

END SUCTION PUMPS REPLACEMENT PARTS GUIDE**LCS, LCSE**

This guide is valid for all Paco Pump brand products beginning with product codes 14 and 24.

See back cover for explanation and identification.

Paco Pump brand End Suction Split Coupled Pumps are designed and built to provide maximum life while requiring minimum attention and service. At times, replacement parts may be required.

VIRTUALLY ALL REQUIRED PARTS ARE AVAILABLE IN KIT FORM.

These kits (easily selected from the charts on the following pages) have been designed to insure that any parts needed when replacing any End Suction split coupled component, are furnished when you need them, with minimum effort.

Guidelines and Suggestions:

The pump nameplate contains all data required in the selection and ordering of the proper replacement parts kit.

The PUMP MODEL AND SERIAL NUMBER should be referenced when ever any replacement parts kit is ordered, while the **pump conditions** (GPM/TDH) and **impeller trim** are required data for the ordering of replacement impellers.

NOTE: SEAL/PACKING KITS ARE ALWAYS RECOMMENDED AS SPARE PARTS
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TO REPLACE A MECHANICAL SEAL

Select the correct Seal Kit, which contains all gaskets and impeller hardware. Shaft sleeve inspection is suggested.

TO REPLACE THE PACKING

Select the correct Packing Kit, which contains all gaskets, impeller hardware and lantern ring. If the packing gland is damaged it may be replaced by ordering the proper Gland Kit.

TO REPLACE IMPELLER

Select the correct Impeller Kit which contains all gaskets and impeller hardware. A Wear Ring Kit is highly recommended, and a Seal or Packing Kit may be required.

TO REPLACE WEAR RINGS

Select the correct Wear Ring Kit. An Impeller Kit may be needed if wear is excessive. A Seal/Packing Kit will provide all other normally replaced components.

TO REPLACE THE SHAFT

Select the correct Shaft Kit. A Seal or Packing Kit may be required.

TO REPLACE LOST OR DAMAGED HARDWARE

Select the correct Hardware Kit.

TO OVERHAUL THE PUMP

Select an Impeller Kit, Wear Ring Kit, Hardware Kit, Seal or Packing Kit.

ORDERING:

After determining and selecting the required Kit(s), or for selection assistance, contact your local Grundfos Sales Office, Representative, or Distributor.

Model Number	Pump Constr. Code	Impeller Kit			Wear Ring Kit	Hardware Kit	Seal Kit	Packing Kit	Gland Kit
		Bronze	N.A. Bronze	Iron					
1070-7	X3	91911005	97679766	-	98669568	91910593	See Page 4 for Seal Kit Selection	91910834	91910643
1270-9	X3	91911000	97909161	91911001	98669581	91910593		91910834	91910643
1570-5	X3	91909739	97850072	91909740	98670131	91910593		91910834	91910643
2070-9	X3	91911595	97776120	91911596	98670058	91910593		91910834	91910643
2570-7	X3	91909762	97891615	91909763	98670059	91910593		91910834	91910643
3070-7	X3	91909772	97661731	91909773	98670060	91910593		91910834	91910643
3070-7	X4	91909777		91909778	98670060	91910594		91910847	91910644
4070-7	X3	91909783	97908496	91909784	98670074	91910593		91910834	91910643
4070-7	X4	91909788	98158554	91909789	98670653	91910594		91910847	91910644
1595-1	X3	91909791	96699310	91909792	98670132	91910595		91910834	91910643
1595-5	X3	91909793	97852485	91909795	98670132	91910595		91910834	91910643
1595-9	X3	91911017	97692479	91911018	98670132	91910595		91910834	91910643
1595-9	X4	91911019	97710406	91911020	98670132	91910596		91910847	91910644
2095-3	X3	91909815	97948034	91909816	98670058	91910595		91910834	91910643
2095-3	X4	91909819	98483455	91909820	98670058	91910596		91910847	91910644
2595-7	X3	91911369	97745127	91911370	98670059	91910595		91910834	91910643
2595-7	X4	91911371	91911371	91911372	98670059	91910596		91910847	91910644
3095-7	X3	91911630		91911633	98670135	91910595		91910834	91910643
3095-7	XA	91911637		91911638	98670136	91910596		91910847	91910644
4095-7	X3	91909863		91909865	98670151	91910596		91910834	91910643
4095-7	X4	91909867		91909870	98670151	91910596		91910847	91910644
4095-9	XA	91909872		91909873	98670151	91910596		91910847	91910644
5095-7	X4	91909887		91909891	98670654	91910596		91910847	91910644
6095-1	XA	91909898	97713071	-	98670157	91910596		91910847	91910644
2012-1	X3	91909901		91909902	98670058	91910598		91910834	91910643
2512-3	X3	91909908	97825585	-	98670059	91910598		91910834	91910643
2512-3	XA	91909915		91909916	98670059	91910599		91910847	91910644
3012-1	XA	91909919		-	98670158	91910599		91910847	91910644
3012-7	XA	91911375		91911376	98670158	91910599		91910847	91910644
4012-9	XA	91911367		91911368	98670159	91910599		91910847	91910644
4012-A	XA	91909218		-	98670159	91910599		91910847	91910644
5012-3	XA	91909957		91909958	98670160	91910599		91910847	91910644
6012-3	XA	91909965		91909967	98670171	91910600		91910847	91910644
6012-3	X5	91909969		91909970	98670172	91910600		91910855	91910645
8012-3	X5	91910024	97627782	91910026	98670173	91910601		91910855	91910645
3015-7	XA	91911029		91911030	98670158	91910601		91910847	91910644
4015-7	XA	91910083		-	98670178	91910601		91910847	91910644
5015-7	X5	91910113		91910114	98670178	91910601		91910855	91910645
6015-7	X5	91910130		-	98670180	91910601		91910855	91910645

NOTE: LCSE is not available in X5 or X6 construction

Motor Frame Size	Construction Code	Pump Size	Shaft Kit Part No.	Coupling Kits
182/184TC	X3	7", 9.5"	98571486	98681226
		12"	98571497	
	XA	12"	98571498	
213/215TC	X3	7", 9.5"	98571478	98681227
		12"	98571487	
	X4	9.5"	98571485	
		9.5"	98571482	
	XA	12", 15"	98571480*	98681277
		12"	98571499**	
		15"	98571481***	98681227
	X5	12"	98571513	
254/256TC	X3	7", 9.5"	98571488	98681228
		12"	98571478	
	X4	7", 9.5"	98571485	
		7"	98571518	
		9.5"	98571515	
284/286TSC	XA	12", 15"	98571482	
284/286TC	X4	9.5"	98571489	98681228
	XA	9.5"	98571480	
284/286TC	X4	7"	98571490	98681229
	XA	9.5", 12"	98571482	98681230
		15"	98571480	
	X5	12"	98571513	
324/326TSC	X4	7", 9.5"	98571490	98681251
	XA	7"	98571519	
		9.5"	98571495	
324/326TC	X4	9.5"	98571516	98681252
	XA	9.5"	98571517	
	X5	12"	98571492	98681253
		15"	98571512	
364/365TSC	X4	7"	98571490	98681251
364/365TC	X5	12"	98571493	98682569
	XA	15"	98571483	98682567
	X5	15"	98571512	98682569
404/405TSC	X4	9.5"	98571516	98681252
	XA	9.5"	98571517	
404/405TC	XA	12"	98571495	98682568
	X5	12"	98571491	98682591
		15"	98571479	
444/445TC	X5	15"	98571511	98694579

* 8012 only

** all 12" except 8012

*** 4015 only

LCS Bushing

Const. Code	Bushing Number
X3	98557913
X4	98557919
XA	
X5	98557920
X5*	98557961

* 15" pump only

LCS O-Ring

91869106

PACO TYPE LCS, LCSE, CLOSE COUPLED END SUCTION REPLACEMENT PARTS
MECHANICAL SEAL KITS

Select appropriate seal kit by matching desired seal code with pump model & construction code.

	AVAILABLE SEAL MATERIALS & PROPERTIES				
Seal Code->	1XXXXX	7XXXXX	6XXXXX	2XXXXX	8XXXXX
Max Temp.	211°F	211°F	250°F	275°F	211°F
Max Press*.	175 PSI	175 PSI	175 PSI	175 PSI	350 PSI
Refer to Note #	-	-	1	1	3, 6
Type	21	21	21	21	1B
Elastomer	Buna N	Buna N	Viton	Viton	Buna N
Rot. Element	Carbon	Carbon	Carbon	Carbon	Carbon
Stationary Seat	Ceramic	Ni Resist	Ni Resist	Tung Crbd	Ni Resist
Spring	18-8 S/S	18-8 S/S	18-8 S/S	18-8 S/S	18-8 S/S
Hardware	18-8 S/S	18-8 S/S	18-8 S/S	18-8 S/S	Brass
Constr Code	MECHANICAL SEAL KIT PART NUMBER				
X3XXXX	91909162	91909165	91909164	91909163	96869395
X4XXXX	91909166	91909170	91909169	91909167	96869886
XAXXXX	91909166	91909170	91909169	91909167	96869886
X5XXXX	91909171	91909174	91909173	91909172	96936795

GASKETS

Pump Size (Nominal Max. Impeller Dia.)	Const. Code	Seal I.D. (in)	Gasket Part Number	Gasket Description
7"	X3, X4	1.25, 1.75	91869180	Volute "O" Ring
9.5"	X3, X4, XA	1.25, 1.75	91849028	Volute Gasket
			91869180	"O" Ring-Backplate
9.5"	X5	2.25	91849028	Volute Gasket
12"	X3, XA	1.25, 1.75	91848843	Volute Gasket
			91869180	"O" Ring-Backplate
12"	X5	2.25	91848843	Volute Gasket
			91849000	Backplate Gasket
15"	XA	1.75	91848882	Volute Gasket
			91869180	"O" Ring-Backplate
15"	X5, X6	2.25, 2.75	91848882	Volute Gasket
			91849000	Backplate Gasket

SLINGERS

Const. Code	Slinger Part Number
X3	91867835
X4,XA	91867849
X5	91867832
X6	91867846

MLE Motors

All MLE motors are 60 HZ, 3 PH, TEFC, VFD, C-Face, and uninsulated

Part Number	Weight	HP Motor	Poles	Volt.	Frame	AK	AH	Shaft Dia	Eff.	SF Motor	Amps Full Load	Type	
98489500	65	3	2	208-230	182TC	8.5	2.62	1.125	Energy/IE2	1.07	8.3	MLEV	
98489501				Premium					1.15	3.7	MLEV		
98489500				Energy/IE2					1.07	7.6	MLEV		
98489485									8.3	MLEH			
98489487	Premium			1.15					3.7	MLEH			
98489485			1.07	7.6					MLEH				
98510586	69								Energy/IE2	1.15	3.7	MLEV	
98534069	88		4	460					3.7		MLEH		
98489502	91	5	2	208-230	184TC	8.5	2.62	1.125	Energy/IE2	1.07	13.8	MLEV	
98489503	100			460					Premium	1.15	6.1		
98489502	91			208-230					Energy/IE2	1.07	13.3		
98489489	97									13.8			
98489490	107			460					Premium	1.15	6.1	MLEH	
98489489	97		208-230						1.07	13.3			
98510587	100		4	460					Energy/IE2	1.15	6.1		MLEV
98534070	107								6.1		MLEH		
98489504	100	7.5	2	208-230	215TC	8.5	3.12	1.375	Energy/IE2	1.07	20.5	MLEV	
98489505	109			460					Premium	1.15	8.9		
98489504	100			208-230					Energy/IE2	1.07	18.5		
98489491	104									20.5			
98489492	113			460					Premium	1.15	8.9	MLEH	
98489491	104		208-230						1.07	18.5			
98510588	115		4	460					Energy/IE2	1.15			MLEV
98534081	140											MLEH	
98489506	139	10	2	460	215TC	8.5	3.12	1.375	Premium	1.15	11.6	MLEV	
98489493											MLEH		
98510589	159		4						Energy/IE2			12.4	MLEV
98534082	179											MLEH	

MLE Motors

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Part Number	Weight	HP Motor	Poles	Volt.	Frame	AK	AH	Shaft Dia	Eff.	SF Motor	Amps Full Load	Type	
98489507	196	15	2	460	254TC	8.5	3.75	1.625	Premium	1.15	17.2	MLEV	
98489494	274		MLEH										
98510590	216		4						Energy/IE2		17.8	MLEV	
98534084	283								MLEH				
98489508	196	20	2	460	256TC	8.5	3.75	1.625	Premium	1.15	22.8	MLEV	
98489496	307		MLEH										
98510592	260		4						Energy/IE2		24.2	MLEV	
98534085	331								MLEH				
98489509	225	25	2	460	284TSC	10.5	3.00	1.625	Premium	1.15	28	MLEV	
98489497	338		284TC		4.38		1.875	Standard	29.5			MLEH	
98510593	269										4	10.5	3.00
98534087	349		30		2		460	286TSC	10.5		3.00	1.625	Premium
98489510	251	30	2	460	286TSC	10.5	3.00	1.625	Premium	1.15	33.5	MLEV	
98489498	366											MLEH	

Motor Kits

Motor pn	Control box cpl.	Control board	Inverter board	Rectifier board	Connector plugs	EMC cable gland	Harmonic filter	Varistor	Upgrade kit
98489500	98489672	Not available							
98489501									
98510586									
98489502									
98489503	96086143								
98510587									
98489504									
98489505									
98510588	96086144								
98489506									
98510589									
98489507	96348913								
98510590									
98489508									
98510592	96348914								
98489509									
98510593									
98489510									

EXPLANATION OF PUMP CATALOG (Refer to Pump Nameplate)

XX
**Product
Code**

XXXXX
**Model
Number**

XXXXXX
**Construction
Code**

NOTE: This Replacement Parts Guide is valid for all Grundfos products beginning with product codes 14 and 24 only.

Product Code 14 = Split coupled End Suction, LCS

Product Code 24 = Split coupled End Suction, LCSE

KIT COMPONENTS

Impeller Kit:
Impeller
Volute Gasket
Backplate Gasket
Impeller Cap Screw
Impeller Washer
Impeller Key
Impeller Nut

Seal Kit:
Mechanical Seal
Seal Cap O-Ring

Packing Kit:
Packing Seal
Volute Gasket
Backplate Gasket
Lantern Ring
Impeller Cap Screw
Impeller Washer
Impeller Key
Impeller Nut

Wear Ring Kit:
Wear Rings

Hardware Kit:
Cap Screws

Gaskets:
(Non-Kitted)

Shaft Kit:
Shaft
O-Ring
Bushing

Gland Kit:
Packing Gland
Studs
Nuts
Bolts
Washers
Retaining Ring

NOTE: Kits may contain all parts listed. They are individually selected for each pump and its construction.

Kits may contain gaskets wherever gasket replacement is indicated, as noted above.

NOTE: Seal/Packing Kits are always recommended as spare parts.