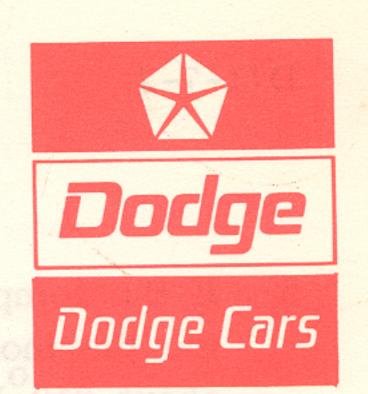
Technical Service Bulletin



Of Interest
General Manager
Sales Manager
Service Manager
Parts Manager
Service Technicians

This technical Service Bulletin is issued to assist dealers in diagnosing engine cooling system complaints before arbitrarily replacing the thermostat.

No. D71-7-2

Over 80 percent of the thermostats returned from the field have been found to be satisfactory. Because of these findings, it is felt that other causes were responsible.

We have compiled the information in two sections. The first section covers engines running too cold, slow warmup, and unsatisfactory heater performance. The second section covers engines running too hot and some coolant loss.

COOLING

Oct. 6, 1971

Engine
Cooling
System
Complaint
Diagnosis

RUNNING TOO COLD OR SLOW WARM-UP

- 1. Drive the car for ten miunutes or idle the engine for about twenty minutes if the engine has cooled down below its operating temperature.
- 2. Fill the radiator to 1-1/4 inches below filler neck.
- 3. With the car parked outdoors or on the wash rack remove the radiator cap. Insert a good thermometer in the radiator top tank so that the bulb will sense the temperature of the coolant coming from below the baffle in the top tank.
- 4. Run the engine at idle speed in neutral with hood raised. If the radiator top tank coolant stabilizes at no lower than approximately 8° below the nominal thermostat opening temperature (see chart below), the thermostat is satisfactory and should not be replaced.

1969-1972 Thermostats

1970	Engine 170	Thermostat 200 190 190 195 185	MODELS: All
		(Over)	P-2670-C

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- 5. If the temperature is too low, it may be caused by a particle of dirt or core sand holding the thermostat valve open. To check this out, elevate the top tank coolant temperature to about 210°F. by covering the radiator core face. This will open the thermostat fully and flush out any foreign material.
- 6. Repeat step 4. If the thermometer continues to read too low, the thermostat should be replaced.

ENGINE OVERHEATING

When an overheating complaint is received it is suggested that careful attention should be given to the following before removal of the thermostat:

- 1. Check for possibility of coolant leaks around engine area, hoses, or in radiator.
- 2. Check fan belt adjustment.
- 3. Check radiator pressure cap. Remove cap and hold in hand up-side down. Replace cap if any light is seen between vent valve and rubber gasket. Check rubber gasket for deterioration and swelling. Vent valve must hang freely.
- 4. Check fan drive unit for any oil leakage and free movement of thermal coil spring shaft. Lift end of coil from slot in housing and rotate coil counter clockwise until a stop is encountered. Gap between coil and clip should be about 1/2 inch. If the shaft does not rotate when coil is rotated, replace drive unit.
- 5. Check reinforcement spring in lower radiator hose. Reposition, if necessary. If deformed, replace hose.

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U. S. AUTOMOTIVE SALES & SERVICE