



11.2 Measure throttle freeplay at the lever

## 11 Throttle and choke operation/grip freeplay - check and adjustment

### Throttle check

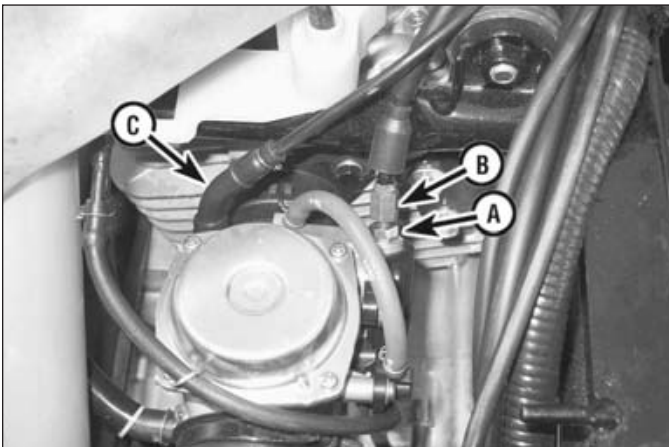
Refer to illustration 11.2

- 1 Make sure the throttle lever moves 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 cable for cracks or kinks in the housings. Also, make sure the inner cable is clean and well-lubricated.
- 2 Check for a small amount of freeplay at the lever and compare the freeplay to the value listed in this Chapter's Specifications (see illustration).

### Throttle adjustment

Refer to illustrations 11.3 and 11.5

- 3 Freeplay adjustments can be made at the throttle lever end of the accelerator cable. Pull back the rubber boot and loosen the lockwheel on the cable (see illustration). Turn the adjuster until the desired freeplay is obtained, then retighten the lockwheel.
- 4 If the freeplay can't be adjusted at the grip end, adjust the cable at the carburetor end. To do this, first remove the seat (see Chapter 7).
- 5 Loosen the locknut on the throttle cable (see illustration). Turn the adjusting nut to set freeplay, then tighten the locknut securely.



11.5 Here are the carburetor throttle cable locknut (A), adjuster (B) and choke cable (C)



11.3 Loosen the lockwheel (right arrow) and turn the adjuster wheel (left arrow) to make fine adjustments in throttle freeplay

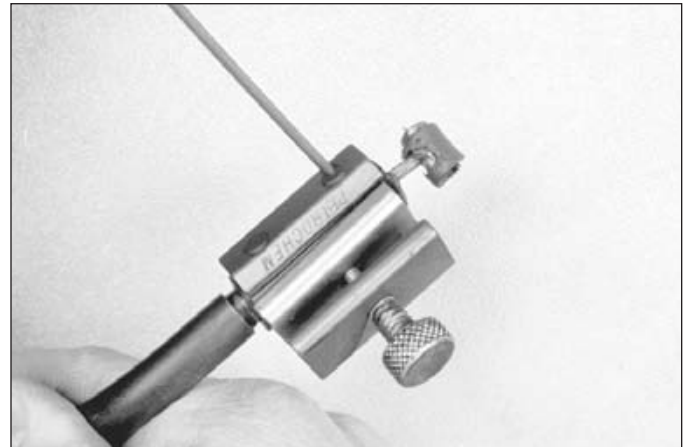
## 12 Choke - operation check

- 1 Operate the choke lever on the left handlebar while you feel for smooth operation. If the lever doesn't move smoothly, refer to Section 13 and lubricate the choke cable.
- 2 Follow the cable from the handlebar to the starting enrichment valve on the carburetor (see illustration 11.5). Check for kinks, bends, loose retainers or other problems and correct them as necessary.

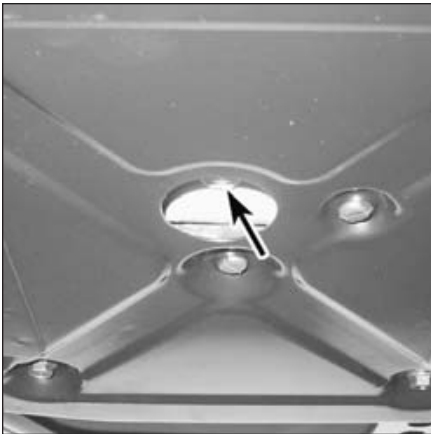
## 13 Lubrication - general

Refer to illustration 13.3

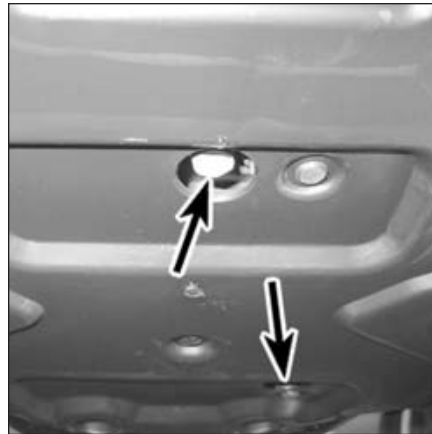
- 1 Since the controls, cables and various other components of a vehicle are exposed to the elements, they should be lubricated periodically to ensure safe and trouble-free operation.
- 2 The throttle and brake levers, brake pedal, kickstarter pivot should be lubricated frequently. In order for the lubricant to be applied where it will do the most good, the component should be disassembled. However, if chain and cable lubricant is being used, it can be applied to the pivot joint gaps and will usually work its way into the areas where friction occurs. If motor oil or light grease is being used, apply it sparingly as it may attract dirt (which could cause the controls to bind or wear at an accelerated rate). **Note:** One of the best lubricants for the control lever pivots is a dry-film lubricant (available from many sources by different names).
- 3 The throttle, choke, brake and reverse cables should be removed



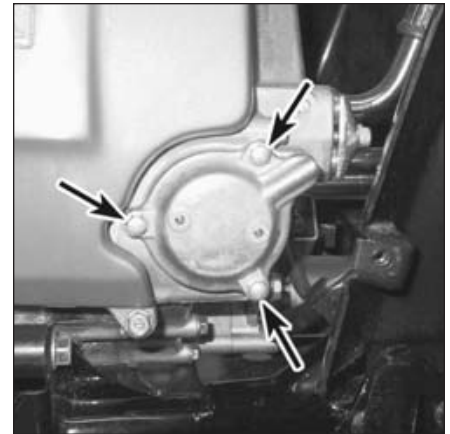
13.3 Lubricating a cable with a pressure lube adapter (make sure the tool seats around the inner cable)



14.5a The 400/450 oil drain plug is on the underside of the crankcase (arrow)



14.5b 500 models have two engine oil drain plugs (arrows)



14.6a On 400/450 models, remove the filter cover bolts (arrows) . . .



14.6b . . . pull off the cover and note the O-ring locations (arrows) . . .



14.6c . . . remove the filter and spring and wipe the remaining oil out of the filter housing; be sure the filter element's OUT SIDE mark faces outward on installation

and treated with a commercially available cable lubricant which is specially formulated for use on vehicle control cables. Small adapters for pressure lubricating the cables with spray can lubricants are available and ensure that the cable is lubricated along its entire length (**see illustration**). When attaching the cable to the lever, be sure to lubricate the barrel-shaped fitting at the end with multi-purpose grease.

4 To lubricate the cables, disconnect them at the lower end, then lubricate the cable with a pressure lube adapter (**see illustration 13.3**). See Chapter 2A (reverse selector cable), Chapter 3 (throttle and choke cables) or Chapter 6 (brake cables).

5 Refer to Chapter 5 for the following lubrication procedures:

- a) Swingarm bearing and dust seals
- b) Front driveaxle splines
- c) Rear driveshaft pinion joint
- d) Rear axle shaft splines

6 Refer to Chapter 6 for the following lubrication procedures:

- a) Brake pedal pivot and seals
- b) Front brake drum waterproof seals
- c) Rear brake drum cover seal

## 14 Engine oil/filter and differential oil - change

### Engine oil/filter

Refer to illustrations 14.5a, 14.5b, 14.6a, 14.6b, 14.6c, 14.7a and 14.7b

1 Consistent routine oil and filter changes are the single most impor-

tant maintenance procedure you can perform on a vehicle. The oil not only lubricates the internal parts of the engine, transmission and clutch, but it also acts as a coolant, a cleaner, a sealant, and a protectant. Because of these demands, the oil takes a terrific amount of abuse and should be replaced often with new oil of the recommended grade and type. Saving a little money on the difference in cost between a good oil and a cheap oil won't pay off if the engine is damaged. Honda recommends against using the following:

- a) Oils with graphite or molybdenum additives
- b) Non-detergent oils
- c) Castor or vegetable based oils
- d) Oil additives.

2 Before changing the oil and filter, warm up the engine so the oil will drain easily. Be careful when draining the oil, as the exhaust pipe, the engine and the oil itself can cause severe burns.

3 Park the vehicle over a clean drain pan.

4 Remove the dipstick/oil filler cap to vent the crankcase and act as a reminder that there is no oil in the engine.

5 Next, remove the drain plug(s) from the engine (**see illustrations**) and allow the oil to drain into the pan. Do not lose the sealing washer on the drain plug(s).

### 400 and 450 models

6 As the oil is draining, remove the oil filter cover bolts (**see illustration**). Remove the cover, filter element and spring (**see illustrations**). If additional maintenance is planned for this time period, check or service another component while the oil is allowed to drain completely. Wipe any remaining oil out of the filter housing area of the crankcase.