

1•10 Routine maintenance and Servicing

the dipstick and filler cap, using new O-rings if the old ones are damaged, deformed or deteriorated (see illustration 3.3). Start the engine and let it run for two or three minutes. Stop the engine, wait a few minutes, then check the oil level (see *Pre-ride checks*). If necessary, add more oil to bring the level up to the correct level on the dipstick. Check that there are no leaks around the filter and drain plug. If the filter is leaking tighten it some more. If the drain plug is leaking make sure it is tightened to the correct torque, and if it is you will need to drain the oil again and replace the sealing washer with a new one.

9 Refer to Chapter 2, Section 6, and check the oil cooler and its hoses for damage and leaks. Replace any components as necessary with new ones.

10 The old oil drained from the engine cannot be re-used and should be disposed of properly. Check with your local refuse disposal company, disposal facility or environmental agency to see whether they will accept the used oil for recycling. Don't pour used oil into drains or onto the ground. Remember to drain all the old oil from the filter (you can punch a hole in the filter to ensure it drains fully) into the drain pan. Note that the old filter should be taken to the oil disposal facility rather than disposed of with the household rubbish.

HAYNES
HINT

Check the old oil carefully – if it is very metallic coloured, then the engine is experiencing wear from break-in (new engine) or from insufficient lubrication. If there are flakes or chips of metal in the oil, then something is drastically wrong internally and the engine will have to be disassembled for inspection and repair. If there are pieces of fibre-like material in the oil, the clutch is experiencing excessive wear and should be checked.



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4 Engine management system check

Note: The idle speed is controlled by the idle air control valve, which in turn is controlled by the electronic control module (ECM). Idle speed cannot be manually adjusted – it can only be done using the diagnostic tool.

1 The engine management system should be checked for any stored diagnostic fault codes. To do this, the Triumph diagnostic tool is essential. Take your machine to a dealer and have them check the system – it should not take them long. Note that this task is not an option for the DIY mechanic, not only because the diagnostic tool would be prohibitively expensive, but because an authorisation code is required to operate it and these are only available to Triumph dealers.

2 If any problems with the system occur during use, the malfunction indicator light (MIL) in the instrument cluster will illuminate. If this happens, the management system switches itself into 'limp home' mode, so that in theory you should not be left stranded. Depending on the problem, it is possible that you will notice no difference in the running of the motorcycle. In order to diagnose the fault and to turn the MIL off, the diagnostic tool is essential, so again the machine must be taken to a Triumph dealer.

Note: It is antisocial and illegal to dump oil down the drain. To find the location of your nearest oil recycling bank in the UK, call this number free. In the USA, note that any oil supplier must accept used oil for recycling.

3 Further information on the system, including all tests and checks that can be performed without the Triumph diagnostic tool, is contained in Chapter 4.

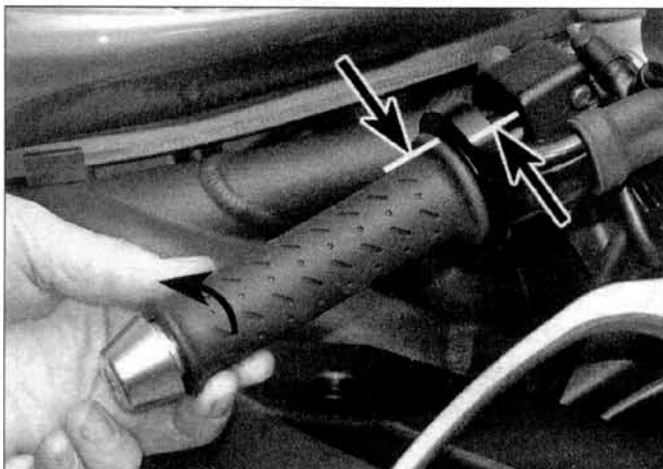
5 Throttle cable check

1 Make sure the throttle twistgrip rotates easily from fully closed to fully open with the front wheel turned at various angles. The twistgrip should return automatically from fully open to fully closed when released.

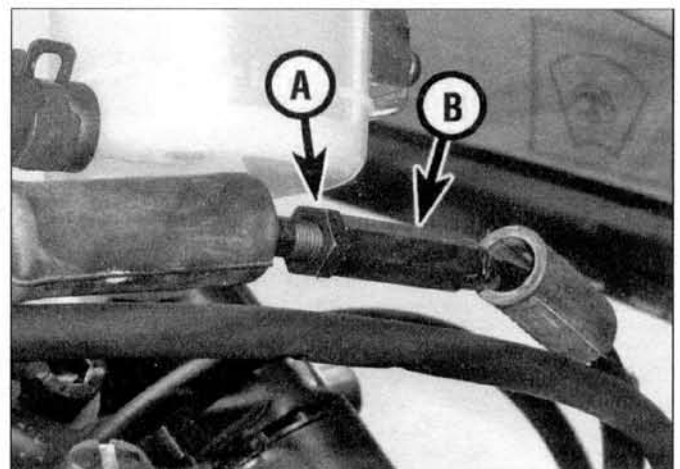
2 If the throttle sticks, this is probably due to a cable fault. Remove the cable (see Chapter 4) and lubricate it (see Section 22). If the inner cable still does not run smoothly in the outer cable, fit a new cable. With the cable removed, check that the twistgrip runs smoothly and freely around the handlebar – dirt and debris combined with a lack of lubrication can cause the action to be stiff. Install the lubricated or new cable, making sure it is correctly routed (see Chapter 4). If this fails to improve the operation of the throttle, the fault could lie in the throttle bodies. Remove the airbox and check the action of the throttle linkage and butterflies (see Chapter 4).

3 With the throttle operating smoothly, check for a small amount of freeplay in the opening cable. This is measured in terms of the amount of twistgrip rotation before the throttle opens (see illustration). Compare the amount to that listed in this Chapter's Specifications. If it's incorrect, adjust the cables as follows.

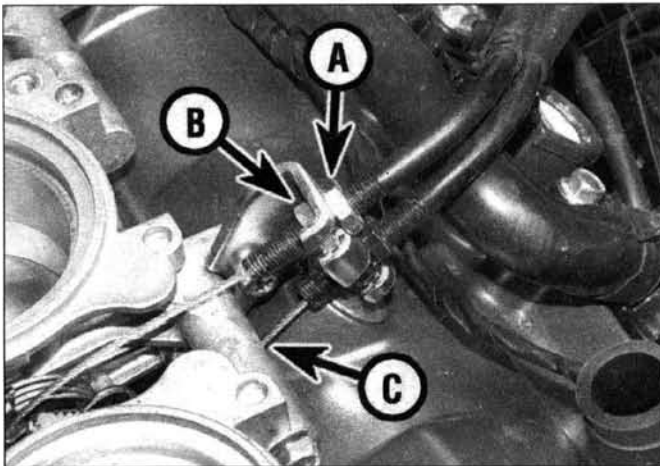
4 An adjuster is incorporated at the twistgrip end of the opening cable – slide the rubber boots back to expose it (see illustration). Slacken the locknut on the adjuster, then turn the adjuster until the specified amount of freeplay is obtained (see this Chapter's Specifications), then retighten the locknut.



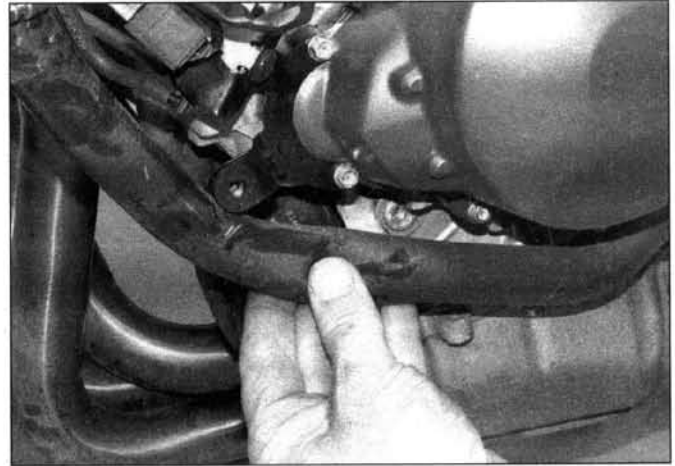
5.3 Check for the specified amount of free rotation in the twistgrip



5.4 Pull back the rubber boots to expose the opening throttle cable adjuster locknut (A) and adjuster (B)



5.7 Throttle opening cable locknut (A) and adjuster nut (B). Throttle closing cable deflection measurement point (C)



6.3 Squeeze the hoses to check for cracks, deterioration and hardening

Turn the adjuster in to increase freeplay and out to reduce it.

5 If the opening cable adjuster has reached its limit of adjustment, reset it so that it is halfway along its adjustment limit, then adjust both cables at the throttle body end as follows.

6 Remove the fuel tank and the airbox (see Chapter 4).

7 Fully slacken the locknut holding the opening (upper) cable in the bracket to free the adjuster nut from its holding tabs (see illustration). Thread the adjuster nut up the cable to increase freeplay, and down to decrease it, then draw it up against the bracket and check the freeplay, readjusting as required until the specified amount of freeplay is obtained. Tighten the locknut onto the bracket on completion. With the throttle fully closed, check that there is the specified amount of freeplay (measured as total deflection of the cable inner wire) in the closing (lower) cable and adjust it at the bracket in the same way.

8 Further adjustments can now be made at the twistgrip end. If the cables cannot be adjusted as specified, replace them with new ones (see Chapter 4).

9 Check that the throttle twistgrip operates smoothly and snaps shut quickly when released. Install the airbox and fuel tank (see Chapter 4).



Warning: Turn the handlebars all the way through their travel with the engine idling. Idle speed should not change. If it does, the cable may be routed incorrectly. Correct this condition before riding the bike.

6 Cooling system checks



Warning: The engine must be cool before beginning this procedure.

1 Check the coolant level in the reservoir (see *Pre-ride checks*).

2 On Daytona models remove both fairing side panels (see Chapter 7).

3 Check the entire cooling system for evidence of leaks. Examine each rubber coolant hose along its entire length. Look for cracks, abrasions and other damage. Squeeze each hose at various points (see illustration). They should feel firm, yet pliable, and return to their original shape when released. If they are dried out or hard, replace them with new ones.

4 Check for evidence of leaks at each cooling system joint. If necessary, tighten the hose clips carefully to prevent future leaks.

5 To prevent leakage of water from the cooling system to the lubrication system and vice versa, two seals are fitted on the water pump shaft. There is a drain hole between the seals in the seal housing section of the pump. If either seal fails, the drain allows the coolant or oil to escape via a tube through a hole in the bottom of the sump and prevents them mixing (see illustration). The seal on the water pump side is of the mechanical type which bears on the rear face of the impeller. The second seal, which is mounted behind the mechanical seal is of the normal

feathered lip type. If on inspection the drain hole shows signs of coolant leakage, remove the pump and replace it with a new one (see Chapter 3) – the seals are not available separately.

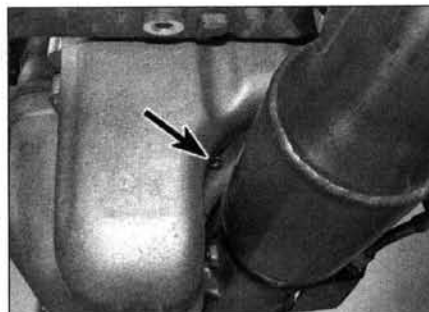
6 Check the radiator for leaks and other damage (see illustration). Leaks in the radiator leave tell-tale scale deposits or coolant stains on the outside of the core below the leak. If leaks are noted, remove the radiator (see Chapter 3) and either have it repaired by a professional or replace it with a new one.

Caution: Do not use a liquid leak stopping compound to try to repair leaks.

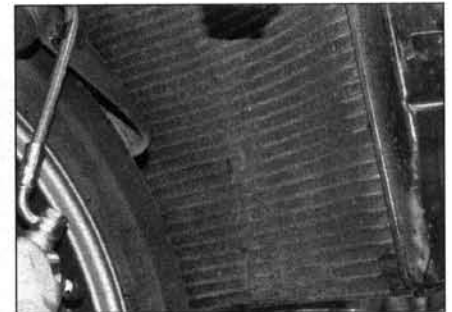
7 Check the radiator fins for mud, dirt and insects, which may impede the flow of air through the radiator. If the fins are dirty, remove the radiator (see Chapter 3) and clean it using water or low pressure compressed air directed through the fins from the rear face of the radiator. If the fins are bent or distorted, straighten them carefully with a screwdriver. If airflow is restricted by bent or damaged fins over more than 30% of the radiator's surface area, fit a new radiator.

8 On Street Triple models displace the left-hand radiator cowl (see Chapter 7).

9 Remove the pressure cap from the filler neck



6.5 Check the drainage tube (arrowed) in the sump for signs of leakage



6.6 Check the radiator joints and fins for damage and leakage