

1.4 Maintenance schedule

The maintenance schedule for these vehicles, based on the manufacturer's recommendations, is as described below - note that the schedule starts from the vehicle's date of registration. These are the minimum maintenance intervals recommended by the factory for Fiestas driven daily, but subjected only to "normal" use. If you wish to keep your vehicle in peak condition at all times, you may wish to perform some of these procedures even more often. Because frequent maintenance enhances the efficiency, performance and resale value of your vehicle, we encourage you to do so. If your usage is not "normal", shorter intervals

are also recommended - the most important examples of these are noted in the schedule. These shorter intervals apply particularly if you drive in dusty areas, tow a caravan or trailer, sit with the engine idling or drive at low speeds for extended periods (ie, in heavy traffic), or drive for short distances (less than four miles) in below-freezing temperatures.

When your vehicle is new, it should be serviced by a Ford dealer service department to protect the factory warranty. In many cases, the initial maintenance check is done at no cost to the owner. Note that this first free service (carried out by the selling dealer

1500 miles or 3 months after delivery), although an important check for a new vehicle, is not part of the regular maintenance schedule, and is therefore not mentioned here.

It should be noted that for the 1992 model year, for all models except RS Turbo, the service time/mileage intervals were extended by the manufacturer to the periods shown in this schedule. Although these intervals can be applied retrospectively, owners of earlier vehicles may notice a discrepancy between this schedule and the one shown in the Service Guide supplied with the vehicle.

Every 250 miles (400 km) or weekly

- Refer to "Weekly Checks".

Every 5000 miles (8000 km) or 6 months, whichever occurs first

Note: Frequent oil and filter changes are good for the engine. We recommend changing the oil at the mileage specified here, or at least twice a year if the mileage covered is less.

- Renew the engine oil and filter (Section 3).

Every 10 000 miles (16 000 km) or 12 months, whichever occurs first

Carry out all operations listed above, plus the following:

- Check the auxiliary drivebelt (Section 4).
- Check under the bonnet for fluid leaks and hose condition (Section 5).
- Check the condition of all engine compartment wiring (Section 6).
- Check the valve clearance adjustment - HCS engines only (Section 7).
- Check the manual transmission oil level (Section 8).
- Check the engine idle speed and mixture - HCS and CVH engines only, where possible (Section 9).
- Check the steering, suspension and roadwheels (Section 10).
- Check the driveshaft rubber gaiters and CV joints (Section 11).
- Check the exhaust system (Section 12).
- Check the underbody, and all fuel/brake lines (Section 13).
- Check the brake system (Section 14).
- Check the security of all roadwheel nuts (Section 15).
- Check the doors, tailgate and bonnet, and lubricate their hinges and locks (Section 16).
- Check the seat belts (Section 17).
- Check the condition of the bodywork, paint and exterior trim (Section 18).
- Road test (Section 19).
- Check the automatic transmission fluid level (Section 20).

Every 20 000 miles (32 000 km) or two years, whichever occurs first

Carry out all operations listed above, plus the following:

- Renew the spark plugs and check the condition of the HT leads - all engines except Zetec (Section 21).
- Clean the idle speed control valve (Weber type) - CVH EFI engines only (Section 22).

Every 30 000 miles (48 000 km) or three years, whichever occurs first

Carry out all operations listed above, plus the following:

- Renew the coolant (Section 23).
- Renew the air cleaner filter element and check the air cleaner temperature control system - carburettor engines only (Section 24).
- Check the emission control systems (Section 25).
- Renew the spark plugs and check the condition of the HT leads - Zetec engines (Section 21).
- Renew the automatic transmission fluid (Section 26).
- Check the handbrake adjustment (Section 27).
- Check the front wheel alignment (Section 28).

Note: If the vehicle is used regularly in dusty or polluted conditions, the air cleaner filter element should be renewed at more frequent intervals.

Every 40 000 miles

- Renew the timing belt - CVH and PTE engines only (Section 29).

Every 60 000 miles

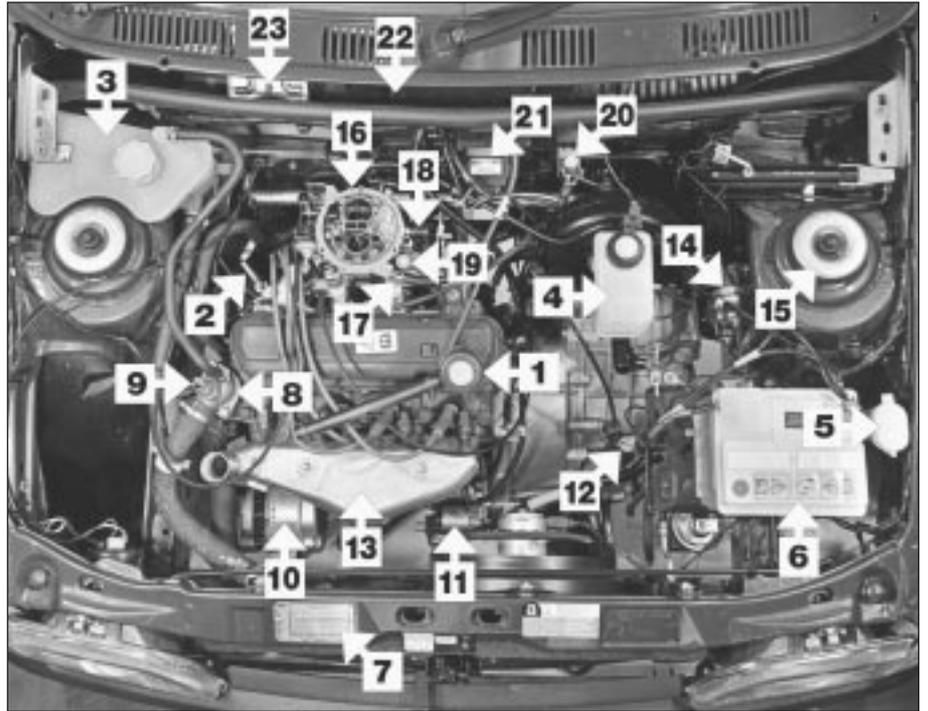
- Renew the timing belt - Zetec engines only (Section 29).
- Renew the fuel filter (Section 30).

Every three years (regardless of mileage)

- Renew the brake fluid (Section 31).

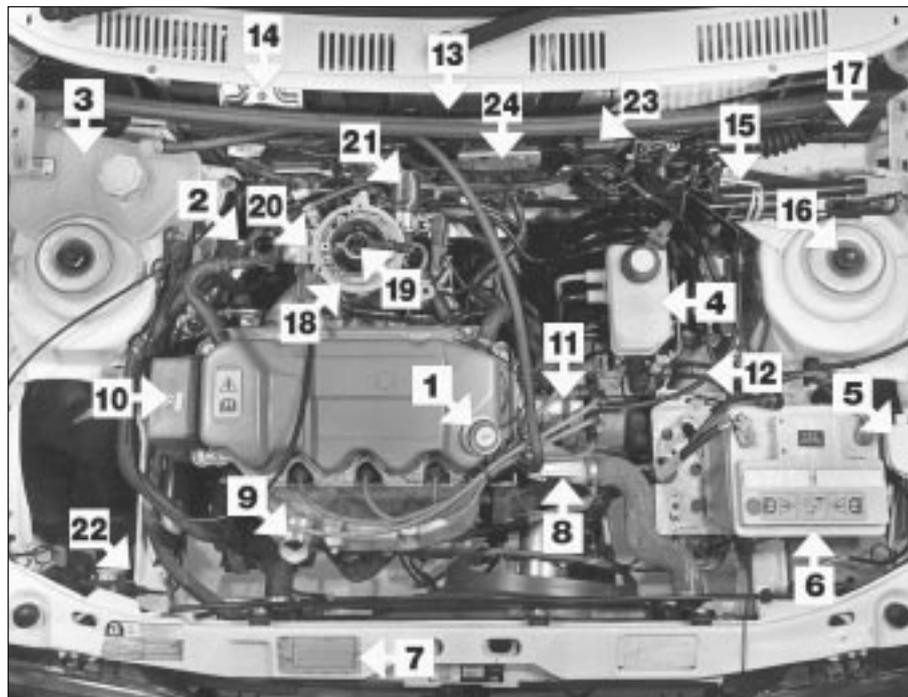
1.1 litre HCS carburettor engine (air cleaner removed for clarity)

- 1 Engine oil filler cap
- 2 Engine oil level dipstick
- 3 Cooling system expansion tank
- 4 Brake fluid reservoir
- 5 Windscreen/tailgate washer fluid reservoir cap
- 6 Battery
- 7 Vehicle identification plate
- 8 Thermostat housing
- 9 Radiator cooling fan thermal switch multi-plug
- 10 Alternator
- 11 Starter motor solenoid
- 12 CTX automatic transmission fluid level dipstick
- 13 Exhaust heatshield/airbox
- 14 Brake pressure control valves
- 15 Top of suspension strut mounting assembly
- 16 Carburettor
- 17 Fuel feed hose
- 18 Anti-dieselling (fuel-cut off) solenoid connection
- 19 Throttle kicker
- 20 Throttle kicker control solenoid
- 21 Ignition module
- 22 Heater blower motor cover
- 23 Windscreen wiper motor mounting bracket



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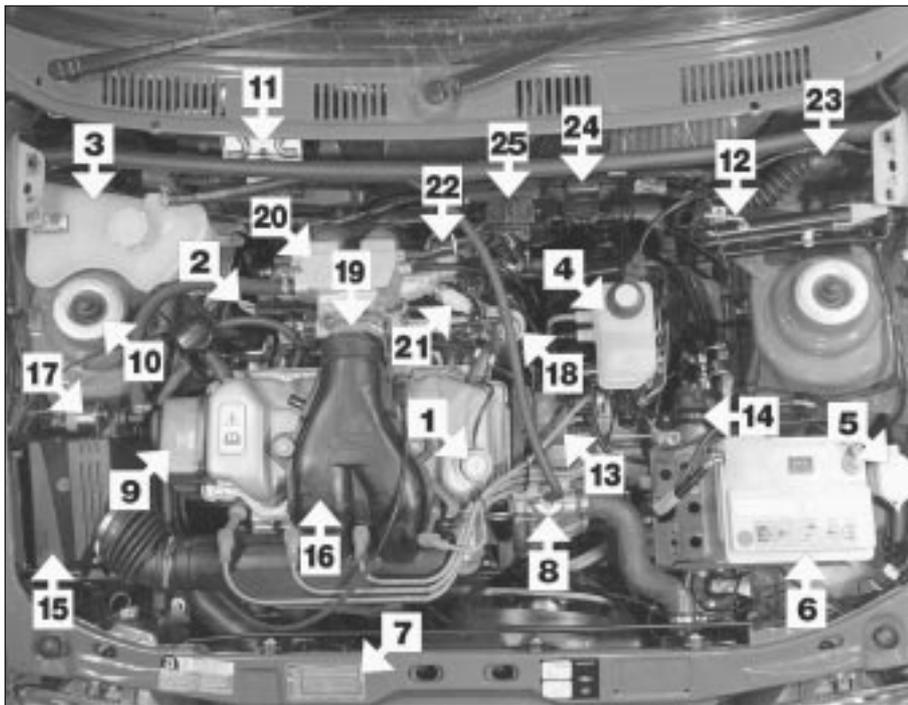
1.4 litre CVH CFI fuel injection engine (air cleaner removed for clarity)



- 1 Engine oil filler cap
- 2 Engine oil level dipstick
- 3 Cooling system expansion tank
- 4 Brake fluid reservoir
- 5 Windscreen/tailgate washer fluid reservoir cap
- 6 Battery
- 7 Vehicle identification plate
- 8 Thermostat housing
- 9 Pre-heat tube
- 10 Timing belt cover
- 11 Distributor
- 12 Fuel filter
- 13 Heater blower motor cover
- 14 Windscreen wiper motor mounting bracket
- 15 Jack and wheelbrace retaining bolt
- 16 Top of suspension strut mounting assembly
- 17 EEC IV engine management module cover
- 18 CFI unit
- 19 Fuel injector
- 20 Fuel pressure regulator
- 21 Throttle plate control motor
- 22 Carbon canister
- 23 Manifold absolute pressure sensor
- 24 Ignition module

1.6 Maintenance – component location

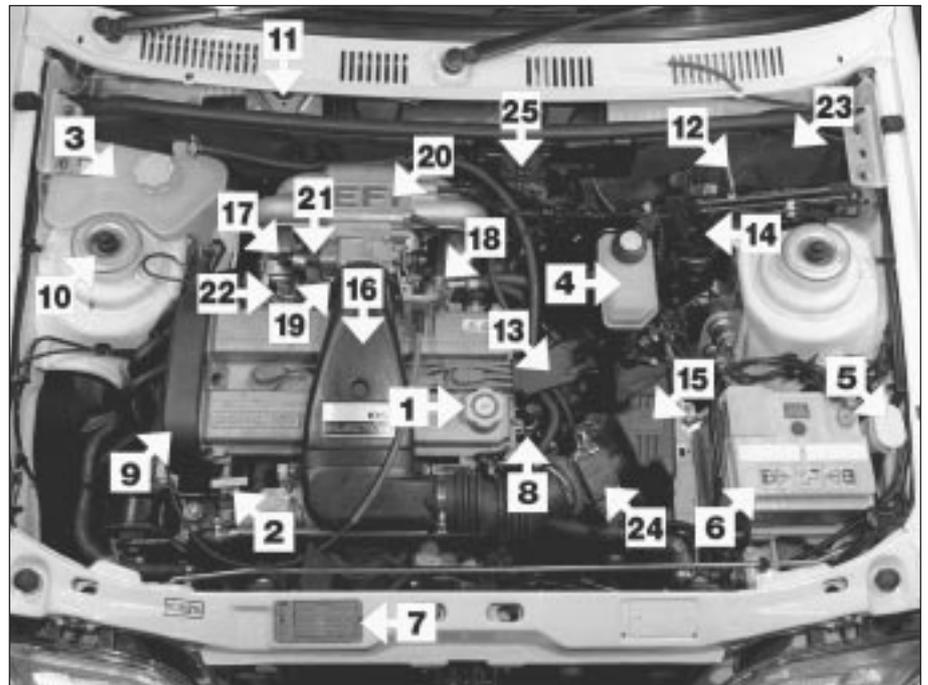
1.6 litre (XR2i) CVH EFi fuel injection engine



- 1 Engine oil filler cap
- 2 Engine oil level dipstick
- 3 Cooling system expansion tank
- 4 Brake fluid reservoir
- 5 Windscreen/tailgate washer fluid reservoir cap
- 6 Battery
- 7 Vehicle identification plate
- 8 Thermostat housing
- 9 Timing belt cover
- 10 Top of suspension strut mounting assembly
- 11 Windscreen wiper motor mounting bracket
- 12 Jack and wheelbrace retaining bolt
- 13 Distributorless (E-DIS) ignition coil
- 14 Fuel filter
- 15 Air cleaner
- 16 Air inlet duct
- 17 Idle speed control valve
- 18 Fuel pressure regulator
- 19 Throttle housing
- 20 Upper section of inlet manifold
- 21 Intake air temperature sensor
- 22 Fuel trap
- 23 EEC IV engine management module cover
- 24 Manifold absolute pressure sensor
- 25 Ignition module

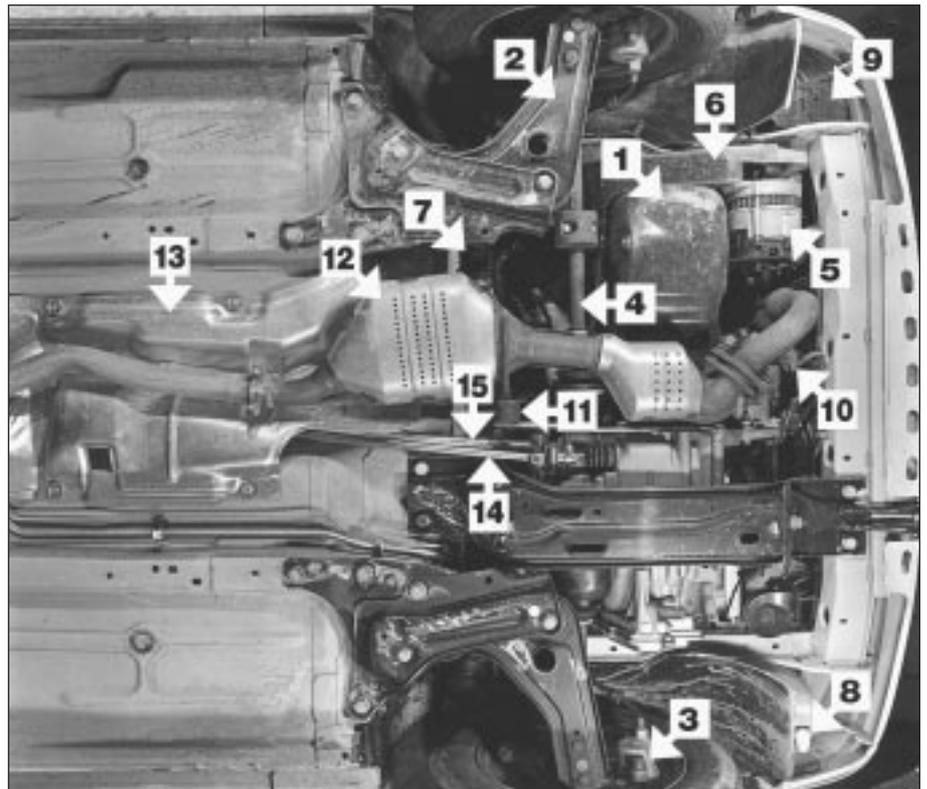
1.8 litre (XR2i) Zetec SEFi fuel injection engine

- 1 Engine oil filler cap
- 2 Engine oil level dipstick
- 3 Cooling system expansion tank
- 4 Braking system fluid reservoir
- 5 Windscreen/tailgate washer fluid reservoir cap
- 6 Battery
- 7 VIN plate
- 8 Thermostat housing
- 9 Timing belt cover
- 10 Top of suspension strut mounting assembly
- 11 Windscreen wiper motor mounting bracket
- 12 Jack and wheelbrace retaining bolt
- 13 Distributorless (E-DIS) ignition coil
- 14 Fuel filter
- 15 Air cleaner
- 16 Air inlet duct
- 17 Idle speed control valve
- 18 Fuel pressure regulator
- 19 Throttle housing
- 20 Inlet manifold
- 21 Throttle position sensor
- 22 Fuel system pressure release/test point
- 23 EEC IV engine management module cover
- 24 Mass air flow sensor
- 25 Ignition module



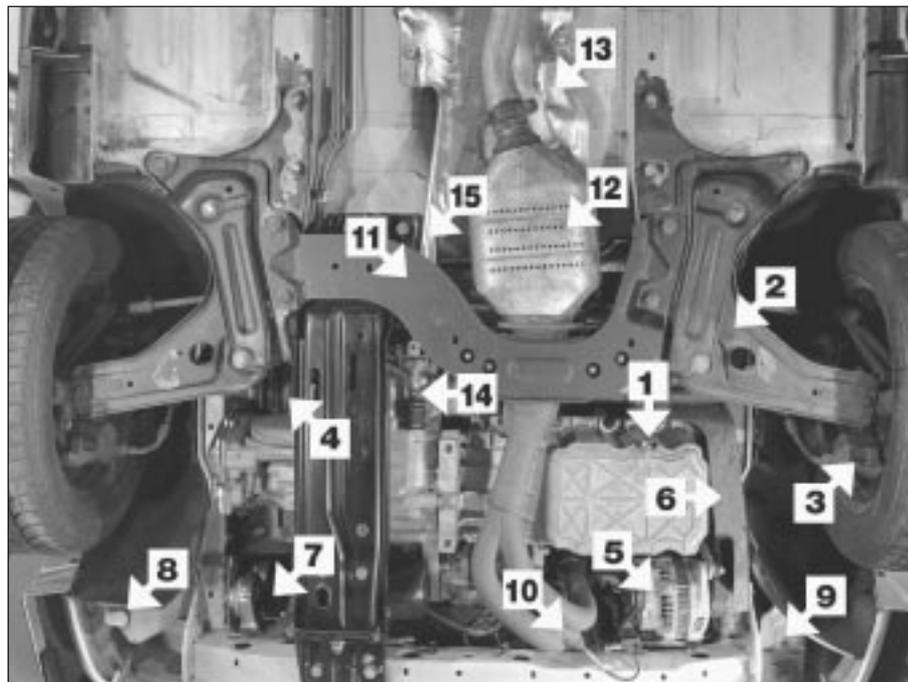
Front underside view of the 1.4 litre CVH CFi fuel injection model

- 1 Engine oil sump
- 2 Front suspension lower arm
- 3 Brake caliper assembly
- 4 Driveshaft
- 5 Alternator
- 6 Auxiliary drivebelt cover
- 7 Steering rack gaiter
- 8 Windscreen/tailgate washer pump
- 9 Carbon canister
- 10 Oxygen sensor
- 11 Catalytic converter (exhaust) rubber insulator mounting
- 12 Catalytic converter assembly
- 13 Underbody heatshields
- 14 Gearchange mechanism shift rod
- 15 Gearchange mechanism stabiliser bar



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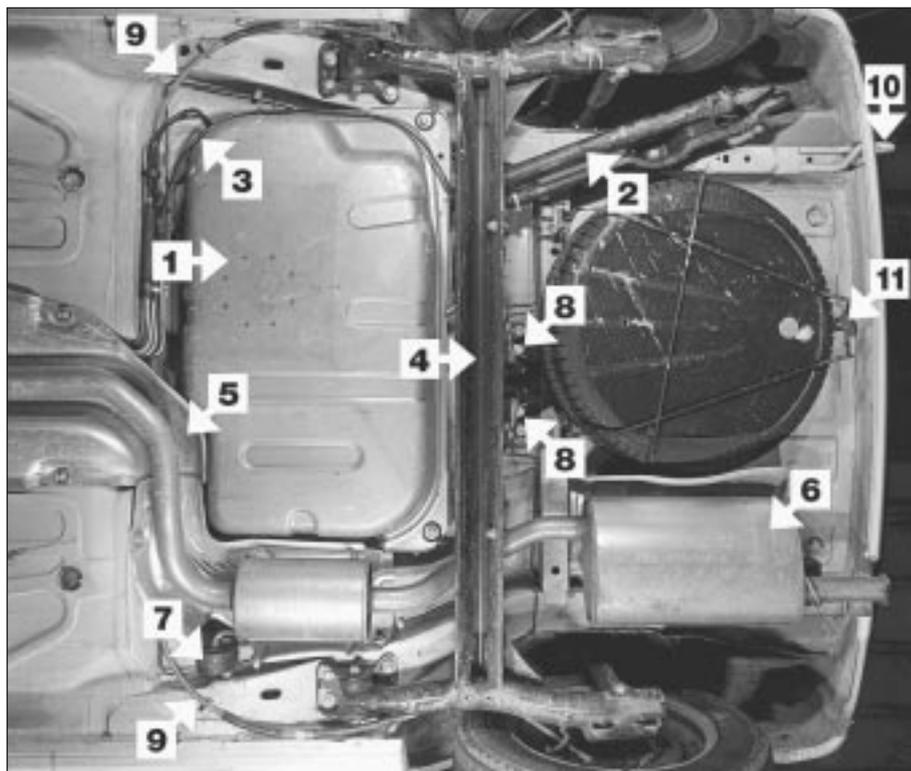
Front underside view of the 1.8 litre (XR2i) Zetec SEFi fuel injection model



- 1 Engine oil drain plug
- 2 Front suspension lower arm
- 3 Brake caliper assembly
- 4 Driveshaft
- 5 Alternator
- 6 Auxiliary drivebelt cover
- 7 Horn
- 8 Windscreen/tailgate washer pump
- 9 Carbon canister
- 10 Oxygen sensor
- 11 Front suspension crossmember
- 12 Catalytic converter
- 13 Underbody heat shields
- 14 Gearchange mechanism shift rod
- 15 Gearchange mechanism stabiliser bar

1.8 Maintenance – component location

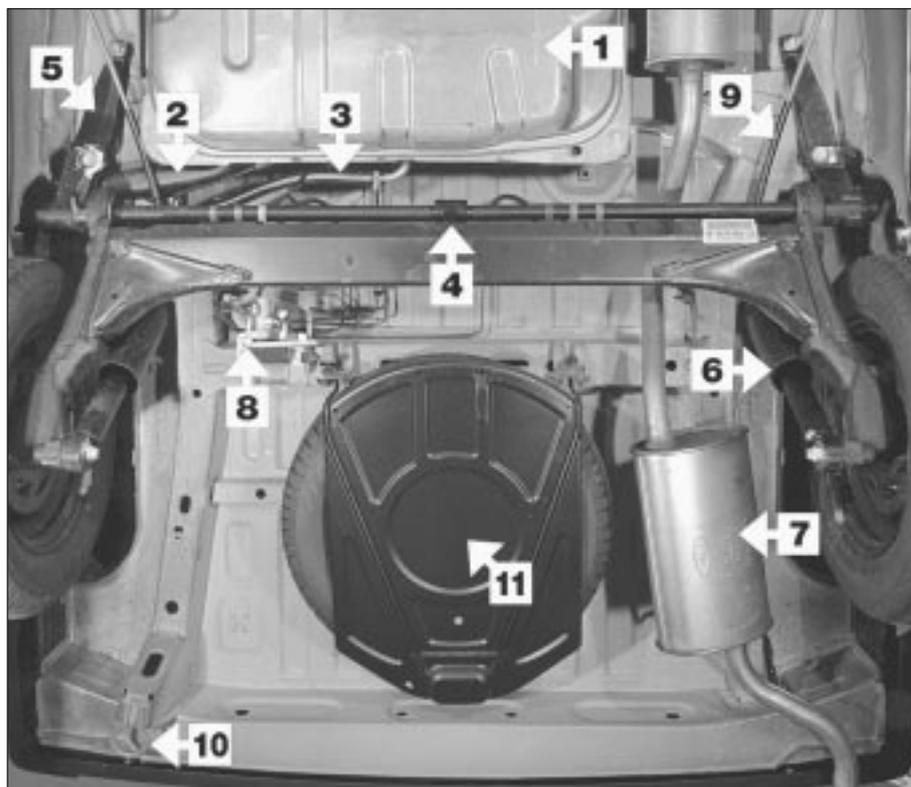
Rear underside view of the 1.4 litre CVH CFI fuel injection model



- 1 Fuel tank
- 2 Fuel filler pipe
- 3 Fuel tank ventilation hose
- 4 Twist beam rear axle assembly
- 5 Underbody heatshields
- 6 Exhaust rear silencer
- 7 Exhaust rubber insulator mounting
- 8 Load apportioning valves (on vehicles with the anti-lock braking system)
- 9 Handbrake cable
- 10 Rear towing eye
- 11 Spare wheel carrier hook (on the retaining bolt)

Rear underside view of the Courier van model

- 1 Fuel tank
- 2 Fuel filler pipe
- 3 Fuel tank ventilation hose
- 4 Rear axle assembly - spring torsion bars visible
- 5 Rear axle pivot brackets
- 6 Rear suspension dampers
- 7 Exhaust system rear silencer
- 8 Braking system light-laden valve
- 9 Handbrake cables
- 10 Rear towing eye
- 11 Spare wheel carrier



1 Introduction

This Chapter is designed to help the home mechanic maintain his/her vehicle for safety, economy, long life and peak performance.

This Chapter contains a master maintenance schedule, followed by Sections dealing specifically with each task in the schedule. Visual checks, adjustments, component renewal and other helpful items are included. Refer to the accompanying illustrations of the engine compartment and the underside of the vehicle for the locations of the various components.

Servicing your vehicle in accordance with the mileage/time maintenance schedule and the following Sections will provide a planned maintenance programme, which should result in a long and reliable service life. This is a comprehensive plan, so maintaining some items but not others at the specified service intervals will not produce the same results.

As you service your vehicle, you will discover that many of the procedures can - and should - be grouped together, because of the particular procedure being performed, or because of the close proximity of two otherwise-unrelated components to one another. For example, if the vehicle is raised for any reason, the exhaust should be inspected at the same time as the suspension and steering components.

The first step of this maintenance programme is to prepare yourself before the actual work begins. Read through all the

Sections relevant to the work to be carried out, then make a list and gather together all the parts and tools required. If a problem is encountered, seek advice from a parts specialist or a dealer service department.

2 Intensive maintenance

1 If, from the time the vehicle is new, the routine maintenance schedule is followed closely, and frequent checks are made of fluid levels and high-wear items, as suggested throughout this manual, the engine will be kept in relatively good running condition, and the need for additional work will be minimised.

2 It is possible that there will be some times when the engine is running poorly due to the lack of regular maintenance. This is even more likely if a used vehicle, which has not received regular and frequent maintenance checks, is purchased. In such cases, additional work may need to be carried out, outside of the regular maintenance intervals.

3 If engine wear is suspected, a compression test (refer to Part A, B or C of Chapter 2) will provide valuable information regarding the overall performance of the main internal components. Such a test can be used as a basis to decide on the extent of the work to be carried out. If, for example, a compression test indicates serious internal engine wear, conventional maintenance as described in this Chapter will not greatly improve the performance of the engine, and may prove a

waste of time and money, unless extensive overhaul work (Chapter 2D) is carried out first.

4 The following series of operations are those often required to improve the performance of a generally poor-running engine:

Primary operations

- a) Clean, inspect and test the battery (See "Weekly Checks").
- b) Check all the engine-related fluids (See "Weekly Checks").
- c) Check the condition of the auxiliary drivebelt (Section 4).
- d) Check and if necessary adjust the valve clearances on HCS engines (Section 7).
- e) Renew the spark plugs and clean and inspect the HT leads (Section 21).
- f) Check the condition of the air cleaner filter element and renew if necessary (Section 24).
- g) Check and if necessary adjust the idle speed and mixture settings - where applicable (Section 9).
- h) Renew the fuel filter - fuel injection models (Section 30).
- i) Check the condition of all hoses, and check for fluid leaks (Section 5).

5 If the above operations do not prove fully effective, carry out the following operations:

Secondary operations

All the items listed under "Primary operations", plus the following:

- a) Check the charging system (Chapter 5A).
- b) Check the ignition system (Chapter 5B).
- c) Check the fuel system (Chapter 4A, 4B, 4C and 4D).
- e) Renew the ignition HT leads (Section 21).

Every 5000 miles (8000 km) or 6 months, whichever occurs first

3 Engine oil and filter renewal



Frequent oil changes are the best preventive maintenance the home mechanic can give the engine, because ageing oil becomes diluted and contaminated, which leads to premature engine wear.

1 Make sure that you have all the necessary tools before you begin this procedure (see illustration). You should also have plenty of rags or newspapers handy, for mopping up any spills.

2 To avoid any possibility of scalding, and to protect yourself from possible skin irritants and other harmful contaminants in used engine oils, it is advisable to wear gloves when carrying out this work.

3 Access to the underside of the vehicle is greatly improved if the vehicle can be lifted on a hoist, driven onto ramps, or supported by axle stands (see "Jacking and Vehicle Support").



Warning: Do not work under a vehicle which is supported only by a hydraulic or scissors-type jack, or by bricks, blocks of wood, etc.



3.2 These tools are required when changing the engine oil and filter

4 If this is your first oil change, get under the vehicle and familiarise yourself with the position of the engine oil drain plug location in the sump. The engine and exhaust components will be warm during the actual work, so try to anticipate any potential problems while the engine and accessories are cool.

5 The oil should preferably be changed when the engine is still fully warmed-up to normal operating temperature, just after a run (the needle on the temperature gauge should be in the "Normal" sector of the gauge); warm oil and sludge will flow out more easily. Park the vehicle on firm, level ground, apply the handbrake firmly, then select 1st or reverse gear (manual transmission) or the "P" position (automatic transmission). Open the bonnet and remove the engine oil filler cap from the cylinder head cover, then remove the oil level dipstick from its tube (see "Weekly Checks").

6 Raise the front of the vehicle, and support it securely on axle stands (see "Jacking and Vehicle Support"). Remove the front right-hand roadwheel to provide access to the oil

1•10 Every 5000 miles or 6 months



3.7a Engine oil drain plug location in the sump on HCS, CVH and PTE engines



3.7b Removing the engine oil drain plug on the Zetec engine



3.9 Removing the oil filter on the CVH engine using a strap wrench

filter; if the additional working clearance is required, remove also the auxiliary drivebelt cover.

7 Being careful not to touch the hot exhaust components, place the drain pan under the drain plug, and unscrew the plug (see illustrations). If possible, try to keep the plug pressed into the sump while unscrewing it by hand the last couple of turns.



As the drain plug releases from the threads, move it away sharply, so the stream of oil issuing from the sump runs into the pan, not up your sleeve!

8 Allow some time for the old oil to drain, noting that it may be necessary to reposition the pan as the oil flow slows to a trickle. Check the condition of the plug's sealing washer and renew it if worn or damaged. When the oil has completely drained, wipe clean the drain plug and its threads in the sump and refit the plug, tightening it to the specified torque wrench setting.

9 Reposition the drain pan under the oil filter then, using a suitable filter removal tool,

unscrew the oil filter from the cylinder block, oil pump or oil filter adaptor, as applicable; be prepared for some oil spillage (see illustration). Check the old filter to make sure that the rubber sealing ring hasn't stuck to the engine; if it has, carefully remove it. Withdraw the filter through the wheel arch, taking care to spill as little oil as possible.

10 Using a clean, lint-free rag, wipe clean the cylinder block around the filter mounting. If there are no specific instructions supplied with it, fit a new oil filter as follows. Apply a light coating of clean engine oil to the filter's sealing ring (see illustration). Screw the filter into position until it seats, then tighten it through a further half- to three-quarters of a turn *only* (see illustration). Tighten the filter by hand only - do not use any tools.

11 Remove the old oil and all tools from under the vehicle, refit the roadwheel, and lower the vehicle to the ground.

12 Refill the engine with oil, using the correct grade and type of oil, as given in "Lubricants, fluids and tyre pressures". Pour in half the specified quantity of oil first, then wait a few minutes for the oil to run to the sump. Continue adding oil a small quantity at a time, until the level is up to the lower notch on the

dipstick. Adding approximately 0.5 to 1.0 litre (depending on model) will raise the level to the dipstick's upper notch.

13 Start the engine. The oil pressure warning light will take a few seconds to go out while the new filter fills with oil; do not race the engine while the light is on. Run the engine for a few minutes, while checking for leaks around the oil filter seal and the drain plug.

14 Switch off the engine, and wait a few minutes for the oil to settle in the sump once more. With the new oil circulated and the filter now completely full, recheck the level on the dipstick, and add more oil as necessary.

15 Dispose of the used engine oil safely, with reference to "General repair procedures" in the Reference Sections of this manual.



Note: It is antisocial and illegal to dump oil down the drain. To find the location of your local oil recycling bank, call this number free.



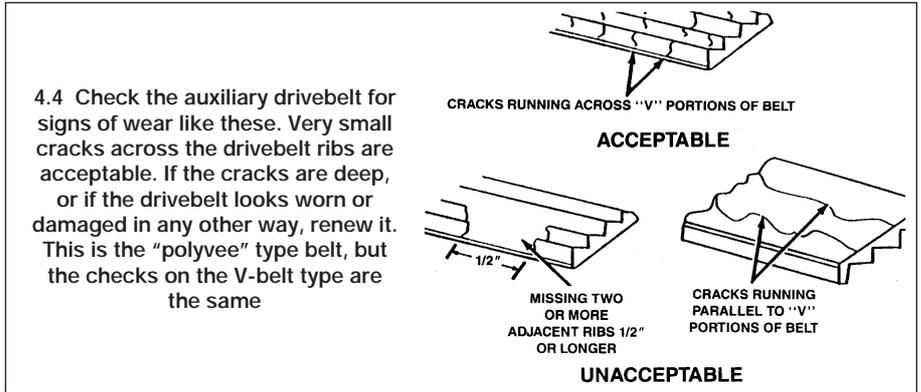
3.10a Lubricate the filter's sealing ring with clean engine oil before installing the filter on the engine



3.10b Fitting the new oil filter on the Zetec engine



4.3 Remove the auxiliary drivebelt lower cover from inside the wheel arch



Every 10 000 miles (16 000 km) or 12 months, whichever comes first

4 Auxiliary drivebelt check and renewal



General

1 The number of auxiliary drivebelts fitted and their type depends on engine, and on whether the vehicle is equipped with power steering. The drivebelt(s) are located on the right-hand end of the engine and will be either of the V-belt type or the flat, multi-ribbed (or "polyvee") type. The belt drives the alternator, water pump and, on CVH and Zetec engines with power steering, the power steering pump from the engine's crankshaft pulley. On HCS engines with power steering, one belt drives the alternator and water pump and a separate belt drives the power steering pump.

2 The good condition and proper tension of the auxiliary drivebelt is critical to the operation of the engine. Because of their composition and the high stresses to which they are subjected, drivebelts stretch and deteriorate as they get older. They must, therefore, be regularly inspected.

Check

3 With the engine switched off, open and support the bonnet, then locate the auxiliary drivebelt(s) on the right-hand end of the engine (*Be very careful, and wear protective gloves to minimise the risk of burning your hands on hot components, if the engine has recently been running*). For improved access, jack up the front right-hand side of the vehicle, support it securely on an axle stand, remove the roadwheel, then (where fitted) remove the auxiliary drivebelt lower cover from inside the wheel arch (see illustration).

4 Using an inspection light or an electric torch, and rotating the engine when necessary with a spanner applied to the crankshaft pulley bolt, check the whole length of the

drivebelt(s) for cracks, separation of the rubber, and torn or worn ribs (see illustration). Also check for fraying and glazing, which gives the drivebelt a shiny appearance. Both sides of the drivebelt(s) should be inspected, which means you will have to twist the drivebelt(s) to check the underside. Feel the relevant drivebelt where you can't see it. If you are in any doubt as to the condition of the drivebelt(s), renewal is necessary (go to paragraph 23).

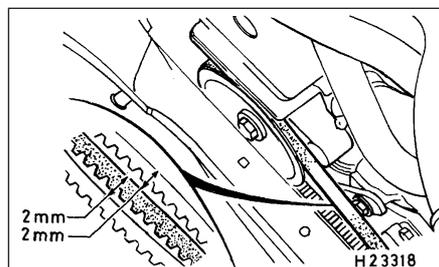


Turning the engine will be much easier if the spark plugs are removed first (Section 21).

Drivebelt tension

5 The tension must be adjusted manually on all V-belt type drivebelts, on flat "polyvee" type drivebelts fitted to early Zetec engines, and on "polyvee" type drivebelts fitted to HCS engines to drive the power steering pump. The "polyvee" type drivebelts used on later Zetec engines and PTE engines are fitted with an automatic tensioner to maintain the correct belt adjustment.

6 For models on which the tension can be adjusted manually, open the bonnet. Jack up



4.7 Checking drivebelt adjustment - V-belt types

Note that the 4 mm dimension is the total belt swing and is equal to 2 mm of deflection

the front right-hand side of the vehicle, and support it securely on an axle stand. Remove the roadwheel, then (where fitted) remove the auxiliary drivebelt lower cover from inside the wheel arch.

7 Ford technicians use a special tension gauge and various other special tools for checking drivebelt adjustment, but for DIY purposes, checking the belt tension using finger pressure gives a good indication of correct adjustment. Apply firm finger pressure midway between the pulleys on the longest run of the belt, and look for a deflection of approximately 2.0 mm (i.e. a total drivebelt "swing" of approximately 4.0 mm) (see illustration).

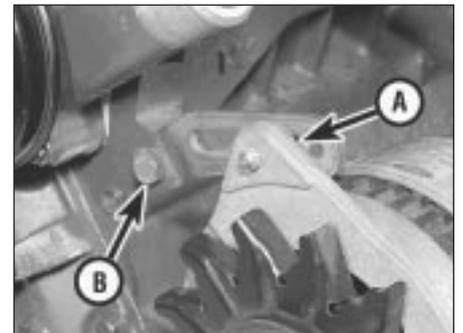
8 If adjustment is necessary, proceed as follows according to belt type.

V-belt with sliding arm type adjuster

9 Loosen off the alternator mounting bolts and sliding arm adjustment bolts, pivot the alternator as required to provide the correct drivebelt tension, then retighten the bolts to secure (see illustration).

10 Refit the auxiliary drivebelt cover (where applicable) and roadwheel, then lower the vehicle to the ground.

11 Run the engine for about five minutes, then recheck the tension.



4.9 Alternator sliding arm adjustment bolt (A) and sliding arm mounting bolt (B) - V-belt with sliding arm type adjuster