

**TEMPERATURE TESTING
DIAGNOSTIC WORKSHEET**

**Single System Orifice Tube or
Front Orifice Tube/Rear TXV Dual System**

VEHICLE INFORMATION:		Year	Make	Model	Engine	Mileage	Vin
SYSTEM CONFIGURATION							
Condenser Type:	Tube & Fin <input type="checkbox"/>	Flat Tube <input type="checkbox"/>	Sub-Cool <input type="checkbox"/>	High Side Port Location			
Refrigerant Flow:	Serpentine Flow <input type="checkbox"/>	Multi-Pass Flow <input type="checkbox"/>	Discharge <input type="checkbox"/>	Liquid Line <input type="checkbox"/>			
Refrigerant Testing:	Pure R12 <input type="checkbox"/>	Pure 134a <input type="checkbox"/>	Contaminated <input type="checkbox"/>	% Air _____			
Clutch Voltage Drop	AC Clutch (+) to (-)	B(+) to B(-)	B(+) to Clutch (+)	B(-) to Clutch (-)			
	_____	_____	_____	_____			
TEMPERATURE TESTING INFORMATION							
Condenser Temperature Drop				Rear Evaporator Superheat – Indirect Measurement (inlet inaccessible)			
Condenser Inlet		20°F Minimum		Rear Duct Temperature		Evaporator Outlet Should be Less than 10°F Warmer than Duct	
Condenser Outlet		50°F Maximum		Evaporator Outlet Line			
Difference	<input type="text"/>			Difference	<input type="text"/>		
Front Evaporator Superheat				System Performance – Rear Evaporator			
Inlet		+/- 5°F OK		Ambient Air Temp			
Outlet		Ideal: 0°F Single		Rear Duct Temp.			
Difference	<input type="text"/>	-2°F Dual		Difference		Greater than 30°F	
System Performance – Front Evaporator				Front to Rear Duct Difference Less Than 4°F?			
Ambient Air Temp				Yes <input type="checkbox"/>	No <input type="checkbox"/>	Difference	<input type="text"/>
Center Duct Temp.				Low Side Pressure V. Rear Suction Line Temp.			
Difference	<input type="text"/>	Greater than 30°F		Pressure	Temperature	OK? * See Note	
Rear Evaporator Superheat – Direct Measurement (inlet accessible)						Yes <input type="checkbox"/>	No <input type="checkbox"/>
Inlet Line (After TXV)		Outlet +2°F		System Pressures		Compressor Case Temperature	
Evaporator Outlet Line		to +10°F		High Side			
Difference	<input type="text"/>	Warmer than Inlet		Low Side			
* Note: If system correctly charged and low side pressure is low/normal but suction line temperature is high, suspect TXV valve malfunction – possible sticking, restricted.							





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SYSTEM CONFIGURATION						
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Refrigerant Flow:	Serpentine Flow <input type="checkbox"/>	Multi-Pass Flow <input type="checkbox"/>	Discharge <input type="checkbox"/>	Liquid Line <input type="checkbox"/>		
Refrigerant Testing:	Pure R12 <input type="checkbox"/>	Pure 134a <input type="checkbox"/>	Contaminated <input type="checkbox"/>	% Air _____		
Clutch Voltage Drop	AC Clutch (+) to (-)	B(+) to B(-)	B(+) to Clutch (+)	B(-) to Clutch (-)		
TEMPERATURE TESTING INFORMATION						
Condenser Temperature Drop			Front to Rear Duct Difference Less Than 4°F?			
Condenser Inlet		20°F	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Difference	<input type="text"/>
Condenser Outlet		Minimum	Low Side Pressure V. Rear Suction Line Temp.			
Difference	<input type="text"/>	50°F	Pressure	Temperature	OK? ** See Note	
		Maximum			Yes <input type="checkbox"/>	No <input type="checkbox"/>
Evaporator Superheat - Direct Measurement (if inlet accessible)			TXV System Charge Level – Use “TXV System Charge Level Chart “A” or “B”			
Inlet	Front	Rear	High Side Port Location	Discharge Line Use Chart A	Liquid Line Use Chart B	
Outlet			High Side Pressure			
Difference	<input type="text"/>	<input type="text"/>	Liquid Line Temperature			
		Outlet +2°F to +10°F Warmer	Charge Level See Note*	Undercharged	<input type="checkbox"/>	
Evaporator Superheat - Indirect Measurement (if inlet inaccessible)				Overcharged	<input type="checkbox"/>	
Outlet	Front	Rear		Normal	<input type="checkbox"/>	
Duct			*Note: Intersection of high side pressure and liquid line temperature on chart indicates system charge level.			
Difference	<input type="text"/>	<input type="text"/>	Should be Warmer than Duct			
System Performance						
Ambient Air Temp.	Front	Rear	System Pressures	Compressor Case Temperature		
Duct			High Side			
Difference	<input type="text"/>	<input type="text"/>	Low Side			
		Should be Greater than 30°F	**Note: If low side pressure low/normal but suction line temperature high – suspect TXV restriction or N.G.			