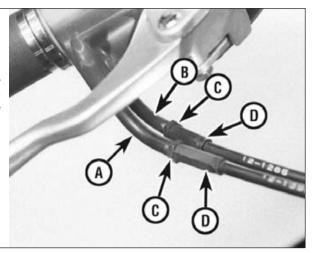
18.4 On EN450/500 models, loosen the accelerator or decelerator cable locknut and turn the adjusting nut to obtain the correct throttle freeplay

- Accelerator cable (toward front of bike)
- Decelerator cable (toward rear of bike)
- C Locknuts
- Adjusting nuts



18 Throttle and choke operation/grip freeplay check and adjustment



# Throttle freeplay check

- 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.
- Check for a small amount of freeplay at the grip and compare the freeplay to the value listed in this Chapter's Specifications.

## Throttle cable adjustment

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

Freeplay adjustments can be made at the throttle end of the cable.

### EN450/500

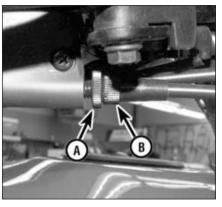
- Loosen the locknuts on both throttle cable adjusters (see illustration). Turn the adjusters all the way in, causing the maximum amount of play at the throttle grip.
- With the throttle grip in the closed position (have an assistant hold it there if necessary), back out the adjuster on the decelerator cable until all of the clearance between the cable bracket and stopper is eliminated. At this point, tighten the locknut on the decelerator cable.
- Back out the adjuster on the accelerator cable to obtain the throttle grip freeplay listed in this Chapter's Specifications, then tighten the locknut.

### EX250

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.

#### All models

If the cables can't be adjusted at the grip



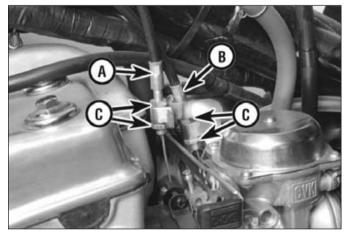
18.7 On EX250 models, loosen the accelerator cable lockwheel and turn the adjuster to obtain the correct throttle freeplay

Lockwheel

B Adjuster

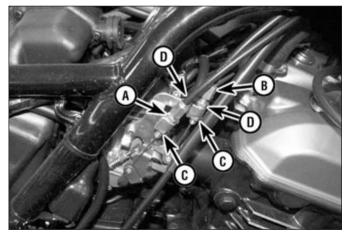
end, adjust them at the lower ends. To do this on an EN450/500, first remove the fuel tank (see Chapter 4). On an EX250, remove the right knee grip pad (see Chapter 7).

- Fully back off the upper adjuster nut towards the cable ferrule on each cable, then screw the lower adjuster nut up the thread (see illustrations). This will create a large amount of freeplay at the throttle grip.
- Make sure the throttle grip is in the fully closed position.
- 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.
- 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.
- Make sure the throttle linkage lever contacts the throttle stop screw when the throttle grip is in the closed throttle position.



18.9a Throttle cable adjusters at the carburetors (EN450/500)

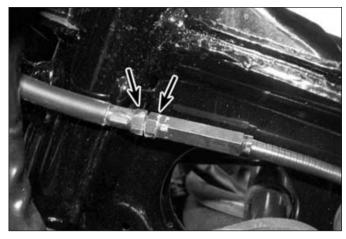
- Accelerator cable adjuster
- Decelerator cable adjuster
- Locknuts



18.9b Throttle cable adjusters at the carburetors (EX250)

- Accelerator cable
- Decelerator cable
- Lower adjusting nuts
- Upper adjusting nuts

18.14 Check freeplay of the choke lever at the handlebar (EN450 and EX250 models)



18.15 Loosen the locknut (left arrow) and turn the adjuster (right arrow) to adjust choke freeplay



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 EN450 and EX250 models

14 There should be a small amount of freeplay at the choke lever (see illustration). 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. Using a ruler, measure the distance when the choke lever is in this position to its OFF position. Compare with the value listed in this Chapter's

15 If freeplay is incorrect, locate the cable adjuster at the handlebar on EN450 models or inside the left-hand side of the fairing on EX250 models (see illustration). Loosen the

locknut, turn the adjusting nut to set freeplay and tighten the locknut.

#### EN500 models

16 Inspect the choke handle and plunger (see illustration). The choke should pull out easily and stay out by itself. If it doesn't, check the plunger bushing for wear and damage and replace as necessary.

## 19 Valve clearances - check and adjustment



- The engine must be completely cool for this maintenance procedure, so let the machine sit overnight before beginning.
- Disconnect the cable from the negative terminal of the battery (see Section 15).
- On all models, refer to Chapter 4 and remove the fuel tank. On California models, remove the EVAP canister, then reinstall the forward canister bolt (the one that supports

the coolant tube). This will prevent the tube from being pulled out of position when the radiator is moved forward. If you're working on an EX250, drain the cooling system (see Section 30). Remove the upper fairing and right ignition coil (see Chapters 8 and 5). If you need to adjust the valves on a 1986 or 1987 EX250, you'll also need to remove the upper engine mounting brackets (together with the ignition coils) (see Chapters 2 and 5).



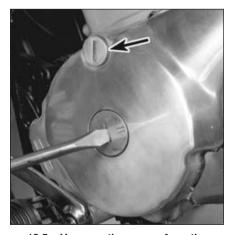
HAYNES To keep from having to remove the radiator and fan on EX250 models, loosen the radiator upper mounting

bolts and remove the lower mounting bolts and position the lower end of the radiator forward with a block of wood. This provides access to the No. 2 left exhaust valve adjuster.

- 4 Remove the valve cover (see Chapter 2).
- Remove the covers from the crankshaft rotation bolt and timing inspection holes (see illustrations).



18.16 On EN500 models, make sure the choke plunger lever moves freely and the bushing (arrow) is in good condition



19.5a Unscrew the covers from the crankshaft rotation bolt and timing window (arrow) - inspect the cover O-rings and replace them if they're worn or damaged . . .



19.5b ... a coin and pliers will prevent damage to the slots if you don't have a screwdriver wide enough