



WHAT HAPPENED TO YOU?

OLD MAN WINTER IS ON THE WAY!

SOMEBODY FORGOT TO TAKE CARE OF MY ENGINE COOLING SYSTEM, SO I'M STUCK HERE...

...NOW GO SAVE YOURSELF!

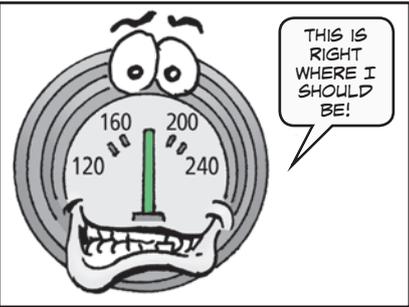
Give Them Proper Care



EVEN WHEN IT'S COLD OUTSIDE, DRIVERS, YOUR ENGINE'S COOLING SYSTEM NEEDS PROPER CARE.

Your vehicle's cooling system should be able to reach 160-180°F in all temperatures. If it doesn't, get a mechanic to check the thermostat. It may need replacing.

A vehicle system that always runs at more than 200°F also needs attention. A broken thermostat, a clogged radiator, a bad radiator cap or filthy coolant may be the culprit. The engine's air flow may even be blocked.

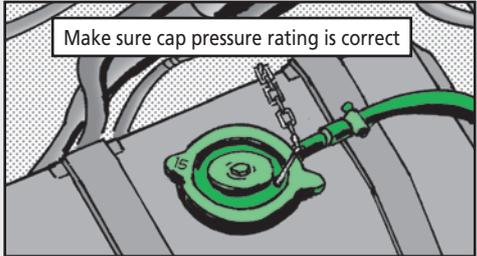


THIS IS RIGHT WHERE I SHOULD BE!

To speed up heating in freezing weather, you can partially cover the air intake grilles with tarp when starting the vehicle. But remember to remove the cover after the engine reaches operating temperature.

Look at the radiator cap. It should be the one your TM calls for. Just any cap won't do. The pressure rating of the cap is vital. Too low a rating lowers the boiling point of your coolant. Too high a rating builds up pressure that'll pop radiator seams or blow out hoses.

Hoses must withstand heat, pressure and vibration. They're rubber, so they rot, harden and crack with age. That's why you need both *eyes and hands* to detect bad hoses. Bad hoses are puffy, hard, mushy, or wet. Report them.

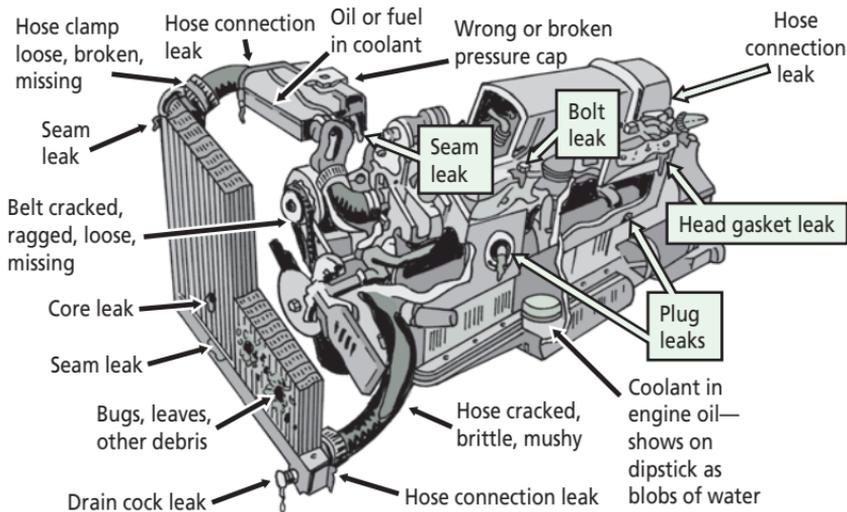


Make sure cap pressure rating is correct

	Puffy?
	Hard (cracks are clues)?
	Mushy?
	Wet (or even damp)?

Check the radiator. Look for leaks on the top, front, back and bottom.

Check for leaks or other cooling system problems



Leaks may not show up when your engine is cold, so look for rust and odd-colored dribbles where coolant has leaked and dried.

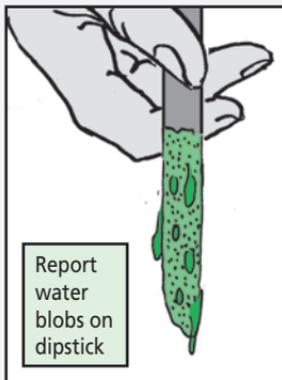
Later, when you've got the engine running at operating temperature and pressure, check those places again for wet spots. Use a flashlight during both inspections.

Finally, take the radiator cap off carefully. If the cooling system is hot, open the filler cap slowly until all pressure is gone. But be sure to use a rag or glove to protect your bare hand from a hot cap or hot coolant.

The coolant should be a little over the top of the core. It should be almost clear—and colored by the antifreeze.

If your coolant is muddy-looking or has bits of gunk in it, your cooling system needs draining and flushing, and maybe even cleaning. Report it.

If you see a rainbow of oil slime on top of the coolant, you probably have a leak inside the engine. Exhaust gas or oil is getting into your cooling system. Pull the crankcase dipstick and check for water in the oil. Little blobs of water will show on the dipstick. Report any slime or blobs that you see.



Drivers, air-cooled systems don't need much attention. All they need is a good flow of air. That means all the airflow shrouds must be in place.

