

*** * TECHNICAL INFORMATION NOTICE * ***

DATE: September 22, 2020
TO: Mitsubishi Motors US Service and Parts Managers
RE: Warranty Claim Submittal for Vehicles with Low Refrigerant
TIN No.: TIN-20-55B-001

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AFFECTED VEHICLES: All Mirage and Mirage G4 Vehicles

PURPOSE:

Due to the increased occurrence of Mirage/Mirage G4 vehicles exhibiting faulty air conditioning systems caused by low/high refrigerant levels; MMNA would like to remind all Dealer Service Personnel of the correct procedures when submitting warranty claims of this distinction.

When diagnosing/repairing these vehicles, please complete the following actions and include measurements within the warranty claim:

1. Hook up AC gauges and record High and Low pressures ****Note: DO NOT engage the AC system****
2. Record ambient/interior temperature from data list in MUT-III SE
3. Inspect and record data list item for AC pressure sensor
4. Evacuate the AC and record the amount of refrigerant recovered
5. Recharge the AC system, install leak detecting dye
6. Perform AC Performance test per applicable service manual and record the results (service manual procedure pictured below)

Reference the chart below which shows the relationship between temperature and pressure with respect to the type of refrigerant that is being used. ****Note: R1234YF is not included in this chart****

Temperature and Pressure Relationships of Automotive Refrigerants

Temp °F	R-12 PSI	R-134a PSI	Temp °F	R-12 PSI	R-134a PSI	Temp °F	R-12 PSI	R-134a PSI
-20	0.6	0.2	35	32.6	30.3	95	108	113
-15	2.4	0.7	40	37.0	35.8	100	116	125
-10	4.5	2.6	45	41.7	40.3	105	126	130
-5	6.8	4.3	50	46.7	45.2	110	136	146
0	9.2	6.2	55	52.0	50.9	115	146	157
5	11.8	9.1	60	57.7	58.1	120	157	170
10	14.7	12.5	65	63.7	64.7	125	167	185
15	17.7	15.2	70	70.1	70.9	130	179	201
20	21.1	19.8	75	76.9	78.2	135	191	212
25	24.6	22.7	80	84.1	86.6	140	205	226
30	28.5	26.8	85	91.7	95.1	145	220	245
32	30.1	28.1	90	99.6	105	150	235	269

PERFORMANCE TEST

M1552001401637

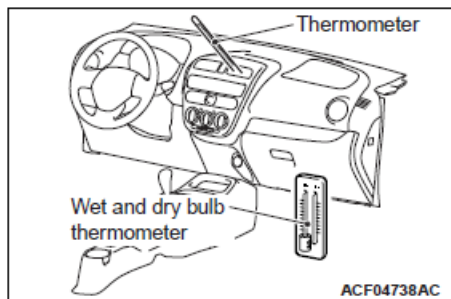
TEST CONDITION

Item	Settings	
Environmental condition	Measurement location	In a shade or indoors
	Temperature	20 – 50°C (68 – 122°F)
	Humidity	Relative humidity 30 – 80% RH
Vehicle body condition	Hood	Fully opened
	Door	Fully open for door, window, and liftgate
Air conditioning condition	Air conditioning switch	ON
	Air volume	Maximum air volume
	Temperature control	MAX COOL
	Air outlet	FACE
	Outside/inside air selection	Air recirculation position
Engine speed	Specified idle speed after warming up	
Transmission	N or P	

TEST CONDITION SETTING

Check that the temperature/humidity of measurement location satisfies the test conditions, and then set the vehicle body conditions to the designated status according to the test conditions. If the temperature/humidity is not within the test conditions, an accurate judgment cannot be made. Therefore, postpone the performance test.

COOLING PERFORMANCE CHECK



1. Insert a thermometer into the air outlet located at the center of instrument panel.
NOTE: Set a thermometer so that cool air from the air outlet blows directly against the sensing part.
2. Set a wet and dry bulb thermometer in the air intake of the front passenger's foot area (below the glove box).
NOTE: Set a wet and dry bulb thermometer so that cool air does not blow against it.
3. Start the engine to warm up. Confirm that the engine speed of the test condition is satisfied.
4. Set the A/C control panel to the mode instructed in the test conditions.
5. Wait until the air outlet temperature is stable (approximately 10 minutes after the A/C starts), and measure dry-bulb/wet-bulb temperatures at the air outlet and the air intake.
6. If the air outlet temperature is in the range specified by the table below, it is judged normal. If the temperature is outside the permissible range in the table below, refer to the refrigerant gas pressure inspection result, and check each section according to the diagnostic chart of refrigerant system.

Garage ambient temperature °C (°F)	20 (68)	25 (77)	30 (86)	35 (95)	40 (104)	45 (113)	50 (122)
Discharge air temperature °C (°F)	3.0 – 15.7 (37.0 – 60.3)	7.5 – 20.2 (45.5 – 68.4)	12.0 – 24.6 (54.0 – 76.3)	16.5 – 29.1 (61.7 – 84.4)	21.0 – 33.6 (70.0 – 92.5)	25.4 – 38.1 (77.7 – 100.6)	29.9 – 42.6 (85.8 – 108.7)