## **COOLING SYSTEM SPECIFICATIONS**

1992 Infiniti G20

1992 ENGINE COOLING Infiniti Engine Cooling Specifications

G20, M30, Q45

## **COOLING SYSTEM SPECIFICATIONS**

Periodic maintenance is necessary for extended cooling system and engine life. Because engine and cooling systems are made of different metals, changing coolant at scheduled maintenance periods reduces electrolysis and removes sediment.

COOLING SYSTEM SPECIFICATIONS TABLE

Application Specification Coolant Replacement Interval ...... 30,000 Miles Or 24 Months Coolant Capacity (Includes Heater) G20 Manual Transaxle ..... 6.5 Qts. (6.2L) Automatic Transaxle ..... 6.9 Qts. (6.5L) M30 ..... 10.9 Qts. (10.3L) 045 Pressure Cap ..... 11-14 psi Thermostat Opens Starts 170°F (76°C) 195°F (90°C) Fully Open .....

## CHANGING ENGINE COOLANT

G20

1) Set heater temperature control to maximum HOT position. Remove radiator cap and radiator drain plug. Remove cylinder block drain plug, air relief plug and air bleeder cap. See Fig. 1. Remove reservoir tank, drain coolant and clean reservoir tank. Install reservoir tank, radiator drain plug and cylinder block drain plug.

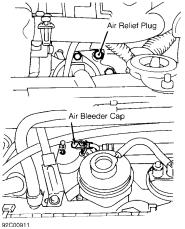


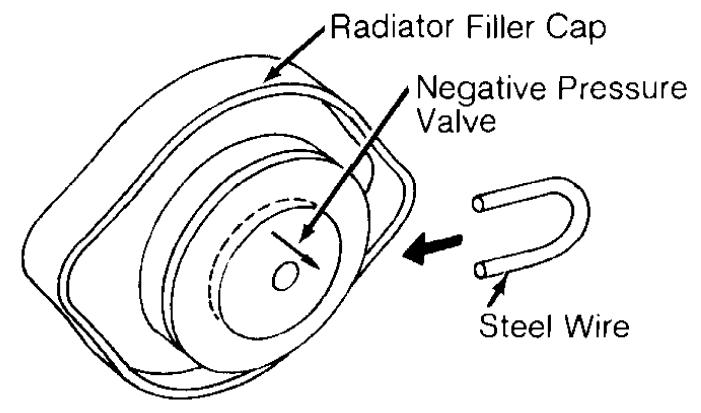
Fig. 1: Locating Air Relief Plug & Air Bleeder Cap (G20) Courtesy of Nissan Motor Co., U.S.A.

NOTE: DO NOT allow coolant to contact drive belts.

2) Fill radiator and reservoir tank to MAX line with water. Reinstall air relief plug when water flows from air relief hole during refill. Continue filling radiator and reservoir tank with water. Reinstall radiator cap and air bleeder cap. Start and warm engine to normal operating temperature. Ensure air conditioner is off. Stop engine, and allow it to cool.

3) Repeat steps 1) and 2) until water is clear. Drain water. Remove air relief plug and air bleeder plug. Fill radiator and reservoir tank to MAX line with coolant. Reinstall air relief plug when coolant flows from air relief hole during refill. Continue filling radiator and reservoir tank. Reinstall air bleeder cap.

4) Fabricate a temporary radiator filler cap which allows air and coolant in cooling system to be directed into reservoir tank regardless of pressure. To fabricate a temporary radiator cap, install a steel wire between negative pressure valve and its seat. See Fig. 2. Warm engine to normal operating temperature.



## 92D00912

Fig. 2: Fabricating Temporary Radiator Filler Cap (G20) Courtesy of Nissan Motor Co., U.S.A.

5) Run engine at 2500 RPM for 10 seconds, and then return it to idle speed. Repeat this procedure 2-3 times, watching coolant temperature gauge to ensure engine does not overheat.

6) Stop engine, and allow it to cool. Remove temporary radiator cap, and add coolant as necessary. Refill reservoir tank to MAX line with coolant. Repeat steps 5) and 6) two or more times.

7) Install correct radiator cap. Warm engine, and check for sound of coolant flow while operating engine from idle to 4000 RPM with heater temperature control lever set at several positions between COOL and HOT. Sound may be noticeable at heater valve. 8) If sound is present, bleed air from cooling system by allowing engine to cool and removing air bleeder cap on heater inlet hose. Attach a transparent hose at air bleeder pipe and put opposite end of hose into reservoir tank coolant.

9) Install temporary radiator cap, and check for proper connection of all coolant hoses. Start engine and check for bubbles in reservoir tank.

10) Set heater temperature control lever to maximum COOL position to bypass coolant through transparent hose. Operate engine up to 2300 RPM until bubbles disappear in transparent hose. After removing bubbles, set heater temperature control lever to maximum HOT position and check for sound of coolant flow. If coolant flow is heard, repeat steps 9) and 10).

CAUTION: DO NOT operate engine over 2300 RPM, as damage may occur due to reduced coolant flow.

11) Stop engine, and allow it to cool. Install correct radiator cap. Remove transparent hose, and install air bleeder cap. Check all removed parts for secure installation.

M30

1) On manual air conditioner models, move heater temperature control lever completely to HOT position. On automatic air conditioner models, turn ignition switch from OFF to ON position. Within 10 seconds after ignition switch is turned to ON position, depress OFF switch on heater/air conditioning control panel for at least 5 seconds.

2) Depress temperature up (L) switch 3 times. Depress defroster switch twice. Display area should indicate 43. To ensure heater valve opens wide, wait 10 seconds, and then turn ignition switch to OFF position.

3) On all models, remove radiator cap and open drain plug at bottom of radiator. Remove drain plugs on both sides of cylinder block. Close radiator drain plug, and tighten drain plugs to 25-32 ft. lbs. (34-44 N.m). Open air relief plug. See Fig. 3.

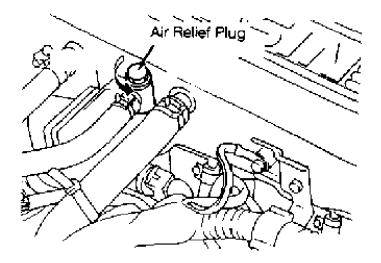


Fig. 3: Locating Air Relief Plug (M30) Courtesy of Nissan Motor Co., U.S.A.

4) Fill radiator with water, and close air relief plug. Start and warm engine. Stop engine, and allow it to cool. Repeat steps 3)

and 4) until clear water flows from radiator. Drain water.

5) Open air relief plug. Slowly fill radiator with coolant so air in system will escape. Remove reservoir tank, and drain coolant. Clean reservoir tank. Fill reservoir tank to MAX line with coolant. Close air relief plug. Start and warm engine. Stop engine, and allow it to cool. Add additional coolant as necessary.

045

Turn ignition switch from OFF to ON position. Within 10 seconds after ignition switch is turned to ON position, depress OFF switch on heater/air conditioning control panel for at least 5 seconds. Depress temperature up (L) switch 3 times. Depress defroster switch twice. Display area should indicate 43.
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2) To ensure heater valve opens wide, wait 10 seconds, and then turn ignition switch to OFF position. Remove radiator cap and open drain plug at bottom of radiator. Open drain plugs on both sides of cylinder block. Close radiator drain plug, and tighten drain plugs on cylinder block.

NOTE: DO NOT allow coolant to contact drive belts.

3) Fill radiator with water. Start engine. Within 10 seconds after starting engine, depress OFF switch on heater/air conditioning control panel for at least 5 seconds. Depress temperature up (L) switch 3 times. Depress defroster switch twice. Display area should indicate 43.

4) Ensure heater value opens wide. Start and warm engine. Stop engine, and allow it to cool. Repeat steps 2) and 3) until clear water flows from radiator. Drain water. Apply sealant to drain plug threads, and tighten to 11-18 ft. lbs. (15-25 N.m).

5) Slowly fill radiator with coolant, allowing air in system to escape. Remove reservoir tank, drain coolant and clean reservoir tank. Fill reservoir tank to MAX line with coolant. Start engine and run to normal operating temperature. Stop engine, and allow it to cool. Add coolant as necessary.