

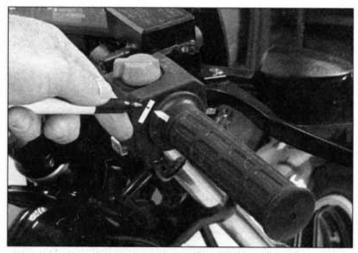
7.4 Measuring tire air pressure

realization that your safety depends to a great extent on their condition.

- 2 Check the tires carefully for cuts, tears, embedded nails or other sharp objects and excessive wear. Operation of the motorcycle with excessively worn tires is extremely hazardous, as traction and handling are directly affected. Measure the tread depth at the center of the tire and replace worn tires with new ones when the tread depth is less than specified (see illustration).
- 3 Repair or replace punctured tires as soon as damage is noted. Do not try to patch a torn tire, as wheel balance and tire reliability may be impaired.
- 4 Check the tire pressures when the tires are **cold** and keep them properly inflated **(see illustration)**. Proper air pressure will increase tire life and provide maximum stability and ride comfort. Keep in mind that low tire pressures may cause the tire to slip on the rim or come off, while high tire pressures will cause abnormal tread wear and unsafe handling.
- 5 The cast wheels used on this machine are virtually maintenance free, but they should be kept clean and checked periodically for cracks and other damage. Never attempt to repair damaged cast wheels; they must be replaced with new ones.
- 6 Check the valve rubber for signs of damage or deterioration and have it replaced if necessary. Also, make sure the valve stem cap is in place and tight. If it is missing, install a new one made of metal or hard plastic.



8.3b ... then measure the distance the throttle grip can be rotated before a slight resistance is felt



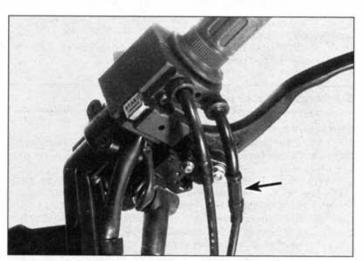
8.3a With the throttle at rest, mark the relationship of the grip to the right switch assembly . . .

8 Throttle and choke operation/grip freeplay - check and adjustment

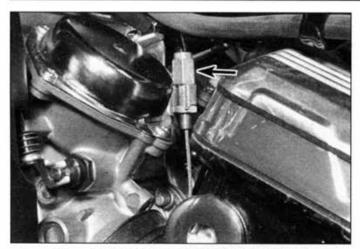
Throttle cables

Refer to illustrations 8.3a, 8.3b, 8.4 and 8.5

- 1 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.
- 2 If the throttle sticks, this is probably due to a cable fault. Remove the cables as described in Chapter 4 and lubricate them as described in Section 15. Install each cable, routing them so they take the smoothest route possible. If this fails to improve the operation of the throttle, the cables must be replaced. Note that in very rare cases the fault could lie in the carburetors rather than the cables, necessitating the removal of the carburetors and inspection of the throttle linkage (see Chapter 4).
- 3 With the throttle operating smoothly, check for a small amount of freeplay at the grip. The amount of freeplay in the throttle cables, measured in terms of twistgrip rotation, should be as given in this Chapter's Specifications (see illustrations). If adjustment is necessary, adjust idle speed first (see Section 17).
- 4 Loosen the locknut on the cable upper adjuster and rotate the adjuster until the correct amount of freeplay is obtained, then tighten



8.4 Throttle cable upper adjuster (arrow) . . .



8.5 ... and lower adjuster on carburetors (arrow)

the locknut (see illustration). If it is not possible to obtain the correct freeplay with the upper adjuster, it will also be necessary to make adjustment at the lower adjuster, situated on the carburetors.

- To gain access to the lower adjuster remove the fuel tank or trig it up on early Magnas (see Chapter 4) (see illustration). Screw the upper cable adjuster in to obtain the maximum possible freeplay, then loosen the lower adjuster locknut and set the cable freeplay using first the lower adjuster and then, if necessary, the upper adjuster. Once the freeplay is correct tighten the locknuts securely.
- 6 Check that the throttle twistgrip operates smoothly and snaps shut quickly when released. 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 (see Chapter 4).

Choke cable

- 7 Proper choke operation will ensure fast starts and quick engine warm up. Initially, move the choke lever up and down making sure it moves smoothly.
- 8 If there is any binding or drag in the lever's operation, the cable should be checked for kinks or damage to the cable casing and then removed (see Chapter 4) and lubricated as described in Section 15.
- 9 If cable lubrication fails to improve the operation of the choke, the cable must be replaced. Note that in very rare cases the fault could lie in the carburetors rather than the cable, necessitating the removal of the carburetors and inspection of the choke plungers as described in Chapter 4.
- 10 With the choke mechanism operating smoothly, check the choke cable freeplay as described in Chapter 4.
- 11 Once the choke mechanism is correctly adjusted, install the air filter housing and fuel tank as described in Chapter 4.

9 Clutch - checks and bleeding

Refer to illustration 9.4

- 1 Check the clutch lever for loose connections, excessive play, bends, and other damage. Replace any damaged parts with new ones (see Chapter 2).
- 2 On 1985 1100 Sabres and 1985/86 1100 Magna models, measure the freeplay at the ball end of the clutch lever. Assuming that there is no air in the hydraulic system, resulting in a spongy feel to the lever (see below), the lever should move 20 to 30 mm before the clutch disengages. If outside of this measurement, adjust using the knurled ring at the lever pivot, noting that the index mark on the ring must align with the arrow stamped in the top of the lever. Start the engine and check that the clutch disengages and engages smoothly, without slip or drag.



9.4 When bleeding the clutch connect tube to bleed valve as shown

- 3 Check that the fluid level in the reservoir is correct (see Section 3). Look for leaks at the hose connections and check for cracks in the hoses.
- 4 If the lever is spongy, bleed the clutch line of air. The bleeding operation is exactly the same as described for bleeding the brakes in Chapter 7, Section 11. Remove the slave cylinder bleed valve cap, and connect the bleed tube to the valve (see illustration).

10 Engine oil/filter - change

Refer to illustrations 10.4a and 10.4b

- 1 Consistent routine oil and filter changes are the single most important maintenance procedure you can perform on a motorcycle. 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.
- 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 pipes, the engine, and the oil itself can cause severe burns.
- 3 Put the motorcycle on the main stand (where fitted) and position a clean drain pan below the engine. Unscrew the oil filler cap to vent the crankcase and act as a reminder that there is no oil in the engine.
- 4 Next, remove the drain plug from the oil pan, as well as the drain plug from the front cylinder head and allow the oil to drain into the pan (on 1987 and 1988 700/750 Magnas hold the motorcycle upright to ensure that the oil drains fully) (see illustrations). Discard the sealing washers on the drain plugs; they should be replaced whenever the plugs are removed.
- 5 On certain California models, the emission control system canister will prevent access to the oil filter. Disconnect its hoses and remove it from the frame (see Chapter 4). On 1987 and 1988 700/750 Magna models access to the filter is improved is the belly fairing is removed (see Chapter 6). Make sure the drain pan is under the filter, then loosen the oil filter using a strap wrench or the Honda service tool. Warning: Take great care not to burn your hands on the exhaust system. Unscrew the filter from the engine unit and empty its contents into the drain pan. If additional maintenance is planned for this time period, check or service another component while the oil is allowed to drain completely.
- 6 Clean the filter thread and housing on the crankcase with solvent or clean shop towels. Wipe any remaining oil off the filter sealing area of the crankcase.
- 7 Slip a new sealing washer over the drain plugs. Fit them to the oil