

**BLOWER MOTOR ASSEMBLY NOISE**

CHECK ALL ELECTRICAL CONNECTIONS AND GROUNDS FOR PROPER CONNECTIONS. IF IN DOUBT, USE VOLTMETER TO CHECK FOR CONSTANT VOLTAGE AT BLOWER MOTOR ASSEMBLY.

SIT IN VEHICLE WITH DOORS AND WINDOWS CLOSED, WITH IGNITION SWITCH ASSEMBLY IN "RUN" AND ENGINE "OFF." RUN BLOWER MOTOR ASSEMBLY ON HIGH SPEED WITH TEMPERATURE SET FOR MAXIMUM COOLING. CYCLE THROUGH BLOWER MOTOR ASSEMBLY SPEEDS, MODES AND TEMPERATURE SETTINGS TO FIND WHERE NOISE OCCURS AND WHERE NOISE DOES NOT OCCUR. TRY TO DEFINE TYPE OF NOISE: AIR RUSH, WHINE, TICK/CLICK, SQUEAL/SCREECH, FLUTTER, RUMBLE OR SCRAPE. CHECK ANOTHER VEHICLE IF POSSIBLE (SAME MODEL) TO DETERMINE IF NOISE IS TYPICAL.

NOISE IS CONSTANT BUT LESSENS WITH BLOWER MOTOR ASSEMBLY SPEED REDUCTION. TYPICAL NOISES ARE WHINE, TICK/CLICK, FLUTTER OR SCRAPE.

NOISE IS ONLY AT START-UP OR IS INTERMITTENT. MAY OCCUR AT COLD AMBIENTS AND LOW BLOWER MOTOR ASSEMBLY SPEEDS. TYPICAL NOISE IS AN OBJECTIONABLE SQUEAL/SCREECH.

NOISE IS CONSTANT AT HIGH BLOWER MOTOR ASSEMBLY SPEEDS IN CERTAIN MODES BUT CAN BE ELIMINATED AT LOWER BLOWER MOTOR ASSEMBLY SPEEDS OR IN OTHER MODES. TYPICAL NOISES ARE FLUTTER OR RUMBLE. REFER TO FIGURE 6.

CHECK FOR MOTOR ASSEMBLY AND BLOWER IMPELLER VIBRATION AT EACH BLOWER MOTOR ASSEMBLY SPEED BY FEELING THE BLOWER MOTOR COVER.

NO EXCESS VIBRATION.

VIBRATION EXCESSIVE.

REMOVE BLOWER MOTOR ASSEMBLY AND BLOWER IMPELLER AND CHECK FOR FOREIGN MATERIAL AT THE ORIFICE OF THE BLOWER INLET.

PROBLEM FOUND.

PROBLEM STILL EXISTS.

REPAIR OR REPLACE AS NECESSARY AND RECHECK.

EXAMINE BLOWER IMPELLER FOR WEAR SPOTS, CRACKED BLADES OR HUB, AND ALIGNMENT. EXAMINE BLOWER CASE FOR WEAR SPOTS.

PROBLEM STILL EXISTS.

PROBLEM FOUND.

CONTINUED

REPLACE BLOWER IMPELLER AND RECHECK.

Figure 14 – Blower Motor Assembly Noise Diagnostic Procedure (1 of 2)