



# SEA-BIRD ELECTRONICS, INC.

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SBE P/N 50062

DATE	REV	REVISION RECORD	AUTH	DR	CHK
07.13.04	B	Changed Descriptions for Impeller and Pump Head o-rings	ET	KLP	
03.17.06	C	Add Thrust Washer, PN 30095	CB	MJ	
06.04.07	D	ECN 1096: Universal external pump housing O-ring kit	PC	PC	
9.21.11	E	Updated for 5T V3	CB	PC	

## SBE 5M / 5P / 5T Pump Housing O-Ring Kit

### KIT CONTENTS

SBE P/N	Manufacturer P/N	Primary SBE Application	QTY
30010	Pump Thrust Washer, 115-033-10	Thrust Washer for Pump Impeller	2
30082	Parker O-Ring, 2-213 N674-70	Connector Endcap O-Ring for 5T V1/V2	1
30095	Parker O-Ring, 2-002 N674-70	Pump Impeller O-Ring	1
30571	Parker O-Ring, 2-124 N674-70	Pump Head O-Ring	1
31011	Parker O-Ring, 2-026 N674-70	Impeller Endcap O-Ring for 5M / 5P / 5T V3	1

## Pump Housing O-Ring Replacement

### A. General O-Ring Installation

- O-rings must be cleaned and lubricated with silicone-based lubricant before installing.
- Never use petroleum-based lubricant.
- Never clean an o-ring with any type of abrasive material.
- Always inspect all o-rings and o-ring surfaces for scratches or dirt before installation.

### B. Pump Impeller O-Ring and Thrust Washer (30095, 30010)

- Install one of the thrust washers (30010) onto the shaft.
- The impeller should then be slid down all the way onto the shaft, followed by the second thrust washer (30010).
- Secure the fixture into place with the pump impeller o-ring (30095).
  - Do not put any lubricate on this o-ring.

### C. Pump Head O-Ring (30571)

- Lube the o-ring groove on impeller endcap and pump head o-ring (30571).
- Install the o-ring into the o-ring groove.
- Press the o-ring as tightly as possible into the groove.
- Backthread the pump head (23593) over the o-ring until both are firmly seated and then thread the pump head hand tight onto the housing.

### D. Connector Endcap O-Ring (30082)

- Lubricate the o-ring and o-ring groove, as well as the housing seating surface with o-ring lubricant.
- Install the o-ring by carefully sliding it completely over the bulkhead connector.
- Next, use a plastic spatula to pry the o-ring over the endcap into its groove.

SBE DRAWING: 67029.03

TITLE: 5M/5P/5T Pump Housing O-Ring Kit

### Sea-Bird Electronics Procedure

PROCEDURE NUMBER: 67029

TITLE: SBE 5M/5P/5T Pump Housing O-Ring Kit

REVISION: E

EFFECTIVE DATE: 09/21/2011

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**E. Impeller Endcap O-Ring (31011)**

1. Lubricate the o-ring and o-ring groove, as well as the housing seating surface with o-ring lubricant.
2. Install the o-ring into the o-ring groove furthest from the impeller side of the endcap.

SBE DRAWING: **67029.03**

TITLE: 5M/5P/5T Pump Housing O-Ring Kit

**Sea-Bird Electronics Procedure**

PROCEDURE NUMBER: **67029**

TITLE: **SBE 5M/5P/5T Pump Housing O-Ring Kit**

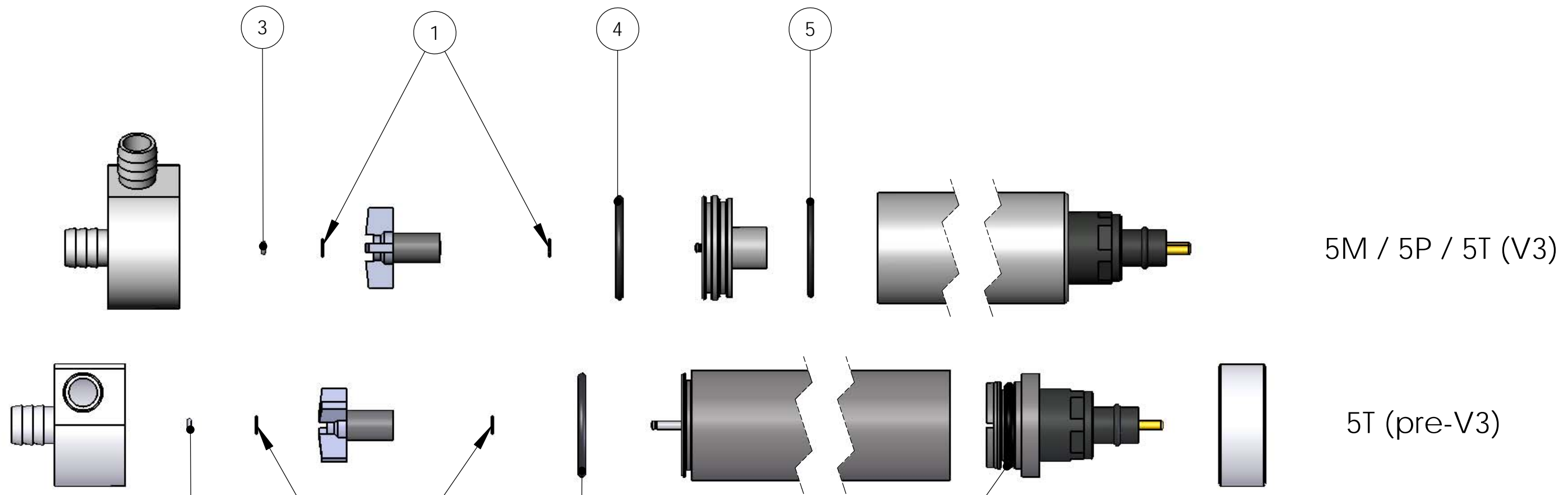
REVISION: **E**

EFFECTIVE DATE: **09/21/2011**

CHECKED BY: \_\_\_\_\_ PC \_\_\_\_\_ Page 2 of 2

ITEM NO.	PART NUMBER	DRAWING NUMBER	DESCRIPTION	QTY.
1	30010	N/A	Pump Thrust Washer, March #115-033-010	2
2	30082	N/A	O-ring, Parker 2-213 N674-70	1
3	30095	N/A	O-ring, Parker 2-002 N674-70	1
4	30571	N/A	O-ring, Parker 2-124, N674-70	1
5	31011	N/A	O-ring, Parker 2-026 N674-70	1

REV.	DATE	ZONE	DESCRIPTION	AUTH	DWG	CHK
.01	03/20/06		Migrate to Solidworks and add pump thrust washers	KHH	KHH	
.02	06/04/07		ECN 1096: Universal external pump housing O-ring kit	CB	PC	
.03	09/21/11		Updated for 5T V3	CB	PC	



5M / 5P / 5T (V3)

5T (pre-V3)

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	SEA-BIRD ELECTRONICS, INC.	
DIMENSIONS ARE IN INCHES		DRAWN	PC	06/04/07	13431 NE 20th Street, Bellevue, WA 98005
TOLERANCES:		PROPRIETARY AND CONFIDENTIAL		TITLE:	
FRACTIONAL ±1/x		THE INFORMATION CONTAINED IN THIS		SBE 5M/5P/5T Pump Housing O-ring Kit	
ANGULAR: ± 0.5° BEND ±		DRAWING IS THE SOLE PROPERTY OF		PART NO.	
.X ± .05 TYP RAD .01		SEA-BIRD ELECTRONICS, INC. ANY		50062	
.XX ± .01		REPRODUCTION IN PART OR AS A WHOLE		SIZE DWG. NO.	
.XXX ± .003		WITHOUT THE WRITTEN PERMISSION OF		B 67029.03	
MACHINED SURFACES		SEA-BIRD ELECTRONICS, INC. IS PROHIBITED.		SCALE: 1:2	
INTERPRET GEOMETRIC TOLERANCING		COMMENTS:		SHEET 1 OF 1	
PER: ANSI Y14.5M - 1994		DEBUR AND BREAK			
MATERIAL		SHARP EDGES			
N/A		Old Part/Draw Info			
FINISH		50062 / 67029			
N/A					
DO NOT SCALE DRAWING					