

Truk-Cel PROTECTIVE BLOWER UNITS



PRODUCT INSURANCE

No Spoilage! No Loss!

"HOLDOVER FOR STOPOVER"

THE ANSWER
TO MANY PROBLEMS
IN THE SAFE
TRANSPORT OF PERISHABLES
BY A PIONEER IN THE
FIELD OF
TRUCK REFRIGERATION
EQUIPMENT

THE
DOLE *Truk-Cel*
ANOTHER MEMBER OF
THE FAMOUS
DOLE CEL LINE

NOTE
THESE
FEATURES!

- DO... ed
- ion
- opt
- boi
- Floor moui
- MPLE: per
- imur
- ANT emj
- holdover
- for

Method of Operation

DOLE *Truk-Cel*

THE DOLE TRUK-CEL is a compact eutectic blower system that provides uniform temperatures in medium temperature (34° to 40°) truck bodies for Dairy Products, Meat, etc. It consists of Dole Vacuum HoldOver Plates mounted in a rugged but lightweight aluminum tread-plate case, ready for connecting to the refrigerating system. A fan is mounted at the top of the unit by which air is drawn over the plates and discharged through an adjustable grill, for circulation throughout the body.

While on the road the fan is powered by the truck battery. During the time the truck is in the garage, an electrical Conversion Unit, built into the Truk-Cel, utilizes regular 115 or 235 volt alternating current power supply for this purpose, since it is advisable to have the fan operating at all times, except when a door is open.

One door switch is supplied with each Truk-Cel, as well as a snap switch and pilot light (for dash mounting) for controlling fan operation. If accurate temperature control is desired, a thermostat may be installed in the control circuit. Additional door switch assemblies #7299BS-2 may be ordered.

Truk-Cels are available for use with either Freon or Ammonia. A thermostatic expansion valve and heat exchanger are built into the Freon units.

The CHO, or Complete HoldOver type, is for use where a source of refrigeration is available at night only, whether it be a Freon unit carried on the truck and plugged in while in the garage, or using the make-and-break system with a remote ammonia or Freon compressor. Thicker plates are used in this model, giving the extra holdover required for the complete period the truck is on the road.

The flexibility of these units, in type of refrigeration, amount of holdover and capacity in the various models, means there is a suitable unit for every truck body, providing the most modern and dependable concept in mobile refrigeration systems.

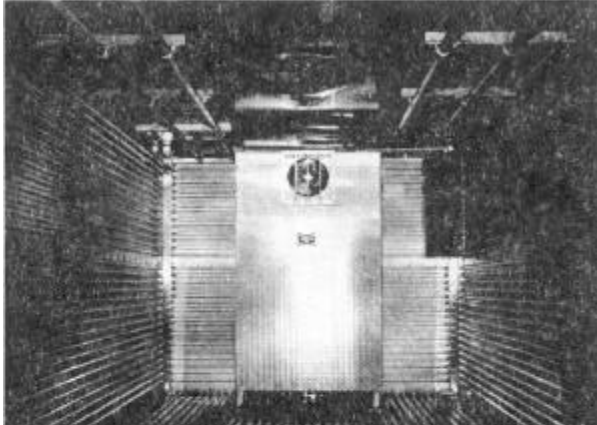
Truk-Cel EUTECTIC BLOWER UNITS



Typical Installations



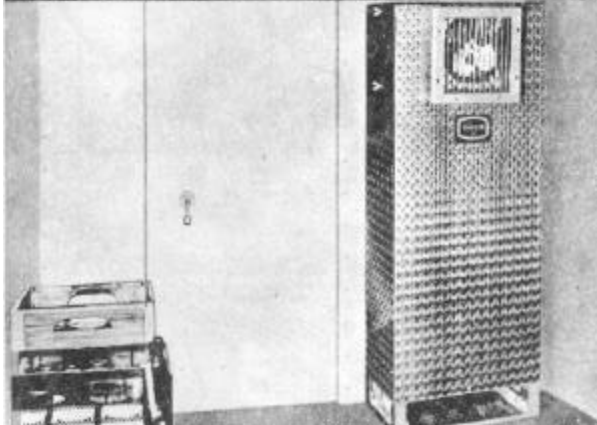
12 Ft. WHOLESALE MEAT BODY



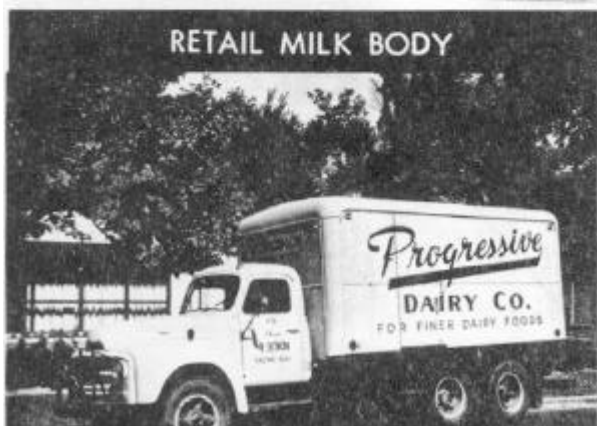
TRUK-CEL CHO-68A



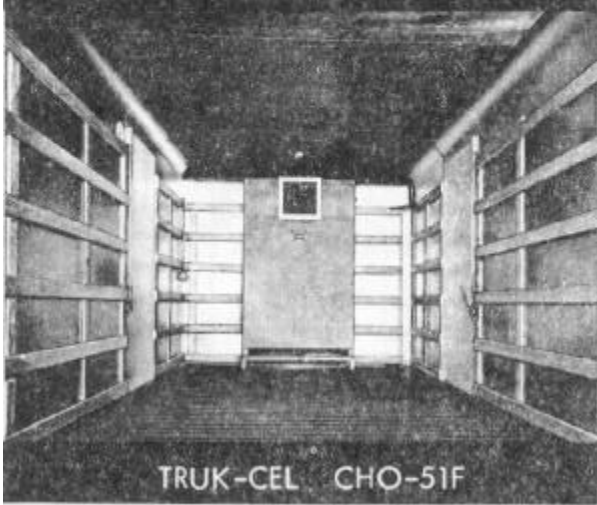
RETAIL MILK BODY



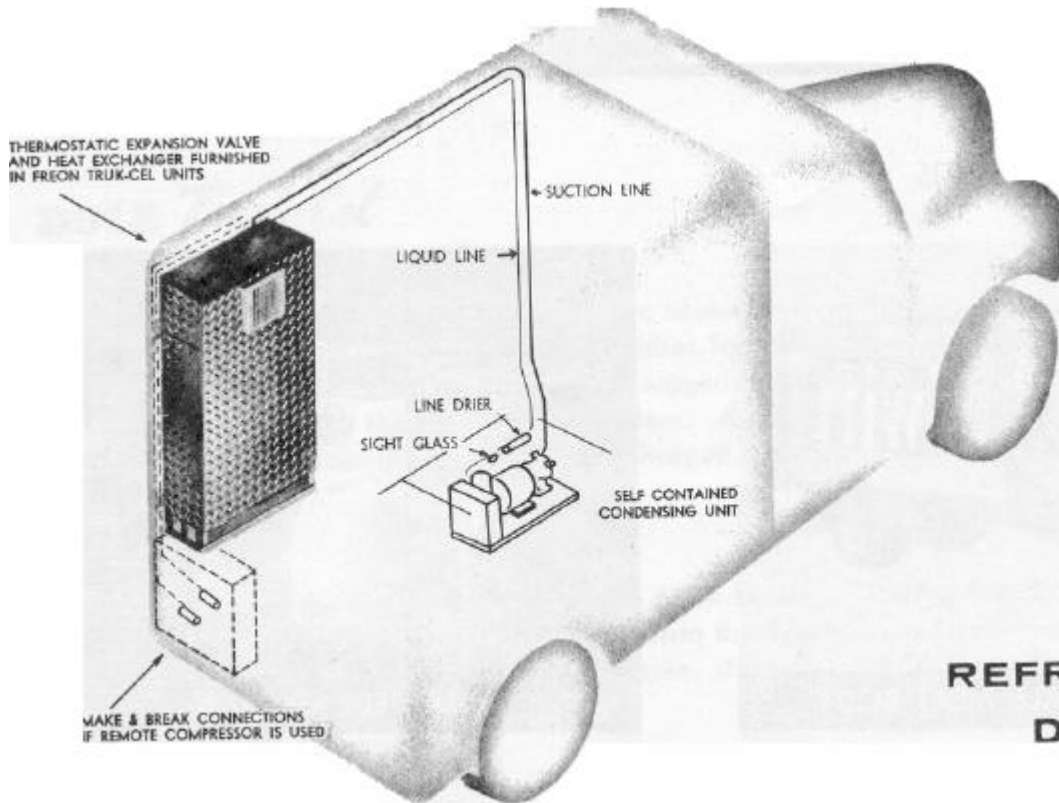
TRUK-CEL CHO-25F



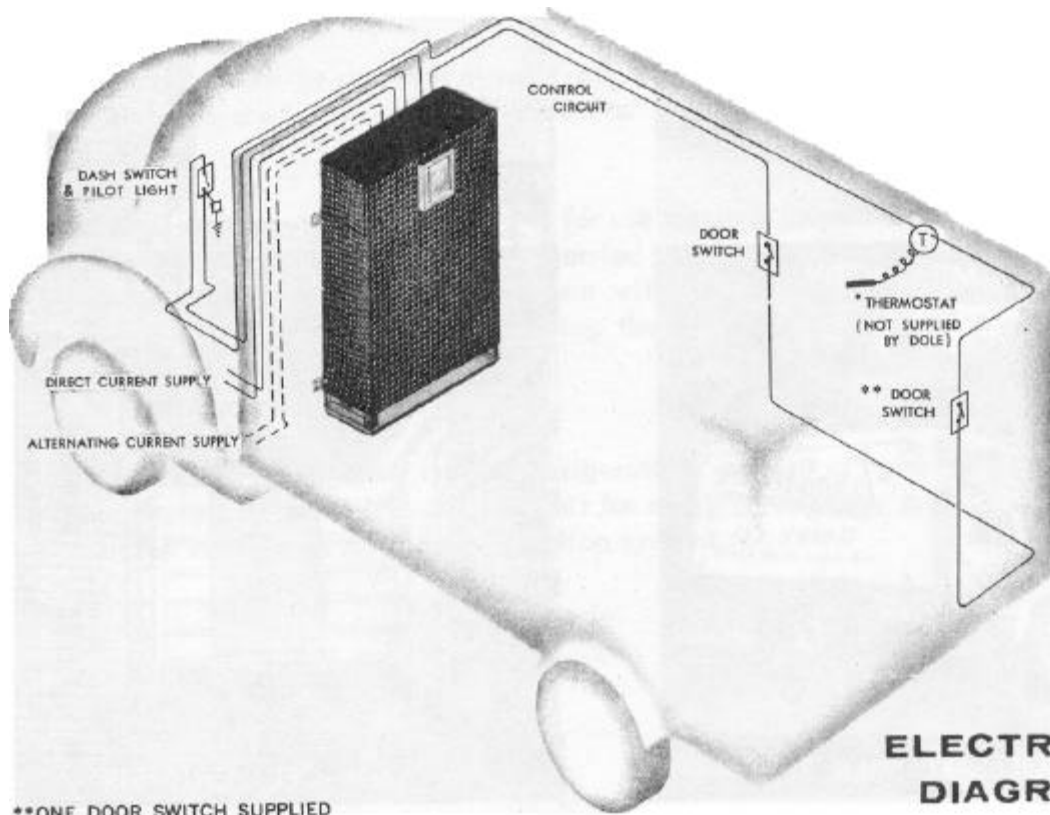
14 Ft. WHOLESALE MILK BODY



TRUK-CEL CHO-51F



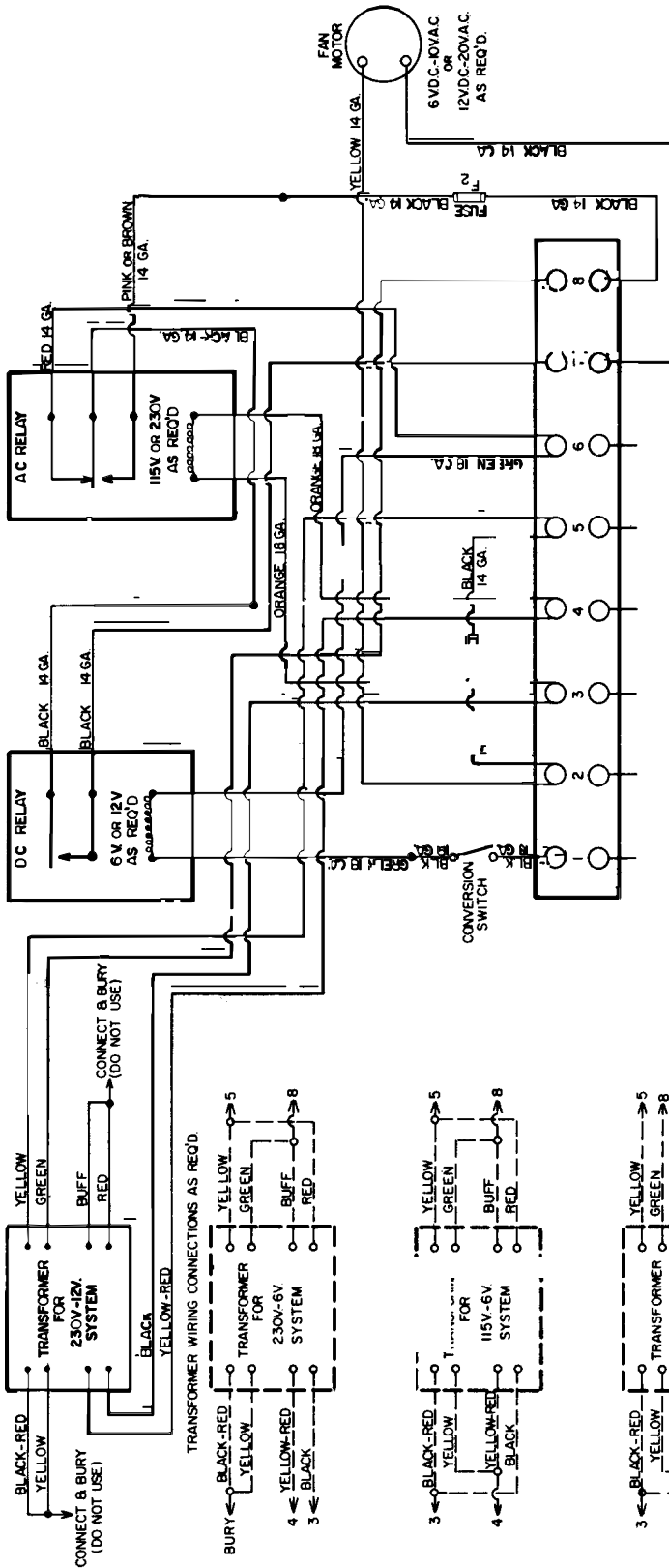
**REFRIGERATION
DIAGRAM**



**ELECTRICAL
DIAGRAM**

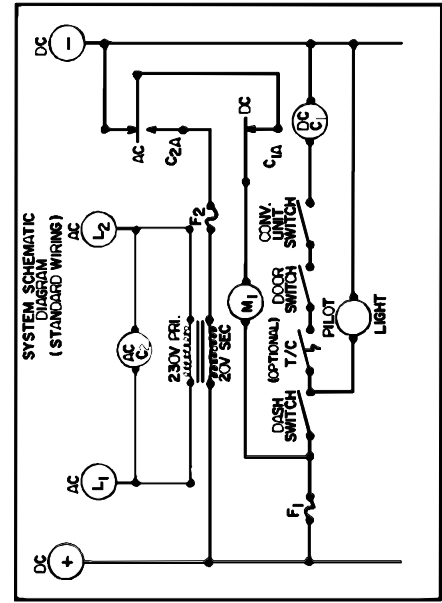
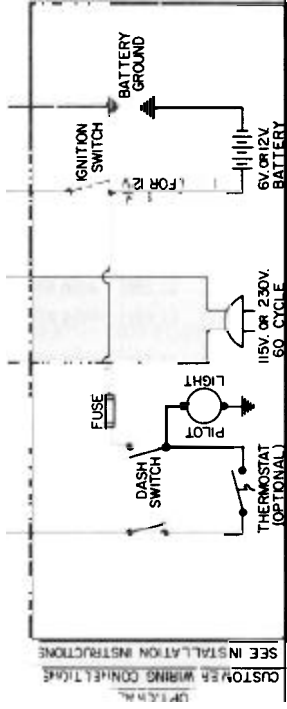
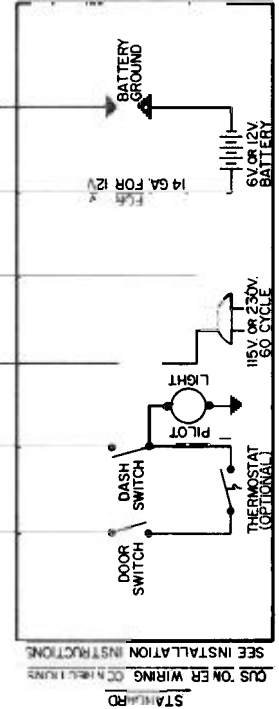
**ONE DOOR SWITCH SUPPLIED WITH EACH TRUK-CEL

TRUK-CEL CONVERSION UNIT SCHEMATIC & WIRING DIAGRAM



NOTES

- IMPORTANT!**
- FAN MOTOR WILL OPERATE ON AC OR DC POWER SUPPLY ONLY WHEN D.C. RELAY IS ENERGIZED THROUGH CONTROL CIRCUIT.
 - TERMINAL 5 MUST BE CONNECTED DIRECT TO THE HOT SIDE OF BATTERY AS SHOWN IN THE STD. CUSTOMER WIRING. THIS WIRING IS AN ALTERNATE CONNECTION TO THE REGULATOR OR IGNITION SWITCH.
 - DASH SWITCH TO BE USED FOR INTER. DASH LET FAN MOTOR OPERATION IF SO DESIRED.
 - SEE INSTALLATION BOOKLET FOR EXPLANATION OF STANDARD & OPTIONAL CUSTOMER WIRING CONNECTIONS.



SEE INSTALLATION INSTRUCTIONS
CUSTOMER WIRING CONNECTIONS
STANDARD WIRING CONNECTIONS
SEE INSTALLATION INSTRUCTIONS

Truk-Cel SPECIFICATIONS

MODEL	HOLD-OVER BTU's	RATING 15° T.D.	EXP. VALVE	HEAT EXCHANGER	REFRIG. CHARGE LBS.	FAN SIZE	SIZE OF UNIT			MOUNTING DIMENSIONS			SHIPPING WEIGHT	NET WEIGHT
							A	B	C	D	E	F		
CH025A	25,000	2340 BTU/hr	None	None	2.2	8"	54 1/2"	21	13 1/4"	40 3/4"	24	3 3/8"	485	400
CH025F	25,000	2340 BTU/hr	1 Ton	D-123	4.8	8"	54 1/2"	21	13 1/4"	40 3/4"	24	3 3/8"	493	408
CH026A	26,500	2448 BTU/hr	None	None	2.0	8"	42 3/8"	31	13 1/4"	29 3/4"	34	3 3/8"	500	404
CH026F	26,500	2448 BTU/hr	1 Ton	D-123	4.4	8"	42 3/8"	31	13 1/4"	29 3/4"	34	3 3/8"	508	412
CH027A	27,000	3000 BTU/hr	None	None	2.8	8"	54 1/2"	21	16 3/8"	40 3/4"	24	3 3/8"	523	433
CH027F	27,000	3000 BTU/hr	1 Ton	D-123	6.2	8"	54 1/2"	21	16 3/8"	40 3/4"	24	3 3/8"	531	441
CH033A	33,400	3120 BTU/hr	None	None	2.9	8"	54 1/2"	21	16 3/8"	40 3/4"	24	3 3/8"	589	499
CH033F	33,400	3120 BTU/hr	1 Ton	D-123	6.4	8"	54 1/2"	21	16 3/8"	40 3/4"	24	3 3/8"	597	507
CH036A	35,800	3200 BTU/hr	None	None	2.9	10"	47 3/8"	37	13 1/4"	32 3/4"	40	3 3/8"	630	540
CH036F	35,800	3200 BTU/hr	1 Ton	D-163	6.4	10"	47 3/8"	37	13 1/4"	32 3/4"	40	3 3/8"	640	550
CH041A	41,000	4650 BTU/hr	None	None	4.1	10"	61 1/2"	37	13 1/4"	45 3/4"	40	3 3/8"	750	650
CH041F	41,000	4650 BTU/hr	1 1/2 Ton	D-163	9.0	10"	61 1/2"	37	13 1/4"	45 3/4"	40	3 3/8"	760	660
CH045A	45,300	3300 BTU/hr	None	None	2.9	10"	47 3/8"	37	15 1/8"	32 3/4"	40	3 3/8"	732	642
CH045F	45,300	3300 BTU/hr	1 1/2 Ton	D-163	6.3	10"	47 3/8"	37	15 1/8"	32 3/4"	40	3 3/8"	742	652
CH051A	51,000	4650 BTU/hr	None	None	4.1	10"	61 1/2"	37	13 1/4"	45 3/4"	40	3 3/8"	840	740
CH051F	51,000	4650 BTU/hr	1 1/2 Ton	D-163	9.0	10"	61 1/2"	37	13 1/4"	45 3/4"	40	3 3/8"	838	738
CH068A	68,000	6200 BTU/hr	None	None	5.5	10"	67 3/8"	37	17 3/8"	45 3/4"	40	3 3/8"	1066	966
CH068F	68,000	6200 BTU/hr	2-1 Ton	D-163	12.0	10"	67 3/8"	37	17 3/8"	45 3/4"	40	3 3/8"	1079	979
CH086A	86,000	6300 BTU/hr	None	None	5.5	10"	67 3/8"	37	19 3/8"	45 3/4"	40	3 3/8"	1350	1225
CH086F	86,000	6300 BTU/hr	2-1 Ton	D-163	12.0	10"	67 3/8"	37	19 3/8"	45 3/4"	40	3 3/8"	1392	1238

NOTE: If Drip Pan is used increase "F" dimension 1/16". Add 1-1/8" to "C" dimension for fan housing.

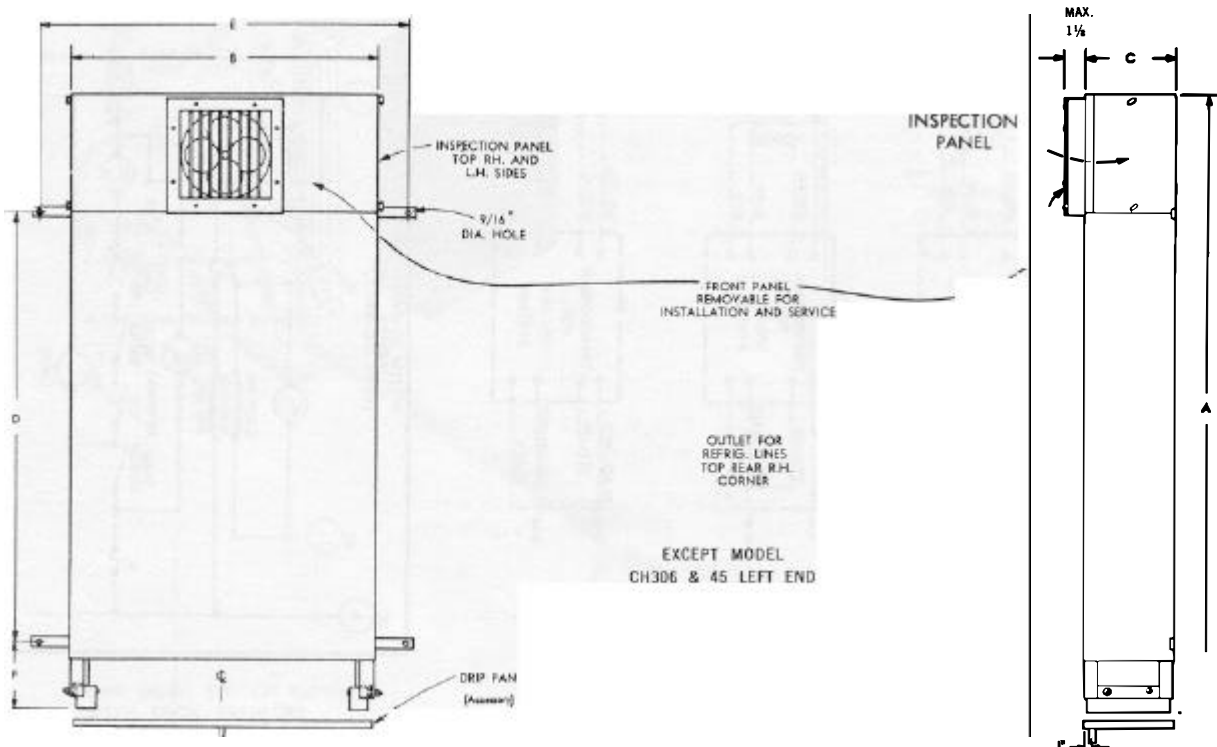
All units are constructed of aluminum tread plate exterior, steel zinc coated plates.

Freon Model Connections - 3/8" inlet, 5/8" outlet - Ammonia Model Connections - 1/2" F. P. T. inlet and outlet.

Letter "A" after model number indicates ammonia, "F" indicates Freon 12.

REFRIGERANT CHARGE BASED ON 25% TOTAL EVAPORATOR VOLUME.

ORDERING INSTRUCTIONS: Specify refrigerant, truck (DC) Voltage, house (AC) Voltage.



Truk-Cel EUTECTIC BLOWER UNITS



HOW TO CALCULATE *Truk-Cel* REQUIREMENTS

INFORMATION REQUIRED

EXAMPLE

1. PRODUCT	MILK
2. TEMPERATURE REQUIRED	40°
3. HOLDOVER REQUIRED	10 HOURS
4. NUMBER OF DOOR OPENINGS	30 - 40
5. OPERATION	WHOLESALE
6. EXTERIOR DIMENSIONS OF REFRIGERATED COMPARTMENT	12'L x 6'H x 7"W (396 sq. ft. Outside Area)
7. INSULATION THICKNESS	3"
8. AVAILABLE CHARGING TIME	12 HOURS

WALL LOSS: - Based on 60° temperature difference:

Outside area x temperature difference
x insulation factor (from table) = $396 \text{ sq. ft.} \times 60^\circ \times .101 \text{ BTU} = 2400 \text{ BTU/hr}$

SERVICE LOSS:

50% of wall loss (estimate for item 4 and 5) = $50\% \text{ of } 2400 \text{ BTU} = 1200 \text{ BTU/hr}$

TOTAL HOURLY HEAT LOSS: (While on the road)

Wall loss plus service loss = $2400 \text{ BTU} + 1200 \text{ BTU} = 3600 \text{ BTU/hr}$

HOLDOVER REQUIRED:

Total hourly heat loss x road time = $3600 \text{ BTU/hr} \times 10 \text{ hrs.} = 36,000 \text{ BTU}$

TRUK-CEL SELECTION

From Table on Page 6 CHO-41 has Hourly capacity of 4650 BTU/hr
Holdover capacity of 41,000 BTU

CAPACITY SELECTION:

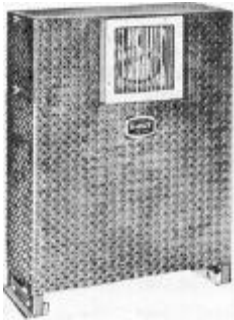
Total load per 24 hrs. divided by available charging time =
Required compressor capacity at +13° suction temperature.
(13° S.T. required for freeze + 26° Eutectic in standard Truk-Cel)

Daytime load = hourly heat loss x road time = $3600 \text{ BTU} \times 10 \text{ hrs} = 36,000 \text{ BTU}$
Nighttime load = hourly wall loss only x garage time = $2400 \text{ BTU} \times 14 \text{ hrs} = 33,600 \text{ BTU}$
Total load per 24 hrs. = $69,600 \text{ BTU}$
Condensing Unit Capacity = $\frac{69,600 \text{ BTU}}{12 \text{ hrs.}} = 5800 \text{ BTU/hr}$

	1"	2"	3"	4"	5"	6"	7"	8"
B.T.U. per 24 hours per 1° F. temperature difference								
B.T.U. per 1 hour per 1° F. temperature difference								
Per 24 hr.	7.3	3.65	2.43	1.82	1.45	1.2	1.04	.91
Per 1 hr.	.304	.152	.101	.076	.06	.05	.043	.038

Aluminum Exterior—Zinc Plates

12/230 volt furnished unless otherwise specified
12/115 volt; 6/115 volt and 6/230 volt available
upon request.



Model Number	Description	Shipping Weight
CHO25A	Ammonia	485
CHO25F	Freon	493
CHO26A	Ammonia	500
CHO26F	Freon	508
CHO27A	Ammonia	523
CHO27F	Freon	531
CHO33A	Ammonia	589
CHO33F	Freon	597
CHO36A	Ammonia	630
CHO36F	Freon	640
CHO41A	Ammonia	750
CHO41F	Freon	760
CHO45A	Ammonia	732
CHO45F	Freon	742
CHO51A	Ammonia	840
CHO51F	Freon	838
CHO68A	Ammonia	1066
CHO68F	Freon	1079
CHO86A	Ammonia	1350
CHO86F	Freon	1392



NOTE: Above units include an automatic Voltage Conversion unit. Freon model includes Heat Exchanger and expansion valve. Drip pans available at extra cost

WARRANTY—Truk-Cel Eutectic Blower

The Company warrants this Dole Truk-Cel Unit to be well made, of good material and free from defects. It is guaranteed against any defect in material or workmanship for the following period of time, providing, if claimed defective, the Truk-Cel Unit or any part thereof is returned to the Company, transportation charges prepaid.

FAN MOTOR & VOLTAGE CONVERSION UNIT - 90 days. **CHO MODELS**
BALANCE OF UNIT - 1 year

PLATES - 5 years. If Dole Plates should prove defective prior to TWO years the Company will replace said Dole Plates free of charge. If Dole Plates should prove defective after TWO years and prior to the lapse of THREE years, the Company will replace said Dole Plates for 50% of prices in effect at time of exchange, and if said Dole Plates shall become defective at the end of THREE years and prior to the lapse of FOUR years, the Company will replace said Dole Plates for 66% of prices in effect at time of exchange, and if said Dole Plate shall become defective at the end of FOUR years and prior to the lapse of FIVE years the Company will replace the Dole Plates for 80% of prices in effect at time of exchange.

FAN MOTOR & VOLTAGE CONVERSION UNIT - 90 days.
PLATES AND BALANCE OF UNIT - 1 year.

The Company shall not be liable for any damage of any nature caused by defects in workmanship or material or any other reason, but its liability shall be limited to the value of the Dole Truk-Cel Unit guaranteed, and correction of any defects in workmanship or material shall constitute a fulfillment of its guarantee. The Company's liability in all events shall be limited to replacing or repairing the defective part, whichever it seems advisable.



DOLE REFRIGERATING COMPANY

1420 Higgs Road • Lewisburg, TN 37091 • Phone (615) 359-6211

Dole Refrigerating Products Limited • Oakville, Ontario, Canada

Dole's COLD LINE 1-800-251-8990

SOLD BY