

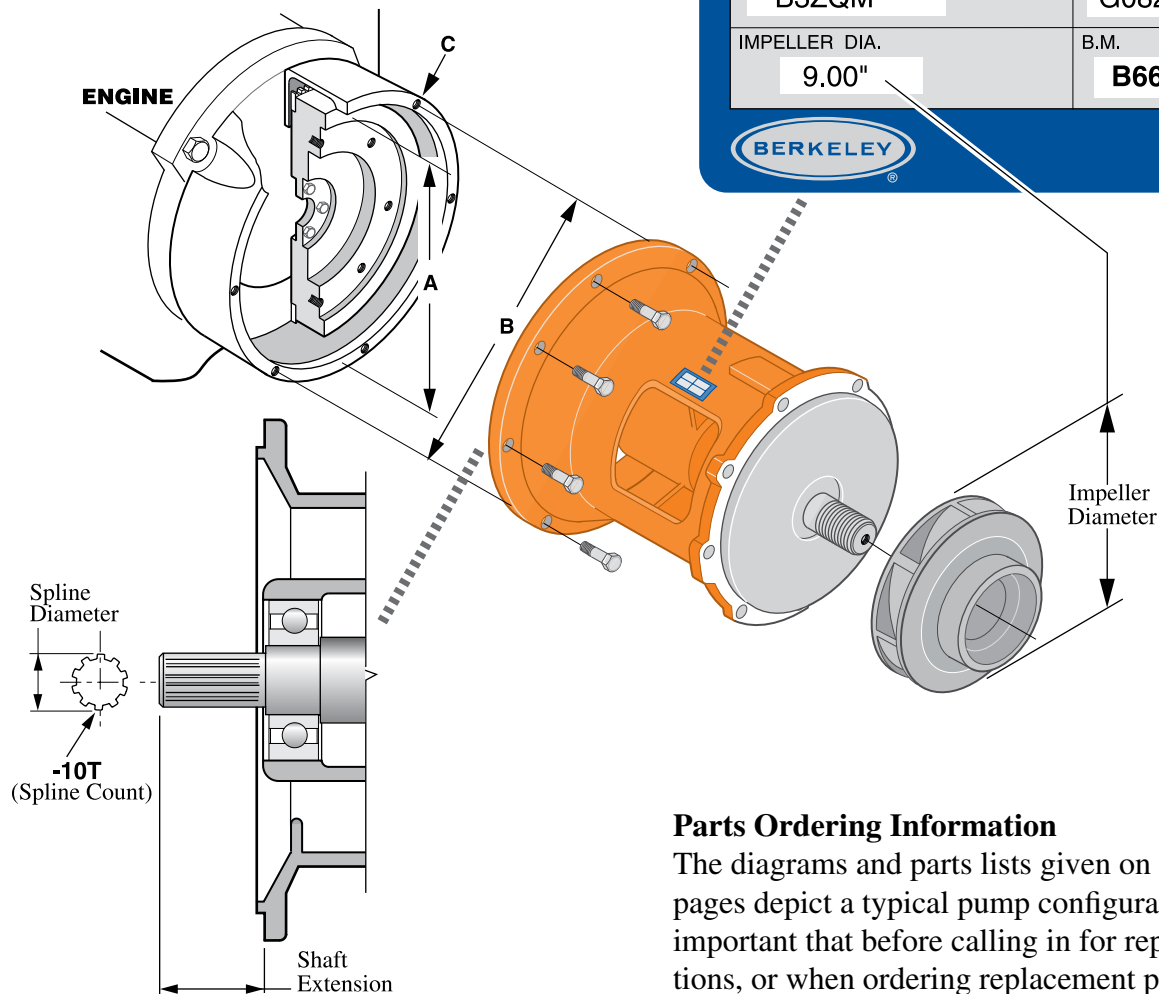


# Type "B" Single Stage Centrifugal Pump SAE Engine Mount

Section	SAE
Page	Supplement A
Date	July 1, 2011
Supersedes 1/1/04	

## Mechanical Shaft Seal Construction Packing Construction

Flywheel Housing Dimensions	S.A.E. Flywheel Housing Size				
	1	2	3	4	5
A	20-1/8	17-5/8	16-1/8	14-1/4	12-3/8
B	20-7/8	18-3/8	16-7/8	15	13-1/8
C	No.	12	12	12	8
	Size	7/16-14	3/8-16	3/8-16	3/8-16



### SAE Housing Size/Shaft Dimensions

Table I on repair parts sheets of this section reflect each pump's SAE housing size to verify fit to engine, and shaft dimensions for proper match-up to flywheel coupling. Refer to above illustration for an explanation of these figures.

**NOTE:** Engine and flywheel coupling are not part of pump assembly.

### Parts Ordering Information

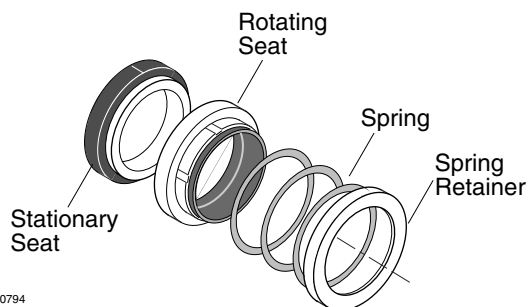
The diagrams and parts lists given on the following pages depict a typical pump configuration. It is most important that before calling in for repair instructions, or when ordering replacement parts, locate the Berkeley nameplate on the pump. It is affixed to the motor bracket, as shown here. Provide all nameplate data, especially the S.N OR DATE number and the B.M. (Bill of Material) number to ensure receiving correct parts.



# TYPE "B" SINGLE STAGE CENTRIFUGAL PUMP SAE Engine Mount

Section	SAE
Supplement	B
Date	August 17, 2010
Supersedes 1/1/04	

## MECHANICAL SEAL CONSTRUCTION



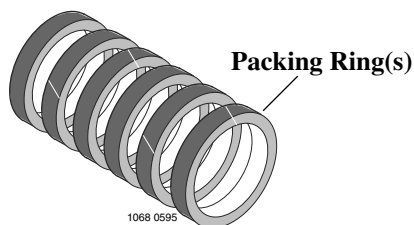
1189 0794

Typical Mechanical Seal

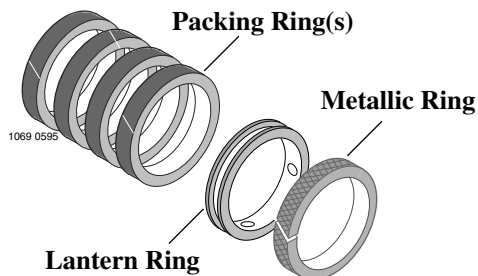
### Standard Mechanical Seal/ Shaft Sleeve Combinations

SEAL		SLEEVE	
P/N	Description	P/N	Description
S32690	1-1/8" Type 21 Short	S05127L	7/8" I.D. x 1-1/8" O.D.
S32694	1-7/8" Type 21 Short	S33429L	1-1/2" I.D. x 1-7/8" O.D.
S30320	2-1/2" Type 2	S19499L	2-3/16" I.D. x 2-1/2" O.D.
S32015	1-3/4" Type 21	M15098L	1-3/8" I.D. x 1-3/4" O.D.

## PACKING CONSTRUCTION



Typical Packing Set - Soft Rings Only



Typical Packing Set With Soft Rings,  
Lantern Ring, and Hard (Metallic) Ring

### Standard Packing Sets Shown on Repair Parts Sheets

Packing Set P/N	No. of Soft Rings	Metallic Ring	Ring I.D.	Ring O.D.	Cross Section	Shaft Sleeve
S14022	6	None	1-1/8"	1-5/8"	1/4"	S05127L
S14023	6	None	1-7/8"	2-5/8"	3/8"	S05974L
S13435	4	S11092	1-3/4"	2-1/2"	3/8"	M15098L
S13436	4	S13434	1-7/8"	2-5/8"	3/8"	S05974L
S13437	4	S11093	2-1/8"	2-7/8"	3/8"	S07073L

**NOTE:** Part numbers given on repair parts sheets for packing rings reflects complete set of soft rings required for each model. Some models also require a hard (metallic) ring that is installed as shown above. Hard ring comes as part of the set, when required, and is in *addition* to the soft ring count shown (set of 5, set of 6, etc.). Metallic part number shown for reference only. Lantern Ring (item #29) is sold separately.

**NOTE:** M15098L is available in Kit # B85741. Kit includes sleeve, adhesive, and instruction sheet.



# Type "B" Single Stage Centrifugal Pump SAE Engine Mount

Section	SAE
Page	Supplement C1
Date	January 1, 2012
Supersedes 1/10/2007	

## Replacement Shaft Kits

**1-3/8-10T 2-1/2" Ext.**

Ref.	Part Description	Part No.
6	Shaft, Pump	M02711
14	Sleeve, Shaft	S05127L
16	Bearing, Inboard	S13270
18	Bearing, Outboard	S14059
816	Ring, Retaining (2 Rqd.)	S23010

**B71878**

**1-3/8-10T 3" Ext.**

Ref.	Part Description	Part No.
6	Shaft, Pump	M04154
14	Sleeve, Shaft	S05127L
16	Bearing, Inboard	S13270
18	Bearing, Outboard	S14059
816	Ring, Retaining (2 Rqd.)	S23010

**B71879**

**1-3/8-10T 3" Ext.**

Ref.	Part Description	Part No.
6	Shaft, Pump	M06186
14	Sleeve, Shaft	S05974L
16	Bearing, Inboard	S13396
18	Bearing, Outboard	S13395

**B71882**

**1-1/2-10T 3" Ext.**

Ref.	Part Description	Part No.
6	Shaft, Pump	M06183
14	Sleeve, Shaft	S05974L
16	Bearing, Inboard	S13396
18	Bearing, Outboard	S13395

**B71883**

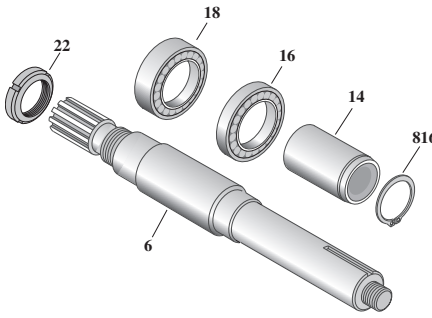


# Type "B" Single Stage Centrifugal Pump SAE Engine Mount

Section	SAE
Page	Supplement C2
Date	January 1, 2012
Supersedes 1/1/2004	

## Replacement Shaft Kits

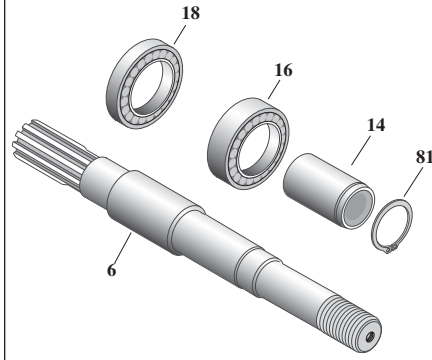
**1-1/2-10T 3" Ext.**



Ref.	Part Description	Part No.
6	Shaft, Pump	M06735
14	Sleeve, Shaft	S19499L
16	Bearing, Inboard	S19502
18	Bearing, Outboard	S18336
22	Nut, Bearing Lock	S19498
816	Ring, Retaining	S17831

**B71884**

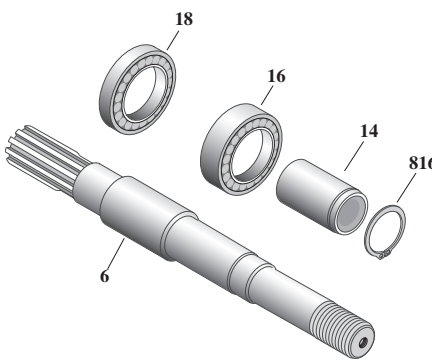
**1-1/2-10T 2-1/2" Ext.**



Ref.	Part Description	Part No.
6	Shaft, Pump	M06188
14	Sleeve, Shaft	S33429L
16	Bearing, Inboard	S13396
18	Bearing, Outboard	S13395
816	Ring, Retaining	S29341

**B71891**

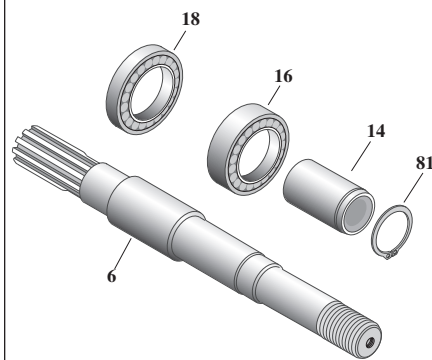
**1-3/8-10T 3" Ext.**



Ref.	Part Description	Part No.
6	Shaft, Pump	M06186
14	Sleeve, Shaft	S33429L
16	Bearing, Inboard	S13396
18	Bearing, Outboard	S13395
816	Ring, Retaining	S29341

**B71893**

**1-1/2-10T 3" Ext.**



Ref.	Part Description	Part No.
6	Shaft, Pump	M06183
14	Sleeve, Shaft	S33429L
16	Bearing, Inboard	S13396
18	Bearing, Outboard	S13395
816	Ring, Retaining	S29341

**B71894**



# Type "B" Single Stage Centrifugal Pump SAE Engine Mount

Section	SAE
Page	Supplement C3
Date	January 1, 2012
Supersedes 8/17/2010	

## Replacement Shaft Kits

1-1/2-10T 3" Ext.

Ref.	Part Description	Part No.
6	Shaft, Pump	M15092
14	Sleeve, Shaft (Kit)	B85741
16	Bearing, Inboard	M15097
18	Bearing, Outboard	S13754
40	Slinger, Water	S10964
72	Ring, Thrust	M15095
816	Ring, Retaining	M15094
	Seal (2 Rqd.)	M12337
	Key	S23677
*	Washer, Lock	S06319
	Washer, Lock	S23038
	Screw, Impeller	S23621

\* Not shown

B85738

1-1/2-10T 4" Ext.

Ref.	Part Description	Part No.
6	Shaft, Pump	M12339
14	Sleeve, Shaft	M12422L
16	Bearing, Inboard	S13395
18	Bearing, Outboard	S13397
40	Slinger, Water	S10964
72	Ring, Thrust	S06519
816	Ring, Retaining	S23016
	Seal, Grease (2 Rqd.)	M12337
*	Key	S24176
	Ring, Retaining	S16767

\* Not shown

B80870



# Type "B" Single Stage Centrifugal Pump SAE Engine Mount

Section	SAE
Page	Supplement C4
Date	January 1, 2012
New	

## Replacement Shaft Kits

**1-3/8-10T 2-3/4" EXT**

Ref.	Part Description	Part No.
6	Shaft, Pump	M06187
14	Sleeve, Shaft	S33429L
16	Bearing, Inboard	S13396
18	Bearing, Outboard	S13395
816	Ring, Retaining	S29341

**B71892**

**1-3/8-10T 2-1/2" EXT**

Ref.	Part Description	Part No.
6	Shaft, Pump	M02711
14	Sleeve, Shaft	S39242L
16	Bearing, Inboard	S13270
18	Bearing, Outboard	S14059
816A	Ring, Retaining	S23010
816B	Ring, Retaining (2 Rqd.)	S23009

**B85553**

**1-1/2" 10T XT Series**

Ref.	Part Description	Part No.
6	Shaft, Pump	M14768
14	Sleeve, Shaft	S07073L
16	Bearing, Inboard	S14049
18	Bearing, Outboard	M12181
816	Ring, Retaining	M12183
72	Thrust Ring	M12182
40	Water Slinger	M09682
51A	Oil Seal	M12241
51B	Oil Seal	M12177

**B85337**

**1-1/2" 10T XT Series**

Ref.	Part Description	Part No.
6	Shaft, Pump	M12179
14	Sleeve, Shaft	S07073L
16	Bearing, Inboard	S14049
18	Bearing, Outboard	M12181
816	Ring, Retaining	M12183
72	Thrust Ring	M12182
40	Water Slinger	M09682
51A	Oil Seal	M12241
51B	Oil Seal	M12177

**B81664**



# Type "B" Single Stage Centrifugal Pump SAE Engine Mount

Section	SAE
Page	Supplement C5
Date	January 1, 2012
	New

## Replacement Shaft Kits

**1-1/2" 10T**

Ref.	Part Description	Part No.
6	Shaft, Pump	M15118
14	Sleeve, Shaft	S29517L
16	Bearing, Inboard	M15133
18	Bearing, Outboard	M15132
72	Thrust Ring	M15202
816	Ring, Retaining	M15134
40	Water Slinger	M15127
51	Oil Seal, 2 Req	M15135
*	O-RING, Volute	M15130
	Shaft Key	M15123
	Impeller Locknut	S07829
	Impeller Washer	M15232

\* Not shown

**B85808**



# TYPE "B" SINGLE STAGE CENTRIFUGAL PUMP SAE Engine Mount

Section	SAE
Supplement	D1
Date	January 1, 2004
Supersedes 12/1/95	

## COMPANION FLANGE KITS

**4" NPT x 9" O.D.**

Key	Part Description	Part No.
73	Gasket	S10366
800	Capscrew, 5/8 - 11 x 2-1/2" (8 Req.)	S27005
802	Nut, Hex 5/8 - 11 (8 Req.)	S23109
850	Flange, Companion, 125 lb.	S11790

**B59870**

**4" NPT x 9" O.D.**

Key	Part Description	Part No.
73	Gasket	S10366
800	Capscrew, 5/8 - 11 x 1-5/8" (8 Req.)	S27000
850	Flange, Companion, 125 lb.	S11790

**B74303**

**5" NPT x 10" O.D.**

Key	Part Description	Part No.
73	Gasket	S10367
800	Capscrew, 3/4 - 10 x 3" (8 Req.)	S27333
802	Nut, Hex 3/4 - 10 (8 Req.)	S23111
850	Flange, Companion, 125 lb.	S11791

**B59871**

**6" NPT x 11" O.D.**

Key	Part Description	Part No.
73	Gasket	S10368
800	Capscrew, 3/4 - 10 x 3" (8 Req.)	S27333
802	Nut, Hex 3/4 - 10 (8 Req.)	S23111
850	Flange, Companion, 125 lb.	S11792

**B59872**





# TYPE "B" SINGLE STAGE CENTRIFUGAL PUMP SAE Engine Mount

Section	SAE
Supplement	D2
Date	January 1, 2004
Supersedes 12/1/95	

## COMPANION FLANGE KITS

**8" NPT x 13-1/2" O.D.**

Key	Part Description	Part No.
73	Gasket	S10369
800	Capscrew, 3/4 - 10 x 2-3/4" (8 Req.)	S27332
802	Nut, Hex 3/4 - 10 (8 Req.)	S23111
850	Flange, Companion, 125 lb.	S11793

**B59873**

**10" NPT x 16" O.D.**

Key	Part Description	Part No.
73	Gasket	S10370
800	Capscrew, 7/8 - 9 x 3" (12 Req.)	S23307
802	Nut, Hex 7/8 - 9 (12 Req.)	S23113
850	Flange, Companion, 125 lb.	S11794

**B59874**

**5" NPT x 10" O.D.**

Key	Part Description	Part No.
73	Gasket	S10367
800	Capscrew, 3/4 - 10 x 1-3/4" (8 Req.)	S27327
850	Flange, Companion, 125 lb.	S11791

**B59875**

**6" NPT x 10" O.D.**

Key	Part Description	Part No.
73	Gasket	S10367
800	Capscrew, 3/4 - 10 x 2-1/4" (8 Req.)	S27330
850	Flange, Companion, 125 lb.	S02178

**B59876**



# TYPE "B" SINGLE STAGE CENTRIFUGAL PUMP SAE Engine Mount

Section	SAE
Supplement	D3
Date	January 1, 2004
Supersedes 12/1/95	

## COMPANION FLANGE KITS

**6" NPT x 11" O.D.**

Key	Part Description	Part No.
73	Gasket	S10368
800	Capscrew, 3/4 - 10 x 2" (8 Req.)	S27329
850	Flange, Companion, 125 lb.	S11792

**B59877**

**8" NPT x 13-1/2" O.D.**

Key	Part Description	Part No.
73	Gasket	S10369
800	Capscrew, 3/4 - 10 x 2" (8 Req.)	S27329
850	Flange, Companion, 125 lb.	S11793

**B59878**

**10" NPT x 16" O.D.**

Key	Part Description	Part No.
73	Gasket	S10370
800	Capscrew, 7/8 - 9 x 2" (12 Req.)	S23303
850	Flange, Companion, 125 lb.	S11794

**B59879**

**12" NPT x 19" O.D.**

Key	Part Description	Part No.
73	Gasket	S10371
800	Capscrew, 7/8 - 9 x 3" (12 Req.)	S24095
802	Nut, Hex 7/8 - 9 (12 Req.)	S23113
850	Flange, Companion, 125 lb.	S11795

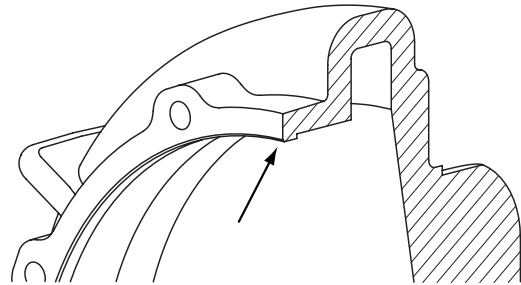
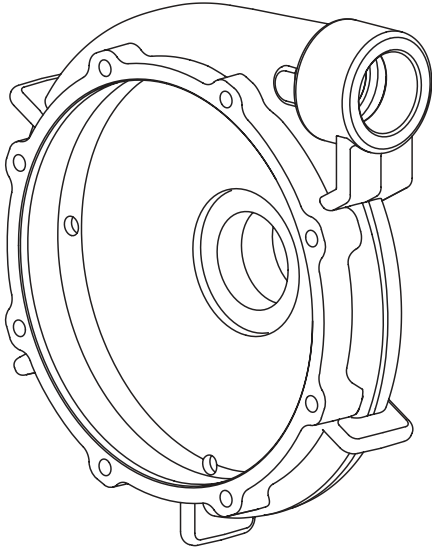
**B59880**



# Type "B" Single Stage Centrifugal Pump SAE Engine Mount

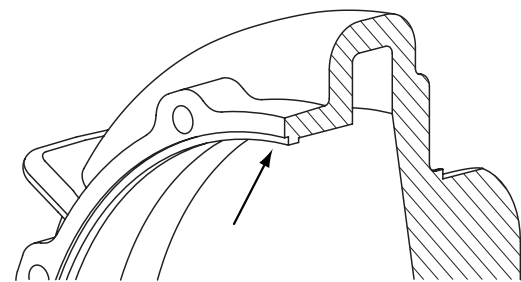
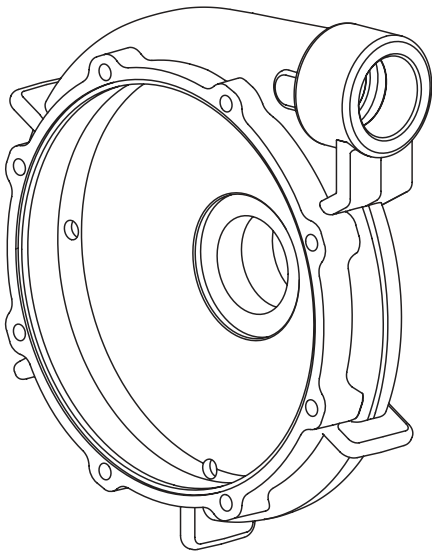
Section	SAE
Page	Supplement E
Date	July 1, 2011
	New

## Volute Sealing: Gasket Only



**Style 1:** There is a small chamfer along the back face of the volute, but no circumferential o-ring groove. This volute can ONLY be sealed with a gasket.

## Volute Sealing: O-ring or Gasket



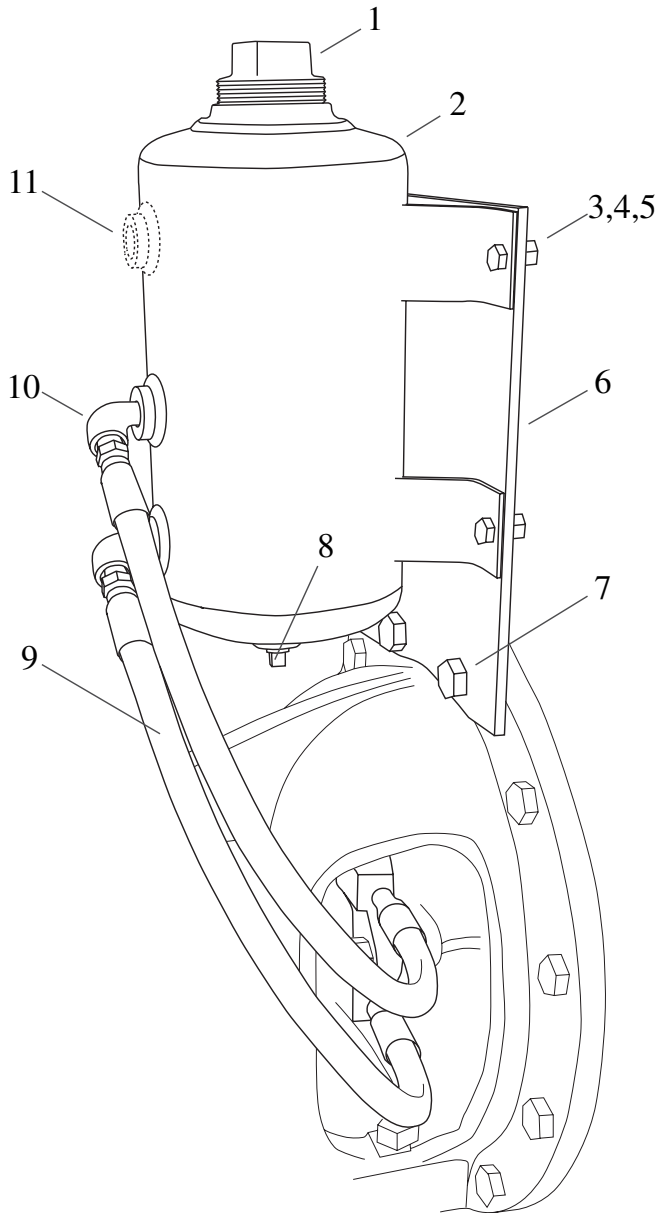
**Style 2:** O-ring groove machined into back face of volute. This volute can be sealed with a gasket or with an o-ring.



# Type "B" Single Stage Centrifugal Pump Dry Run Tank Assembly

Section	SAE
Page	Supplement F
Date	December 1, 2011
	New

## Components



**B85576** Dry Run Tank Assembly for Frame and SAE Series pump models B\_G, B\_J, B\_EY

- Requires M14959 Dry Run Shaft Seal Retainer

Ref.	Description	Part Number
1	2" Sq. Hd. Pipe Plug	U78-64GP
2	Reservoir, Dry Run	M14961
3	Capscrew, Hex Hd, 3/8-16 x 1" (4 Rqd.)	S26826
4	Nut, 3/8-16 (4 Rqd.)	S23103
5	Washer, Lock Spring, 3/8 (4 Rqd.)	S23076
6	Tank Mounting Plate	M14976
7	Capscrew, Hex Hd, 5/8-11 x 1-3/4" (2 Rqd.)	S27001
8	1/4" NPT Hex Hd Pipe Plug	U78-941ZPF
9	Hose Assy, 3/8" Dia, 1/4" NPT, 24" lg. (2 Rqd.)	M14983
10	Elbow, Street 90° (2 Rqd.)	20FM3C0002 0008 F
11	Sight Glass Assy*	HYD7S2 9906 F

\* Not present on all tanks

**B85577** Dry Run Tank Assembly for model B6XTQBH

- Requires M14960 Dry Run Shaft Seal Retainer

Ref.	Description	Part Number
1	2" Sq. Hd. Pipe Plug	U78-64GP
2	Reservoir, Dry Run	M14961
3	Capscrew, Hex Hd, 3/8-16 x 1" (4 Rqd.)	S26826
4	Nut, 3/8-16 (4 Rqd.)	S23103
5	Washer, Lock Spring, 3/8 (4 Rqd.)	S23076
6	Tank Mounting Plate	M14977
7	Capscrew, Hex Hd, 5/8-11 x 1-3/4" (2 Rqd.)	S27001
8	1/4" NPT Hex Hd Pipe Plug	U78-941ZPF
9	Hose Assy, 3/8" Dia, 1/4" NPT, 24" lg. (2 Rqd.)	M14983
10	Elbow, Street 90° (2 Rqd.)	20FM3C0002 0008 F
11	Sight Glass Assy*	HYD7S2 9906 F

\* Not present on all tanks

For Dry Run gland, seals and other pump components, refer to the appropriate pump repair part page.