



HOSHIZAKI AMERICA, INC.

SERVICE BULLETIN

SB94-0014R1

Revised July 23, 2003

Page 1 of 12

Subject: REBUILDING WATER PUMPS

All KM model ice machines utilize a re-buildable water pump. (Except KML, there are no replaceable parts for the KML assembly See SB03-0001). Each part outside of the motor itself is replaceable.

If a problem occurs such as a broken impeller, cracked housing or leaking mechanical seal, the warranty will only cover the replacement of the defective part.

Many times pump motors that are leaking due to mechanical seal issues can be repaired by simply re-seating the seal. This type of seal failure can occur for many reasons including scale build up, debris on the seal surface or pump shipping/handling issues, etc. To reseal the mechanical seal or rebuild the water pump please refer to the instructions below.

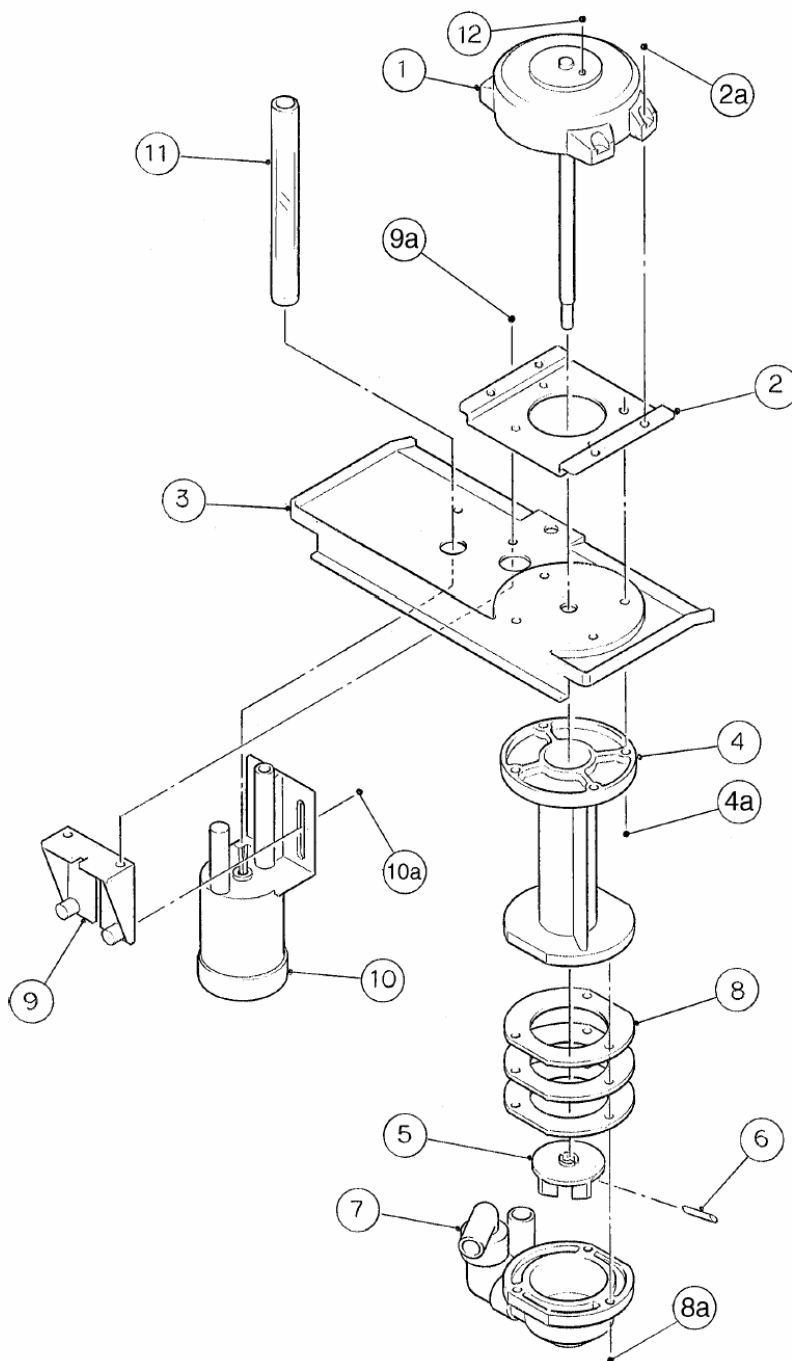
1. Remove screws/bolts from the pump housing and remove front housing.
 - a. Screws can be difficult to remove on older pumps. If you have difficulty try this: Spray the screws with silicone or "Rust buster" type of lubricant. Insert a good quality Phillips (+) head screw driver into the screw head and tap the but end with a hammer. Then try to tighten the screw a fraction now try to remove. This will sometimes break away any corrosion and allow for removal of the screw.
2. Remove pin holding impeller to pump motor shaft and remove impeller.
3. Remove rubber pump gasket
4. Remove and inspect the mechanical seal
 - a. Remove screws/bolts holding ABS pump flange to pump motor on larger units
 - b. Smaller units simply remove metal flange and o-ring to access mechanical seal (Order and style vary depending on model) NOTE: It is a good idea to mark the position of the metal flange, rubber gasket and motor this will make aligning the holes much easier when the pump is reassembled.
5. If pump was leaking, check position and condition of mechanical seal. (The KM-150 B, KM-250B_C, 250B_E and 250B_F do not incorporate a mechanical seal)
 - a. If seal is out of position, reseal.

- b. If seal has scale or other debris clean or replace seal and reseal. (Heavy scale may accumulate in hard water areas. In these cases, it may be better to replace the seal).
 - c. If seal is clean and correctly positioned replace seal
- 6. Mechanical seal seating: The mechanical seal is a two part or in some cases a three-part assembly. It consists of the carbon ring portion (motor side) and the spring/stainless portion. Some pumps will also use an additional “eared” washer.
 - a. The seal should be flush with the stainless retaining cup or in the retaining area molded directly in the pump flange on larger units.
 - b. Care should be taken not to damage the seal surface. Do not use an sort of lubrication around the seal area, this may prevent the parts from sealing correctly
- 7. Reassemble pump in reverse order replacing any parts that are damaged or broken
 - a. It is important the tabs on the spring portion of the mechanical are placed in the appropriate notches on the bottom of the seal and impeller.
 - b. When reinstalling the impeller pin into the motor shaft insure that the pin protrudes through both sides.

Many of the pump components are common with other pump assemblies. Attached you will find some exploded views including part numbers for various models. Since part numbers can change, please confirm all part numbers with your local distributor using the complete Model and Serial numbers.

KM-150BAF PUMP ASSEMBLY

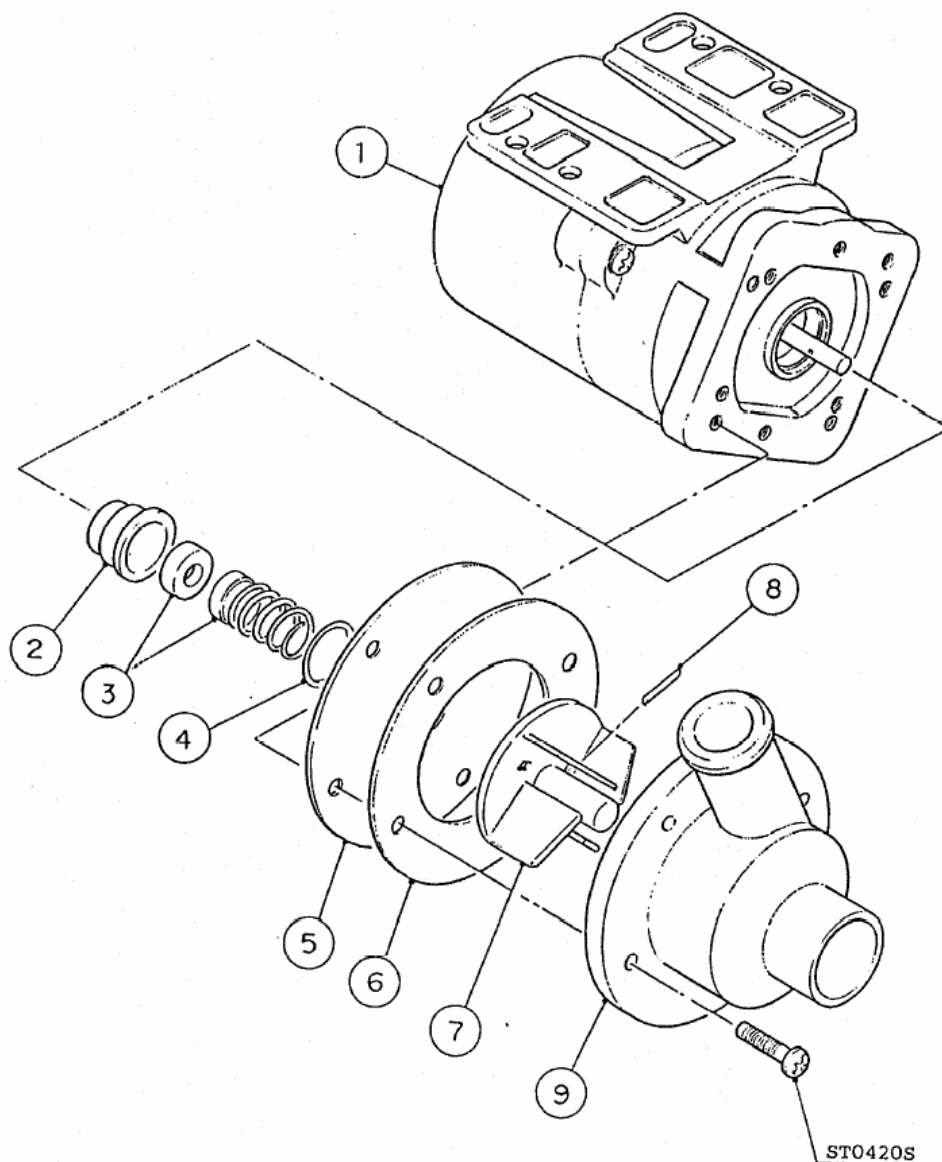
INDEX NO.	DESCRIPTION
1	PUMP MOTOR
2	BRACKET - PM
2a	TRUSS HEAD SCREW
3	PUMP MOTOR BRACKET
4	PUMP SHAFT COVER
4a	TRUSS HEAD SCREW
5	IMPELLER
6	PIN
7	PUMP HOUSING ASSEMBLY
8	PUMP GASKET
8a	T2 SCREW
9	FLOAT SWITCH BRACKET
9a	T2 SCREW
10	FLOAT SWITCH
10a	T2 SCREW
11	VINYL HOSE
12	TRUSS HEAD SCREW



KM-250B_B PUMP ASSEMBLY

Index #	Description	Part Number
1	Pump Motor	2U0095-01
2	Retainer	418584-01
3	Mechanical Seal	415817-01
4	“O” Ring	7611-P018
5	Plate (Pump)	403013-01
6	Pump Gasket	403014-01
7	Impeller	433522-01
8	Pin	414102-01

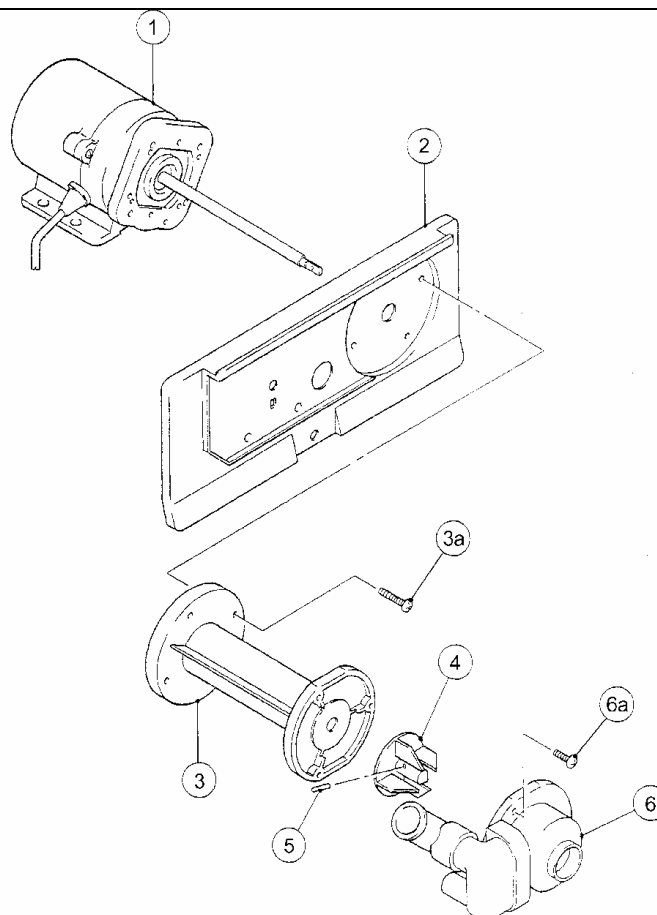
Note: This list is designed to be a generic guide. Before ordering parts, you MUST consult the individual part manual for the model and serial number you are working on. Parts manuals are available on line at www.hoshizakiamerica.com or through your local distributor



KM-250B_B PUMP ASSEMBLY

INDEX NO.	DESCRIPTION	MATERIAL OR MODEL NUMBER	PART NUMBER	REQUIRED NUMBER					
1	PUMP MOTOR	APTA4J2P10W D9	3U0146-01	1					
2	PUMP MOTOR BRACKET	JSR CB40	105926-01	1					
3	PUMP SHAFT COVER	JSR 86K1	216281-01	1					
3a	TRUSS HEAD SCREW	4X25, SS	7C32-0425	4					
4	IMPELLER	ABS	433522-01	1					
5	PIN	SS	414102-01	1					
6	PUMP HOUSING ASSEMBLY	ABS	327772G01	1					
6a	T2 SCREW	4X10, SS	7C32-0410	3					

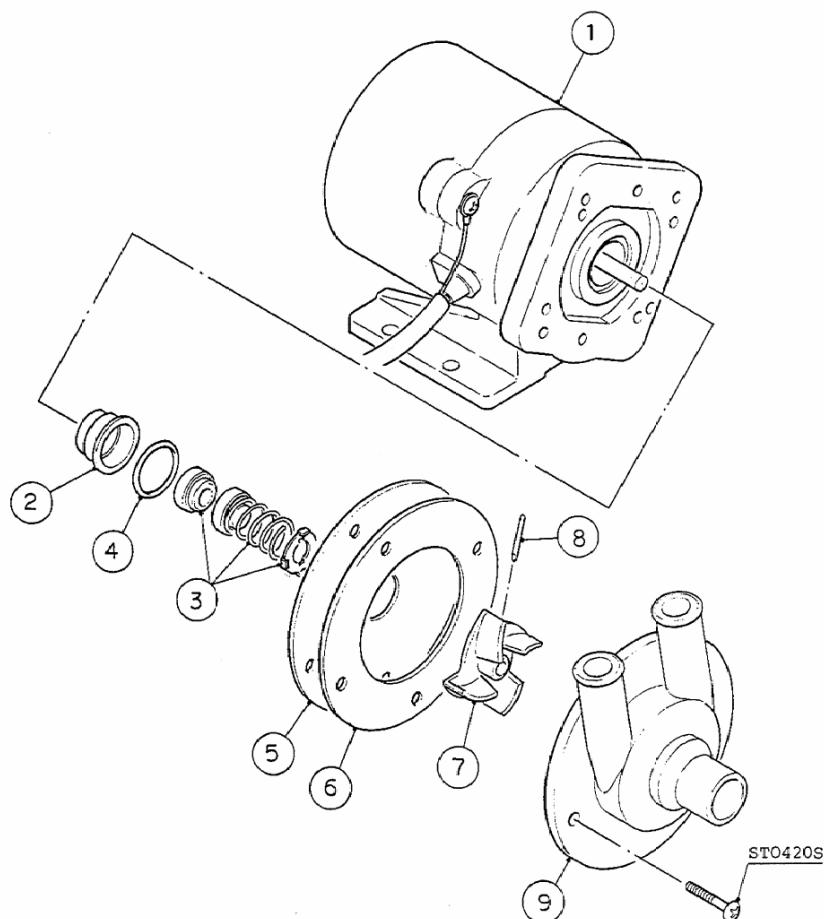
Note: 1) This series does not incorporate a mechanical seal. 2) This list is designed to be a generic guide. Before ordering parts, you MUST consult the individual part manual for the model and serial number you are working on. Parts manuals are available on line at www.hoshizakiamerica.com or through your local distributor.



KM-250M SERIES PUMP ASSEMBLY

INDEX NO.	DESCRIPTION	MATERIAL OR MODEL NUMBER	PART NUMBER	REQUIRED NUMBER				
1	PUMP MOTOR	AP-TA4(H) 120V	2U0095-01	1				
2	RETAINER	S.S	418584-01	1				
3	MECHANICAL SEAL (B)	H5-PS9 ø5	415817-01	1				
4	"O" RING	1AP18	7611-P018	1				
5	FLANGE - "O"RING	P.C	439674-01	1				
6	PUMP GASKET	NR	403014-01	1				
7	IMPELLER	ABS	326256-01	1				
8	PIN	S.S	414102-01	1				

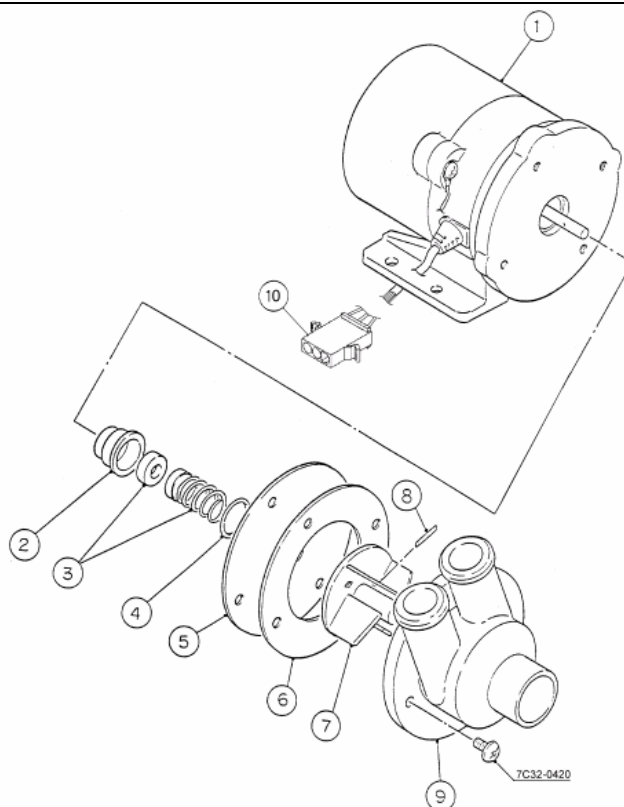
Note: 1) This list is designed to be a generic guide. Before ordering parts, you **MUST** consult the individual part manual for the model and serial number you are working on. Parts manuals are available on line at www.hoshizakiamerica.com or through your local distributor.



KM-280M SERIES PUMP ASSEMBLY

INDEX NO.	DESCRIPTION	MATERIAL OR MODEL NUMBER	PART NUMBER	REQUIRED NUMBER							
1	PUMP MOTOR	AP-TA4(H) 120V	2U0095-01	1							
2	RETAINER	SS	418584-01	1							
3	MECHANICAL SEAL (B)	H5-PS9, 5	415817-01	1							
4	"O" RING	1AP18	7611-P018	1							
5	PLATE - PUMP	SS	403013-01	1							
6	PUMP GASKET	NR	403014-01	1							
7	IMPELLER	ABS	3A0990-01	1							
8	PIN	SS	414102-01	1							
9	PUMP HOUSING	ABS	3A0989-01	1							
	TRUSS HEAD SCREW	4X20, SS	7C32-0420	4							
	HEX SOCKET HEAD CAP SCREW	4X20, SS	7S12-0420								
10	PLUG HOUSING	-	412832-06	1							

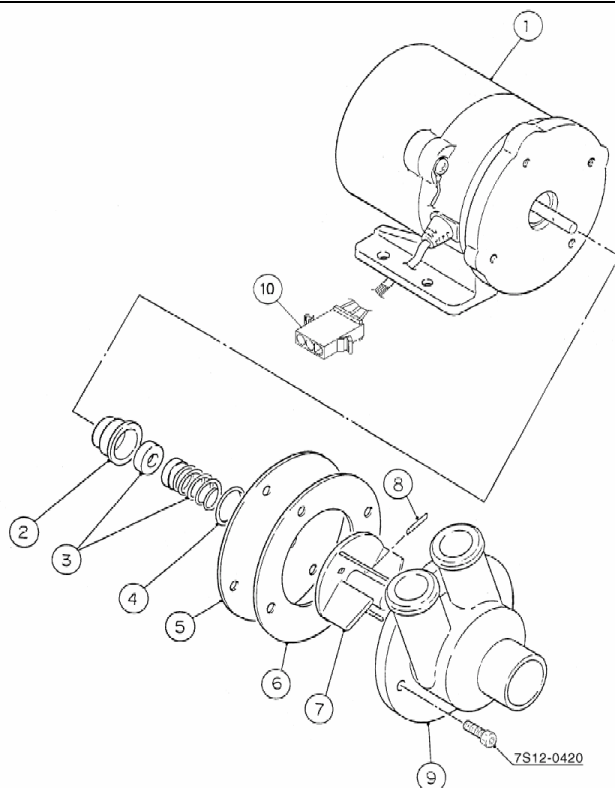
Note: This list is designed to be a generic guide. Before ordering parts, you **MUST** consult the individual part manual for the model and serial number you are working on. Parts manuals are available on line at www.hoshizakiamerica.com or through your local distributor.



KM-450,452,500,630,632,800,900 SERIES PUMP ASSEMBLY

INDEX NO.	DESCRIPTION	MATERIAL OR MODEL NUMBER	PART NUMBER	REQUIRED NUMBER				
1	PUMP MOTOR	AP-TA4(H) 120V	2U0095-01	1				
2	RETAINER	SS	418584-01	1				
3	MECHANICAL SEAL (B)	H5-PS9, 5	415817-01	1				
4	"O" RING	1AP18	7611-P018	1				
5	PLATE – PUMP	SS	403013-01	1				
6	PUMP GASKET	NR	403014-01	1				
7	IMPELLER	ABS	433522-01	1				
8	PIN	SS	414102-01	1				
9	PUMP HOUSING	ABS	211409-01	1				
	HEX SOCKET HEAD CAP SCREW	4X20, SS	7S12-0420	4				
10	PLUG HOUSING	-	412832-06	1				

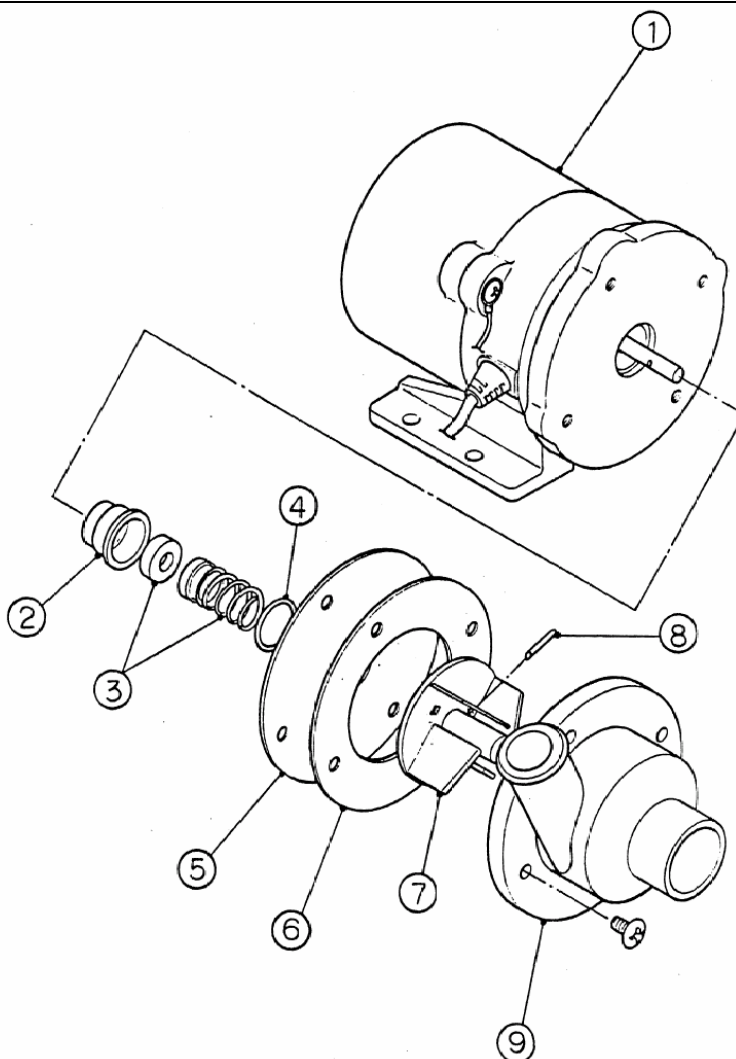
Note: This list is designed to be a generic guide. Before ordering parts, you MUST consult the individual part manual for the model and serial number you are working on. Parts manuals are available on line at www.hoshizakiamerica.com or through your local distributor.



KM-451, 601, 631 SERIES PUMP ASSEMBLY

Index #	Description	Part Number	Qty.
1	Pump Motor	2U0095-01	1
2	Retainer	418584-01	1
3	Mechanical Seal	404653-01	1
4	“O” Ring	7611-P018	1
5	Flange “O” Ring	403013-01	1
6	Packing	403014-01	1
7	Impeller	417082-01	1
8	Pin	414102-01	1
9	Pump Housing	204451-02	1

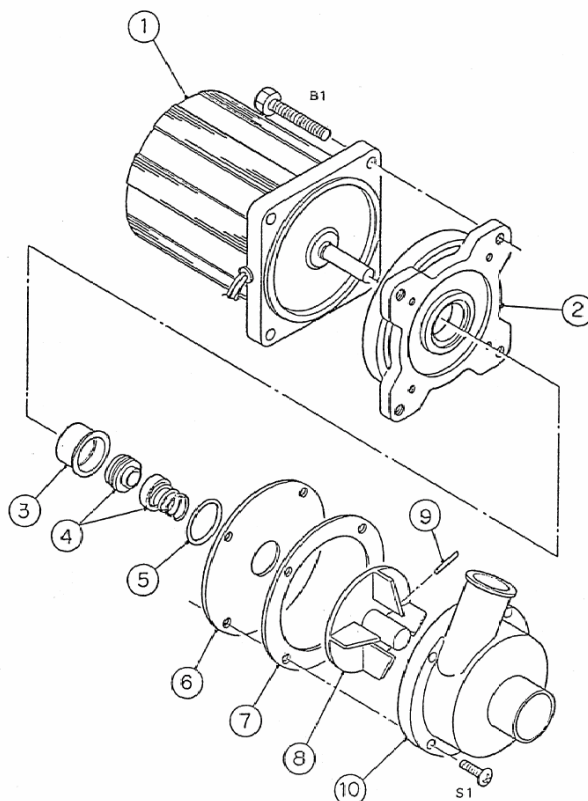
Note: This list is designed to be a generic guide. Before ordering parts, you MUST consult the individual part manual for the model and serial number you are working on. Parts manuals are available on line at www.hoshizakiamerica.com or through your local distributor.



KM-1201D SERIES PUMP ASSEMBLY

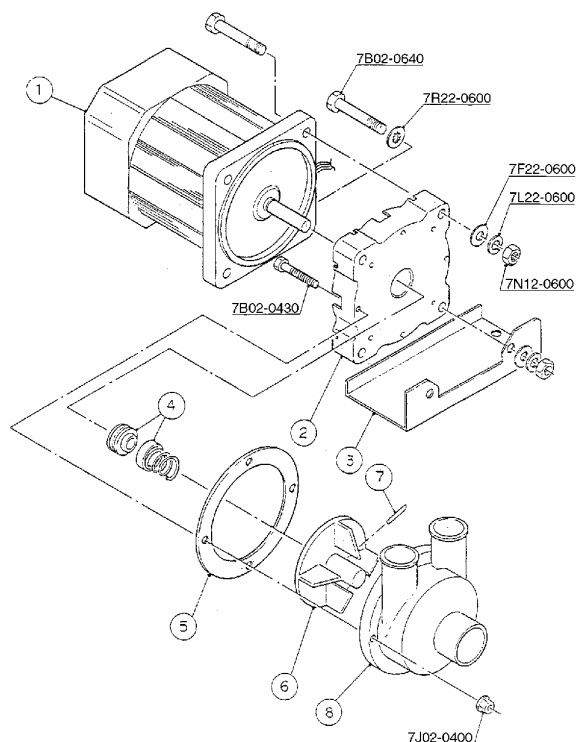
INDEX NO.	DESCRIPTION	MATERIAL OR MODEL NUMBER	PART NUMBER	F-1
1	Pump Motor	9IK60SP-10	2U0073-01	1
2	Flange	Aluminum	318047-01	1
3	Retainer	S.S	428544-01	1
4	Mechanical Seal	H5-PN, 8mm	428545-01	1
5	"O" Ring	1AP22	7611-P022	1
6	Flange - "O" Ring	S.S	428546-01	1
7	Packing	SBR	428547-01	1
8	Impeller	ABS	428548-01	1
9	Pin	S.S	414102-01	1
10	Pump Housing	ABS	209467-01	1

Note: 1) The KM-1201 uses two pumps the components are the same only the mounting position of the motor differs. 2) This list is designed to be a generic guide. Before ordering parts, you MUST consult the individual part manual for the model and serial number you are working on. Parts manuals are available on line at www.hoshizakiamerica.com or through your local distributor.



INDEX NO.	DESCRIPTION	MATERIAL OR MODEL NUMBER	PART NUMBER	REQUIRED NUMBER				
1	PUMP MOTOR	M91A60SP201	2U0106-01	1				
2	PUMP FLANGE	PC	215662-01	1				
3	PUMP MOTOR BRACKET	SS	435057-01	1				
	TOOTH WASHER	SS, M6	7F22-0600	1				
	HEXAGON BOLT	SS, 6X40	7B02-0640	4				
	SPLIT LOCK WASHER	SS, M6	7L22-0600	4				
	FLAT WASHER	SS, M6	7F22-0600	4				
	NUT	SS, M6	7N12-0600	4				
4	MECHANICAL SEAL	H5-PN, 8MM	428545-01	1				
5	PACKING	EPDM	428547-01	1				
6	IMPELLER	ABS	428548-01	1				
7	PIN	SS	414102-01	1				
8	PUMP HOUSING	ABS	212636-01	1				
	HEXAGON BOLT	SS, 4X30	7B02-0430	4				
	FLANGE NUT	SS, M4	7J02-0400	4				

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KM-1200, 1300, 1600, 1800, 2000, 2400S SERIES PUMP ASSEMBLY

INDEX NO.	DESCRIPTION	MATERIAL OR MODEL NUMBER	PART NUMBER	REQUIRED NUMBER						
				L-0						
1	PUMP MOTOR	M91A60SP201	2U0106-01	1						
2	PUMP FLANGE	PC	215662-01	1						
3	PUMP MOTOR BRACKET	SS	323904-01	1						
3A	TOOTH WASHER	6, SS	7P22-0600	2						
3B	HEXAGON BOLT	6X40, SS	7B02-0640	4						
3C	FLAT WASHER	6, SS	7W22-0600	4						
3D	SPLIT LOCK WASHER	6, SS	7L22-0600	4						
3E	NUT	6, SS	7N12-0600	4						
4	MECHANICAL SEAL	H5-PN, 8MM	428545-01	1						
5	PACKING	EPDM	428547-01	1						
6	IMPELLER	ABS	436584-01	1						
7	PIN	SS	414102-01	1						
8	PUMP HOUSING	ABS	213687-01	1						
8A	HEXAGON BOLT	4X55, SS	7B02-0455	4						
8B	FLANGE NUT	4, SS	7J02-0400	4						

Note: This list is designed to be a generic guide. Before ordering parts, you MUST consult the individual part manual for the model and serial number you are working on. Parts manuals are available on line at www.hoshizakiamerica.com or through your local distributor.

