

HOBART701 S Ridge Avenue, Troy, OH 45374
1-888-4HOBART • www.hobartcorp.com**FD500
FOODWASTE DISPOSERS****HOBART****POWERFUL AND DEPENDABLE**

Peak periods for the large food service establishment can be very demanding on any food waste disposer. This powerful disposer has a large capacity for food waste. Hobart has engineered the 5 horsepower unit to perform dependably during peak demands for economical food waste disposal.

SPECIFICATIONS

Listed by Underwriters Laboratories Inc. and meets requirements of A.S.S.E. Standard No. 1009. (50 Hz. Electrical Specifications not available with thermal overload protection nor submitted for UL listing.)

MOTORS: Continuous duty rating. Permanently lubricated bearings (matched set double row tapered roller bearings for upper shaft thrust support, ball bearings for lower shaft support). Inherent overload protection in motor.

HOUSINGS: Heavy aluminum grind and discharge housings. Eight bolts fasten the motor unit to the grind chamber, permit easy removal.

MOUNTING: Disposer fastens to 7" I.D. throat opening cones. A vinyl isolating ring eliminates metal-to-metal contact at the cone mounting, reduces vibration and noise transmission.

STATIONARY SHREDDER RING: Ni-Hard, 2½" high, 4 machine ground primary action breaker bars, 42 secondary action grinding teeth.

FLYWHEEL: Breaker blade, mounted at center, speeds grinding, prevents objects from "riding" at center. Two hardened stainless steel cutter blocks (fastened to flywheel with Nyloc screws) are replaceable, can be indexed for new cutting edges. Ni-Resist flywheel is 9" diameter, slots undercut the shredder ring to assure that particles are cut to proper size before passing to the drain line.

MOTOR SHAFT SEAL: Face-type seal consists of sintered bronze mating ring and spring loaded carbon ring insert in chemical resistant neoprene bellows. Mating surfaces are protected from grit of fibers by being recessed into flywheel. Should any moisture pass this seal, a flinger and drain tube are provided to insure immediate removal. In addition, a lip-type oil seal (located beneath the bearings) is an "added protection" water seal.

DRAIN CONNECTOR: The removable outlet flange is tapped for 3" pipe connection.

DUAL DIRECTION GRINDING: Disposer flywheel operates in either direction. When installed with Control Groups 2 & 3, flywheel automatically starts in opposite direction each start. (Increases life and efficiency of grinding elements and frees flywheel of jams.)

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ACCESSORY GROUPS

GROUP A



GROUP B



GROUP C

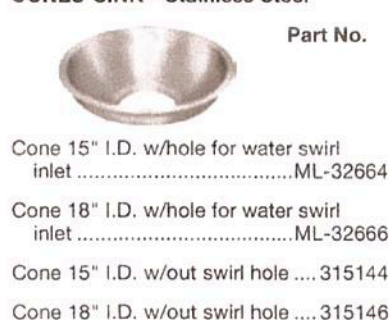


GROUP D

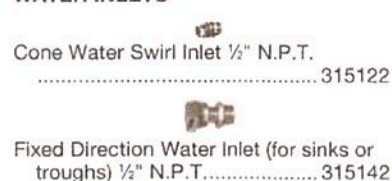


ACCESSORY COMPONENTS

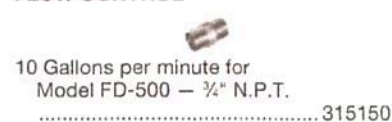
CONES-SINK—Stainless Steel



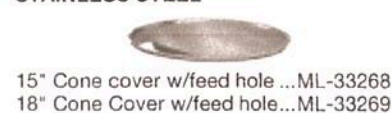
WATER INLETS



FLOW CONTROL



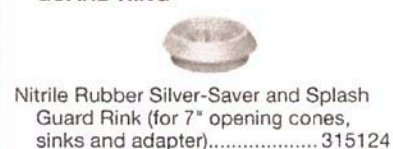
CONE COVER — STAINLESS STEEL



CONE FEEDING ACCESSORIES



SILVER-SAVER SPLASH GUARD RING



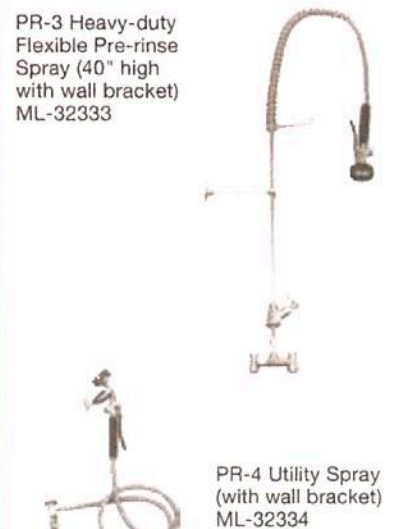
SINK ADAPTER — Standard Group D Accessory



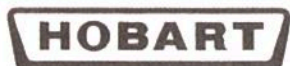
VACUUM BREAKERS — Luster Chrome Plated



PRE-RINSE SPRAYS



Adapters are available to install Hobart Disposers on existing cones. See Form F-7543

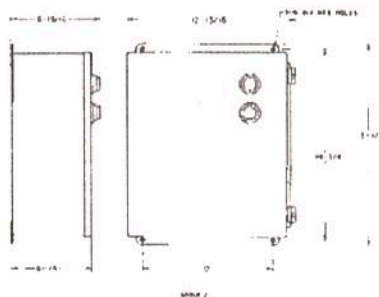
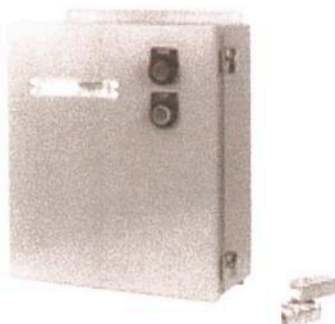


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FD500 FOODWASTE DISPOSERS

ELECTRICAL CONTROL GROUPS

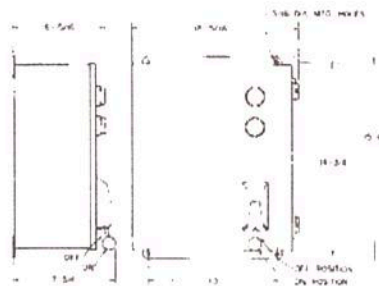
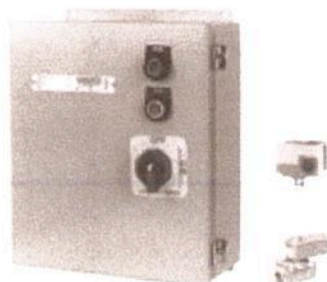
Listed by Underwriters Laboratories Inc., for use with FD Disposers
(50 Hz. Electrical Specifications not submitted for UL Listing.)



Group 2

Includes:
Magnetic Contactors
Pushbutton Start and Stop
Automatic Reversing
NEMA 12 Enclosure
Solenoid Valve

Approximate
Shipping Wt. 31 lbs.



Group 3

Includes:
Magnetic Contactors
Pushbutton Start and Stop
Automatic Reversing
Low Water Pressure Cut-off
Time Delay for water after shut-off
Line Disconnect
Solenoid Valve
NEMA 12 Enclosure

Approximate
Shipping Wt. 38 lbs.

AVAILABLE ELECTRICAL SPECIFICATIONS

5.H.P., 3 Phase

Hz.	VOLTS	RATED AMPS
60	200-230/460	12.8/6.4
50	220-240/380-415	11.6/6.7

The slant (/) line indicates the dual voltage operation accomplished by motor lead connections.
Follow connecting diagram on motor.

SAMPLE SPECIFICATION

FD-500 — B — 2 (230/60/3)

Model Number
Accessory Group
Electrical Control Group
Electrical Specifications

Cut hole 19" for 18" cone. Hole to be 16" for 15" cone.

Solenoid must be installed in upright position.

Disposer may be easily rotated for better drain line connection.

Center line at wall outlet of trap should not be higher than
center line of disposer discharge opening.

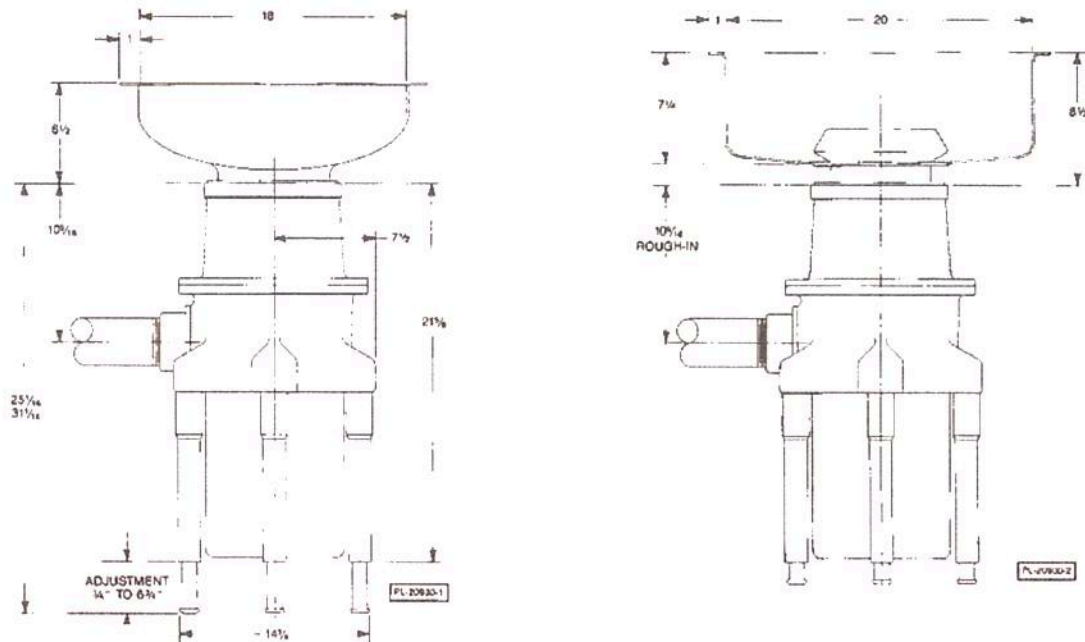
If water pressure is in excess of 60 P.S.I. install a pressure
reducing valve.

FD500 FOODWASTE DISPOSERS

HOBART

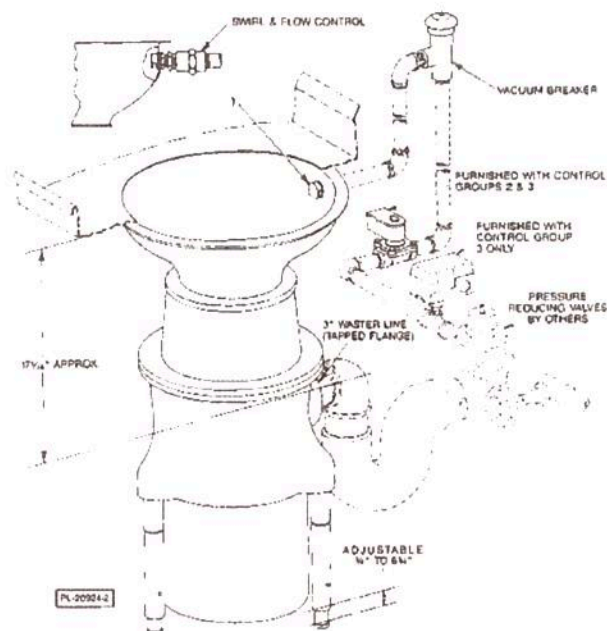
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DETAILS AND DIMENSIONS



NOTE: Accessory Groups A and B ... 18" Cone is Standard. Specify 15" Cone in Place of 18" Cone When Desired.

TYPICAL INSTALLATION



As continued product improvement is a policy of Hobart, specifications are subject to change without notice.

MODELS FD-150, FD2-150, FD-200, FD2-200, FD-300, FD2-300 & FD-500 FOOD WASTE DISPOSERS

MOTOR CONNECTION DIAGRAMS

MODEL		VOLTAGE/HZ/PH	MOTOR CONNECTIONS 10 WIRE DESIGNATION AND/OR COLOR AT TERMINAL BLOCK TB1					SPLICE AND INSULATE	NO CONNECTION AND INSULATE		
			A	B	C	D	E				
FD3-50, -75, -125 -150, -200		120/60/1 110-120/50/1	P1 (PRP)	T2 T4 (WHT), (YEL)	T3 P2 (ORN), (BRN)	T8 (RED)	J10 (BLK)				
FD3-50, -75, -125 -150, -200		208-240/60/1 220-240/50/1	P1 (PRP)	T4 (YEL)	T2 T3 (WHT), (ORN)	T8 (RED)	J10 (BLK)		P2 (BRN)		
MODEL	VOLTAGE/HZ/PH	MOTOR CONNECTIONS 30 WIRE DESIGNATION AND/OR COLOR AT TERMINAL BLOCK TB1			SPLICE AND INSULATE			NO CONNECTION AND INSULATE			
		T1	T2	T3							
FD3-50 -75 -125 -150 -200 -300	208-240/60/3	T1 T7 (BLU), (PK)	T2 T8 (TAN), (RED)	T3 T9 (ORN), (BRN)	T4 P4 (YEL), (BLU)						
	T5 P5 (BLK), (TAN)										
	T6 P6 (PRP), (ORN)										
FD-500	200-230/60/3	1, 7	2, 8	3, 9	D, 4	E, 5	F, 6				
	220-240/50/3	1, 6	2, 4	3, 5							
FD3-50 -75 -125 -150 -200 -300	480/60/3	T1 (BLU)	T2 (TAN)	T3 (ORN)	T4 T7 (YEL), (PK)			P4 (BLU)	P5 (TAN)	P6 (ORN)	
	T5 T8 (BLK), (RED)										
	T6 T9 (PRP), (BRN)										
FD-500	460/60/3	1	2	3	4, 7	5, 8	6, 9	D	E	F	
	380-415/50/3	1	2	3	4, 5, 6						
F-19344-A		HOBART CORPORATION, TROY, OHIO 45374							PRINTED IN U.S.A.		

NOTE

F-19344-A

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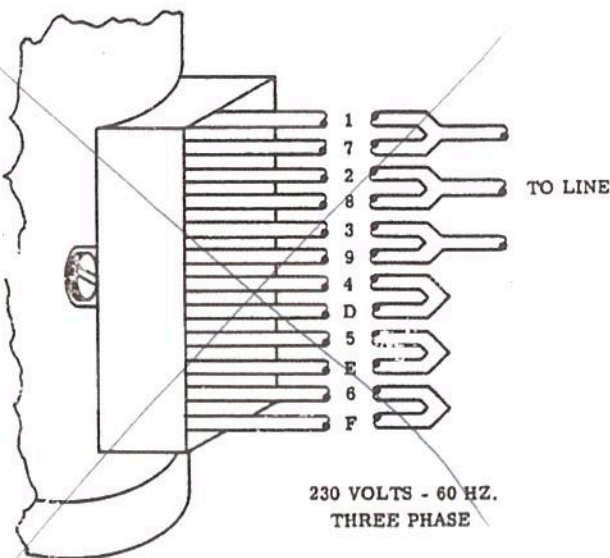


FIG. 3

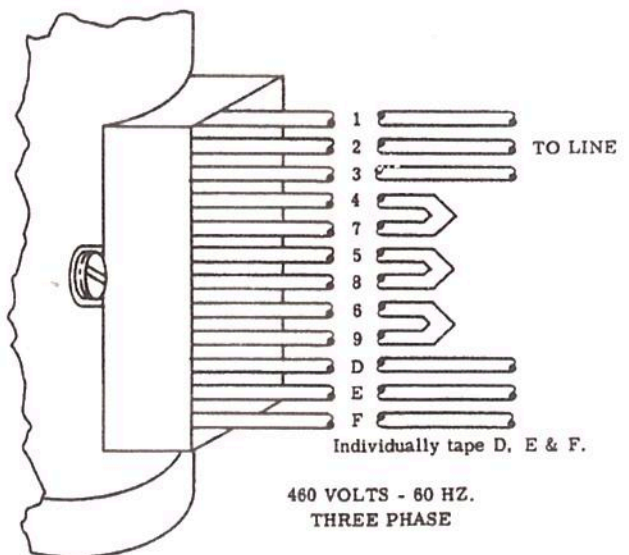


FIG. 4

HOBART
CORPORATION

TROY, OHIO 45374



INSTRUCTION MANUAL

... with Replacement Parts



MODEL FD500

FOOD WASTE DISPOSERS

(INCLUDES MOTOR PARTS)
ML-18978

A product of HOBART CORPORATION 701 S. RIDGE AVENUE TROY, OHIO 45374-0001

FORM 11394 Rev. G (10-98)

Installation, Operation, and Care of MODEL FD500 FOOD WASTE DISPOSER

SAVE THESE INSTRUCTIONS

GENERAL

The FD500 disposer features removable hardened steel components and reversible rotation with grinding in both directions. The disposer is self-feeding, making it unnecessary to force the food waste into the grinding mechanism.

The FD500 food waste disposer utilizes hardened steel cutter blocks (1, Fig.1) mounted to a rotating flywheel (4, Fig.1) and a stationary shredder ring (2, Fig. 1) to grind food waste to a small particle size for discharge through waste lines. With the motor running and flushing water turned on, food waste is reduced to grinding size by the rotating "hi-bulk" cutter (3, Fig. 1). Grinding occurs as the food waste is forced against the shredder ring by the cutter blocks and the centrifugal force due to rotation. The flushing water aids the grinding action and discharges ground food waste into the waste line.

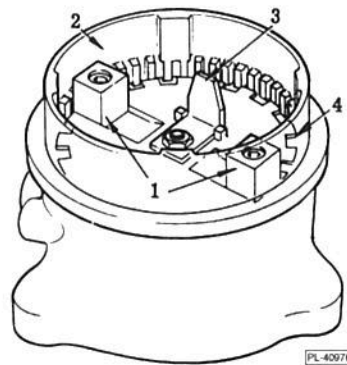


Fig. 1

Control groups and accessory groups are available to suit each installation.

INSTALLATION

Immediately after unpacking the disposer, check for possible shipping damage. If the disposer is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

Prior to installation, test the electrical service to make sure that it agrees with the specifications on the disposer data plate.

Use legs and temporary blocking to support the disposer during installation to avoid excessive stress at welded or soldered cone to table connection.

ASSEMBLY

To attach the disposer assembly to the cone, see Figs. 2 and 4. Remove the ten screws holding the clamp ring halves in place and remove the clamp ring halves. Raise the disposer into position using the adjustable legs to bring the disposer into firm contact with the cone flange. Do not place the weight of the disposer on the cone.

Turn each adjustable foot as required to complete height and level adjustments.

Assemble the clamp ring halves using the ten screws and tighten screws finger tight. Rotate disposer to the desired position. Tighten the ten screws evenly to form a water tight joint.

For an accessory group D installation, use the mounting flange (1, Fig. 3) included with accessory group D. See Fig. 3 and the accessory group data sheet.

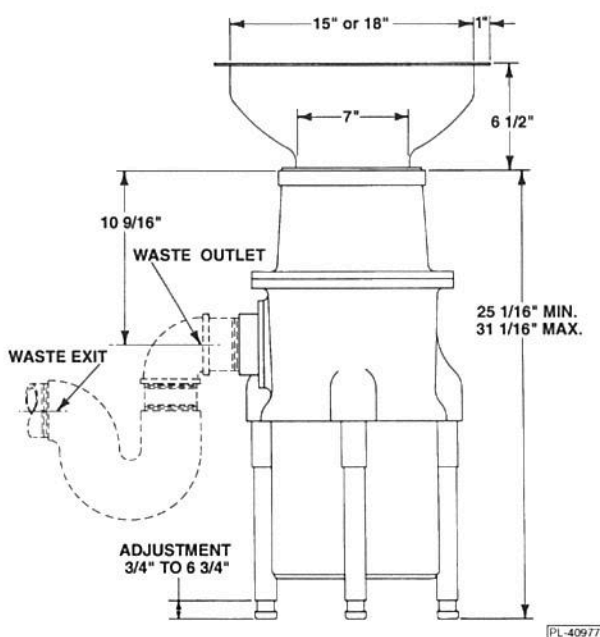


Fig. 2

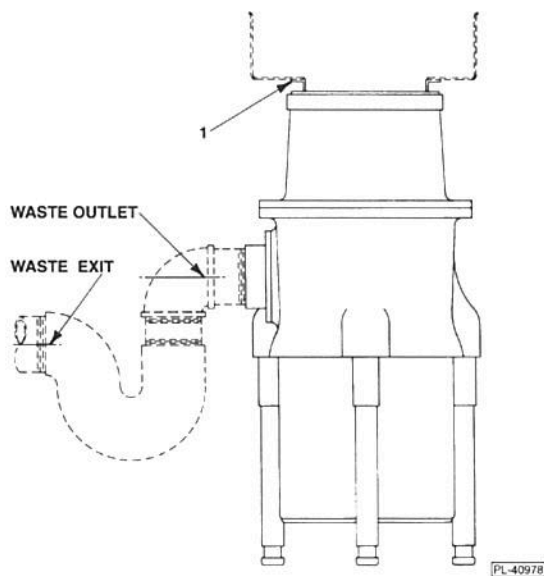


Fig. 3

WARNING: HAZARDOUS MOVING PARTS — DO NOT OPERATE DISPOSER UNTIL PROPERLY INSTALLED TO CONE.

Use one of the following: Part No. 204006 or 204007 (15 inch diameter cone), Part No. 204003 or 204004 (18 inch diameter cone). For custom built installations — minimum thickness of stainless steel cone shall be .035 inches and minimum height of cone (vertical distance from work surface to disposer sink flange) shall be 7 inches (Fig. 4).

PLUMBING

WARNING: PLUMBING CONNECTIONS MUST COMPLY WITH APPLICABLE SANITARY, SAFETY AND PLUMBING CODES.

Drain

The disposer is furnished with a waste discharge outlet flange (7, Fig. 5) threaded with a standard 3" IPS tapered thread. Install waste lines with the shortest possible run and best fall. If possible, use a fall of 1/4" per foot. The waste exit must be lower than the waste outlet (Fig. 2). The waste lines must be thoroughly cleaned. Ream burrs from cut pipe ends and use fittings which will permit unrestricted flow. Drum traps and grease traps must NOT be used.

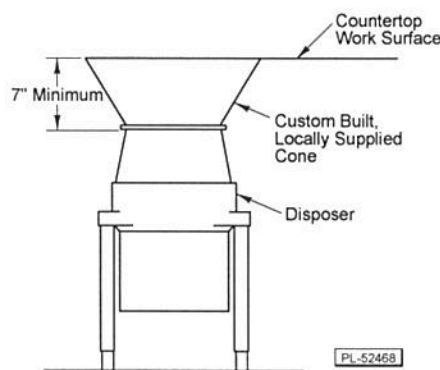


Fig. 4

Water Connections

Connect disposer swirl (1, Fig. 5) from a $\frac{3}{4}$ " IPS cold water supply line. Install the ten gallon per minute flow control supplied with the disposer (2, Fig. 5). If the water line pressure exceeds 60 psig, a pressure reducing valve (6, Fig. 5) (not supplied) should be installed. The minimum flow pressure for the disposer to function properly is 16 psig. Install a shut-off valve (not supplied) for proper servicing of the disposer.

Control Groups 2 and 3 are supplied with a solenoid valve (4, Fig. 5 or 2, Fig. 6) which must be installed in the water supply line as shown. Control Group 3 is furnished with a pressure switch (5, Fig. 5 or 3, Fig. 6) which must be installed between the solenoid valve and pressure reducing valve. If there is no pressure reducing valve in the water supply line, install the pressure switch between the solenoid and the shut-off valve.

Install a vacuum breaker (3, Fig. 5) according to the local plumbing codes. If local plumbing codes prohibit the use of a vacuum breaker, install an air gap water inlet (1, Fig. 6) (not supplied) observing the local codes.

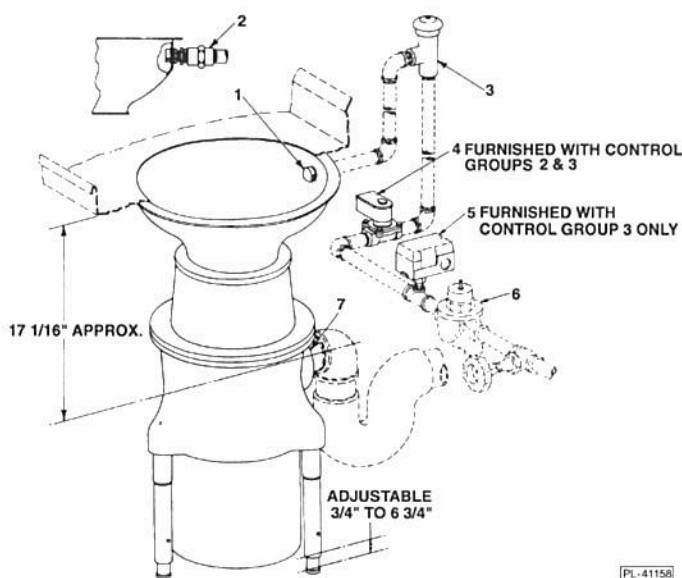


Fig. 5

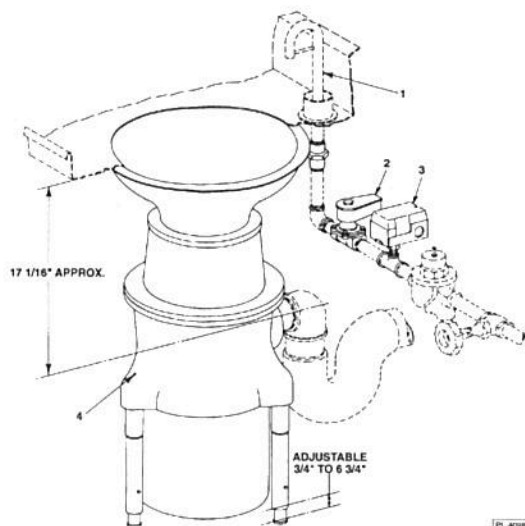


Fig. 6

ELECTRICAL CONNECTIONS

WARNING: ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER LOCAL ELECTRICAL CODES.

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY AND PLACE A TAG AT THE DISCONNECT SWITCH INDICATING THAT YOU ARE WORKING ON THE CIRCUIT.

This unit must be connected to a dedicated, acceptable motor control switch with a marked OFF position to disconnect the appliance from all ungrounded supply conductors. The switch must be mounted within sight of the disposer or sink opening for the disposer.

Knockouts are provided in the motor junction box for making electrical connections to the unit. Flexible conduit should be used to permit moving the unit for periodic servicing and maintenance.

Select and follow wiring diagram, furnished with machine, applicable to your disposer and electrical service.

OPERATION

Before operating disposer make sure it is clear of foreign objects such as metal or wire clippings, screws, nails, etc., which may have dropped into it during installation. Check the flywheel for free rotation.

WARNING: NEVER USE YOUR HAND TO CHECK ROTATION OF FLYWHEEL OR TO REMOVE FOREIGN MATTER FROM THE DISPOSER. USE A STICK OR SIMILAR OBJECT TO TURN THE FLYWHEEL. FOREIGN MATTER CAN BE REMOVED WITH TONGS OR PLIERS.

Start the disposer before feeding food waste. Be sure water is flowing. With typical optional controls, water flow and unit starting are simultaneous and automatic. Feed food waste into disposer. DO NOT feed china, metal, rags, clam shells, or similar material into the unit. DO NOT put grease or oil in the disposer. Oil or grease can clog the drain. Always allow the disposer to run for a short period after grinding is completed to assure proper flushing of the disposer and waste line. This flushing is automatically controlled with certain optional controls.

CONTROLS

WARNING: NEVER REACH INSIDE THIS DISPOSER WHILE IT IS OPERATING.

The operation of the disposer and additional available controls will depend on the selection of control devices. Refer to control group data sheet.

CLEANING

The food waste disposer should be kept in a clean and sanitary condition. Allow the disposer to run a few minutes after disposing of all food waste to completely flush out the interior. If food waste is allowed to accumulate due to improper clean-up, it will give off offensive odors. If this happens, cleaning can be accomplished by using a stiff brush with a strong soap and hot water solution. Light cleaning can be accomplished by grinding ice and a lemon through the disposer.

CAUTION: Do not use chemical solvents or other drain cleaning compounds through the disposer.

MAINTENANCE

LUBRICATION

No lubrication is required for the food waste disposer. Its grease-packed bearings require no service.

CUTTER BLOCKS

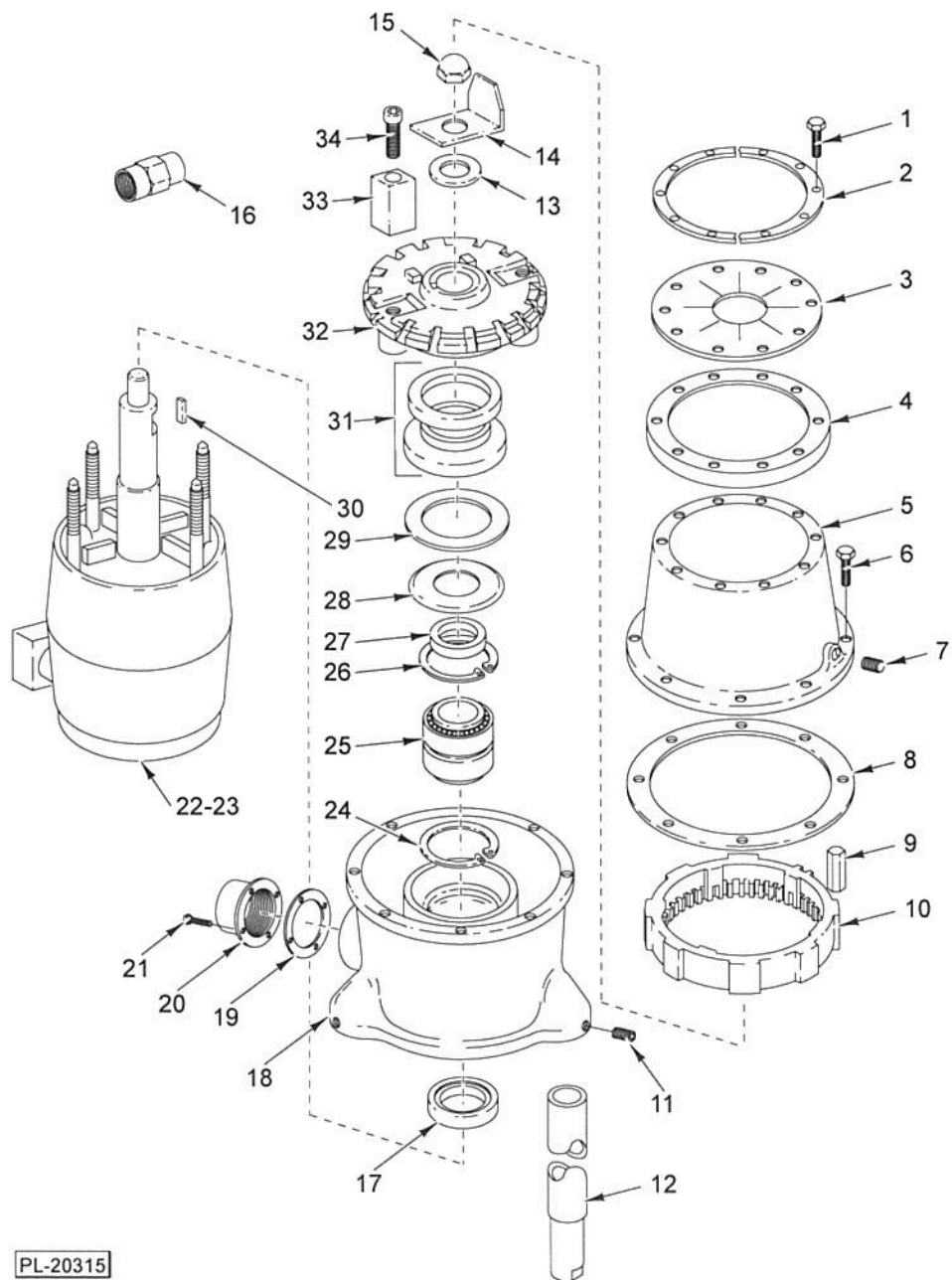
The cutter blocks (1, Fig. 1) may be rotated by a qualified Hobart Service Technician if the cutting edges become worn.

OVERLOAD PROTECTION

The disposer motor is protected by a thermal, resettable overload protector and will trip if the motor is overloaded. To reset, allow approximately five minutes for cooling, then press the manual reset button located on the bottom of the motor junction box. An arrow on the side of the motor junction box indicates location of the button. Restart the disposer using normal operating procedure. If overload protector continues to trip, contact your local Hobart Service Office.

WATER SEAL VENT

A small weep hole (4, Fig. 6) in the side of the lower housing vents the dry side of the water seal. Water leaking from this weep hole is an indication of water seal leakage. If leaking, the water seal should be replaced. DO NOT plug or put grease in the weep hole.

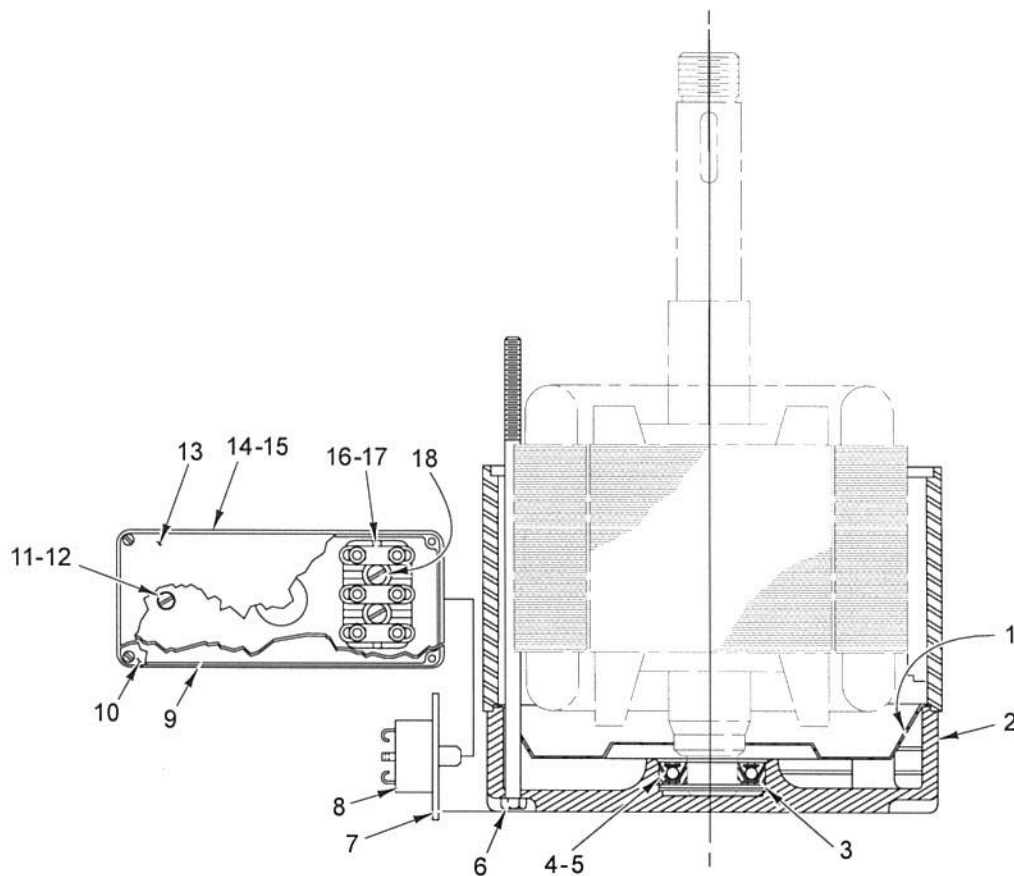


PL-20315

DISPOSER UNIT

DISPOSER UNIT

ILLUS. PL-20315	PART NO.	NAME OF PART	AMT.
1	SC-041-12	Cap Screw $\frac{5}{16}$ -18 x $\frac{7}{8}$ Hex Hd.	10
2	00-203185	Ring - Top Cone Clamp (Half)	2
3	00-202105	Guard - Splash	1
4	00-201493	Ring - Isolating	1
5	00-200950-00002	Housing - Upper	1
6	SC-036-40	Cap Screw $\frac{5}{16}$ -18 x $1\frac{1}{4}$ Hex Hd.	8
7	FP-066-02	Plug $\frac{1}{2}$ Sq. Hd. Pipe	1
8	00-201415	Gasket - Waist	1
9	00-123421	Pin - Shredder lock	1
10	00-201231	Ring - Shredder	1
11	SC-088-36	Set Screw $\frac{5}{16}$ -18 x $\frac{1}{2}$ Hex Hdls. Cup Pt.	3
12	00-288380-00002	Leg Adjusting	3
13	00-272005	Washer - Sealing	1
14	00-201237	Cutter - Hi-Bulk	1
15	NS-031-45	Stop Nut $1\frac{1}{2}$ -12 Hex	1
16	00-204369-00001	Flow Control (10 G.P.M.)	1
17	00-201466	Seal-Oil	1
18	00-276070	Lower Housing Assy.	1
19	00-201414	Gasket	1
20	00-204850	Flange - Outlet	1
21	SC-041-12	Cap Screw $\frac{5}{16}$ -18 x $\frac{7}{8}$ Hex Hd.	4
22	00-475137-00009	Motor (60 Hz.)	1
23	00-121009-00002	Motor (50 Hz.)	1
24	RR-011-66	Retaining Ring	1
25	00-202920	Bearing	1
26	RR-011-66	Retaining Ring	1
27	00-202709	Spacer - Shaft	1
28	00-202729	Slinger - Water	1
29	00-118910	Support - Seal	1
30	00-203617	Key - Shaft	1
31	00-117072	Water Seal Assy.	1
32	00-201211	Flywheel	1
33	00-201223-00005	Cutter - Flywheel	2
34	00-202556-00003	Screw	2
	00-200435	Seal & Bearing Kit (Incls. items 13, 15, 17, 25, 27, 28 & 31)	1



PL-53194

MOTOR UNIT

ILLUS. PL-53194	PART NO.	NAME OF PART	AMT.
	1	00-116744 Baffle	1
	2	00-120836 Bracket - Bearing	1
	3	SL-005-01 Spring - Loading - N.D. #52 Wavy	2
	4	BB-017-36 Ball Bearing SKF #6205Z (50 Hz Motor Unit)	1
	5	BB-008-33 Ball Bearing Fafnir 3205WD (60 Hz Motor Unit)	1
	6	00-120994 Bolt $\frac{7}{16}$ -18 x $8\frac{1}{16}$	4
	7	00-116745-00001 Bracket - Protector (60 Hz Motor Unit)	1
	8	00-201982-00016 Protector (60 Hz Motor Unit)	1
	9	00-120990 Box - Conduit (60 Hz Motor Unit)	1
	10	00-120991 Cover - Conduit Box (60 Hz Motor Unit)	1
	11	00-202559 Screw - Grounding 10-32 x 3.8 Slotted Hex Hd.	1
	12	WC-004-10 Washer - Countersunk	1
	13	00-201152-00005 Cover - Conduit Box (50 Hz Motor Unit)	1
	14	00-117433 Box - Conduit (50 Hz Motor Unit)	1
	15	00-294028 Back - Plate	1
	16	00-270172 Terminal Block Assy. (50 Hz Motor Unit)	1
	17	00-116801 Spacer - Terminal Block (50 Hz Motor Unit)	1
	18	SC-060-39 Mach. Screw 6-32 x $\frac{7}{8}$ Rd. Hd. (50 Hz Motor Unit)	2
		00-270676 Strap - Jumper (50 Hz Motor Unit)	3