

VULCAN®

**INSTALLATION, OPERATING, SERVICE
AND PARTS MANUAL FOR
FLOOR MOUNTED TILTING
BRAISING PANS
VETS SERIES**



Vulcan service agencies are located throughout the United States.
For location and phone number of one near you, call your local Vulcan dealer.

VULCAN-HART CORPORATION, P.O. BOX 696, LOUISVILLE, KY 40201-0696, TEL. (502) 778-2791
TECHNICAL ASSISTANCE (800) 626-2700

IMPORTANT

OPERATING, INSTALLING AND SERVICE PERSONNEL

The operating information on this equipment has been prepared for use by qualified and/or authorized operating personnel.

All installation and service on this equipment is to be performed by qualified, certified, licensed and/or authorized installation or service personnel, with the exception of any part marked with a □ in front of the part number.

To obtain the name and location of an authorized Vulcan service agency, contact your Food Service Equipment dealer by calling 1-800-626-2700.

DEFINITIONS

QUALIFIED AND/OR AUTHORIZED OPERATING PERSONNEL

Qualified or authorized operating personnel are those who have carefully read the information in this manual and are familiar with the equipment's functions or have had previous experience with the operation of the equipment covered in this manual.

1. For the installation of gas piping from the outlet side of the gas meter, or the service regulator when the meter is not provided, and the connection and installation of the gas appliance, qualified installation personnel must be experienced in such work, be familiar with all precautions required, and have complied with all requirements of state or local authorities having jurisdiction. In the absence of local codes, installation must comply with National Fuel Gas Code ANSI Z223.1-latest edition.
2. For the installation of electrical wiring from the electric meter, main control box or service outlet to the electric appliance, qualified installation personnel must be experienced in such work, be familiar with all precautions required, and have complied with all requirements of state or local authorities having jurisdiction. In the absence of local codes, installation must comply with the National Electrical Code ANSI NFPA No. 70 latest edition.
3. For the installation of steam piping from the source of supply to the service inlet of the appliance, qualified installation personnel must be experienced in such work, be familiar with all precautions required, and have complied with all requirements of state or local authorities having jurisdiction.

QUALIFIED SERVICE PERSONNEL

Qualified service personnel are those who are familiar with this equipment who have been endorsed by our company. All authorized service personnel are required to be equipped with a complete set of service and parts manuals and stock a minimum amount of parts for this equipment.

SHIPPING DAMAGE CLAIM PROCEDURE

For your protection, please note that equipment in this shipment was carefully inspected and packed by skilled personnel before leaving the factory. The transportation company assumes full responsibility for safe delivery upon acceptance of this shipment.

If shipment arrives damaged:

1. **VISIBLE LOSS OR DAMAGE** — Be certain this is noted on freight bill or express receipt and signed by person making delivery.
2. **FILE CLAIM FOR DAMAGES IMMEDIATELY** — Regardless of extent of damage.
3. **CONCEALED LOSS OR DAMAGE** — If damage is unnoticed until merchandise is unpacked, notify transportation company or carrier immediately, and file "concealed damage" claim with them. This must be done within fifteen (15) days of the date the delivery is made to you. Be sure to retain container for inspection.

We cannot assume responsibility for damage or loss incurred in transit. We will, however, be glad to furnish you with necessary documents to support your claim.

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE

DESCRIPTION

- A. The capacity of this tilting braising pan is indicated by the last two numbers in the model number; 24 gallons, 30 gallons or 40 gallons.
- B. The tilting braising pan is one of the most versatile pieces of equipment to be found in any restaurant or institutional kitchen.
- C. This unit will stew, simmer, pan fry, braise, grill and saute and all with a very uniform heat pattern. It cannot be used as a deep fat fryer.
- D. The tilting braising pan should always be pre-heated and allowed to cycle, for more satisfactory results.
- E. A great deal of heavy lifting and transferring of foods from one pan to another can be eliminated and, therefore, pot washing will be reduced.
- F. Frozen vegetables can be cooked in the braising pan, placed in the serving pan, then removed and transferred directly to the serving line.
- G. The cover has a lip at the back edge which directs the condensate on the inside of the cover into the braising pan.
- H. The unit tilts easily to 90°. The optional receiving pan is always approximately 2 inches from the pouring lip of the braising pan.

INSTALLATION

WARNING: Electrical and grounding connections must comply with applicable portions of the National Electrical code and/or other local electrical codes.

A. SET UP

- a. Set the tilting braising pan in place, level and mark leg anchoring locations.
- b. Remove the braising pan, prepare the leg bolt down locations and return the braising pan to its prepared location.
- c. Level the pan then pull threads up tight to the counter or stand.
- d. Seal the legs with a high grade sealing compound.

B. SERVICE CONNECTIONS

- a. All internal wiring for the braising pan was completed at the factory.
- b. Have a waterproof electrical connection from incoming lines to the control box.
- c. Ground braising pan to the terminal provided in the control housing.

- d. A wiring diagram is provided inside the control housing cover panel.
- e. All braising pans have been factory tested for control operation and for electrical heating elements.
- f. Connect water to faucet if optional faucet was purchased.
- g. Turn unit on and check for proper operation.

CONTROLS

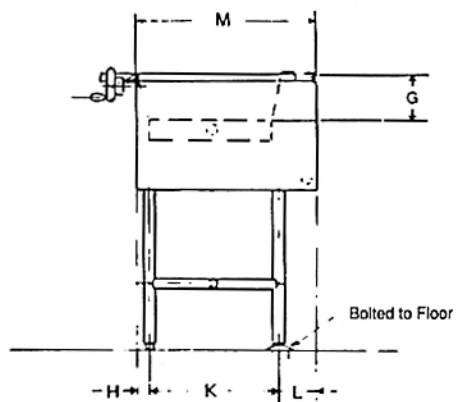
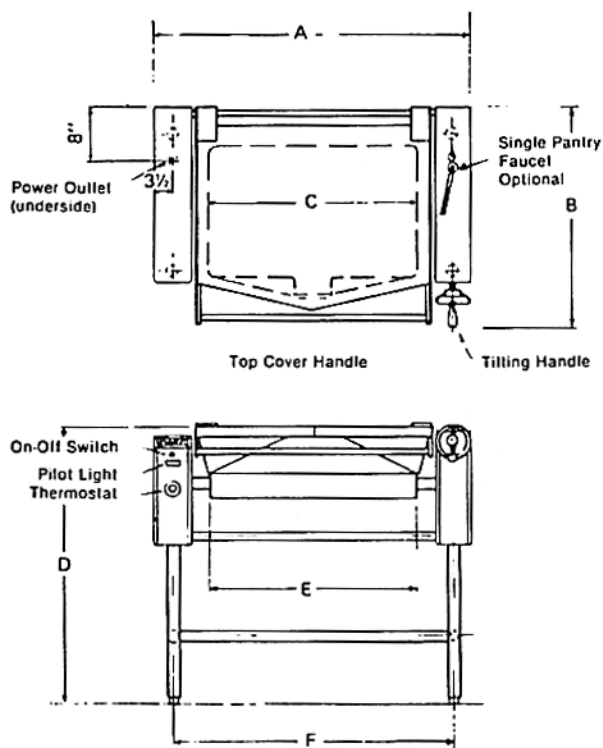
The controls on the braising pan are an "ON-OFF" electrical switch and a thermostat. Turn the switch to "ON" when ready to start cooking: Dial the temperature control to bring the pan up to temperature, let it cycle then begin cooking. Do not leave the unit "ON" when not warming it up for cooking, or when nothing is being cooked. Turn the unit "OFF" when through cooking. The pilot light lights when unit is turned on and the heating elements turn on. Use the thermostat to dial the correct

temperature for the type of cooking being done. When the dialed temperature is reached the elements turn off. The light and heating elements continue to cycle off and on, holding the dialed temperature.

ELECTRICAL CHARACTERISTICS

ELECTRICAL CHARACTERISTICS													
MODEL	PH	208V		230V		240V		380V		415V		480V	
		KW	AMP	KW	AMP	KW	AMP	KW	AMP	KW	AMP	KW	AMP
VETS24	3	18.0	50.0	18.0	45.2	18.0	43.3	18.0	27.3	18.0	25.0	18.0	21.6
VETS30	3	18.0	50.0	18.0	45.2	18.0	43.3	18.0	27.3	18.0	25.0	18.0	21.6
VETS40	3	27.0	75.0	27.0	67.9	27.0	65.0	27.0	41.0	27.0	37.6	27.0	32.5

DIMENSIONS													
MODEL	CAPACITY		A	B	C	D	E	F	G	H	K	L	M
VETS24	24 U.S. gal.	inches	50 1/2	35	33 1/2	38	33 1/4	43 1/2	7	2 3/4	22	4 1/2	29 1/4
	91 liter	mm	1280	889	902	965	851	1105	184	70	559	114	743
VETS30	30 U.S. gal.	inches	50 1/2	35	33 1/2	38	33 1/4	43 1/2	9	2 3/4	22	4 1/2	29 1/4
	114 liter	mm	1280	889	902	965	851	1105	235	70	559	114	743
VETS40	40 U.S. gal.	inches	66 1/2	35	49 1/2	38	49 1/4	59 1/2	9	2 3/4	22	4 1/2	29 1/4
	152 liter	mm	1686	889	1254	965	1251	1511	235	70	559	114	743



OPERATION

- A. Check that the unit has been electrically connected and that circuit breakers are on.
- B. Turn the power switch to the "ON" position.
- C. Tilt the braising pan to check that it moves easily. Turn the handle as far as it will go and then return it to its upright position (approximately 90°).
- D. Dial the thermostat dial to the temperature needed for the cooking operation. The thermostat has a range of 100° to 450°F (38° to 232°C).
- E. Preheat the unit for 5 to 7 minutes and allow it to cycle to equalize heat across the surface.
- F. With the cover closed, water will boil faster.
- G. When cooking is completed, return the thermostat to the "OFF" position, turn the power switch "OFF", remove the food, put water and detergent in the pan and let it soak, for easier cleaning.
- H. If the cooking oils or fat get too deep in the pan, drain off the excess by tilting the pan and draining into a container.
- I. Turn the thermostat down to hold food warm.
- J. Do not use sharp cooking or cleaning instruments. They can scratch the finish.

WARNING: DO NOT use a braising pan for deep fat frying. Restrict frying activity to shallow pan frying (oil film not more than 1/8 inch deep) or sauteing. Failure to follow this could result in a fire hazard.

OPERATING TIPS

- A. Sauces usually lose less moisture when the cover is used. It reduces evaporation.
- B. Frozen vegetables can be cooked in the braising pan, placed in a serving pan, then removed and transferred directly to the serving line.
- C. The following temperatures should be used:

Proofing	100° F
Holding	150° - 170° F
Roasting	160° - 200° F
Simmering	Maximum of 200° F
Sauteing	225° - 275° F
Searing	300° - 350° F
Frying	325° - 375° F
Grilling	350° - 425° F
- D. Temperatures of approximately 200°F should always be used for milk based products or scorching will take place. Lower temperatures (150 - 175°F) prevent thickening.
- E. Breakfast foods such as sausage, bacon, pancakes, fried eggs, scrambled eggs and French toast are a few of the more common items cooked in a braising pan.
- F. When cooking meat or poultry, all pieces should be of fairly uniform size and weight and should be turned at least once while simmering.
- G. This unit can be used as a proof box by placing a small amount of water in the pan to form steam and then placing the food in another pan. The thermostat should be set very low (100 - 150°F).
- H. It can be used as a holding cabinet by adding water and setting the thermostat at approximately 175°F.
- I. When using water over and over for vegetable cookery, be sure to add water occasionally to keep level at about 3 - 4 inches. Thermostat should be set at 200°F.
- J. Perforated 2 1/2" deep pans are suggested for vegetables for the most satisfactory results.

CLEANING

The braising pan interior and exterior should be thoroughly washed after each use when a different food is to be cooked next or when cooking is completed for the day. Before cleaning check that the unit has cooled enough to touch it.

- A. Soak the cooking surface to remove any food stuck to the surface.
- B. Wash the pan surface with a mild detergent and warm water.

- C. Remove the wash water by tilting and draining it into a container.
- D. Check that the pouring spout, cover and sides of unit as well as the cooking surface are clean.
- E. Rinse the complete unit, then dry it.
- F. Never spray or pour water over the control console.

COOKING CHART

The Tilting Braising pan is a very versatile piece of commercial cooking equipment. It can stew, simmer, pan fry, braise, griddle or saute with a very uniform heat pattern. The figures given below are suggested quanti-

ties and temperature settings and estimated numbers of orders per load and per hour. When two temperatures are given, the first is to start the product, the second to complete the product.

ITEM	PORTION SIZE	THERMOSTAT SETTING	BATCHES PER HOUR	VETS 24		VETS 40	
				PER LOAD QTY	YIELD	PER LOAD QTY	YIELD
BREAKFAST FOODS							
Bacon	3 Slices	350°	12	2 lbs.	10 lbs.	3 lbs.	15 lbs.
Eggs							
- Boiled - Hard	1 Egg	225°	5	50	50	75	75
- Boiled - Soft	1 Egg	225°	8	50	50	75	75
- Fried	1 Egg	400°	4	30	30	45	45
- Poached	1 Egg	225°	5	36	36	60	60
- Scrambled	1½ Eggs	300° 200°	1	18 gal.	720	28 gal.	1100
French Toast	3 Slices	450°	7	35 Slices	12	50 Slices	17
Regular Oatmeal	½ Cup	250°	2	20	500	40	1000
Pancakes	2 Each	400°	10	30 ea.	15	50 ea.	25
FISH							
Clams	1 pt.	400°	10	10 qts.	20	15 qts.	30
Fish Cakes	2 -3 oz.	400°	5	70 - 3 oz.	35	110 - 3 oz.	55
Haddock Filet	4 oz.	400°	4	60 - 4 oz.	60	90 - 4 oz.	90
Halibut Steak	5 oz.	450°	3	60 - 4 oz.	60	90 - 4 oz.	90
Lobster	1 -1 lbs.	350°	4	20 - 1 lbs.	20	30 - 1 lb.	30
Swordfish	5 oz.	450°	3	50 - 5 oz.	50	75 - 5 oz.	75
SAUCES, GRAVIES, SOUPS							
Brown Gravy	1 oz.	350° 200°	2	18 gals.	2300	35 gals.	4500
Cream Sauce	2 oz.	250° 175°	1	18 gals.	1150	35 gals.	2250
Cream Soup	6 oz.	200°	1	18 gals.	375	35 gals.	725
French Onion Soup	6 oz.	225°	1	18 gals.	350	35 gals.	700
Meat Sauce	4 oz.	350° 200°	1	18 gals.	575	35 gals.	1100

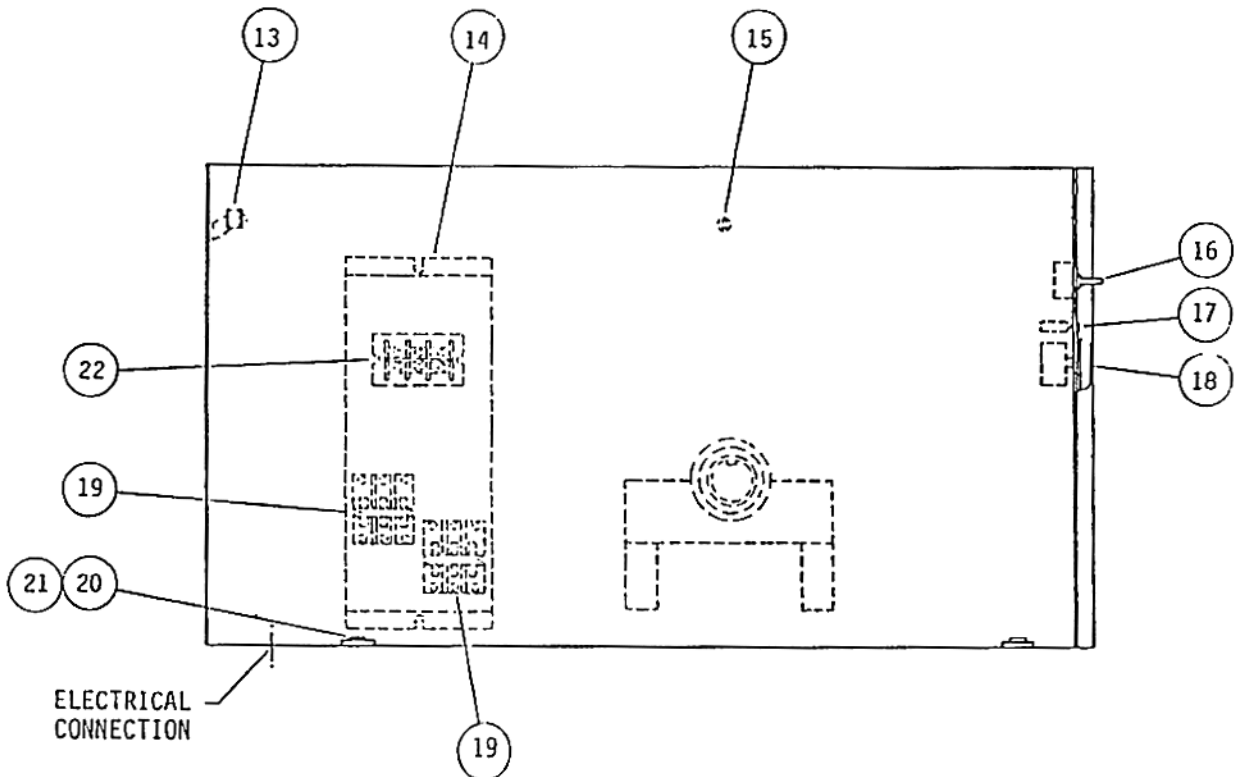
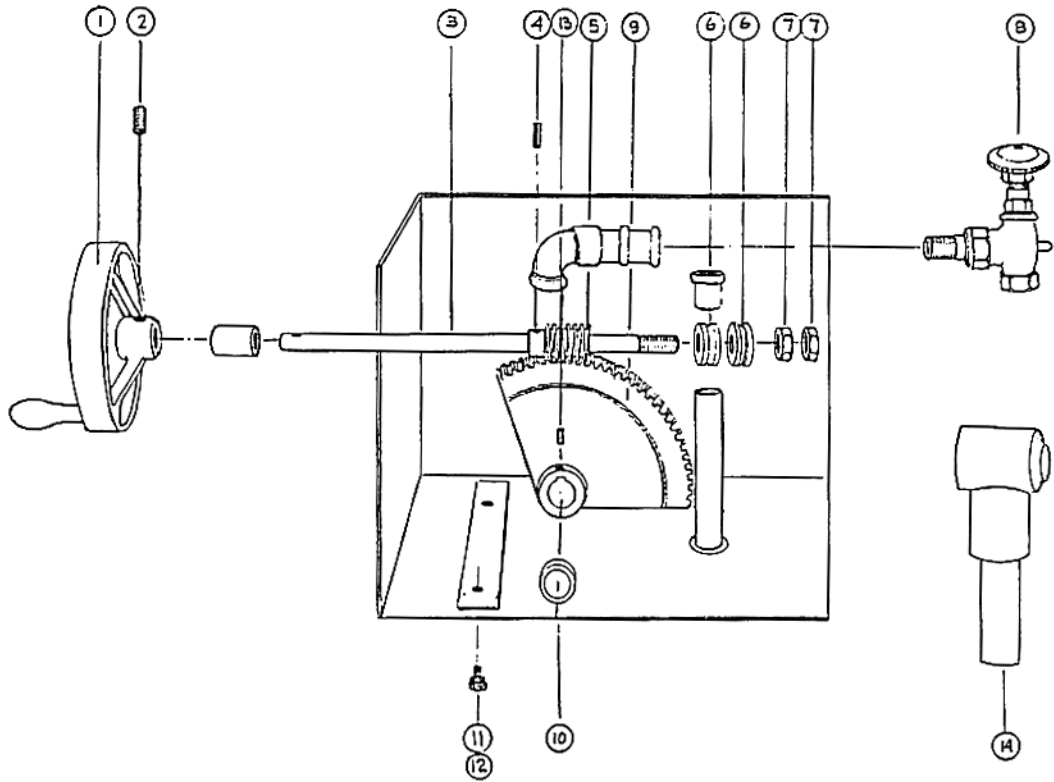
COOKING CHART (CONT.)

ITEM	PORTION SIZE	THERMOSTAT SETTING	BATCHES PER HOUR	VETS 24 PER LOAD		VETS 40 PER LOAD	
				QTY	YIELD	QTY	YIELD
MEAT - POULTRY							
Bacon	3 Slices	350°	12	2 lbs.	10 lbs.	3 lbs.	15 lbs.
Beef Chop Suey	6 oz.	400° 225°	2	18 gals.	350	35 gals.	700
Beef Stew	8 oz.	300°	--	18 gals.	280	35 gals.	560
Corned Beef Hash	5 oz.	400°	5	16 lbs.	50	25 lbs.	75
Cheeseburger	3 oz.	300°	12	7 lbs.	35	10 lbs.	50
Hamburger	3 oz.	300°	15	7 lbs.	35	10 lbs.	50
Meatballs	1 oz.	400° 225°	3	12 1/2 lbs.	65	18 lbs.	100
Pot Roast	2 oz.	350° 200°	--	120 lbs.	500	180 lbs.	750
Salisbury Steak	5 oz.	400°	3	16 lbs.	50	24 lbs.	75
Sirloin Steak	6 oz.	400°	5	15 lbs.	40	22 1/2 lbs.	60
Swiss Steak	4 oz.	300° 200°	1	25 lbs.	100	40 lbs.	160
Chicken: Pan Fried	2 - 1/4's	350°	3	50 pieces	25	80 pieces	40
Chicken: Whole	1 - 5 lbs.	350° 200°	--	16 - 5lbs.	200	24 - 5 lbs.	265
Hot Dogs: Grilled	2 oz.	300°	8	22 lbs.	176	33 lbs.	264
Hot Dogs: Boiled	2 oz.	250°	12	16 lbs.	128	25 lbs.	200
Ham Steak	3 oz.	400°	8	10 lbs.	50	15 lbs.	75
Pork Chops	5 oz.	350°	4	15 lbs.	50	25 lbs.	75
Sausage Links	3 links	350°	7	30 lbs.	120	45 lbs.	180
Turkey							
- Off Carcass	2 oz.	400° 200°	--	3-26-30 lbs.	200	4-26-30 lbs.	275
- On Carcass	2 oz.	400° 200°	--	4-16-20 lbs.	175	6-16-20 lbs.	265
MISCELLANEOUS							
Grilled Cheese Sandwiches	1 Sandwich	400°	8	35 Sand.	35 Sand.	50 Sand.	50
Macaroni & Cheese	8 oz.	200°	2	18 gals.	300 gals.	35 gals.	525
Rice	4 oz.	350° 225°	1	20 lbs. raw	320 lbs.	40 lbs.	650
Spaghetti	4 oz.	350° 225°	2	8 lbs. raw	200 lbs.	12 lbs.	300

COOKING CHART (CONT.)

ITEM	PORTION SIZE	THERMOSTAT SETTING	BATCHES PER HOUR	VETS 24 PER LOAD		VETS 40 PER LOAD	
				QTY	YIELD	QTY	YIELD
VEGETABLES							
Canned	3 oz.	400°	6	30 lbs.	125	45 lbs.	200
FRESH							
Beans, Wax, Green	3 oz.	400°	3	25 lbs.	125 lbs.	50 lbs.	250
Beets	3 oz.	400°	1	30 lbs.	125	60 lbs.	300
Broccoli	3 oz.	400°	3	25 lbs.	125	40 lbs.	200
Cabbage	3 oz.	400°	5	20 lbs.	80	30 lbs.	125
Carrots	3 oz.	400°	2	35 lbs.	150	70 lbs.	300
Cauliflower	3 oz.	250°	5	15 lbs.	75	25 lbs.	125
Corn	1 Ear	400°	8	50 Ears	50 Ears	75 Ears	75
Potatoes	3 oz.	400°	2	40 lbs.	200	60 lbs.	300
Spinach	4 oz.	250°	10	6 lbs.	25	9 lbs.	35
Turnip	4 oz.	400°	2	20 lbs.	100	30 lbs.	150
FROZEN							
Beans, French Cut, Green	3 oz.	400°	6	15 lbs.	60 lbs.	22 1/2 lbs.	90
Lima Beans	3 oz.	250°	4	15 lbs.	60	22 1/2 lbs.	90
Broccoli	3 oz.	400°	8	12 lbs.	50	18 lbs.	75
Sliced Carrots	3 oz.	250°	6	15 lbs.	60	22 1/2 lbs.	90
Small Whole Carrots	3 oz.	250°	3	15 lbs.	50	22 1/2 lbs.	90
Corn	3 oz.	250°	18	15 lbs.	50	22 1/2 lbs.	90
Small Whole Onions	3 oz.	250°	7	15 lbs.	50	22 1/2 lbs.	90
Peas	3 oz.	400°	10	15 lbs.	75	22 1/2 lbs.	110
Spinach	3 oz.	400°	3	15 lbs.	75	22 1/2 lbs.	110
DESSERTS, PUDDINGS, SWEET SAUCES							
Butterscotch Sauce	1 oz.	200°	1	18 gals.	2300 gals.	35 gals.	4500
Cherry Cobbler	3 oz.	200°	1	18 gals.	750	35 gals.	1500
Chocolate Sauce	1 oz.	200°	1	18 gals.	2300	35 gals.	4500
Cornstarch Pudding	4 oz.	200°	1	18 gals.	575	35 gals.	1100
Fruit Gelatin	3 oz.	250°	2	18 gals.	750	35 gals.	1500

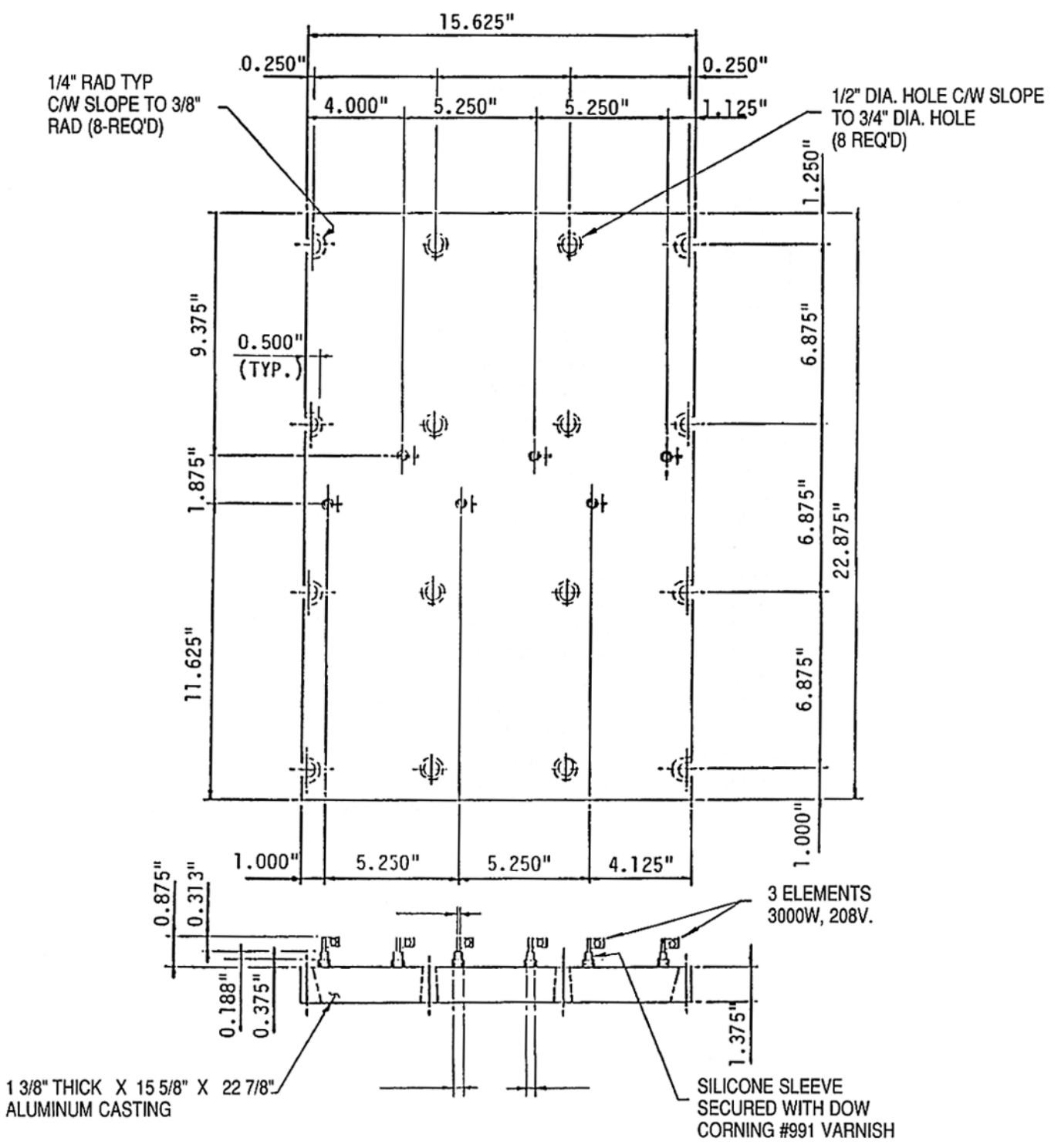
PARTS LIST: GEAR AND ELECTRICAL BOX ASSEMBLIES



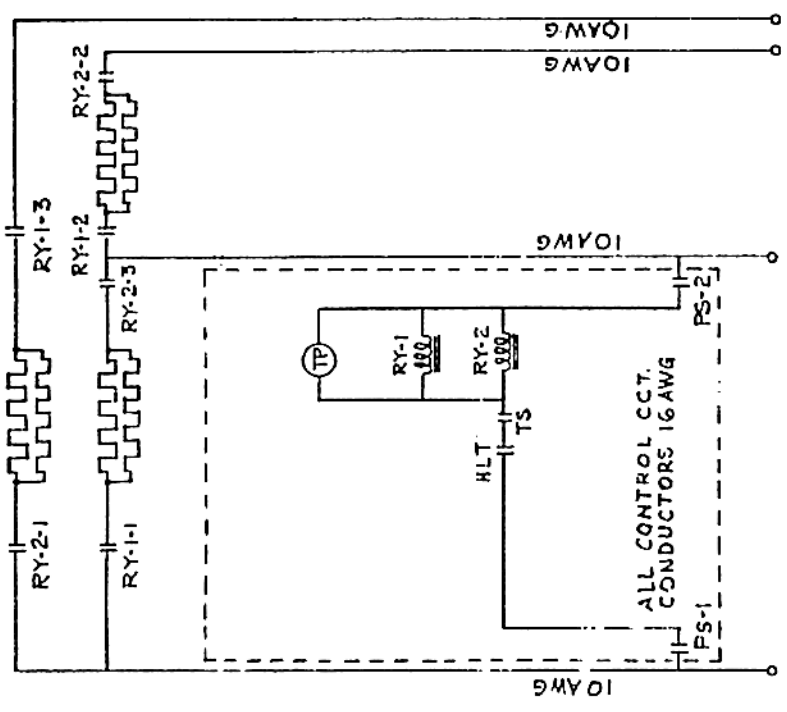
PARTS LIST: GEAR AND ELECTRICAL BOX ASSEMBLIES

ITEM NO.	PART NUMBER	DESCRIPTION	QUANTITY
1	881962	Handwheel	1
2	SC-047-42	Set Screw	1
3	836839	Tilting Shaft	1
4	836952	Tension Pin	1
5	881965	Worm Gear	1
6	881963	Thrust Bearing	2
7	NS-013-50	Jam Nut	2
8	881964	Large Segment Gear	1
9	836971	Spacer Collar	1
10	SC-090-12	Fastening Bolt	4
11	WL-004-06	Lock Washer	4
12	SC-047-42	Set Screw	1
	836949	Key (Not Visible)	1
	881967	"O" Ring (Not Visible)	4
13	FE-024-33	Ground Lug	1
14	840474	Assembly Plate	1
15	1-WS32	Stud	3
16	881970	Double Pole, Single Throw Switch	1
17	881972	Amber Pilot Light	1
18	840467	Thermostat	1
19	881975	Furnas Contactor (Made by Furnas of Canada)	2
20	SC-118-09	Fastening Bolt	4
21	WL-004-06	Lock Washer	4
22	881985	Terminal Block	1
23	836832	Thermostat Hi Limit (Not Visible)	1

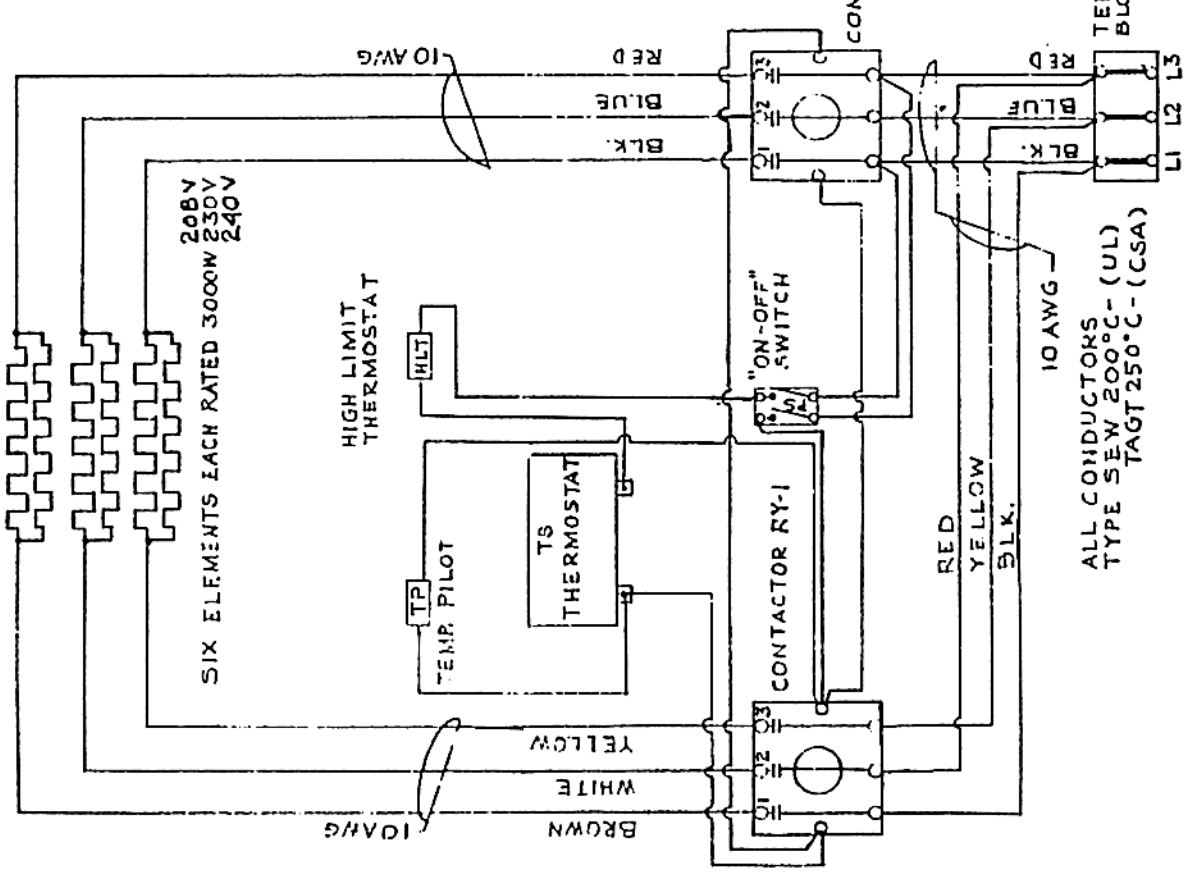
TYPICAL BRAISING PAN (208V) ELEMENT BLOCK



WIRING DIAGRAMS: MODELS VETS24 & VETS30: 208/230/240 VOLTS



MODEL VETS24 & 30	
ELECTRICAL RATING	
208V	18KW 3PH 50 A/PH
230V	18KW 3PH 45.2 A/PH
240V	18KW 3PH 43.3 A/PH



THREE PHASE CONNECTION

WIRING DIAGRAM: MODEL VETS40: 208/230/240 VOLTS

