

UNDER THE BONNET



Imagine replacing a tank engine in the dusty hot desert, or replacing a helicopter rotor in the jungle – this is the job of the REME, the Army's professional maintenance engineers. By introducing your young people to basic car maintenance you're providing insight into the responsibilities of the REME, as well as helping them work towards badge requirements.

Not only will your section learn basic car maintenance, but they'll also get a taste of what it's like to be a Royal Electrical and Mechanical Engineer

KNOW YOUR WAY AROUND AN ENGINE

- A.** Battery
- B.** Radiator cap
- C.** Windscreen/ rear window washer tank
- D.** Engine oil filler cap
- E.** Oil dipstick
- F.** Cooling fan

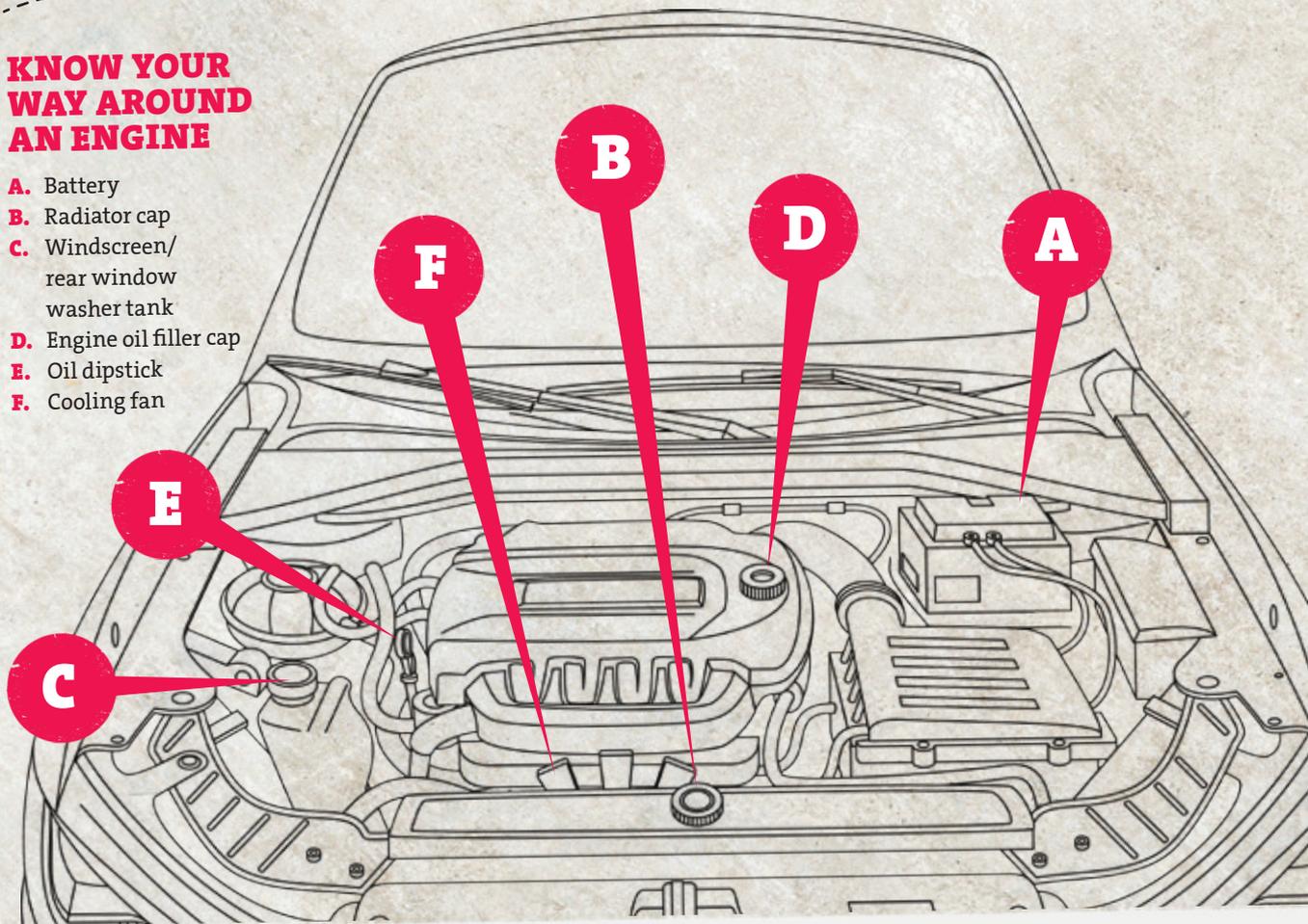


Illustration: Tom Hughes

HOW TO REFILL THE WINDSCREEN WASH TANK

- 1** Make sure your engine has cooled before showing your young people how to open the bonnet and secure it safely with the bonnet prop. Let them locate the windscreen washer reservoir and remove the cap.
- 2** If the car has a washer dipstick, ask them to check the levels; if it doesn't, they ought to be able to tell how much liquid is in there by checking the markings on the side of the reservoir.
- 3** Ask a young person to read the back of the windscreen washer fluid bottle to check the recommended ratio of washer fluid to water and pre-mix. Using a funnel, a young person can then pour in the windscreen washer mix, being careful not to overfill it.
- 4** Now they can replace the cap and wipe up any drips, and you can climb behind the wheel to test your windscreen washer jets.

HOW TO CHECK TYRE PRESSURE

- 1** Ask your young people to check the owners' manual to find the correct PSI (pounds per square inch) for the car.
- 2** Ask a young person to find and unscrew the valve stem cap from the valve stem. Top tip: it looks a bit like a pen cap. Another young person can then press the air pressure gauge onto the valve stem and take a reading. If the pressure is lower than recommended, it's time to top them up! Replace the cap.
- 3** Remind your section that tyres need to be cold before you fill them. Let the young people each take a turn to inflate the tyre and replace the valve stem cap. If visiting a petrol station for this activity, make sure your young people are well supervised and that everyone follows the safety instructions.



Behind the scenes

For every tank or road vehicle in the British Army, there's a highly trained REME member who has ensured the vehicle is in tip-top condition.

TIME NEEDED

30–40 minutes

BADGE



Scout Mechanic Activity Badge

PARTNER



The British Army

OUTCOMES

By completing these activities, your Scouts will be two steps closer to meeting their badge criteria and even better informed about essential car maintenance.

TAKE IT FURTHER

Help your young people continue to fulfill badge requirements by teaching them how to change wiper blades or a headlight bulb. You could even invite a speaker in to talk through the outline requirements of an MOT test.

MORE INFORMATION

The Royal Electrical and Mechanical Engineers (REME) maintain and manufacture equipment to keep the British Army aircraft, tanks and weapons in working order.