

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

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	Aluminum Bronze	Iron	316 Stainless	304 Stainless					
1070-7	X3	91911005	97679766	-		96656930	98669568	91910593		91910834	91910643
1270-9	X3	91911000	97909161	91911001		98563922	98669581	91910593		91910834	91910643
1570-5	X3	91909739	97850072	91909740		97847338	98670131	91910593		91910834	91910643
2070-9	X3	91911595	97776120	91911596	96801104	99061295	98670058	91910593		91910834	91910643
2570-7	X3	91909762	97891615	91909763		96882778	98670059	91910593		91910834	91910643
3070-7	X3	91909772	97661731	91909773		96742711	98670060	91910593		91910834	91910643
3070-7	X4	91909777	98994113	91909778	96932507	98961148	98670060	91910594		91910847	91910644
4070-7	X3	91909783	97908496	91909784		97698632	98670074	91910593		91910834	91910643
4070-7	X4	91909788	98158554	91909789		96743206	98670653	91910594		91910847	91910644
1595-1	X3	91909791	96699310	91909792			98670132	91910595		91910834	91910643
1595-5	X3	91909793	97852485	91909795	98515804	99195412	98670132	91910595		91910834	91910643
1595-9	X3	91911017	97692479	91911018			98670132	91910595		91910834	91910643
1595-9	X4	91911019	97710406	91911020		97635780	98670132	91910596		91910847	91910644
2095-3	X3	91909815	97948034	91909816			98670058	91910595		91910834	91910643
2095-3	X4	91909819	98483455	91909820		98097794	98670058	91910596		91910847	91910644
2595-7	X3	91911369	97745127	91911370	98170062	98616222	98670059	91910595		91910834	91910643
2595-7	X4	91911371	97579179	91911372			98670059	91910596		91910847	91910644
3095-7	X3	91911630	97642561	91911633		91911634	98670135	91910595		91910834	91910643
3095-7	XA	91911637		91911638			98670136	91910596		91910847	91910644
4095-7	X3	91909863	97920032	91909865	97656733		98670151	91910596		91910834	91910643
4095-7	X4	91909867	97684756	91909870			98670151	91910596		91910847	91910644
4095-9	XA	91909872	97549902	91909873	99040009	98432284	98670151	91910596		91910847	91910644
5095-7	X4	91909887	97683168	91909891		99050940	98670654	91910596		91910847	91910644
6095-1	XA	91909898	97713071	-			98670157	91910596		91910847	91910644
2012-1	X3	91909901	99275313	91909902		98067193	98670058	91910598		91910834	91910643
2512-3	X3	91909908	97825585	98762221			98670059	91910598		91910834	91910643
2512-3	XA	91909915		91909916			98670059	91910599		91910847	91910644
3012-1	XA	91909919	97793607	-		99048897	98670158	91910599		91910847	91910644
3012-7	XA	91911375	97767356	91911376		96832331	98670158	91910599		91910847	91910644
4012-9	XA	91911367	97692846	91911368	98888845	97551540	98670159	91910599		91910847	91910644
4012-A	XA	91909218	98382920	-	98961707	98403873	98670159	91910599		91910847	91910644
5012-3	XA	91909957	97951786	91909958	99026744	96933441	98670160	91910599		91910847	91910644
6012-3	XA	91909965	97767354	91909967	98314600	98889249	98670171	91910600		91910847	91910644
6012-3	X5	91909969	98618755	91909970	98878798		98670172	91910600		91910855	91910645
8012-3	X5	91910024	97627782	91910026		96884773	98670173	91910601		91910855	91910645
3015-7	XA	91911029	98134905	91911030		98477474	98670158	91910601		91910847	91910644
4015-7	XA	91910083	98366001	-			98670178	91910601		91910847	91910644
5015-7	X5	91910113	97749052	91910114			98670178	91910601		91910855	91910645
6015-7	X5	91910130	97790399	-	98439267		98670180	91910601		91910855	91910645

See Page 4 for Seal Kit Selection

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*	
		12"	98571499**	98681227
		15"	98571481***	
254/256TC	X3	7", 9.5"	98571488	98681228
		12"	98571478	
	X4	7", 9.5"	98571485	
		7"	98571518	
	XA	9.5"	98571515	
12", 15"		98571482		
284/286TSC	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	68			208-230					Energy/IE2	1.07	7.6	MLEV	
98489485				460					8.3	MLEH			
98489487	69		4	208-230					460	Energy/IE2	1.07	7.6	MLEH
98489485				1.15							3.7	MLEV	
98510586	88		3.7	MLEH									
98489502	91		5	2					208-230	184TC	8.5	2.62	1.125
98489503	100	460			Premium	1.15	6.1						
98489502	91	208-230			Energy/IE2	1.07	13.3						
98489489	97	460			Premium	1.15	6.1	MLEH					
98489490	107	208-230		Energy/IE2	1.07	13.3							
98489489	97	460			1.15	6.1	MLEV						
98510587	100	4		460		6.1	MLEH						
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			460					Premium	1.15	8.9	MLEH	
98489492	113		208-230	Energy/IE2					1.07	18.5			
98489491	104		460						1.15		MLEV		
98510588	115		4	460							MLEH		
98534081	140												
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

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
98489507	196	15	2	460	254TC	8.5	3.75	1.625	Premium	1.15	17.2	MLEV
98489494	274		4						MLEH			
98510590	216								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		4						MLEH			
98510592	260								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		4		284TC				4.38			1.875
98510593	269						Energy/IE2	29.5			MLEV	
98534087	349		MLEH									
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	96348918	96348919	96348921	96348923	96478309	96348985	96348917	96348973	
98489501										
98510586										
98489502										
98489503	96086143									Not available
98510587										
98489504										
98489505										
98510588										
98489506	96086144									
98510589										
98489507	96348913									
98510590										
98489508	96348914	96348920								
98510592										
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 With MLE Motor, 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

Gaskets:
(Non-Kitted)

Gland Kit:
Packing Gland
Studs
Nuts
Bolts
Washers
Retaining Ring

Shaft Kit:
Shaft
O-Ring
Bushing

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.