



SERVICE MANUAL

Commercial Disposers

SS-100

SS-200

SS-300

SS-500

SS-1000



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This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

GENERAL INFORMATION

Safety Signals



This symbol indicates potential personal injury hazards. Obey all safety messages accompanying this symbol to avoid possible injury or death.

IMPORTANT SAFETY INFORMATION

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

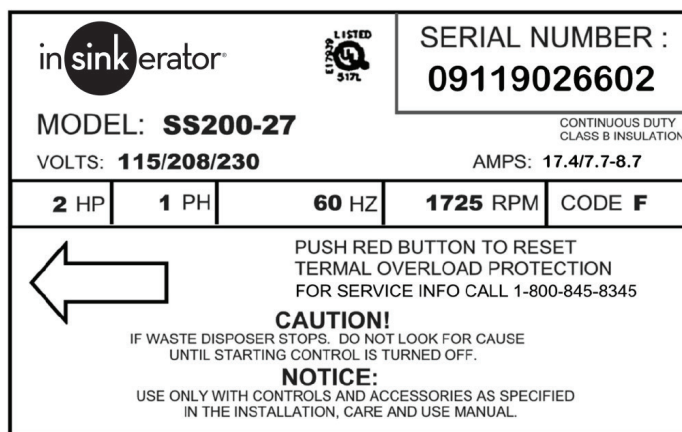


Figure 1. Specification Decal

Commercial Disposers

InSinkErator® manufactures commercial food waste disposers with motors ranging from 1 horsepower through 10 horsepower.

The basic assembly of all SS Series commercial disposers is identical. However, electrical connections vary depending upon the disposer specifications, power supply, and electrical controls.

Specification Decal

The specification decal (Figure 1) located on the motor trim cover indicates

- complete model number (example - SS200-27)
- serial number (includes manufactured date)
- amperage
- voltage
- phase
- horsepower

NOTE: The correct part sheet (as designated by the complete model number) must be referenced to order replacement parts.

Prior to Service Call

- Obtain the model number, serial number, voltage and phase from the customer to prepare for the service call.
- Date of installation.
- Obtain the service history of the disposer.
- Make sure the customer has tried resetting the overload protector and has checked for foreign objects jammed in the grind chamber (see "Troubleshooting" on page 26).
- Before troubleshooting for mechanical problems, determine if the problem is electrical:
 - To determine if the problem is in the switch or the disposer, bypass all electrical starting and/or electrical controls and run the disposer direct.
 - Make sure the disposer electrical specifications match the electric power supply.
 - Make sure the motor lead connections are correct for the corresponding power supply and starting controls.
 - Determine if there are electrical problems with other kitchen appliances. This may indicate a problem in the building's electrical circuitry.
- Call Toll Free **1-800-845-8345** for the nearest InSinkErator Authorized Service Agency or to reach Technical Support.

After Completing Service

Test the disposer for proper operation and ensure that the fittings are secure and do not leak.

Commercial Disposer Limited Warranty

InSinkErator® commercial disposers are warranted against defects in material and workmanship for one year from the date of installation. The warranty includes parts and labor, provided the service is performed by an InSinkErator Factory Authorized Service Center. This warranty does not apply if failure is due to:

- Faulty or improper electrical installation
- Faulty or improper plumbing installation
- Product abuse or misuse
- Accidental damage
- Grinding elements jammed by foreign objects

- Clogged drain lines
- Unit improperly sized or improper water flow (as specified in the Disposer Sizing Chart and Recommended Cold Water Flow Chart in this manual).

Commercial Disposer Parts Limited Warranty

Replacement parts installed on **OUT OF WARRANTY** disposers are covered (parts and labor) for 90 days from the date the parts are installed, provided the service is performed by an InSinkErator Factory Authorized Service Center. To receive credit, the Service Agency must provide a copy of the service invoice given to the customer as a receipt for the replacement part.

Serial Number Date Code (Prior to April 2024)

Example: 19110000000 19 = Year of Manufacture 11 = Month of Manufacture 0000000 = Serial Number

YEAR	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
2015	1501	1502	1503	1504	1505	1506	1507	1508	1509	1510	1511	1512
2016	1601	1602	1603	1604	1605	1606	1607	1608	1609	1610	1611	1612
2017	1701	1702	1703	1704	1705	1706	1707	1708	1709	1710	1711	1712
2018	1801	1802	1803	1804	1805	1806	1807	1808	1809	1810	1811	1812
2019	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
2020	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
2021	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112
2022	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212
2023	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312
2024	2401	2402	2403	-	-	-	-	-	-	-	-	-

Serial Number Date Code (April 2024 forward)

Example: IHD0100000 IH = Location of Manufacture D = Year of Manufacture 01 = Week of Manufacture 00000 = Serial Number

YEAR	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	---->>	Week 51	Week 52
2024	D01	D02	D03	D04	D05	D06	D07	---->>	D51	D52
2025	E01	E02	E03	E04	E05	E06	E07	---->>	E51	E52
2026	F01	F02	F03	F04	F05	F06	F07	---->>	F51	F52
2027	G01	G02	G03	G04	G05	G06	G07	---->>	G51	G52
2028	H01	H02	H03	H04	H05	H06	H07	---->>	H51	H52
2029	J01	J02	J03	J04	J05	J06	J07	---->>	J51	J52
2030	K01	K02	K03	K04	K05	K06	K07	---->>	K51	K52
2031	L01	L02	L03	L04	L05	L06	L07	---->>	L51	L52
2032	M01	M02	M03	M04	M05	M06	M07	---->>	M51	M52
2033	P01	P02	P03	P04	P05	P06	P07	---->>	N51	P52
2034	R01	R02	R03	R04	R05	R06	R07	---->>	R51	R52
2035	S01	S02	S03	S04	S05	S06	S07	---->>	S51	S52
2036	T01	T02	T03	T04	T05	T06	T07	---->>	T51	T52
2037	U01	U02	U03	U04	U05	U06	U07	---->>	U51	U52
2038	W01	W02	W03	W04	W05	W06	W07	---->>	W51	W52
2039	Y01	Y02	Y03	Y04	Y05	Y06	Y07	---->>	Y51	Y52

SPECIFICATIONS

Cold Water Flow & Drain Line Diameter

Disposer	Water Flow GPM (LPM)	Drain Line Diameter Inches (MM)
SS-100	5 (19)	1-1/2"(38)
SS-200	7 (26)	2" NPT (51)
SS-300	8 (30)	3" NPT (51)
SS-500	8 (30)	3" NPT (51)
SS-1000	10 (38)	3" NPT (51)

Dimensions

IMPORTANT: Use the following dimension charts for adaptor height in place of InSinkErator sink bowl height when mounting directly to a sink. *Dimensions - Model SS-100*

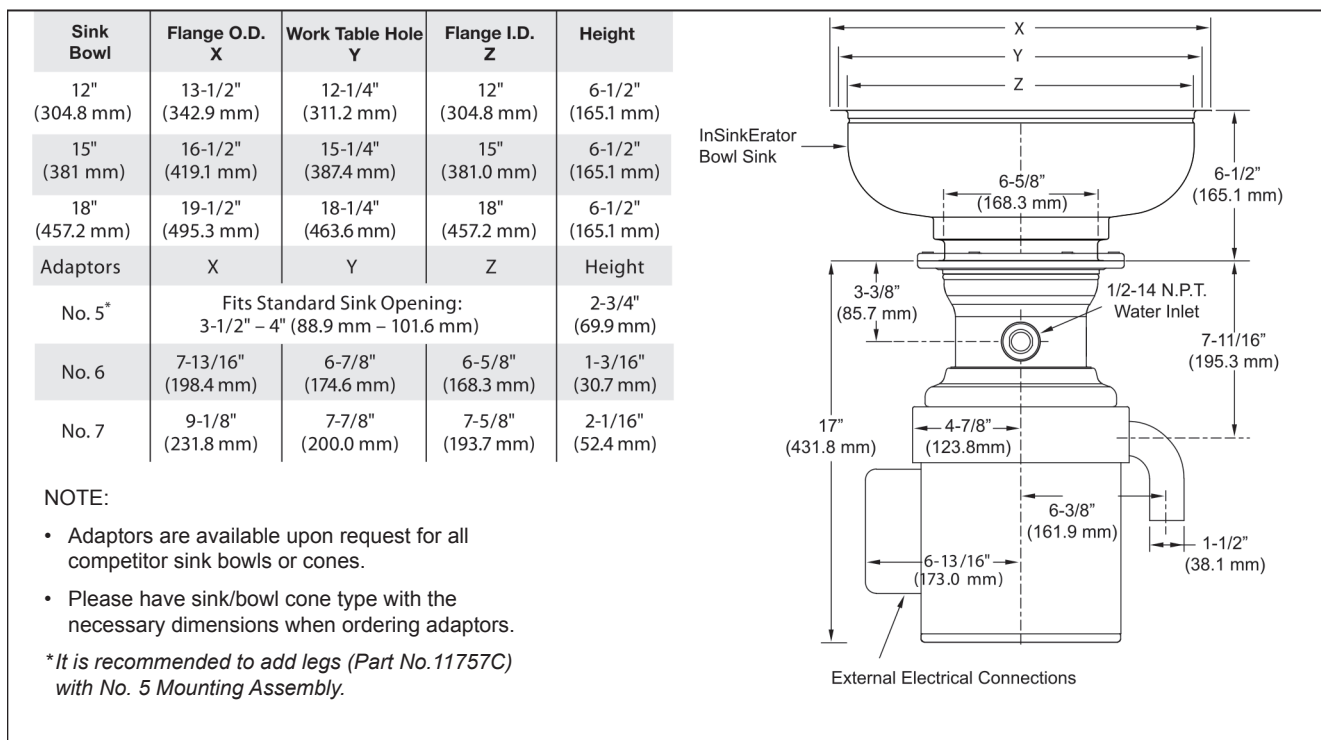


Figure 2. Dimensions - Model SS-100

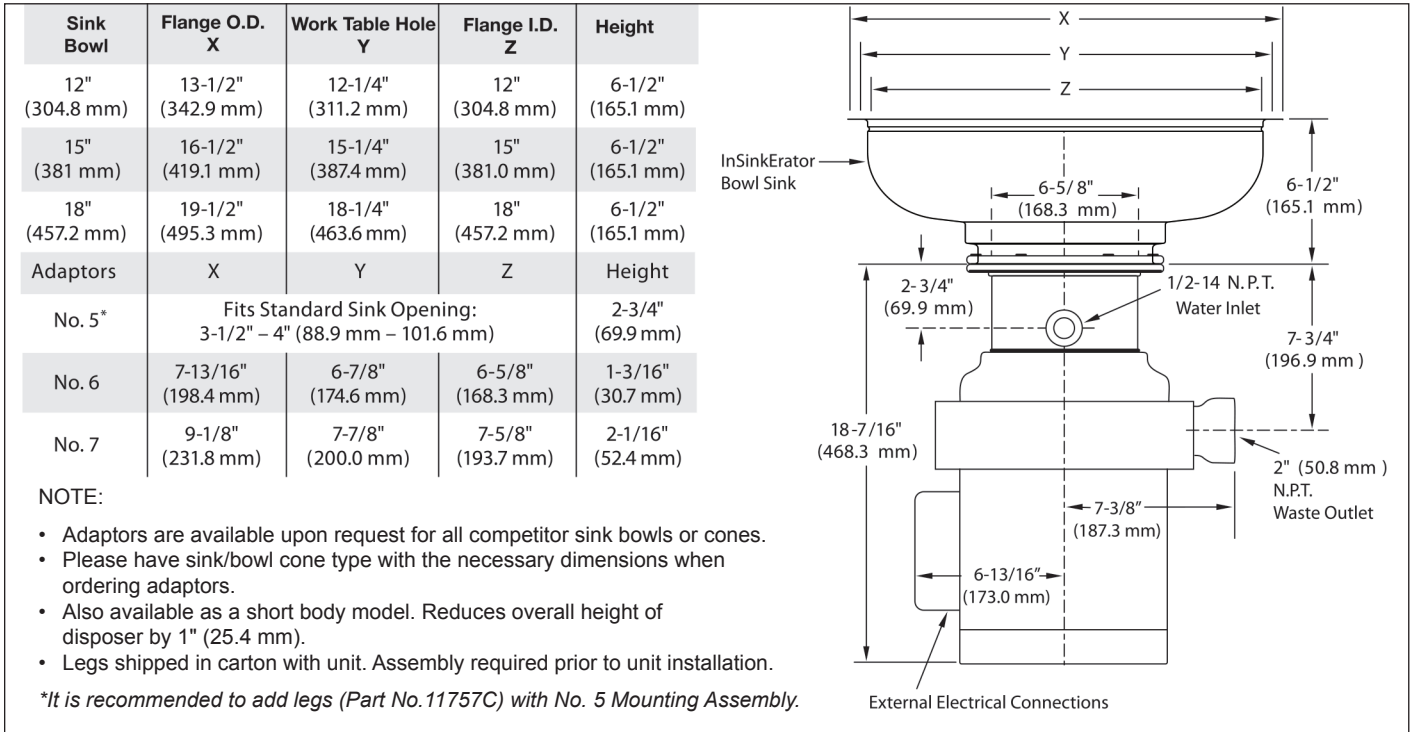


Figure 3. Dimensions - Model SS-200

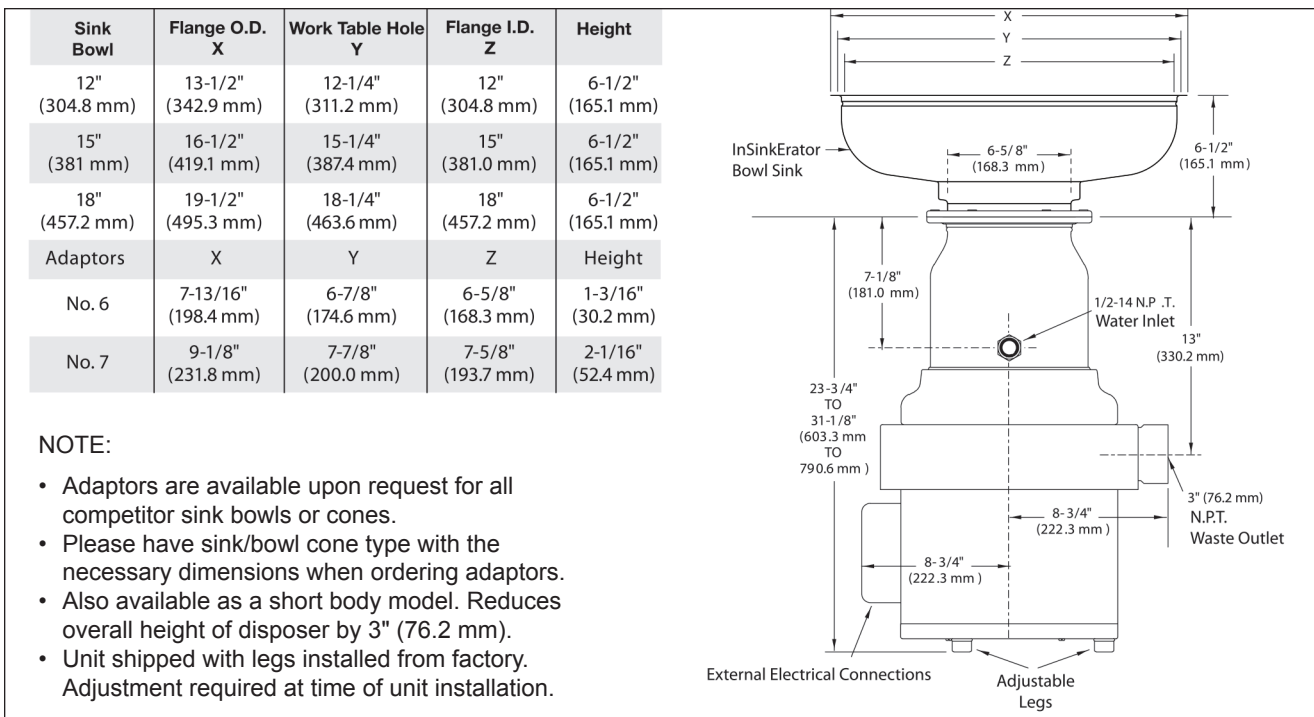


Figure 4. Dimensions - Models SS-300, SS-500 & SS1000

Electrical Requirements

The electrical wiring on disposers shipped from the factory are not connected for a specific voltage. Refer to the Standard Motor Connection Wiring Diagram attached to the inside of the disposer terminal box cover for the correct voltage connections.

Standard disposer voltages are:

- 115/208/230 volts for single phase electrical power
- 208/230/460 volts for three phase electrical power

NOTE: All amp ratings denote amp draw during a grind load.

NOTE: The disposer motor phase and voltage must be the same as the line or power supply.

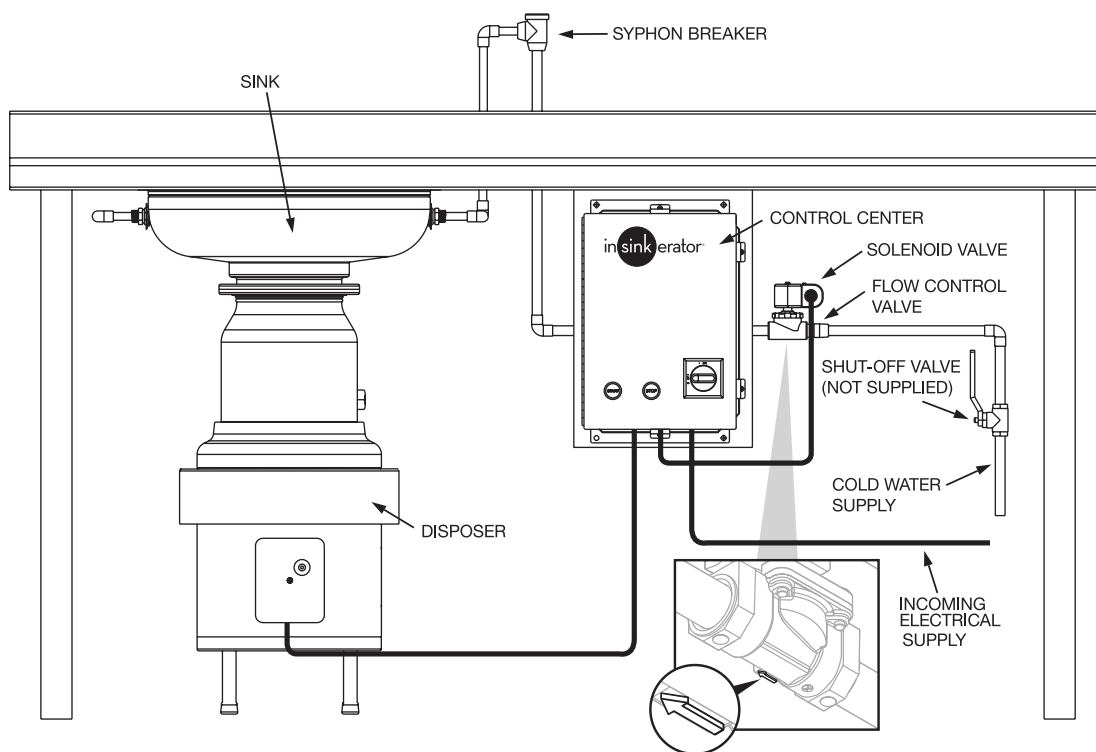
⚠ DANGER **ELECTRIC SHOCK!** The disposer must be permanently grounded.

SS-100 1 H.P.	-28	115/208-230V, 60Hz, 1 Ph, 11.6/5.1/5.7 amps, UL
	-29	208-230/460V, 60Hz, 3 Ph, 2.2/3.0/1.5 amps, UL
	-30	115/208-230V, 60Hz, 3 Ph, 11.6/5.1/5.7 amps, CSA
	-31	208-230/460V, 60Hz, 3 Ph, 2.2/3.0/1.5 amps, CSA
SS-200 2 H.P.	-27	115/208-230V, 60 Hz, 1 Ph, 17.4/7.7/8.7 amps, UL
	-29	208-230/460V, 60 Hz, 3 Ph, 3.3/5.0/2.5 amps UL
	-31	115/208-230V, 60 Hz, 1 Ph, 17.4/7.7/8.7 amps, UL , short body
	-32	208-230/460V, 60 Hz, 3 Ph, 3.3/5.0/2.5 amps, UL , short body
	-28	115/208-230, 60 Hz, 1 Ph, 17.4/7.7/8.7 amps, CSA
	-30	208-240/460V 60Hz, 3 Ph, 3.3/5.0/2.5 amps, CSA
SS-300 3 H.P.	-25	208-230/460V, 60 Hz, 3 Ph, 6.0/7.4/3.7 amps, UL
	-27	208-230/460V, 60 Hz, 3 Ph, 6.0/7.4/3.7 amps, UL , short body
	-26	208-230/460V, 60 Hz, 3 Ph, 6.0/7.4/3.7 amps, CSA
SS-500 5 H.P.	-28	208-230/460V, 60 Hz, 3 Ph, 8.4/8.8/4.4 amps, UL
	-30	208-230/460V, 60 Hz, 3 Ph, 8.4/8.8/4.4 amps, UL , short body
	-29	208-230/460V, 60 Hz, 3 Ph, 8.4/8.8/4.4 amps, CSA
SS-1000 10 H.P.	-10	208-230/460V, 60 Hz, 3 Ph, 11.0/13.0/6.5 amps, UL
	-12	208-230/460V, 60 Hz, 3 Ph, 11.0/13.0/6.5 amps, UL , short body
	-11	208-230/460V, 60 Hz, 3 Ph, 11.0/13.0/6.5 amps, CSA

Discontinued Models

SS-50 1/2 H.P.	-26	115/208-230V, 60Hz, 1 Ph, 8.4/4.0/4.2 amps, UL
	-27	208-230/460V, 60Hz, 3 Ph, 2.0/2.1/1.1 amps, UL
	-28	115/208-230V, 60Hz, 1 Ph, 8.4/4.0/4.2 amps, CSA
	-29	208-230/460V, 60Hz, 3 Ph, 2.0/2.1/1.1 amps, CSA
SS-75 3/4 H.P.	-27	115/208-230V, 60Hz, 1 Ph, 10.0/4.3/5.0 amps, UL
	-28	208-230/460V, 60Hz, 3 Ph, 2.0/2.4/1.2 amps, UL
	-29	115/208-230V, 60Hz, 1 Ph, 10.4/4.3/5.0 amps, CSA
	-30	208-230/460V, 60Hz, 3 Ph, 2.0/2.4/1.2 amps, CSA
SS-125 1-1/4 H.P.	-25	115/208-230V, 60Hz, 1 Ph, 10.6/4.5/5.3 amps, UL
	-26	208-230/460V, 60Hz, 3 Ph, 3.5/4.0/2.0 amps, UL
	-27	15/208-230V, 60Hz, 1 Ph, 10.6/4.5/5.3 amps, CSA
	-28	208-230/460V, 60Hz, 3 Ph, 3.5/4.0/2.0 amps, CSA
SS-150 1-1/2 H.P.	-34	115/208-230V, 60Hz, 1 Ph, 12.2/5.7/6.1, amps, UL
	-36	208-230/460V, 60 Hz, 3 Ph, 3.2/4.6/2.3 amps, UL
	-37	208-230/460V, 60 Hz, 3 Ph, 3.2/4.6/2.3 amps, CSA
	-38	115/208-230V,, 60 Hz, 1 Ph, 12.2/5.7/6.1 amps, UL , short body
	-39	208-230/460V, 60 Hz, 3 Ph, 3.2/4.6/2.3 amps, UL , short body
	-35	115/208-230V, 60 Hz, 1 Ph, 12.2/5.7/6.1 amps, CSA
SS-750 7-75 H.P.	-13	208-230/460V, 60 Hz, 3 Ph, 9.7/12.4/6.2 amps, UL
	-15	208-230/460V, 60 Hz, 3 Ph, 9.7/12.4/6.2 amps, UL , short body
	-14	208-230/460V, 60 Hz, 3 Ph, 9.7/12.4/6.2 amps, CSA

Recommended Installation



Controller and Garbage Disposer Compatibility by Line Voltage

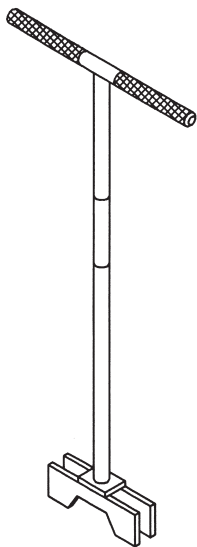
Incoming Line Voltage	Controllers	Disposers
1 PHASE		
120VAC (115-125)	MS-7, MRS-14, CC101K-5, CC202D-5, AS101K-5, MSLV-9	LC-50-11, SS100-28, SS200-27, SS200-31
240VAC (208-230 / 240)	MS-8, MRS-15, CC101K-6, CC202D-6, AS101K-6, MSLV-10	SS100-28, SS200-27, SS200-31
3 PHASE		
208-230 / 240 VAC	MS-9, MRS-16, CC101K-7, CC202D-7, AS101K-7, MSLV-11	SS100-47, SS200-35, SS200-36, SS300-25, SS300-27, SS500-28, SS500-30, SS1000-10, SS1000-12, SSC100-3, SS200-3, SS500-1
460-480 VAC	MS-10, MRS-17, CC101K-8, CC202D-8, AS101K-8, MSLV-12	SS100-47, SS200-35, SS200-36, SS300-25, SS300-27, SS500-28, SS500-30, SS1000-10, SS1000-12, SSC100-3, SS200-3, SS500-1

COMMON SERVICE ISSUES

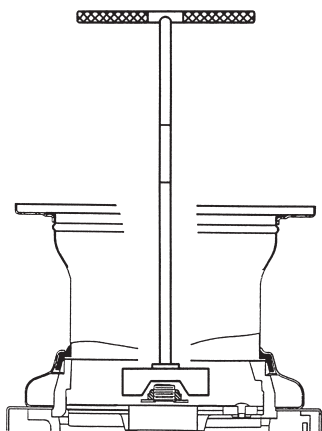
Fixing a Jammed Disposer SS100, SS200, SS300, SS500 and SS1000

⚠ WARNING ELECTRIC SHOCK! Turn power off to the disposer before servicing.

1. Insert the dejamming bar (slot down) through the sink opening. Place the slot over one end of the raised bars found on the top of the rotating shredder.
2. Using an adjustable wrench or a pipe wrench for leverage, twist the dejamming bar back and forth to free the jam. The rotating shredder should move freely when the jam is released.
3. Remove all foreign matter that caused the stoppage.
4. Allow the disposer to cool for 3-5 minutes after it stops running. Press the red reset button to reset the overload protector. Never strike the reset button with an object.
5. If the disposer remains inoperative after following these steps, contact the nearest InSinkErator Factory Authorized Service Center. Call 1-800-558-5700 to obtain the telephone number of the nearest center.



Dejamming Wrench



Dejamming Wrench
engaged in unit

NOTE: Sinks with a 3.5" to 5" sink opening will require a smaller dejamming wrench (Part #04173B)



Fixing a Jammed LC50

⚠ WARNING ELECTRIC SHOCK! Turn power off to the disposer before servicing.



1. Insert the wrench into the hole at the bottom of the garbage disposal. The hole is located under the sink at the bottom of the garbage disposal, dead center, facing the floor. Use the wrench like a crank.
2. Work the wrench back and forth in both directions. If the wrench will not turn easily, it is OK to use some force. The wrench is designed to bend before any damage is done to the garbage disposal.
3. Continue working with the wrench. Continue working with the wrench until it turns freely in complete circles in both directions.
4. Check the overload protector. The overload protector is located under the sink, on the bottom of the garbage disposal, facing the floor. It is a small square red button. If the overload protector has tripped, you will see the red button dropped down about a quarter of an inch (5mm). Gently press the red button. If it does not stay up, wait ten minutes and try again.
5. Check inside garbage disposal's grinding chamber. Look down into the garbage disposal using a flashlight. Do not place your hand into the garbage disposal. Pay special attention to the area around the outer edge of the garbage disposal's shredding disk where you see the little teeth. If you see anything in the garbage disposal, remove it using tongs or pliers.
6. Turn on the water, then the garbage disposal. The garbage disposal should now run. If it jams again, use the wrench again. You may need to repeat the process several times.

Common Repair Areas

Grind Chamber

Stationary Shredder Gasket
Stationary Shredder
Rotating Shredder

Upper End Bell (UEB)

Seals & Bearings

Electrical

Overload
Capacitor
Stator
Rotor & Centrifugal Switch
Lower End Frame (LEF)



Figure 7. Common Repair Areas

PREPARATION FOR REPAIR

⚠ WARNING

ELECTRIC SHOCK! Turn off water and electrical supply. Discharge capacitor with 1000 ohm jumper wire (1 Phase only). Do not use a screwdriver to discharge or capacitor may be damaged.



Removing Disposer

1. Turn off electrical supply and water supply to disposer.
2. Disconnect cold water connection from disposer body water inlet (if connected).
3. Disconnect waste line from disposer.
4. Remove terminal box retaining screw and terminal box cover. See "Terminal Box & Trim Band" on page 9. Mark motor lead wires and electrical supply wires, then disconnect wires and grounding wire from disposer.

NOTE: Make sure sink can bear weight of disposer before legs are loosened. In some cases, support disposer before loosening or removing legs.

5. If equipped with legs and legs interfere with removing disposer from mounting flange, pull O-ring down disposer leg, turn each leg clockwise to raise legs and gain floor clearance.
6. Remove disposer from mounting flange by turning disposer or loosening bolts as necessary (depending on mounting flange).
7. To remove legs, remove black cap plug from bottom of support leg (Figure 6). Insert slotted screwdriver into open end of leg support tube and turn stud counterclockwise until free of upper end bell. Pull leg from disposer.

Re-Installing Disposer

⚠ WARNING

ELECTRIC SHOCK! Turn off water and electrical supply. Discharge capacitor with jumper wire (1 Phase only).

1. If unit was equipped with legs, insert leg assemblies through end cover guide holes. Insert screwdriver into open end of leg support tube and turn stud clockwise to install. Install O-ring, washer and cap to each leg (Figure 6).

NOTE: Model SS-200 ships with legs uninstalled inside the carton. Leg installation is critical for proper support whenever the disposer is mounted to a dish table, a thin-gauge sink (16-gauge minimum), or when using a #5 mounting assembly or non-InSinkErator mounting adapters. On models SS-300 and above, legs are factory-installed and recessed on the unit.

2. Attach disposer to the mounting assembly by positioning in mounting flange and turning disposer into flange or tightening bolts (depending on specific mounting).
3. Adjust legs so unit is supported evenly. Push O-ring up flush with bottom of unit.

4. Connect electrical supply wires to the motor leads. Reference the wiring diagram attached to the inside of the terminal box or the Wiring Diagrams section of the Disposer Control Center Installation manual.

5. Reinstall terminal box.

⚠ WARNING

ELECTRIC SHOCK! Make sure electrical wires are not pinched or damaged when installing terminal box cover.

6. Connect waste line to disposer.
7. Connect cold water supply to disposer body water inlet (if previously installed).
8. Turn on electrical and water supply.
9. Test the disposer to ensure the cutting elements revolve and the water flows automatically. Make sure the disposer is securely mounted and does not leak from any of the connections.

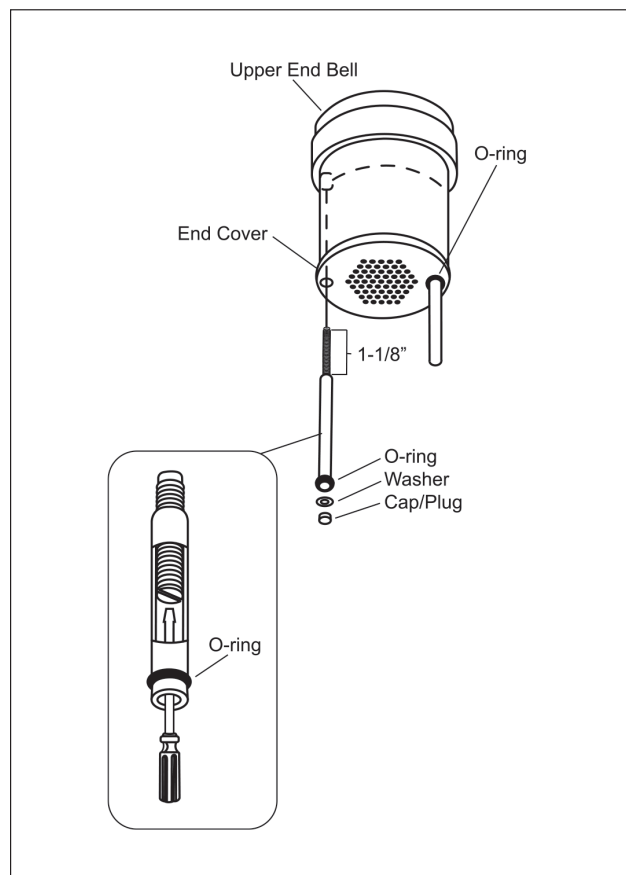


Figure 6. Disposer Leg

NOTE: For full installation instructions, please see the installation, care and use manual that came with the disposer.

Terminal Box & Trim Band

⚠ WARNING

ELECTRIC SHOCK! Turn off water and electrical supply. Discharge capacitor with 1000 ohm jumper wire (1 Phase only). Do not use a screwdriver to discharge or capacitor may be damaged.



NOTE: Terminal box and trim band are removed for all repairs except overload and start capacitor.

Removal

1. Remove screw and terminal box (Figure 8).
2. Remove two screws securing trim band (Figure 9).
3. Spread the trim seam. While pivoting trim band upward and forward, slip band over terminal box bracket and remove band from disposer.

Re-installing the Terminal Box & Trim Band

⚠ WARNING

ELECTRIC SHOCK! Make sure electrical wires are not pinched or damaged when installing terminal box cover

1. Insert trim band onto unit. Secure with two screws and tighten.
2. Install terminal box with overload protector positioned through rubber grommet. Take care not to pinch lead wires in terminal box.
3. Secure with screw.

NOTE: For full installation instructions, please see the installation, care and use manual that came with the disposer.



Figure 8. Terminal Box



Figure 9. Trim Band

GRINDING CHAMBER

Replacing Water Inlet

NOTE: It is not necessary to remove the disposer to repair water inlet.

Water Inlet Kit part number is 13956.

1. Using a wrench, remove water inlet from upper body (Figure 10).
2. Remove any burrs on water inlet hole.
3. Wrap Teflon tape around new water inlet fitting and insert fitting through water inlet hole from inside of upper body.
4. Place O-ring in groove in water inlet nut. A small amount of grease may be used to hold O-ring in place during installation.
5. From outside of body, attach water inlet nut to water inlet fitting. Tighten nut with wrench.

NOTE: Water inlet fitting and nut are joined with a left-hand thread

Rotating the Container Body

1. Remove the disposer from the sink. (Completing the following steps with the disposer mounted beneath the sink base is possible, but difficult.)
2. Remove the electrical box and the trim band.
3. Loosen the bolts from the bottom of the upper end bell assembly (UEB) that hold the top cover on to be able to rotate the container body. (They are accessible from the bottom of the UEB.)
4. With the bolts loosened, rotate to any position needed relative to the water inlet.
5. Once at the desired position, inspect the seal to make sure it is evenly seated (not folded or pinched) and then retighten the bolts to 40–75 in-lbs.
6. Reattach the electrical box and the trim band.
7. Reinstall the disposer to the sink.

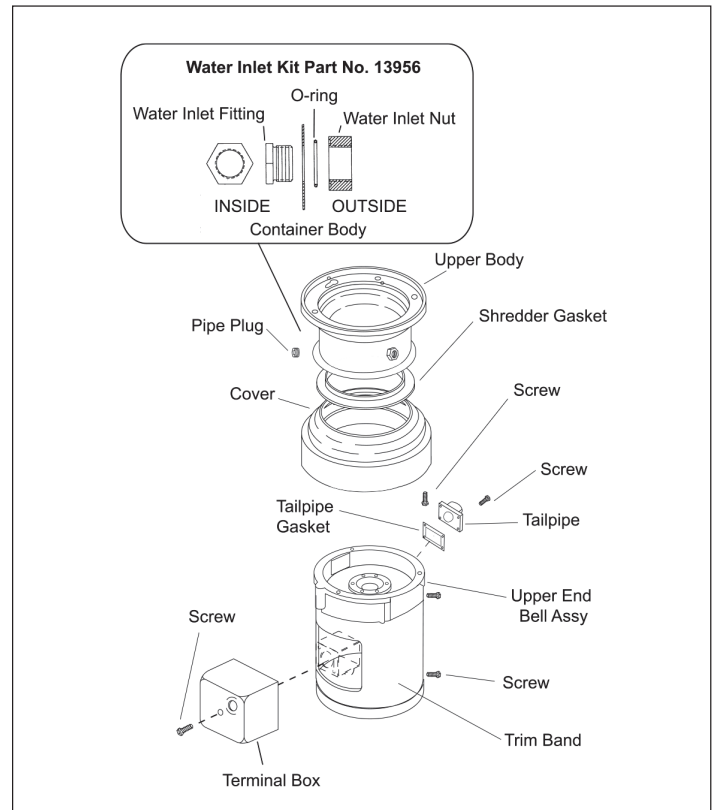


Figure 10. Cover and Upper Body Assembly

Grind Chamber

Stationary Shredder Gasket
Stationary Shredder
Rotating Shredder

Upper End Bell (UEB)

Seals & Bearings

Electrical

Overload
Capacitor
Stator
Rotor & Centrifugal Switch
Lower End Frame (LEF)



Figure 10.1 Common Repair Areas

Replacing Shredder Gasket

1. Remove disposer. See "Removing Disposer" on page 7.
2. Remove screws securing tailpipe and gasket from upper end bell assembly (Figure 10).
3. Remove terminal box and trim band (Figure 10).
4. Remove screws securing body and cover assembly to upper end bell assembly (Figure 10).
5. Lift cover and upper body assembly off upper end bell assembly.
6. Separate the upper body assembly from the cover.
7. Remove old gasket. Install new gasket to bottom edge of upper body (Figure 11).
8. Place cover over upper body.
9. Place cover and upper body assembly onto upper end bell assembly. There are two tabs on the inside of the cover. These tabs fit into the two side grooves on the upper end bell with the waste outlet aligned with the waste outlet cutout.
10. Secure in place with screws.
11. Install trim band and terminal box.
See "Terminal Box & Trim Band" on page 9.
12. Re-install tailpipe gasket and tailpipe using screws (Figure 10).
13. Install disposer. See "Installing Disposer" on page 7.



Figure 11. Replacing Shredder Gasket

Replacing Stationary Shredder

Removal

1. Remove disposer. See "Removing Disposer" on page 7.
2. Remove cover and upper body assembly. Perform steps 2 – 5 under "Replacing Shredder Gasket" on page 10.
3. Lubricate the full outside diameter of the shredder ring with penetrating oil.
4. Place a 1"D x 1-1/4"L long piece of pipe or similar sized hex socket over rotating shredder nut (Figure 12).
5. Using a 5/16" thick flat bar, rest bar on top of pipe or socket with flat end under shredder teeth. Strike jam release bar with a soft non-metallic mallet (rawhide, nylon, leather, wood) to break the seal and remove stationary shredder.

NOTICE

Do not strike stationary shredder or shredder could be damaged.

Installation

1. Clean old silicone and dirt from upper end bell.
2. Apply water resistant silicone sealant around bottom of stationary shredder.
3. Place stationary shredder on upper end bell, aligning one stationary shredder groove with upper end bell weep hole (Figure 13). Strike stationary shredder firmly on alternate sides with soft mallet until securely seated.

NOTICE

Do not use metal hammer or die cast stationary shredder will break.

4. Turn rotating shredder by hand and make sure it rotates freely.
5. Install cover and upper body. Perform steps 8–13 under "Replacing Shredder Gasket" on page 10.



Figure 12. Removing Stationary Shredder

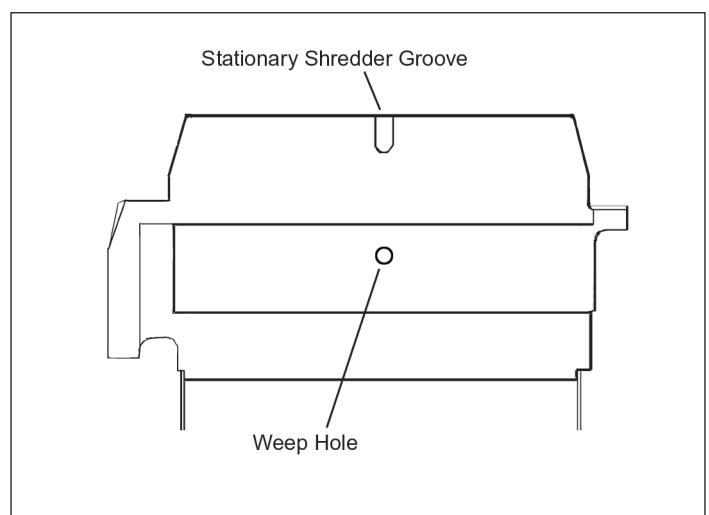


Figure 13. Aligning Stationary Shredder

Replacing Rotating Shredder

Removal

1. Remove disposer. See "Removing Disposer" on page 7.
2. Remove stationary shredder. See "Replacing Stationary Shredder" on page 11.
3. Lubricate shredder nut and shaft threads with penetrating oil.
4. Secure rotating shredder with a vice-grips or channel lock pliers and remove rotating shredder nut using a socket or box wrench (Figure 14).
5. Place gear puller onto rotating shredder as shown (Figure 15).

NOTICE

Do not attempt to use gear puller to remove the shredder without following step 5. Tighten the puller until it creates resistance on the rotating puller, then proceed to step 6.

6. Tighten puller until snug. Tap around shredder hub 6-8 times. Tighten puller 1/4 turn (maximum) and repeat. Shredder will release from shaft after a number of repetitions.

Installation

1. Place rotating shredder on shaft, aligning shredder keyways with shaft keys. Tap with a soft mallet until seated.
2. Install fiber washer, steel washer and self-locking hex mounting nut (Figure 16).
3. Hold rotating shredder with vise-grips or channel lock and tighten mounting nut with socket or box wrench (Figure 14).
4. Install stationary shredder. Perform Installation procedure under See "Replacing Stationary Shredder" on page 11.
5. Install disposer. See "Installing Disposer" on page 7.



Figure 14. Rotating Shredder Nut

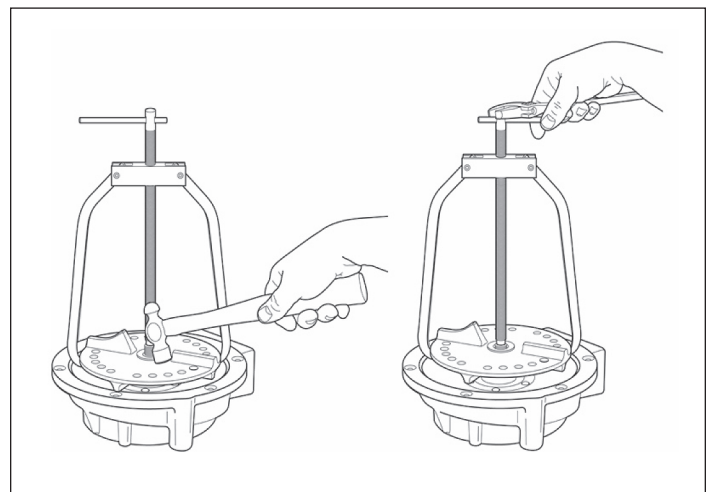


Figure 15. Removing Rotating Shredder

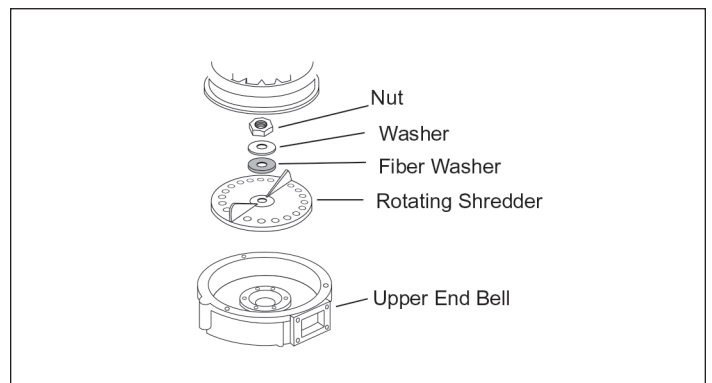


Figure 16. Installing Rotating Shredder

UPPER END BELL (UEB)

Repairing Upper End Bell Assembly

1. Remove disposer. See "Removing Disposer" on page 7.
2. Turn unit right side up and remove body and upper cover assembly, stationary shredder and rotating shredder. See "Replacing Rotating Shredder" on page 12.
3. Turn unit upside down and remove lower cover, fan and stator. See "Removing the Stator" on page 20.
4. Remove two woodruff keys (one each side) from rotor shaft and remove shield and spacer sleeve (Figure 17).
5. Remove screws securing seal assembly to upper end bell. Work flat head screwdriver under seal lip and pry up to remove seal assembly (Figure 18).
6. Remove third woodruff key from rotor shaft. Slide O-ring and slinger off rotor shaft (Figure 19).



Figure 17. Spacer Sleeve



Figure 18. Seal



Figure 19. O-ring and Slinger

7. Carefully remove rotor shaft from upper end bell (Figure 22).

NOTE: Do not remove lower bearing or centrifugal switch (1 Phase only) from rotor. If centrifugal switch is damaged, rotor shaft assembly must be replaced.

If bearing is damaged, press bearing off rotor shaft, supporting rotor shaft by the bearing. Press new bearing onto shaft until fully seated on shaft groove.

8. Remove water and oil seal, bearing set and spacer from motor side of UEB (Figure 20).

NOTE: On SS-300, SS-500 and SS-1000 units, remove steel thrust washer.

NOTICE

Do not attempt to remove large snap ring from center of upper end bell. Snap ring cannot be removed without damaging upper end bell.

9. Using wood block and mallet, knock both bearing races out from UEB.
 10. Clean upper end bell of all grease, dirt and sealant. Clean outside diameter of bearing cup and wipe dry with clean rag (Figure 21).
 11. Coat inner wall of bearing cavity with #242 Loctite and fully seat new race (bevel side outwards). Turn end bell over and repeat for other side.
 12. Lubricate new bearing pack with Texaco RV1939 or equivalent and install bearing pack into cavity on motor side of UEB.
 13. Place new water & oil seal squarely into end bell recess (motor side). Using a wood block or soft mallet, tap seal into end bell recess until it is flush with casting.
- NOTE:** On SS-300 and SS-500 (serial # 70,000 and above) and SS-1000 units, install steel thrust washer.
14. Carefully insert rotor assembly into UEB from motor side.
 15. Install stator, lower end frame, fan and bottom cover. See "Stator" on page 20.
 16. Install slinger and O-ring (Figure 19). O-ring should fit snug against slinger.
 17. Install lower woodruff key into shaft keyway.
 18. Install spacer sleeve with channel fitting over O-ring, aligning sleeve notch with woodruff key (Figure 22).
 19. Coat machined face and groove (with 6 holes) of upper end bell with water proof silicone sealant (Figure 21).
 20. Install seal assembly and secure with screws (Figure 18).
 21. Install shield and two woodruff keys.
 22. Install stationary and rotating shredder. See Installation under "Replacing Stationary Shredder" on page 11 and "Replacing Rotating Shredder" on page 12.



Figure 20. Water and Oil Seal



Figure 21. Cleaning Upper End Bell

23. Place cover and upper body assembly onto upper end bell assembly. There are two tabs on the inside of the cover. These tabs fit into the two side grooves on the upper end bell with the waste outlet aligned with the waste outlet cutout.
24. Install trim band and terminal box. See "Terminal Box & Trim Band" on page 9.
25. Re-install tailpipe gasket and tailpipe using screws ("Cover and Upper Body Assembly" on page 10).
26. Install disposer. See "Installing Disposer" on page 7.

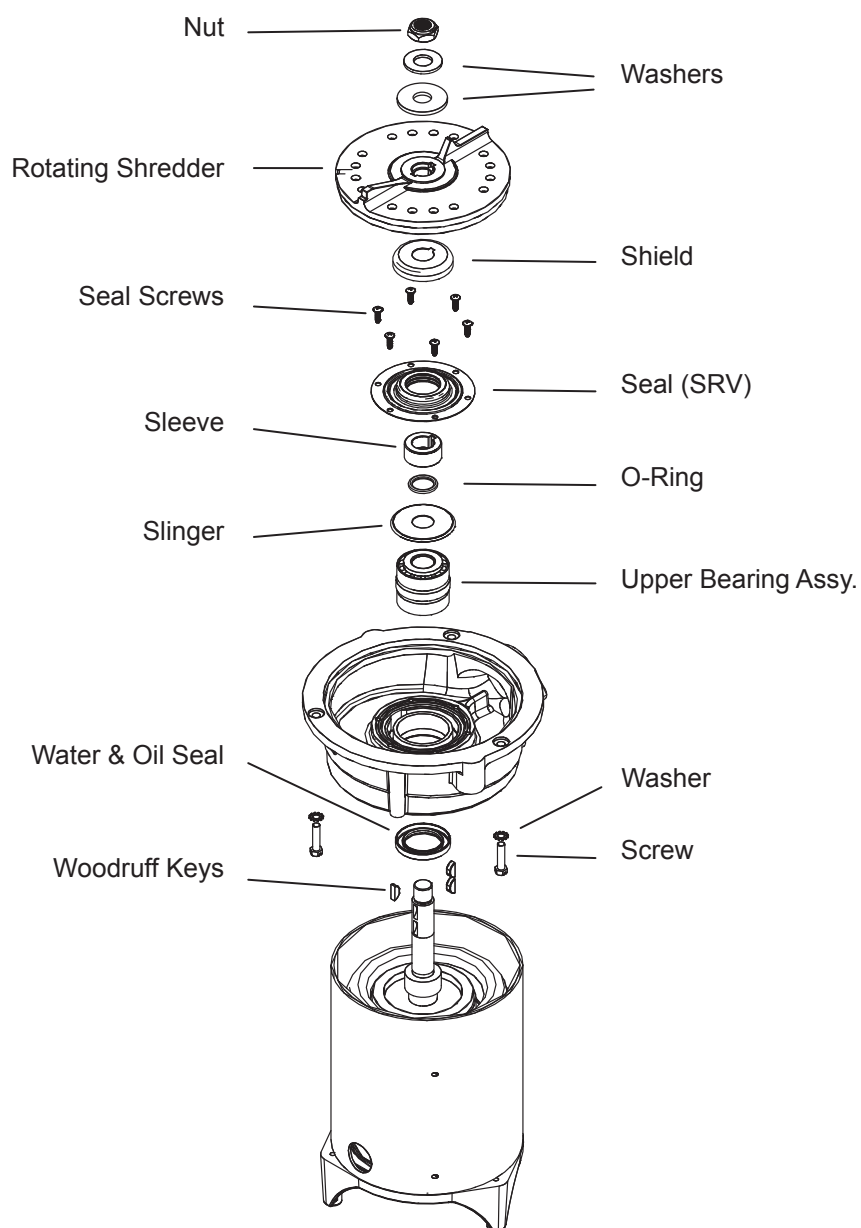
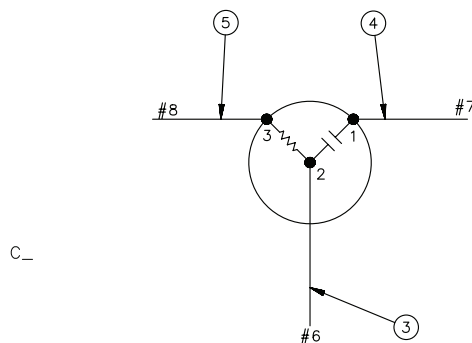


Figure 22. Upper End Bell and Rotor Assembly

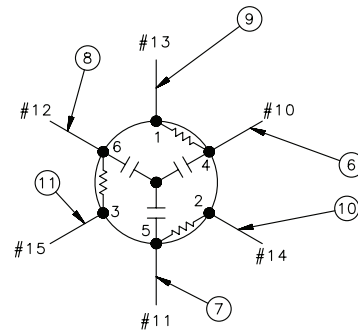
ELECTRICAL REPAIRS

Overload Chart

#	SERVICE ASSY P/N	ISE P/N	*KLIXON* P/N.	Ø	WHERE USED	REVISION
1	13422B	14659A	BYV36KG28	3	SS500-1,-4,-5,-6,-14,-22,-28,-30 SSC500-1	34
2	13422D	11925	CSJ51EA	1	SS150-6,-7,-17,-18, SS200-1,-4,-5,-9,-10,-13,-14,-20	
3	13422E	14660J	CST66EA397	1	SS100-5,-13,-28,-30,-35,-44,-45 SS125-1,-10,-11,-15,-21 SSC100-1	34
4	13422H	14661	MYV78AG94	3	SS-50-2,-12,-22,-27,-29	
5	13422J	14660H	CST69EG397	1	SS50-5,-9,-11,-15,-18 SS75-1,-7,-10,-11,-15,-17,-23,-27,-29	
6	13422K	14661A	MYV74KG94	3	SS50-19 SS75-2,-12,-20,-22,-24,-8,-28,-30	
7	13422L	14660L	CST67HA397	1	SS75-4,-14,-31 SS100-1,-9,-16,-18	
8	13422M	14661D	MYV64KG94	3	SS125-3,-9,-13,-19,-26,-28 SS150-1,-2,-13,-21,-22,-30,-33	
9	13422N	14661C	MYV69KG94	3	SS75-21 SS100-2,-3,-6,-7,-10,-11,-14,-15,-22,-29,-31	
10	13422P	14660A	CYV61KG37	3	SS150-3,-8,-14,-19,-23,-25,-28 SS200-2,-6,-11,-15,-18,-19,-21,-29,-30,-32	
11	13422S	14660C	CST63HA397	1	SS150-1,-11,-12,-24,-32,-34,-35,-38	
12	13422AC	14659	BYV35KG28	3	SS300-23 SS500,-9,-11,-15,-16,-17,-19,-23,-24,-27,-31 SS750-6,-13 SS1000-10,-11,-12	34
13	13422AK	14660G	CST69LA397	1	SS50-8,-10,-21,-26,-28	
14	13422AW	14660	CYV53KG36	3	SS300-5,-25,-27,-21,-22,-24,-28	34
15	13422BA	14660E	CST49EA397	1	SS200-27,-31,-28 SSC200-1	34
16	13422BB	14660M	CST53HL397	1	SS100-32,-24,-38,-43	34
17	13422BC	14660K	CST64CA397	1	SS125-25,-27	
18	13422BD	14661G	MYV69KJ94	3	SS100-33,-25,-39	
19	13422BE	14660B	CYV61AL37	3	SS100-36,-37,-41,-42,-34,-40	34
20	13422BG	14661H	MYV55JG94	3	SS150-36,-37,-39	
21	13422BH-ISE	14660N	CYV54KG37	3	SS200-35,-36,-37,-39,-38 SSC200-3	34
22	13422BJ-ISE	14660S	CYV62WG37	3	SS100-47,-50 SSC100-3	
23	13422BK-ISE	14660T	CYV62WJ37	3	SS100-48	



OVERLOAD
(SEE CHART)



6 PLACES
OVERLOAD
(SEE CHART)

ELECTRICAL REPAIRS

Overload Protector

Testing Overload Protector

⚠ WARNING

ELECTRIC SHOCK! Turn off water and electrical supply. Discharge capacitor with 1000 ohm jumper wire (1 Phase only). Do not use a screwdriver to discharge or capacitor may be damaged.



NOTICE

Do not use a screwdriver to discharge or capacitor may be damaged.

1. Remove screw and terminal box (Figure 23).
2. Remove two screws securing overload protector to bracket and pull out from unit. Disconnect overload wires from stator.
3. Push red button in and check continuity between all terminals and center post using an ohmmeter.
 - 3 terminals – 1 Ø
 - 6 terminals – 3 Ø
4. There should be continuity between all terminals and center post. Replace overload protector if circuit is open on any terminal and center post combination.
5. Re-install terminal box as described previously on this page.

Replacing Overload Protector

1. Remove screw and terminal box (Figure 23).
2. Disconnect wires.
3. Remove two screws securing overload protector to bracket, disconnect wires and remove protector.
4. Connect new switch wires and tuck wires into bracket and secure new protector to bracket using two screws.
5. Re-install terminal box and screw.

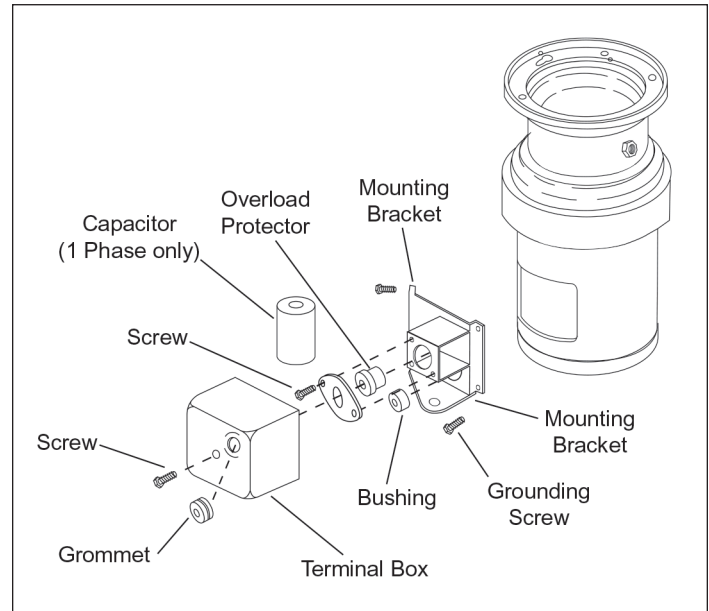


Figure 23. Terminal Box and Components

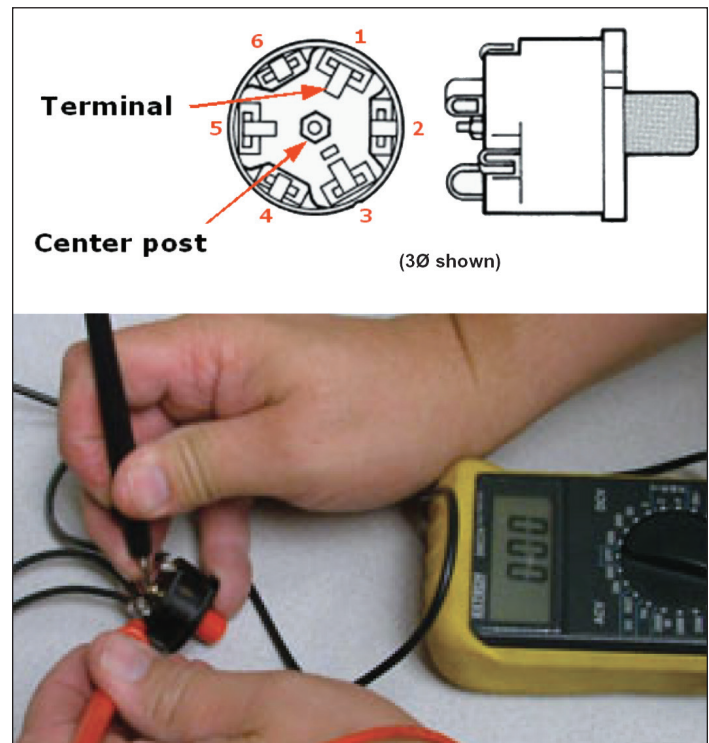


Figure 24. Testing Overload Protector

Capacitor

(1 Phase units only)

Testing Capacitor

WARNING

ELECTRIC SHOCK! A charged capacitor will hold an electric charge until it is discharged or shorted out. **DO NOT** touch capacitor terminals or electric shock may occur.

WARNING

ELECTRIC SHOCK! Turn off water and electrical supply. Discharge capacitor with 1000 ohm jumper wire (1 Phase only). Do not use a screwdriver to discharge or capacitor may be damaged.



NOTICE

Do not use a screwdriver to discharge or capacitor may be damaged.

1. Remove screw and terminal box (Figure 23).
2. Insert a flat blade screwdriver between capacitor clip and capacitor and gently pry capacitor from bracket.
3. Mark and remove lead wires from capacitor terminals. If flag connectors are not present, cut lead wires approximately 1" from terminal on capacitor.
4. Set ohmmeter to highest scale. Connect ohmmeter probes to capacitor terminals (Figure 25).
 - If meter does not move, capacitor is open. Replace it.
 - If meter needle jumps to zero and stays there, capacitor is shorted. Replace it.
 - If meter needle jumps to zero and slowly rises toward infinity, capacitor is working.

Installing Capacitor

1. Reconnect wires to capacitor (flag connectors if present - otherwise solder into place).
2. Snap capacitor into place on bracket.
3. Install screw and terminal box (Figure 23).

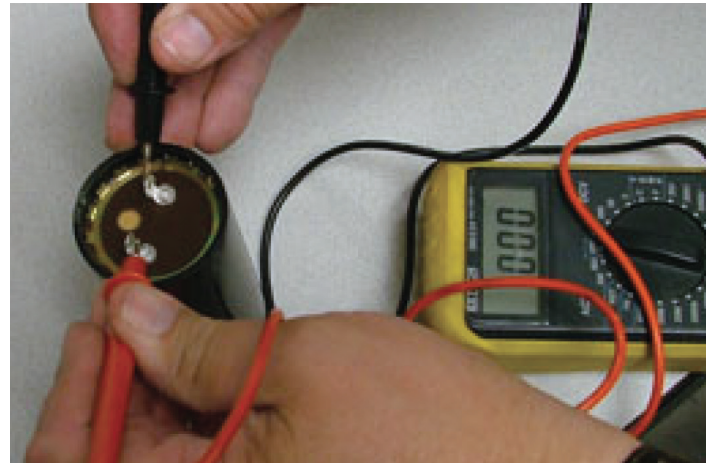


Figure 25. Testing Capacitor

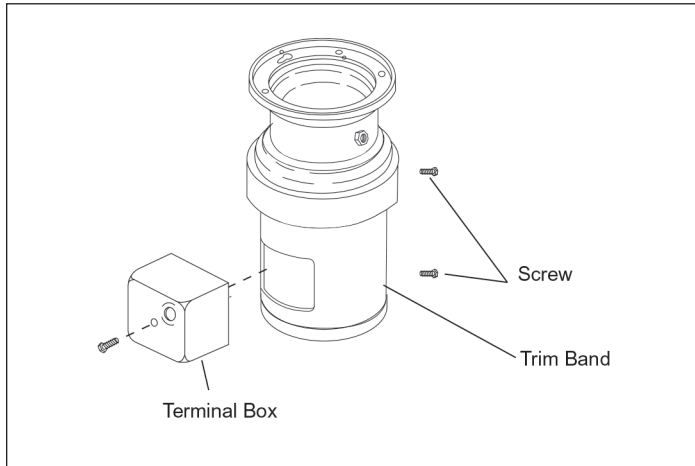


Figure 26. Terminal Box and Trim Band

Bottom Cover and Fan

Removal

(Removal instructions apply for SS300-SS1000 models only)

1. Remove disposer. See "Removing Disposer" on page 7
2. Remove terminal box and trim band (Figure 26).
3. Place disposer upside down on a flat surface.

Remove the three thru bolts, bottom cover and three spacers (Figure 27).

NOTE: Large disposers (SS300-SS1000) have four bolts and no spacers.

4. Remove snap ring securing fan, then remove fan (Figure 28).

Installation

1. Install fan to shaft with tab on fan engaged in shaft keyway.
2. Install bottom cover with three spacers and secure with three thru-bolts. Secure thru bolts to upper end bell.

NOTE: When positioning bottom cover, make sure two leg holes line up with leg mounting holes on upper end bell assembly.

3. Reinstall trim band and terminal box (Figure 26).
4. Re-install disposer. See "Installing Disposer" on page 7.

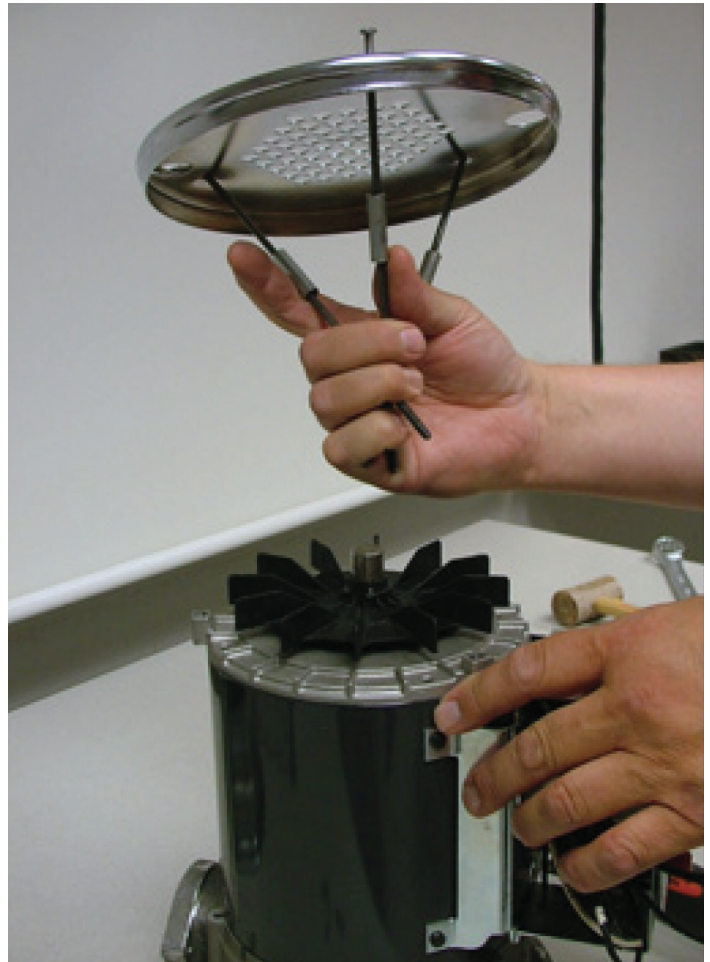


Figure 27. Bottom Cover and Fan



Figure 28. Fan

Lower End Frame (LEF)

Removal

1. Remove disposer. See "Removing Disposer" on page 7.
2. Remove bottom cover and fan. See "Bottom Cover and Fan" on page 18.
3. Place a reference mark over the seam between the lower end frame and stator (Figure 30).
4. Remove lower end frame by lightly tapping thru bolt guides with rawhide or nylon mallet (Figure 30).

Replacing Start Switch (1 Phase Models)

1. Remove lower end frame as described above.
2. Mark and disconnect wires from start switch (Figure 29).
3. Secure new start switch to lower end frame with two screws.
4. Connect wires to switch.

Installation

1. Make sure pre-load spring is seated fully into lower end frame.
2. Align the reference mark on the lower end frame and stator. Gently tap lower end frame in place on stator (Figure 30).
3. Reinstall fan and bottom cover. See "Bottom Cover and Fan" on page 18.
4. Reinstall disposer. See "Installing Disposer" on page 7.

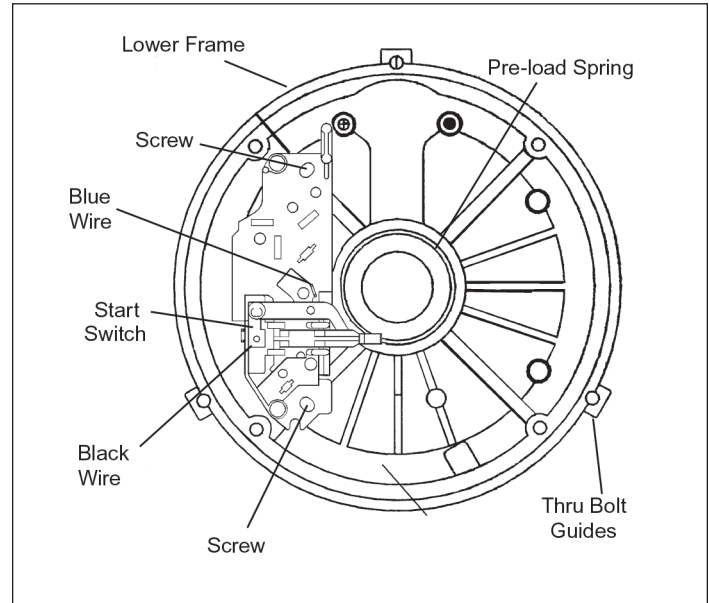


Figure 29. Start Switch - 1 Phase Only



Figure 30. Marking and Removing Lower End Framer

Stator

Removing the Stator

(Removal instructions apply for SS300-SS1000 models only)

1. Remove disposer. See "Removing Disposer" on page 7.
2. Remove terminal box, trim band and lower end frame. See "Lower End Frame (LEF)" on page 19.
3. Mark and disconnect wires from start switch (1 phase only, see (Figure 29).
4. Disconnect stator wires from overload protector.
5. On 1 phase models, remove capacitor wires by either removing flag connectors or heating solder joints on capacitor
6. Remove screws and mounting bracket from stator assembly (Figure 31).
7. Place scribe marks on upper end bell assembly to align with terminal mounting bracket holes on stator (Figure 32).
8. Lay assembly on its side. Gently tap on rotor shaft assembly with a soft non-metallic (rubber or nylon) mallet to separate stator from upper end bell assembly.

NOTICE

Stator is not secured to upper end bell and may drop out.

Testing Stator Windings

Using an ohmmeter, test the start and run windings for continuity. If testing indicates open, shorted, or grounded across any combination, replace the stator.

Testing 1 Phase Stator

1. Disconnect and isolate all stator leads.
2. Capacitor, overload protector and start switch should be tested individually before testing stator. Disconnect all three and isolate wires from stator before conducting stator test.
3. Using an ohmmeter, check continuity across leads (Figure 33):
 - #2 and #9 start windings,
 - #1 and #4 run windings,
 - #3 and #8 run windings.
4. Check all leads individually to ground. If any continuity is found, replace stator.

Testing 3 Phase Stator

1. Disconnect and isolate all stator leads.
2. Using an ohmmeter, check continuity across leads (Figure 34).

#1 and #4	#7 and #13
#2 and #5	#8 and #14
#3 and #6	#9 and #15
3. Check all leads individually to ground. If any continuity is found, replace stator.

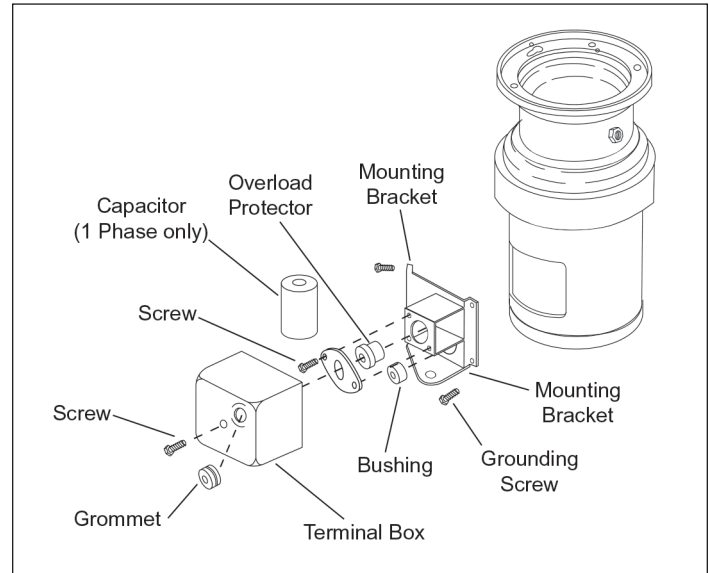


Figure 31. Terminal Box and Components

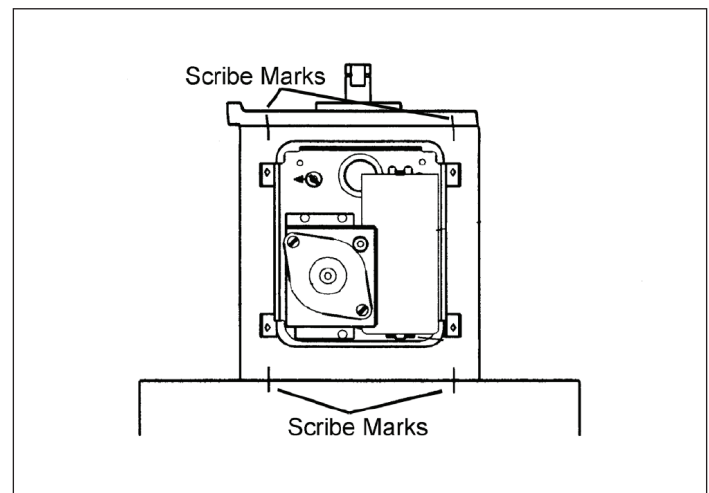


Figure 32. Scribe Marks on Lower End Frame

Installing the Stator

1. Install mounting bracket to new stator (Figure 31).
2. Reconnect stator wires to overload protector and capacitor (if equipped). Reconnect wires to capacitor.
3. Install lower end frame. On 1 phase models, install start switch. Reconnect stator wires to start switch (Figure 29). See "Lower End Frame (LEF)" on page 19.
4. Align mounting bracket holes on new stator with scribe marks on upper end bell assembly (Figure 32). Gently tap stator into place on upper end bell assembly.

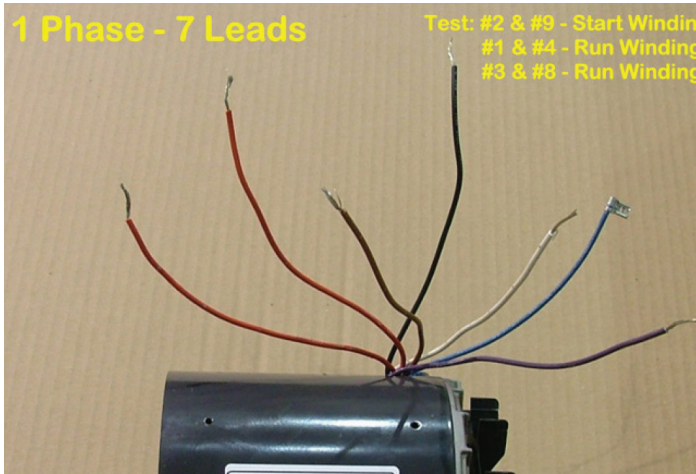


Figure 33. Testing 1 Phase Stator

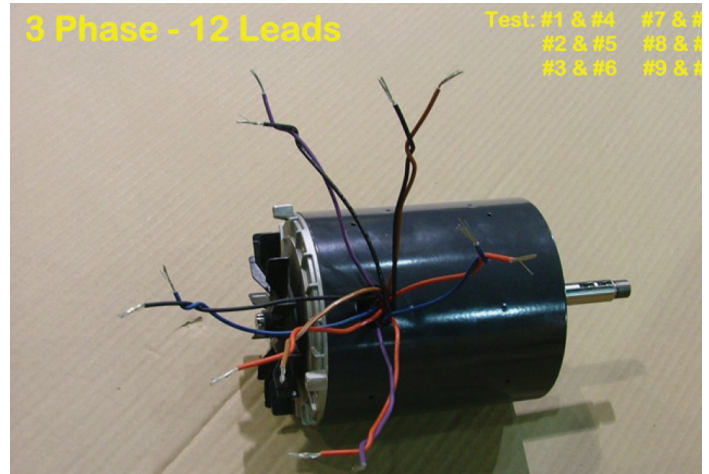


Figure 34. Testing 3 Phase Stator

5. Install bottom cover and fan. See “Bottom Cover and Fan” on page 18.
6. Install trim band and terminal box. See “Terminal Box & Trim Band” on page 9.
7. Install disposer. See “Installing Disposer” on page 7.

Motor Leads connections

Commercial disposers produced since April, 1985 are manufactured with tri-voltage motors.

115/208/230V Single Phase 7 leads 208/230/460V
Three Phase 12 leads

NOTE: Color coding no longer applies. Wires are labeled with wire numbers – verify with wire numbers.

Commercial disposers produced before April, 1985 were manufactured with single- or dual-voltage motors. These models are not repairable and must be replaced if service is required. Contact InSinkErator to verify current replacement model.

115/230V	Single Phase	7 leads
208V	Single Phase	7 leads
230/460V	Three Phase	12 leads
208V	Three Phase	3 leads

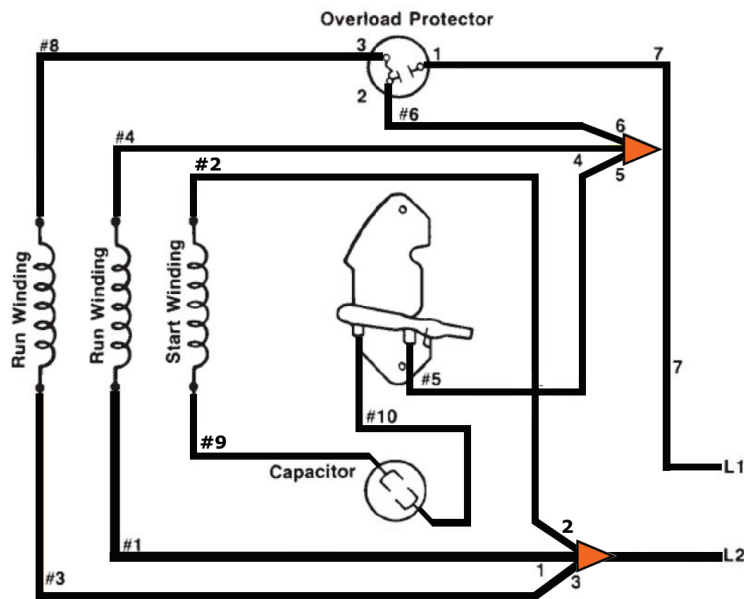
NOTE: For information on servicing InSinkErator Control Centers, refer to the instructions included with the Control Center.

⚠ WARNING Electrical Shock!

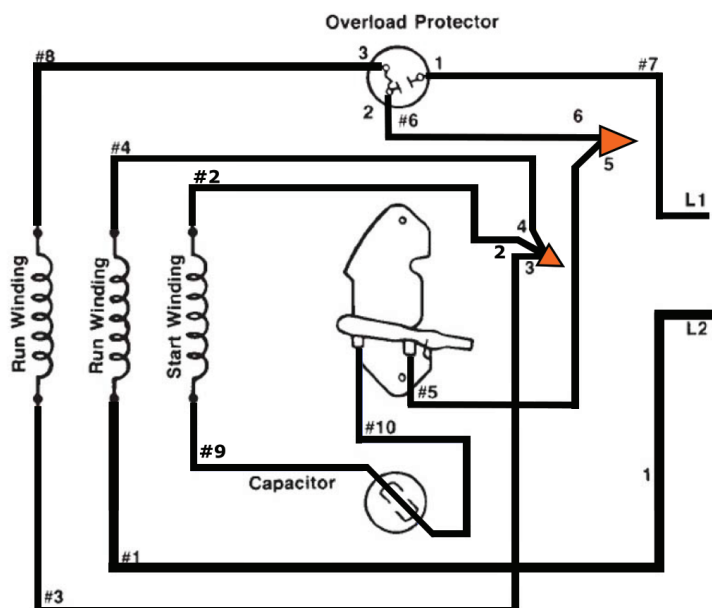
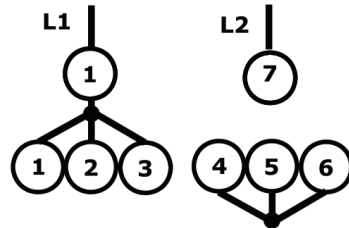
Turn off electrical supply to the disposer before attempting any service work. Use a voltmeter or circuit tester to ensure that power is off.

Installation must conform to local electrical codes.

WIRING DIAGRAMS



115V / 1 Phase



208-230V / 1 Phase

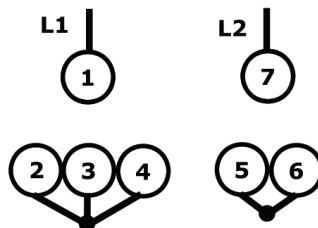
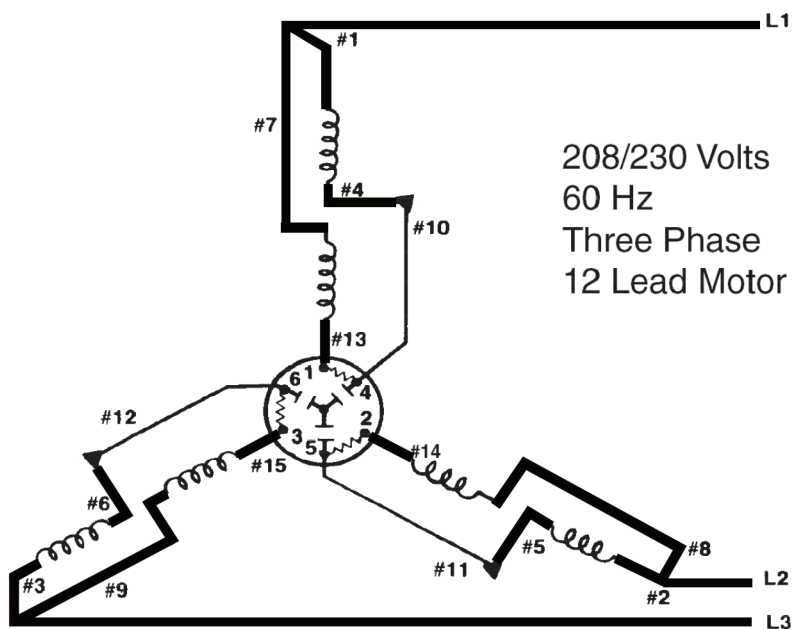
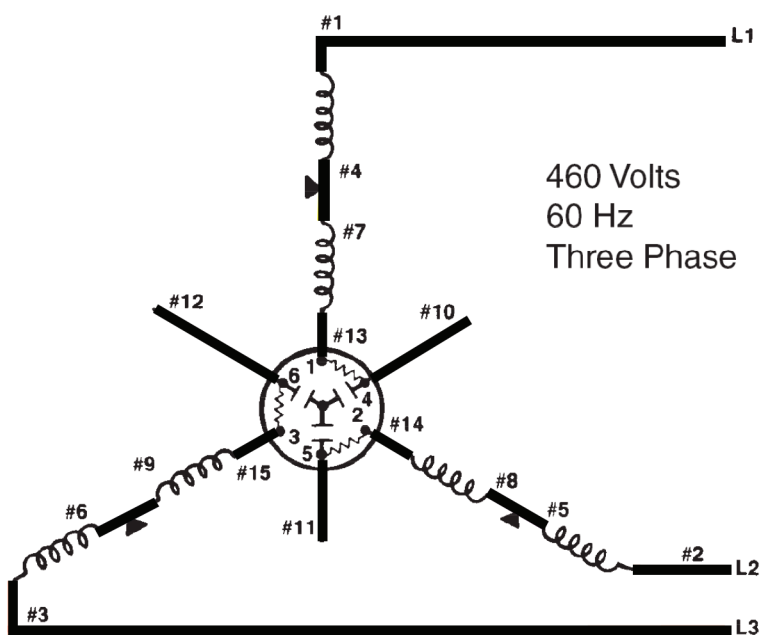


Figure 35. 1 Phase



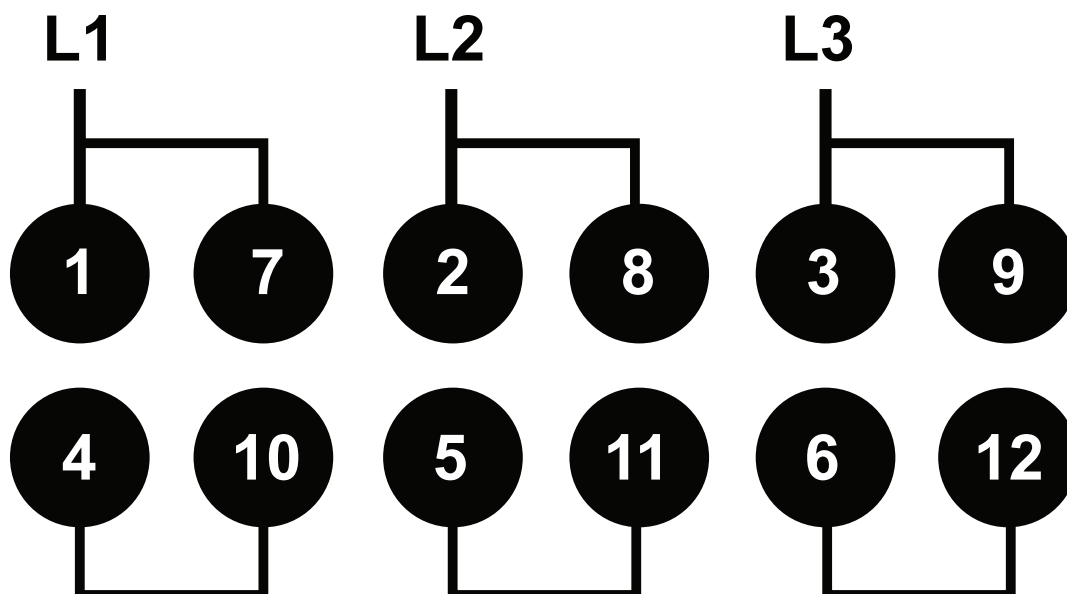
Note: Color coding no longer applies.
Wires are labeled with wire numbers – verify with wire numbers.



Note: Color coding no longer applies.
Wires are labeled with wire numbers – verify with wire numbers.

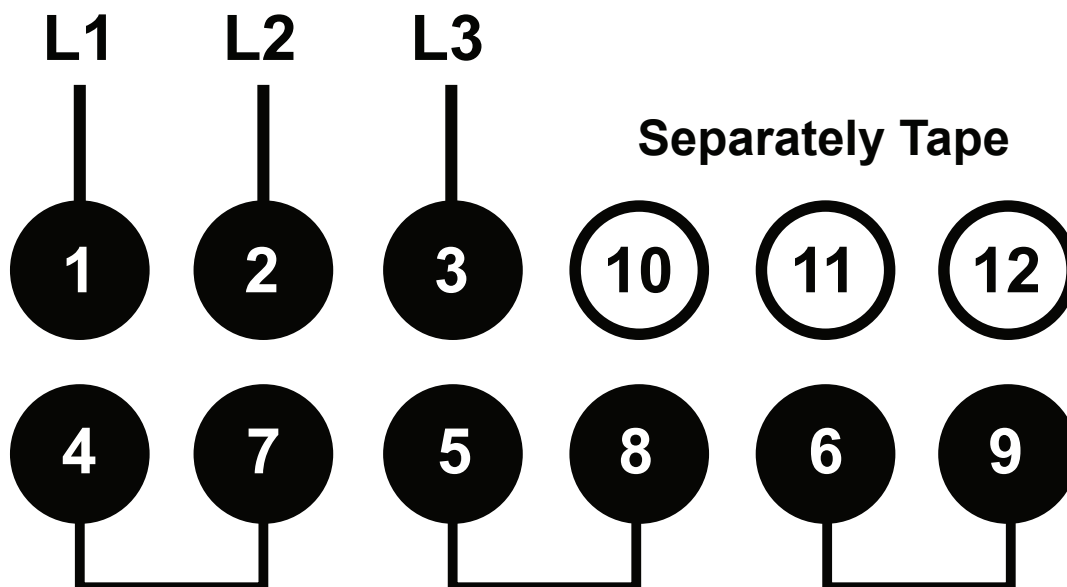
Figure 36. 3 Phase

208-230V 3 Phase



Note: Color coding no longer applies.
Wires are labeled with wire numbers – verify with wire numbers.

460V 3 Phase



Note: Color coding no longer applies.
Wires are labeled with wire numbers – verify with wire numbers.

Figure 37. 3 Phase Motor Connections

TROUBLESHOOTING

⚠ WARNING Disconnect power before troubleshooting or servicing the disposer.

⚠ CAUTION Troubleshooting problems other than those listed in this section should be performed by qualified service personnel. Any troubleshooting performed by untrained personnel could result in electrical shock or damage to the disposer.

If the problem is electrical:

- To determine if the problem is in the switch or the disposer, bypass all electrical starting and/or electrical controls and run the disposer direct.
- Make sure the disposer electrical specifications match the electric power supply.
- Make sure the motor lead connections are correct for the corresponding power supply and starting controls.
- Determine if there are electrical problems with other kitchen appliances. This may indicate a problem in the building's electrical circuitry.

Problem	Cause	Solution
Disposer will not start but water runs.	Overload protector tripped.	Allow 5 minute cooling period and reset overload protector.
	Overload protector burned out; open circuits.	Test and replace overload protector. See "Overload Protector" on page 16.
	Stator burned out; open windings	Test stator. See "Stator" on page 20. Inspect for pinched (grounded/shorted) stator lead wires.
	Jammed rotating shredder.	Turn the control to the OFF position and complete the following steps: 1. Insert the dejamming bar (slot down) through the sink opening. Place the slot over one end of the raised bars found on the top of the rotating shredder. 2. Using an adjustable wrench or a pipe wrench for leverage, twist the dejamming bar back and forth to free the jam. The rotating shredder should move freely when the jam is released. 3. Remove all foreign matter that caused the stoppage. 4. Allow the disposer to cool for 3-5 minutes after it stops running. Press the red reset button to reset the overload protector. Never strike the reset button with an object. 5. If the disposer remains inoperative after following these steps, contact the nearest InSinkErator Factory Authorized Service Center. Call 1-800-845-8345 to obtain the telephone number of the nearest center.
	Water in stator area.	Inspect and fix water leak. See Water in Stator in this section.
Disposer will not start and water does not run.	No power to disposer.	Replace switch or repair control center. Check for blown fuses or tripped circuit breaker.
	Disposer control switch not connected or faulty.	Connect or repair/replace control switch.

Problem	Cause	Solution
Motor hums but does not run; water runs.	Jammed rotating shredder.	See previous "Jammed rotating shredder" solution.
	Stator/lower end frame/upper end bell misaligned (thru bolts loose, bent, or broken).	Remove and realign sections. Ensure thru bolts are not bent or broken. Replace bolts if necessary.
	Rotor shaft binding against stator core.	Check inside diameter of stator core and outside diameter of rotor shaft core for score marks and replace stator or rotor shaft if necessary. See "Stator" on page 20 or "Lower End Frame (LEF)" on page 19.
	Start switch inoperative (1 Phase only).	Replace start switch. See "Replacing Start Switch (1 Phase Models)" on page 19.
	Stator windings open.	Test stator windings and replace stator if open. See "Stator" on page 20. Check for water leaks and repair as necessary.
	Weak capacitor charge (1 Phase only).	Test capacitor and replace if necessary. See "Testing Capacitor" on page 17.
	Improper voltage to disposer.	Test power supply for proper voltage and phase, and correct if necessary.
Disposer runs briefly, then trips overload protector	Incorrect wiring at motor and/or starting switch or solenoid valve.	Refer to the appropriate wiring diagram.
	Centrifugal actuator stuck open or closed, or actuator spring is loose (1 Phase only).	Inspect centrifugal actuator. Replace rotor assembly.
	Start switch contacts arced (1 Phase only).	Replace start switch. See "Replacing Start Switch (1 Phase Models)" on page 19.
	Stator windings shorted.	Test stator windings and replace stator if open. See "Stator" on page 20. Check for water leaks and repair as necessary.
	Water in stator.	Inspect and fix water leak. See Water in Stator in this section.
	Disposer jammed.	See previous "Jammed Rotating Shredder" solution.
	Improper power supply.	Electrical supply must be connected by an electrician.
	Improper wiring connection.	See applicable wiring diagram and reconnect wiring.
	Electrical supply line overloaded.	Connect disposer to another circuit. Disposer should only be on appliance circuit.
Disposer runs slow and/or stops when food waste is inserted.	Faulty or improperly connected overload protector.	See applicable wiring diagram for correct connections and/or replace overload if necessary. See "Overload Protector" on page 16.
	Low voltage power supply connected to high voltage stator connections.	See applicable wiring diagram and reconnect motor leads for corresponding voltage

Problem	Cause	Solution
Overload protector is tripped or fuse/circuit breaker blows immediately after starting disposer.	Direct short in stator windings.	Test stator windings and replace stator if open. See "Stator" on page 20.
	Incorrect wiring connections.	See applicable wiring diagram in installation manual.
	Start switch wired incorrectly.	See applicable wiring diagram and correct connections.
	Contact on start switch is welded (1 Phase only).	Replace contact or start switch. See "Replacing Start Switch (1 Phase Models)" on page 19.
	Incorrect voltage.	Check disposer electrical specifications, power supply, and stator lead connections.
	Improper fuse or circuit breaker.	Check fuse or circuit breaker and have an electrician correct if necessary.
Disposer motor runs but little or no water runs.	Faulty overload protector.	Test and replace overload protector if necessary. See "Overload Protector" on page 16.
	Water supply is shut off.	Open water supply valve and adjust for the recommended gallons per minute (GPM). See "Cold Water Flow & Drain Line Diameter" on page 3.
	Faulty water solenoid.	Replace water solenoid.
	Low water pressure.	Consult plumber regarding solution.
	Improperly installed or inoperative time delay relay.	See applicable wiring diagram for proper connections. Replace time delay relay if faulty.
Water in stator.	Bearing seals worn.	Replace with bearing and seal kit. See "Repairing Upper End Bell Assembly" on page 13.
	Upper end bell cracked or eroded.	Replace upper end bell. See "Repairing Upper End Bell Assembly" on page 13.
	Water sprayed into motor during cleaning.	Instruct cleaning crew no to spray disposer with water.
Disposer squeals during operation.	Bearings are worn.	Replace with bearing and seal kit. See "Repairing Upper End Bell Assembly" on page 13.
	Rotor core loose on rotor shaft assembly.	Replace rotor shaft assembly. See "Repairing Upper End Bell Assembly" on page 13.
Disposer vibrates excessively.	Excessive water entering disposer.	Adjust water flow to recommended gallons per minute (GPM). See "Cold Water Flow & Drain Line Diameter" on page 3. If unit is installed with #5 mounting assembly, drain water from sink before operating disposer.
	Disposer overloaded with hard food waste or non-biodegradable material.	Clear disposer of waste and do not overload.
Water leaks at mounting or waste discharge.	Improper installation.	See Installation Guide and reinstall disposer.
	Loose mounting screws.	Tighten all mounting screws. Tighten locking ring if #5 mounting assembly is used.
	Pinched or broken mounting gasket.	Replace mounting gasket.

Problem	Cause	Solution
Water leaks from grind chamber area.	Stationary shredder gasket faulty.	Replace gasket. See "Replacing Shredder Gasket" on page 10.
	Water inlet connection loose in body.	Replace water inlet connection. See "Cold Water Flow & Drain Line Diameter" on page 3.
	Bottom cover loose or damaged.	Tighten or replace cover. See "Bottom Cover and Fan" on page 18.
	Stationary shredder damaged.	Replace it. See "Replacing Stationary Shredder" on page 11.
Water leaks from siphon breaker.	Loose plumbing connections.	Tighten plumbing connections.
	Improper installation.	See Installation Guide and reinstall disposer.
Water does not drain or drains slowly.	Drain line blocked.	Clean drain lines from dispose to main sewer. Vent lines may also required cleaning.
	Waste outlet centerline is below drain line centerline.	Adjust plumbing so drain line centerline is below waste outlet connections.
	Improper drain line slope.	Adjust the drain line slope to a minimum fall of 1/4" per foot.
	Grind elements worn or broken.	Replace rotating and/or stationary shredder. See "Replacing Stationary Shredder" on page 11 and "Replacing Rotating Shredder" on page 12.
Water splashes from disposer during operation.	Excessive water entering disposer and/or excessive water pressure	Reinstall solenoid valve with arrow pointing downstream. Disassemble solenoid valve, clean and reinstall. Adjust water amount entering disposer. See "Cold Water Flow & Drain Line Diameter" on page 3. If water pressure can not be adjusted, install safety baffle, silver guard, and/or cover.
Water splashes from sink bowl.	Spray nozzle not installed properly	Spray nozzle should be angled downward approximately 15° - 20°.
Water runs continuously after disposer is turned off.	Solenoid valve installed backward.	Arrow on solenoid must point downstream.
	Solenoid valve dirty.	Replace solenoid valve.
	Diaphragm bleeder hole out of position.	Replace solenoid valve.
	Water pressure too high.	Reduce water pressure.
	Normal operation with time delay relay	Time delay relay can be set for five seconds to ten minute post flush.
	Defective time delay relay.	Check time delay relay circuitry with volt meter and replace if necessary.

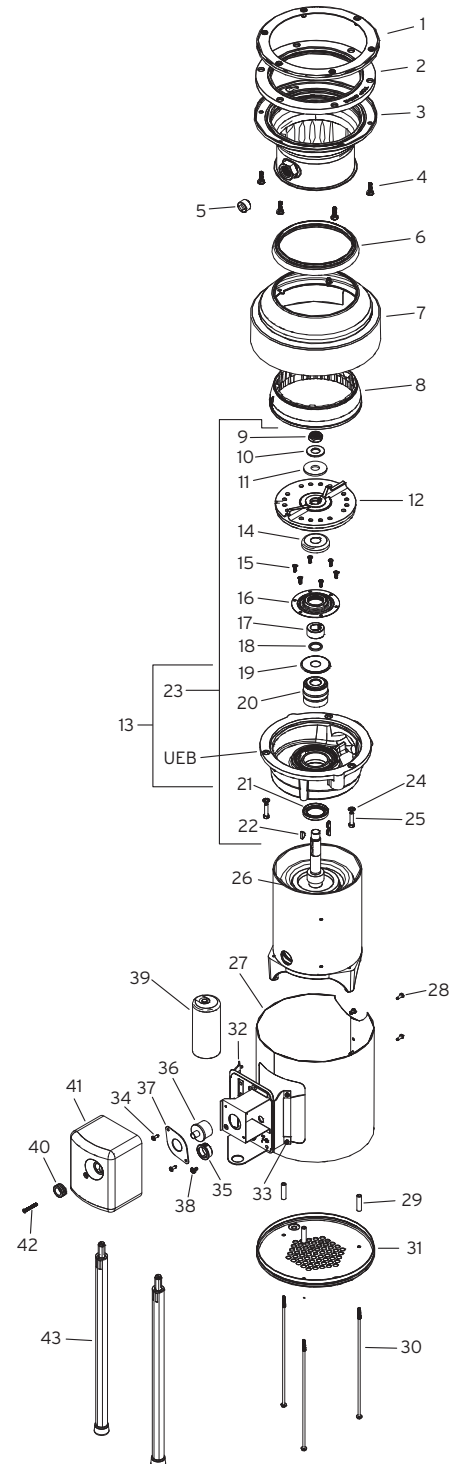
Problem	Cause	Solution
Grinding elements worn excessively	Disposer undersized for application.	Replace disposer with correct size. See “Serial Number Date Code” on page 2.
	Large amounts of highly abrasive material ground regularly.	Replace rotating shredder and/or stationary shredder. See “Replacing Stationary Shredder” on page 11 and “Replacing Rotating Shredder” on page 12. Do not grind abrasive material such as glass, crockery, ceramic, or clam shells.
	Non-biodegradable material ground.	Replace rotating shredder. See “Replacing Rotating Shredder” on page 12. Do not grind non-biodegradable material.
	Excessive water entering disposer.	Adjust water to recommended gallons per minute (GPM). See “Cold Water Flow & Drain Line Diameter” on page 3.
Disposer does not grind food waste.	Insufficient grind time.	Do not turn unit off until all food waste has been ground and flushed away. Allow water to run for 3 minutes after grinding is complete.
	Grinding elements worn.	Replace rotating shredder and/or stationary shredder. See “Replacing Stationary Shredder” on page 11 and “Replacing Rotating Shredder” on page 12.
	Stationary shredder teeth plugged.	Disconnect power from disposer and clean stationary shredder grinder teeth.
	High drain time/too much water.	Restriction to waste line downstream of disposer. Clear clog.
Disposer runs only when bypassing electrical controls.	Inoperable or improperly installed controls.	Reference control wiring diagrams and rewire accordingly or replace if inoperable.

SS-100 – Small Capacity 1 & 3 Phase UL

1 Phase: 115/208-230V 60 Hz

3 Phase: 208-230/460V 60 Hz

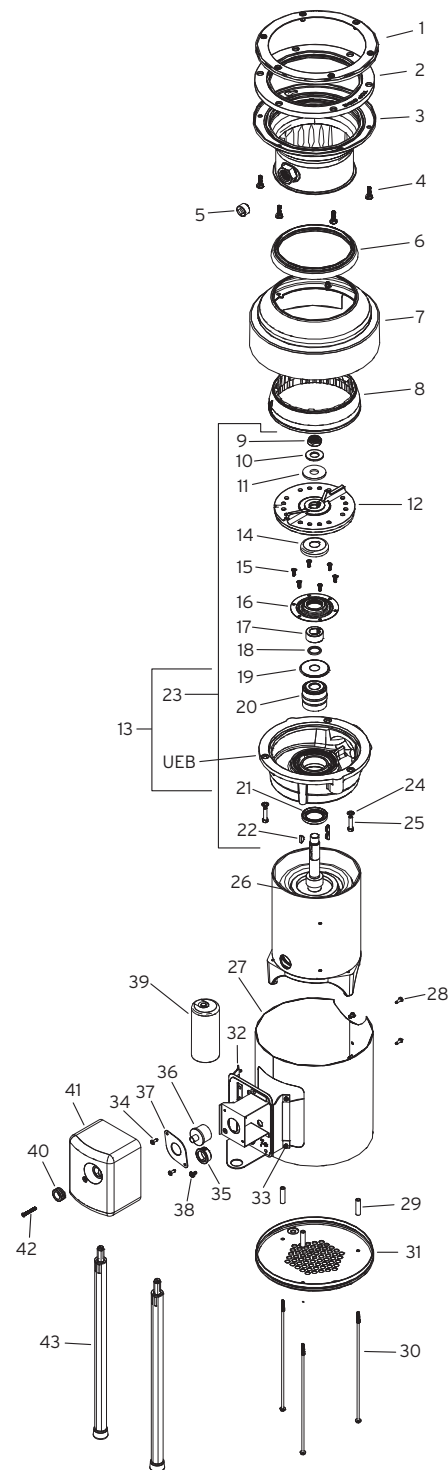
CODE#	DESCRIPTION	QTY	SINGLE				THREE	
			MODEL				MODEL	
			BODY				BODY	
			ISE/PN				ISE/PN	
			-28	-35	-44	-45	-47	-50
			STD	STD	STD	STD	STD	STD
			13660	13660H	13660U	13660W	13660Y	13660AC-ISE
			P/N				P/N	
1	MOUNTING FLANGE	1	11004				11004	
2	MOUNTING GASKET	1	11016				11016	
3	UPPER BODY ASSY	1	11020A				11020A	
4	FLANGE SCREW (1/4-20 x 1")	6	01491				01491	
5	PIPE PLUG	1	11227				11227	
6	SHREDDER GASKET	1	11006				11006	
7	BODY & COVER ASSY	1	12442ZZ				12442ZZ	
8	STATIONARY SHREDDER	1	14664				14664	
9	NUT, 5/8-18 HEX JAM HD LKG	1	11260				11260	
10	WASHER, .656 IDx1.312 OD x	1	12445				12445	
11	WASHER, .64 IDx1.75 ODx.03 THK	1	12142				12142	
12	ROTATING SHREDDER (SRV)	1	15192ZZ				15192ZZ	
13	UPPER END BELL ASSY (includes 23)	1	13722				13722	
14	SHIELD	1	12936				12936	
15	SEAL SCREW #10-24x.375 TAPPING	6	01269				01269	
16	SEAL (SRV)	1	12934A				12934A	
17	SLEEVE	1	12935				12935	
18	O-RING	1	12860				12860	
19	SLINGER	1	12319				12319	
20	UPPER BEARING ASSY KIT	1	12610				12610	
21	WATER & OIL SEAL	1	12326				12326	
22	WOODRUFF KEY, ASA #605	3	11322				11322	
23	BEARING SEAL KIT (9-11, 14-22)	1	13080				13080	
24	WASHER, .262 IDx.50 ODx.025 THK	3	11444				11444	
25	SCREW, BODY 1/4-20x1.00 HEX HD	3	03135				03135	
26	MOTOR & FAN ASSY	1	13656B				13657K	
27	TRIM BAND ASSY	1	12370ZZ				15535ZZ	
28	TRIM BAND SCREW #8-32 x .50	2	01836A				01836A	
29	TUBE SPACER	3	12490				12490	
30	THRU SCREW	3	15214				15537	
31	BOTTOM COVER	1	12396				12396	
32	BRACKET	1	12433ZZ				12433AZZ	
33	OVERLOAD BRACKET SCREWS (8-18 x 0.25)	4	11448				11448	
34	OVERLOAD CLAMP SCREWS (8-32 x 0.5)	2	8221				8221	



(Continued on next page)

SS-100 – Small Capacity 1 & 3 Phase UL (con't)

CODE#	DESCRIPTION	QTY	SINGLE				THREE	
			-28	-35	-44	-45	-47	-50
			STD	STD	STD	STD	STD	STD
			ISE/PN	ISE/PN	ISE/PN	ISE/PN	ISE/PN	ISE/PN
35	BUSHING / INSERT	1	12384				12384	
36	OVERLOAD	1	13422E				13422BJ-ISE	
37	OVERLOAD CLAMP	1	12378				12378	
38	GROUND SCREW	1	02466E				02466E	
39	CAPACITOR	1	11868				N/A	
40	OVERLOAD GROMMET	1	12383				12383	
41	TERMINAL BOX ASSY, SS100	1	13396ZZ				13396ZZ	
42	SCREW, #8-32x1.25 FLT C'SNK	1	12381				12381	
43	LEG ASSY	2	11757B				11757B	
44	INSTALL / ENVELOPE KIT (not shown)	1	12434				12434	



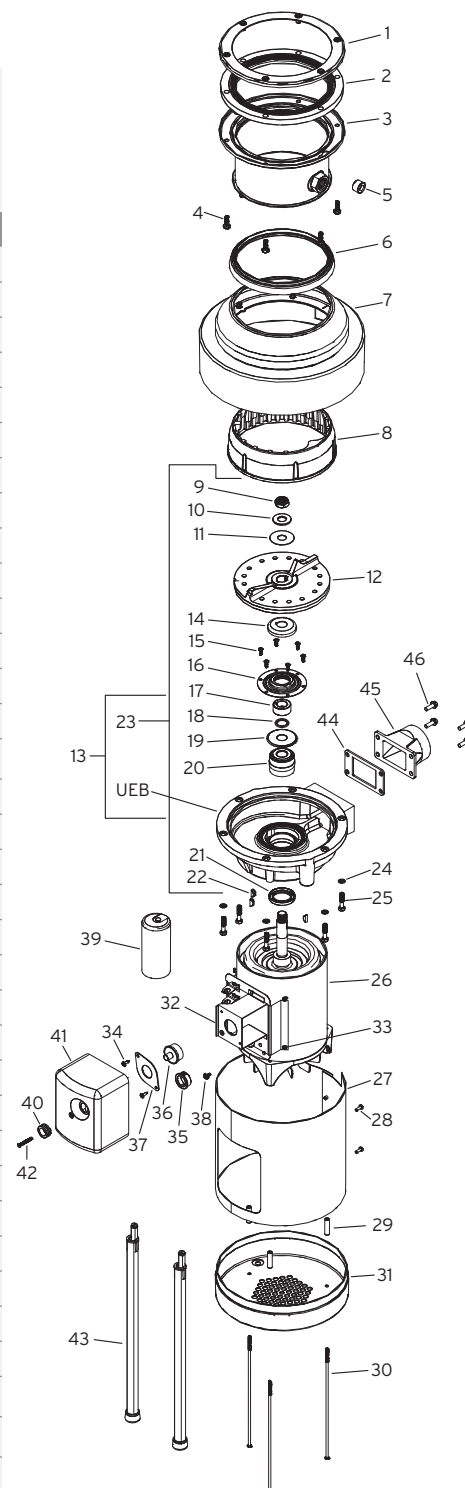
SS-200 – Medium Capacity 1 & 3 Phase UL

1 Phase: 208-230/460V 60 Hz

3 Phase: 208-230/460V 60 Hz

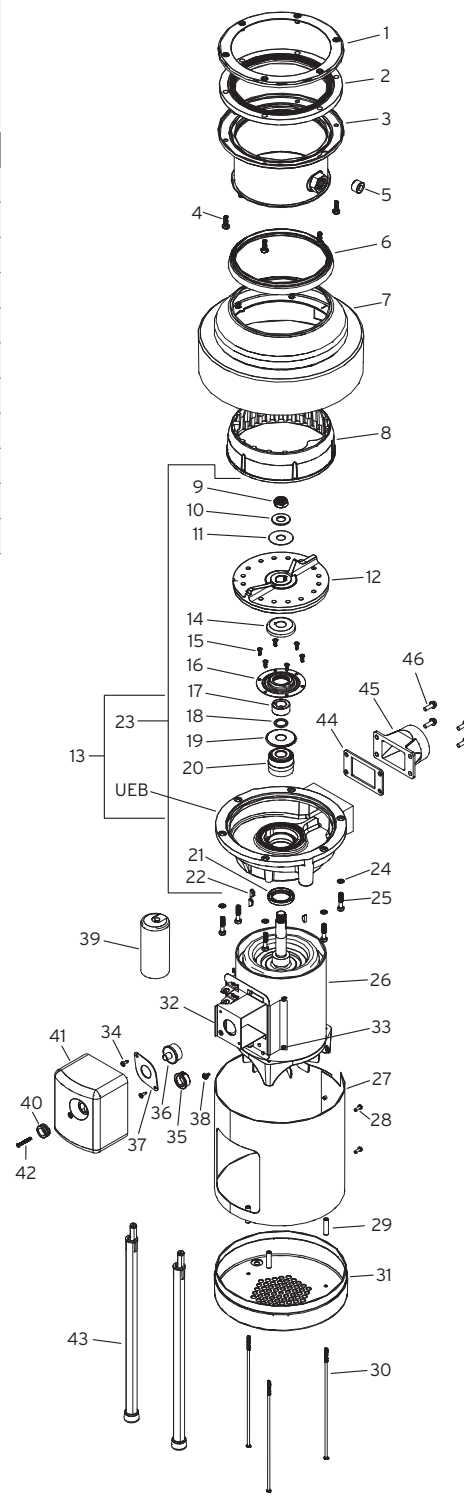
PHASE			SINGLE		THREE						
SS200 MODEL											
BODY											
ISE/PN											
CODE#	DESCRIPTION	QTY	P/N		P/N						
1	MOUNTING FLANGE	1	11004		11004						
2	MOUNTING GASKET	1	11016		11016						
3	UPPER BODY ASSY	1	11024A	11024C	11024A	11024C	11024A	11024A	11024A	11024A	
4	FLANGE SCREW (1/4-20 x 1")	6	01491		01491						
5	PIPE PLUG	1	11227		11227						
6	SHREDDER GASKET	1	11007		11007						
7	BODY & COVER ASSY	1	12443ZZ		12443ZZ						
8	STATIONARY SHREDDER	1	14663		14663						
9	NUT, 5/8-18 HEX JAM HD LKG	1	11260		11260						
10	WASHER, .656 IDx1.312 OD x	1	12445		12445						
11	WASHER, .64 IDx1.75 ODx.03 THK	1	12142		12142						
12	ROTATING SHREDDER (SRV)	1	15193ZZ		15193ZZ						
13	UPPER END BELL ASSY (includes 23)	1	13723		13723						
14	SHIELD	1	12936		12936						
15	SEAL SCREW #10-24x.375 TAPPING	6	01269		01269						
16	SEAL (SRV)	1	12934A		12934A						
17	SLEEVE	1	12935		12935						
18	O-RING	1	12860		12860						
19	SLINGER	1	12319		12319						
20	UPPER BEARING ASSY KIT	1	12610		12610						
21	WATER & OIL SEAL	1	12326		12326						
22	WOODRUFF KEY, ASA #605	3	11322		11322						
23	BEARING SEAL KIT (9-11, 14-22)	1	13080		13080						
24	WASHER, .262 IDx.50 ODx.025 THK	6	11444		11444						
25	SCREW, BODY 1/4-20x1.00 HEX HD	6	11524		11524						
26	MOTOR & FAN ASSY	1	13656E		13657M						
27	TRIM BAND ASSY	1	12426ZZ		15541ZZ						
28	TRIM BAND SCREW #8-32 x .50	2	01836A		01836A						
29	TUBE SPACER	3	12490		12490						
30	THRU SCREW	3	15215		15538						
31	BOTTOM COVER	1	12432		12432						
32	BRACKET	1	12433ZZ		12433AZZ						
33	OVERLOAD BRACKET SCREWS (8-18 x 0.25)	4	11448		11448						
34	OVERLOAD CLAMP SCREWS (8-32 x 0.5)	2	08221		08221						
35	BUSHING / INSERT	1	12384		12384						

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SS-200 – Medium Capacity 1 & 3 Phase UL (con't)

CODE#	DESCRIPTION	QTY	PHASE		SINGLE		THREE				
			SS200 MODEL		-27	-31	-35	-36	-37	-38	-39
			BODY		STD	SHORT	STD	SHORT	STD	STD	STD
			ISE/PN		13663	13663D	13663J	13663K	13663L	13663M	13663N-ISE
					P/N		P/N				
36	OVERLOAD	1			13422BA		13422BH-ISE				
37	OVERLOAD CLAMP	1			12378		12378				
38	GROUND SCREW	1			02466E		02466E				
39	CAPACITOR	1			11868		N/A				
40	OVERLOAD GROMMET	1			12383		12383				
41	TERMINAL BOX ASSY, SS100	1			13396ZZ		13396ZZ				
42	SCREW, #8-32x1.25 FLT C'SNK	1			12381		12381				
43	LEG ASSY	2			11757B		11757B				
44	OUTLET FLANGE GASKET	1			11459		11459				
45	OUTLET FLANGE	1			13997		13997				
46	OUTLET FLANGE SCREWS	4			14729		14729				

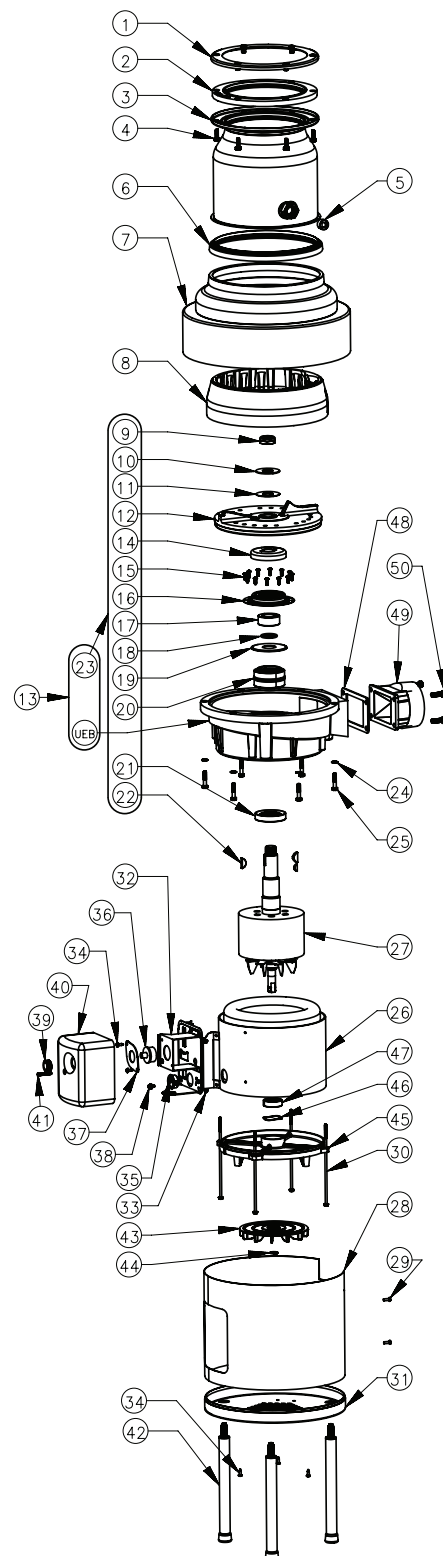


SS-300 – Large Capacity 3 Phase UL

208-230/460V 60 Hz

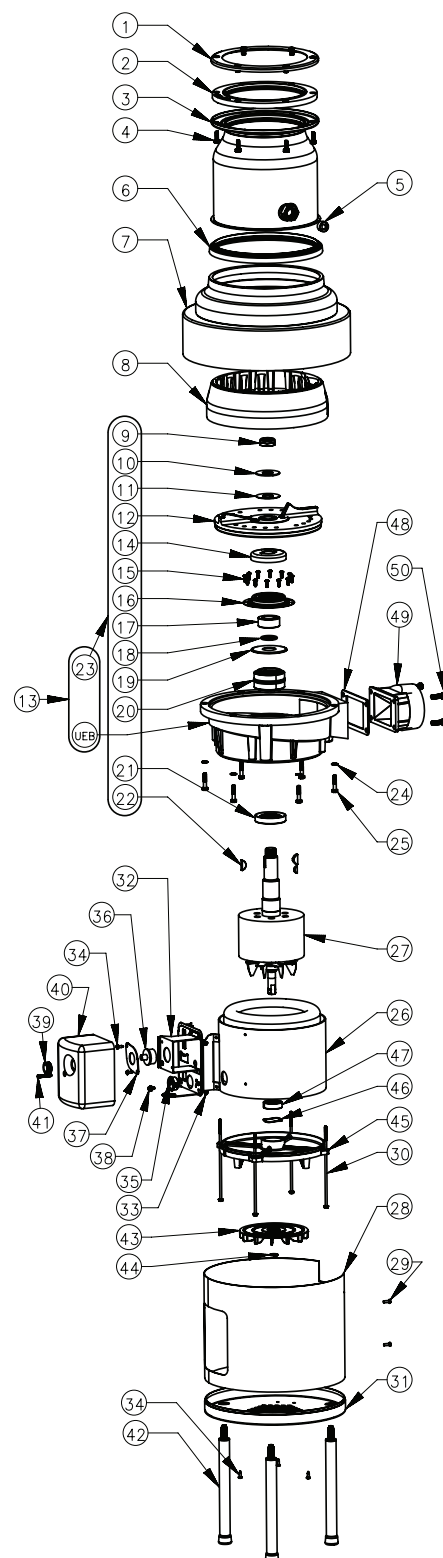
			THREE							
PHASE										
SS300 MODEL										
BODY										
ISE/PN										
CODE#	DESCRIPTION	QTY	P/N							
1	MOUNTING FLANGE	1	11004							
2	MOUNTING GASKET	1	11016							
3	UPPER BODY ASSY	1	11232	11232	11232	11232	11232	11232B	11232	
4	FLANGE SCREW (1/4-20 x 1")	6	01491							
5	PIPE PLUG	1	11227							
6	SHREDDER GASKET	1	11008							
7	BODY & COVER ASSY	1	11725ZZ							
8	STATIONARY SHREDDER	1	14662							
9	NUT, 5/8-18 HEX JAM HD LKG	1	11255							
10	WASHER, .656 IDx1.312 OD x	1	11256							
11	WASHER, .64 IDx1.75 ODx.03 THK	1	12143							
12	ROTATING SHREDDER (SRV)	1	15194ZZ							
13	UPPER END BELL ASSY (includes 23)	1	13320							
14	SHIELD	1	13266							
15	SEAL SCREW #10-24x.375 TAPPING	12	01269							
16	SEAL (SRV)	1	13260							
17	SLEEVE	1	13265							
18	O-RING	1	12860							
19	SLINGER	1	11729							
20	UPPER BEARING ASSY KIT	1	12638							
21	WATER & OIL SEAL	1	13398							
22	WOODRUFF KEY, ASA #605	3	11322							
23	BEARING SEAL KIT (9-11, 14-22)	1	13281A							
24	WASHER, .262 IDx.50 ODx.025 THK	6	11444							
25	SCREW, BODY 1/4-20x1.00 HEX HD	6	11524							
26	STATOR ASSY	1	13079	13079	13079A	13079	13079	13079	13079	
27	ROTOR/SHAFT ASSY	1	13270ZZ	13270ZZ	13270AZZ	13270ZZ	13270ZZ	13270ZZ	13270ZZ	
28	TRIM BAND ASSY	1	11721							
29	TRIM BAND SCREW #8-32 x .50	2	01836A							
30	THRU SCREW	3	15213							
31	BOTTOM COVER	1	11748							
32	BRACKET	1	12433AZZ	12433AZZ	12433BZZ	12433AZZ	12433AZZ	12433AZZ	12433AZZ	
33	OVERLOAD BRACKET SCREWS (8-18 x 0.25)	4	11448							

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SS-300 – Large Capacity 3 Phase UL (con't)

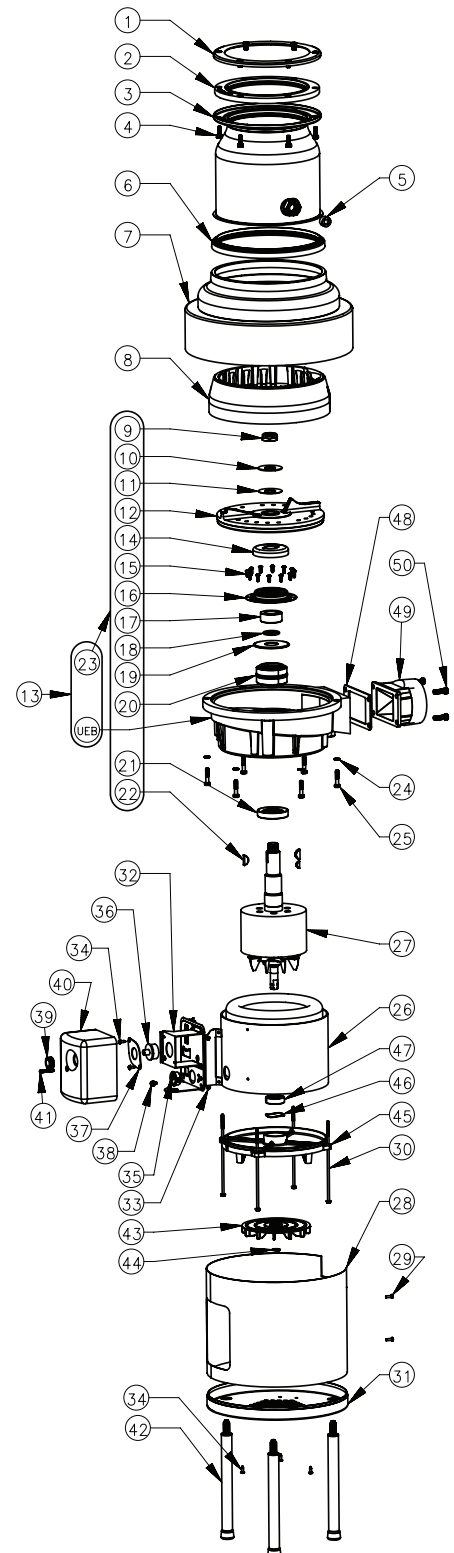
PHASE SS300 MODEL BODY ISE/PN			THREE						
			-21	-22	-23	-24	-25	-27	-28
			STD	STD	STD	STD	STD	SHORT	STD
			13261D	13261E	13261G	13261H	13389	13389B	13389C
CODE#	DESCRIPTION	QTY	P/N						
34	SCREW (8-32 x 0.5) - OVERLOAD / BOT COV	5	8221						
35	BUSHING / INSERT	1	12384						
36	OVERLOAD	1	13422AW	13422AW	13422AC	13422AW	13422AW	13422AW	13422AW
37	OVERLOAD COVER	1	12378						
38	GROUND SCREW	1	02466E						
39	OVERLOAD GROMMET	1	12383						
40	TERMINAL BOX ASSY, SS100	1	13396H	13396C	13396C	13396G	13396	13396	13396
41	SCREW, #8-32x1.25 FLT C'SNK	1	12381						
42	LEG ASSY	3	11757						
43	FAN	1	12395						
44	RETAINING RING	1	12635						
45	LOWER END FRAME	1	11672						
46	SPRING WASHER	1	13678						
47	LEF BEARING	1	12415						
48	OUTLET FLANGE GASKET	1	11457						
49	OUTLET FLANGE	1	13998						
50	OUTLET FLANGE SCREW	4	11448						



SS-500 – Large Capacity 3 Phase UL

208-230/460V 60 Hz

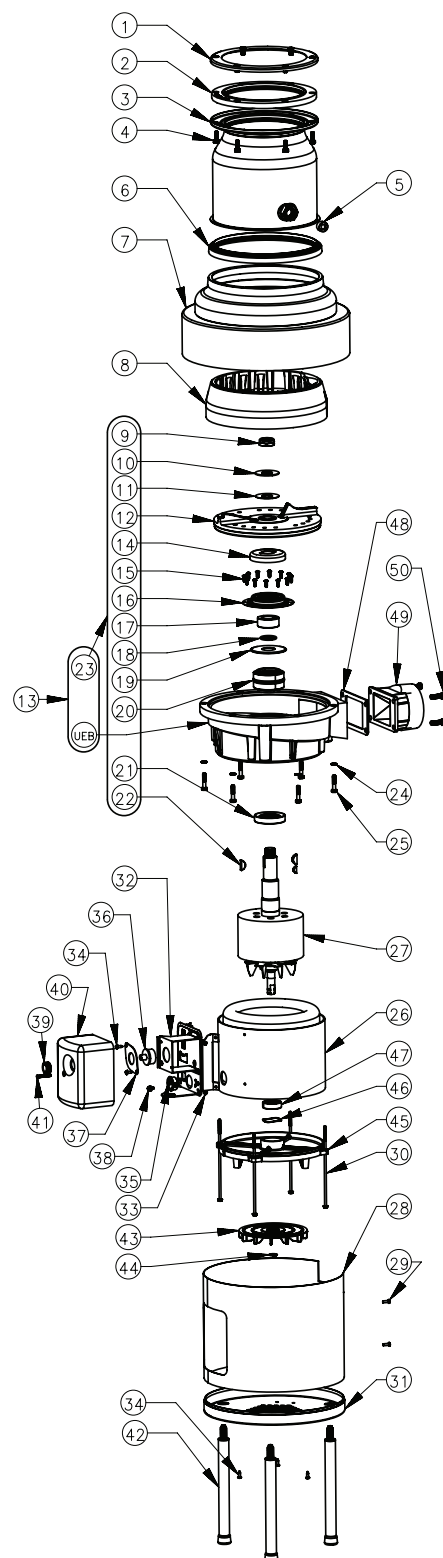
PHASE			THREE					
SS500 MODEL			-22	-23	-27	-28	-30	-31
BODY			STD	STD	STD	STD	SHORT	STD
ISE/PN			13262E	13262G	13390B	13390C	13390E	13390G
CODE#	DESCRIPTION	QTY	P/N					
1	MOUNTING FLANGE	1	11004					
2	MOUNTING GASKET	1	11016					
3	UPPER BODY ASSY	1	11232	11232	11232	11232	11232B	11232
4	FLANGE SCREW (1/4-20 x 1")	6	01491					
5	PIPE PLUG	1	11227					
6	SHREDDER GASKET	1	11008					
7	BODY & COVER ASSY	1	11725ZZ					
8	STATIONARY SHREDDER	1	14662					
9	NUT, 5/8-18 HEX JAM HD LKG	1	11255					
10	WASHER, .656 IDx1.312 OD x	1	11256					
11	WASHER, .64 IDx1.75 ODx.03 THK	1	12143					
12	ROTATING SHREDDER (SRV)	1	15194ZZ					
13	UPPER END BELL ASSY (includes 23)	1	13320					
14	SHIELD	1	13266					
15	SEAL SCREW #10-24x.375 TAPPING	12	01269					
16	SEAL (SRV)	1	13260					
17	SLEEVE	1	13265					
18	O-RING	1	12860					
19	SLINGER	1	11729					
20	UPPER BEARING ASSY KIT	1	12638					
21	WATER & OIL SEAL	1	13398					
22	WOODRUFF KEY, ASA #605	3	11322					
23	BEARING SEAL KIT (9-11, 14-22)	1	13281A					
24	WASHER, .262 IDx.50 ODx.025 THK	6	11444					
25	SCREW, BODY 1/4-20x1.00 HEX HD	6	11524					
26	STATOR ASSY	1	13079D	13079A	13079C	13079A	13079A	13079C
27	ROTOR/SHAFT ASSY	1	13270ZZ	13270AZZ	13270AZZ	13270AZZ	13270AZZ	13270AZZ
28	TRIM BAND ASSY	1	11721					
29	TRIM BAND SCREW #8-32 x .50	2	01836A					
30	THRU SCREW	3	15213					
31	BOTTOM COVER	1	11748					
32	BRACKET	1	12433BZZ					
33	OVERLOAD BRACKET SCREWS (8-18 x 0.25)	4	11448					



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SS-500 – Large Capacity 3 Phase UL (con't)

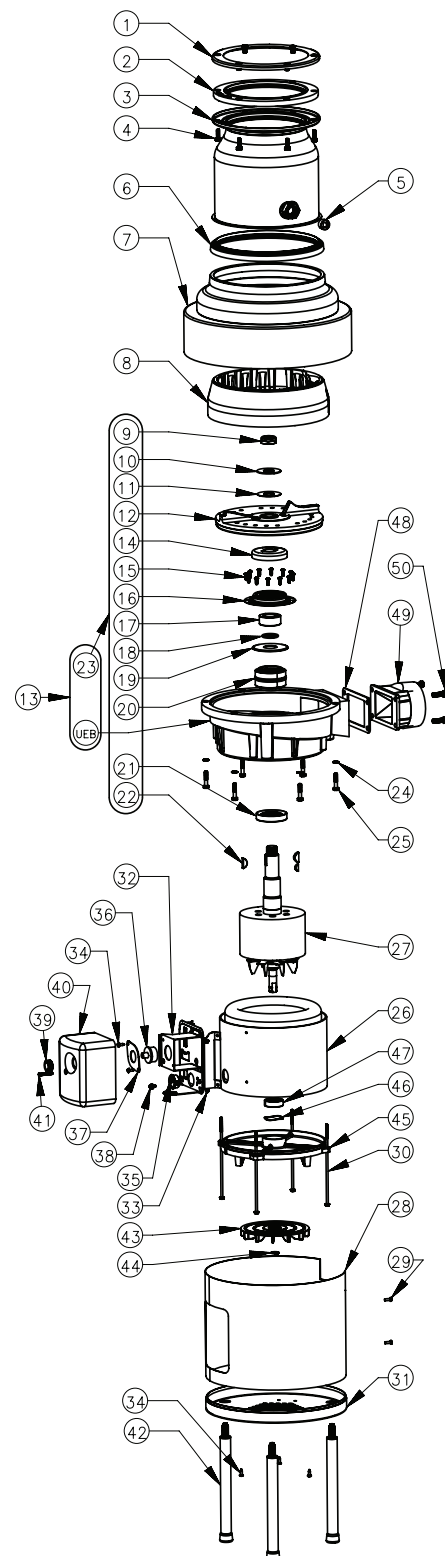
PHASE			THREE					
SS500 MODEL			-22	-23	-27	-28	-30	-31
BODY			STD	STD	STD	STD	SHORT	STD
ISE/PN			13262E	13262G	13390B	13390C	13390E	13390G
CODE#	DESCRIPTION	QTY	P/N					
34	SCREW (8-32 x 0.5) - OVERLOAD / BOT COV	5	8221					
35	BUSHING / INSERT	1	12384					
36	OVERLOAD	1	13422B	13422AC	13422AC	13422B	13422B	13422AC
37	OVERLOAD CLAMP	1	12378					
38	GROUND SCREW	1	02466E					
39	OVERLOAD GROMMET	1	12383					
40	TERMINAL BOX ASSY, SS100	1	13396	13396H	13396C	13396	13396	13396G
41	SCREW, #8-32x1.25 FLT C'SNK	1	12381					
42	LEG ASSY	3	11757					
43	FAN	1	12395					
44	RETAINING RING	1	12635					
45	LOWER END FRAME	1	11672					
46	SPRING WASHER	1	13678					
47	LEF BEARING	1	12415					
48	OUTLET FLANGE GASKET	1	11457					
49	OUTLET FLANGE	1	13998					
50	OUTLET FLANGE SCREW	4	11448					



SS-1000 – Large Capacity 3 Phase UL

208-230/460V 60 Hz

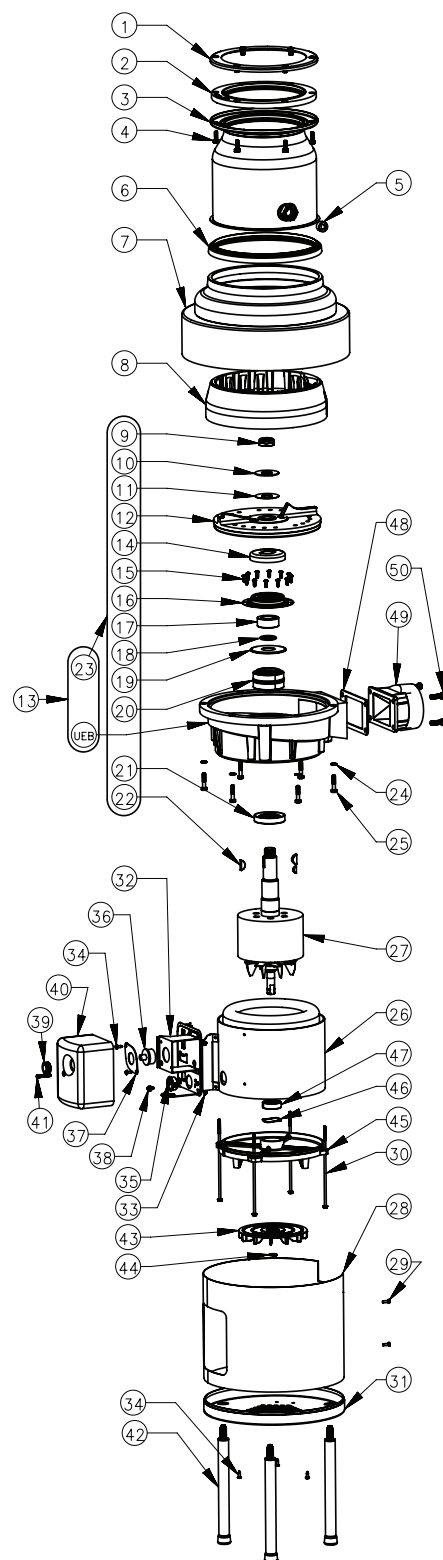
PHASE			THREE	
SS1000 MODEL			-10	-12
BODY			STD	SHORT
ISE/PN			13392	13392B
CODE#	DESCRIPTION	QTY	P/N	
1	MOUNTING FLANGE	1	11004	
2	MOUNTING GASKET	1	11016	
3	UPPER BODY ASSY	1	11232	11232B
4	FLANGE SCREW (1/4-20 x 1")	6	01491	
5	PIPE PLUG	1	11227	
6	SHREDDER GASKET	1	11008	
7	BODY & COVER ASSY	1	11725ZZ	
8	STATIONARY SHREDDER	1	14662	
9	NUT, 5/8-18 HEX JAM HD LKG	1	11255	
10	WASHER, .656 IDx1.312 OD x	1	11256	
11	WASHER, .64 IDx1.75 ODx.03 THK	1	12143	
12	ROTATING SHREDDER (SRV)	1	15194ZZ	
13	UPPER END BELL ASSY (includes 23)	1	13320	
14	SHIELD	1	13266	
15	SEAL SCREW #10-24x.375 TAPPING	12	01269	
16	SEAL (SRV)	1	13260	
17	SLEEVE	1	13265	
18	O-RING	1	12860	
19	SLINGER	1	11729	
20	UPPER BEARING ASSY KIT	1	12638	
21	WATER & OIL SEAL	1	13398	
22	WOODRUFF KEY, ASA #605	3	11322	
23	BEARING SEAL KIT (9-11, 14-22)	1	13281A	
24	WASHER, .262 IDx.50 ODx.025 THK	6	11444	
25	SCREW, BODY 1/4-20x1.00 HEX HD	6	11524	
26	STATOR ASSY	1	13079C	
27	ROTOR/SHAFT ASSY	1	13270AZZ	
28	TRIM BAND ASSY	1	11721	
29	TRIM BAND SCREW #8-32 x .50	2	01836A	
30	THRU SCREW	3	15213	
31	BOTTOM COVER	1	11748	
32	BRACKET	1	12433BZZ	
33	OVERLOAD BRACKET SCREWS (8-18 x 0.25)	4	11448	



(Continued on next page)

SS-1000 – Large Capacity 3 Phase UL (con't)

PHASE			THREE	
SS1000 MODEL			-10	-12
BODY			STD	SHORT
ISE/PN			13392	13392B
CODE#	DESCRIPTION	QTY	P/N	
34	SCREW (8-32 x 0.5) - OVERLOAD / BOT COV	5	8221	
35	BUSHING / INSERT	1	12384	
36	OVERLOAD	1	13422AC	
37	OVERLOAD CLAMP	1	12378	
38	GROUND SCREW	1	02466E	
39	OVERLOAD GROMMET	1	12383	
40	TERMINAL BOX ASSY, SS100	1	13396	
41	SCREW, #8-32X1.25 FLT C'SNK	1	12381	
42	LEG ASSY	2	11757	
43	FAN	1	12395	
44	RETAINING RING	1	12635	
45	LOWER END FRAME	1	11672	
46	SPRING WASHER	1	13678	
47	LEF BEARING	1	12415	
48	OUTLET FLANGE GASKET	1	11457	
49	OUTLET FLANGE	1	13998	
50	OUTLET FLANGE SCREW	4	11448	



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NOTES

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