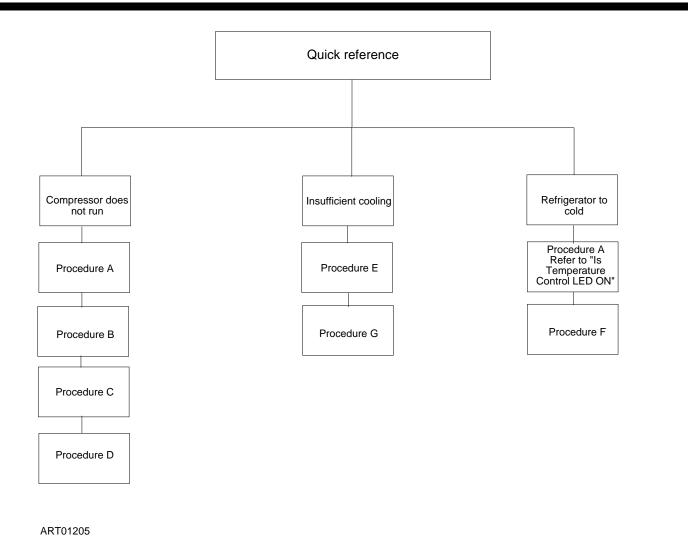
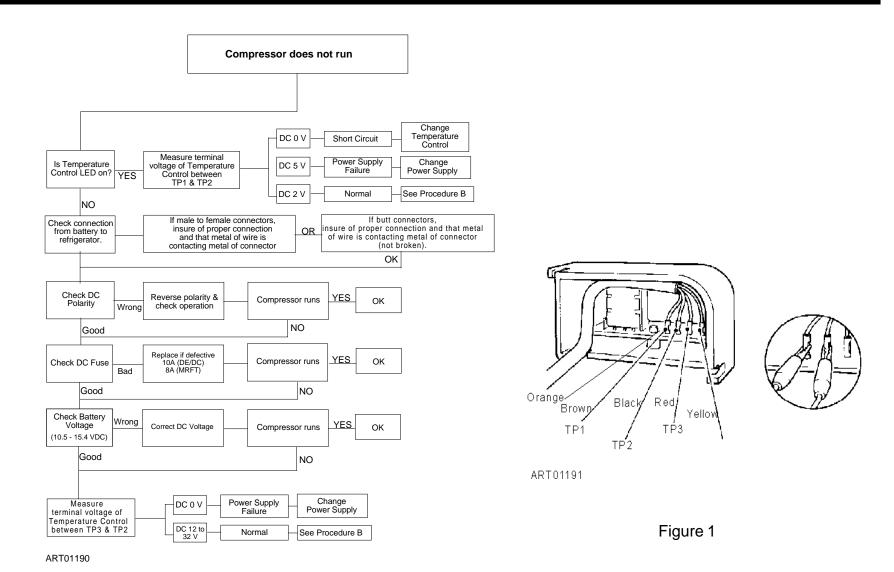


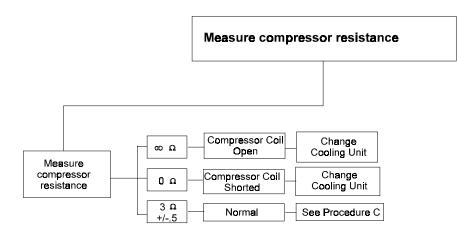
TROUBLE SHOOTING & VENTILATION GUIDE

For Models: DE 441, DE461, DE451, DE490, DC440, DC451, DC490, MRFT415, MRFT440, MRFT460

NORCOLD, INC. P.O BOX 4248 SIDNEY, OH 45365-4248







ART01192

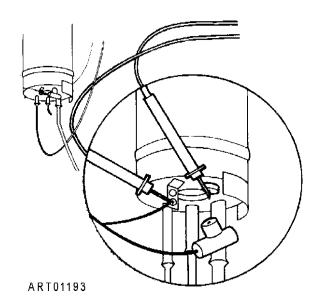


Figure 2

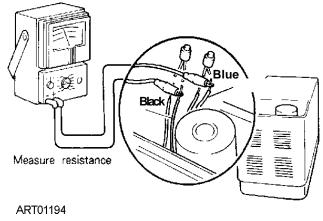
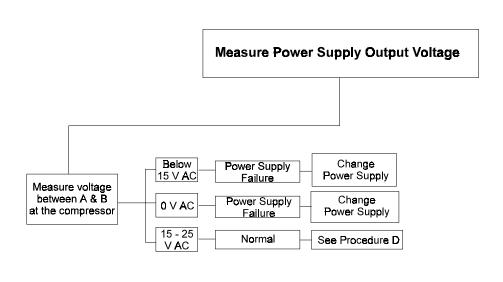
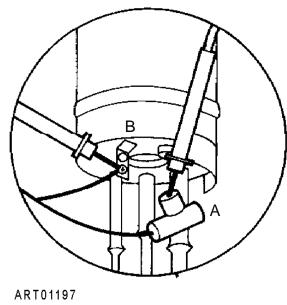
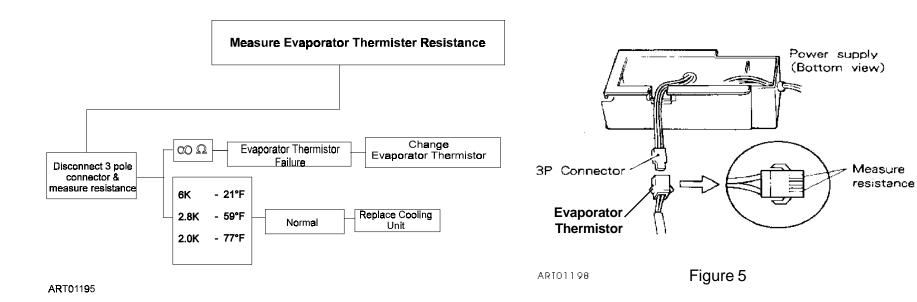


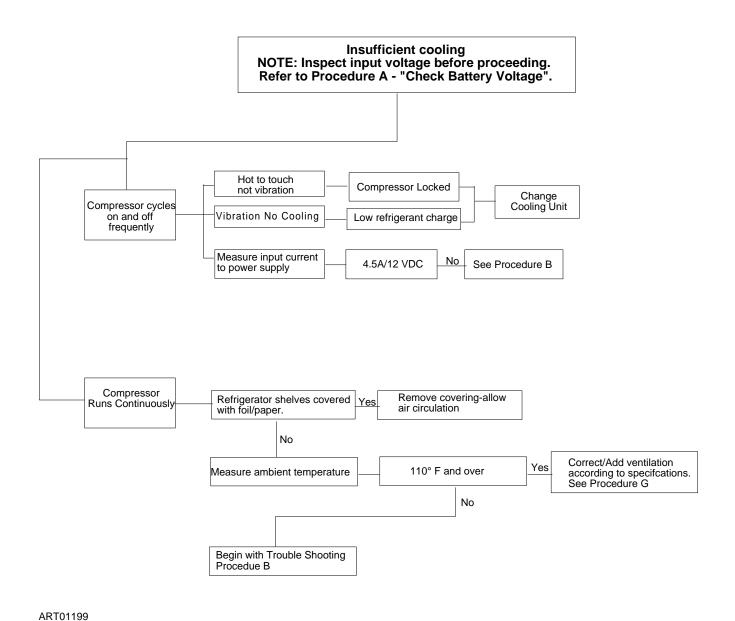
Figure 3

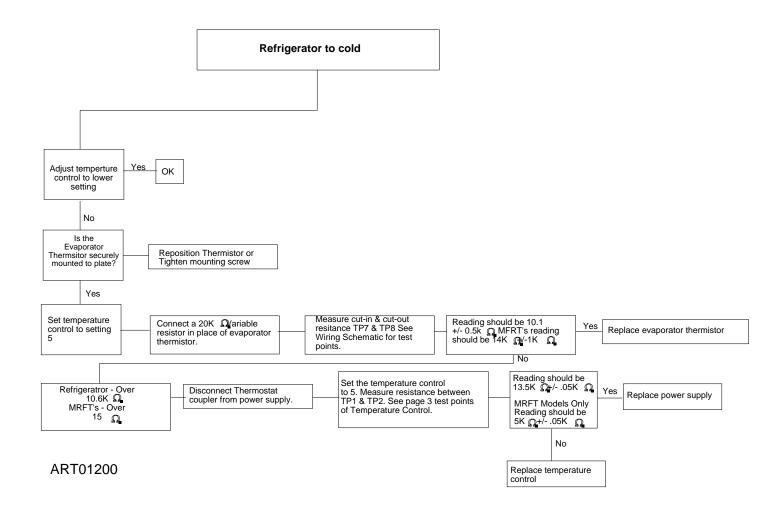




ART01196 Figure 4







Ventilation is required to assure efficient operation of the refrigerator and to increase the life expectancy of the refrigerator's cooling system. Ventilation allows fresh air to come from and exhaust to the living area of the vehicle by means of an inlet and an exhuast vents. These vents allow an adequate airflow over the rear mounted refrigerator condenser and cooling unit. These vents must be unobstructed and provide an open path to the rear of the refrigerator.

Each refrigerator has a specified **minimum** air flow requirement. It is suggested to provide as much ventilation as possible. The more air circulating over the rear of the refrigerator, the more efficient the refrigerator will operate. Refer to Figures 6, 7 and 8 on pages 9 and 10 and the Ventilation Requirement Chart on page 11.

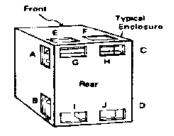


Figure 6

Figure 1: Approved venting arrangements - venting should be installed using any of the following cutout location combinations.

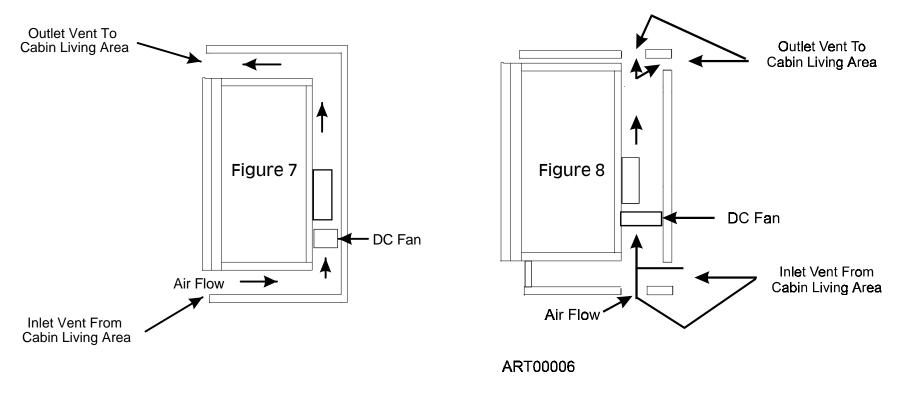
A/B	B/C	C/D	D/E	E/f	F/I	G/J	H/I
A/D	B/E	C/I	D/F	E/J			H/J
A/I	B/F	C/J	D/G				
A/J	B/G		D/H				
	B/H						



Failure to provide the required ventilation will result in shortened life expectancy of the cooling unit, poor refrigeration, continuous operation, accelerated battery discharge and will void the refrigerator warranty.

ART01201

Ventilation continued on page 10

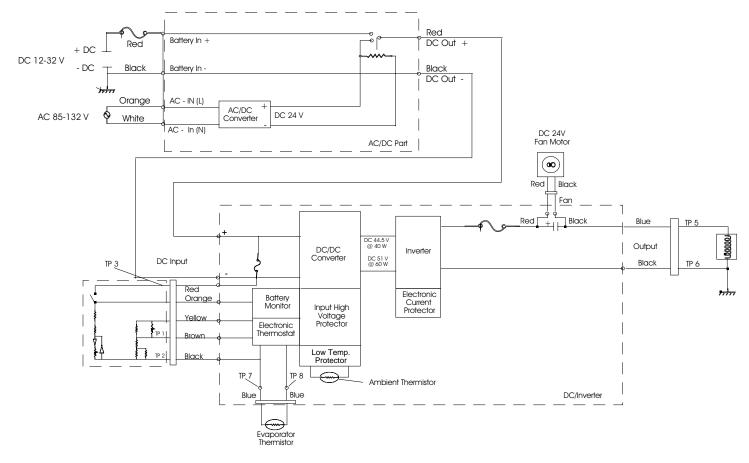


ART00556

In addition to the required vents sizes, a fan can be added to increase the refrigerator performance and to decrease the refrigerator current consumption. A fan kit is available through Norcold part distribution network. Refer to Fan Kit Assembly chart on page 11.

VENTILATION REQUIREMENT CHART								
Refrigerator Model	Min. Vent Sizes Without Fan	Min. Vent Sizes With Fan	Recommended Fan CFM					
DC440	50 Square Inches Inlet 50 Square Inches Outlet	25 Square Inches Inlet 25 Square Inches Outlet	28					
DC451 50 Square Inches Inlet 50 Square Inches Outlet		25 Square Inches Inlet 25 Square Inches Outlet	28					
DE451	50 Square Inches Inlet 50 Square Inches Outlet	25 Square Inches Inlet 25 Square Inches Outlet	28					
DE490	100 Square Inches Inlet 100 Square Inches Outlet	35 Square Inches Inlet 35 Square Inches Outlet	28					
DE/EV441	100 Square Inches Inlet 100 Square Inches Outlet	50 Square Inches Inlet 50 Square Inches Outlet	28					
DE/EV461	100 Square Inches Inlet 100 Square Inches Outlet	50 Square Inches Inlet 50 Square Inches Outlet	60					

FAN KIT ASSEMBLY							
Part Number	Description	Model	AMP				
160924950	Fan Kit	DE/DC451	.15				
160924950	Fan Kit	DC440	.15				
160930600	Fan Kit	DE490	.1				
620379	Fan Kit	DE441	.15				
620648 Fan Kit		DE461	.15				



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