SBE

SBE P/N Varies

DATE	REV	REVISION RECORD	AUTH	DR	CHK
06.03	B	Added new 7mm Kit	CB	MJ	
03.04	C	Updated Drawing Revision		KLP	
7.9.04	D	Change title	CB	KLP	
2.15.05	E	Add Clamp/Cap/Base components table and rework of assy. Instructions.	MJ	KHH	MJ
4.4.06	F	Add new kit to List	CB	MJ	

SBE 37 SM/SI/SMP/SIP Cable Clamp Assembly Kit

UNIVERSAL KIT CONTENTS

SBE P/N	Manufacturer P/N	Primary SBE Application	QTY
30633	Washer, 1/4" Split Ring, Ti	Used with cable guide cap and cable clamp securing bolts	2
30634	Washer, 1/4" Flat, Ti	Used with cable guide cap and cable clamp securing bolts	2
30860	Mach Screw, 6-32x1/2" FH, Ti	Hold cable clamp half to flat area of sensor endcap	1
30900	Mach Screw, 1/4-20x2" Hex Ti	Secure cable guides/clamps to endcaps	2
31019	O-Ring, 2-008 N674-70	Placed on cable clamp 1/4-20 bolts as retainers	2
31040	Mach Screw, 8-32 x 1" FH, Ti	Secure cable guide base to battery/connector endcap	3

SPECIFIC KIT CONTENTS (varies to specified wire size)

SBE P/N	Manufacturer P/N	Primary SBE Application	QTY
Varies	SBE37 Microcat Cable Clamp	Attach to flat surface of sensor ec., clamps to cable	2
Varies	SBE37 Microcat Cable guide cap	Attach to cable guide base to lock down mooring cable	1
Varies	SBE37 Microcat Cable guide base	Attach to battery/connector endcap to hold cable	1

CLAMP/CAP/BASE SUB-ASSEMBLY COMPONENTS (as seen in attached drawing, 67094B)

SBE P/N	Manufacturer P/N	Primary SBE Application	QTY
30633	Washer, 1/4" Split Ring, Ti	Used with cable guide cap and cable clamp securing bolts	2
30634	Washer, 1/4" Flat, Ti	Used with cable guide cap and cable clamp securing bolts	2
30900	Mach Screw, 1/4-20x2" Hex Ti	Secure cable guides/clamps to end caps	2
31019	O-Ring, 2-008 N674-70	Placed on cable clamp 1/4-20 bolts as retainers	2

KIT PART NUMBERS

SBE P/N	Kit Description	SBE P/N	Kit Description
50260	SBE37 Modular Cable Clamp Kit, 11mm	50268	SBE37 Modular Cable Clamp Kit, 10mm
50261	SBE37 Modular Cable Clamp Kit, 1/4"	50269	SBE37 Modular Cable Clamp Kit, 1/2"
50262	SBE37 Modular Cable Clamp Kit, 3/8"	50270	SBE37 Modular Cable Clamp Kit, 12mm
50263	SBE37 Modular Cable Clamp Kit, 5/16"	50271	SBE37 Modular Cable Clamp Kit, 16mm
50267	SBE37 Modular Cable Clamp Kit, 6mm	50337	SBE37 Modular Cable Clamp Kit, 7mm
		50410	SBE37 Modular Cable Clamp Kit, 20mm

SBE DRAWING: 67094

TITLE: SBE37 Microcat Cable Clamp Set

REV: B

Sea-Bird Electronics Procedure
PROCEDURE NUMBER: **67094**
TITLE: **SBE37 SM/SI/SMP/SIP Cable Clamp Kit Assembly**
REVISION: **E**
EFFECTIVE DATE: 2/15/2005

Clamp/Cap/Base Assembly - Usually Done at Seabird

1. One (1) Microcat Threaded Insert (231481) must be glued into each hole in the connector endcap Cable Guide Base (PN varies).
   a. Clean the surfaces of the Celcon and of the threaded insert with alcohol.
   b. Use a fine grit sandpaper to roughen the celcon surface area.
   c. Prime the Celcon with DC-1200.
      - *Follow instructions on the can.*
      - *DC-1200 has a cure time of about 30 minutes.*
   d. Use RTV 734 flowable to glue the insert into position.
2. Mate the cable guide cap to the cable guide base to achieve alignment of the threaded inserts while the RTV cures.
   a. Align them together so that the circular cut-outs make a hole.
   b. Use one (1) bolt (30900) for every insert to align them while they cure.
   c. Slide the bolts into the guide cap from the rounded side.
3. RTV cures at an absolute minimum of 2 hours, but should be allowed to cure overnight.
4. Once the RTV has fully cured, you may remove the cable guide cap.
5. Secure the guide cap to the guide base.
   a. Align them together so that the circular cut-outs make a hole.
   b. Place one lock washer (30633) and one flat washer (30634) onto each of the two (2) bolts (30900).
   c. Slide the bolts into the guide cap from the rounded side.
   d. Slide one (1) o-ring (31019) over each bolt.
   e. Secure the guide cap to the guide base with these bolts. The o-rings should seat themselves into the internal countersinks on the blocks.

Install Sensor Endcap Cable Clamp Assembly

1. Install the first clamp guide piece (one of the two identical blocks) onto the endcap.
   a. Align it so that the threaded circular cut-out faces away from the sensor.
   b. Secure onto the endcap with one (1) set screw (30860).
2. Install the second clamp piece to the first piece.
   a. Align them so that the circular cut-outs make a hole.
   b. Place one lock washer (30633) and one flat washer (30634) onto each of two (2) bolts (30900).
   c. Slide the screws into the cable clamp from the flat side.
   d. Slide one o-ring (31019) over each bolt.
   e. Secure the cable clamps together with these bolts. The o-rings should seat themselves into the internal countersinks on the blocks.

SBE DRAWING: 67094

TITLE: SBE37 Microcat Cable Clamp Set

REV: B

Sea-Bird Electronics Procedure
PROCEDURE NUMBER: **67094**
TITLE: **SBE37 SM/SI/SMP/SIP Cable Clamp Kit Assembly**
REVISION: **E**
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Install Connector Endcap Guide Cap and Base

1. The guide base installs onto the connector endcap with the rounded side containing the countersunk screw holes facing away from the sensor, and squared end facing the same direction as the clamp guides on the other end.
2. Secure the guide base to the endcap with three (3) screws (31040) directly into the endcap,
    a. *Coat the screws in NeverSeez.*

Re-Installing the Connector Endcap

1. If you have removed the sensor endcap, either for this procedure, or to replace the batteries, please follow this procedure to properly re-install the endcap.
2. Inspect, clean and re-lubricate the seating surface as necessary.
3. Insert the molex header onto the pins on the battery post.
4. Verify visually that the pins are properly aligned. Microcats have "burned up" before because of the pins have been misalignment.
5. Install the endcap carefully, but tightly, onto the housing, so that the screw holes are both aligned.
6. Inject the holes with DC-4, and secure the housing to the endcap with the screws that were removed.

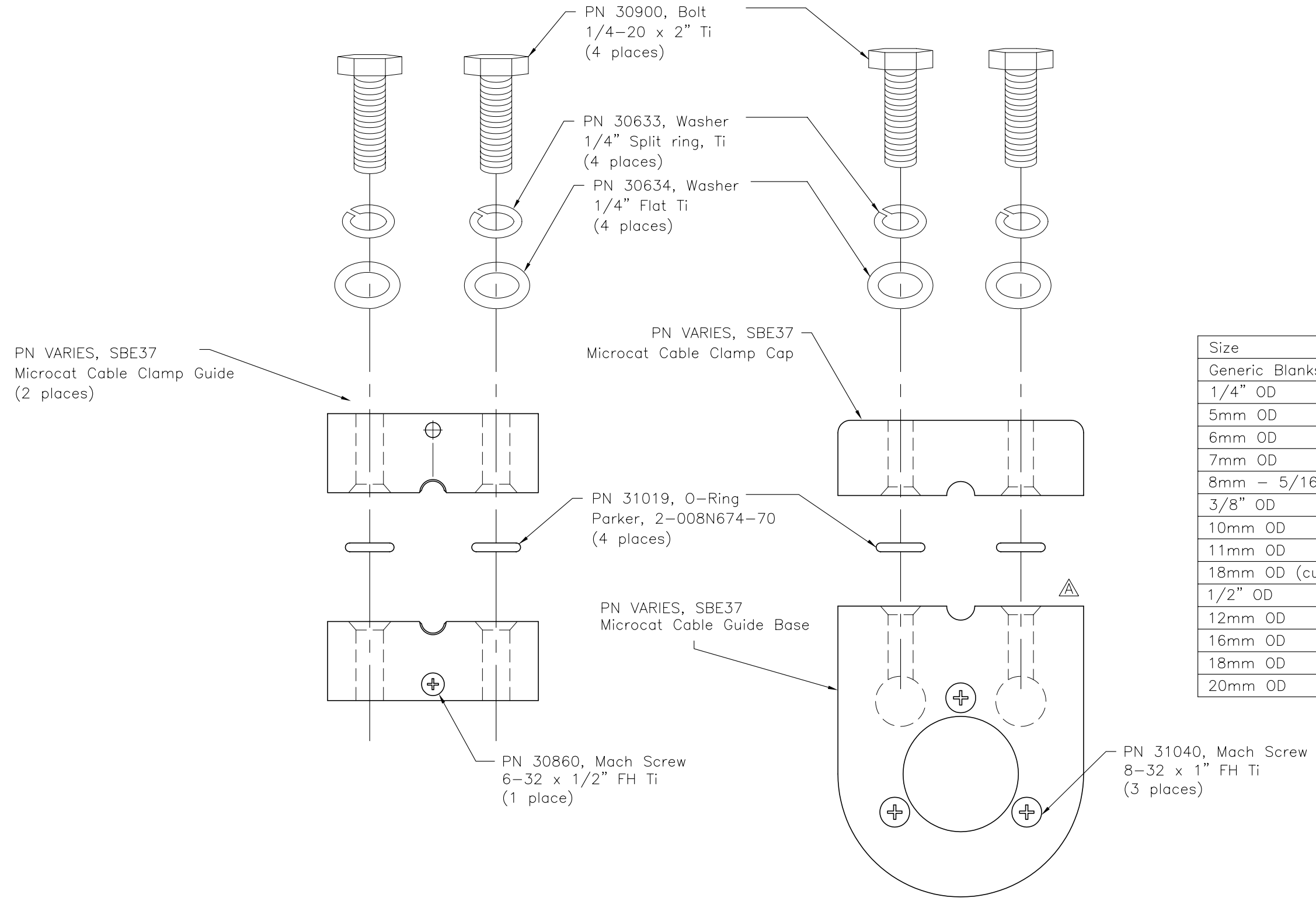|	
SBE DRAWING: 67094 TITLE: SBE37 Microcat Cable Clamp Set REV: B	**Sea-Bird Electronics Procedure** PROCEDURE NUMBER: **67094** TITLE: **SBE37 SM/SI/SMP/SIP Cable Clamp Kit Assembly** REVISION: **E** EFFECTIVE DATE: 2/15/2005 CHECKED BY: PAGE 3 of 3

TO SENSOR ENDCAP

TO CONNECTOR ENDCAP

PN 30900, Bolt
1/4-20 x 2" Ti
(4 places)

PN 30633, Washer
1/4" Split ring, Ti
(4 places)

PN 30634, Washer
1/4" Flat Ti
(4 places)

PN VARIES, SBE37
Microcat Cable Clamp Guide
(2 places)

PN VARIES, SBE37
Microcat Cable Clamp Cap

PN 31019, O-Ring
Parker, 2-008N674-70
(4 places)

PN VARIES, SBE37
Microcat Cable Guide Base

PN 30860, Mach Screw
6-32 x 1/2" FH Ti
(1 place)

PN 31040, Mach Screw
8-32 x 1" FH Ti
(3 places)

Kit P/N	Kit Description
50260	SBE37 Cable Clamp Set, 11mm
50261	SBE37 Cable Clamp Set, 1/4"
50262	SBE37 Cable Clamp Set, 3/8"
50263	SBE37 Cable Clamp Set, 5/16"
50267	SBE37 Cable Clamp Set, 6mm
50337 ⚠	SBE37 Cable Clamp Set, 7mm
50268	SBE37 Cable Clamp Set, 10mm
50269	SBE37 Cable Clamp Set, 1/2"
50270	SBE37 Cable Clamp Set, 12mm
50271	SBE37 Cable Clamp Set, 16mm
50410	SBE37 Cable Clamp Set, 20mm

Size	Cable Clamp	Guide Cap	Guide Base
Generic Blanks	231766	231768	231767
1/4" OD	231461	231483	231484
5mm OD	232369	232370	232371
6mm OD	231739	231743	231747
7mm OD	232192	232194	232193
8mm - 5/16" OD	231569	231727	231728
3/8" OD	231722	231723	231724
10mm OD	231740	231744	231748
11mm OD		231693	231694
18mm OD (custom)	232342		
1/2" OD	231738	231742	231746
12mm OD	231741	231745	231749
16mm OD	231762	231763	231764
18mm OD	233000	233002	233001
20mm OD	233351	233353	233352

SEA-BIRD ELECTRONICS, INC

P/N See Table	SCALE NTS	DRAWN BY MJ
		APPROVED BY

SBE 37 Microcat Cable
Clamp Assembly

| DATE 12.14.99 | DWG NO. 67094 | SHEET 1 of 1 | REV B |