SS:1034181 TBB AC Testing procedure test Form

This Service Solution does not imply any special warranty coverage. Standard warranty guidelines and coverage apply. This Service Solution is provided to assist Dealers/Customers in gathering info what is needed to help diagnostic AC repairs

Applicable Vehicles

C2, HDX, EFX, Minotour

Issue

Making sure all the info is provided the first time to provide better Technical assistance

Solution:

Requesting the attach form to have fill out to provide to the Technical assistance

R-134a TEMPERATURE PRESSURE CHART

(Tabla de Temperaturas y Lecturas)

Ambient Temperature °F/°C (Temperatura Ambiental)	Low-Pressure Gauge (Puerto de Servicio del Lado de Baja Presión)	High-Pressure Gauge (Puerto de Servicio del Lado de Alta Presión)
65°F (18°C)	25-35 psi / 172-241 kPa	135-155 psi / 931-1069 kPa
70°F (21°C)	35-40 psi / 241-276 kPa	145-160 psi / 1000-1103 kPa
75°F (24°C)	35-45 psi / 241-310 kPa	150-170 psi / 1034-1172 kPa
80°F (27°C)	40-50 psi / 276-345 kPa	175-210 psi / 1207-1448 kPa
85°F (29°C)	45-55 psi / 310-379 kPa	225-250 psi / 1551-1724 kPa
90°F (32°C)	45-55 psi / 310-379 kPa	250-270 psi / 1724-1862 kPa
95°F (35°C)	50-55 psi / 345-379 kPa	275-300 psi / 1896-2068 kPa
100°F (38°C)	50-55 psi / 345-379 kPa	315-325 psi / 2172-2241 kPa
105°F (41°C)	50-55 psi / 345-379 kPa	330-335 psi / 2275-2310 kPa
110°F (43°C)	50-55 psi / 345-379 kPa	340-345 psi / 2344-2379 kPa

Ambient temp is the outside atmospheric temperature.

INTERPRETING PRESSURE READINGS

Low-pressure Gauge	High-pressure Gauge	Action Required
In Range	In Range	A/C is working properly.
Low	Low	Add Refrigerant.
Low	High	Need service, possibly blockage of the expansion valve or orifice tube.
High	Low	Needs service, possibly faulty compressor.
High	High	System is overcharged. Slowly remove refrigerant. Venting is illegal in USA.

It is illegal to vent 134a refrigerant into the atmoshpere.

C2 - End of Line Verification–Air Conditioning Systems

Verification Checks

Ensure the following correspond to the Order number: Chassis VIN and Body Number

Order Number	
Chassis VIN	
Body Number	

Ensure BOM matches the actual installed Air Conditioning components/units (TBD)

Component	BOM Code

Operation Checks

A) Switch Control – Evaporator Fans

Ensure AC switch controls function properly for the correct evaporator unit

AC Switch Control	OFF	ON	Fan Speed (Low or 1)	Fan Speed (Medium or 2)	Fan Speed (High or 3)	VENT
Dash—(chassis)						
Front—(bulk-head)						
Side-–(roof 1st window)						
Rear—(bulk-head)						

Evaporator Location	Degrees °F
Dash—(chassis)	
Front—(bulk-head)	
Side-–(roof 1st window)	
Rear—(bulk-head)	

Ambient Temperature ☐ °F

B) Condenser Fan(s) Operation (Roof)

Ensure Roof Mounted Condenser Fans are Operational (if–equipped)

Condenser Fan(s)	
1	
2	
3	

Condenser Temperature ☐ °F

C) Condenser Fan Operation (Skirt)

Ensure Skirt Mounted Condenser Fans are Operational (if–equipped)

Condenser Fan(s)	
1	
2	
3	

Condenser Temperature ☐ °F

D) AC Compressor Operation—Check per Engine Type

Detroit Engine

☐ DD5

☐ DD8

Compressor	Gauge Pressure (PSI)	
Primary– driver's side	Low	
	High	
Auxiliary– curb side (hard plumbed to driver's side)	Low	
	High	

Note: Refer to Pressure Temperature Chart for correct PSI range.

Ambient Temperature ☐ °F

Cummins Engine

☐ CNG

☐ Non–CNG

Compressor	Gauge Pressure (PSI)	
Primary– curb side	Low	
	High	
Auxiliary– driver's side	Low	
	High	

Note: Refer to Pressure Temperature Chart for correct PSI range.

Ambient Temperature °F ☐

E) R134a Refrigerant Leakage Check

Ensure AC system is leak free Yes ☐

No ☐

Has the AC system been checked and approved for delivery? Yes ☐

No ☐

Repairman _____

Approver _____