



**19.4** To adjust clutch freeplay at the crankcase, pull back the rubber dust cover (right arrow) to expose the adjuster, then loosen the locknut (left arrow) and turn the adjuster as needed



**20.3** Here are the idle speed screw (right arrow) and choke knob (left arrow)

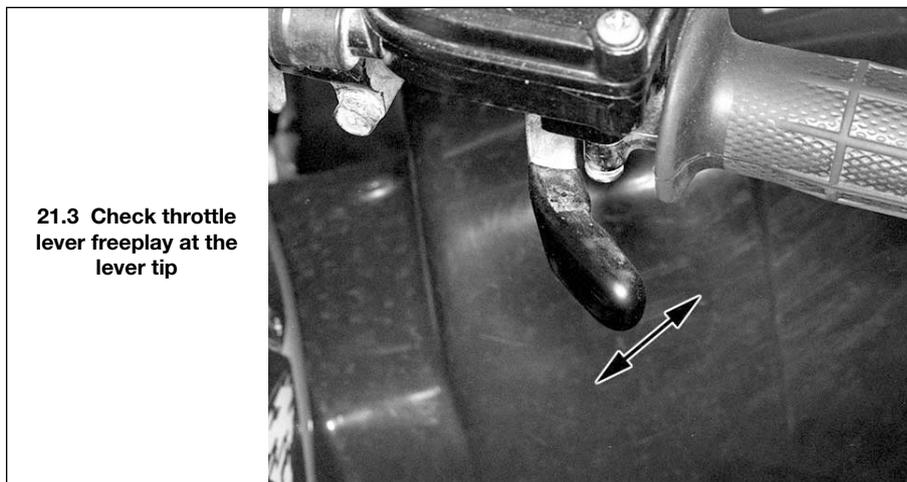
3 If freeplay isn't within the range listed in this Chapter's Specifications, turn the adjuster to set freeplay (see illustration 19.2) and tighten the locknut.

### Adjusting clutch freeplay at the crankcase

4 Pull the cover back from the adjuster (see illustration).

5 Loosen the adjuster locknut, turn the adjuster in or out until clutch freeplay is within the limits listed in this Chapter's Specifications.

6 Tighten the locknut securely and slide the cover back over it.



**21.3** Check throttle lever freeplay at the lever tip

## 20 Idle speed - check and adjustment



### Carbureted models

1 Before adjusting the idle speed, make sure the spark plug gap is correct (see Section 16). Also, turn the handlebars back-and-forth and note whether the idle speed changes. If it does, the throttle cable may be incorrectly routed. Be sure to correct this problem before proceeding.

2 Start the engine and warm it up to its normal operating temperature. Make sure the transmission is in Neutral, then hook up an inductive-type tachometer.

3 Turn the idle speed adjustment screw (see illustration) to bring the idle speed within the range listed in this Chapter's Specifications. Turning the screw in increases the idle speed; backing it out decreases the idle speed.

4 Snap the throttle open and shut a few times, then recheck the idle speed. If neces-

sary, repeat the adjustment procedure.

5 If a smooth, steady idle can't be achieved, the fuel/air mixture may be incorrect. Refer to Section 26 for pilot screw adjustment and Chapter 4 for additional carburetor information.

### Fuel injected models

6 Periodic checking of the idle speed is not required, and adjustment is not possible (it's controlled by the engine control unit).

7 If the idle speed seems to be too high or too low, remove the seat, fuel tank cover and right side cover (see Chapter 8).

8 Start the engine and warm it up to its normal operating temperature. Make sure the transmission is in Neutral, then hook up an inductive-type tachometer.

9 Compare the idle speed to the value listed in this Chapter's Specifications. If it's not within the specified range, refer to Chapter 4 and check the throttle body.

## 21 Throttle cable and speed limiter - check and adjustment



### Throttle cable

1 Before proceeding, check and, if necessary, adjust the idle speed (see Section 20).

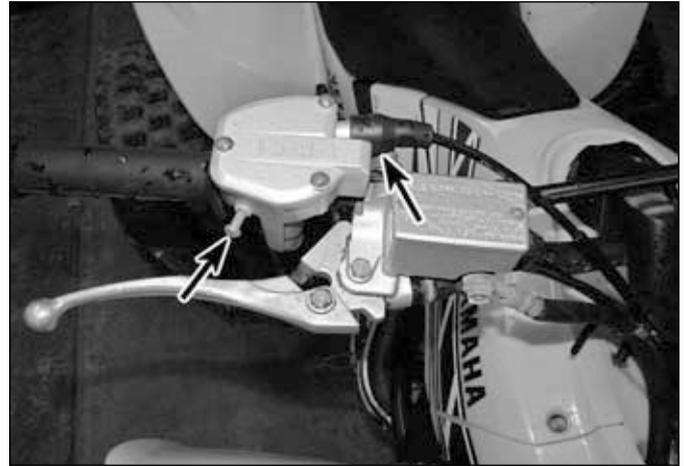
2 Make sure the throttle lever moves easily from fully closed to fully open with the front wheel turned at various angles. The lever should return automatically from fully open to fully closed when released. If the throttle sticks, check the throttle cable for cracks or kinks in the housing. Also, make sure the inner cable is clean and well-lubricated.

3 Measure freeplay at the throttle lever (see illustration). If it's within the range listed in this Chapter's Specifications, no adjustment is necessary. If not, adjust it as follows.

4 Pull the rubber boot to expose the



**21.4** Slide the rubber boot (arrow) off the adjuster, loosen the locknut and turn the adjuster



**21.5** If necessary, pull back the rubber cover (right arrow) to expose the handlebar adjuster; measure limiter screw length from the throttle housing to the underside of the screw head (left arrow)

adjuster at the carburetor end of the throttle cable (**see illustration**). Loosen the adjuster locknut. Turn the adjuster to set freeplay, then tighten the locknut.

5 If freeplay can't be brought within the specified range by adjusting it at the carburetor, pull back the rubber boot from the adjuster at the handlebar end of the throttle cable (**see illustration**). Loosen the adjuster locknut. Turn the adjuster to set freeplay, then tighten the locknut.

6 Reposition the rubber boot(s) over the adjuster(s).

### Speed limiter

7 The speed limiter (**see illustration 21.5**) can be used to restrict maximum throttle opening. Turning the screw in reduces the maximum throttle opening; backing it out increases maximum throttle opening.

8 To change the speed limiter screw setting, loosen the locknut, turn the screw in or out as necessary and tighten the locknut. Screw length is measured from the underside of the screw head to the throttle housing.



**Warning: Do NOT back out the speed limiter screw farther than the maximum setting listed in this Chapter's Specifications;**

**doing so will affect throttle lever operation.**

### 22 Choke (carbureted models) - operation check

1 Operate the choke knob (**see illustration 20.3**) and note whether it operates smoothly.

2 If the choke knob doesn't operate smoothly, inspect the choke system (see Chapter 4).

### 23 Battery - check

1 All models use a sealed, maintenance-free battery. Periodic checking of the electrolyte specific gravity is not possible. Inspect the battery as described in Chapter 5.

2 If the vehicle will be stored for an extended time, fully charge the battery, then remove it. Disconnect the negative cable and remove the battery retainer strap. Disconnect the positive cable and vent tube and lift the battery out.



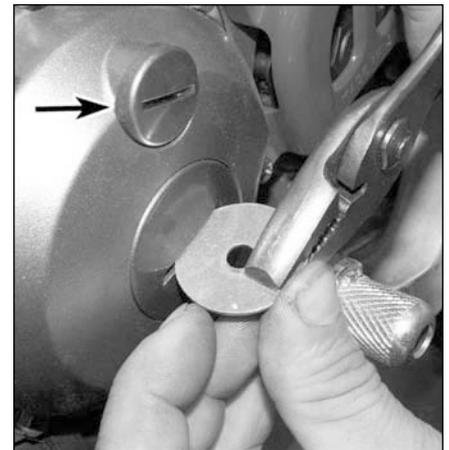
**Warning: Always disconnect the negative cable first and reconnect it last to avoid sparks which could cause a battery explosion.**

3 Store the battery in a cool dark place. Check open circuit voltage (see Chapter 9) at least once a month and recharge the battery if it's low.

### 24 Valve clearance - check and adjustment

#### Check

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



**24.8** On YFZ450 models, use a coin or large washer and a pair of pliers to unscrew the crankshaft bolt cover and the timing hole cover directly above it (arrow). On YFZ450R models, use a 14 mm Allen wrench or a bolt with a 14 mm head turned with vise grips

2 Remove the seat, fuel tank cover and both sides covers (see Chapter 8).

3 If you're working on a YFZ450, remove the ignition coil (see Chapter 5).

4 Remove the fuel tank (see Chapter 4).

5 Disconnect the crankcase breather hose (all models) and oil tank breather hose (YFZ450).

6 Remove the spark plug (see Section 16). This will make it easier to turn the crankshaft.

7 Remove the valve cover (see Chapter 2).

8 Unscrew the crankshaft end plug and timing hole access plug (**see illustration**).