

**HOBART**

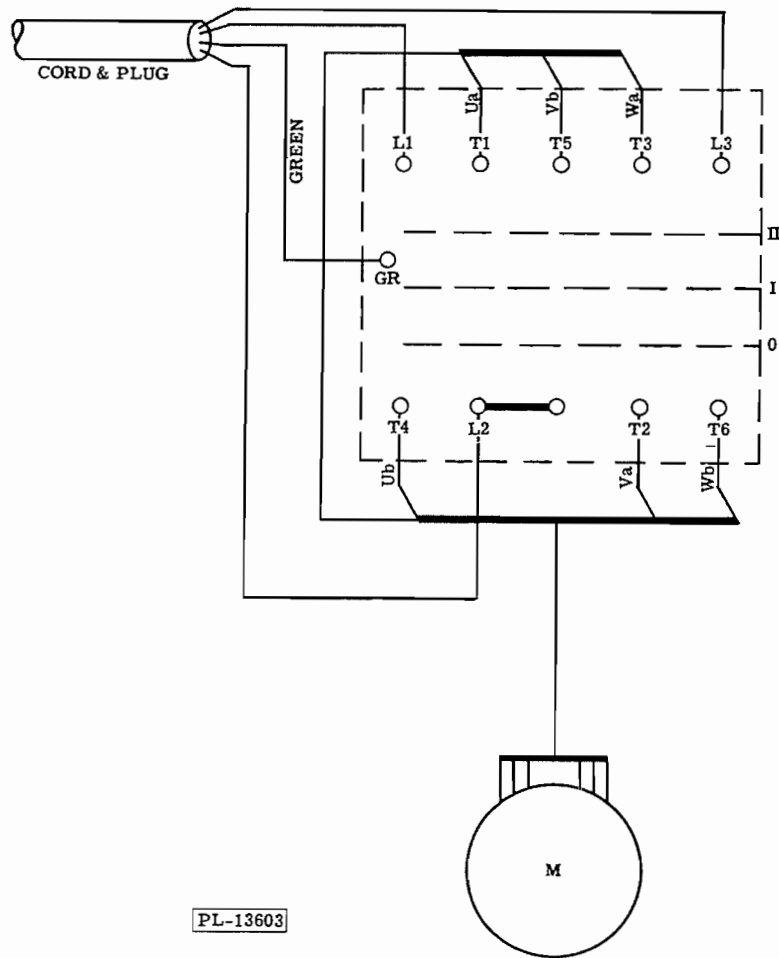
**INSTRUCTION MANUAL**  
**... with Replacement Parts**



(VCM-40 SHOWN)

**MODELS VCM-25 & 40**  
**VERTICAL**  
**CUTTER/MIXERS**

ML-16392 - VCM 25  
ML-16393 - VCM 40



PL-13603

Fig. 1

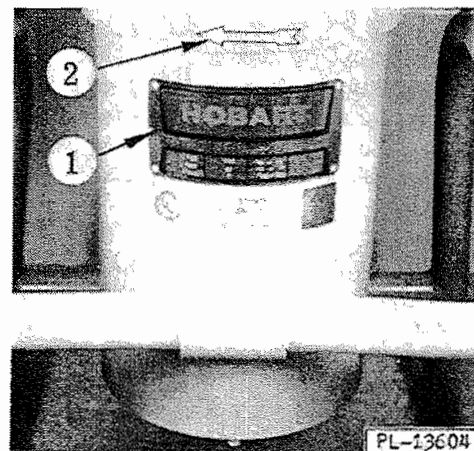
## Installation, Operation and Care of MODELS VCM-25 & 40 VERTICAL CUTTER/MIXERS

### I. INSTALLATION:

Electrical connections should be made by qualified workmen who will observe all applicable Safety Codes and The National Electrical Code.

Before making any electrical connections, CHECK THE SPECIFICATIONS ON THE NAME PLATE (1, Fig. 2) TO MAKE SURE THEY AGREE WITH THOSE OF YOUR ELECTRICAL SERVICE. WARNING: Connect main motor so that shaft turns in clockwise direction (see arrow 2, Fig. 2) (always remove knives before checking shaft rotation).

The models VCM-25 & 40 Vertical Cutter/Mixers are of two types electrically and must be described separately.



PL-13604

Fig. 2

**1. MODEL VCM-25:**

1.1 The MOTOR is two speed: 4.5 H.P., 1750 R.P.M.; 5.5 H.P., 3500 R.P.M.; it is totally enclosed, has grease-packed bearings and a stainless steel shaft. The motor is furnished in three phase electrical specifications only; 200-60-3, 230-60-3 and 460-60-3.

1.2 The MOTOR CONTROLLER is a three position (Off-Low-High) manual rotary type drum switch and is mechanically interlocked with the bowl cover.

**NOTE:** Switching from one speed to another should be made without hesitation. This will decrease the arcing between contacts and insure a longer life-span of the switch.

1.3 The POWER CABLE is a 6 foot, U.L. listed flexible rubber jacketed type "S" four conductor cable with a four prong grounding polarized Hubbel #3431-G plug. A four prong grounding polarized power receptacle Hubbel #3430-G and enclosure (not furnished) is required for attaching the power cable and plug to the power service.

**NOTE:** Any alteration or change of this equipment, or replacement of parts with other than Hobart recommended replacement parts may damage this equipment and will be considered to void any warranties on this machine.

1.4 **BRANCH POWER CIRCUIT REQUIREMENTS:** This model must have an individual branch circuit of #10 minimum conductor size, protected by fuses or circuit breaker having 40 ampere rating of 200 or 230 volt applications; #12 minimum conductor size, protected by fuses or circuit breaker having 20 ampere rating for 460 volt application. The electrical power circuit must be capable of supplying a minimum of 200, 230 or 460 volts, as applicable to the cutter/mixer controller terminals during a 60% power factor load of 34 KVA for a period of 1 to 4 second duration.

1.5 **MOTOR THERMAL OVERLOAD PROTECTION:** The cutter/mixer motor must be protected by a magnetic starter type motor controller (not furnished), having thermal overload protection, installed in the power circuit. The controller to be a three phase controller of size "1" with "on-off" push-buttons installed in cover of the enclosure. The thermal overload elements to be 23 amperes for 200 volts, 21 amperes for 230

volts or 10.5 amperes for 460 volts application. **Warranty will be voided unless the motor is protected by a controller with the proper thermal overload elements.**

**2. MODEL VCM-40:**

2.1 The MOTOR is two speed; 7.5 H.P., 1750 R.P.M.; 10 H.P., 3500 R. P. M.; it is totally enclosed, has grease-packed bearings and a stainless steel shaft. Furnished in three phase electrical specifications only; 200-60-3, 230-60-3 and 460-60-3.

2.2 The MOTOR CONTROLLER is a three position (Off-Low-High) manual rotary type drum switch and is mechanically interlocked with the bowl cover.

**NOTE:** Switching from one speed to another should be made without hesitation. This will decrease the arcing between contacts and insure a longer life-span of the switch.

2.3 The POWER CABLE is a 6 foot, U.L. listed flexible rubber jacketed type "S" four conductor cable with a four prong grounding polarized Hubbel #3431-G plug. A four prong grounding polarized power receptacle Hubbell #3430-G, and enclosure (not furnished) is required for attaching the power cable and plug to the power service.

**NOTE:** Any alteration or change of this equipment, or replacement of parts with other than Hobart recommended replacement parts may damage this equipment and will be considered to void any warranties on this machine.

2.4 **BRANCH POWER CIRCUIT REQUIREMENTS:** This model must have an individual branch circuit of #8 minimum conductor size, protected by fuses or circuit breaker having 60 ampere rating for 200 or 230 volt applications; #12 minimum conductor size, protected by fuses or circuit breaker having 30 ampere rating for 460 volt application. The electrical power circuit must be capable of supplying a minimum of 200, 230 or 460 volts, as applicable to the cutter/mixer controller terminals during a 60% power factor load of 70 KVA for a period of 1 to 4 second duration.

2.5 **MOTOR THERMAL OVERLOAD PROTECTION:** The cutter/mixer motor must be protected by a magnetic starter type motor controller (not furnished), having thermal overload protection, installed in the power

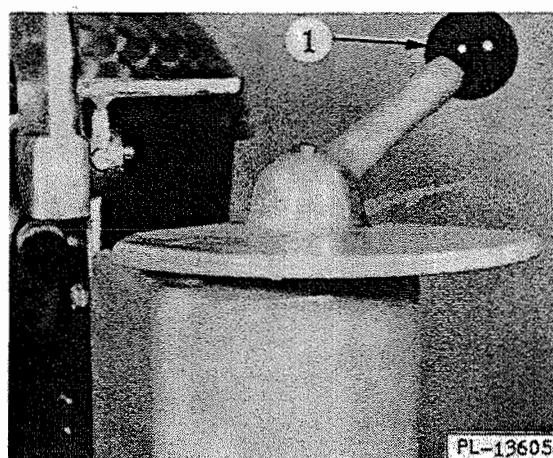


Fig. 3

circuit. The controller to be a three phase controller of size "2" with "on-off" push-buttons installed in cover of the enclosure. The thermal overload elements to be 36 amperes for 200 volts, 34 amperes for 230 volts or 17 amperes for 460 volts application. **Warranty will be voided unless the motor is protected by a controller with the proper thermal overload elements.**

The cutter/mixer motor is controlled by the manual, rotary, switch (1, Fig. 3) and is mechanically interlocked with the bowl cover. The three positions of the switch are; Off, Low (I) and High (II).

## II. DESIGN:

The heavy duty motor supplies power directly to the cutting/mixing knives. The machine has two speeds. Low speed is 1750 R.P.M. and is used for general cutting and mixing. High speed is 3500 R.P.M. and is used for emulsifying, pureeing, pulverizing and crumbing.

The scimitar knives are at a fixed angle, rotating at high speed, they pull the product down through the central portion of the bowl, slicing it in the process. The product is then returned up the sides of the bowl by centrifugal force. A vortex is created inside the bowl, which keeps the entire load in motion. The cutting and mixing action begins the instant the machine is turned on.

When cutting certain products the action is supplemented by a hand operated mixing baffle. This baffle turns the product over in a rolling motion, moving the product into the knives.

The models VCM-25 & 40 have a tubular base, with sanitary rubber feet and are equipped with a pair of nylon wheels to aid in moving machine. The bowl and motor (1, Fig. 4) are one unit which

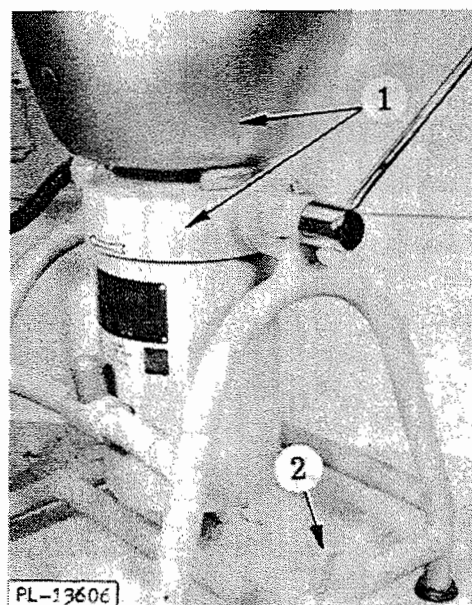


Fig. 4

is swivel mounted on the base. A locking handle (3, Fig. 5) is used to hold or lock bowl in position and as a brake when tilting bowl.

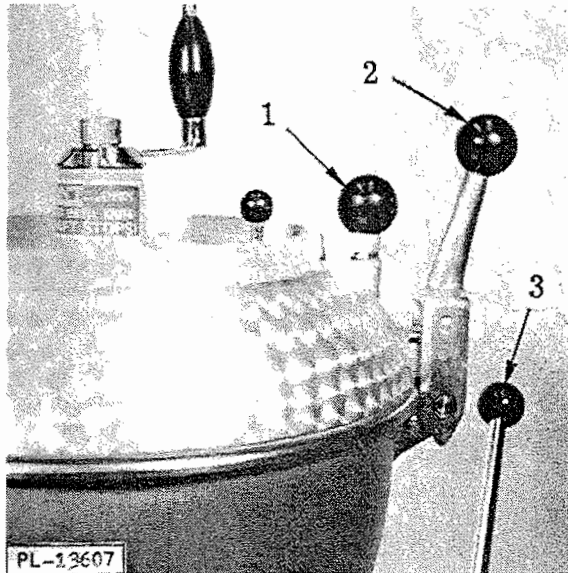


Fig. 5

Knives and other accessories are mounted directly on the motor shaft that extends through the bottom of the bowl. Seals are used to prevent fluids from leaking from the bowl into the motor and also prevent motor grease from reaching the bowl. As an added protection a metal flinger disc

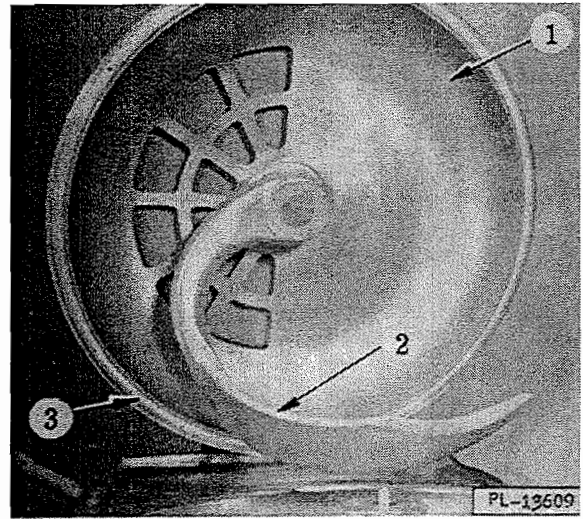


Fig. 7

will throw out any leaking liquid (when the machine is running) should the seals fail.

Release the cover locking clamp (2, Fig. 5) then lift the bowl cover (1, Fig. 7) by the cover knob (1, Fig. 5). A removable sealing gasket (3, Fig. 7) prevents leakage and provides a tight seal.

To remove mixing baffle: Raise cover, loosen nut and withdraw handle (1, Fig. 6). Remove mixing baffle & shaft (2, Fig. 7).

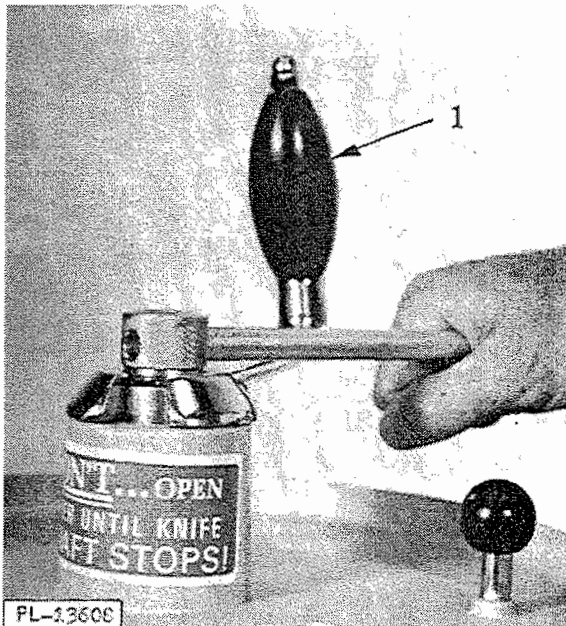


Fig. 6

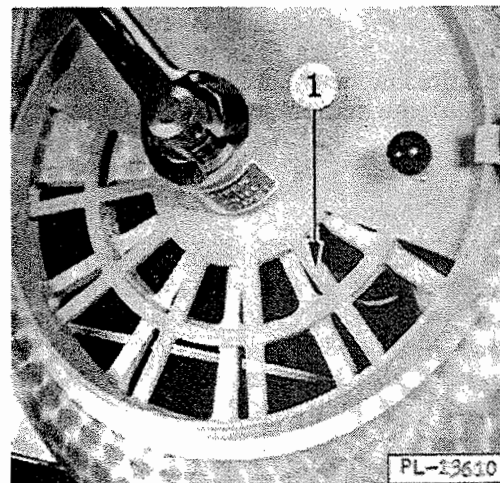


Fig. 8

An inspection cover (1, Fig. 8) is provided on the bowl lid for the operator to check the progress of operation without opening the lid itself.

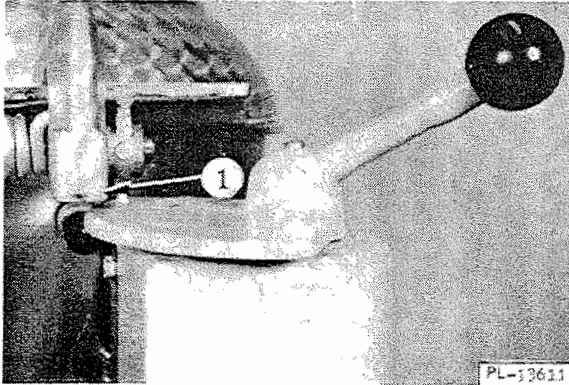


Fig. 9

A mechanical safety interlock prevents opening the bowl cover to its raised position when the cutter/mixer motor is in operation. Fig. 9 shows the interlock (1, Fig. 9) position when the cutter motor is turned "on" (either low speed or high speed). Fig. 10 shows the interlock (1, Fig. 10) position with the cutter motor turned to "off" (allowing the bowl cover to be lifted to the raised position).

### III. OPERATION:

The following listing may be used as a guide to select the proper VCM processing components. **STANDARD COMPONENTS (Supplied with the Machine):**

1. **Standard narrow knives:** used for all cutting operations, such as meat products, vegetables, cheese products, pastry and cake products, and some doughs that require both cutting and mixing. These knives are also used for processing mixtures such as salad dressing.
2. **Knead/mix shaft:** used for general noncutting applications and specifically for bakery products, such as yeast doughs, cakes, icings, and liquid mixtures.

### OPTIONAL ACCESSORIES:

1. **Wide knives:** generally used for the same type application as the standard narrow knives but are more suited for cutting heavy frozen products or in industrial applications where the product to be cut and mixed is of a dense or heavy consistency.
2. **Wave-cut knives (either narrow or wide):** used for cutting oily products - nuts, corn masa, tallow, and some vegetables. The wide wave-cut knives should be used for the heavier duty applications.

3. **Low-Angle Knives:** used for cutting and mixing small amounts of meat products, vegetables, pastry, cake batters, salad dressings or cheese spreads.
4. **Mixing shaft (for average or heavy quantities):** used for special mixing applications where more vigorous action is required than that yielded by the standard knead/mix shaft.

The "wings" of the mixing shaft are longer than those of the knead/mix shaft and cause more vigorous action within the bowl. **The mixing shaft should not be used for processing doughs in bakery applications.**

5. **Grater shaft:** used for mixing hard and raw vegetables or for some selected dry ingredients. The wings of the grater shaft have sharp teeth pressed upward on their surfaces and serve to shear off particles of the product being processed.
6. **Wing nut (for the knife shaft):** screws onto the lower portion of the standard knife shaft in place of the regular locking nut, which secures the two knife blades onto the shaft. The wings act as wipers on the bottom of the bowl and eliminate product build-up on the bowl bottom. Occasionally certain products (such as nuts, cheeses, and tallow or fat) have a tendency to heat-up during processing and adhere to the bottom of the bowl. If this occurs in processing a specific product, then a wing nut should be used to prevent damage to the knives and also improve the cutting and mixing action of the product.

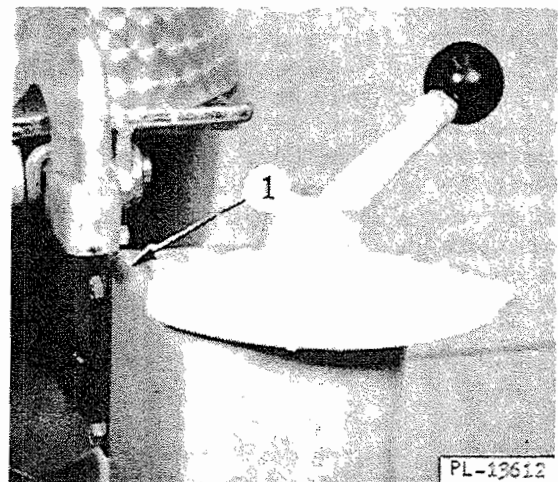


Fig. 10

- 7. **Attachment power unit:** a gear reducer that is available for the VCM-25 or 40 and is used for driving standard Hobart #12 attachments (such as meat chopper, dicer, and slicer attachments).
- 8. **Strainer basket:** used for processing vegetables and fruits which are normally cut while suspended in water. The strainer basket permits the operator to withdraw the processed product from the VCM bowl. The water is then drained from the vegetables back into the bowl and can be used in another operation. The product is also automatically drained of excess moisture.

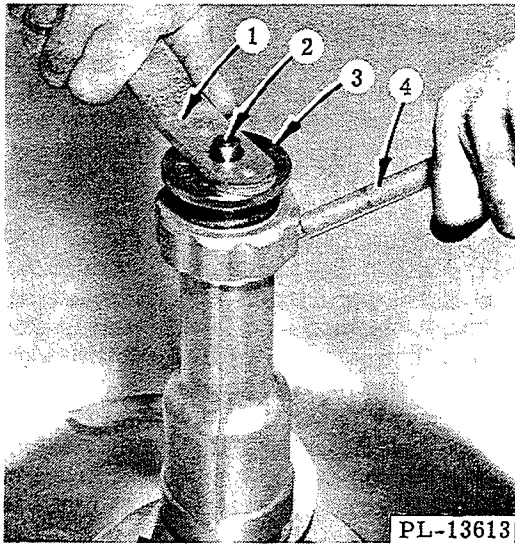


Fig. 11

To change accessories on the motor shaft (2, Fig. 11), unscrew knurled nut (L.H. Thd.) (3, Fig. 11). This nut should be tight, so will require the use of the peg wrench (1, Fig. 11) and pin (4, Fig. 11) to free the accessory. After changing accessory make sure nut is **TIGHT** before starting motor.

When processing medium or large batches of product, the cutting knives should be in the high position. For small quantities they should be in the low position.

To raise or lower knives, first place knife shaft on stud (2, Fig. 4) located on frame. Next, remove base nut (1, Fig. 12) from knife shaft with open end wrench (2, Fig. 12) (furnished). Then remove knives, slant rings and spacers. Place large flat spacer (4, Fig. 13) on shaft first, to lower knives; or last to raise knives. Be sure the numbered slant rings (1, 2, 3, Fig. 13) run down toward bottom of shaft, 1 on top, 2 next and 3 on bottom.

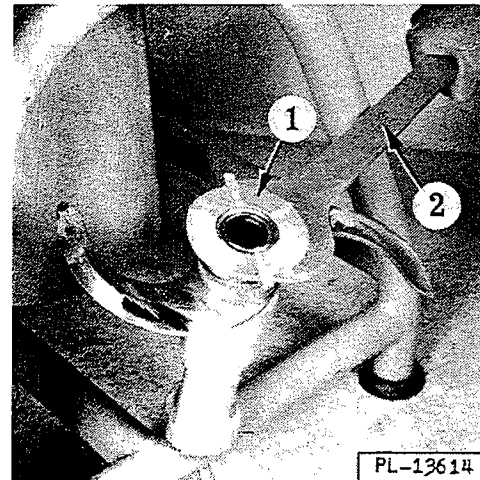


Fig. 12

To attach mixing baffle, raise bowl cover, insert baffle shaft through cover, position crank handle and lock into position with the retaining screw. Turn baffle manually to a position that it will enter the product in the bowl with a slicing action. This prevents forcing baffle on top of product when lowering cover.

**BEFORE LOADING OR OPERATING MACHINE:** Have bowl in vertical position, place bowl locking pin (1, Fig. 14) in horizontal locking hole and tighten bowl lock handle (3, Fig. 5). This prevents bowl from tipping.

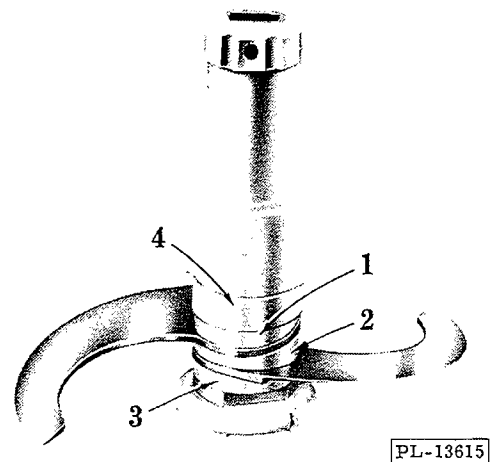


Fig. 13

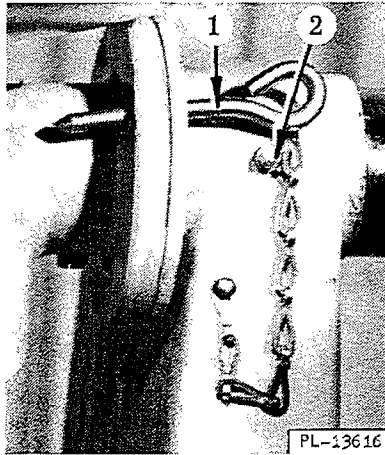


Fig. 14

#### A. Loading Machine.

A.1 Lock bowl in vertical position.

A.2 Although in most cases all ingredients are placed in the bowl at one time, there are exceptions, and various methods are used for adding ingredients.

A.2.1 Finely cut (or emulsified) products from large or bulky items (such as loaves of bread, large chunks of meat, etc.):

- a. Limit product length (the distance from center shaft to side of bowl) since product must be free to drop into cutting blades.
- b. Run machine briefly to break down large chunks then add balance of load to reach full capacity.
- c. When adding large frozen chunks, remove mixing baffle.

A.2.2 In baking applications, always add the shortening last. This prevents the shortening from smearing bottom of bowl. Dissolve sugar in liquid before adding other products.

A.2.3 When cutting vegetables in water (most vegetables cut best in water) first, fill bowl about one half full of cold water, add vegetables and cut to suit. Always distribute load evenly in bowl when cutting minimum amounts.

**Note:** See strainer basket description under optional equipment.

A.2.4 Do not exceed 80% of machine capacity when mixing or homogenizing liquid products such as, salad dressing, ice cream mix or reconstituting dry milk.

#### B. Unloading machine.

B.1 Make sure machine has stopped and knives have stopped turning, then open bowl cover.

B.2 Remove knife accessory before emptying bowl. Non-cutting accessories such as the knead/mix shaft need not be removed.

B.3 Scrape bowl cover (when required) before tipping bowl.

B.4 Remove bowl locking pin and slightly loosen bowl lock handle (which can also be used as a brake should the bowl tend to tip too quickly).

B.5 Bowl may also be locked in various positions with this lock handle. Cautiously tip bowl by grasping cover knob and pulling toward you, emptying contents into container.

B.6 For products cut in water, use strainer basket as described in optional equipment.

#### IV. CLEANING:

##### A. Between operations.

1. Use standard narrow knives.
2. Use mixing baffle.
3. Fill bowl one third full of warm (not hot) water.
4. Add SMALL amount of detergent.
5. Close bowl cover.
6. Close inspection cover and place towel over this cover.
7. Start in low speed briefly, then switch to high speed.
8. Turn baffle counterclockwise.
9. Operate motor 10 seconds.
10. Turn off motor switch. WAIT FOR KNIVES TO STOP TURNING, then open cover.



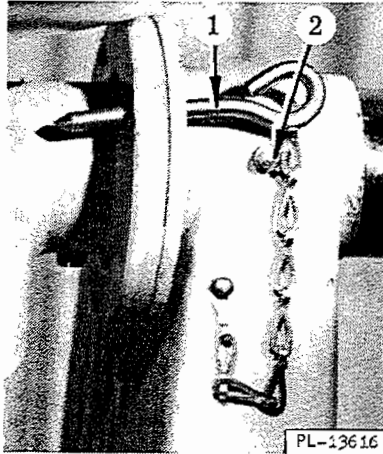


Fig. 14

## A. Loading Machine.

- A.1 Lock bowl in vertical position.
- A.2 Although in most cases all ingredients are placed in the bowl at one time, there are exceptions, and various methods are used for adding ingredients.
- A.2.1 Finely cut (or emulsified) products from large or bulky items (such as loaves of bread, large chunks of meat, etc.):
- Limit product length (the distance from center shaft to side of bowl) since product must be free to drop into cutting blades.
  - Run machine briefly to break down large chunks then add balance of load to reach full capacity.
  - When adding large frozen chunks, remove mixing baffle.
- A.2.2 In baking applications, always add the shortening last. This prevents the shortening from smearing bottom of bowl. Dissolve sugar in liquid before adding other products.
- A.2.3 When cutting vegetables in water (most vegetables cut best in water) first, fill bowl about one half full of cold water, add vegetables and cut to suit. Always distribute load evenly in bowl when cutting minimum amounts.

Note: See strainer basket description under optional equipment.

A.2.4 Do not exceed 80% of machine capacity when mixing or homogenizing liquid products such as, salad dressing, ice cream mix or reconstituting dry milk.

## B. Unloading machine.

- B.1 Make sure machine has stopped and knives have stopped turning, then open bowl cover.
- B.2 Remove knife accessory before emptying bowl. Non-cutting accessories such as the knead/mix shaft need not be removed.
- B.3 Scrape bowl cover (when required) before tipping bowl.
- B.4 Remove bowl locking pin and slightly loosen bowl lock handle (which can also be used as a brake should the bowl tend to tip too quickly).
- B.5 Bowl may also be locked in various positions with this lock handle. Cautiously tip bowl by grasping cover knob and pulling toward you, emptying contents into container.
- B.6 For products cut in water, use strainer basket as described in optional equipment.

## IV. CLEANING:

## A. Between operations.

- Use standard narrow knives.
- Use mixing baffle.
- Fill bowl one third full of warm (not hot) water.
- Add SMALL amount of detergent.
- Close bowl cover.
- Close inspection cover and place towel over this cover.
- Start in low speed briefly, then switch to high speed.
- Turn baffle counterclockwise.
- Operate motor 10 seconds.
- Turn off motor switch. WAIT FOR KNIVES TO STOP TURNING, then open cover.

11. Remove knife accessory and clean separately.
12. Remove baffle and bowl cover gasket. Place baffle in bowl and wash by hand.
13. Replace baffle and gasket.
14. Drain water from bowl and wipe bowl dry.

#### B. Daily Cleaning and Sanitizing:

##### B.1 Materials Required:

1. Nylon bristled brush with 12" (approx.) handle.
2. Small plastic two compartment pail.
3. Scrap pail.
4. Clean cloths.
5. "Soilax" All Purpose Cleaner.
6. "Mikro-Klene" Iodophor Sanitizer.
7. Plastic spray bottle.

##### B.2 Procedure:

1. Add two ounces of "Soilax" to one gallon of hot water in wash side of two compartment pail.
2. Mix rinse solution by adding two teaspoons of "Mikro-Klene" in one gallon of cool water in rinse side of pail.
3. Make sure motor is turned "off".
4. Remove knives, baffle and bowl cover gasket. Wash separately in sink.
5. Dip brush into "Soilax" All Purpose Cleaner solution in wash side of pail. Liberally brush the inside of the bowl and the under side of the bowl cover.
6. Next brush the outside of the bowl and the bowl cover.
7. Wipe off the outside of the unit.
8. Sanitizing and rinsing can be done in one of two ways:
  - a. Go over the cleaned bowl, bowl cover and disassembled parts with a clean

cloth soaked in "Mikro-Klene" solution.

- b. Rinse in fresh water and sanitize by applying "Mikro-Klene" via the spray bottle.

9. Allow all surfaces to drain dry and then reassemble. Do not wipe dry. Cover cleaned bowl unit until next use.

10. Rinse nylon brush thoroughly under running water. Next dip brush into "Mikro-Klene" solution and allow to drain dry in covered container or wrapped in freshly laundered towel. Cloth used for rinsing should be sent to laundry or discarded. Wash out pails.

#### V. LUBRICATION:

The prelubricated motor bearings should be checked by a Hobart technician every 5 to 7 years under normal use.

#### VI. OPERATING TIPS:

1. Use standard narrow knives if in doubt as to the proper accessory.
2. Use honing stone (furnished) to sharpen knives. Keep knives sharp.
3. Make sure bowl cover is closed and latched before turning on cutter motor.
4. Make sure knives have stopped turning before opening bowl cover.
5. Always remove knife accessory before emptying bowl.
6. To operate on high speed, first switch momentarily into low speed, then shift quickly into high speed.

#### VII. EQUIPMENT:

The following standard equipment is furnished with each machine:

1. Accessory shaft with (2) narrow knives.
2. Knead/mix shaft.
3. Mixing baffle.
4. Open end wrench.
5. Peg wrench.

6. Pin wrench.
7. Honing stone.
8. Spanner wrench (Bowl Seal).
9. Upper shaft seal (spare).

#### VIII. VCM USAGE:

When products are to be cut and mixed together cut the harder products first, then add the softer products for final cutting and mixing. When cutting meat with high gristle and tendon content, remove them by hand before processing; or grind through a Hobart Chopper (using 1/8" chopper plate) after VCM processing. It is suggested when cutting fat only that the fat be frozen and cut with dry ice and/or use the optional winged nut accessory.

Various accessories are available for different products and recipes (see separate booklet). The

following suggestions cover "over-all" operation:

1. When in doubt as to what accessory to use always use standard narrow knives.
2. Stop often and check progress of product.
3. Use water when cutting vegetables.
4. Use high speed only when emulsifying, pureeing, crumbing bread, or homogenizing.
5. NEVER open bowl cover until knives have stopped turning.
6. Do not exceed 80% bowl capacity when using liquids.
7. Do not use knead/mix shaft for liquid products over 20% of bowl capacity.
8. Do not exceed the capacity of the machine in the finished weight of bread dough.

PRODUCT USAGE CHART

\* Recommended operating capacity.  
 † Standard narrow knives.

APPROXIMATE CAPACITIES  
 VCM-25 VCM-40

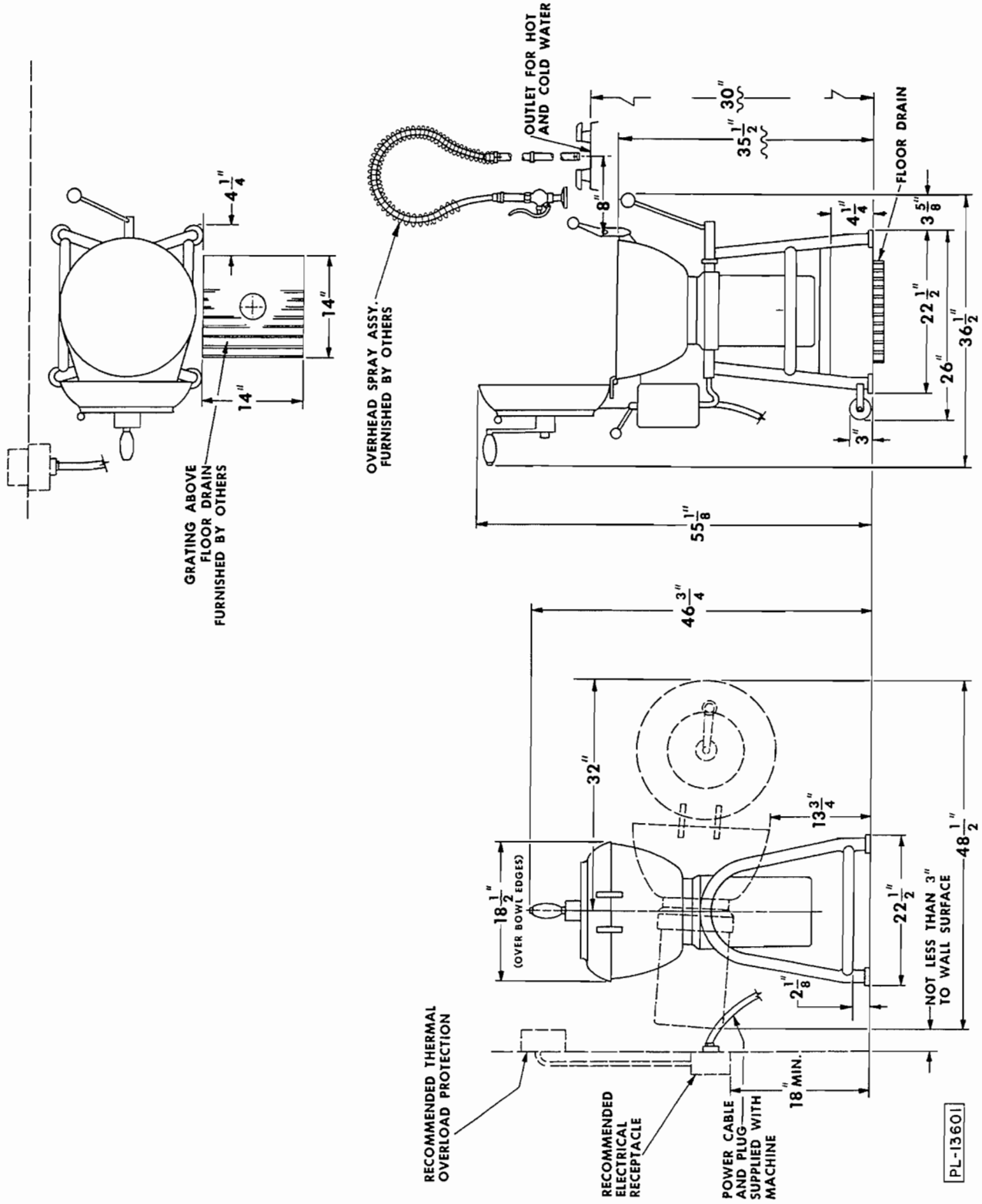
Product	Type	Comments	Use Accessory	VCM-25		VCM-40			
				MIN.	*REC. MAX.	MIN.	*REC. MAX.		
Tossed Salad	Head Lettuce (average).	Cut in cold water.	† Narrow Knives	1 hd.	5 hd.	6 hd.	1 hd.	6 hd.	8 hd.
Cole Slaw	Quartered heads.	Cut hard products first in water.	† Narrow Knives	10#	19#	20#	12#	30#	30#
Ham, Egg, Veal or Salmon Salads	Coarse Cut.	Capacity may be increased 20% if product is fine cut.	† Narrow Knives	12#	19#	25#	20#	30#	40#
Potato, Tuna Fish or Shrimp Salads	Large items in fine mix (such as potatoes in salad).	Cut fine products first.	† Narrow Knives	15#	22#	30#	25#	37#	50#
Mayonnaise, Fr. Dress., "Boiled" Salad Dress., 1000 Is. Dress.		Add oil last thru top of mach. Double min., if knives used.	Knead/mix Shaft	1 gal.	3 gal.	5 gal.	2 gal.	4 gal.	8 gal.
Cheese, Mozzarella, American, Cheddar & Parmesan.	Hard cheese to be grated. Cold cheese approx. 38° F.	Use wing nut. Prevents packing under knives.	† Narrow Knives	10#	13#	18#	15#	22#	30#
Cheese Spreads	Soft products. Mayonnaise or water added.	Cheese should be room temperature or warmer.	† Narrow Knives	15#	22#	30#	24#	36#	48#
Bread Crumbs	Fine finish size (For coarse, cut capacity 50%).	Add product in stages to reach max. capacity on fine cut.	† Narrow Knives	2 1/4#	5#	7#	3 3/4#	7#	11#
Meat Loaf	Large chunks of meat.	Temper if frozen to 28° F. Amts. are total wts. of all ingredients. Finish product thru a 1/8" grinder plate.	† Narrow Knives	12#	19#	25#	20#	30#	45#
Pork Sausage		Temper if frozen to 28° F. Add ice for better color.	† Narrow Knives	12#	19#	30#	15#	30#	50#
Hamburger	Large chunks of meat.	Temper if frozen to 28° F. Finish product thru 1/8" grinder plate.	† Narrow Knives	12#	20#	30#	20#	40#	50#

## PRODUCT USAGE CHART (Cont.)

APPROXIMATE CAPACITIES  
VCM-25                      VCM-40

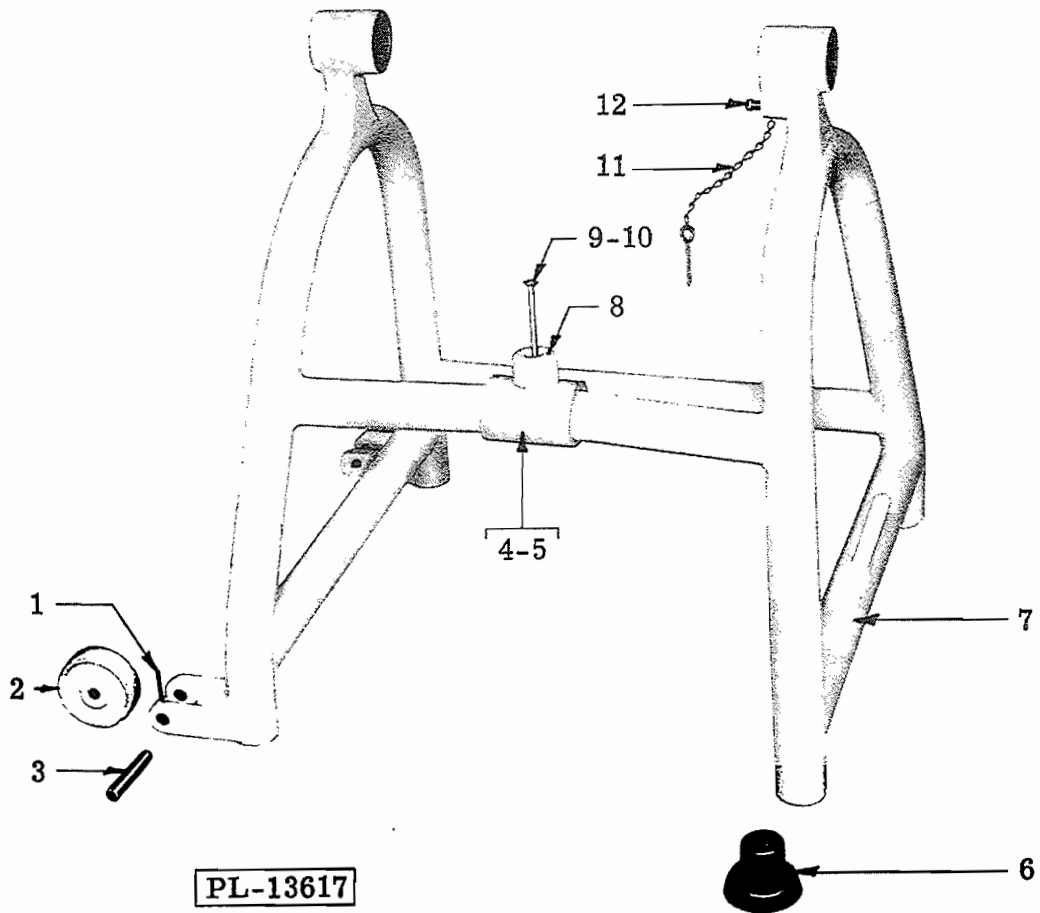
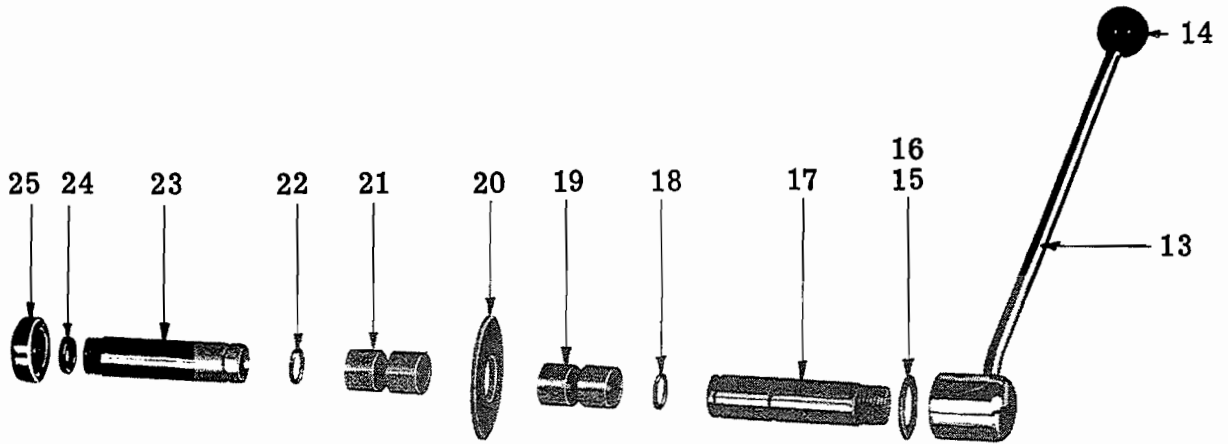
Product	Type	Comments	Use Accessory	VCM-25			VCM-40		
				MIN.	*REC.	MAX.	MIN.	*REC.	MAX.
Wieners & Franks	Emulsion type.	Add in approx. 1/3 of ice & water during last 2 min. of operation.	† Narrow Knives	20#	30#	40#	33#	48#	65#
Layer Cakes, Cake Doughnuts	White, Chocolate, Yellow, Devils Food.	Cakes requiring aeration (angel food, etc.) can not be made in a VCM.	† Narrow Knives or Mixing Shaft	21#	32#	43#	35#	52#	70#
Pizza Dough, Bread Dough, Rye Bread, Whole Wheat.	Heavy (50%) absorption.	**Use mixing baffle and knead/mix shaft. After mixing in VCM process dough as usual. If using knives instead of knead/mix shaft, cut capacity 20%.	Knead/mix Shaft	14#	21#	25#	22#	33#	40#
Bread Dough, White bread, Dinner Rolls	Medium (60%) absorption.	Not necessary to use mixing baffle. **Cut capacity 30% w/knives.	Knead/mix Shaft	16#	26#	30#	25#	37#	45#
Sweet Doughs, Bun Doughs, Yeast Doughnuts, Bismarks.	Any dough product with high moisture & shortening.	Limit capacity because product will stick to mixing shaft.	Knead/mix Shaft	12#	20#	25#	20#	30#	40#
Pie Doughs, Apple Turnovers, Cream Horns, Danish "Blintze"	Products having shortening cut into other ingredients.	Shortening or lard must be cold and in fist size chunks. Use mixing baffle.	† Narrow Knives	16#	26#	35#	25#	37#	50#
Cookies: Butter, oatmeal, sugar, peanut butter.	High shortening and sugar type.	If using raisins or chocolate chips add in last 5 seconds.	† Narrow Knives Knead/mix Shaft	10#	15#	20#	16#	24#	32#
Icings (all types)	Flat whipped.	Finish whipped icing in mixer (when desired).	† Narrow Knives Knead/mix Shaft	21#	32#	43#	35#	52#	70#
Fillings: Raisin, date, fig, apricot.	Homogenized. Thinned with dextrose & water.	Use mixing baffle.	† Narrow Knives	15#	22#	30#	25#	37#	50#

\*\*Do not exceed recommended capacity loads of bread or pizza dough when using mixing baffle.



VCM-25  
INSTALLATION DIAGRAM





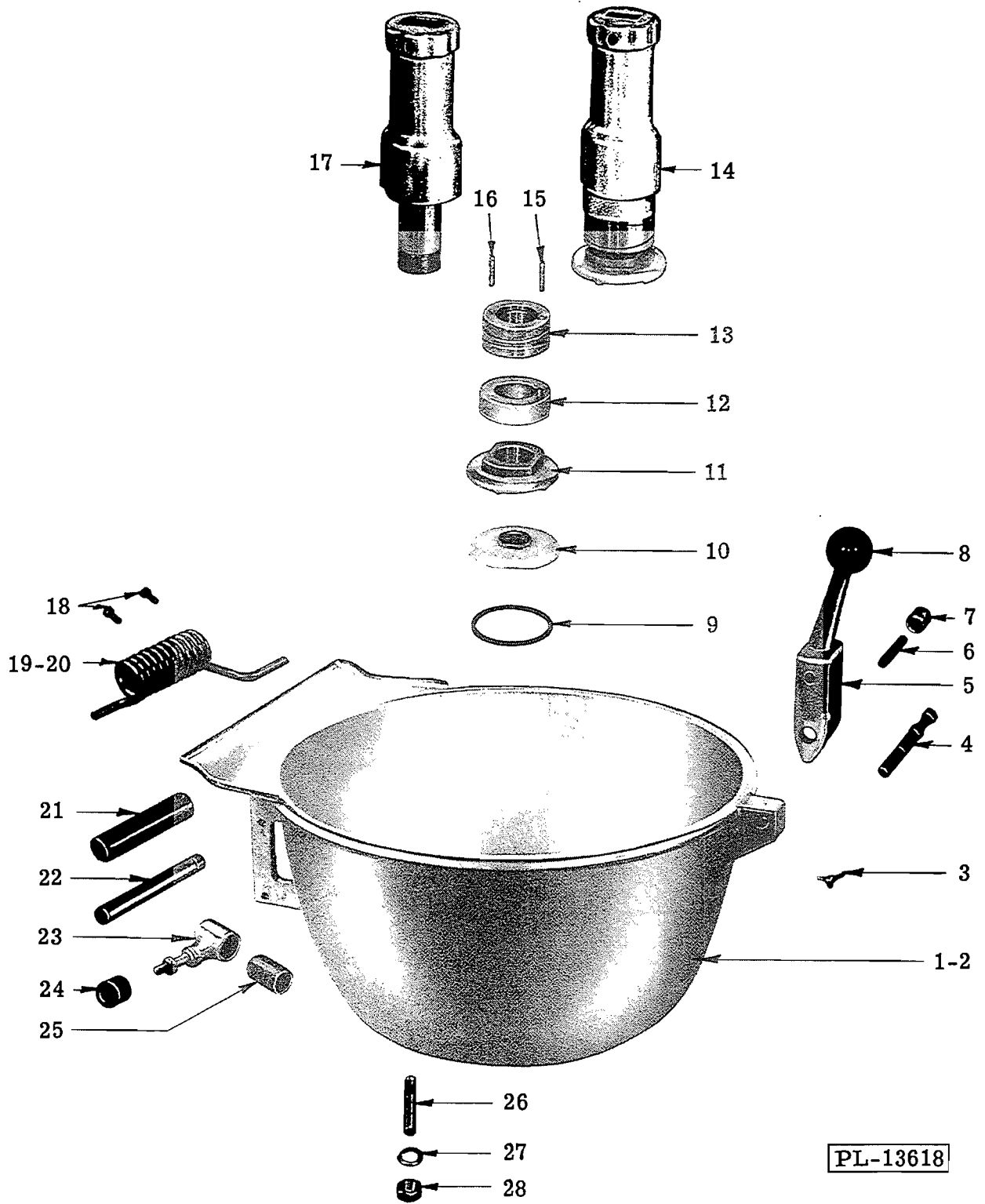
PL-13617

CHASSIS UNIT



## CHASSIS UNIT

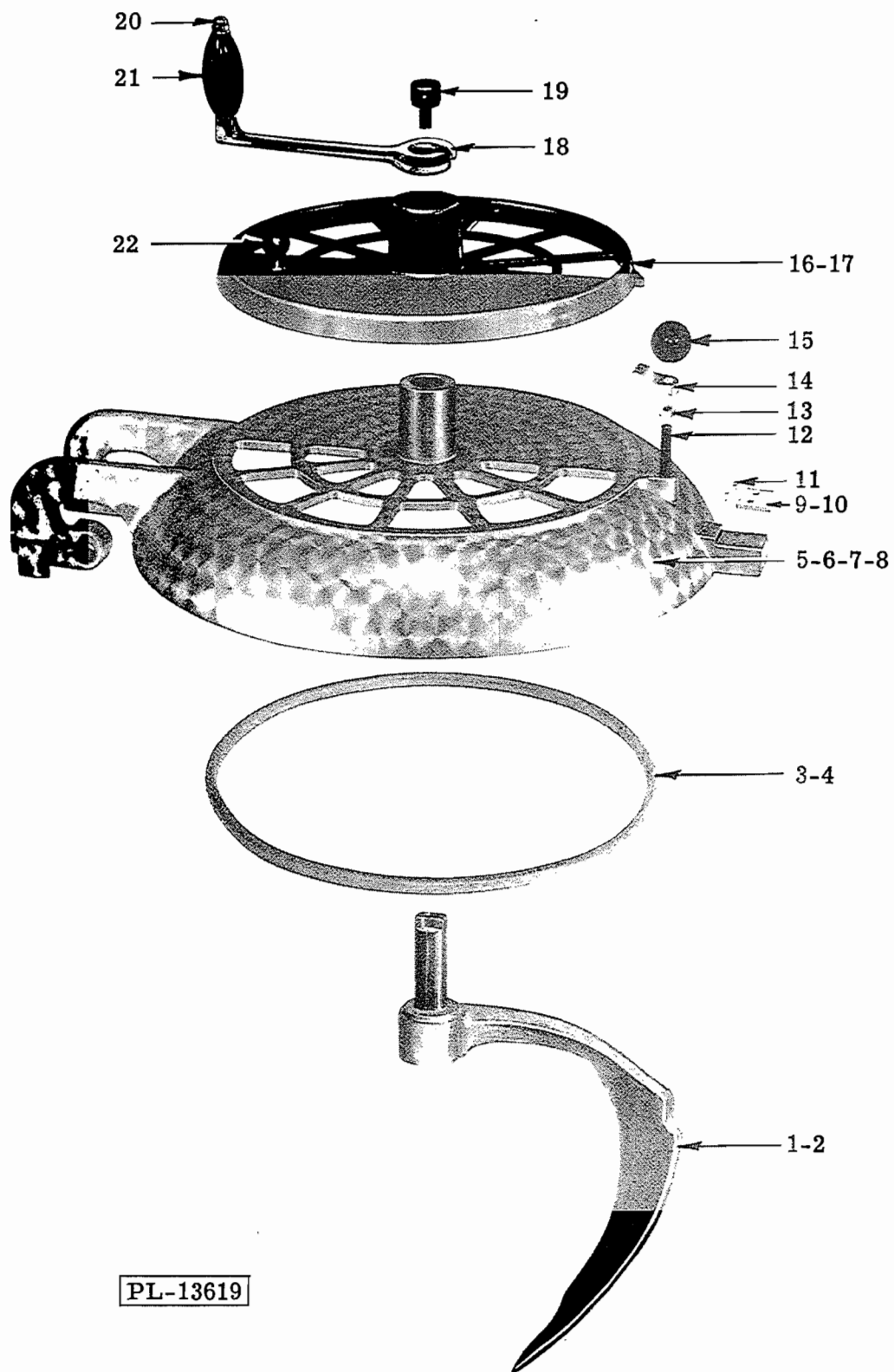
ILLUS. PL-13617	HOBART PART NO.	NAME OF PART	MODEL		STEPHAN PART NO.	AMT.
			25	40		
1	A-107347	Cyl. Groov. Dowel Pin (3 x 30)	X	X	4b	2
2	A-107345	Wheel (Nylon)	X	X	4	2
3	A-107346	Bolt - Wheel (12 x 55)	X	X	4a	2
4	M-82827	Bowl Bumper	-	X	6	1
5	M-82827	Bowl Bumper	X	-	6	1
6	M-82824	Foot	X	X	2	2
7	M-82822	Chassis (Give serial number)	X	X	1	1
8	A-120564	Rubber Bumper	X	-	6b	1
9	M-82829	Screw - Flat Hd. (M6 x 90 mm)	X	X	6c	1
10	M-82831	Washer (6 mm)	X	X	-	1
11	M-82823	Lock Pin (W/Chain)	X	X	1c	1
12	A-107350	Bolt - Sq. Hd. (M10 x 20 mm)	X	X	1b	1
13	M-82840	Handle - Bowl Lock	X	X	15	1
14	M-84037	Knob - Handle	X	X	15a	1
15	M-82839-1	Shim Washer (1.0 mm Thk.)	X	X	14	As Reqd.
16	M-82839-2	Shim Washer (2.0 mm Thk.)	X	X	14	As Reqd.
17	M-82837	Bowl Swivel Bearing (R.H.)	X	X	13	1
18	M-82838	"O" Ring	X	X	13a	2
19	A-107424	Bushing - Oilite (R.H.)	X	X	12	1
20	M-82836	Disc - Positioning	X	X	11	1
21	A-107425	Bushing - Oilite (L.H.)	X	X	10	1
22	M-82838	"O" Ring	X	X	13a	2
23	M-82834	Bowl Swivel Bearing (L.H.)	X	X	9	1
24	M-82833	"O" Ring	X	X	8	2
25	M-82832	Cable Sleeve	X	X	7	1



BOWL UNIT

## BOWL UNIT

ILLUS. PL-13618	HOBART PART NO.	NAME OF PART	MODEL		STEPHAN PART NO.	AMT.
			25	40		
1	A-106981	Bowl W/Adapter -----	X	-	20	1
2	A-106982	Bowl W/Adapter -----	-	X	20	1
3	A-107351	Wing Bolt (M6 x 15) -----	X	X	22a	1
4	A-107352	Bolt - Lock Hdle. (Removable) -----	X	X	22	1
5	M-82849	Locking Handle -----	X	X	23	1
6	M-82982	Pin -----	X	X	24	1
7	M-82983	Roller -----	X	X	25	1
8	M-82850	Knob - Lock Handle -----	X	X	26	1
9	A-106980	"O" Ring (75 x 5) -----	X	X	28c	1
10	A-106978	Seal Assy. -----	X	X	28b	1
11	M-82984	Lock Nut - Knife Shaft -----	X	X	29	1
12	A-106373	Pressure Ring (15 mm) -----	X	X	30	1
13	M-82986	Slant Ring Set (1, 2, 3) -----	X	X	31	1
14	M-82854	Knife Shaft Sub-Assy. (Incls. items #11, 12, 13 & 17) --	X	X	32	1
15	M-83017	Slant Ring Pin (Long) -----	X	X	31a	2
16	M-83016	Slant Ring Pin (Short) -----	X	X	31a	2
17	M-82855	Knife Shaft -----	X	X	33	1
18	M-84041	Screw - Fil. Hd. (M6 x 10 mm) -----	X	X	19c	2
19	M-82981-1	Spring - Cover -----	X	-	19b	1
20	M-82981-2	Spring - Cover -----	-	X	19b	1
21	M-82846	Sleeve - Hinge Shaft -----	X	X	19a	1
22	M-82845	Shaft - Hinge -----	X	X	19	1
23	M-82916-2	Holder - Bumper -----	-	X	19f	1
24	A-107353	Spacer -----	-	X	19h	1
25	M-84042	Bumper -----	X	X	19g	1
26	A-120565	Threaded Pin -----	X	X	27b	4
27	A-120566	Lock Washer (10.2) -----	X	X	27c	4
28	A-120567	Nut - Hex (M10) -----	X	X	27d	4



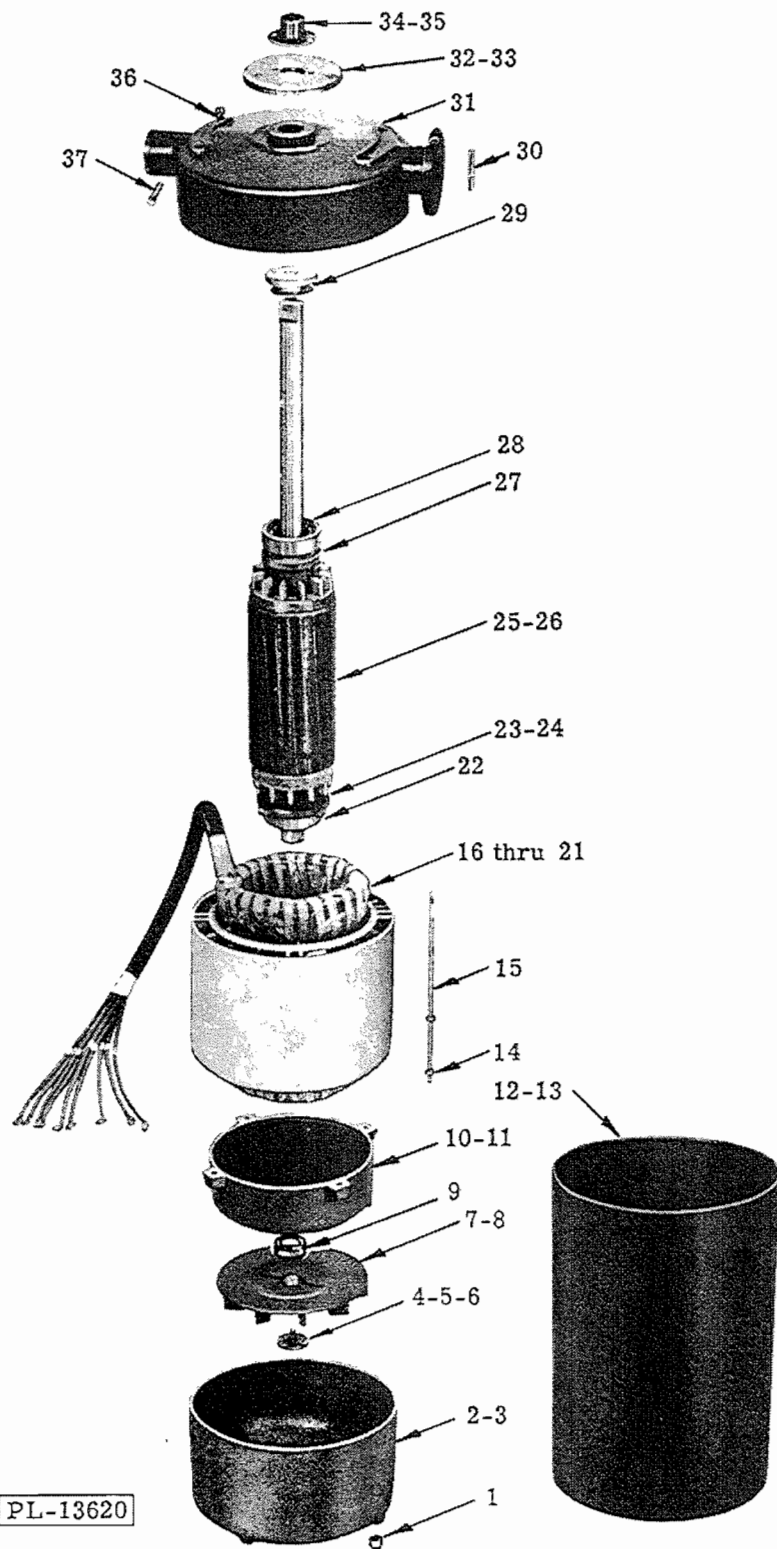
PL-13619

BOWL COVER UNIT

## BOWL COVER UNIT

ILLUS. PL-13619	HOBART PART NO.	NAME OF PART	MODEL USE		STEPHAN PART NO.	AMT.
			25	40		
1	M-82856-1	Mixing Baffle -----	X	-	35	1
2	M-82856-2	Mixing Baffle -----	-	X	35	1
3	M-101066-1	Gasket - Cover (Silicone) -----	X	-	36	1
4	M-101066-2	Gasket - Cover (Silicone) -----	-	X	36	1
5	A-107354	Cover - Bowl -----	X	-	38	1
6	A-107355	Cover - Bowl -----	-	X	38	1
7	M-89966-1	Cover - Bowl (W/O Insp. Opening) -----	X	-	-	1
8	M-89966-2	Cover - Bowl (W/O Insp. Opening) -----	-	X	-	1
9	M-82859	Lock Plate -----	X	X	39	1
10	M-84043	Shim - Lock Plate -----	X	X	-	As Reqd.
11	M-82860	Screw - Flat Hd. (M6 x 15 mm) -----	X	X	40	2
12	M-82861	Stud (M10 x 55) -----	X	X	41	1
13	M-82862	Nut - Hex (M10) -----	X	X	42	1
14	M-82863	Retainer - Sight Cover -----	X	X	43	1
15	M-82864	Knob - Cover -----	X	X	45	1
16	M-82865-1	Sight Cover -----	X	-	46	1
17	M-82865-2	Sight Cover -----	-	X	46	1
18	M-82866	Crank - Hand -----	X	X	51	1
19	M-82867	Retaining Screw - Crank -----	X	X	52	1
20	M-82990	Acorn Nut (M8) -----	X	X	50	1
21	M-82989	Handle - Crank -----	X	X	49	1
22	M-82988	Knob - Sight Cover -----	X	X	48	1
	*M-82857-1	Gasket - Cover -----	X	-	36	1
	*M-82857-2	Gasket - Cover -----	-	X	36	1
	*M-82858-1	Cover - Bowl -----	X	-	38	1
	*M-82858-2	Cover - Bowl -----	-	X	38	1

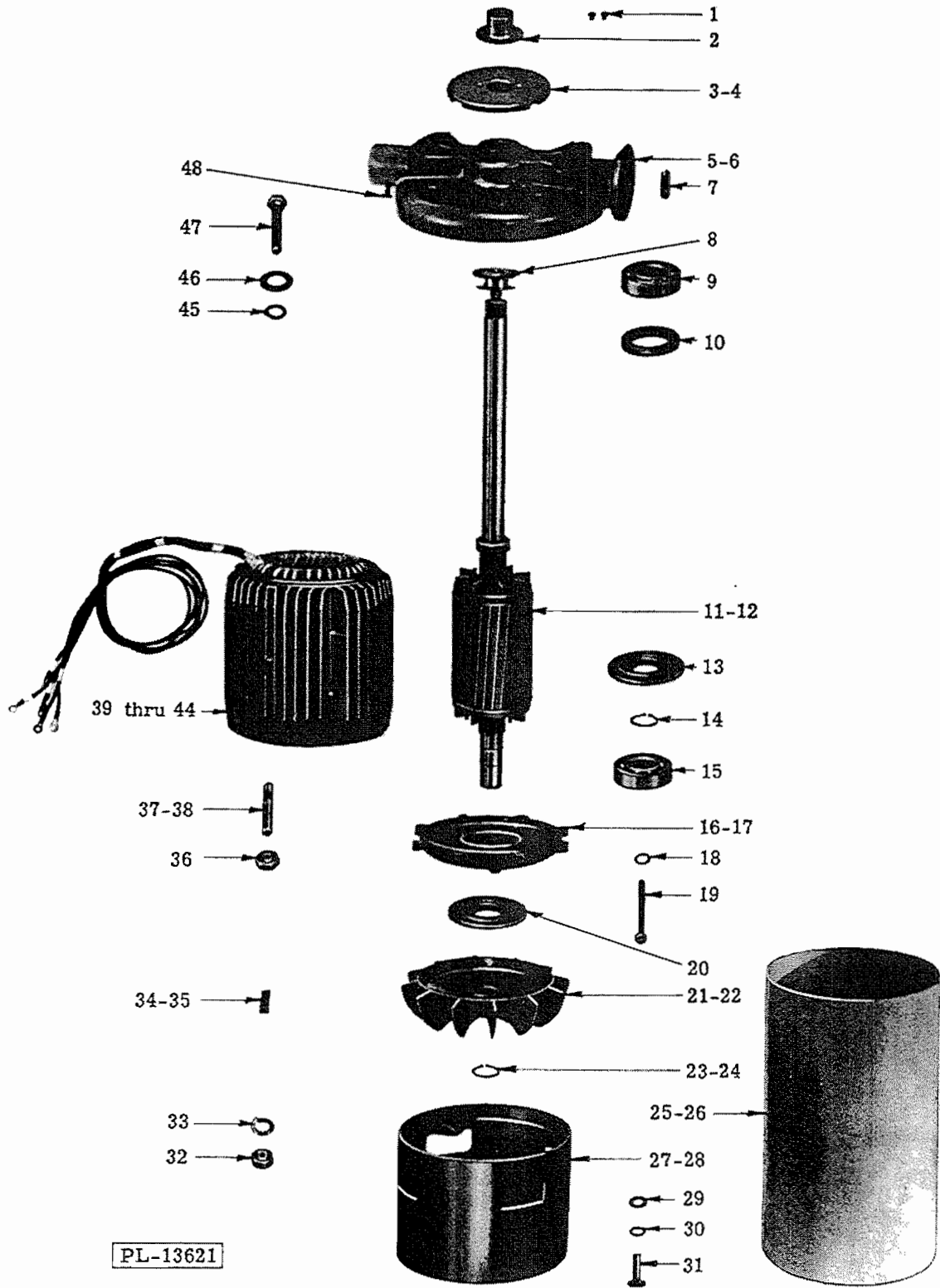
\*Used on machines manufactured prior to Jan. 1, 1967  
(Year of manufacture included in serial number).



MOTOR UNIT  
(PRIOR TO SERIAL NO. 76 U-20 000)

**MOTOR UNIT**  
(PRIOR TO SERIAL NO. 76 U-20 000)

ILLUS. PL-13620	HOBART PART NO.	NAME OF PART	MODEL USE		STEPHAN PART NO.	AMT.
			25	40		
1	M-82990	Acorn Nut (M8)	X	X	68b	4
2	M-82993-1	Vent Housing	X	-	68	1
3	M-82993-2	Vent Housing	-	X	68	1
4	M-84052	Lock Washer - Shakeproof (M8)	X	X	69	1
5	M-84053	Screw - Soc. Hd. (M8 x 20 mm)	X	X	69	1
6	M-82994	Disc	X	X	69	1
7	M-82995	Fan	X	X	70	1
8	A-107357	Key for Fan (8 x 10 mm)	X	X	-	1
9	A-107356	Spacer	X	X	70a	1
10	M-82996-1	Bearing Bracket - Lower	X	-	71	1
11	M-82996-2	Bearing Bracket - Lower	-	X	71	1
12	M-84054	Motor Housing	X	-	68a	1
13	M-84055	Motor Housing	-	X	68a	1
14	M-84056	Nut - Hex (M8)	X	X	-	8
15	M-82997	Stud	X	X	72	4
16	M-82998-1	Stator - Type FDS (230 V., 60 Hz., 3 Ph.)	X	-	73	1
17	M-82998-2	Stator - Type FDS (230 V., 60 Hz., 3 Ph.)	-	X	73	1
18	M-82998-4	Stator (460 V., 60 Hz., 3 Ph.)	X	-	-	1
19	M-82998-5	Stator (460 V., 60 Hz., 3 Ph.)	-	X	-	1
20	M-82998-7	Stator (200 V., 60 Hz., 3 Ph.)	X	-	-	1
21	M-82998-8	Stator (200 V., 60 Hz., 3 Ph.)	-	X	-	1
22	M-82999	Bearing - Lower	X	X	74	1
23	M-83000	Retainer - Bearing	X	X	75	1
24	M-84057	Screw (M5 x 35 mm)	X	X	-	4
25	M-83001-1	Rotor	X	-	76	1
26	M-83001-2	Rotor	-	X	76	1
27	M-83002	Seal - Oil	X	X	77	1
28	M-83003	Bearing - Upper	X	X	78	1
29	M-82880	Knurled Nut	X	X	79	1
30	M-82883	Pin (10 x 60 mm)	X	X	81	1
31	M-82888	Bearing Bracket - Upper	X	X	82	1
32	M-82884	Disc - Water Spin-Off	X	X	83	1
33	M-88297	Screw - Soc. Hd. (M6 x 25 mm)	X	X	-	2
34	M-82885	Sieve	X	X	84	1
35	M-82886	Screw - Flat Hd. (M5 x 8 mm)	X	X	-	2
36	M-82910	Screw - Fil. Hd. (M10 x 35 mm)	X	X	-	4
37	M-82882	Bolt - Sq. Hd.	X	X	80	1

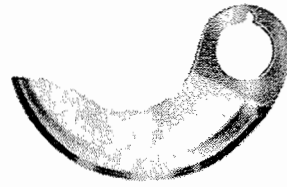
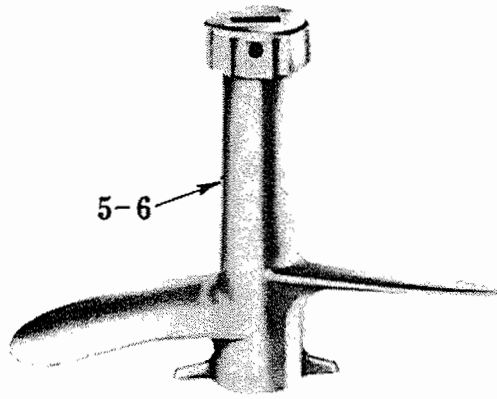


MOTOR UNIT  
(BEGINNING WITH SERIAL NO. 76 U-20 000)



**MOTOR UNIT**  
(BEGINNING WITH SERIAL NO. 76 U-20 000)

ILLUS. PL-13621	HOBART PART NO.	NAME OF PART	MODEL		STEPHAN PART NO.	AMT.
			25	40		
1	M-82886	Screw - Flat Hd. (M5 x 8 mm)	X	X	200	2
2	M-82885	Sleeve	X	X	201	1
3	M-82884	Disc - Water Spin-Off	X	X	202	1
4	M-84061	Screw - Soc. Hd. (M6 x 25 mm)	X	X	203	2
5	A-120568	Bearing Bracket - Upper	X	-	204	1
6	A-120569	Bearing Bracket - Upper	-	X	204	1
7	M-82883	Pin (10 x 60 mm)	X	X	205	1
8	M-82880	Knurled Nut	X	X	212	1
9	M-83003	Bearing - Upper	X	X	210	1
10	M-83002	Seal - Oil	X	X	211	1
11	A-120571	Rotor	X	-	213	1
12	A-120572	Rotor	-	X	213	1
13	A-120579	Retainer - Bearing	X	X	215	1
14	A-120580	Retaining Ring	X	X	216	3
15	M-82999	Bearing - Lower	X	X	217	1
16	A-120581	Bearing Bracket - Lower	X	-	218	1
17	A-120582	Bearing Bracket - Lower	-	X	218	1
18	A-120584	Lock Washer (B5)	X	X	220	4
19	A-120585	Screw - Hex Hd. (M5 x 45 mm)	X	X	221	4
20	A-120583	Retainer - Bearing	X	X	219	1
21	A-120591	Fan	X	-	225	1
22	A-120592	Fan	-	X	225	1
23	A-120593	Retaining Ring	X	-	226	1
24	A-120594	Retaining Ring	-	X	226	1
25	A-120597	Motor Housing	X	-	230	1
26	A-120598	Motor Housing	-	X	230	1
27	A-120595	Vent Housing	X	-	227	1
28	A-120596	Vent Housing	-	X	227	1
29	A-120599	Washer (M6.4)	X	X	231	3
30	A-120600	Lock Washer (B6)	X	X	232	3
31	A-120601	Screw - Hex Hd. (M6 x 15 mm)	X	X	233	3
32	A-107361	Nut - Hex (M8)	X	X	229	4
33	A-107360	Lock Washer (B8)	X	X	228	4
34	A-120589	Key	X	-	224	1
35	A-120590	Key	-	X	224	1
36	A-120588	Nut - Hex (M8)	X	X	223	4
37	A-120586	Screw - Lock	X	-	222	4
38	A-120587	Screw - Lock	-	X	222	4
39	A-120573	Stator (230 V., 60 Hz., 3 Ph.)	X	-	214	1
40	A-120574	Stator (200 V., 60 Hz., 3 Ph.)	X	-	214	1
41	A-120575	Stator (460 V., 60 Hz., 3 Ph.)	X	-	214	1
42	A-120576	Stator (230 V., 60 Hz., 3 Ph.)	-	X	214	1
43	A-120577	Stator (200 V., 60 Hz., 3 Ph.)	-	X	214	1
44	A-120578	Stator (460 V., 60 Hz., 3 Ph.)	-	X	214	1
45	A-107360	Lock Washer (B8)	X	X	209	4
46	A-107359	Washer (M8.4)	X	X	208	4
47	A-120570	Fin. Bolt - Hex Hd. (M8 x 60 mm)	X	X	207	4
48	M-82882	Screw - Hex Hd. (M8 x 20 mm)	X	X	206	1



7-8



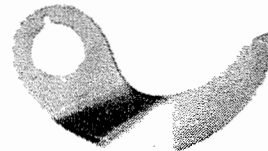
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13-14



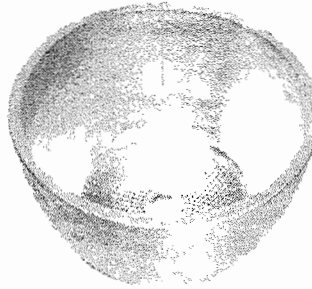
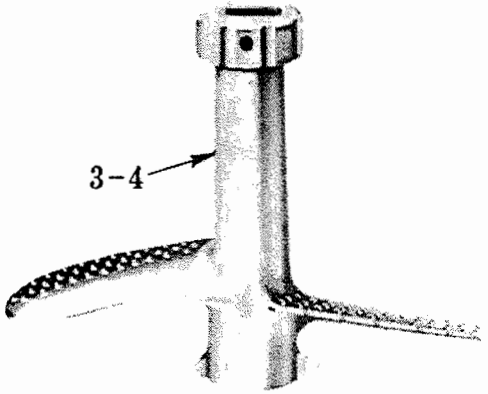
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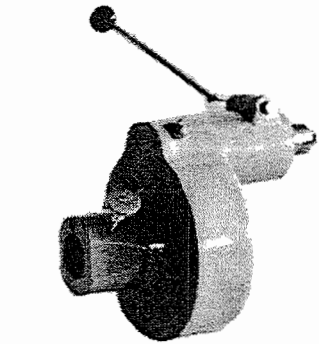
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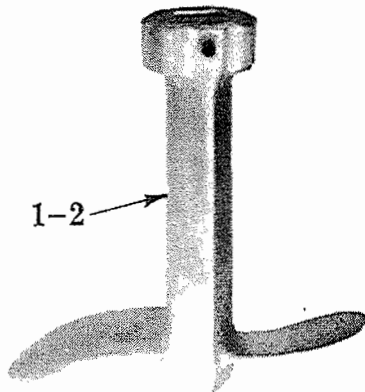
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20-21



18-19



22



23



24



25



26

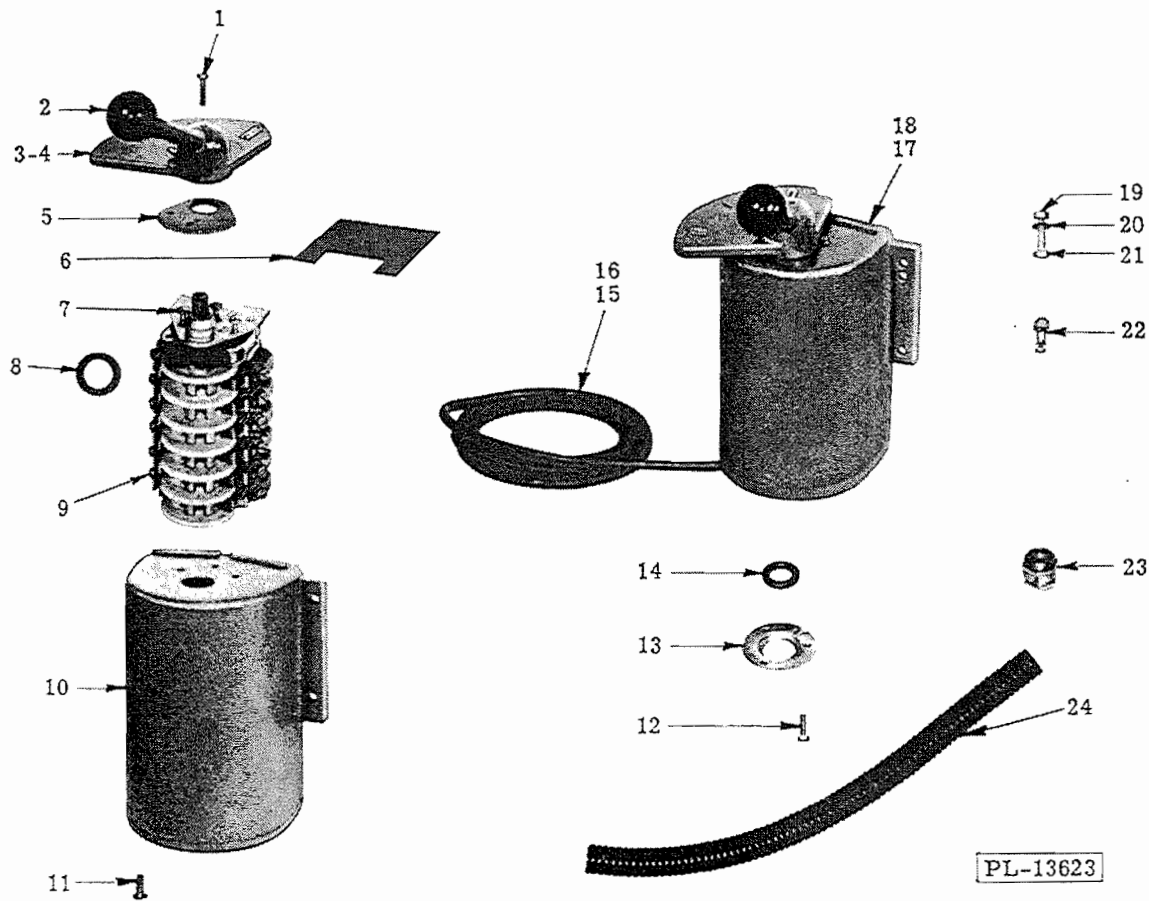
PL-13622

ACCESSORIES AND TOOLS

## ACCESSORIES AND TOOLS

ILLUS. PL-13622	HOBART PART NO.	NAME OF PART	MODEL		STEPHAN PART NO.	AMT.
			25	40		
1	M-88258-1	Knead/mix Shaft (Elliptical Shank) -----	X	-	-	1
2	M-88258-2	Knead/mix Shaft (Elliptical Shank) -----	-	X	-	1
3	M-83402-1	Grater Shaft -----	X	-	-	1
4	M-83402-2	Grater Shaft -----	-	X	-	1
5	M-83009-1	Mix Shaft (Large Qty.) -----	X	-	-	1
6	M-83009-2	Mix Shaft (Large Qty.) -----	-	X	-	1
7	M-83004-1	Wide Knife -----	X	-	-	1
8	M-83004-2	Wide Knife -----	-	X	-	1
9	M-83007-1	Wave-Cut Knife (Wide) (1 set of 2) -----	X	-	-	1
10	M-83007-2	Wave-Cut Knife (Wide) (1 set of 2) -----	-	X	-	1
11	M-83008-1	Wave-Cut Knife (Narrow) (1 set of 2) -----	X	-	-	1
12	M-83008-2	Wave-Cut Knife (Narrow) (1 set of 2) -----	-	X	-	1
13	M-83006-1	Narrow Knife (1 set of 2) -----	X	-	-	1
14	M-83006-2	Narrow Knife (1 set of 2) -----	-	X	-	1
15	M-89937-1	Low Angle Knife (1 set of 2) -----	X	-	-	1
16	M-89937-2	Low Angle Knife (1 set of 2) -----	-	X	-	1
17	M-89940-1	Winged Nut Accessory -----	X	X	29a	1
18	M-89938-1	Attach. Power Unit -----	X	-	-	1
19	M-89938-2	Attach. Power Unit -----	-	X	-	1
20	A-102472	Strainer Basket -----	X	-	-	1
21	A-102473	Strainer Basket -----	-	X	-	1
22	M-82879	Wrench - Knife Shaft -----	X	X	67	1
23	M-82878	Sharpening Tool -----	X	X	66	1
24	M-82876	Peg Wrench -----	X	X	64	1
25	M-82877	Spanner Wrench (Knurled Nut) -----	X	X	65	1
26	A-106985	Spanner Wrench (Bow Seal) -----	X	X	28d	1

25/40 VCM REPLACEMENT PARTS



SWITCH UNIT

ILLUS. PL-13623	HOBART PART NO.	NAME OF PART	MODEL USE		STEPHAN PART NO.	AMT.
			25	40		
1	M-84044	Retaining Screw - Hex Hd. (M6 x 25 mm)	X	X	62d	1
2	M-82872	Knob - Switch Handle	X	X	61	1
3	M-89474	Switch Handle (3 Position)	-	X	62	1
4	M-82874	Switch Handle (3 Position)	X	-	62	1
5	M-82870	Gasket - Switch	X	X	59	1
6	M-84045	Insulator (460 V.)	X	X	58a	1
7	M-82992	Screw (M6 x 10 mm)	X	X	-	3
8	M-82906	Seal	X	X	62b	1
9	M-82869	Drum Switch	X	X	58	1
10	M-84046	Switch Housing	X	X	57	1
11	M-84048	Screw (M6 x 15 mm)	X	X	57a	1
12	A-120612	Bolt - Hex Hd. (M6 x 20 mm)	X	X	62g	3
13	M-82899	Seal Disc - Cord	X	X	62e	1
14	M-82833	"O" Ring	X	X	62f	1
15	M-82889	Cord	X	X	56	1
16	M-84049	Plug - Hubbel "Twist Lock"	X	X	-	1
17	M-82868-1	Switch Housing Sub-Assy. (Incls. items #1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 & 23)	X	-	55	1
18	M-82868-2	Switch Housing Sub-Assy. (Incls. items #1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 & 23)	-	X	55	1
19	A-107361	Nut - Hex (M8)	X	X	62i	As Reqd.
20	A-107359	Washer (M8)	X	X	62m	As Reqd.
21	A-107358	Bolt - Hex Hd. (M8 x 35 mm)	X	X	62n	As Reqd.
22	A-107363	Grd. Lug - Cord	X	X	62o	1
23	M-84050	Fitting - Cord	X	X	62h	1
24	M-82991	Armored Cable	X	X	62j	1
	A-107362	Clamp for Cord (Not Shown)	X	X	-	1