



Document Number	Issue Date	Rev. Date
<b>SPL71487</b>	<b>05/87</b>	<b>8/29/17</b>

## CP-1, CP-2, E301-A and E302-A Body and Impeller Shaft Assembly Service Parts List

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Waterous Company 125 Hardman Avenue South, South St. Paul, Minnesota 55075 USA (651) 450-5000

NOTE: When ordering parts, provide Pump, Transmission or PTO Serial Number.

## Models CP-1, E301-A Exploded View

REF. NO.	DESCRIPTION
B52	Volute Body (Furnished with Wear Ring B83)
B53	Packing Gland Half
B54	Gland Stud
B55	Unbalanced Packing Nut
B56	Flinger Ring
B57	Graphite, Grafoil™ or Lead Foil Packing Ring
B58	Volute Gasket
B59A	See B82
B59B	See B83
B60	Impeller Shaft
B61	Pump Head (Furnished with Wear Ring B82)
B62	Impeller
B64	Cap Screw, 7/16-14 x 1 in. (For Cast Iron Bodies) or Cap Screw, Self-Locking (Nylok), SS, 7/16/14 x 1 in., (For Bronze Bodies)
	Plain Brass Washer

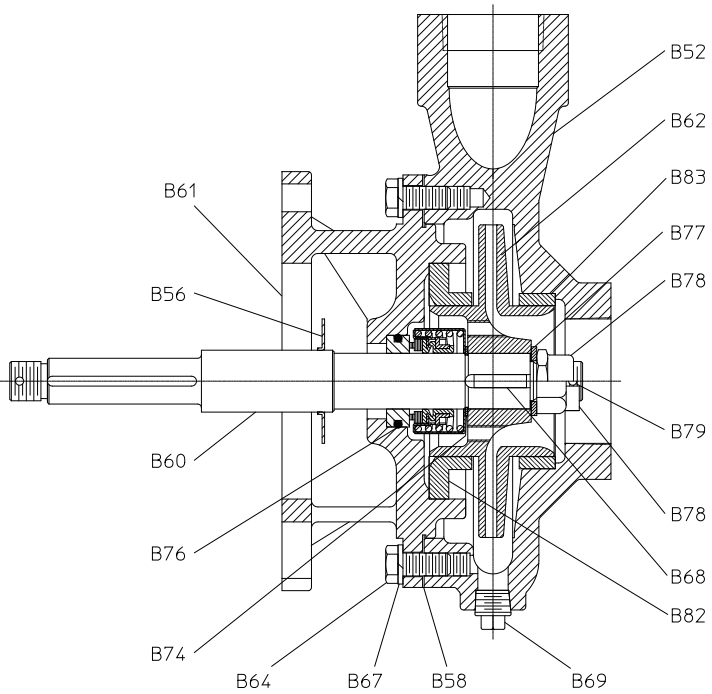
REF. NO.	DESCRIPTION
B67	Plain Copper Washer, 7/16 in.
B68	Square Key, SS, 1/4 x 1 in.
B69	Square Head Pipe Plug, 3/8 in.
B74	Snap Ring
B75	Spring Holder (Used with Mechanical Seal Furnished Prior to January 31, 1979)
B76	Mechanical Seal
B77	Shaft Nut Washer
B78	Locknut (Stainless Steel Shafts)
B78	Castellated Nut, SS 3/4-16 (Monel Shafts)
B79	Cotter Pin, SS, 1/8 x 1 in. (Monel Shafts)
B80	Soft Packing Ring
B81	Spring Sleeve
B82	Rear Wear Ring, Standard, 0.025, 0.050, 0.075 in. U/S (Formerly B59A)
B83	Wear Ring, Standard, 0.025, 0.050, 0.075 in. U/S (Formerly B59B)



## Models CP-1, E301-A Cross-Section View

REF. NO.	DESCRIPTION
B52	Volute Body (Furnished with Wear Ring B83)
B53	Packing Gland Half
B54	Gland Stud
B55	Unbalanced Packing Nut
B56	Flinger Ring
B57	Graphite, Grafoil™ or Lead Foil Packing Ring
B58	Volute Gasket
B60	Impeller Shaft
B61	Pump Head (Furnished with Wear Ring B82)
B62	Impeller
B64	Cap Screw, 7/16-14 x 1 in. (For Cast Iron Bodies) or Cap Screw, Self-Locking (Nylok), SS, 7/16/14 x 1 in., (For Bronze Bodies)
B65	Plain Brass Washer

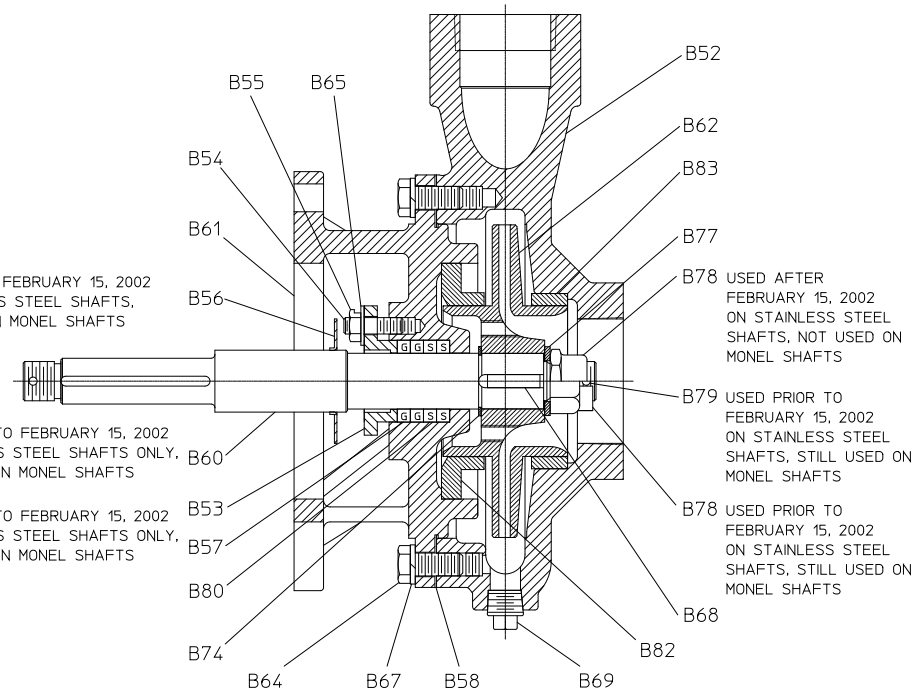
REF. NO.	DESCRIPTION
B67	Plain Copper Washer, 7/16 in.
B68	Square Key, SS, 1/4 x 1 in.
B69	Square Head Pipe Plug, 3/8 in.
B74	Snap Ring
B76	Mechanical Seal
B77	Shaft Nut Washer
B78	Locknut (Stainless Steel Shafts)
B78	Castellated Nut, SS 3/4-16 (Monel Shafts)
B79	Cotter Pin, SS, 1/8 x 1 in. (Monel Shafts)
B80	Soft Packing Ring
B82	Rear Wear Ring, Standard, 0.025, 0.050, 0.075 in. U/S (Formerly B59A)
B83	Wear Ring, Standard, 0.025, 0.050, 0.075 in. U/S (Formerly B59B)



B78 USED AFTER FEBRUARY 15, 2002 ON STAINLESS STEEL SHAFTS, NOT USED ON MONEL SHAFTS

B79 USED PRIOR TO FEBRUARY 15, 2002 ON STAINLESS STEEL SHAFTS ONLY, STILL USED ON MONEL SHAFTS

B78 USED PRIOR TO FEBRUARY 15, 2002 ON STAINLESS STEEL SHAFTS ONLY, STILL USED ON MONEL SHAFTS



B78 USED AFTER FEBRUARY 15, 2002 ON STAINLESS STEEL SHAFTS, NOT USED ON MONEL SHAFTS

B79 USED PRIOR TO FEBRUARY 15, 2002 ON STAINLESS STEEL SHAFTS, STILL USED ON MONEL SHAFTS

B78 USED PRIOR TO FEBRUARY 15, 2002 ON STAINLESS STEEL SHAFTS, STILL USED ON MONEL SHAFTS

**MODELS CP-1, E301-A WITH MECHANICAL SEAL**

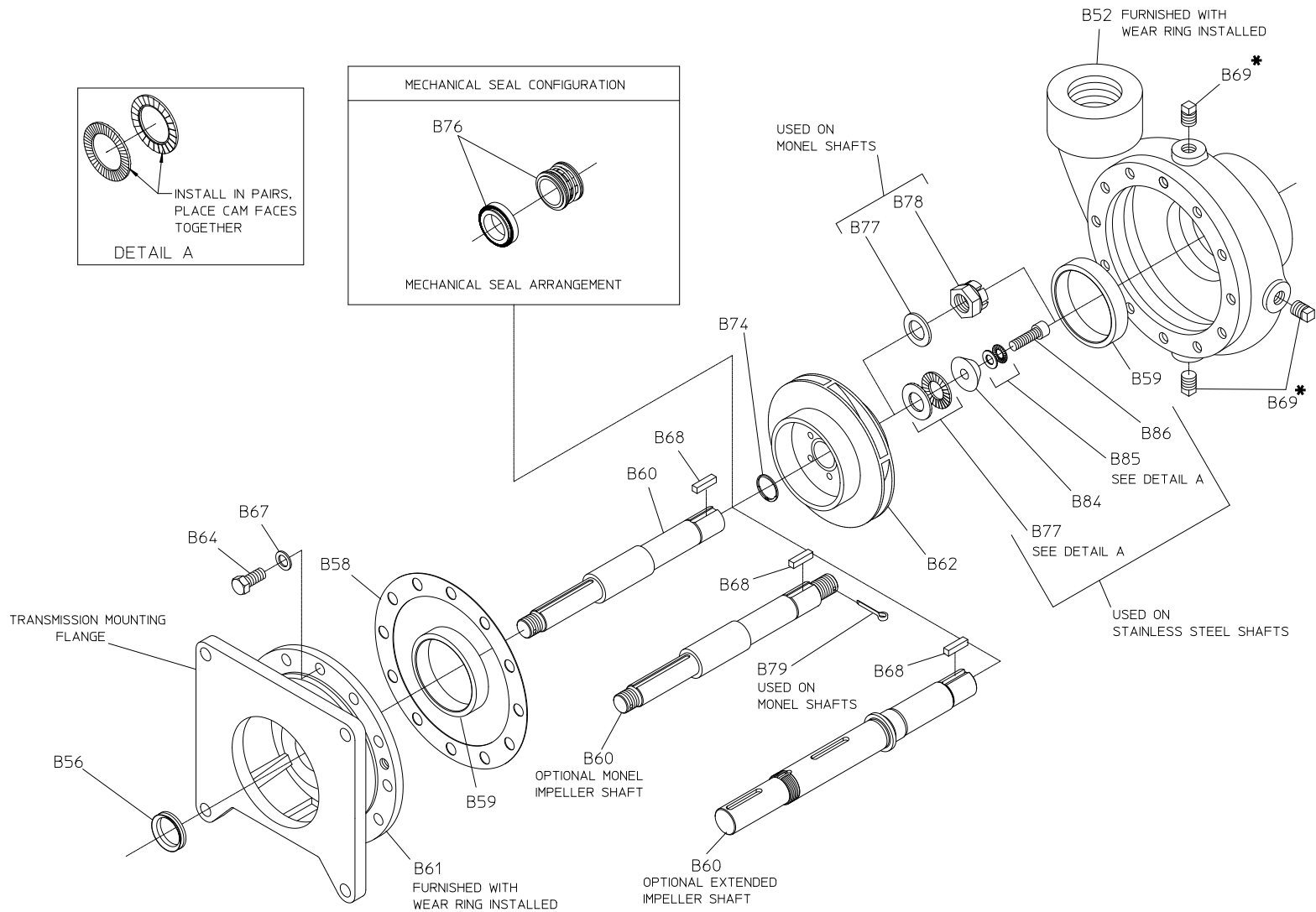
**MODELS CP-1, E301-A WITH PACKING**

**CROSS-SECTION VIEW**

## Models CP-2, E302-A with Mechanical Seal Exploded View After August 23, 2017

REF. NO.	DESCRIPTION
B52	Volute Body (Furnished with Wear Ring B59)
B56	Flinger Ring
B58	Volute Gasket
B59	Wear Ring, Standard, 0.025, 0.050, 0.075 in. U/S
B60	Impeller Shaft
B61	Pump Head (Furnished with Wear Ring B59)
B62	Impeller
B64	Cap Screw, 7/16-14 x 1 in. (For Cast Iron Bodies) or Cap Screw, Self-Locking (Nylok), SS, 7/16/14 x 1 in., (For Bronze Bodies)

REF. NO.	DESCRIPTION
B67	Plain Copper Washer, 7/16 in.
B68	Square Key, SS, 1/4 x 1 in.
B69	Square Head Pipe Plug, 3/8 in.
B74	Snap Ring
B76	Mechanical Seal
B77	Shaft Nut Washer
B78	Locknut (Stainless Steel Shafts)
B78	Castellated Nut, SS 3/4-16 (Monel Shafts)
B79	Cotter Pin, SS, 1/8 x 1 in. (Monel Shafts)
B84	Impeller Washer
B85	Nord-Lock Washer, 3/8
B86	Skt Hd Screw, 3/8 x 1-1/4



\*NOTE: ONE OF THESE TAPS USED FOR PUMP DRAIN.

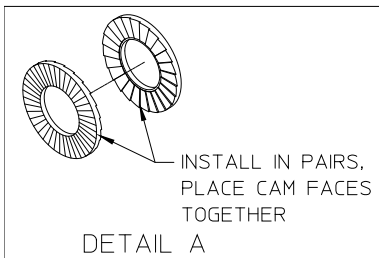
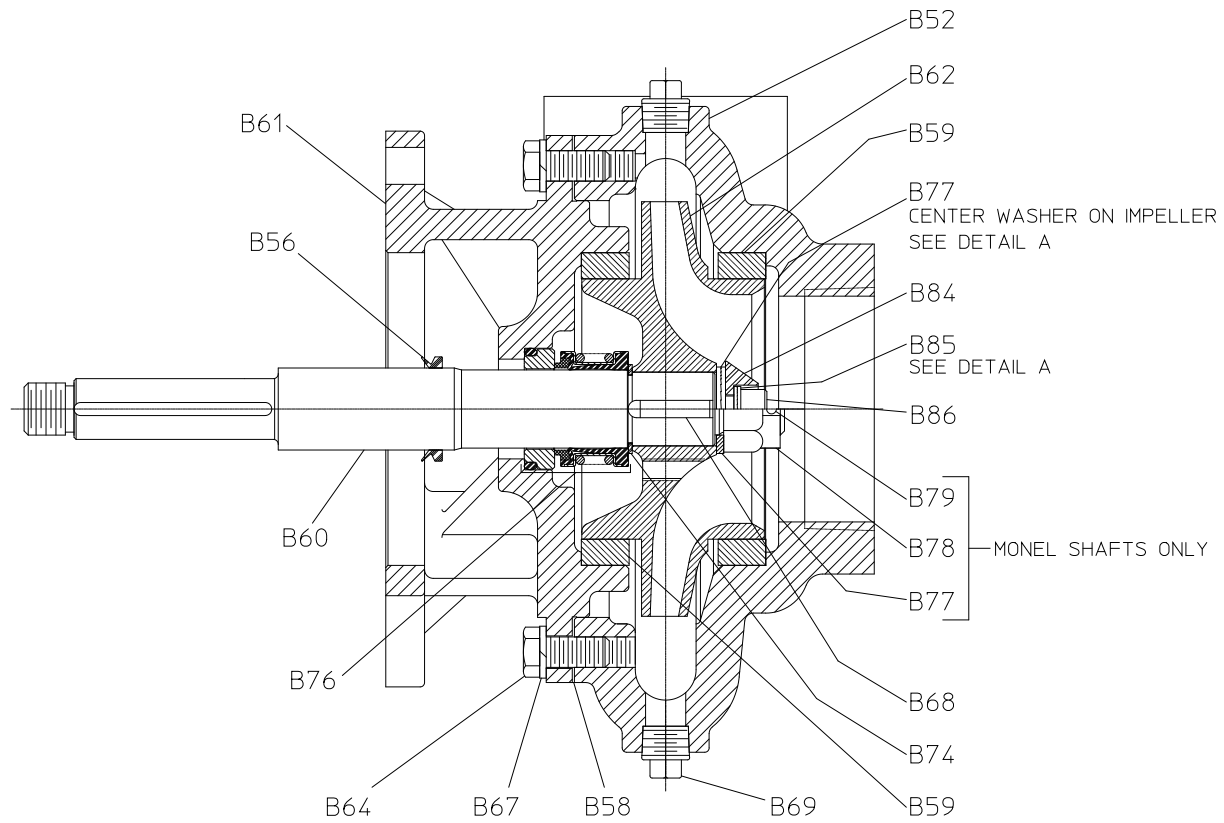
**MODELS CP-2, E302-A WITH MECHANICAL SEAL**  
**EXPLODED VIEW - AFTER AUGUST 23, 2017**

## Models CP-2, E302-A with Mechanical Seal Cross-Section View After August 23, 2017

REF. NO.	DESCRIPTION
B52	Volute Body (Furnished with Wear Ring B59)
B56	Flinger Ring
B58	Volute Gasket
B60	Impeller Shaft
B61	Pump Head (Furnished with Wear Ring B59)
B62	Impeller
B64	Cap Screw, 7/16-14 x 1 in. (For Cast Iron Bodies) or Cap Screw, Self-Locking (Nylok), SS, 7/16/14 x 1 in., (For Bronze Bodies)

REF. NO.	DESCRIPTION
B67	Plain Copper Washer, 7/16 in.
B68	Square Key, SS, 1/4 x 1 in.
B69	Square Head Pipe Plug, 3/8 in.
B74	Snap Ring
B76	Mechanical Seal
B77	Shaft Nut Washer
B78	Locknut (Stainless Steel Shafts)
B78	Castellated Nut, SS 3/4-16 (Monel Shafts)
B79	Cotter Pin, SS, 1/8 x 1 in. (Monel Shafts)



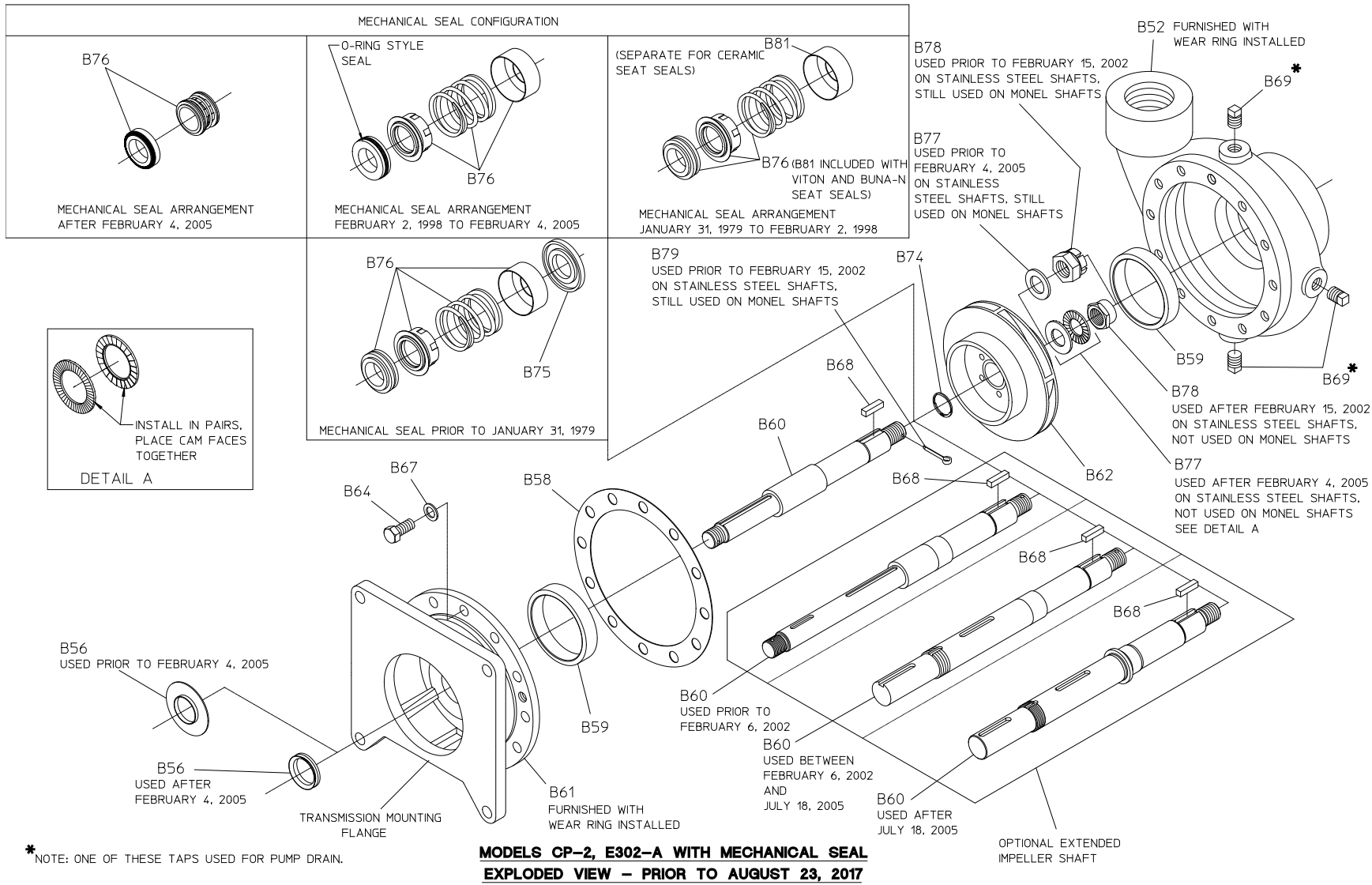


**MODELS CP-2, E302-A WITH MECHANICAL SEAL**  
**CROSS-SECTION VIEW - AFTER AUGUST 23, 2017**

## Models CP-2, E302-A with Mechanical Seal Exploded View Prior August 23, 2017

REF. NO.	DESCRIPTION
B52	Volute Body (Furnished with Wear Ring B59)
B56	Flinger Ring
B58	Volute Gasket
B59	Wear Ring, Standard, 0.025, 0.050, 0.075 in. U/S
B60	Impeller Shaft
B61	Pump Head (Furnished with Wear Ring B59)
B62	Impeller
B64	Cap Screw, 7/16-14 x 1 in. (For Cast Iron Bodies) or Cap Screw, Self-Locking (Nylok), SS, 7/16/14 x 1 in., (For Bronze Bodies)

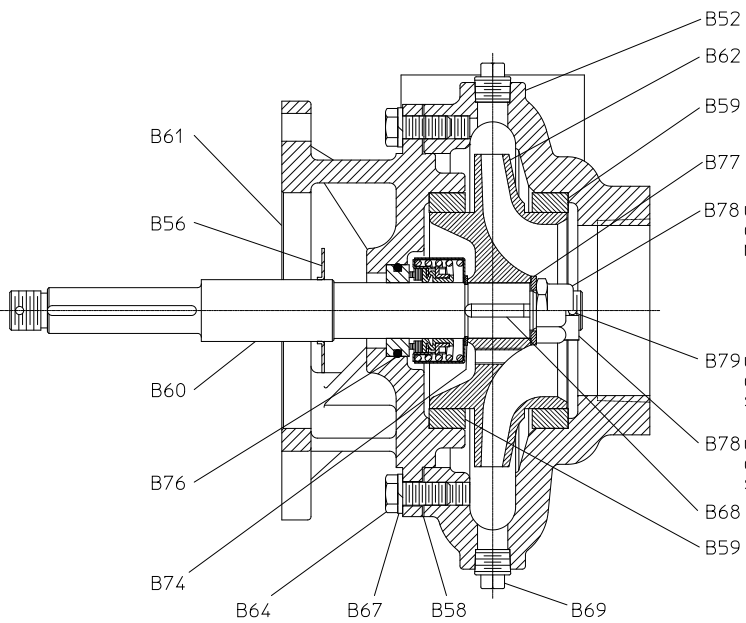
REF. NO.	DESCRIPTION
B67	Plain Copper Washer, 7/16 in.
B68	Square Key, SS, 1/4 x 1 in.
B69	Square Head Pipe Plug, 3/8 in.
B74	Snap Ring
B75	Spring Holder (Used with Mechanical Seal Furnished Prior to January 31, 1979)
B76	Mechanical Seal
B77	Shaft Nut Washer
B78	Locknut (Stainless Steel Shafts)
B78	Castellated Nut, SS 3/4-16 (Monel Shafts)
B79	Cotter Pin, SS, 1/8 x 1 in. (Monel Shafts)
B81	Spring Sleeve



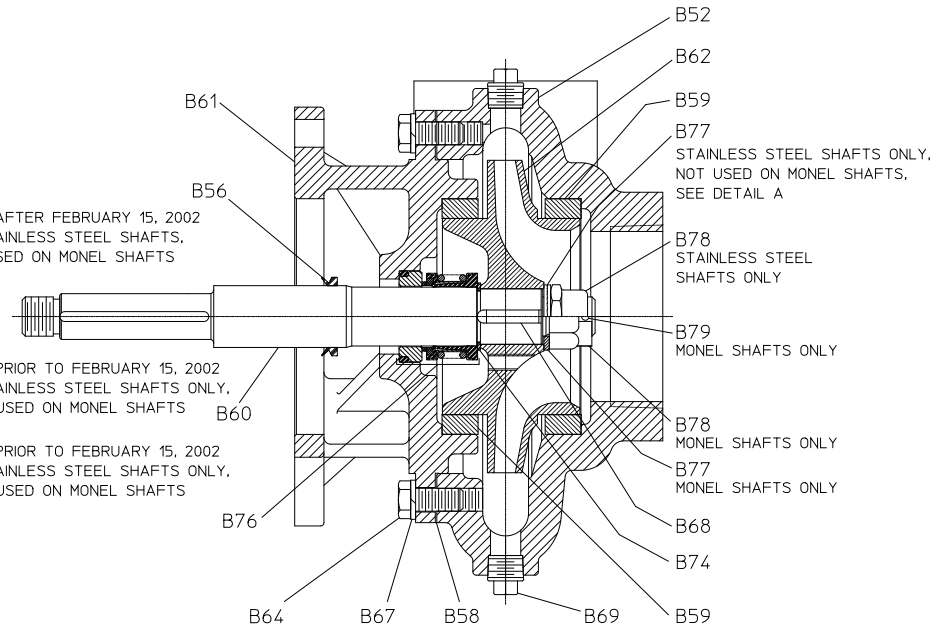
**Models CP-2, E302-A with Mechanical Seal  
Cross-Section View Prior to August 23, 2017**

REF. NO.	DESCRIPTION
B52	Volute Body (Furnished with Wear Ring B59)
B56	Flinger Ring
B58	Volute Gasket
B60	Impeller Shaft
B61	Pump Head (Furnished with Wear Ring B59)
B62	Impeller
B64	Cap Screw, 7/16-14 x 1 in. (For Cast Iron Bodies) or Cap Screw, Self-Locking (Nylok), SS, 7/16/14 x 1 in., (For Bronze Bodies)

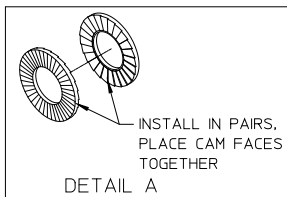
REF. NO.	DESCRIPTION
B67	Plain Copper Washer, 7/16 in.
B68	Square Key, SS, 1/4 x 1 in.
B69	Square Head Pipe Plug, 3/8 in.
B74	Snap Ring
B76	Mechanical Seal
B77	Shaft Nut Washer
B78	Locknut (Stainless Steel Shafts)
B78	Castellated Nut, SS 3/4-16 (Monel Shafts)
B79	Cotter Pin, SS, 1/8 x 1 in. (Monel Shafts)



ARRANGEMENT PRIOR TO FEBRUARY 4, 2005



ARRANGEMENT FEBRUARY 4, 2005 TO AUGUST 22, 2017

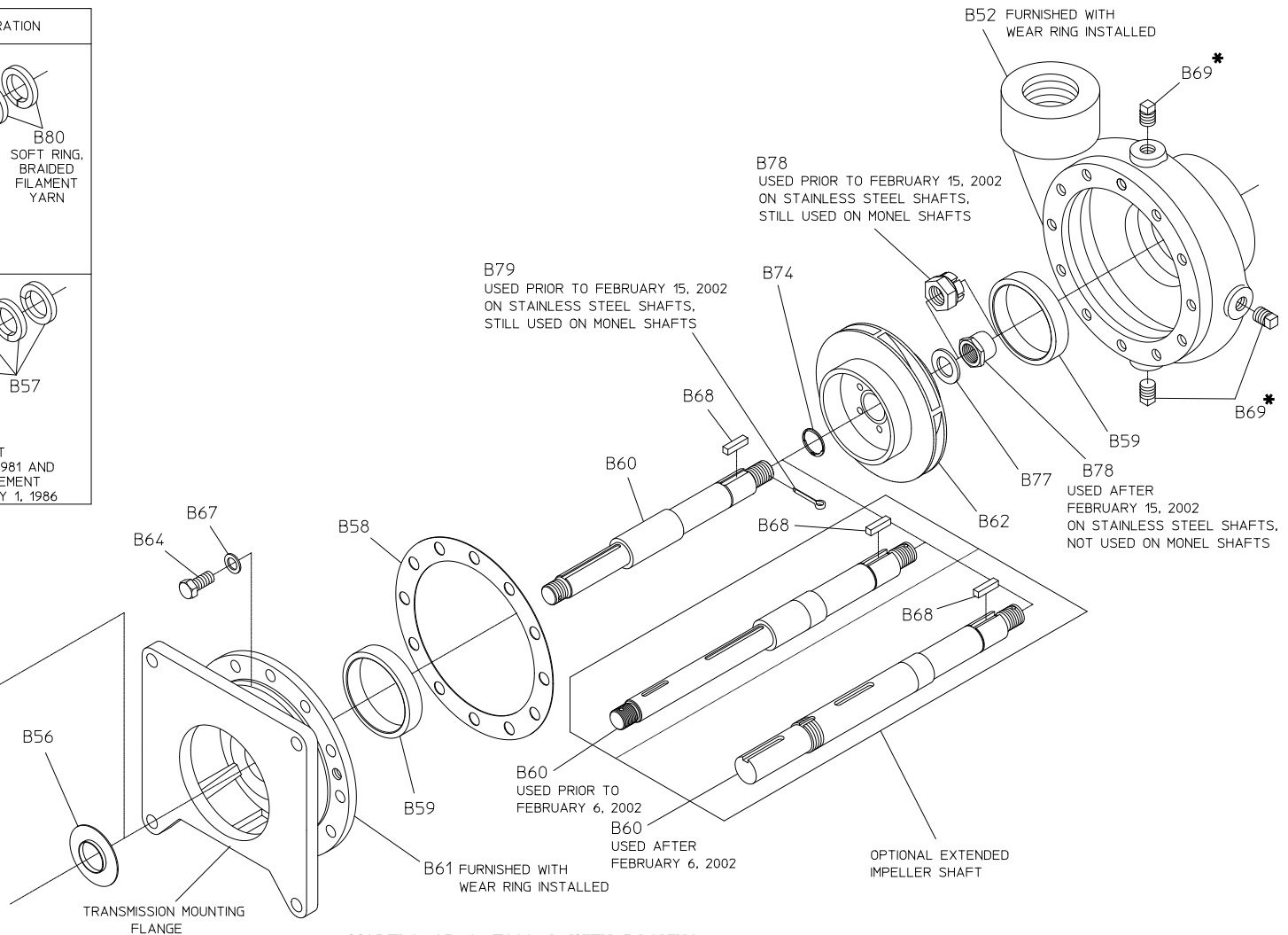
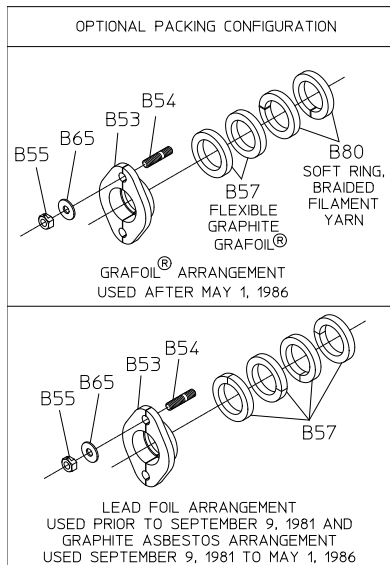


**MODELS CP-2, E302-A WITH MECHANICAL SEAL**  
**CROSS-SECTION VIEW - PRIOR TO AUGUST 23, 2017**

## Models CP-2, E302-A with Packing Exploded View

REF. NO.	DESCRIPTION
B52	Volute Body (Furnished with Wear Ring B59)
B53	Packing Gland Half
B54	Gland Stud
B55	Unbalanced Packing Nut
B56	Flinger Ring
B57	Graphite, Grafoil™ Lead Foil Packing Ring
B58	Volute Gasket
B59	Wear Ring, Standard , 0.025, 0.050, 0.075 in. U/S
B60	Impeller Shaft
B61	Pump Head (Furnished with Wear Ring B59)
B62	Impeller
B64	Cap Screw, 7/16-14 x 1 in. (For Cast Iron Bodies) or Cap Screw, Self-Locking (Nylok), SS, 7/16/14 x 1 in., (For Bronze Bodies)
B65	Plain Brass Washer

REF. NO.	DESCRIPTION
B67	Plain Copper Washer, 7/16 in.
B68	Square Key, SS, 1/4 x 1 in.
B69	Square Head Pipe Plug, 3/8 in.
B74	Snap Ring
B77	Shaft Nut Washer
B78	Locknut (Stainless Steel Shafts)
B78	Castellated Nut, SS 3/4-16 (Monel Shafts)
B79	Cotter Pin, SS, 1/8 x 1 in. (Monel Shafts)
B80	Soft Packing Ring



\* NOTE: ONE OF THESE TAPS USED FOR PUMP DRAIN.

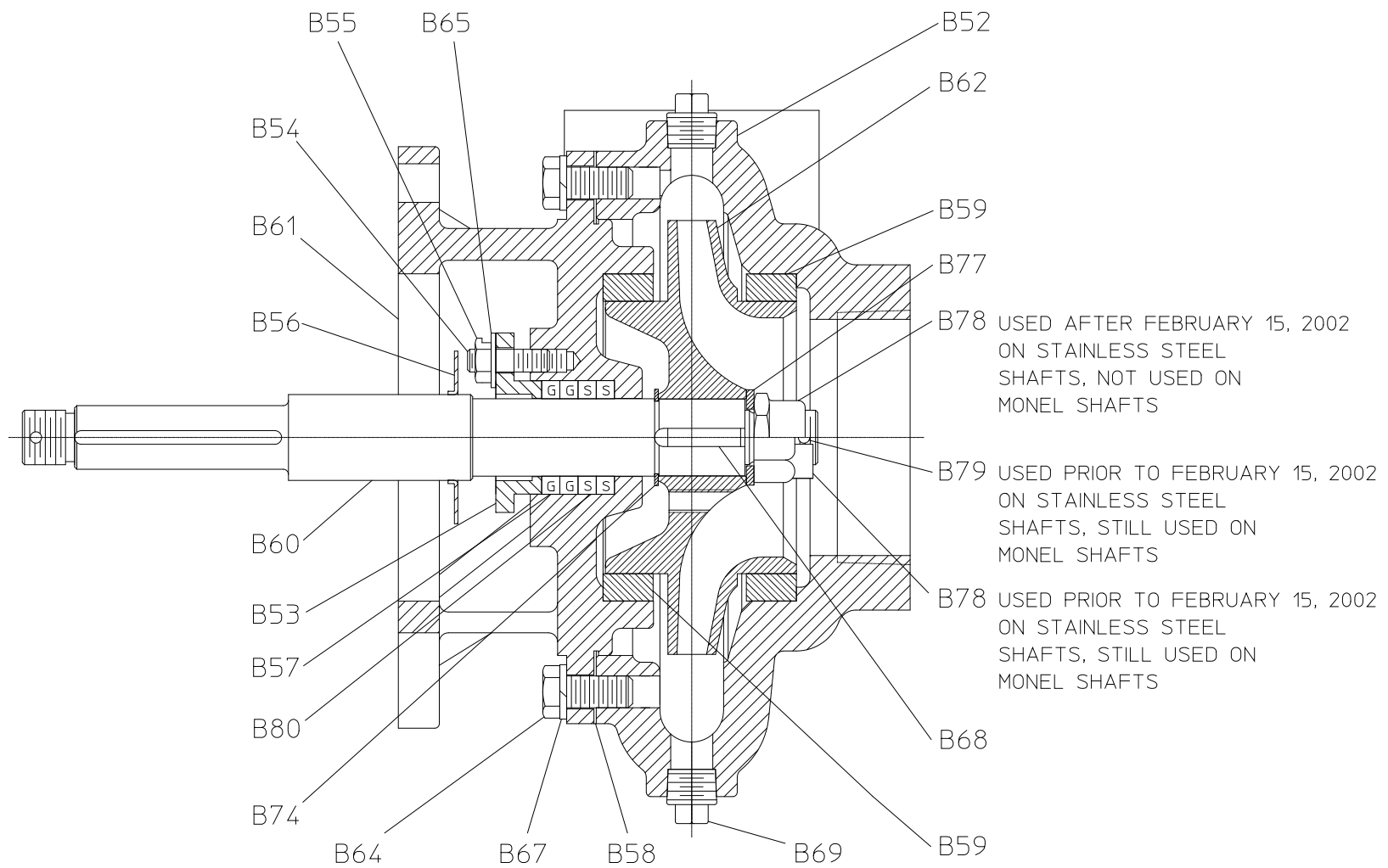
**MODELS CP-2, E302-A WITH PACKING  
EXPLODED VIEW**

## Models CP-2, E302-A with Packing Cross-Section View

REF. NO.	DESCRIPTION
B52	Volute Body (Furnished with Wear Ring B59)
B53	Packing Gland Half
B54	Gland Stud
B55	Unbalanced Packing Nut
B56	Flinger Ring
B57	Graphite, Grafoil™ Lead Foil Packing Ring
B58	Volute Gasket
B59	Wear Ring, Standard, 0.025, 0.050, 0.075 in. U/S
B60	Impeller Shaft
B61	Pump Head (Furnished with Wear Ring B59)
B62	Impeller
B64	Cap Screw, 7/16-14 x 1 in. (For Cast Iron Bodies) or Cap Screw, Self-Locking (Nylok), SS, 7/16/14 x 1 in., (For Bronze Bodies)
B65	Plain Brass Washer

REF. NO.	DESCRIPTION
B67	Plain Copper Washer, 7/16 in.
B68	Square Key, SS, 1/4 x 1 in.
B69	Square Head Pipe Plug, 3/8 in.
B74	Snap Ring
B77	Shaft Nut Washer
B78	Locknut (Stainless Steel Shafts)
B78	Castellated Nut, SS 3/4-16 (Monel Shafts)
B79	Cotter Pin, SS, 1/8 x 1 in. (Monel Shafts)
B80	Soft Packing Ring





**MODELS CP-2, E302-A WITH PACKING**

**CROSS-SECTION VIEW**