

REFRIGERATOR

MODELS

DC-351D DC-340D-(F), (K) DC-390D-(V)

OWNER'S GUIDE

SERVICE INFORMATION

IF SERVICE OR PARTS ARE REQUIRED, CONTACT THE NEAREST NORCOLD SERVICE CENTER. A NORCOLD SERVICE CENTER BOOKLET HAS BEEN INCLUDED WITH THE REFRIGERATOR INFORMATION PACKET

NORCOLD®

Printed in Japan 5/97 #5490 110 2030

This appliance has been designed for refrigerating purposes and is operable on a 12 Volt D.C. power supplies when installed as directed by this manual.

MODEL NO.		SERIAL	NO.
	 		

The model and serial number may be located on the lower front trim rail or on the cabinet immediately adjacent to this trim rail.

Before installing your unit, record and retain the model and serial number for future reference and warranty purposes.

- DOOR OPENING, RIGHT & LEFT HAND, INTERCHANGEABLE
- · CHANGEABLE DOOR PANEL

☐ INSTALLATION

Your refrigerator should be located and secured on a solid surface with in the vehicle.

Before installing the cabinet into the opening, check to see if the D.C. supply be connected. In many cases, the D.C. supply can be connected from outside the vehicle by means of the baggage or access door.

Measure the opening to determine if you have the proper clearances for installation.

These is no need for allowing an area around the cabinet for additional insulation as the Norcold refrigerator is well insulated and requires no additional

insulation.

Be sure your refrigerator is not in direct sunlight or near a gas stove, heater, or other heat-generating appliances.

Avoid installing your refrigerator close to warm lines, or warm air ducts. Your refrigerator has been thoroughly cleaned before shipment form the factory. It is advisable, however, to clean the interior once more before using.

Wipe the interior with a cloth moistened in warm water and wipe afterwards with a dry cloth.

☐ VENTING

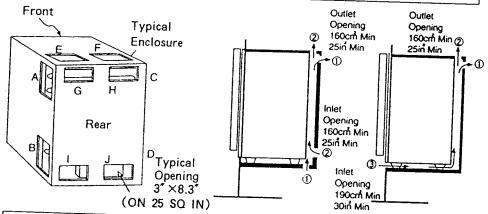
In order to assure efficient operation an adequate airflow over the rear mounted condenser of the refrigerator is required. Please refer to the illustration showing the various approved venting arrangements. Venting should be installed using any of the following combinations for truck use.

A-D, A-I, A-J, B-C, B-F, B-H, C-D, C-I, C-J, D-F, D-H, F-I, F-J, G-I, G-J, H-I, H-J,

Vent opening combinations should equal a minimum air flow of 50 square inches. These opening sizes are for minimum ventilation, however, we suggest providing as much ventilation as possible. The more air circulating over the condenser (located at rear) the more efficient the refrigerator will operate.

CAUTION

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

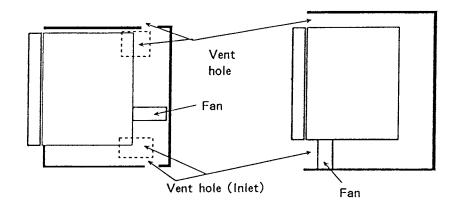


FOR TRUCK OR HEAVYDUTY USE IN MARINE & R/V. ON TEMPERATURE

In addition to suitable Vent opening, there must be cooling fan adding in order to get "Good cooling performance, Less current consumption, Higher ambient air temperature use such as 110° F"

Model	Vent hole size	C.F.M of Fan	Max. ambient air Temp. to use
DC-340D-(F)	min. 25 in²	FAN INSTALLED	110° F
DC-351D	min. 25 in ²	25-28	110° F
DC-390D-(V)	min. 50 in²	FAN INSTALLED	110° F

Cooling Fan position is recommended as follows,



☐ CONNECTING TO POWER SOURCE

Your refrigerator can be operated on D.C. (12 volt) from a battery.

CAUTION -

The use of an Extension cord is not recommended.

12 VOLT D.C. OPERATION IN YOUR BOAT, TRAILER, CAMPER ETC.

The car battery voltage varies with the type of car you own. Most cars and boats use a 12 volt system. Your refrigerator needs a 12 volt battery.

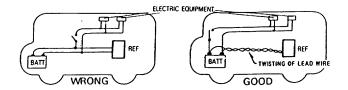
If the battery voltage is too high (for example 24 volt), your refrigerator should not operate because of this refrigerator has a high voltage protector. On the other hand, its cooling power will decrease if the voltage is lower than 12 volt.

Set the temperature control dial to "OFF". Connect two (2) wires from the battery. REFERRING TO PULS/MINUS (+/-) INDICATIONS, D.C. lead wires located in the terminal box at the rear of the refrigerator.

CAUTIONS: 1.

CONNECT REFRIGERATOR DIRECT TO BATTERY

Any switches, lead wires or other electrical equipment should not be common with wiring between your refrigerator and battery, because this equipment often generates high voltage pulses and causes transistor defects in the inverter.



- 2. NEVER USE WIRING LESS THAN AWG #10 BETWEEN BATTERY AND REFRIGERATOR.
- 3. TWISTING OF LEAD WIRE IS RECOMMENDED.

To reduce the radio interference and induction of a high surge voltage from the outside, twisting of the lead wire is important.

Then, make a trial run of your refrigerator.

DIAL SETTING

Refrigerating temperature can be controlled by means of the thermostat dial, which also serves as the "ON-OFF" switch. Turn the dial clockwise from "OFF" and your refrigerator is switched "ON" just before the dial reaches the "1" position.

The interior temperature drops as the position is changed from "1" to "5", In this way, interior temperatures can be regulated freely.

To switch off your refrigerator, turn the dial counterclockwise to "OFF". The dial dose not turn clockwise beyond "5". For efficient operation, regulate the temperature according to the types of foods stored.

CAUTION

- *Never store gasoline or other flammable vapors and liquids as these sometimes cause explosion.
- *Do not touch evaporator and metal parts of cabinet inside by wet hand. Sometimes, it may cause frostbite to your hand.
- *Do not remove or modify all the electrical live parts to avoid electric shock and trouble of your refrigerator.

MAINTENANCE OF YOUR BATTERY IS IMPORTANT

1. OVER COOLING DRAINS YOUR BATTERY.

In order to avoid an excessive drain of your battery, it is advisable to keep the temperature control dial setting at the #3 setting position when ambient temperatures are in the 70° to 90° F. When frozen food is stored in the freezing compartment, advisable the dial setting is the #5 setting at the same temperature conditions.

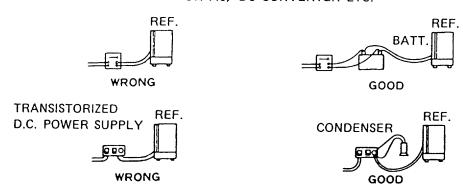
.

2. MAINTENANCE OF BATTERY IS IMPORTANT.

If the charge of your battery is not sufficient a decline in the cooling performance of your refrigerator can be expected.

3. NEVER EMPLOY A "QUICK CHARGER" TO YOUR BATTERY UNLESS THERMOSTAT HAS BEEN TURNED TO "OFF".

BATTERY CHARGER OR AC/DC CONVERTER ETC.



4. HOW TO CHECK THE BATTERY CHARGE LEVEL

Before placing the refrigerator into operation on the D.C. supply, it is important that the charge level of the battery be known. The following two methods are commonly used.

The voltage level of the battery will indicate to a certain degree the charge level of the battery. It is important, however, when using this method that a load be placed on the battery to assure a correct reading. Before applying the D.C. voltmeter to the battery terminals, it is recommended that a minimum of three interior vehicle lights or comparable load be turned on to eliminate the possibility of a false reading. A battery in a partially discharged state with no load applied will provide a 12 volt reading indicating full charge. The same battery with the load applied will read the true voltage level and indicate a recharge is required.

The voltage check system should only be used when the availability of a hydrometer is not present.

B) SPECIFIC GRAVITY CHECK

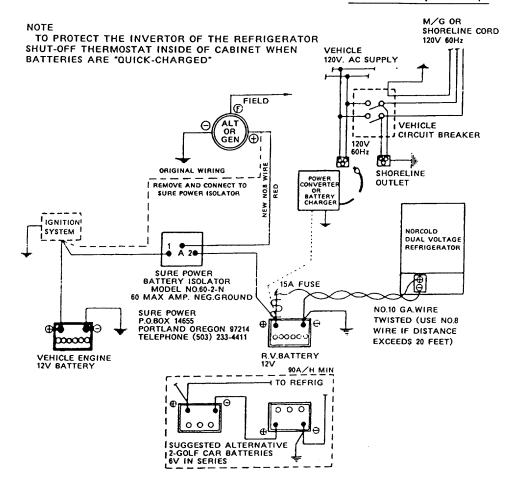
This method is by far the most accurate. The specific gravity reading when taken properly will indicate the true charge level of the battery. A full charged battery will have a specific gravity reading of 1,260 to 1,280. When taking the readings in this manner, it is advisable to check all the cells. (3 for the six volt battery and 6 for the 12 volt) If the battery is in good condition, all the cell readings will be

If the battery is in good condition, all the cell readings will be approximately the same. If you that one cell has a lower reading than any of the others, it is an indication that the battery is defective and should be replaced.

Battery recharge is recommended any time the specific gravity reading is less than 1,200.

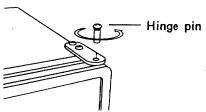
FOR YOUR REFERENCE.....

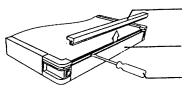
The Wiring Diagram shown below is recommended for dual battery hookup.



I. HOW TO REPLACE DOOR PANEL

Remove door from refrigerator
 (Remove hinge pin by use of screw driver.)



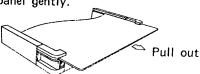


Lower panel frame

Lower door frame

Push in thin top minus screw driver between lower panel frame and lower door frame and detach lower panel frame to upper side.

3. Pull out door panel gently.



Insert a new door panel to the door slit.
 Caution: Thickness of the door panel should be 4mm or under.

5. Fix the lower panel frame and replace the door following with the reverse order of disassembly.

II. HOW TO CHANGE DOOR OPENING DIRECTION FOR STOPPER PIN MODELS; DC-340D, DC-390D-V

- 1. Remove 2 hinge plates (both upper and lower side), door stopper plate and stopper pin by loosen of 6 screws.
- 2. Fix the hinge plates, the door stopper and the stopper pin as counter side of cabinet end.

Door stopper

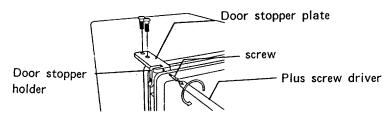
Upper hinge plate

Lower hinge plate

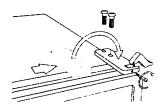
FOR STOPPER HOLDER MODELS; DC-351D

- 1. Remove 2 hinge plates (both upper and lower side) and door stopper by pulling out of 6 screws.
- 2. Fix the hinge plates at counter side of cabinet end.

3. Pullout screw of door stopper plate and remove door stopper holder.



4. Turnover the door stopper plate and fix the door stopper holder so as to it can catch door at counter side of previous setting.



5. Fix the door stopper at counter side of cabinet end.

☐ MAINTENANCE OF YOUR REFRIGERATOR

CLEANING BOX AND DOOR:

Wipe with a soft, dry cloth. To remove dirt, use a cloth moistened by a warm neutral detergent solution. Never use hot water. After cleaning, wipe with a dry cloth.

GASKET (door cushion):

Wipe away dirt with a soft cloth moistened by a neutral detergent. Do not soak the cloth excessively. If water gets inside, the insulating effect may become temporarily impaired.

ATTACHMENTS:

Wash all attachments in soapsuds. Rinse and wipe clean with a dry cloth.

CAUTION: Never use a brush, powder soap, cleanser, acid, benzene, gasoline, or thinner. These tend to leave scratches on the coating.

TO TURN OFF THE REFRIGERATOR:

Set the power switch to "OFF" and remove the plug from its socket.

When not in use the refrigerator should be emptied, cleaned and dried, and the door left ajar.

DEFROSTING

Set the temperature control dial to "OFF". When frost is melted, wipe the compartment plates with a soft, dry cloth.