

Repair Parts

Sump, Effluent and Sewage



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SUMP, EFFLUENT AND SEWAGE

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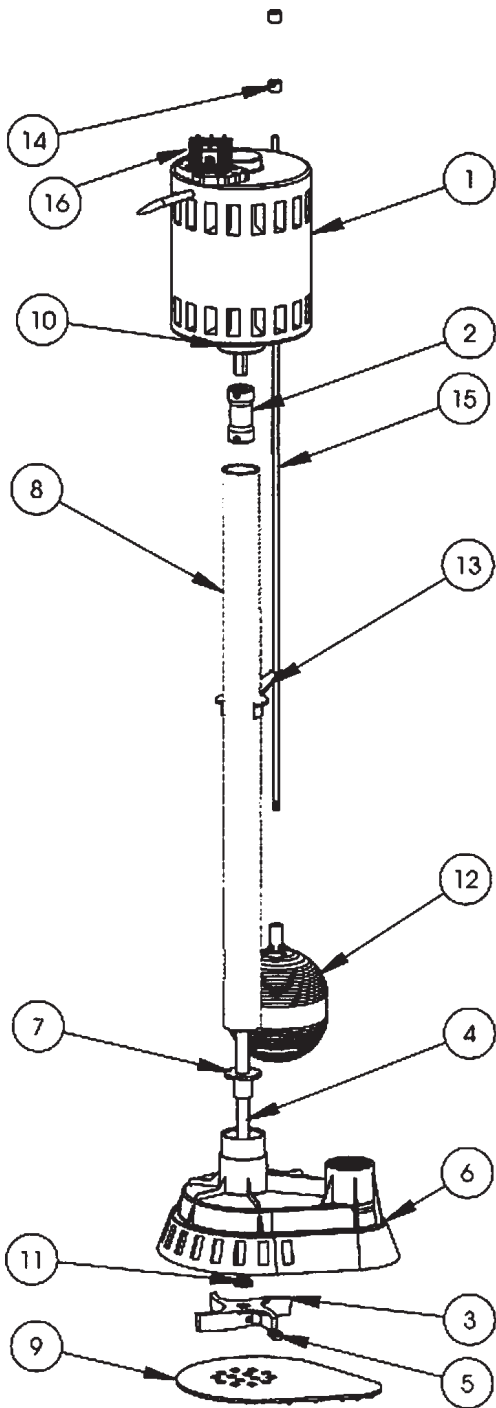
4K432 OIL SPECIFICATION:
5 gallon can of ASTM 150 Turbine Oil

COMPARABLE BRAND NAMES:

Sunoco	Sunvis 932
Mobil	DTE Light
Texaco	Regal R&O 32
Shell	Turbo 32
Gulf	Harmony 32
Amoco	Am. Industries Oil 32

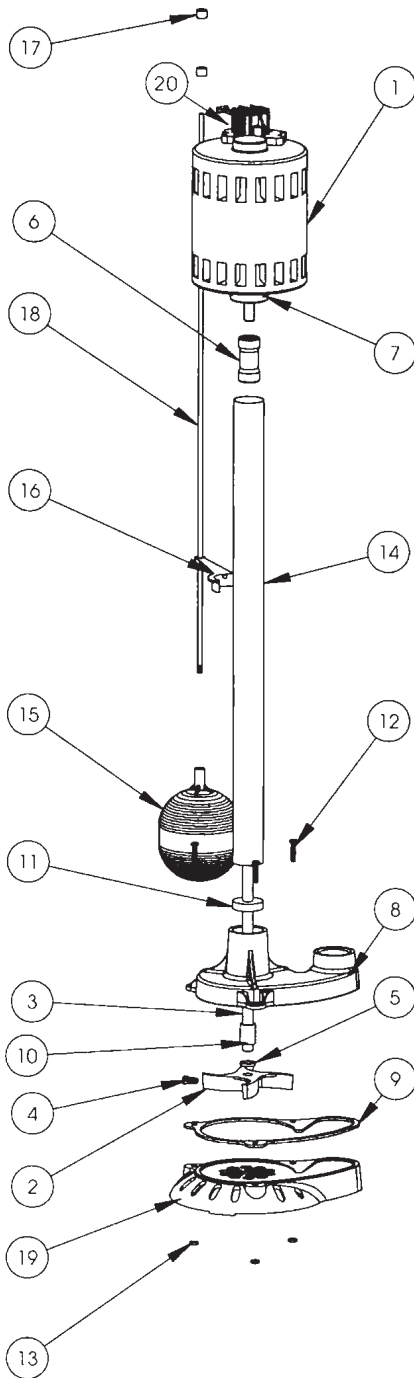
Note: Repair Motor List Prices are in the "K", "L" and Numeric Repair Part Price Book.

PVP03



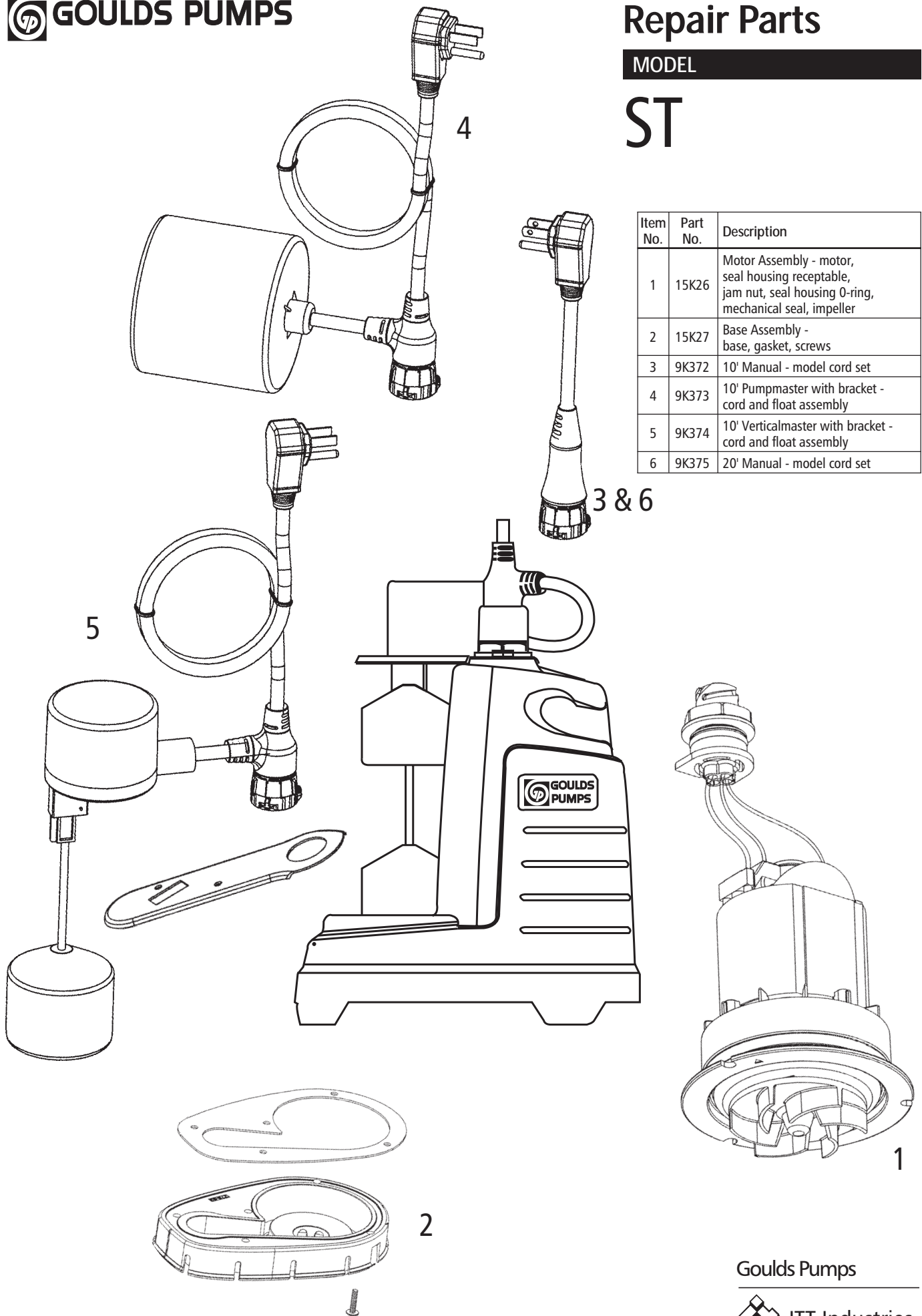
Item Number	Part Number	Description	Quantity Required
1	3501000	Motor 1/2 HP with switch and cord	1
2	3513000	Coupling, 1/2 flexible	1
3	3511000	Impeller, CI	1
4	3523000	Shaft 304SS 1/2 X 23 7/8	1
5	3507000	Set screw 5/16" - 18 X 1/2" SST sq. hd.	1
6	3502000	Housing, PVC	1
7	3504000	Bearing nylatron	1
8	3503000	Column, PVC 1 1/2 X 24 X .140	1
9	3525000	Baseplate, PVC	1
10	3506000	Set screw 1/4 - 20 X 1/4 hex	3
11	3516000	Seal, cork, 1/2 X 3/4 X 1/8	1
12	3519000	Float ball	1
13	3518000	Float rod guide	1
14	3521000	Float rod stop	2
15	3520000	Float rod	1
KITS			
6, 7, 8	3526000	Housing assembly and column with bearing	1 Kit
12, 13, 14, 15	3524000	Kit: float rod, ball, guide, rod stops (2)	1Kit
16	3527000	Switch kit	1Kit

CVP03



Item Number	Part Number	Description	Quantity Required
1	3501000	Motor 1/3 HP with switch & cord	1
2	3511000	Impeller, cast iron	1
3	3523000	Shaft 304SS 1/2 X 23/8	1
4	3507000	Set screw 5/16" - 18 X 1/2" SST sq. hd.	1
5	3516000	Seal, cork, 1/2 X 3/4 X 1/8"	1
6	3513000	Coupling, 1/2 Flexible	1
7	3506000	Set scr 1/4 - 20 X 1/4 hex	3
8	3509000	Housing, cast iron, blue	1
9	3517000	Gasket, base	1
10	3514000	Bearing, pdrmtl .5 X. 75 X 1"	1
11	3515000	Washer, felt .5 x 1.5 x .375"	1
12	3508000	Screw 10-24 X 1 PH HD SS	3
13	3505000	Nut 10-24 Hex SS	3
14	3512000	Column, steel 1.5 x 24 x .049"	1
15	3519000	Float ball	1
16	3518000	Float rod guide	1
17	3521000	Float rod stop	2
18	3520000	Float rod	1
19	3510000	Base, cast iron black	1
KITS			
8, 10, 11, 14	3522000	Housing assembly & column with bearing	1 Kit
15, 16, 17, 18	3524000	KIT; float rod, ball, guide, rod stops (2)	1 Kit
20	3527000	Switch kit	1 Kit

Item No.	Part No.	Description
1	15K26	Motor Assembly - motor, seal housing receptable, jam nut, seal housing O-ring, mechanical seal, impeller
2	15K27	Base Assembly - base, gasket, screws
3	9K372	10' Manual - model cord set
4	9K373	10' Pumpmaster with bracket - cord and float assembly
5	9K374	10' Verticalmaster with bracket - cord and float assembly
6	9K375	20' Manual - model cord set



SPBB

Item Number	Part Description	Material	Quantity Required	Repair Part Order Number
1	Tee, 1-1/2" Socket	Thermoplastic	1	6K146
2	Reducing Bushing, 1-1/2" x 1-1/4"	Thermoplastic	2	4K499
3	Pump - 2000GPH	Varies	1	9K318
4	Float Switch Assembly	—	1	9K319
5	Fuse Holder	—	1	9K320
6	Fuse - 15 Amps (not shown)	—	1	9K321
7	Wire Terminals	—	1	9K322
			1	9K323
			2	9K324
			3	9K325
8	Terminals - Top Post Battery	—	2	9K326
9	Battery Case (not shown)	Thermoplastic	1	9K327
10	Charger Assembly	—	1	9K328
11	Check Valve - 1" MPT	Thermoplastic	1	6K147
12	Elbow - 1" FPT	Thermoplastic	1	6K148
13	Hose Clamp	—	1	4K497
14	Pump / Switch Bracket	—	1	9K329
15	Hose Clamp	—	1	4K498

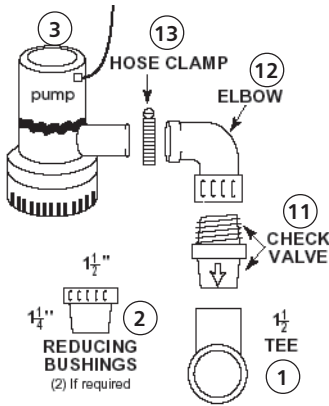


Figure 1

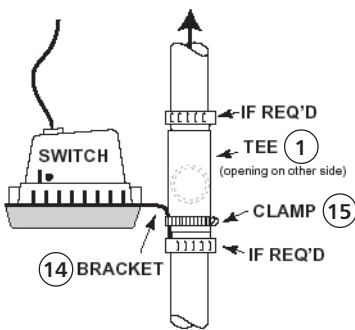


Figure 2

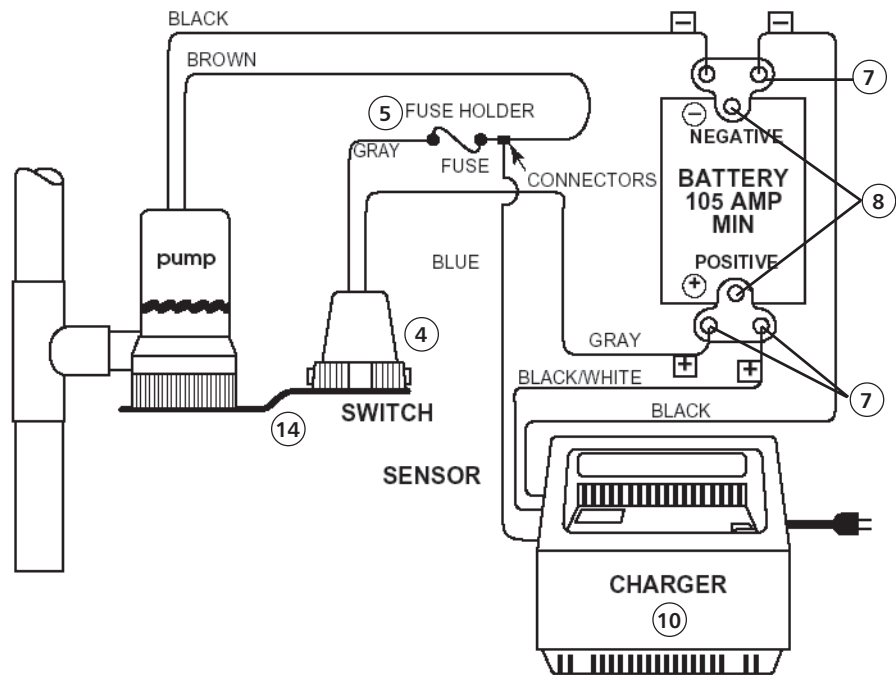


Figure 4

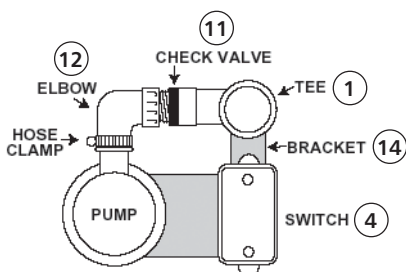
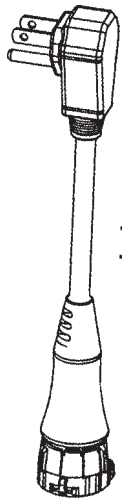
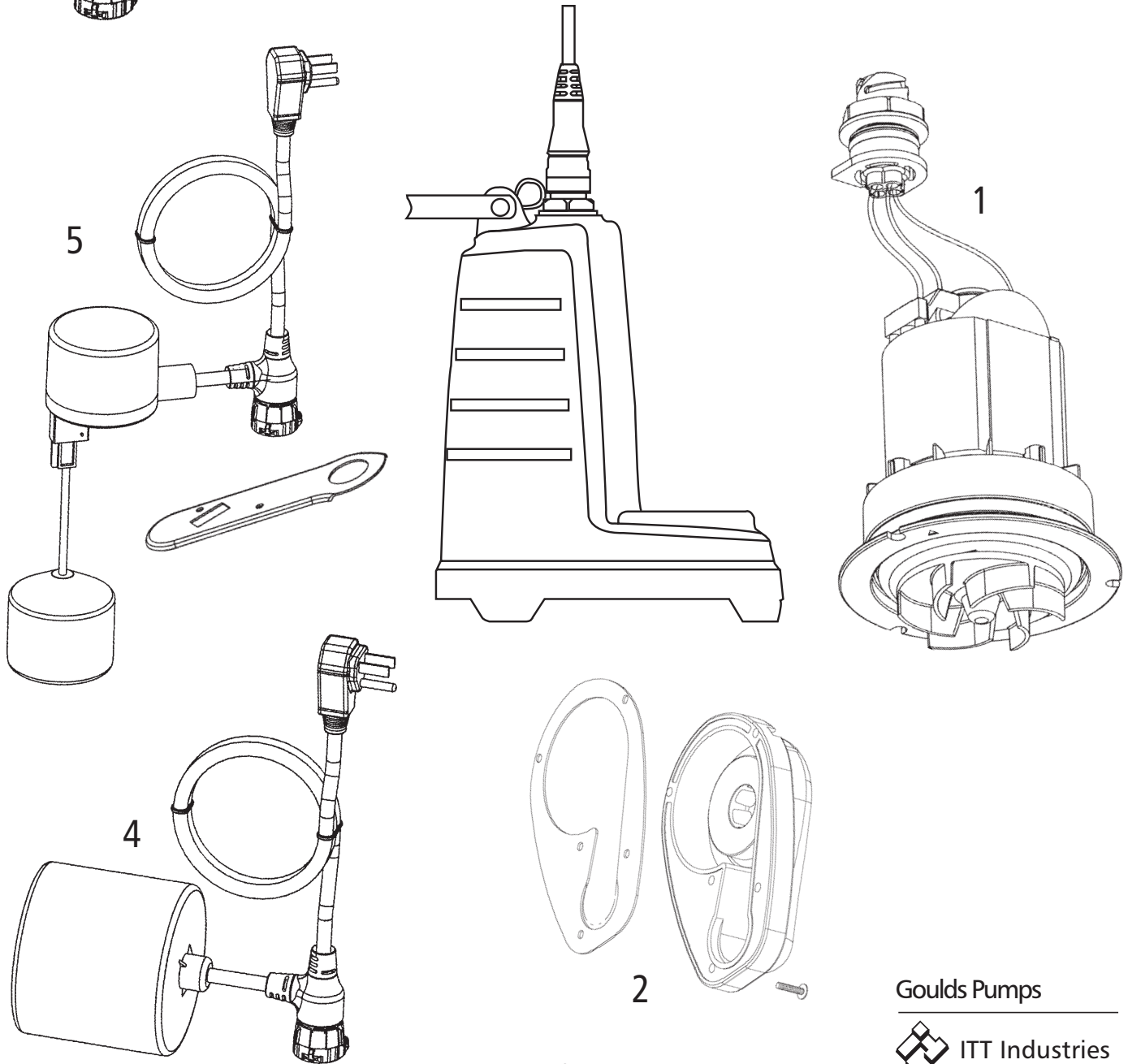


Figure 3

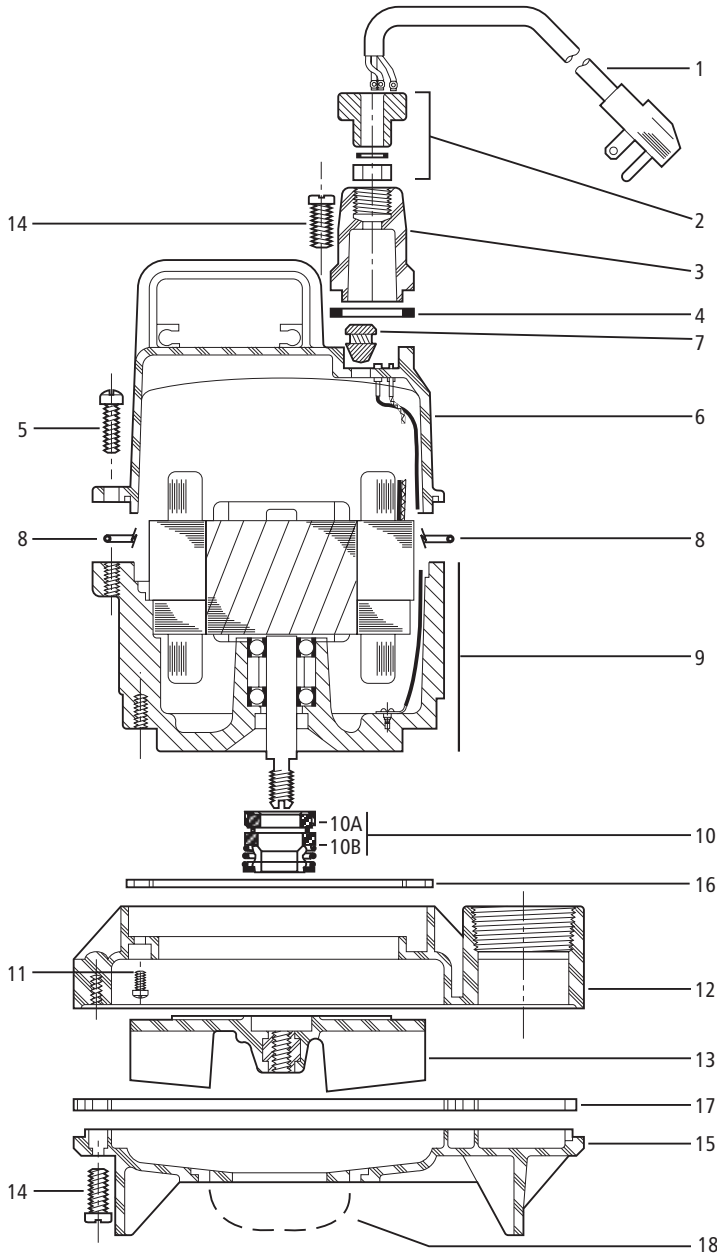


3 & 6

Item Number	Part Name	Description	Repair Part Order Number
1	1/3 HP Motor Assembly	Motor, Seal Housing, Receptacle, Jam Nut, O-ring, Mechanical Seal, Impeller	15K26
	4/10 HP Motor Assembly		15K28
	1/2 HP Motor Assembly		15K29
2	Base Assembly	Base, Gasket, Screws	15K27
3	Cord Set	10' Manual	9K372
4		20' Manual - Standard	9K375
5		30' Manual	9K380
6		50' Manual	9K377
—		Piggyback Float Switch (see catalog)	20' Pumpmaster with Hardware - 115V, 13A



EP04/EP05 Series



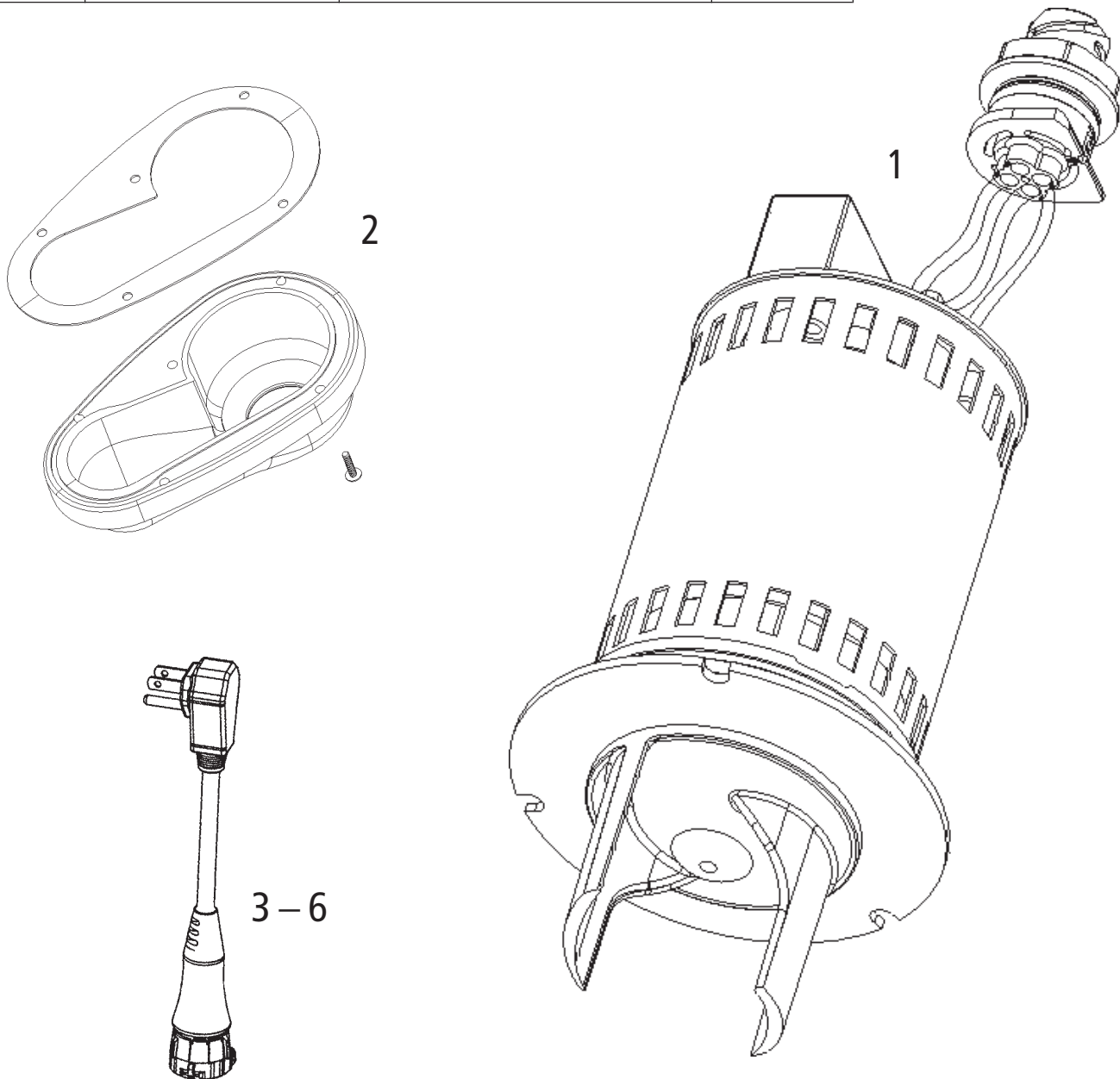
Item No.	Part Description	Material	Qty. Req.	Repair Part Order No.
1	10' Cord Set with Plug - 115 V	SJTOW - 16/3	1	9K207
	10' Cord Set with Plug - 230 V			9K208
	20' Cord Set with Plug - 115 V			9K209
	20' Cord Set with Plug - 230 V			9K210
	30' Cord Set with Plug - 115 V*			9K403
2	Strain Relief Assembly, Cord Set	Varies	1	5K113
3	Gland Nut Housing	Thermoplastic	1	9K226
4	O-ring - gland nut housing	Buna-N, AS 568A-024		5K197
5	Fillister Head Screw - Motor Cover	AISI 300 SS	4	13K347
6	Motor Cover	Thermoplastic	1	1K257
7	Oil Plug Grommet	Buna-N	1	6K87
8	O-ring - Motor Cover	Buna-N, AS 568A-161	1	5K196
9	Motor Assembly - 115V, 4/10 HP	Varies	1	1K282
	Motor Assembly - 230V, 4/10 HP			1K283
	Motor Assembly - 115 V, 1/2 HP			1K284
	Motor Assembly - 230 V, 1/2 HP			1K285
10	Mechanical Seal Assembly - Type 16	Carbon/Ceramic	1	10K32
11	Fillister Head Screw - Casing	AISI 300 SS	4	13K347
12	Casing	Thermoplastic	1	1K233
13	Impeller - (EP04 - 4/10 HP)	Thermoplastic	1	2K498
	Impeller - (EP05 - 1/2 HP)			2K731
14	Thread Forming Screw	AISI 300 SS	10	13K243
15	Base	Thermoplastic	1	1K258
16	Gasket - Motor Adapter	Composite	1	5K182
17	Gasket - Casing	Composite	1	5K219
18	Strainer	Thermoplastic	1	4K528
	Insulating Oil - see note on Index page	Turbine Oil - ATSM 150	—	4K432

Item No. 9 includes motor adapter, rotor, stator, tolerance ring, ground wire and ground screw.

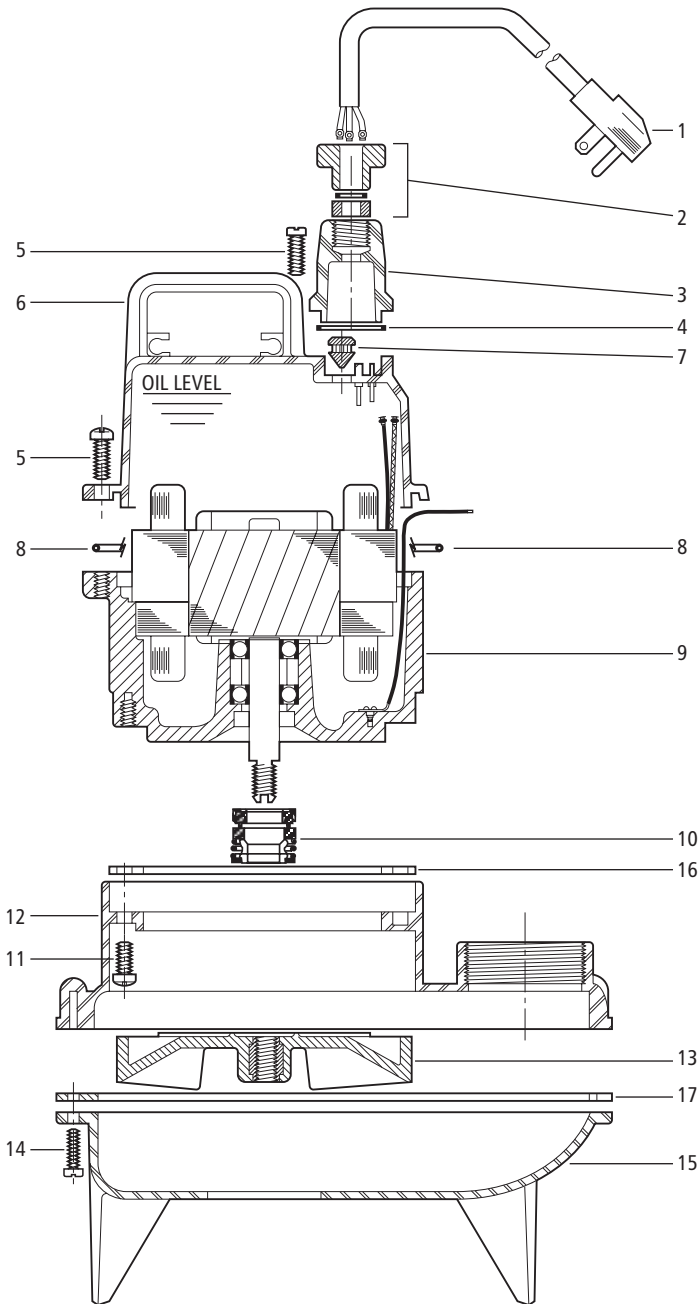
4/10 HP - 1 quart of insulating oil required.
 1/2 HP - .85 quarts of insulating oil required.

* Effective December 3, 2003.

Item Number	Part Name	Description	Repair Part Order Number
1	4/10 HP Motor Assembly	Motor, Seal Housing, Receptacle, Jam Nut, O-ring, Mechanical Seal, Impeller	15K30
	1/2 HP Motor Assembly		15K31
2	Base Assembly	Base, Gasket, Screws	15K39
3	Cord Set	10' Manual	9K372
4		20' Manual - Standard	9K375
5		30' Manual	9K380
6		50' Manual	9K377
—	Float Switch (see catalog)	10' Pumpmaster with Hardware - 115V, 13A	A2D11C
		20' Pumpmaster with Hardware - 115V, 13A	A2D31C



WW05 Series

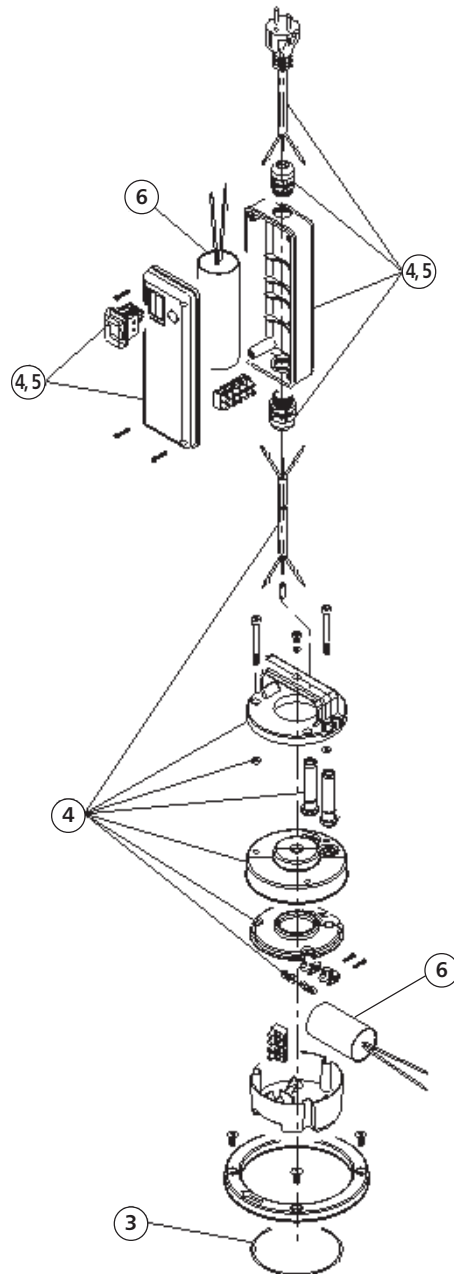
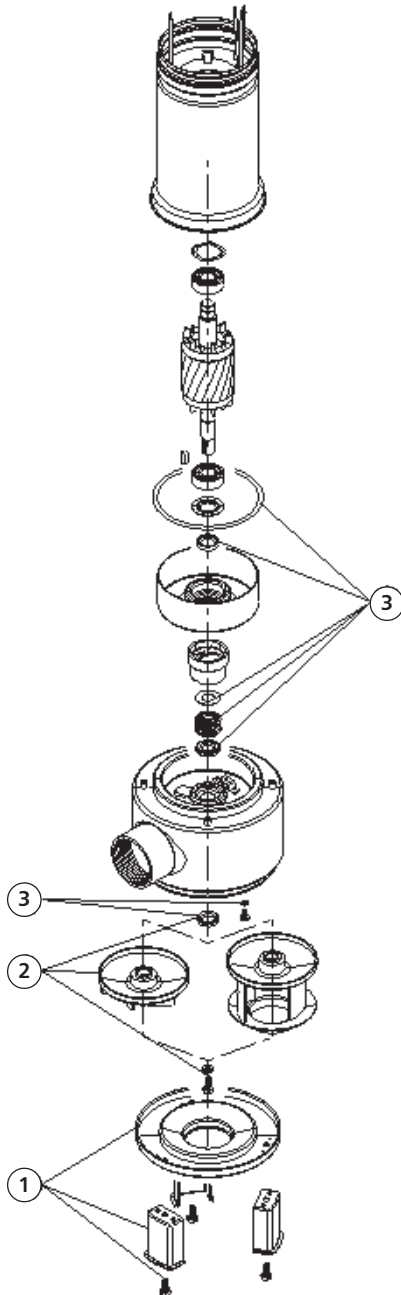


Item No.	Part Description	Material	Qty. Req.	Repair Part Order No.
1	10' Cord Set with Plug - 115 V	SJTOW - 16/3	1	9K207
	10' Cord Set with Plug - 230 V			9K208
	20' Cord Set with Plug - 115 V			9K209
	20' Cord Set with Plug - 230 V			9K210
2	Strain Relief Assembly, Cord Set	Varies	1	5K113
3	Gland Nut Housing	Thermoplastic	1	9K226
4	O-ring - gland nut housing	Buna-N, AS 568A-024		5K197
5	Fillister Head Screw - Motor Cover	AISI 300 SS	4	13K347
6	Motor Cover	Thermoplastic	1	1K257
7	Oil Plug Grommet	Buna-N	1	6K87
8	O-ring - Motor Cover	Buna-N, AS 568A-161	1	5K196
9	Motor Assembly - 115 V, 1/2 HP	Varies	1	1K284
	Motor Assembly - 230 V, 1/2 HP			1K285
10	Mechanical Seal Assembly - Type 16	Carbon/Ceramic	1	10K32
11	Fillister Head Screw - Casing	AISI 300 SS	4	13K347
12	Casing	Thermoplastic	1	1K274
13	Impeller	Thermoplastic	1	2K494
14	Thread Forming Screw	AISI 300 SS	10	13K243
15	Base	Thermoplastic	1	1K275
16	Gasket - Motor Adapter	Composite	1	5K182
17	Gasket - Casing	Composite	1	5K217
	Insulating Oil - see note on Index page	Turbine Oil - ATSM 150	—	4K432

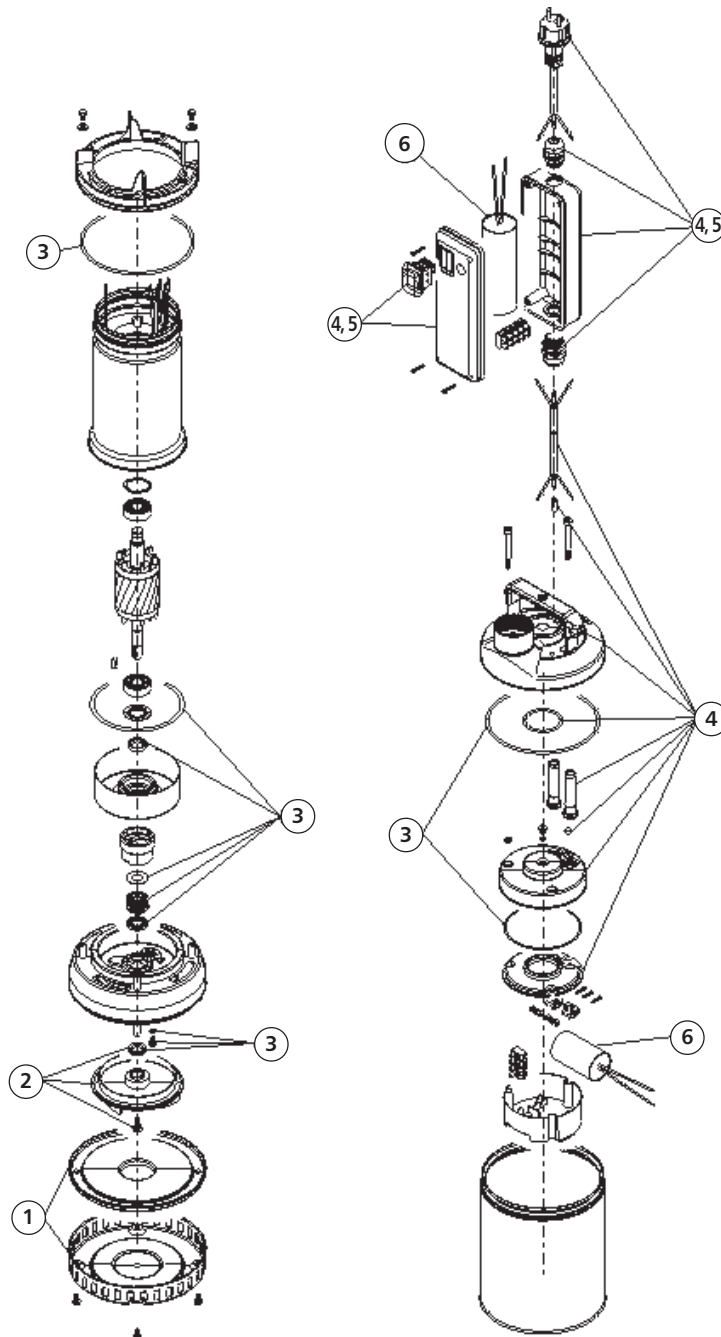
Item No. 9 includes motor adapter, rotor, stator, tolerance ring, ground wire and ground screw.

1/2 HP — .85 quarts of insulating oil required.

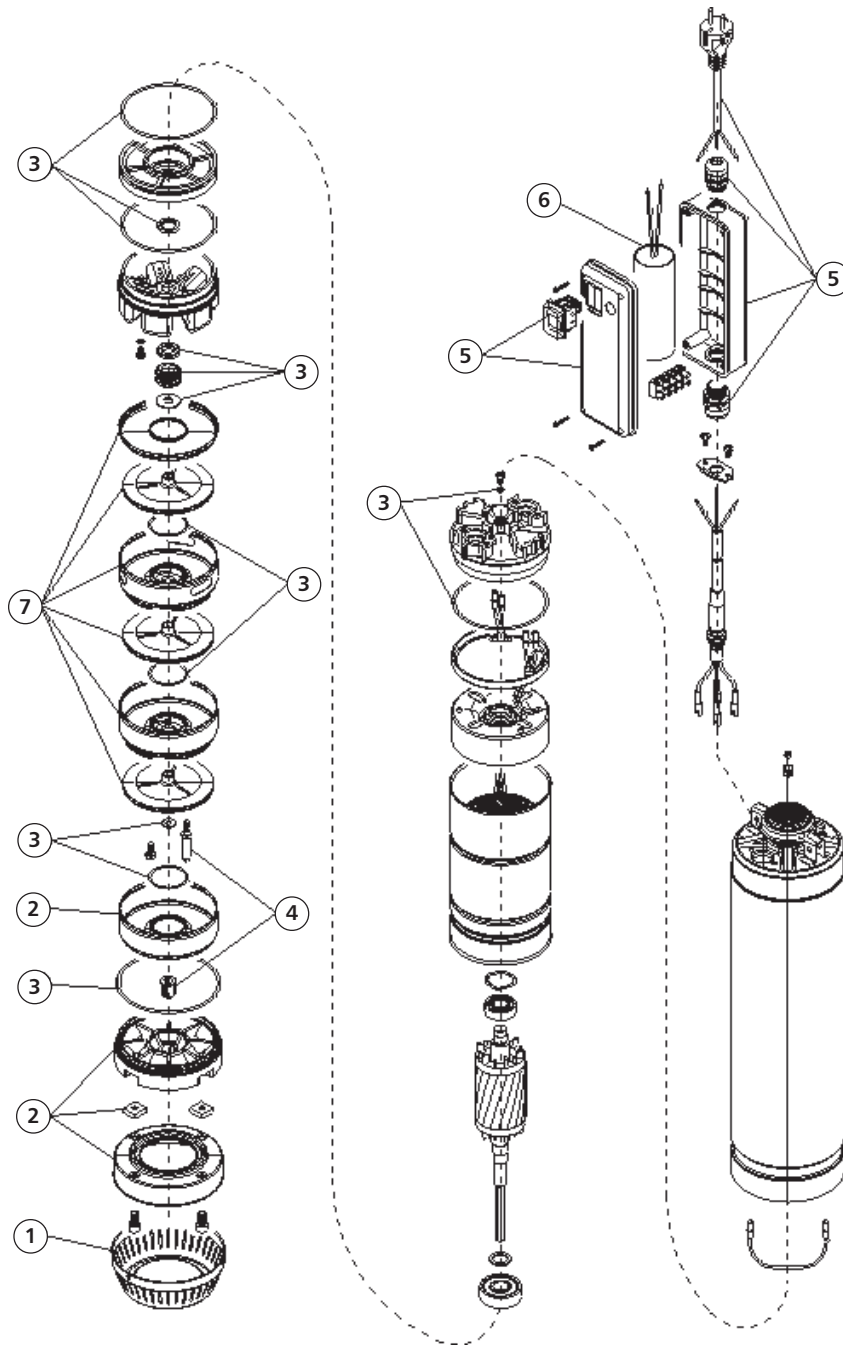
Item Number	Part Description	Repair Parts Order Number			
		1/2 HP	3/4 HP	1 HP	1½ HP
1	Base Package (Suction Flange, Feet, Screws)	15L1		15L2	
2	DV Impeller Package (Impeller, Screw, Key, V-Ring)	15L3	15L4	15L5	15L6
	DM Impeller Package (Impeller, Screw, Key, V-Ring)	15L7	15L8	15L9	15L10
3	Pump Seal Package (V-Ring, Mechanical Seal, O-Rings)		15L11		
4	Cord / Handle / Capacitor Box Assembly	115V, Single Phase	15L12	N/A	
		230V, Single Phase	15L13		15L14
	Cord / Handle Assembly	230/460V, Three Phase	15L15		
5	Capacitor Box / Cord Assembly		N/A		15L16
6	Capacitor	230V, Single Phase	9L115	9L116	9L114
		115V, Single Phase	9L112	N/A	

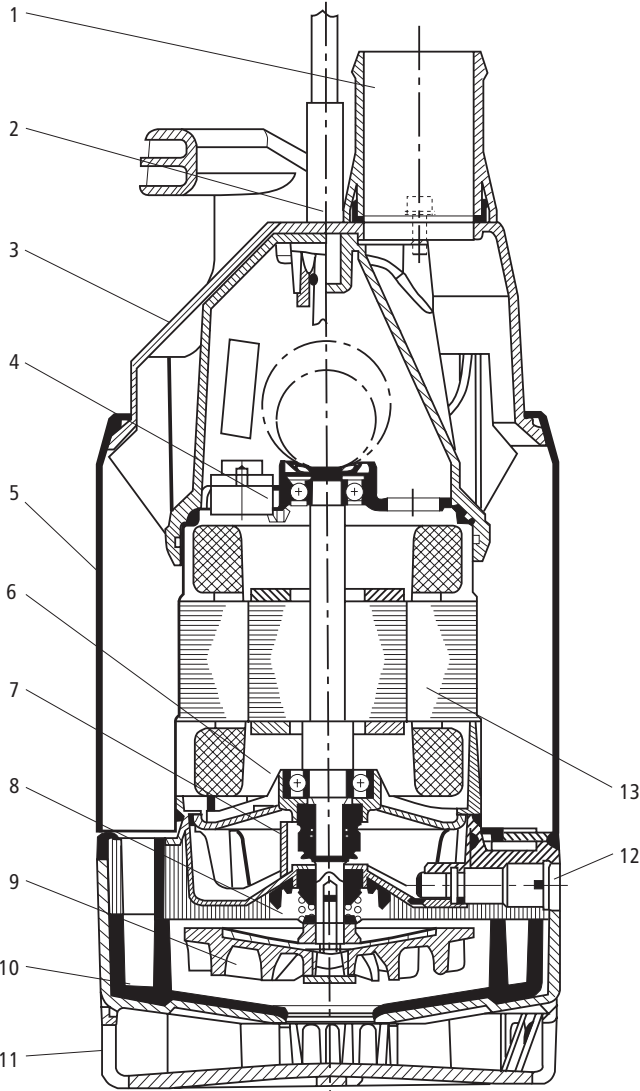


Item Number	Part Description	Repair Parts Order Number			
		1/2 HP	3/4 HP	1 HP	1½ HP
1	Strainer Package (Suction Flange and Strainer)	15L17		15L18	
2	Impeller Package (Impeller, Screw, Key, V-Ring)	15L19	15L20	15L21	15L22
3	Pump Seal Package (V-Ring, Mechanical Seal, O-Rings)	15L23			
4	Cord / Handle / Capacitor Box Assembly	115V, Single Phase	15L24	N/A	
	Cord / Handle Assembly	230V, Single Phase	15L25	15L26	N/A
5	Capacitor Box / Cord Assembly	230/460V, Three Phase	15L27		
			N/A	15L16	N/A
6	Capacitor	230V, Single Phase	9L115	9L116	9L114
		115V, Single Phase	9L112	N/A	



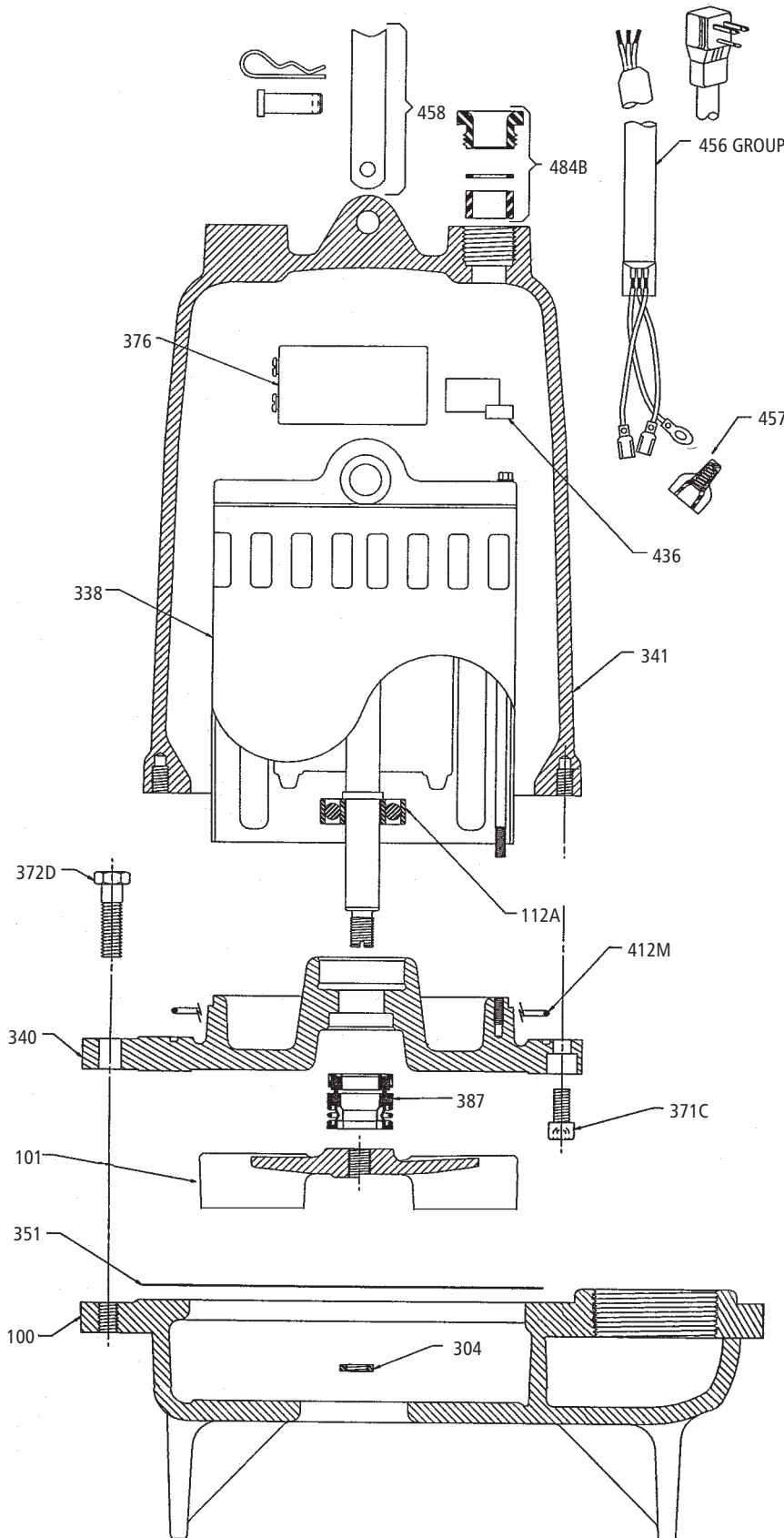
Item Number	Part Description	Repair Parts Order Number		
		1/2 HP	3/4 HP	1 HP
1	Suction Strainer	15L28		
2	Lower Bearing Support Package	15L29		
3	Pump Seal Package (Mechanical Seal and O-Rings)	15L30		
4	Bushing Package	15L31		
5	Capacitor Box / Cord Assembly	N/A	15L32	15L16
6	Capacitor	115V, Single Phase	9L112	
		230V, Single Phase	9L113	9L113 9L114
7	Impeller / Diffuser Package	15L33		





Item No.	Part Description	Quantity Required	Repair Part Order No.
1	Discharge Connection - Threaded	1	6K167
2	Cordset - 1 Phase, 115V		9K386
	Cordset - 1 Phase, 230V		9K387
3	Handle / Cover		—
4	Bearing - Upper		—
5	Casing		—
6	Bearing - Lower		—
7	Mechanical Seal - Lower		—
8	Mechanical Seal - Upper		—
9	Impeller		—
10	Diffuser		—
11	Strainer		—
12	Plug - Oil		—
13	Motor	—	
Kits		Kit	
Impeller - 1/2 HP	Impeller, Impeller Screw, Protective Plug, Washer, Assembly Instructions	1	15K11
Impeller - 1 HP	Impeller, Impeller Screw, Protective Plug, Washer, Assembly Instructions		15K12
Diffuser	Diffuser, Screws, Washers, Assembly Instruction		15K13
Mechanical Seal - Lower	Mechanical Face-Seal Unit, Assembly Instruction		15K14
Mechanical Seal - Upper & Lower	Complete Mechanical Seal Kit		15K41
Ball Bearing Kit	Upper and Lower Ball Bearings		15K42
O-Ring Kit (Complete Set)	Complete O-Ring Set		15K43

WE Series



CAPACITOR DATA		
"K" no.	MFD	VAC
9K197	161/193	110
9K351	30	370
9K352	200/240	220

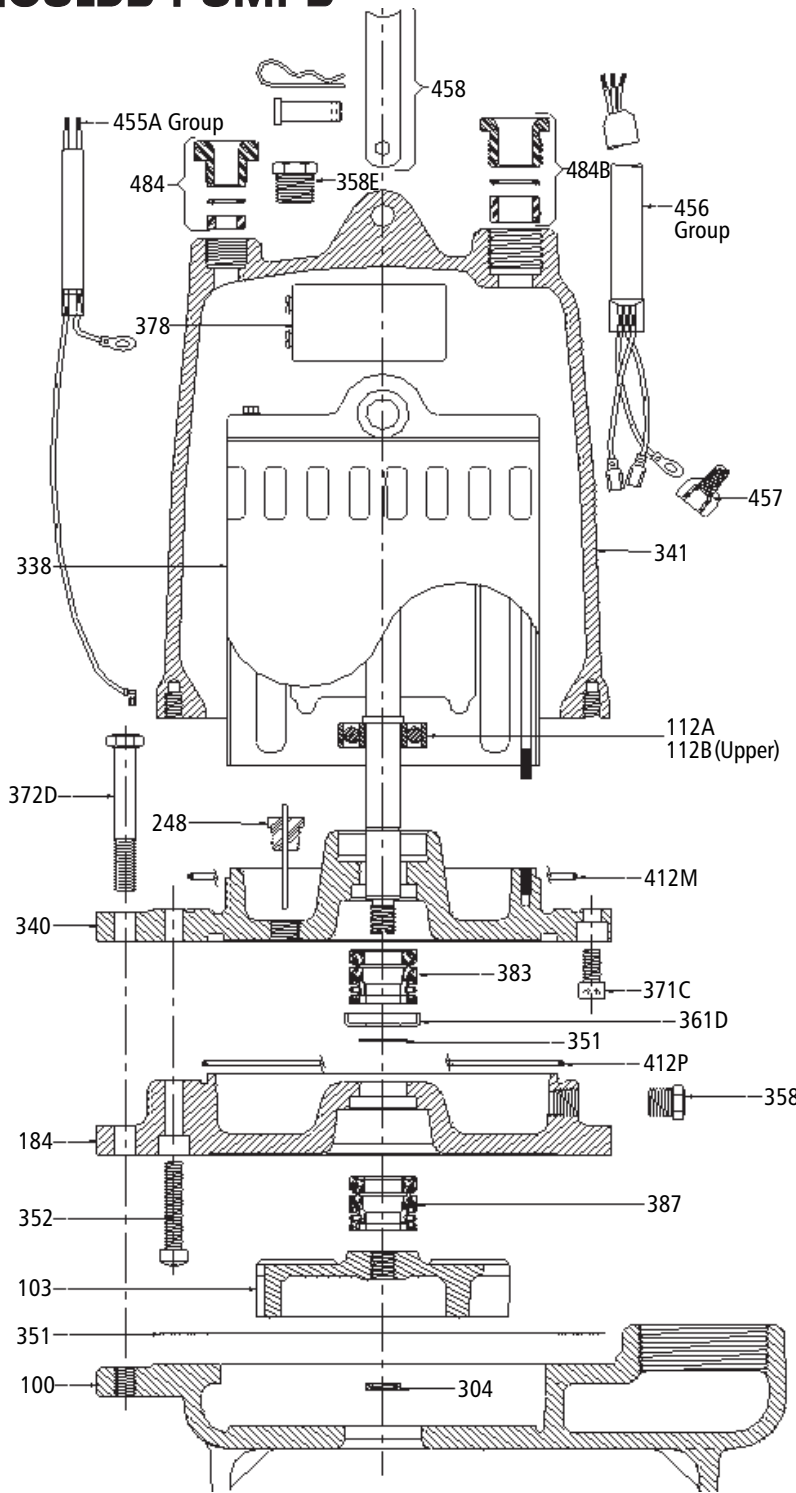
Item No.	Part Description	Material	Qty. Reqd.	Repair Parts Order Number						Max. Wt. (lbs.)
				1725 RPM	3450 RPM					
				1/2 HP	1/2 HP	3/4 HP	1 HP	1 1/2 HP	2 HP	
100	Casing – 1/2 HP "L" Model Only	Cast Iron	1	1K171	N/A					13.0
	Casing – All Others (M, H, HH)			N/A	1K170					
101	Impeller	Cast Iron	1	2K158	2K220	2K219	2K218	2K217	2K840	2.0
	Impeller	Bronze		2K271	2K272	2K273	2K274	2K275	2K841	2 1/2
	Impeller – High Head "HH"	Cast Iron		N/A	2K225	N/A	N/A	2K221	N/A	3 1/2
	Impeller – High Head "HH"	Bronze		N/A	2K276	N/A	N/A	2K277	N/A	4.0
112A	Lower Ball Bearing	Steel	1	4K132					4K384	–
112B	Upper Ball Bearing	Steel	1	4K132						–
218	Insulating Turbine Oil	ASTM150		4K432 (1 gallon 1/2-1 1/2 HP, .88 gallons 2 HP)						7 1/2 lbs./gal.
304	Impeller Locknut - All	AISI 300 SS	1	13K286						–
338	Motor	Motor with Stainless Steel Shaft	1	118-121R	118-1222R	N/A	N/A	N/A	N/A	13.0 to 24.0
				118-1215R	118-1236R	118-1236R	118-1238R	118-1238R	N/A	
				118-122R	118-1223R	118-1232R	118-1233R	118-1234R	120-845R	
				N/A	118-1333R	118-1334R	118-1335R	118-1336R	120-8425R	
				N/A	118-1321R	118-1322R	118-1323R	118-1324R	120-8425R	
				N/A	118-1328R	118-1330R	118-1330R	118-1331R	120-8435R	
340	Seal / Bearing Housing	Cast Iron	1	1K167				1K332	10.0	
341	Motor Cover	Cast Iron	1	1K207		1K208			23.0	
				N/A	1K208					
351	Casing Gasket - All Except "HH"	Composite	1	5K170					–	
	Shim Set - "HH" Models Only	Plastic	1	5K169					–	
358E	Plug – Motor Cover 3/8" NPT	Steel	1	6K3					–	
371C	Skt. Hd. Screw – Housing to Motor Cover	AISI 300 SS	4	13K271					–	
372D	Hex Cap Screw – Housing to Casing	AISI 300 SS	4	13K186					–	
376	Capacitor (1 Phase Only)	Varies	1	9K197				9K352	–	
				N/A				9K351		
387	Mechanical Seal – Standard	Silicon Carbide	1	10K120				10K119	–	
	Mechanical Seal – Optional	Tungsten Carbide	1	10K122				10K123	–	
412M	O-ring – Motor Cover	BUNA-N, AS 568A-166	1	4K252					–	
436	Solid State Switch (1 Phase Only)		1	N/A				9K356	–	
457	Wire Nut (Power Cable)	Special Nylon Housing	2 up to 6	N/A				9K145	–	
				N/A	9K145					
458	Handle Assembly	AISI 300 SS	1	4K243					–	
484B	Strain Relief Assembly (Power Cable)	Varies	1	5K113		5K111			–	
				1	N/A	5K111			–	
	Loctite #271 - Impeller / Nut		1	AL27121					–	

Item No. 456, Power Cables	Type and AWG Size	Standard length	Optional Lengths			Wt. (lbs./5 ft.)
		20'	30'	50'	100'	
1 PH: 1/2 HP, 115 V; standard with plug, optional length cords have bare leads.	SJTOW – 16/3	9K165	9K214	9K215	N/A	0.5
1 PH: 1/2 HP, 115 V; standard with plug, optional length cords have bare leads.	STOW – 14/3	9K385 - SJTOW	9K216*	9K161*	9K217*	0.9
1 PH: 1/2 & 1/2 HP, 208 & 230 V; standard with plug, opt. length cords have bare leads.	SJTOW – 16/3	9K164	9K214	9K215	N/A	0.5
1 PH: 3/4 – 1 1/2 HP, 208 & 230 V with bare leads.	STOW – 14/3	9K163	9K216	9K161	9K217	0.9
1 PH: 2 HP, 230 V with bare leads.	STOW – 14/3	9K266	9K267	9K268	9K269	0.9
3 PH: 1/2 – 2 HP, 200–230/460/575 V with bare leads.	STOW – 14/4	9K153	9K218	9K154	9K219	1.1

* Requires 5K111 Strain Relief Assembly and 1K208 Motor Cover.

MODEL

2ED



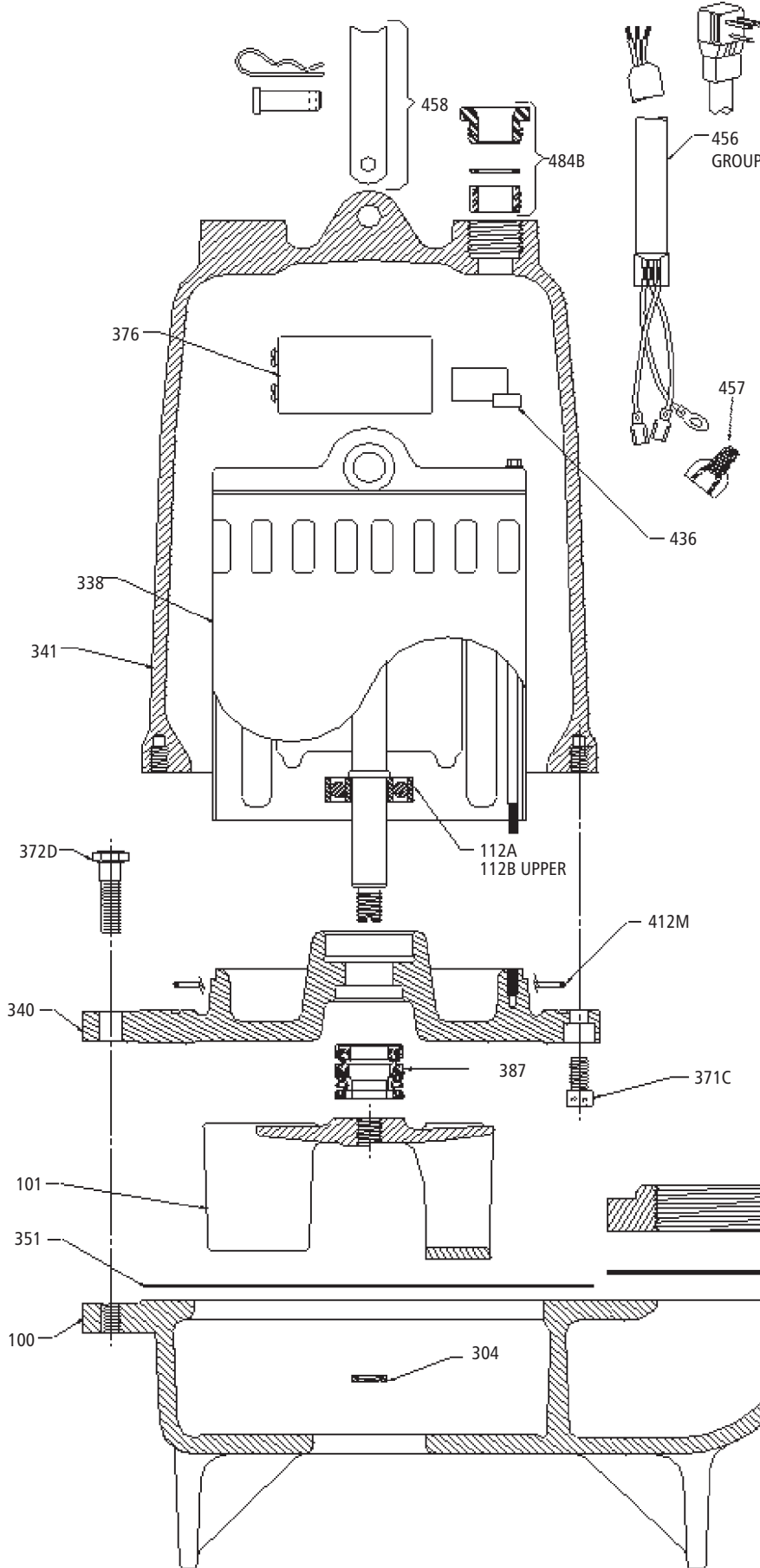
CAPACITOR DATA		
"K" no.	MFD	VAC
9K197	161/193	110

Item No. 456, Power Cables	Type and AWG Size	Standard length				Wt. (lbs./5 ft.)
		20'	30'	50'	100'	
1 PH: ½ HP, 115 V; standard with plug, optional lengths have bare leads.	SJTOW – 16/3	9K165	9K214	9K215	N/A	0.5
1 PH: ½ HP, 115 V; standard with plug, optional lengths have bare leads.	STOW – 14/3	9K385 - SJTOW	9K216*	9K161*	9K217*	0.9
1 PH: ½ & ½ HP, 208 & 230 V; standard with plug, opt. lengths have bare leads.	SJTOW – 16/3	9K164	9K214	9K215	N/A	0.5
1 PH: ¾ – 1½ HP, 208 & 230 V with bare leads.	STOW – 14/3	9K163	9K216	9K161	9K217	0.9
3 PH: ½ – 1½ HP, 200–230/460/575 V with bare leads.	STOW – 14/4	9K153	9K218	9K154	9K219	1.1
Item No. 455A, Sensor Cables						
Mechanical Seal Sensor - Standard for All Models	SJTOW – 16/2	9K189	9K220	9K221	9K222	0.5
Mechanical Seal/Heat Sensor - Optional for 3-Phase Models	SJTOW – 18/4	9K237	9K238	9K239	9K240	0.5

* Requires 5K111 Strain Relief Assembly and 1K208 Motor Cover.

Item No.	Part Description	Material	Qty. Req'd.	Repair Parts Order Number					Max. Wt. (lbs.)	
				1725 RPM	3450 RPM					
				1/3 HP	1/2 HP	3/4 HP	1 HP	1 1/2 HP		
100	Casing – "F" Model Only (8th Digit)	Cast Iron	1	1K171	N/A				13.0	
	Casing – All Others			N/A	1K170					
101	Impeller – Standard	Cast Iron	1	2K158	2K220	2K219	2K218	2K217	4.0	
	Model Number (8th Digit) = Diameter	Bronze		E, F = 5 3/8"	D = 3 3/8"	C = 4 1/8"	B = 4 1/16"	A = 4 9/16"	2.5	
	Impeller – Standard			2K271	2K272	2K273	2K274	2K275		
	Model Number (8th Digit) = Diameter	Cast Iron		E, F = 5 3/8"	D = 3 3/8"	C = 4 1/8"	B = 4 1/16"	A = 4 9/16"	3.5	
	Impeller – High Head			N/A	2K225	N/A	N/A	2K221		
	Model Number (8th Digit) = Diameter	Bronze		N/A	H = 3 3/8"	N/A	N/A	G = 5 1/2"	4.0	
Impeller – High Head	N/A		2K276	N/A	N/A	2K277				
	Model Number (8th Digit) = Diameter			H = 3 3/8"			G = 5 1/2"			
112A	Lower Ball Bearing	Steel	1	4K132				–		
112B	Upper Ball Bearing	Steel	1	4K132				–		
184	Seal Housing	Cast Iron	1	1K229				9.5		
218	Insulating Oil – Gallons Required	Turbine Oil - ASTM150	–	4K432				7 1/2 lbs./gal.		
	Gallons Required in Seal Housing			0.10						
	Gallons Required in Motor Cover			1.0						
246	Seal Sensor – Plug and Rod	Nylon/Brass	1	9K191				–		
304	Impeller Locknut - All	AISI 300 SS	1	13K286				–		
338	Motor	Stainless Steel Shaft	1	1 Phase, 115V	119-493R	119-4931R	N/A			13.0 to 24.0
				1 Phase, 208V	119-49815R	119-4992R	119-4992R	119-4994R	119-4994R	
				1 Phase, 230V	119-494R	119-4932R	119-4934R	119-4934R	119-4935R	
				3 Phase, 200V	N/A	119-4971R	119-4973R	119-4973R	119-4974R	
				3 Phase, 230/460V	N/A	119-4941R	119-4943R	119-4943R	119-4944R	
				3 Phase, 575V	N/A	119-4951R	119-4954R	119-4954R	119-4954R	
340	Bearing Housing	Cast Iron	1	1K228				10.0		
341	Motor Cover	Cast Iron	1	1K230		1K231			23.0	
				N/A	1K231					
351	Casing Gasket	Composite	1	5K170				–		
	Shim Set - "High Head" Models Only	Plastic	1	5K169				–		
352	Skt. Hd. Screw – Seal Housing to Motor Cover	AISI 300 SS	2	13K219				–		
358	Plug – Seal Housing 1/4" NPT	Steel	1	6K2				–		
358E	Plug – Motor Cover 3/8" NPT	Steel	1	6K3				–		
361	Retaining Ring	AISI 300 SS	1	4K375				–		
361D	Seal Retainer	AISI 300 SS	1	4K379				–		
371C	Skt. Hd. Screw – Bearing Housing to Motor Cover	AISI 300 SS	2	13K271				–		
372D	Hex Cap Screw – Housing to Casing	AISI 300 SS	4	13K222				–		
376	Capacitor (1 Phase Only) – Start	–	1	9K197				–		
383	Mechanical Seal – Upper	Carbon/Ceramic	1	10K121 (Type 16)				–		
387	Mechanical Seal – Lower (Standard)	Silicon Carbon	1	10K120 (Type 16)				–		
	Mechanical Seal – Lower (Optional)	Tungsten Carbon	1	10K122 (Type 16)				–		
412M	O-ring – Motor Cover	BUNA-N, AS 568A-166	1	4K252				–		
412P	O-ring – Seal/Bearing Housing	BUNA-N, AS 568A-163	1	5K181				–		
457	Wire Nut	Special Nylon Housing	N/A	None Required				–		
				1 pkg.	N/A	9K145 (package of 8)			–	
				1 pkg.	9K145 (package of 8)				–	
458	Handle Assembly	AISI 300 SS	1	4K243				–		
484	Strain Relief Assembly, Sensor Cable	Varies	1	5K113				–		
484B	Strain Relief Assembly (Power Cable)	Varies	1	5K113		5K111		–		
			1	N/A	5K111			–		
	Heat Sensor Kit (Optional)	–	1	9K261				–		
	Seal Installation Tool	–	1	A02A013				–		
	Loctite #271	–	1	AL27121				–		

**WS_B, WS_BF,
WS_BHF**



CAPACITOR DATA		
"K" no.	MFD	VAC
9K197	161/193	110
9K235	189/227	110
9K351	30	370
9K352	200/240	220
9K353	295/355	125

Note: Model 3886 casing is threaded 2" NPT and therefore does not require some of the diagramed parts.

358E – Pipe Plug Not Shown
1750 RPM – Open Impeller
3500 RPM – Enclosed Impeller

Item No.	Part Description	Material	Qty. Req.	Repair Parts Order Number				Max. Wt. (lbs.)
				1725 RPM				
				1/3 HP	1/2 HP	3/4 HP	1 HP	
100	Casing	Cast Iron	1	1K168				16.5
101	Impeller	Cast Iron	1	2K268	2K239	2K240	2K241	3.0
	Impeller	Bronze	1	2K279	2K280	2K281	2K282	3.5
112A	Lower Ball Bearing	Steel	1	4K132				–
112B	Upper Ball Bearing	Steel	1	4K132				–
218	Insulating Turbine Oil	ASTM150	-	4K432 (1 gallon 1/3 - 1 HP)				7.5 lbs./gal.
304	Impeller Locknut - All	AISI 300 SS	1	13K286				–
338	Motor – 1 Phase, 115V	Motor with Stainless Steel Shaft	1	118-121R	118-123R	N/A	N/A	13.0 to 24.0
	Motor – 1 Phase, 208V			118-1215R	118-1215R	118-1217R	118-1217R	
	Motor – 1 Phase, 230V			118-122R	118-124R	118-1212R	118-1213R	
	Motor – 3 Phase, 200 V			N/A	118-1314R	118-1316R	118-1316R	
	Motor – 3 Phase, 230/460 V			N/A	118-132R	118-134R	118-134R	
	Motor – 3 Phase, 575 V			N/A	118-139R	118-1311R	118-1311R	
340	Seal / Bearing Housing	Cast Iron	1	1K167				10.0
341	Motor Cover – 1 Phase	Cast Iron	1	1K207		1K208		20.0
	Motor Cover – 3 Phase			1K208				
351	Casing Gasket	Composite	1	5K170				–
358E	Plug – Motor Cover 3/8" NPT	Steel	1	6K3				–
371C	Skt. Hd. Screw – Housing to Motor Cover	AISI 300 SS	4	13K271				–
372D	Hex Cap Screw – Housing to Casing	AISI 300 SS	4	13K186				–
376	Capacitor (1 Phase only) Start	Varies	1	9K197		9K235		–
387	Mechanical Seal – Standard	Silicon Carbide	1	10K120				–
	Mechanical Seal – Optional	Tungsten Carbide	1	10K122				–
412M	O-ring – Motor Cover	BUNA-N, AS568A-166	1	4K252				–
457	Wire Nut (Power Cable)	1 Phase	-	N/A				–
		3 Phase	Special Nylon Housing up to 6	N/A	9K145			–
458	Handle Assembly	AISI 300 SS	1	4K243				–
484B	Strain Relief Assembly (Power Cable)	1 Phase	1	5K113		5K111		–
		3 Phase		N/A	5K111			–
	Loctite #271	–	1	AL27121				–

Item No. 456, Power Cables	Type and AWG Size	Standard length	Optional Lengths			Wt. (lbs./5 ft.)
		20'	30'	50'	100'	
1 PH: 1/3 HP, 115 V; standard with plug, optional length cords have bare leads.	SJTOW – 16/3	9K165	9K214	9K215	N/A	0.5
1 PH: 1/3 HP, 115 V; standard with plug, optional length cords have bare leads.	STOW – 14/3	9K385 - SJTOW	9K216*	9K161*	9K217*	0.9
1 PH: 1/3 and 1/2 HP, 208 & 230 V; standard with plug, opt. length cords have bare leads.	SJTOW – 16/3	9K164	9K214	9K215	N/A	0.5
1 PH: 3/4 & 1 HP, 208 & 230 V with bare leads.	STOW – 14/3	9K163	9K216	9K161	9K217	0.9
3 PH: 1/2 – 1 HP, 200-230/460/575 V with bare leads.	STOW – 14/4	9K153	9K218	9K154	9K219	1.1

* Requires 5K111 Strain Relief Assembly and 1K208 Motor Cover.

Item No.	Part Description	Material	Qty. Req.	Repair Parts Order Number				Max. Wt. (lbs.)
				1725 RPM				
				1/3 HP	1/2 HP	3/4 HP	1 HP	
100	Casing	Cast Iron	1	1K178				16.5
101	Impeller	Cast Iron	1	2K268	2K239	2K240	2K241	3.0
	Impeller	Bronze	1	2K279	2K280	2K281	2K282	3.5
112A	Lower Ball Bearing	Steel	1	4K132				–
112B	Upper Ball Bearing	Steel	1	4K132				–
195C	Discharge Flange (2" NPT STD.)	Cast Iron	1	6K76				1.5
	Discharge Flange (3" NPT OPT.)			A1-3				
218	Insulating Turbine Oil	ASTM150	1	4K432				7.5 lbs./gal.
304	Impeller Locknut - All	AISI 300 SS	1	13K286				–
338	Motor – 1 Phase, 115V	Motor with Stainless Steel Shaft	1	118-121R	118-123R	N/A	N/A	13.0 to 24.0
	Motor – 1 Phase, 208V			118-1215R	118-1215R	118-1217R	118-1217R	
	Motor – 1 Phase, 230V			118-122R	118-124R	118-1212R	118-1213R	
	Motor – 3 Phase, 200 V			N/A	118-1314R	118-1316R	118-1316R	
	Motor – 3 Phase, 230/460 V			N/A	118-132R	118-134R	118-134R	
	Motor – 3 Phase, 575 V			N/A	118-139R	118-1311R	118-1311R	
340	Seal / Bearing Housing	Cast Iron	1	1K167				10.0
341	Motor Cover – 1 Phase	Cast Iron	1	1K207		1K208		20.0
	Motor Cover – 3 Phase			1K208				
351	Casing Gasket	Composite	1	5K170				–
351A	Discharge Flange Gasket	Composite	1	5K150				–
357	Hex Nut – Discharge Flange	AISI 300 SS	2	13K99				–
358E	Plug – Motor Cover 3/8" NPT	Steel	1	6K3				–
371C	Skt. Hd. Screw – Housing to Motor Cover	AISI 300 SS	4	13K271				–
371H	Hex Cap Screw – Discharge Flange	AISI 300 SS	2	13K153				–
372D	Hex Screw – Housing to Casing	AISI 300 SS	4	13K186				–
376	Capacitor (1 Phase Only) Start	Varies	1	9K197		9K235		–
387	Mechanical Seal – Standard	Silicon Carbide	1	10K120				–
	Mechanical Seal – Optional	Tungsten Carbide	1	10K122				–
412M	O-Ring – Motor Cover	Buna-N, AS 568A-166	1	4K252				–
457	Wire Nut, Power Cable, 3 Phase	Special Nylon Housing	Up to 6	N/A	9K145			–
458	Handle Assembly	AISI 300 SS	1	4K243				–
484B	Strain Relief Assembly (Power Cable)	Varies	1	5K113		5K111		–
			1	N/A	5K111			
528	Washer – Discharge Flange	AISI 300 SS	2	13K82				–
	Loctite #271	–	1	AL27121				–

Item No. 456, Power Cables	Type and AWG Size	Standard length	Optional Lengths			Wt. (lbs./5 ft.)
		20'	30'	50'	100'	
1 PH: 1/3 HP, 115 V; standard with plug, optional length cords have bare leads.	SJTOW – 16/3	9K165	9K214	9K215	N/A	0.5
1 PH: 1/2 HP, 115 V; standard with plug, optional length cords have bare leads.	STOW – 14/3	9K385 - SJTOW	9K216*	9K161*	9K217*	0.9
1 PH: 1/3 & 1/2 HP, 208 & 230 V; standard with plug, optional length cords have bare leads.	SJTOW – 16/3	9K164	9K214	9K215	N/A	0.5
1 PH: 3/4 & 1 HP, 208 & 230 V with bare leads.	STOW – 14/3	9K163	9K216	9K161	9K217	0.9
3 PH: 1/2 – 1 HP, 200-230/460/575 V with bare leads.	STOW – 14/4	9K153	9K218	9K154	9K219	1.1

* Requires 5K111 Strain Relief Assembly and 1K208 Motor Cover.

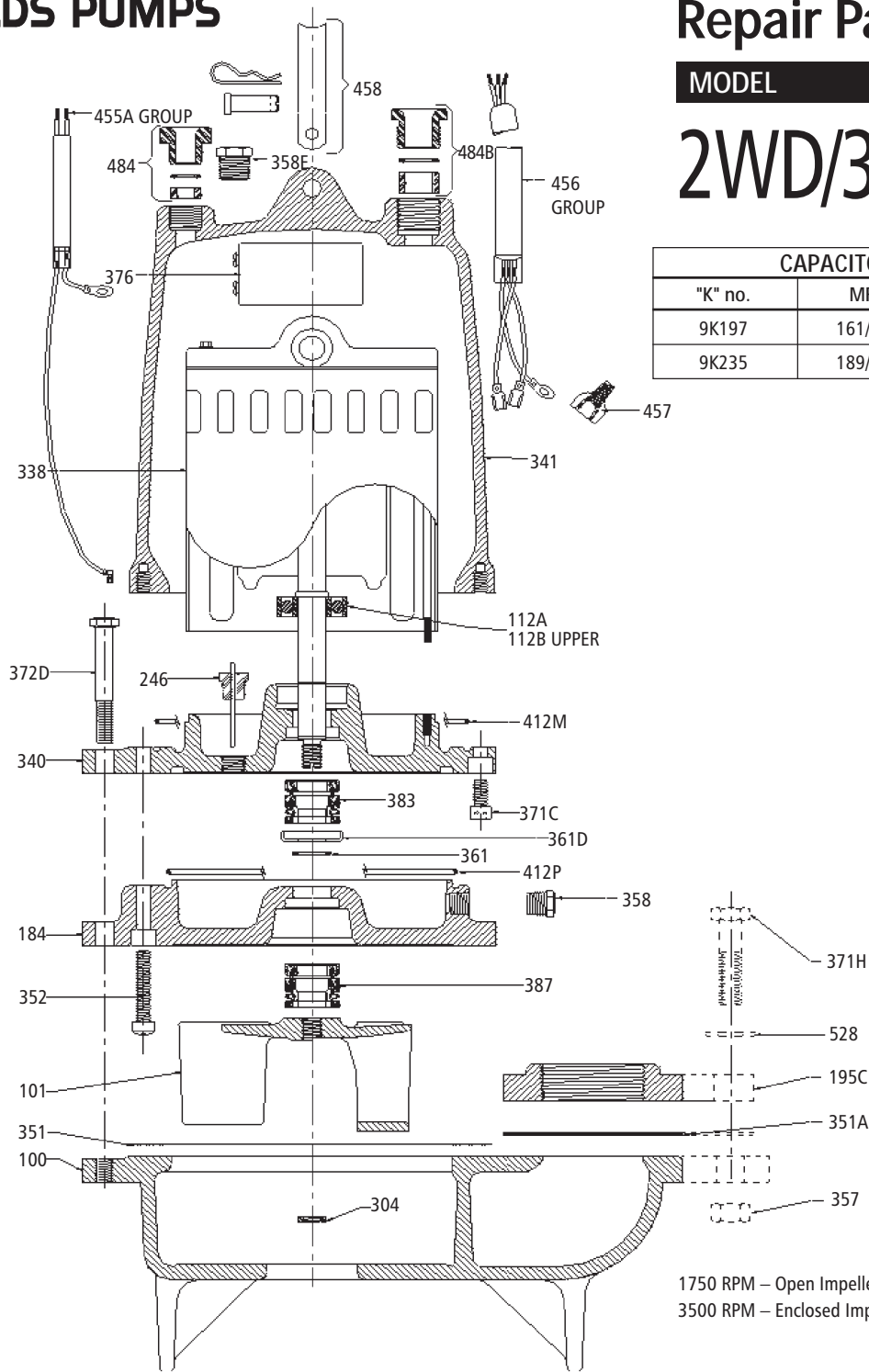
Item No.	Part Description	Material	Qty. Req.	Repair Parts Order Number						Max. Wt. (lbs.)
				3450 RPM						
				1/3 HP	1/2 HP	3/4 HP	1 HP	1 1/2 HP	2 HP	
100	Casing	Cast Iron	1	1K330						16.5
101	Impeller	Cast Iron	1	2K858	2K856	2K854	2K852	2K800	2K798	3.0
	Impeller	Bronze	1	2K859	2K857	2K855	2K853	2K801	2K799	3.5
112A	Lower Ball Bearing	Steel	1	4K132			4K384			–
112B	Upper Ball Bearing	Steel	1	4K132						–
195C	Discharge Flange (2" NPT STD.)	Cast Iron	1	6K76						1.5
	Discharge Flange (3" NPT OPT.)	Cast Iron	1	A1-3						1.5
218	Insulating Turbine Oil	ASTM150	-	4K432 (1 gallon 1/3-1 HP, .88 gallons 1 1/2 and 2 HP)						7.5 lbs./gal.
304	Impeller Locknut - All	AISI 300 SS	1	13K286						–
338	Motor – 1 Phase, 115V	Stainless Steel Shaft	1	118-1222R	118-1222R	N/A	N/A	N/A	N/A	13.0 to 24.0
	Motor – 1 Phase, 208V			118-1236R	118-1236R	118-1236R	118-1238R	N/A	N/A	
	Motor – 1 Phase, 230V			118-1223R	118-1223R	118-1232R	118-1233R	120-844R	120-845R	
	Motor – 3 Phase, 200 V			N/A	118-1333R	118-1334R	118-1335R	120-8425R	120-8425R	
	Motor – 3 Phase, 230/460 V			N/A	118-1321R	118-1322R	118-1323R	120-8425R	120-8425R	
	Motor – 3 Phase, 575 V			N/A	118-1328R	118-1330R	118-1330R	120-8435R	120-8435R	
340	Seal / Bearing Housing	Cast Iron	1	1K167			1K332			10.0
341	Motor Cover – 1 Phase	Cast Iron	1	1K207		1K208				20.0
	Motor Cover – 3 Phase			1K208						
351	Casing Gasket	Composite	1	5K170						–
351A	Discharge Flange Gasket	Composite	1	5K150						–
357	Hex Nut – Discharge Flange	AISI 300 SS	2	13K99						–
358E	Plug – Motor Cover 3/8" NPT	Steel	1	6K3						–
371C	Skt. Hd. Screw – Housing to Motor Cover	AISI 300 SS	4	13K271						–
371H	Hex Cap Screw – Discharge Flange	AISI 300 SS	2	13K153						–
372D	Hex Cap Screw – Housing to Casing	AISI 300 SS	4	13K186						–
376	Capacitor (1 Phase Only) Start	Varies	1	9K197			9K353	9K352		–
	Capacitor (1 Phase Only) Run			N/A				9K351		
387	Mechanical Seal – Standard	Silicon Carbide	1	10K120			10K119			–
	Mechanical Seal – Optional	Tungsten Carbide	1	10K122			10K123			–
412M	O-Ring – Motor Cover	BUNA-N, AS568A-166	1	4K252						–
436	Solid State Switch (1 Phase Only)	–	1	N/A			9K355	9K356		–
457	Wire Nut (Power Cable)	1 PH	2	N/A			9K145			–
		3 PH		N/A	9K145					
458	Handle Assembly	AISI 300 SS	1	4K243						–
484B	Strain Relief Assembly (Power Cable)	Varies	1	5K113		5K111				–
				N/A	5K111					–
528	Washer – Discharge Flange	AISI 300 SS	2	13K82						–
	Loctite #271	–	1	AL27121						–

Item No. 456, Power Cables	Type and AWG Size	Standard length	Optional Lengths			Wt. (lbs./5 ft.)
		20'	30'	50'	100'	
1 PH: 1/2 HP, 115 V; standard with plug, optional lengths have bare leads.	SJTOW – 16/3	9K165	9K214	9K215	N/A	0.5
1 PH: 1/2 HP, 115 V; standard with plug, optional lengths have bare leads.	STOW – 14/3	9K385 - SJTOW	9K216*	9K161*	9K217*	0.9
1 PH: 1/2 and 1/2 HP, 208 & 230 V; standard with plug, optional lengths have bare leads.	SJTOW – 16/3	9K164	9K214	9K215	N/A	0.5
1 PH: 3/4 – 1 1/2 HP, 208 & 230 V with bare leads.	STOW – 14/3	9K163	9K216	9K161	9K217	0.9
1 PH: 2 HP, 230 V with bare leads.	STOW – 14/3	9K266	9K267	9K268	9K269	0.9
3 PH: 1/2 – 2 HP, 200-230/460/575 V with bare leads.	STOW – 14/4	9K153	9K218	9K154	9K219	1.1

* Requires 5K111 Strain Relief Assembly and 1K208 Motor Cover.

MODEL

2WD/3WD



CAPACITOR DATA		
"K" no.	MFD	VAC
9K197	161/193	110
9K235	189/227	110

1750 RPM – Open Impeller
3500 RPM – Enclosed Impeller

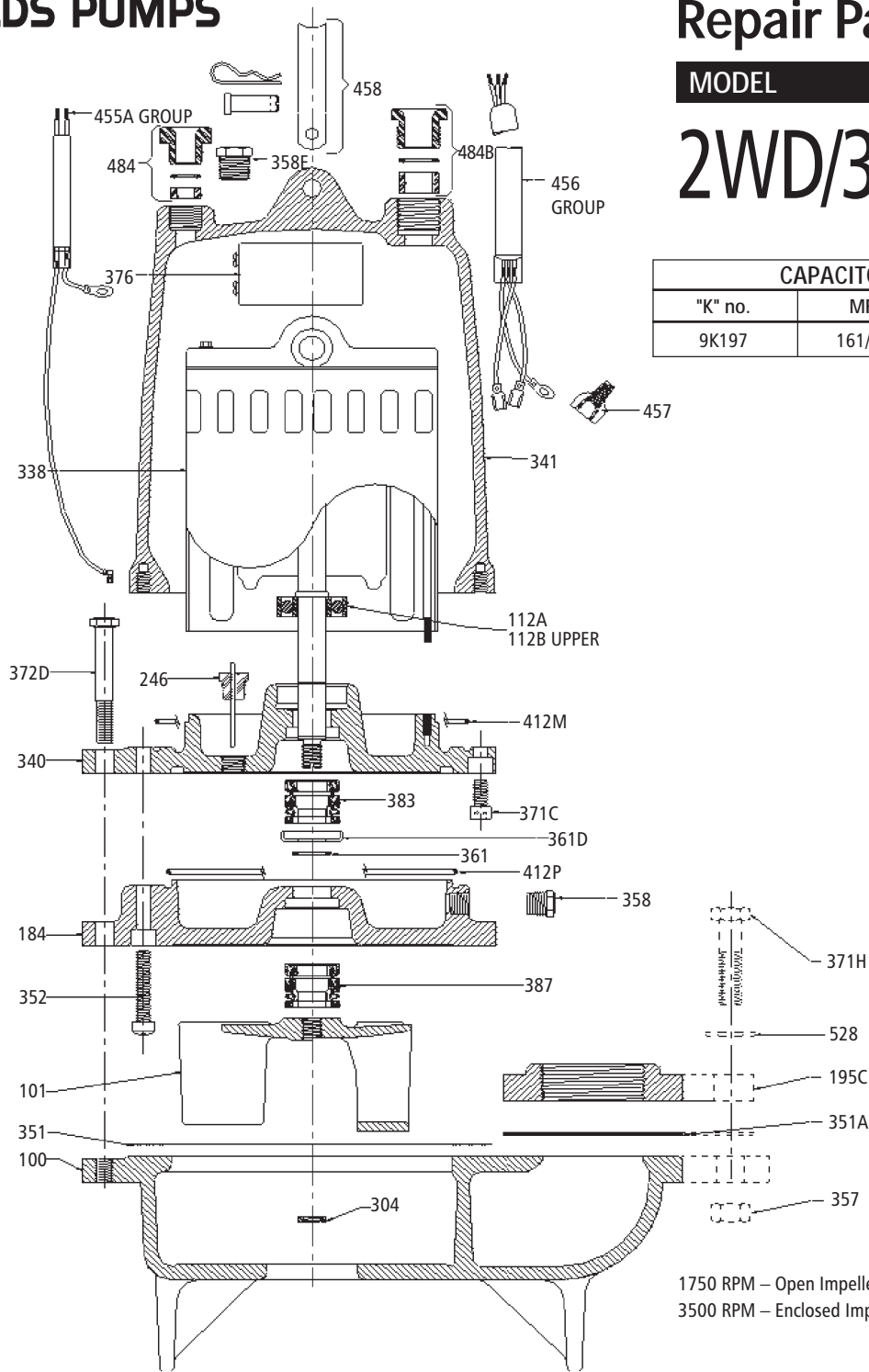
Item No. 456, Power Cables	Type and AWG Size	Standard length				Wt. (lbs./5 ft.)
		20'	30'	50'	100'	
1 PH: ½ HP, 115 V; standard with plug, optional lengths have bare leads.	SJTOW – 16/3	9K165	9K214	9K215	N/A	0.5
1 PH: ½ HP, 115 V; standard with plug, optional lengths have bare leads.	STOW – 14/3	9K385 - SJTOW	9K216*	9K161*	9K217*	0.9
1 PH: ½ & ½ HP, 208 & 230 V; standard with plug, opt. lengths have bare leads.	SJTOW – 16/3	9K164	9K214	9K215	N/A	0.5
1 PH: ¾ – 1 HP, 208 & 230 V with bare leads.	STOW – 14/3	9K163	9K216	9K161	9K217	0.9
3 PH: ½ – 1 HP, 200–230/460/575 V with bare leads.	STOW – 14/4	9K153	9K218	9K154	9K219	1.1
Item No. 455A, Sensor Cables						
Mechanical Seal Sensor - Standard for All Models	SJTOW – 16/2	9K189	9K220	9K221	9K222	0.5
Mechanical Seal/Heat Sensor - Optional for 3-Phase Models	SJTOW – 18/4	9K237	9K238	9K239	9K240	0.5

* Requires 5K111 Strain Relief Assembly and 1K208 Motor Cover.

Item No.	Part Description	Material	Qty. Req.	Repair Parts Order Number				Max. Wt. (lbs.)
				1725 RPM				
				1/3 HP	1/2 HP	3/4 HP	1 HP	
100	Casing	Cast Iron	1	1K178				16.5
101	Impeller	Cast Iron	1	2K268 E = 4 ¹ / ₁₆ "	2K239 D = 5"	2K240 C = 5 ³ / ₈ "	2K241 B = 5 ³ / ₄ "	3.0
	Impeller	Bronze	1	2K279 E = 4 ¹ / ₁₆ "	2K280 D = 5"	2K281 C = 5 ³ / ₈ "	2K282 B = 5 ³ / ₄ "	3.5
112A	Lower Ball Bearing	Steel	1	4K132				–
112B	Upper Ball Bearing	Steel	1	4K132				–
184	Seal Housing	Cast Iron	1	1K229				9.5
195C	Discharge Flange - Standard 2" NPT	Cast Iron	1	6K76				1.5
	Discharge Flange - Optional 3" NPT			A1-3				
218	Insulating Oil – Gallons Required	Turbine Oil - ASTM150	–	4K432				7.5 lbs./gal.
	Gallons Required in Seal Housing			0.10				
	Gallons Required in Motor Cover			1.0				
246	Seal Sensor - Plug and Rod	Nylon/Brass	1	9K191				–
304	Impeller Locknut – All	AISI 300 SS	1	13K286				–
338	Motor – 1 Phase, 115V	Stainless Steel Shaft	1	119-493R	119-493R	N/A	N/A	13.0 to 24.0
	Motor – 1 Phase, 208V			119-4981R	119-4981R	119-4983R	119-4983R	
	Motor – 1 Phase, 230V			119-494R	119-494R	119-496R	119-496R	
	Motor – 3 Phase, 200V			N/A	119-4961R	119-4963R	119-4963R	
	Motor – 3 Phase, 230/460V			N/A	119-4911R	119-4913R	119-4913R	
	Motor – 3 Phase, 575V			N/A	119-4921R	119-4923R	119-4923R	
340	Bearing Housing	Cast Iron	1	1K228				10.0
341	Motor Cover – 1 Phase	Cast Iron	1	1K230		1K231		20.0
	Motor Cover – 3 Phase			1K231				
351	Casing Gasket	Composite	1	5K170				–
351A	Discharge Flange Gasket	Composite	1	5K150				–
352	Skt. Hd. Screw - Seal Hsg. to Motor Cover	AISI 300 SS	2	13K219				–
357	Hex Nut – Discharge Flange	AISI 300 SS	2	13K99				–
358	Plug – Seal Housing 1/4" NPT	Steel	1	6K2				–
358E	Plug – Motor Cover 3/8" NPT	Steel	1	6K3				–
361	Retaining Ring	AISI 300 SS	1	4K375				–
361D	Seal Retainer	AISI 300 SS	1	4K379				–
371C	Skt. Hd. Screw – Brg. Hsg. to Motor Cover	AISI 300 SS	2	13K271				–
371H	Hex Cap Screw – Discharge Flange	AISI 300 SS	2	13K153				–
372D	Hex Cap Screw – Housing to Casing	AISI 300 SS	4	13K222				–
376	Capacitor (1 Phase only) – Start	Varies	1	9K197		9K235		–
383	Mechanical Seal – Upper	Carbon/Ceramic	1	10K121 (Type 16)				–
387	Mechanical Seal – Lower (Standard)	Silicon Carbide	1	10K120 (Type 16)				–
	Mechanical Seal – Lower (Optional)	Tungsten Carbide	1	10K122 (Type 16)				–
412M	O-ring – Motor Cover	BUNA-N, AS568A-166	1	4K252				–
412P	O-ring – Seal/Bearing Housing	BUNA-N, AS568A-163	1	5K181				–
457	Wire Nut	Power Cable - 3 Ph., 460V	1 pkg.	N/A	9K145 (package of 8)			–
		Seal/Heat Cable - Opt. 3 Ph. Only	1 pkg.	9K145 (package of 8)				–
458	Handle Assembly	AISI 300 SS	1	4K243				–
484	Strain Relief Assembly, Sensor Cable	Varies	1	5K113				–
484B	Strain Relief Assembly (Power Cable)	1 Phase	1	5K113		5K111		–
		3 Phase		N/A	5K111			
528	Washer – Discharge Flange	AISI 300 SS	2	13K82				–
–	Heat Sensor Kit (Optional)	–	1	9K261				–
–	Seal Installation Tool	–	1	A02A013				–
–	Loctite #271	–	1	AL27121				–

MODEL

2WD/3WD



CAPACITOR DATA		
"K" no.	MFD	VAC
9K197	161/193	110

1750 RPM – Open Impeller
3500 RPM – Enclosed Impeller

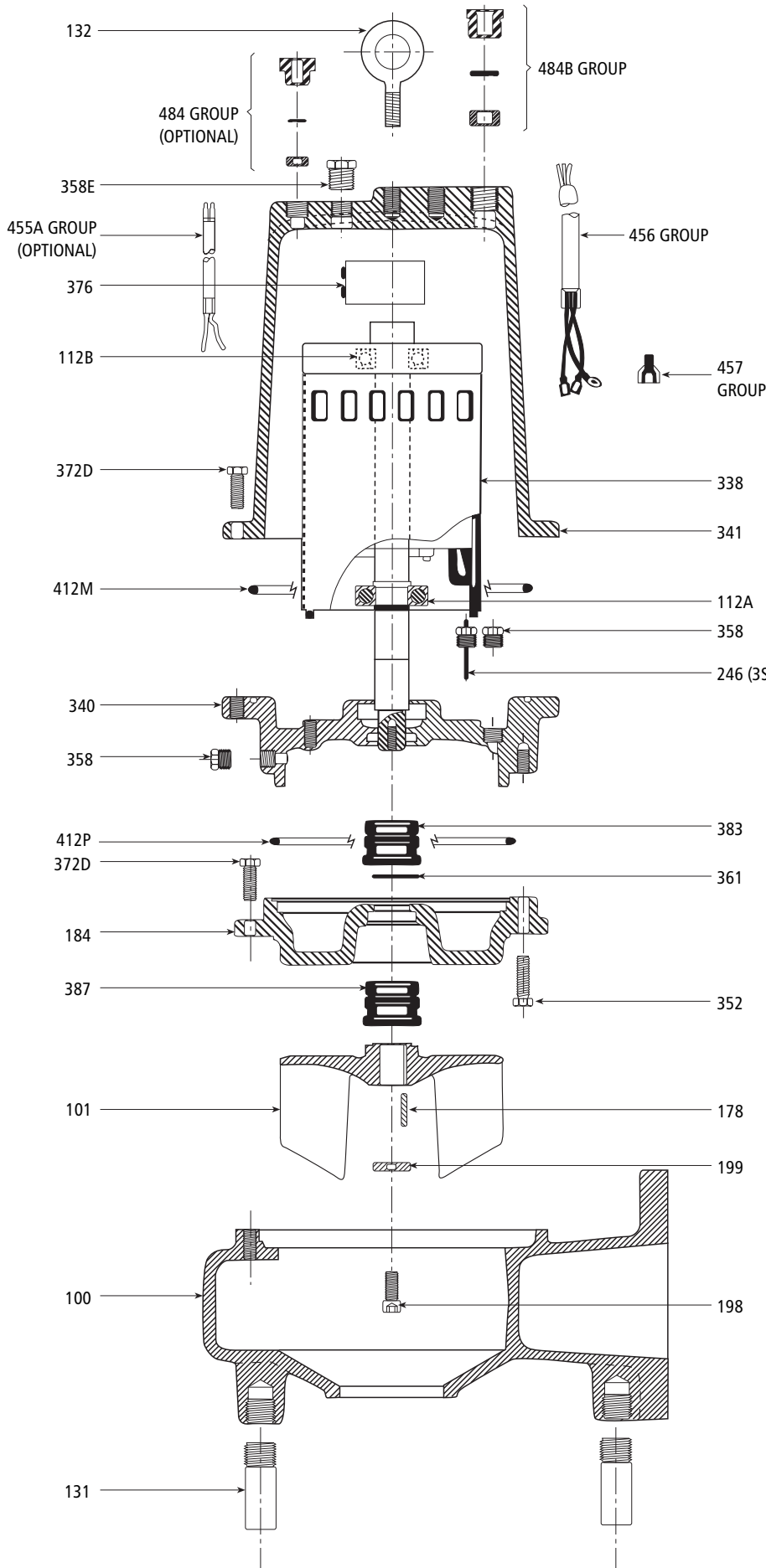
Item No. 456, Power Cables	Type and AWG Size	Standard length				Wt. (lbs./5 ft.)
		20'	30'	50'	100'	
1 PH: ½ HP, 115 V; standard with plug, optional lengths have bare leads.	SJTOW – 16/3	9K165	9K214	9K215	N/A	0.5
1 PH: ½ HP, 115 V; standard with plug, optional lengths have bare leads.	STOW – 14/3	9K385 - SJTOW	9K216*	9K161*	9K217*	0.9
1 PH: ½ & ½ HP, 208 & 230 V; standard with plug, opt. lengths have bare leads.	SJTOW – 16/3	9K164	9K214	9K215	N/A	0.5
1 PH: ¾ – 1 HP, 208 & 230 V with bare leads.	STOW – 14/3	9K163	9K216	9K161	9K217	0.9
3 PH: ½ – 1 HP, 200–230/460/575 V with bare leads.	STOW – 14/4	9K153	9K218	9K154	9K219	1.1
Item No. 455A, Sensor Cables						
Mechanical Seal Sensor - Standard for All Models	SJTOW – 16/2	9K189	9K220	9K221	9K222	0.5
Mechanical Seal/Heat Sensor - Optional for 3-Phase Models	SJTOW – 18/4	9K237	9K238	9K239	9K240	0.5

* Requires 5K111 Strain Relief Assembly and 1K208 Motor Cover.

Item No.	Part Description	Material	Qty. Req.	Repair Parts Order Number				Max. Wt. (lbs.)
				3450 RPM				
				1/3 HP	1/2 HP	3/4 HP	1 HP	
100	Casing	Cast Iron	1	1K330				16.5
101	Impeller	Cast Iron	1	2K858 K = 2 ¹⁵ / ₁₆ "	2K856 J = 3 ³ / ₁₆ "	2K854 H = 3 ³ / ₁₆ "	2K852 A = 3 ³ / ₄ "	3.0
	Impeller	Bronze	1	2K859 E = 2 ¹⁵ / ₁₆ "	2K857 J = 3 ³ / ₁₆ "	2K855 H = 3 ³ / ₁₆ "	2K853 A = 3 ³ / ₄ "	3.5
112A	Lower Ball Bearing	Steel	1	4K132				–
112B	Upper Ball Bearing	Steel	1	4K132				–
184	Seal Housing	Cast Iron	1	1K229				9.5
195C	Discharge Flange - Standard 2" NPT	Cast Iron	1	6K76				1.5
	Discharge Flange - Optional 3" NPT			A1-3				
218	Insulating Oil – Gallons Required	Turbine Oil - ASTM150	–	4K432				7.5 lbs./gal.
	Gallons Required in Seal Housing			0.10				
	Gallons Required in Motor Cover			1.0				
246	Seal Sensor - Plug and Rod	Nylon/Brass	1	9K191				–
304	Impeller Locknut – All	AISI 300 SS	1	13K286				–
338	Motor – 1 Phase, 115V	Stainless Steel Shaft	1	119-4931R	119-4931R	N/A	N/A	13.0 to 24.0
	Motor – 1 Phase, 208V			119-4992R	119-4992R	119-4992R	119-4994R	
	Motor – 1 Phase, 230V			119-4932R	119-4932R	119-4934R	119-4934R	
	Motor – 3 Phase, 200V			N/A	119-4971R	119-4973R	119-4973R	
	Motor – 3 Phase, 230/460V			N/A	119-4941R	119-4943R	119-4943R	
	Motor – 3 Phase, 575V			N/A	119-4951R	119-4954R	119-4954R	
340	Bearing Housing	Cast Iron	1	1K228				10.0
341	Motor Cover – 1 Phase	Cast Iron	1	1K230		1K231		20.0
	Motor Cover – 3 Phase			1K231				
351	Casing Gasket	Composite	1	5K170				–
351A	Discharge Flange Gasket	Composite	1	5K150				–
352	Skt. Hd. Screw - Seal Hsg. to Motor Cover	AISI 300 SS	2	13K219				–
357	Hex Nut – Discharge Flange	AISI 300 SS	2	13K99				–
358	Plug – Seal Housing 1/4" NPT	Steel	1	6K2				–
358E	Plug – Motor Cover 3/8" NPT	Steel	1	6K3				–
361	Retaining Ring	AISI 300 SS	1	4K375				–
361D	Seal Retainer	AISI 300 SS	1	4K379				–
371C	Skt. Hd. Screw – Brg. Hsg. to Motor Cover	AISI 300 SS	2	13K271				–
371H	Hex Cap Screw – Discharge Flange	AISI 300 SS	2	13K153				–
372D	Hex Cap Screw – Housing to Casing	AISI 300 SS	4	13K222				–
376	Capacitor (1 Phase only) – Start	Varies	1	9K197				–
383	Mechanical Seal – Upper	Carbon/Ceramic	1	10K121 (Type 16)				–
387	Mechanical Seal – Lower (Standard)	Silicon Carbide	1	10K120 (Type 16)				–
	Mechanical Seal – Lower (Optional)	Tungsten Carbide	1	10K122 (Type 16)				–
412M	O-ring – Motor Cover	BUNA-N, AS568A-166	1	4K252				–
412P	O-ring – Seal/Bearing Housing	BUNA-N, AS568A-163	1	5K181				–
457	Wire Nut	Power Cable - 3 Ph., 460V	Special	1 pkg.	N/A	9K145 (package of 8)		–
		Seal/Heat Cable - Opt. 3 Ph. Only	Nylon Housing	1 pkg.	9K145 (package of 8)			
458	Handle Assembly	AISI 300 SS	1	4K243				–
484	Strain Relief Assembly, Sensor Cable	Varies	1	5K113				–
484B	Strain Relief Assembly (Power Cable)	1 Phase	Varies	1	5K113		5K111	–
		3 Phase			N/A	5K111		
528	Washer – Discharge Flange	AISI 300 SS	2	13K82				–
–	Heat Sensor Kit (Optional)	–	1	9K261				–
–	Seal Installation Tool	–	1	A02A013				–
–	Loctite #271	–	1	AL27121				–

MODEL

3888D3/3SD
3888D4/4SD



CAPACITOR DATA			
"K" no.	MFD	VAC	Qty. Req.
9K144①	20	370	2
9K233②	30	370	2
9K262	50	370	2
9K332	60	370	See item 376

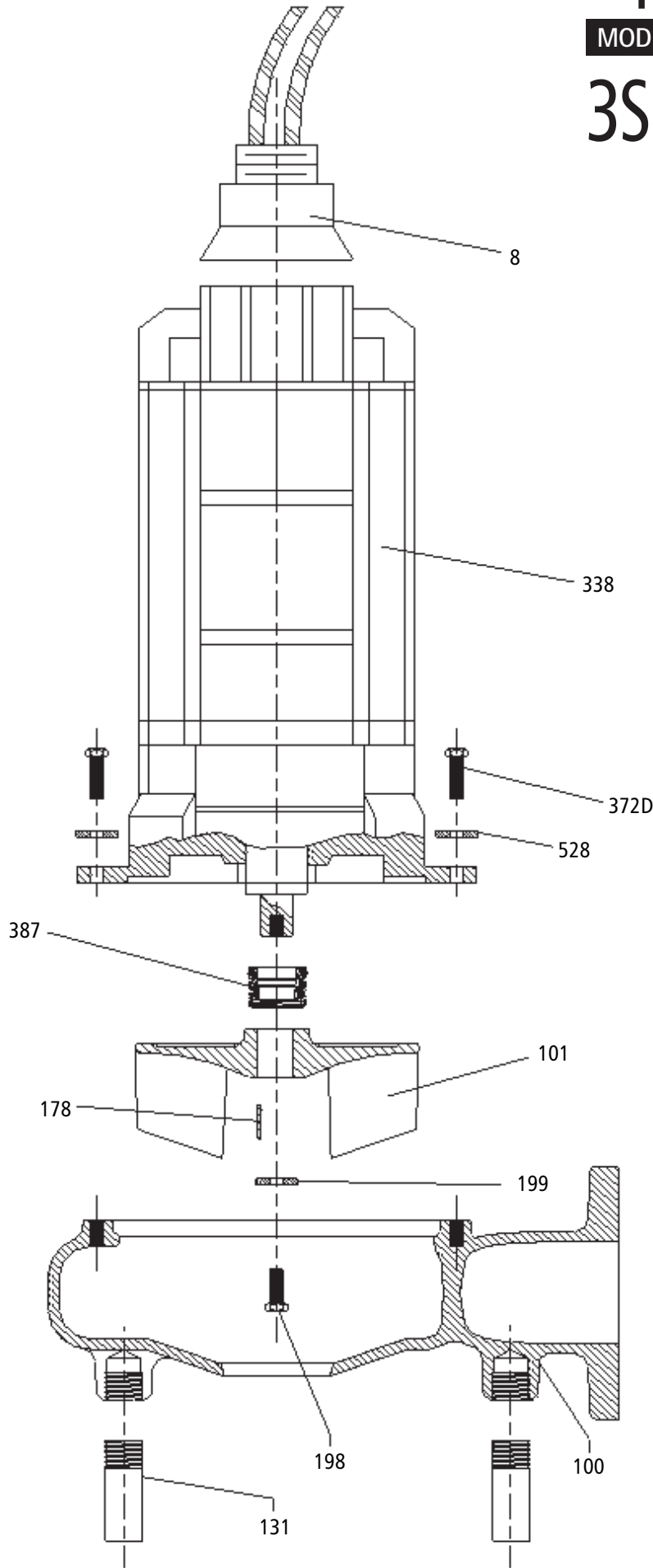
① Used prior to March 1991.

② Replaced by (1) 9K332.

Item No.	Part Description	Material	Qty. Req.	Repair Parts Order Number – 1725 RPM						Max. Wt. (lbs.)
				1½ HP M	1½ HP	2 HP	3 HP	5 HP	7½ HP	
100	Casing – 3888D3, 3SD	Cast Iron	1	1K190						42.0
	Casing – 3888D4, 4SD			1K219						52.0
101	Impeller – 3888D3, 3SD, Standard	Cast Iron	1	2K514 5¼"	2K24 6½"	2K25 7.0"	2K26 7¼"	2K27 8.0"	N/A	7.0
	Impeller – 3888D3, 3SD, Optional	Bronze		2K515 5¼"	2K284 6½"	2K285 7.0"	2K286 7¼"	2K287 8.0"	N/A	8.0
	Impeller – 3888D4, 4SD, Standard	Cast Iron		2K512 5½"	2K294 6¼"	2K295 6½"	2K296 7.0"	2K830 7¼"	2K532 7¼"	7.5
	Impeller – 3888D4, 4SD, Optional	Bronze		2K513 5½"	2K329 6¼"	2K328 6½"	2K327 7.0"	2K326 7¼"	2K533 7¼"	8.5
112A	Lower Ball Bearing	Steel	1	4K135					4K402	–
112B	Upper Ball Bearing	Steel	1	4K384						–
131	Pump Leg - Standard	Steel	3	4K42						–
	Pump Leg - Optional	Cast Iron	1	4K625						–
132	Eye Bolt	Galvanized Steel	1	13K193						–
178	Impeller Key	AISI 300 SS	1	4K11						–
184	Seal Housing – 3888D3, 3SD	Cast Iron	1	1K189					N/A	19.0
	Seal Housing – 3888D4, 4SD	Cast Iron	1	1K218						18.0
198	Impeller Bolt	17-4PH SS	1	13K48						–
199	Impeller Washer	AISI 300 SS	1	13L39						–
218	Insulating Turbine Oil	Turbine Oil - ASTM 150	-	4K432						7.5 lbs./gal.
	Gallons required in Seal Housing			3888D3, 3SD - .44 — 3888D4, 4SD - .38						
	Gallons required in Motor Cover			1.75				1.5		
246	Seal Sensor - Available Only on 3SD, 4SD	Nylon/Brass	1	9K191						–
338	Motor – 1 Phase, 208V	Stainless Steel Shaft	1	114-9210R	114-9210R	114-9210R	114-9210R	N/A	N/A	–
	Motor – 1 Phase, 230V			114-925R	114-925R	114-926R	114-927R	114-928R	N/A	
	Motor – 3 Phase, 200 V			114-9230R	114-9230R	114-9230R	114-9231R	114-9232R	N/A	
	Motor – 3 Phase, 230/460 V			114-9217R	114-9217R	114-9217R	114-9218R	114-9219R	119-961R	
	Motor – 3 Phase, 575 V			114-9227R	114-9227R	114-9227R	114-9228R	114-9229R	119-963R	
340	Bearing Housing	Cast Iron	1	1K176					1K303	28.0
341	Motor Cover– 3888D3, 3888D4	Cast Iron	1	1K177						39.0
	Motor Cover – 3SD, 4SD	Cast Iron	1	1K299						39.0
352	Hex Cap Screw-Seal Housing to Bearing Housing	AISI 300 SS	4	13K81						–
358	Plug – Seal Housing ¼" NPT	Steel	2	6K2						–
358E	Plug – Motor Cover ¾" NPT	Steel	1	6K68						–
361	Retaining Ring	AISI 300 SS	1	4K305						–
372D	Hex Screw – Bearing Housing to Motor Cover and Seal Housing to Casing	AISI 300 SS	8	13K186						–
376	Capacitor, Run - 1 Phase, 208 V	Varies	1	9K262 Qty. - 2	9K262 Qty. - 2	9K262 Qty. - 2	9K262 Qty. - 2	N/A		–
	Capacitor, Run - 1 Phase, 230 V		1	9K332 Qty. - 1	9K332 Qty. - 1	9K332 Qty. - 1	9K262 Qty. - 2	9K332 Qty. - 2	N/A	–
383	Mechanical Seal – Upper	Carbon/Ceramic	1	10K21 (Type 21)						–
387	Mechanical Seal – Lower (Standard)	Silicon Carbide	1	10K28 (Type 31)						–
	Mechanical Seal – Lower (Optional)	Tungsten Carbide	1	10K22 (Type 31)						–
412M	O-Ring – Bearing Housing to Motor Cover	BUNA-N, A5568A-374	1	4K242						–
412P	O-Ring – Bearing Housing to Seal Housing	BUNA-N, A5568A-265	1	5K74						–
457	Wire Nut (Power Cable)	Special Nylon Housing	2	9K145 (14/3 Cords), 9K252 (10/3 Cords)					N/A	–
			6	9K145 (14/4 Cords), 9K252 (10/4 Cords)						–
			2	9K145						–
484	Strain Relief Assembly – Sensor Cable	Varies	1	5K113						–
484B	Strain Relief Assembly (Power Cable)	Varies	1	5K234 (14/3 Cords), 5K355 (10/3 Cords)					N/A	–
			1	5K266 (14/4 Cords), 5K227 (10/4 Cords)						–
	Seal Installation Tool – Guide	Delrin	1	A01A008						–
	Seal Installation Tool – Driver	Delrin	1	A02A017						–
	Loctite #271		1	AL27121						–

Power and Sensor Cables Description		Type and AWG Size	Standard Length	Optional Lengths				Wt. (lbs./5 ft.)
Item No. 456, Power Cables			20'	30'	50'	100'		
1 PH: 1½ and 2 HP, 230 V, standard with bare leads.		STOW – 14/3	9K266	9K267	9K268	9K269	0.9	
1PH: 2HP, 3HP and 5 HP, 208 V, standard with bare leads.		STOW – 10/3	9K289	9K290	9K291	9K293	1.6	
3 PH: 1½, 2HP, 3 HP (except 200 V) and 5 HP, 460 V, 575 V – bare leads.		STOW – 14/4	9K153	9K218	9K154	9K219	1.1	
3 PH: 3 HP, 200 V, 5 HP 200/230 V and all 7½ HP – bare leads.		STOW – 10/4	9K251	9K247	9K248	9K250	1.6	
Item No. 455A, Sensor Cables								
Mechanical Seal Sensor: Standard on 3SD and 4SD. (N/A on 3888D3 and 3888D4)		SJTOW – 16/2	9K189	9K220	9K221	9K222	0.5	
Seal/Heat Sensor: Optional on 3SD and 4SD.		SJTOW – 18/4	9K237	9K238	9K239	9K240	0.5	

3SDX/4SDX



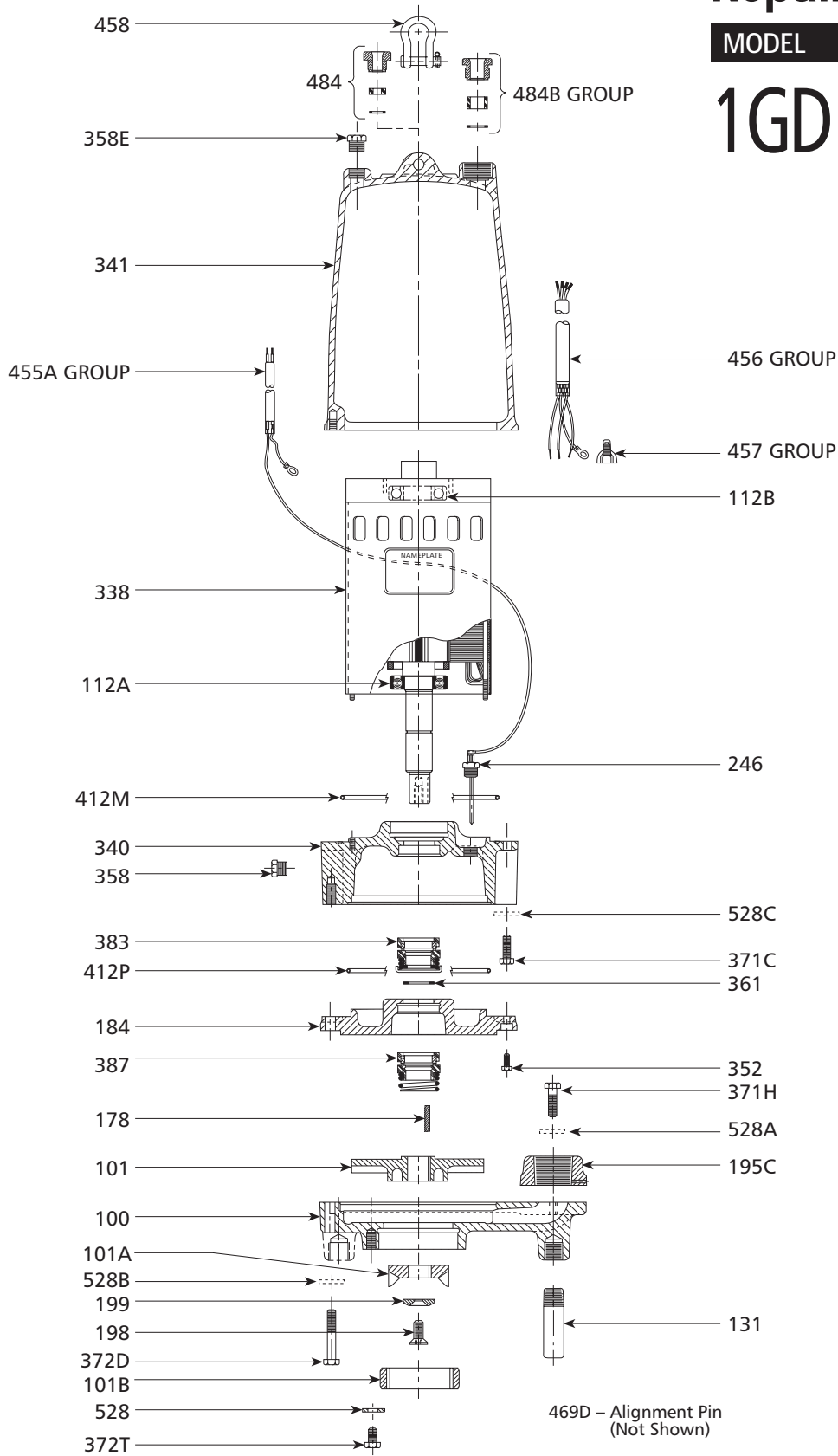
Item No.	Part Description	Material	Qty. Reqd.	Repair Parts Order Number					Max. Wt. (lbs.)
				1750 RPM					
				1½ HP	2 HP	3 HP	5 HP	7½ HP	
100	Casing – 3SDX	Cast Iron	1	1K429					35.0
	Casing – 4SDX			1K428					53.0
101	Impeller – 3SDX	Cast Iron	1	2K918 5 ³ / ₁₆ "	2K916 6 ¹ / ₈ "	2K914 6 ³ / ₄ "	2K912 7 ⁷ / ₈ "	2K910 8 ⁵ / ₁₆ "	
	Impeller – 3SDX	Bronze		2K919 5 ³ / ₁₆ "	2K917 6 ¹ / ₈ "	2K915 6 ³ / ₄ "	2K913 7 ⁷ / ₈ "	2K911 8 ⁵ / ₁₆ "	
	Impeller – 4SDX	Cast Iron		N/A	2K904 5 ¹ / ₁₆ "	2K906 6 ⁷ / ₈ "	2K908 7 ¹ / ₈ "	2K532 7 ¹¹ / ₁₆ "	
	Impeller – 4SDX	Bronze			2K905 5 ¹ / ₁₆ "	2K907 6 ⁵ / ₁₆ "	2K909 7 ¹ / ₈ "	2K533 7 ¹¹ / ₁₆ "	
131	Foot - Standard	Steel	3	4K42					–
	Foot - Optional	Cast Iron	1 Kit	4K625					–
178	Impeller Key	AISI 300 SS	1	4K11					–
198	Impeller Bolt	17-4 PH	1	13K48					–
199	Impeller Washer	AISI 300 SS	1	13L39					–
338	Motor	416 Stainless Steel Shaft	1	278-72 12 (140TY)	278-72 22 (180TY)	278-72 32 (180TY)	N/A	N/A	140TY 160 lbs. Air Filled 180TY 200 lbs. Air Filled
				278-72 13 (140TY)	278-72 23 (140TY)	278-72 33 (140TY)	278-72 43 (180TY)	278-72 53 (180TY)	
				278-72 14 (140TY)	278-72 24 (140TY)	278-72 34 (140TY)	278-72 44 (180TY)	278-72 54 (180TY)	
				278-72 15 (140TY)	278-72 25 (140TY)	278-72 35 (140TY)	278-72 45 (180TY)	278-72 55 (180TY)	
				278-72 16 (140TY)	278-72 26 (140TY)	278-72 36 (140TY)	278-72 46 (180TY)	278-72 56 (180TY)	
372D	Hex Cap Screw - Casing to Motor	AISI 300 SS	8	13K304					–
387	Mechanical Seal – Standard	Carbon/Ceramic	1	10K136 (140TY) / 10K137 (180TY)					–
	Mechanical Seal – Optional	Silicon/Silicon	1	10K132 (140TY) / 10K134 (180TY)					
	Mechanical Seal – Optional	Silicon/Tungsten	1	10K133 (140TY) / 10K135 (180TY)					
528	Lockwasher	AISI 300 SS	8	13K158					–

Models 3SDX/4SDX, Power and Control Cap/Cables	Type and AWG Size	Standard length	Optional Lengths	Wt. (lbs./5 ft.)
		25'	50'	
1 PH: 1½ HP, 230V, 140TY	SOW, SOOW – 10/4	9K357	9K358	
1 PH: 2 and 3 HP, 230V, 180TY	SOW, SOOW – 8/4	9K359	9K360	
3 PH: 1½, 2 and 3 HP, 200-230/460/575V, 140TY	SOW, SOOW – 14/4	9K361	9K362	
3 PH: 5 HP, 200-230/460V, 180TY	SOW, SOOW – 12/4	9K365	9K366	
3 PH: 7½ HP, 200-230/460V, 180TY	SOW, SOOW – 10/4	9K367	9K368	
3 PH: 5 and 7½ HP, 575V, 180TY	SOW, SOOW – 14/4	9K363	9K364	

Control Cable is AWG Size 18/5 - SOW.

MODEL

1GD

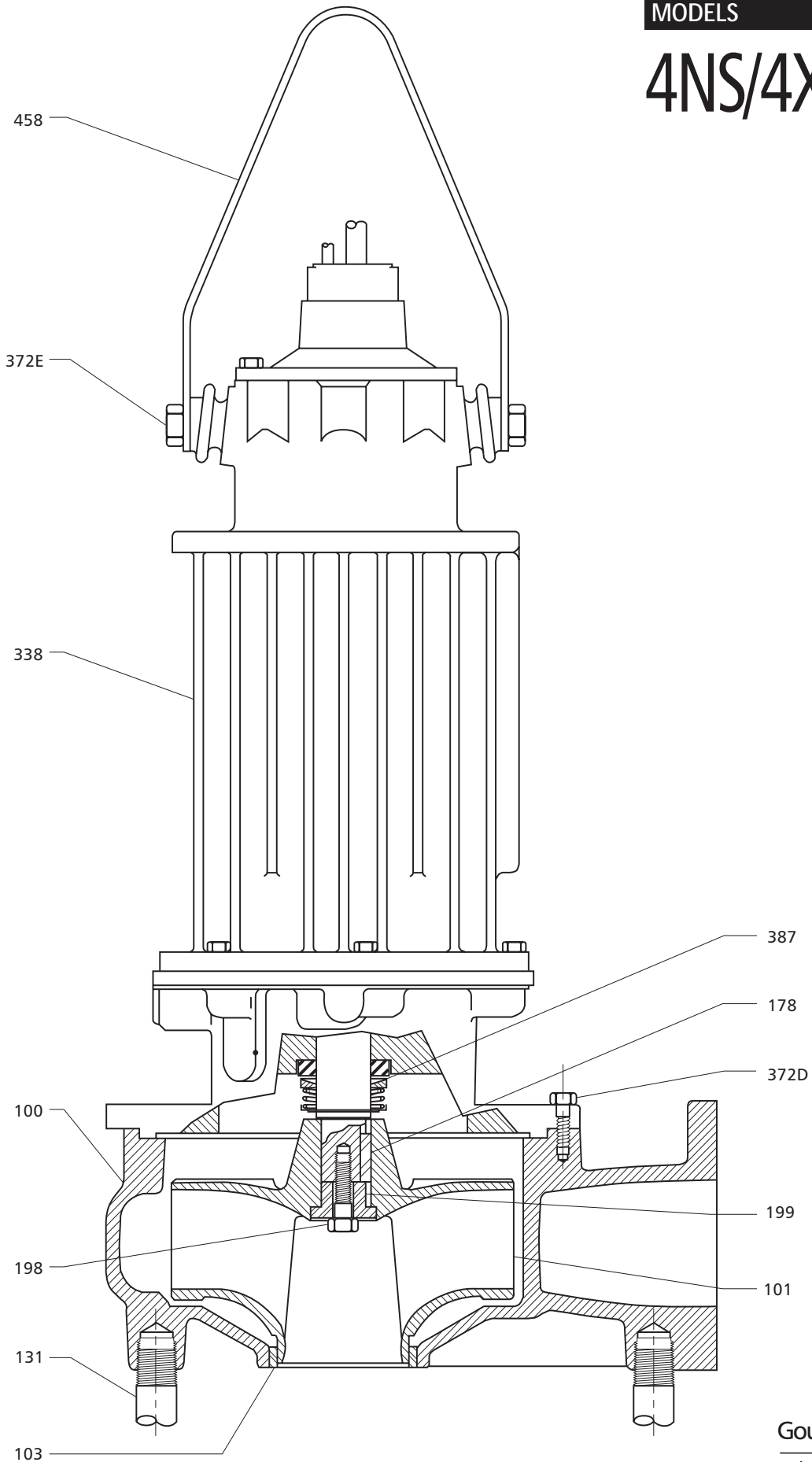


Item No. 456, Power Cables	Type and AWG Size	Standard length				Optional Lengths				Wt. (lbs./5 ft.)
		20'	30'	50'	100'	9K218	9K154	9K219	9K222	
1 and 3 PH: 2 HP, 200–230/460/575V with bare leads.	STOW – 14/4	9K153	9K218	9K154	9K219					1.1
Item No. 455A, Sensor Cables										
Mechanical Seal Sensor - Optional	SJTOW – 16/2	9K189	9K220	9K221	9K222					0.5
Heat Sensor - Standard 1 Phase, Optional 3 Phase.	SJTOW – 16/2	9K189	9K258	9K259	9K260					0.5
Mechanical Seal/Heat Sensor - Optional	SJTOW – 18/4	9K237	9K238	9K239	9K240					0.5

Item No.	Part Description	Material	Quantity Required	Repair Parts Order Number	Weight (lbs.)	
100	Casing	Cast Iron	1	1K174	10.5	
101	Impeller – 8th Digit Model Designation and Diameter	Bronze	1	2K247 A = 5 $\frac{1}{8}$ "	3.0	
				2K332 B = 5 $\frac{1}{4}$ "		
				2K333 C = 4 $\frac{3}{4}$ "		
				2K334 D = 4 $\frac{1}{4}$ "		
101A	Cutter	AISI 440C SS	1	4K303	0.5	
101B	Cutter Ring	AISI 440C SS	1	4K304	0.5	
112A	Lower Ball Bearing	Steel	1	4K135	–	
112B	Upper Ball Bearing	Steel	1	4K384	–	
131	Foot – Standard	Steel	3	4K343	–	
	Foot – Optional	Cast Iron	1 Kit	4K639		
178	Impeller Key	AISI 300 SS	1	4K11	–	
184	Seal Housing	Cast Iron	1	1K226	8.5	
195C	Discharge Flange	Cast Iron	1	4K313	1.0	
198	Impeller Screw	AISI 300 SS	1	13K190	–	
199	Impeller Washer	AISI 300 SS	1	13K191	–	
218	Insulating Oil – Gallons Required	Turbine Oil - ASTM150	–	4K245	7.5 lbs./gal.	
	Gallons Required in Seal Housing			0.98		
	Gallons Required in Motor Cover			0.23		
246	Seal Sensor - Plug and Rod (See Note)	Nylon/Brass	1	9K191	–	
338	Motor – 1 Phase, 230V	Stainless Steel Shaft	1	114-922R	26.0 to 37.0	
	Motor – 3 Phase, 200V			114-9220R		
	Motor – 3 Phase, 230/460V			114-9212R		
	Motor – 3 Phase, 575V			114-9292R		
340	Bearing Housing	Cast Iron	1	1K227	14.5	
341	Motor Cover with Seal Sensor (See Note)	Cast Iron	1	1K197	23.0	
	Motor Cover without Seal Sensor (See Note)			1K209		
352	Screw - Seal Housing to Bearing Housing	AISI 300 SS	2	13K347	–	
358	Plug – Bearing Housing $\frac{1}{4}$ " NPT	Steel	1	6K2	–	
358E	Plug – Motor Cover $\frac{3}{8}$ " NPT	Steel	1	6K3	–	
361	Retaining Ring	Steel	1	4K305	–	
371C	Hex Cap Screw – Brg. Hsg. to Motor Cover	AISI 300 SS	4	13K78	–	
371H	Hex Cap Screw – Discharge Flange to Casing	AISI 300 SS	2	13K186	–	
372D	Hex Cap Screw – Casing to Bearing Housing	AISI 300 SS	4	13K52	–	
372T	Hex Cap Screw – Cutter Ring Retainer	AISI 300 SS	3	13K218	–	
383	Mechanical Seal – Upper	Carbon/Ceramic	1	10K21 (Type 21)	–	
387	Mechanical Seal – Lower (Standard)	Silicon Carbon	1	10K28 (Type 31)	–	
	Mechanical Seal – Lower (Optional)	Tungsten Carbon		10K22 (Type 31)		
412M	O-ring – Motor Cover	BUNA-N, AS568A-166	1	4K252	–	
412P	O-ring – Seal/Bearing Housing	BUNA-N, AS568A-256	1	5K73	–	
457	Wire Nut	Nylon Housing	Power Cable - 1 Ph., 230V	5	9K145	–
			Power Cable - 3 Ph., 200/230V	4		
			Power Cable - 3 Ph., 460V	6		
			Power Cable - 3 Ph., 575V	3		
			Seal/Heat Cable - See Note	2		
458	Lifting Handle	Galvanized Steel	1	4K494	–	
469D	Alignment Roll Pin (Not Shown)	Steel	2	9K265	–	
484	Strain Relief Assembly, Sensor Cable (See Note)	Varies	1	5K113	–	
484B	Strain Relief Assembly, Power Cable	Varies	1	5K111	–	
528	Washer –Cutter Ring Retainer	AISI 300 SS	3	13K212	–	
528A	Lockwasher –Discharge Flange to Casing	AISI 300 SS	2	13K158	–	
528B	Lockwasher –Casing to Bearing Housing	AISI 300 SS	4	13K158	–	
528C	Lockwasher –Bearing Housing to Motor Cover	AISI 300 SS	4	13K117	–	
–	Heat Sensor Kit (See Note)	–	1	9K261	–	
–	Seal Installation Tool - Guide	Delrin®	1	A01A008	–	
–	Seal Installation Tool - Driver	Delrin®	1	A02A017	–	
–	Loctite® #271	–	1	AL27121	–	

Note: Single phase has Heat Sensor (93711) supplied with motor, 3 phase is optional.

4NS/4XD



Item No.	Part Description	Material	Qty. Reqd.	Repair Parts Order Number								Max. Wt. (lbs.)
				1750 RPM					1150 RPM			
				7½ HP	10 HP	15 HP	20 HP	25 HP	30 HP	7½ HP	10 HP	
100	Casing – with Wear Ring	Cast Iron	1	1K429								75.0
101	Impeller – 4NS	Cast Iron	1	2K781 7½"	2K779 8"	2K776 9"	2K774 9¾"	2K772 10⅝"	2K771 10¾"	2K773 10⅝"	2K770 11"	21.5- 28.0
	Impeller – 4NS	Bronze		2K795 7½"	2K793 8"	2K790 9"	2K788 9¾"	2K786 10⅝"	2K785 10¾"	2K787 10⅝"	2K784 11"	25.0- 32.5
	Impeller – 4XD	Cast Iron		2K782 7½"	2K780 7⅞"	2K777 8¾"	2K775 9½"	2K773 10⅝"	2K771 10¾"	2K773 10⅝"	2K770 11"	21.0- 28.0
	Impeller – 4XD	Bronze		2K796 7⅞"	2K794 7⅞"	2K791 8¾"	2K789 9½"	2K787 10⅝"	2K785 10¾"	2K787 10⅝"	2K784 11"	24.5- 32.5
103	Casing Wear Ring	Bronze	1	4K264								2.0
131	Foot - Standard	Steel	3	4K367 (Old), 4K42 (New)								2.0
	Foot - Optional	Cast Iron	1 Kit	4K625								–
178	Impeller Key	AISI 300 SS	1	4K392								–
198	Impeller Bolt	AISI 300 SS	1	13K275								–
199	Impeller Washer	AISI 300 SS	1	4K431								–
338	Motor	416 Stainless Steel Shaft	1	277-43 1 (210TY)	277-43 7 (210TY)	277-43 13 (210TY)	277-43 19 (250TYS)	277-43 25 (250TYS)	277-43 31 (250TYS)	277-43 43 (210TY)	277-43 49 (210TY)	210TY 310 lbs. Air Filled 250TY 525 lbs. Oil Filled
				277-43 2 (210TY)	277-43 8 (210TY)	277-43 14 (210TY)	277-43 20 (250TYS)	277-43 26 (250TYS)	277-43 32 (250TYS)	277-43 44 (210TY)	277-43 50 (210TY)	
				277-43 3 (210TY)	277-43 9 (210TY)	277-43 15 (210TY)	277-43 21 (250TYS)	277-43 27 (250TYS)	277-43 33 (250TYS)	277-43 45 (210TY)	277-43 51 (210TY)	
				277-43 4 (210TY)	277-43 10 (210TY)	277-43 16 (210TY)	277-43 22 (250TYS)	277-43 28 (250TYS)	277-43 34 (250TYS)	277-43 46 (210TY)	277-43 52 (210TY)	
				277-43 5 (210TY)	277-43 11 (210TY)	277-43 17 (210TY)	277-43 23 (250TYS)	277-43 29 (250TYS)	277-43 35 (250TYS)	277-43 47 (210TY)	277-43 53 (210TY)	
372D	Hex Cap Screw - Casing to Motor	AISI 300 SS	8	13K45								–
372E	Hex Cap Screw - Bracket to Motor	AISI 300 SS	2	13K226			13K227			13K226		–
387	Mechanical Seal – Optional	Carbon/Ceramic	1	10K82			10K142			10K82		–
	Mechanical Seal – Optional	Silicon/Tungsten	1	10K83			10K85			10K83		–
458	Lift Bracket	AISI 300 SS	1	4K433			4K434			4K433		3.5

Models 4NS/4XD, Power and Control Cap/Cables	Type and AWG Size	Standard length	Optional Lengths	Wt. (lbs./5 ft.)
		25'	50'	
7½ – 15 HP, 200/230/380V; 7½ – 30 HP, 460/575V	SO – 8/4	9K279	9K280	
20 – 25 HP, 200/230V	SO – 4/4	9K281	9K282	
30 HP, 200/230V	SO – 2/4	9K283	9K284	

Control Cable is AWG Size 18/5 - SOW-A, SO.

4ND

Item No.	Part Description	Material	Qty. Reqd.	Repair Parts Order Number						Max. Wt. (lbs.)	
				1750 RPM				1150 RPM			
				7½ HP	10 HP	15 HP	20 HP	25 HP	7½ HP		10 HP
100	Casing – with Wear Ring	Cast Iron	1	1K252						75.0	
101	Impeller - Standard		1	2K497 7½"	2K496 8"	2K495 9"	2K471 10"	2K470 10¾"	2K471 10"	2K465 11"	28.0
	Impeller - Optional		1	2K529 7"	N/A	2K528 8½"	2K527 9½"	2K526 10⅝"	2K527 9½"	2K526 10⅝"	
	Impeller - Standard		1	2K521 7½"	2K520 8"	2K519 9"	2K518 10"	2K517 10¼"	2K518 10"	2K516 11"	32.5
	Impeller - Optional		1	2K525 7"	N/A	2K524 8½"	2K523 9½"	2K522 10⅝"	2K523 9½"	2K522 10⅝"	
103	Casing Wear Ring		1	4K264						2	
131	Pipe Nipple - Casing Pump Leg	Steel	3	4K367						0.5	
178	Impeller Key	AISI 300 SS	1	4K392						–	
184	Stuffing Box	Cast Iron	1	1K253						32.5	
198	Impeller Bolt	AISI 300 SS	1	13K155						–	
199	Impeller Washer		1	13K156						–	
218	Insulating Oil (gallons) Gallons Required	Turbine Oil	–	4K245						7.5 lbs./gal.	
243	Conduit Cover	Cast Iron	1	1K287	1K287	1K288	5.4	1K289	1K287	1K287	17
341	Motor Cover		1	1K286	1K286	1K286	1K255	1K255	1K286	1K286	105
352	Socket Head Screw - Stuffing Box	AISI 300 SS	4	13K232						–	
356	Stud - Ground	Brass	1	13K235						–	
357B	Hex Nut - Strain Relief Clamp	AISI 300 SS	2	13K262						–	
357C	Hex Nut - Terminal 208-230 V	Brass	28	13K236			N/A	13K236		–	
	Hex Nut - Terminal 460 V		32	13K236						–	
358	Pipe Plug - Brg. Hsg. and Motor Cover	AISI 300 SS	3	6K90						–	
358E	Pipe Plug - Conduit Cover		1	6K89						–	
361	Retaining Ring	Steel	1	4K359						–	
372D	Hex Head Screw - Csg. and Motor Cover	AISI 300 SS	8	13K233						–	
372E	Hex Head Screw - Lift Bracket		2	13K226						–	
372F	Hex Head Screw - Terminal Block		4	13K261						–	
372G	Hex Head Screw - Conduit Cover / Gland		6	13K157						–	
372H	Hex Head Screw - Clamp		2	13K260						–	
383	Mechanical Seal - Upper		Carbon / Ceramic	1	10K35						1
387	Mechanical Seal - Lower (Standard)	Carbon / Ceramic	1	10K35						1	
	Mechanical Seal - Lower (Optional)	Sil Cbd / Sil Cbd	1	10K31						1	
	Mechanical Seal - Lower (Optional)	Tung Cbd/Tung Cbd	1	10K41						1.5	
			1	5K188						–	
412M	O-Ring - Terminal Block	BUNA-N	1	5K187						–	
412N	O-Ring - Conduit Cover		1	5K187						–	
412P	O-Ring - Bearing Housing		2	5K155						–	
451	Gland	Cast Iron	1	4K386	4K386	4K387	4K388	4K386	4K386	4K386	1.5
452	Strain Relief Clamp		2	4K391	4K391	4K391	4K390	4K391	4K391	4K391	0.5
453	Packing - Power Cable	Neoprene	1	5K200	5K200	5K201	5K202	5K200	5K200	5K200	–
454	Power Cable - 30 foot length	Type-W	1	9K201	9K201	9K202	9K203	9K201	9K201	9K201	17-36
	Power Cable - 50 foot length		1	9K228	9K228	9K229	9K230	9K228	9K228	9K228	27-60
455	Terminal Block Assembly	Glass Filled Polyester	1	9K200						1	
455A	Sensor Cord - 30 foot length	Type-STO	1	9K212						5.5	
	Sensor Cord - 50 foot length		1	9K232						9.5	
458	Lift Bracket	AISI 300 SS	1	13K258						3	
484	Strain Relief Assembly	Neoprene/SS	1	5K111						–	
513	O-Ring - Casing to Stuffing Box	BUNA-N	1	5K218						–	
532A	Lock Washer - Stuffing Box, Casing and Motor Cover	AISI 300 SS	12	13K162						–	
532B	Lock Washer - Terminal 208-230 V		14	13K263			N/A	13K263		–	
	Lock Washer - Terminal 460 V		16	13K263						–	
	Seal Installation Tool Set (2 pcs.)	Delrin	–	A02C007						1	

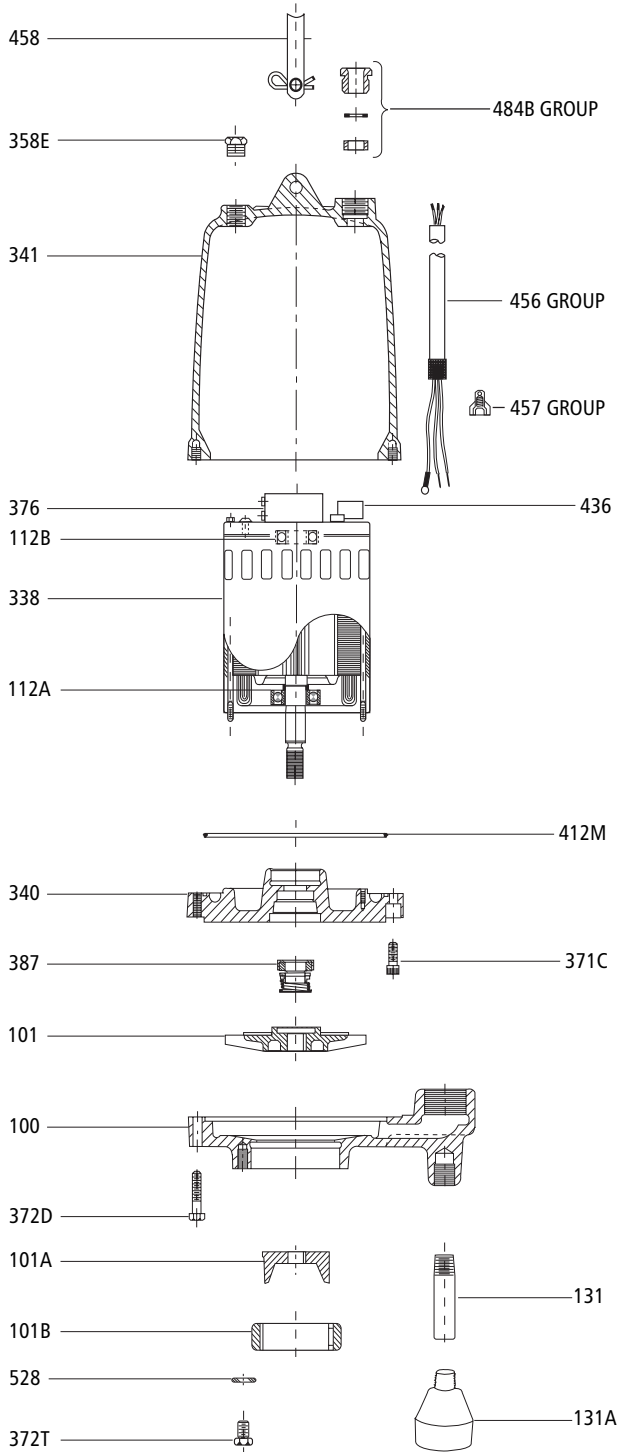
MOTOR PARTS

112A	Lower Ball Bearing	Steel	1	4K360						1	
112B	Upper Ball Bearing with Wave Washer		1	4K393						2	
246	Sensor Assembly	Varies	1	9K234						–	
338	Motor -208-230/460 V, 3Ph* Weight (lbs.)	Shaft - AISI 303 SS	1	0119-03 2	0119-03	0119-03 4	0119-03 5	0119-03 6	0119-03 9	0119-03 10	–
				165	182	215	238	280	182	215	
340	Bearing Housing	Cast Iron	1	1K254						68	

* 25 HP motor is 460 V only.

Parts in gray are no longer available.

RGS2012



Item No.	Part Name	Material	Qty.	Repair Parts Order Number	Wt. (lbs.)
100	Casing	Cast iron	1	1K313	11
101	Impeller 5 7/8" dia.	Bronze	1	2K705	2.0
101A	Cutter	AISI 440C SS	1	4K409	0.5
101B	Cutter ring	AISI 440C SS	1	4K304	0.5
112A	Lower ball bearing	Steel	1	4K384	–
112B	Upper ball bearing	Steel	1	4K132	–
131	Foot	Steel	3	4K343	–
131A	Optional Pump Legs	Steel	3	4K639	–
218	Insulating oil	Turbine Oil ASTM150	.98 gal	4K432 See Index Page	7.5 lbs/gal
338	Motor with Brg. Hsg. #340	–	–	120-212R	19
340	Bearing housing (1K314)	Cast iron	–	–	–
341	Motor cover	Cast iron	1	1K208	18.5
358E	Plug – motor cover 3/8" NPT	Steel	1	6K3	–
371C	Screw – bearing housing to motor cover	AISI 300 SS	4	13K271	–
372D	Screw – casing to bearing housing	AISI 300 SS	4	13K336	–
372T	Screw – cutter ring retainer	AISI 300 SS	3	13K218	–
376	Capacitor (start)	–	1	9K353	–
387	Mechanical seal (standard)	Silicon Carbide	1	10K119	–
	Mechanical seal (optional)	Tungsten Carbide		10K123	–
412M	O-ring – motor cover	BUNA-N	1	4K252	–
436	Solid state switch	–	1	9K395	–
456	Power cable	–	1	See power cable chart	–
457	Wire nut	Nylon	2	9K145	–
458	Handle assembly	AISI 300 SS	1	4K243	–
484B	Strain relief assembly – power cable	BUNA-N/SS	1	5K111	–
528	Washer – cutter ring retainer	AISI 300 SS	3	13K212	–

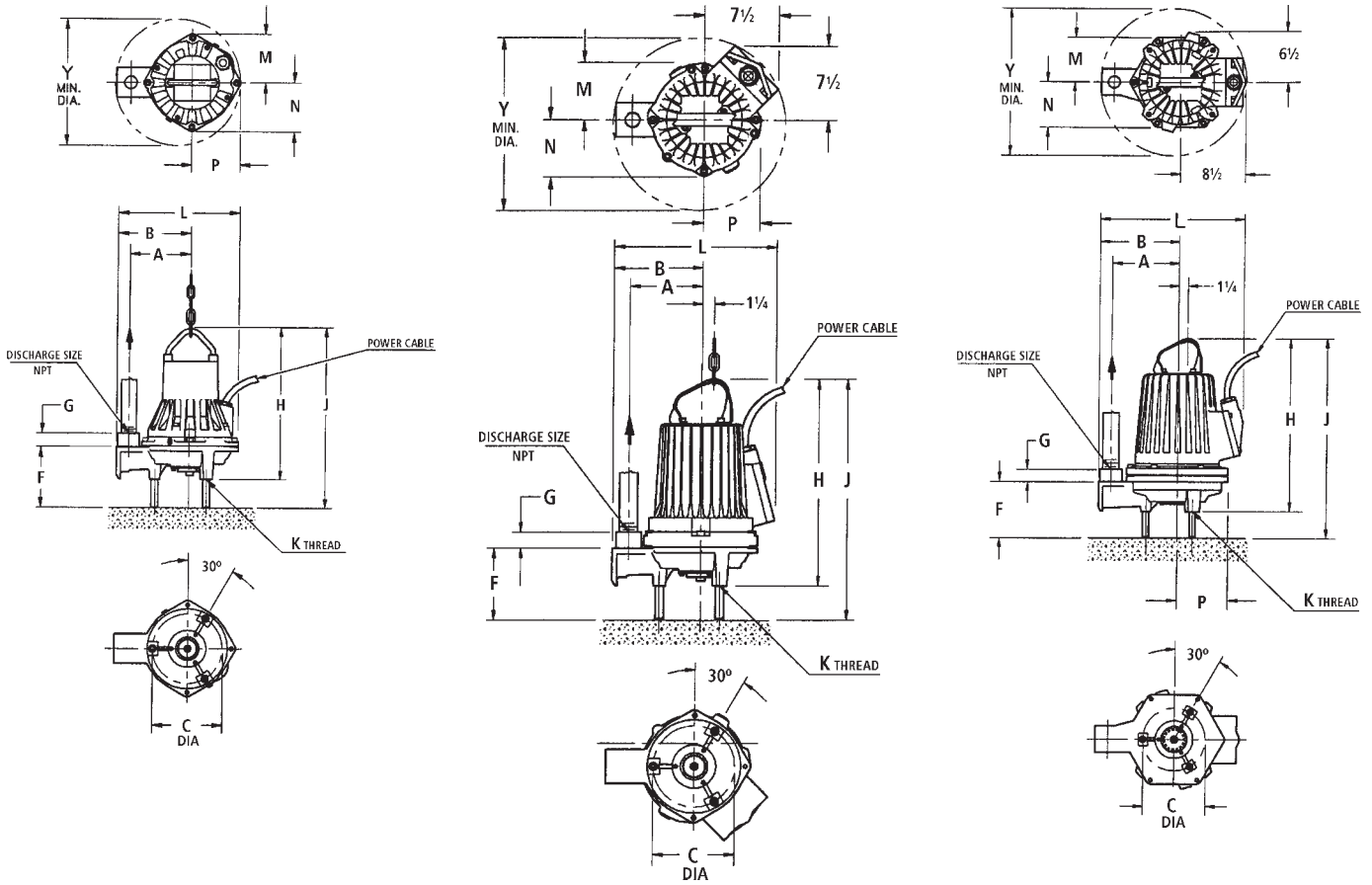
RESIDENTIAL GRINDER POWER CABLES

Residential Grinder Power Cables	Standard length	Optional Lengths			Wt. (lbs./5 ft)
	20'	30'	50'	100**	
1 Phase, 2 HP, 230V - STOW - 14/3 with bare leads	9K266	9K267	9K268	9K269	0.9
1 Phase, 2 HP, 230V - SJTOW - 14/3 with Nema plug	9K393	9K394	N/A	N/A	0.9

* Maximum allowable cord length. ** Includes 230V NEMA plug.

9K353 capacitor is a 295/355 MFD, 125 VAC start capacitor with resistor.

1GA/2GA



Please contact Customer Service for part information.
 Phone (315) 568-7123 or Fax (888) 3222-5877 (toll free)

RB Number	Description	SES Control Panel	"A" Series Control Panel	Manufacturing Number
RB-1	Single phase contactor, 2 pole	D10020, D10020N1, D10027, D10036	A6-0511, A6-1012, A-2012, A6-3012, A-5012, G6-2012	Furnas 41NB20AFP
RB-3	Pump circuit breaker		A6-2012 (After 11/98)	Square D – QOU225
RB-5	Pump circuit breaker		A6-5012	Square D – QOU240
RB-6	Pump circuit breaker		G6-2012 / A6-1012	Square D – QOU220
RB-15	Duplex alternator		A6-0511, A6-1012, A6-2012, A6-5032, A6-5034, A5-1 (Before 11/98)	Potter and Brumfield S89R5ABD1-120
RB-29	Same as RB-6		A6-1012	Same as RB-6
RB-30	Control circuit breaker		A6-1012, A6-2012, A6-0511	Square D – QOU110
RB-31	Seal sensor relay		A4-3, A4-4	Boulay BFI-SFR-120
RB-32	Single phase contactor, 2 pole with auxiliary	S10020, S10020N1, S10027, S10036	A3-2012, A3-3012, A3-5012, G3-2012	Furnas 41NB20AFPM6R
RB-33	Three phase motor starter		A3-5034, A6-5032, A6-5034	Furnas 15DF32AF81
RB-34	Control circuit transformer	All three phase SES controls	A3-5034, A6-5032, A6-5034	Square D – XF75
RB-35	Time delay relay		A6-0511, A6-1012, A6-2012, A6-5032, A6-5034, A5-1 (Before 11/98)	SSAC, TSD 74115
RB-36	Control relay	All SES simplex controls	A6-0511, A6-1012, A6-2012, A6-5032, A6-5034, A5-1, A4-1, A4-1N4 (Before 11/98)	Potter and Brumfield KUP14A15-120
RB-37	Pump circuit breaker		A6-0511	Square D – QOU115
RB-38	Pump circuit breaker		A6-2012 (Before 11/98)	Square D – QOU215
RB-39	Control circuit breaker		A6-5032	Square D – QOU210
RB-40	Pump circuit breaker		A6-5032	Square D – QOU330
RB-41	Control circuit breaker		A6-5034	Airpax 219-2-1-63-7-2-10
RB-42	Pump circuit breaker		A6-5034	Airpax 219-3-1-63-7-2-15
RB-43	Control circuit breaker	D10020, D10020N1, S10020, S10020N1	(Before 11/98)	Potter and Brumfield W28-XQTA-3
RB-44	Same as RB-43		A4-1	Same as RB-43
RB-45	Control module		A6-0511, A6-1012, A6-2012, A6-5032, A6-5034 (Before 11/98)	Boulay BFI-8630
RB-46	Three phase contactor, pole with auxiliary	S31625-S32025		Furnas 41NB30AFPM6R
RB-47	Three phase contactor, 3 pole	D31625-D32025		Furnas 41NB30AFP
RB-48	Latching relay board alternating relay	All SES duplex panels	(Before 11/98)	Boulay BFI2-002-120
RB-49	Relay interface board	All SES duplex panels	(Before 11/98)	Boulay BFI3-003-120

Continued on next page.

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RB Number	Description	SES Control Panel	"A" Series Control Panel	Manufacturing Number
RB-50	Alarm horn	All SES controls		Floyd MW-09-201-QC
RB-51	Control relay	All SES duplex controls	A4-1, A4-1N4 (After 11/98)	Potter and Brumfield KHUA-11A11-120
RB-52	Motor circuit protector	S31625, D31625		Cutler Hammer A-302 GN
RB-53	Motor circuit protector	S32540, D32540		Cutler Hammer A-302 HN
RB-54	Motor circuit protector	S34063, D34063		Cutler Hammer A-302 JN
RB-55	Motor circuit protector	S36310, D36310		Cutler Hammer A-302 KN
RB-56	Motor circuit protector	S31016, D31016		Cutler Hammer A-302 LN
RB-57	Motor circuit protector	S31620, D31620		Cutler Hammer A-302 MN
RB-58	Motor circuit protector	S32025, D32025		Cutler Hammer A-302 NN
RB-59	Overload relay		A3-5012, A3-3012, A6-3012, A6-5012, G3-2012, G6-2012	Furnas 48DA18AA4
RB-60	Motor start relay		G3-2012, G6-2012	Franklin Electric 155031102
RB-61	Motor start capacitor		G3-2012, G6-2012	Mallory 580UF
RB-62	Motor run capacitor		G3-2012, G6-2012	30UFC370VAC
RB-63	Flashing red alarm light	All SES simplex panels (before 11/98)		BL4-30
RB-64	Flashing red alarm light	All SES duplex panels (before 11/98)		BL4-40
RB-70	Flashing red alarm light (after 11/98)	All S31625-S32025 D10020, D10020N1, S10020, S10020N1		Ingram MX-15
RB-71	Flashing red alarm light (after 11/98)	All D31625-D32025 D10027, D10036		Ingram LRX-40
RB-72	Pump run light assembly	All SES panels except S10020, D10020N1		BACO, C20SA20
RB-73	Alarm test button assembly	All SES panels except S10020N1, D10020N1		BACO, C21AA01
RB-74	Alarm reset button assembly	D10020, D10027, D10036 D31625-D32025		BACO, C21AA02
RB-75	Duplex logic control board	All SES duplex panels	A6-2012, G6-2012, A6-5032, A6-5034, A6-3012, A6-5012 (after 11/98)	Boulay BFI-LLC-120
RB-76	Alarm silence button assembly	All SES panels except D10020N1, S10020N1		BACO, C21AA01
RB-77	Replacement light bulbs for run lights (quantity 5)	All SES panels except D10020N1, S10020N1		BACO, WDL-120
RB-78	Same as RB-3	D10020N1, D10020		Same as RB-3

Oil Volumes

Model	Oil Volume - Motor Housing	Oil Volume - Seal Housing
	Quarts	Quarts
ST 31	1.32	N/A
PE31	1.32	N/A
PE41	1.32	N/A
PE51	1.32	N/A
PS41	1.70	N/A
PS51	1.70	N/A
3871 (EP's - .4 hp)	1.00	N/A
3871 (EP's - .5 hp)	0.85	N/A
3872 (WW's)	0.85	N/A
3885 (WE's) - A.O. Smith	3.90	N/A
3885 (WE's) - Franklin	3.50	N/A
2ED's - A.O. Smith	3.90	0.40
3886 (WS__B)	3.90	N/A
3887BF (WS__BF)	3.90	N/A
3887BHF (WS_BHF) - A.O. Smith	3.90	N/A
3887BHF (WS_BHF) - Franklin	3.50	N/A
2/3WD's - A.O. Smith	3.90	0.40
3888D3 (WS____D3)	7.00	1.70
3SD's	7.00	1.70
3888D4 (WS____D4)	7.00	1.50
4SD's	7.00	1.50
3888D4 (WS____D4) - 7½ HP	6.00	1.50
4SD's - 7½ HP	6.00	1.50
RGS2012	3.90	N/A
1GD - Single Phase	3.55	0.90
1GD - Three Phase	3.90	0.90

Noco T-32 oil is standard.

Note: Normally a minimum of a 1" air gap at the top of the motor/seal housing should be maintained due to thermal expansion of the oil.

DVP

Part No.	Description
D03834	½ HP, 1725 RPM, 115 V

3885, 3886, 3887 THREADED SHAFT 2" Discharge Pumps with Single Seal

Part No.	Description
118-121R	½ HP, 1/60/115, 1725 RPM
118-122R	½ HP, 1/60/230, 1725 RPM
118-123R	½ HP, 1/60/115, 1725 RPM
118-1222R	½ HP, 1/60/115, 3450 RPM
118-124R	½ HP, 1/60/230, 1725 RPM
118-1215R	½ HP, 1/60/208, 1725 RPM
118-1223R	½ HP, 1/60/230, 3450 RPM
118-1236R	¾ HP, 1/60/208, 3450 RPM
118-1212R	¾ HP, 1/60/230, 1725 RPM
118-1232R	¾ HP, 1/60/230, 3450 RPM
118-1213R	1 HP, 1/60/230, 1725 RPM
118-1233R	1 HP, 1/60/230, 3450 RPM
118-1238R	1½ HP, 1/60/208, 3450 RPM
118-1234R	1½ HP, 1/60/230, 3450 RPM
118-1314R	½ HP, 3/60/200, 1725 RPM
118-1333R	½ HP, 3/60/200, 3450 RPM
118-1334R	¾ HP, 3/60/200, 3450 RPM
118-1316R	1 HP, 3/60/200, 1725 RPM
118-1335R	1 HP, 3/60/200, 3450 RPM
118-1336R	1½ HP, 3/60/200, 3450 RPM
118-1321R	½ HP, 3/60/230-460, 3450 RPM
118-132R	½ HP, 3/60/230-460, 1725 RPM

Note: Repair Motor List Prices will be found in the Repair Part Price Book effective February 4, 2002.

3SD, 4SD, 3888D3, 3888D4 KEYED SHAFT 3" and 4" Dual Seal Pump Motors

Part No.	Description
114-925R	1½ HP, 1/60/230, 1725 RPM
114-926R	2 HP, 1/60/230, 1725 RPM
114-9210R	3 HP, 1/60/208, 1725 RPM
114-927R	3 HP, 1/60/230, 1725 RPM
114-928R	5 HP, 1/60/230, 1725 RPM
114-9230R	2 HP, 3/60/200, 1725 RPM
114-9217R	2 HP, 3/60/230-460, 1725 RPM
114-9231R	3 HP, 3/60/200, 1725 RPM
114-9218R	3 HP, 3/60/230-460, 1725 RPM
114-9232R	5 HP, 3/60/200, 1725 RPM
114-9219R	5 HP, 3/60/230-460, 1725 RPM
119-961R	7½ HP, 3/60/230-460, 1725 RPM

MODELS 2ED, 2WD, 3WD 2" Discharge Pumps with Dual Seals

Part No.	Description
119-491R	½ HP, 1/60/115, 1725 RPM
119-492R	½ HP, 1/60/230, 1725 RPM
119-493R	½ HP, 1/60/115, 1725 RPM
119-4931R	½ HP, 1/60/115, 3450 RPM
119-494R	½ HP, 1/60/230, 1725 RPM
119-4932R	½ HP, 1/60/230, 3450 RPM
119-495R	¾ HP, 1/60/230, 1725 RPM
119-4933R	¾ HP, 1/60/230, 3450 RPM
119-496R	1 HP, 1/60/230, 1725 RPM
119-4934R	1 HP, 1/60/230, 3450 RPM
119-4935R	1½ HP, 1/60/230, 3450 RPM

