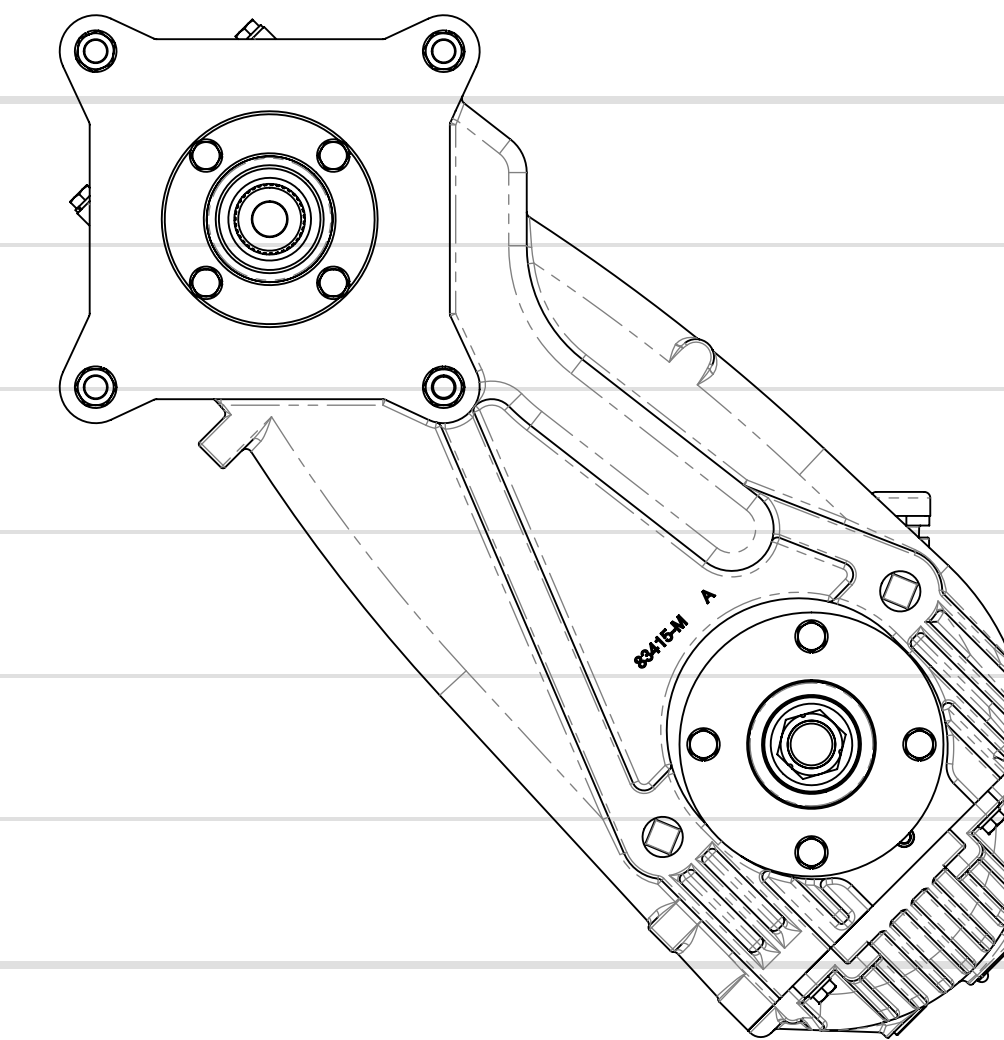
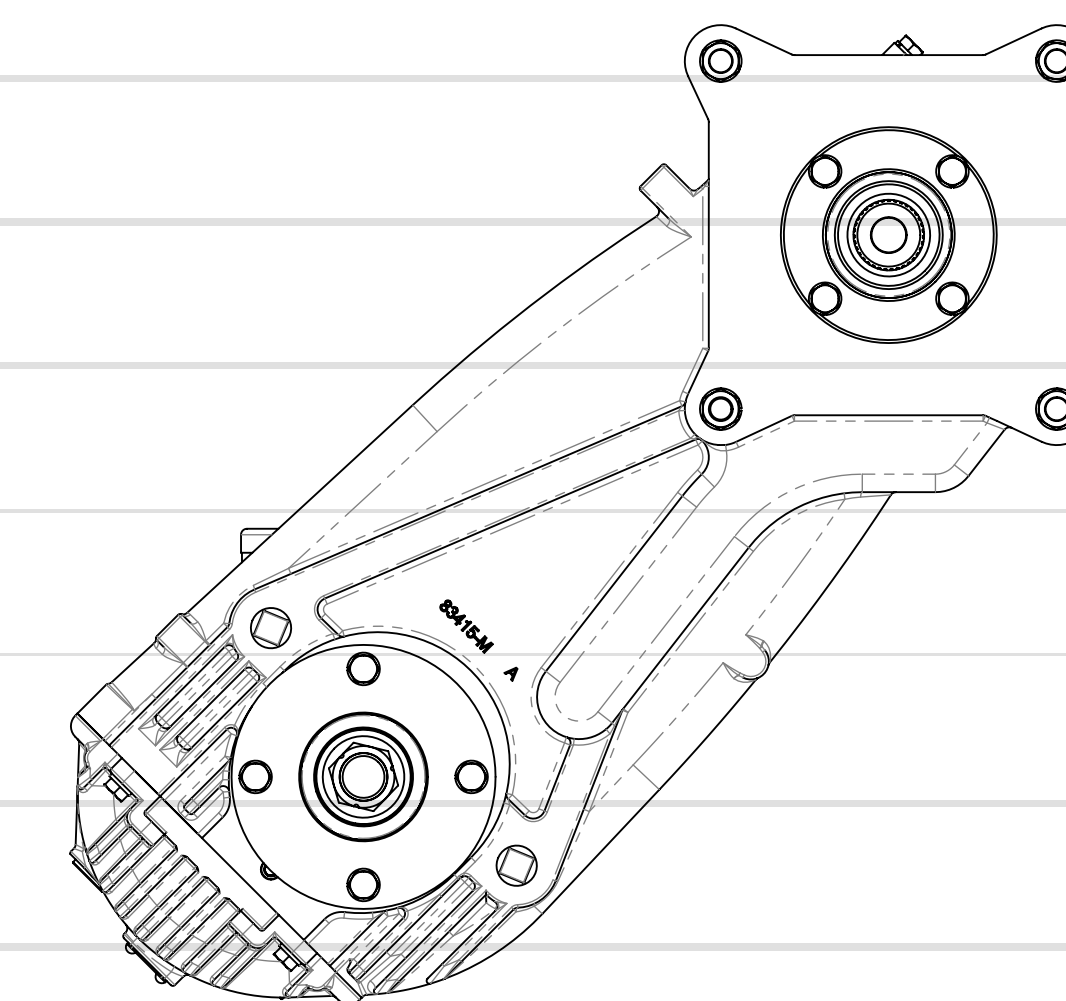


## Model PA Transmission Service Parts List

Component		See Page	
Case	Without Oil Cooler	<b>2</b>	
	With Oil Cooler	<b>3</b>	
	Oil Level, Drain and Breather Locations	<b>4</b>	
	1.00, 1.70, 1.90 & 2.10 Ratio Variations	<b>5</b>	
Driveline	Input Shaft Only	<b>6</b>	
	Input and Output Shaft	<b>7</b>	
Driven Shaft	CM, CMU, CS, CSU HLU Pump Models	No Rear Output	<b>8</b>
		Compressor (CAFS)	<b>9</b>
		Combination Pump	<b>10</b>
		Hydraulic Flange	<b>11</b>
	CG, CL, CX Pump Models	No Rear Output	<b>12</b>
		Compressor (CAFS)	<b>13</b>
		Hydraulic Flange	<b>14</b>
	S100 Pump Models	No Rear Output	<b>15</b>
		Compressor (CAFS)	<b>16</b>
	Sprockets and Chain		<b>17</b>
Pump Mounting Hardware	CM, CS, CG, CL, CX	<b>18</b>	
	HLU Models	<b>19</b>	
	S100 Models	<b>20</b>	
Oil Cooler Lines	CM, CS Pump Models	<b>21</b>	
	HLU Models	<b>22</b>	



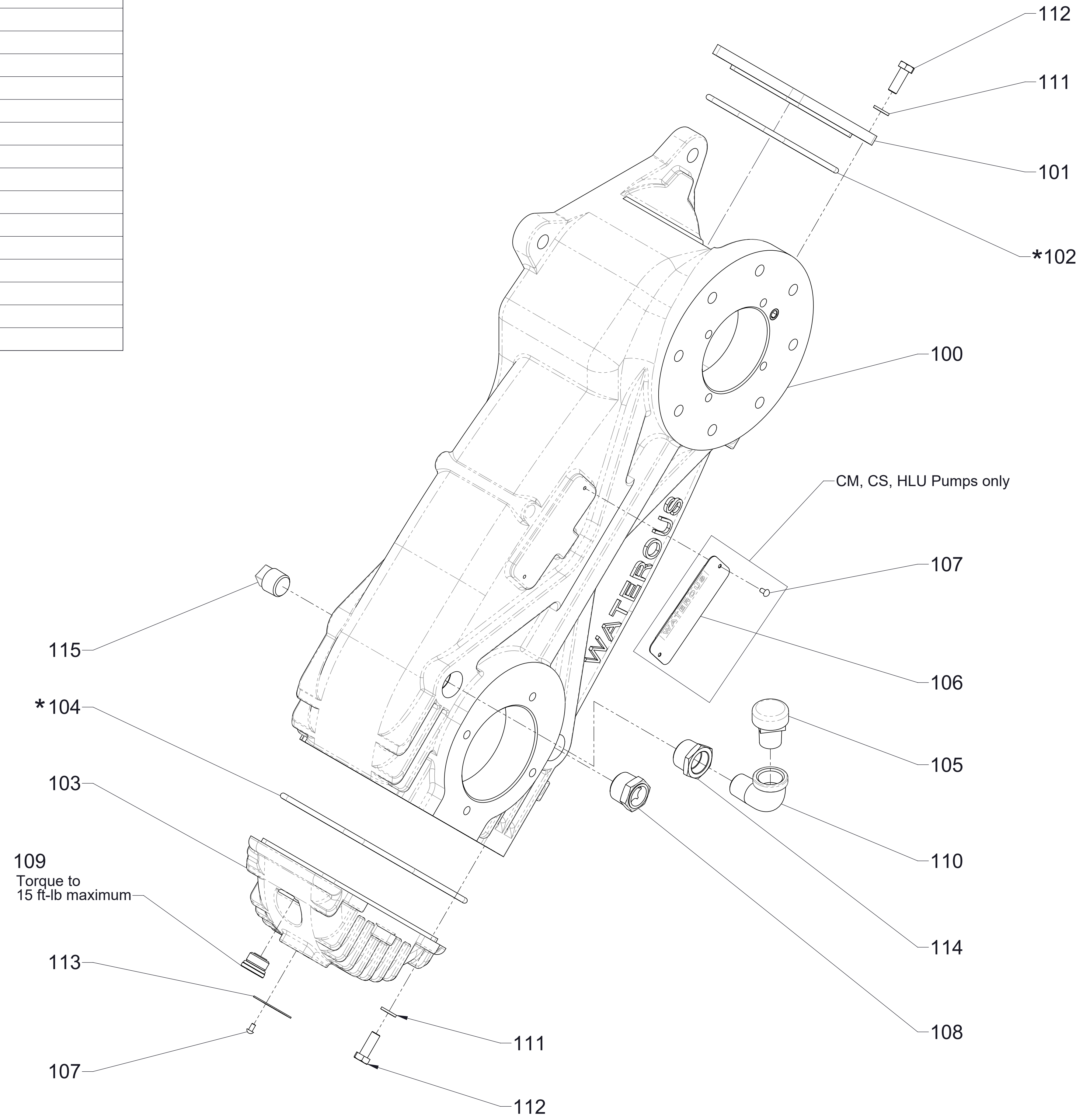
Vertical (Right) Mounting



Horizontal (Left) Mounting

Ref No.	Description
100	Case-Transmission
101	Cover-Case
102	O-Ring, 4-5/8 x 5 in
103	Pan-Transmission
104	O-Ring, 7 x 7-3/8 in
105	Breather, 1/2 NPT
106	Plate-Serial
107	Screw-Drive, #6 x 1/4 in
108	Plug-Site, Glass, 3/4 NPT
109	Plug-Magnetic, 3/4 in
110	Elbow-Street, 90°, 1/2 NPT
111	Washer-Lock, 5/16 in
112	Screw-Hex Hd, 5/16-18 x 7/8 in
113	Plate-Oil Level
114	Bushing-Reducing, Pipe, 3/4 x 1/2 NPT
115	Plug-Pipe, Square Hd, 1/2 NPT
120	Gasket and Shim Repair Kit

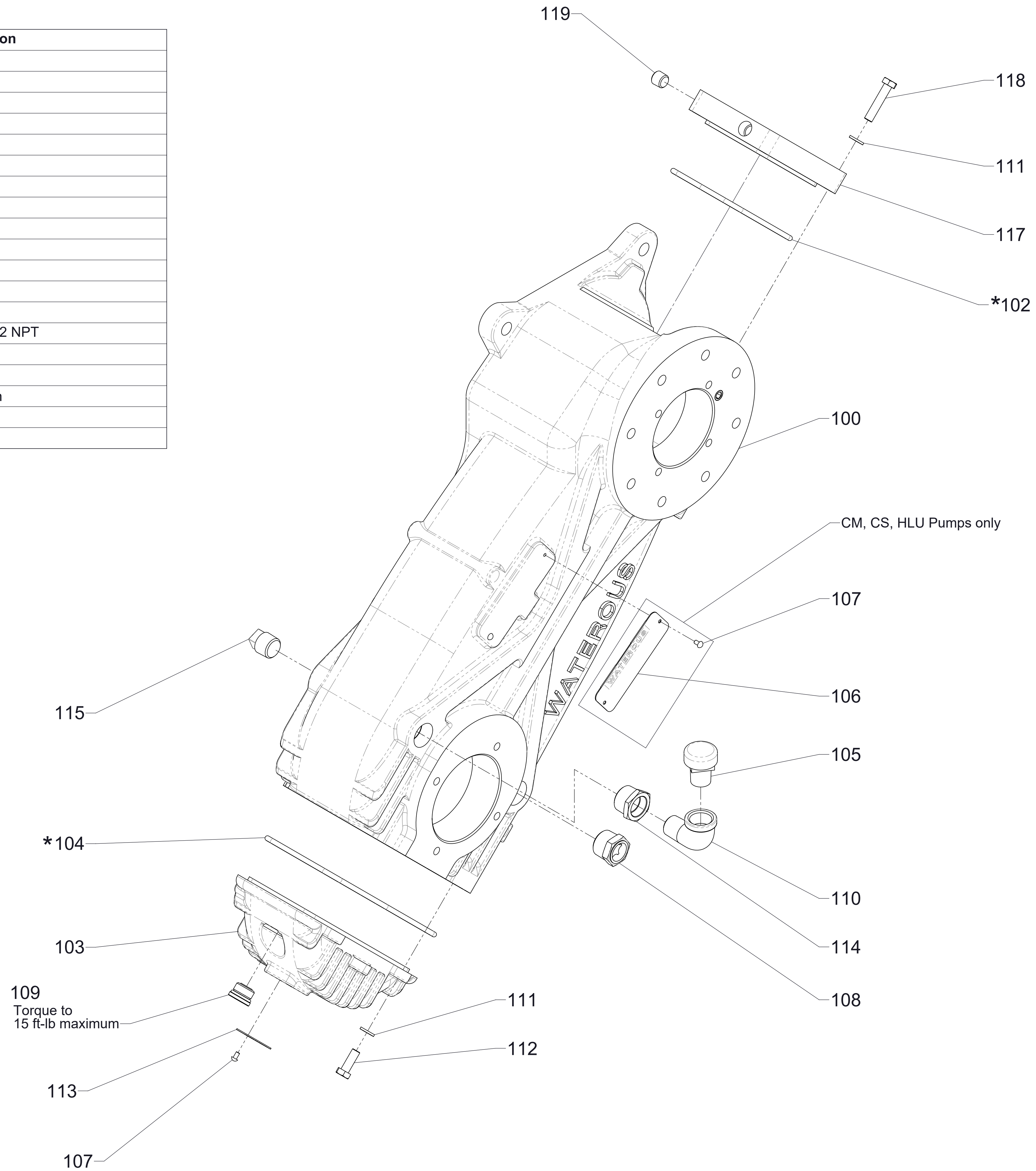
120  
Gasket and Shim Kit  
\* Indicates components of kit



Case Components without Oil Cooler  
Vertical Mounting Shown



Ref No.	Description
100	Case-Transmission
102	O-Ring, 4-5/8 x 5 in
103	Pan-Transmission
104	O-Ring, 7 x 7-3/8 in
105	Breather, 1/2 NPT
106	Plate-Serial
107	Screw-Drive, #6 x 1/4 in
108	Plug-Site, Glass, 3/4 NPT
109	Plug-Magnetic, 3/4 in
110	Elbow-Street, 90°, 1/2 NPT
111	Washer-Lock, 5/16 in
112	Screw-Hex Hd, 5/16-18 x 7/8 in
113	Plate-Oil Level
114	Bushing-Reducing, Pipe, 3/4 x 1/2 NPT
115	Plug-Pipe, Square Hd, 1/2 NPT
117	Plate-Cooler
118	Screw-Hex Hd, 5/16-18 x 1-1/2 in
119	Plug-Pipe, Headless, 1/4 NPT
120	Gasket and Shim Repair Kit



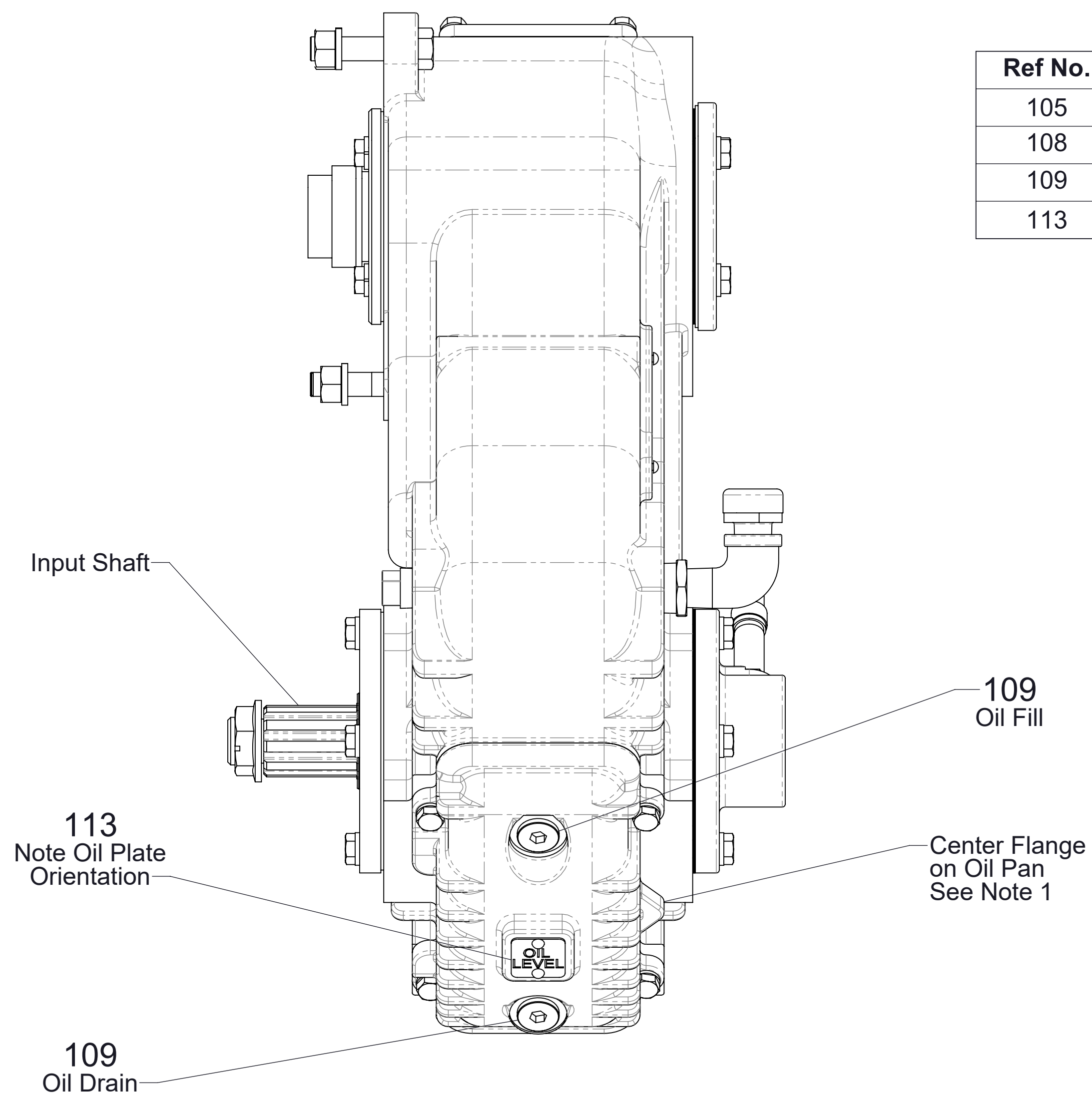
120  
Gasket and Shim Kit

\* Indicates components of kit

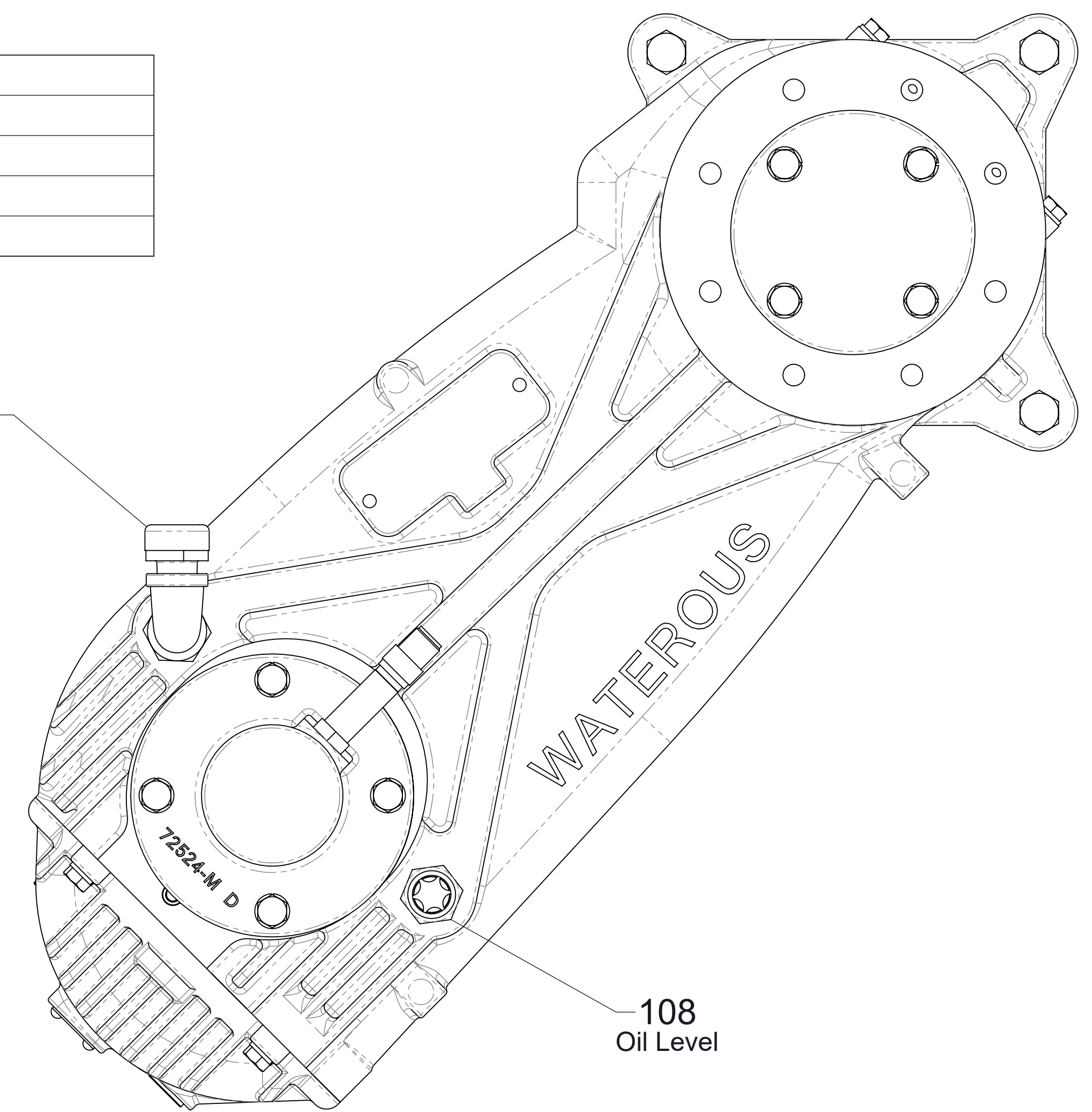
Case Components with Oil Cooler  
Vertical Mounting Shown



Ref No.	Description
105	Breather, 1/2 NPT
108	Plug-Site, Glass, 3/4 NPT
109	Plug-Magnetic, 3/4 in
113	Plate-Oil Level

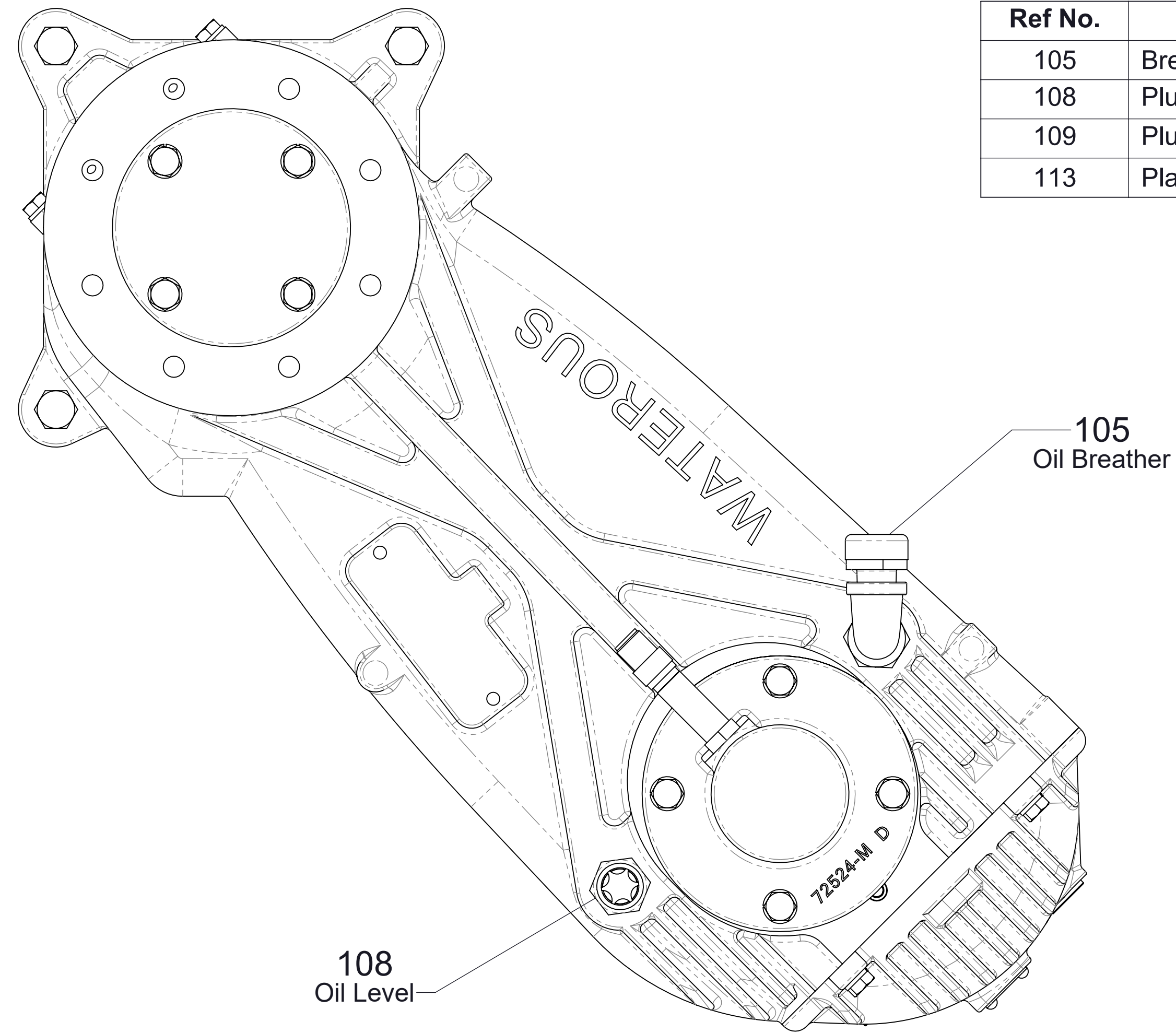


105 Oil Breather



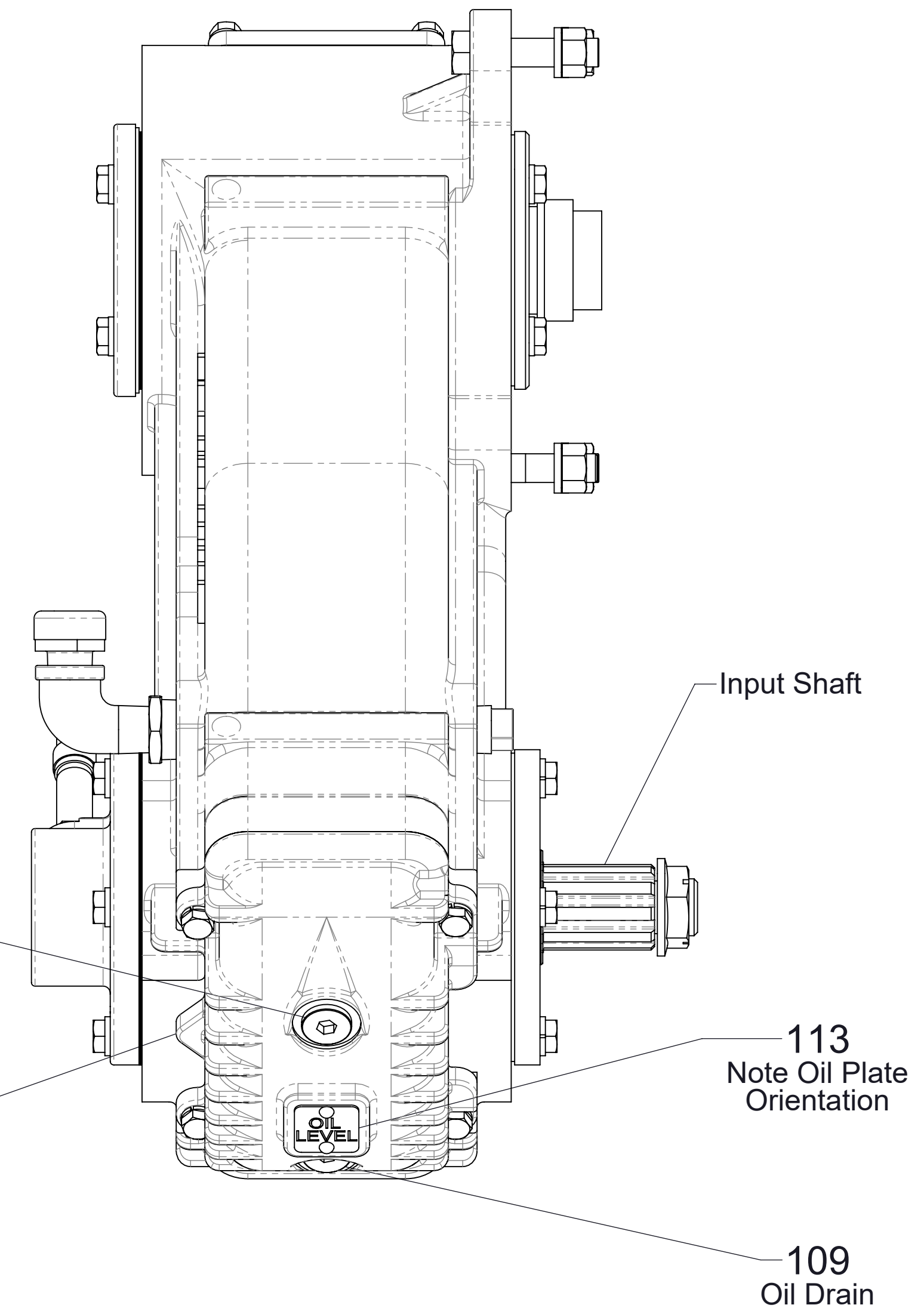
Vertical (Right Mounting)

Ref No.	Description
105	Breather, 1/2 NPT
108	Plug-Site, Glass, 3/4 NPT
109	Plug-Magnetic, 3/4 in
113	Plate-Oil Level



109 Oil Fill

Center Flange on Oil Pan See Note 1



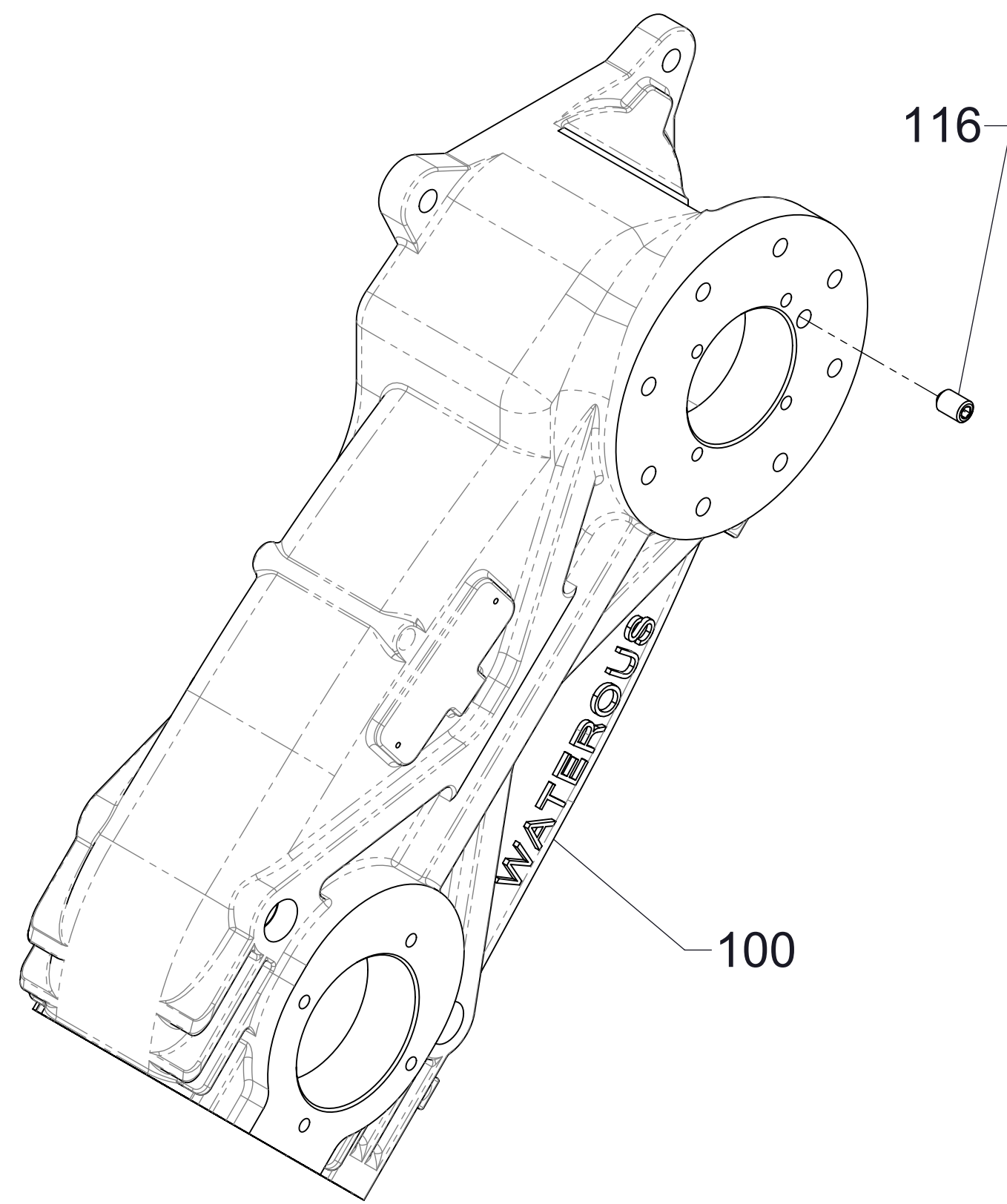
Note:  
1. the center flange on the oil pan must face away from the input shaft.

Horizontal (Left Mounting)

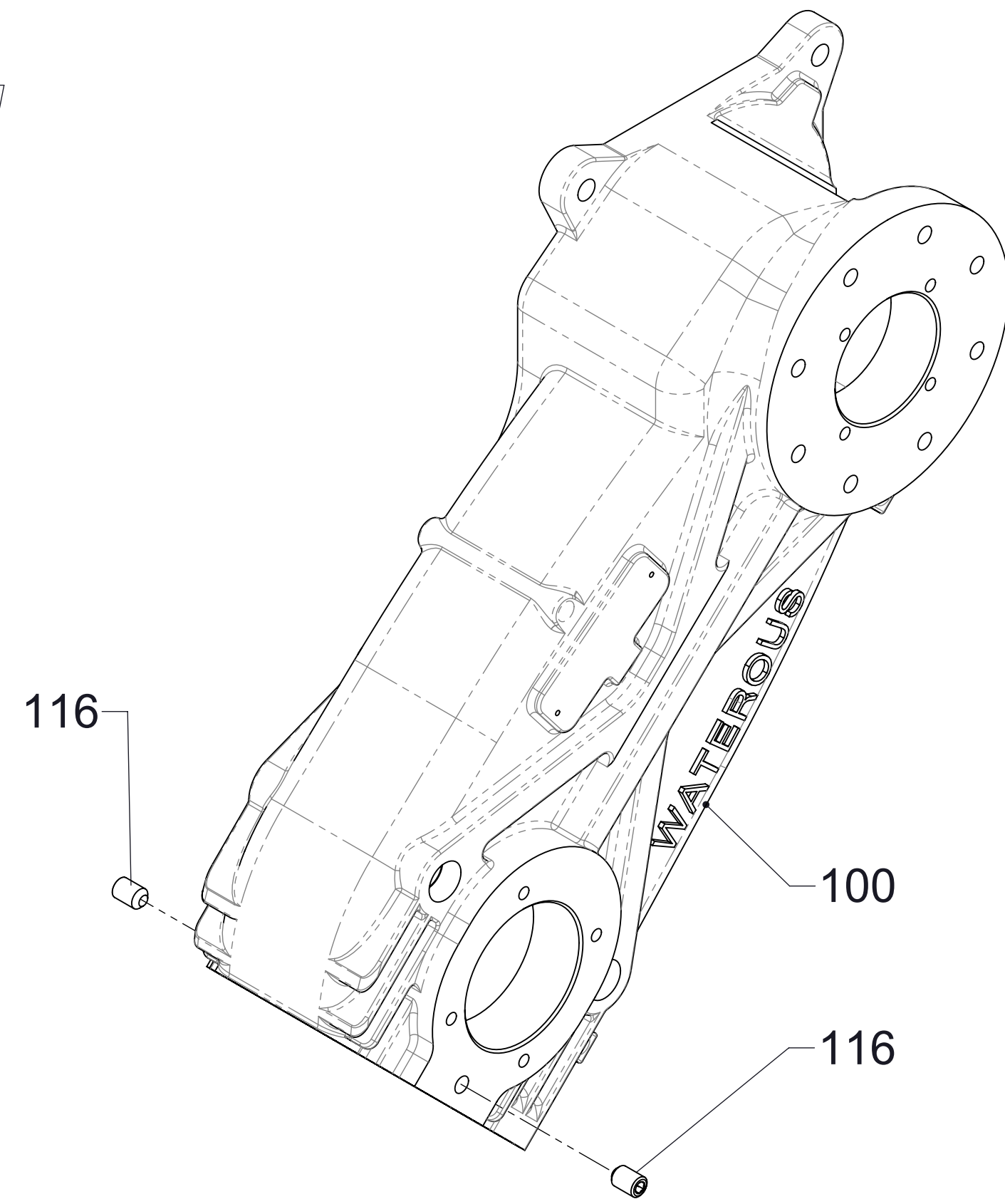
Oil Level, Drain and Breather Locations



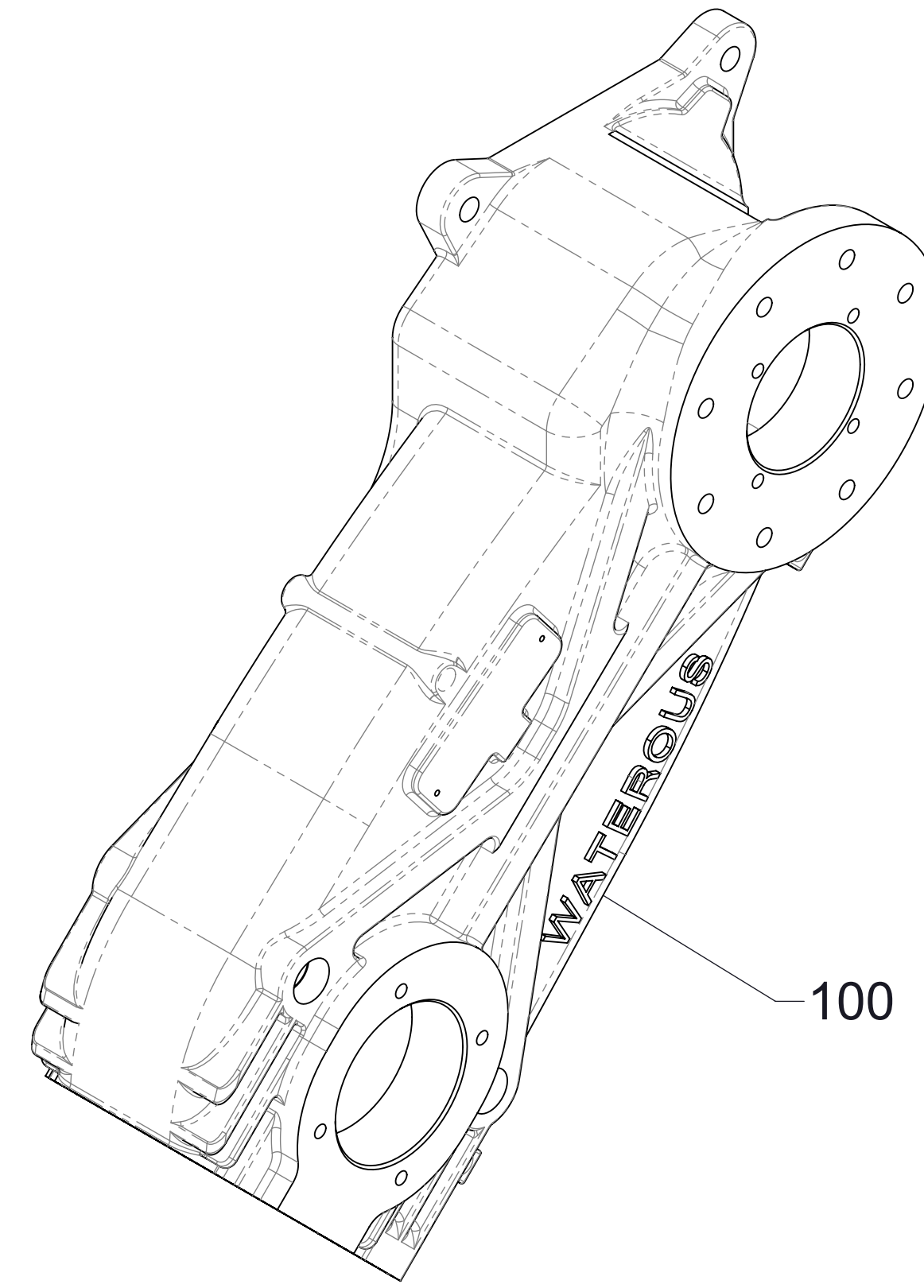
Ref No.	Description
100	Case-Transmission
116	Screw-Set, Cup Point, Hex Soc, 1/2-13 x 3/4 in



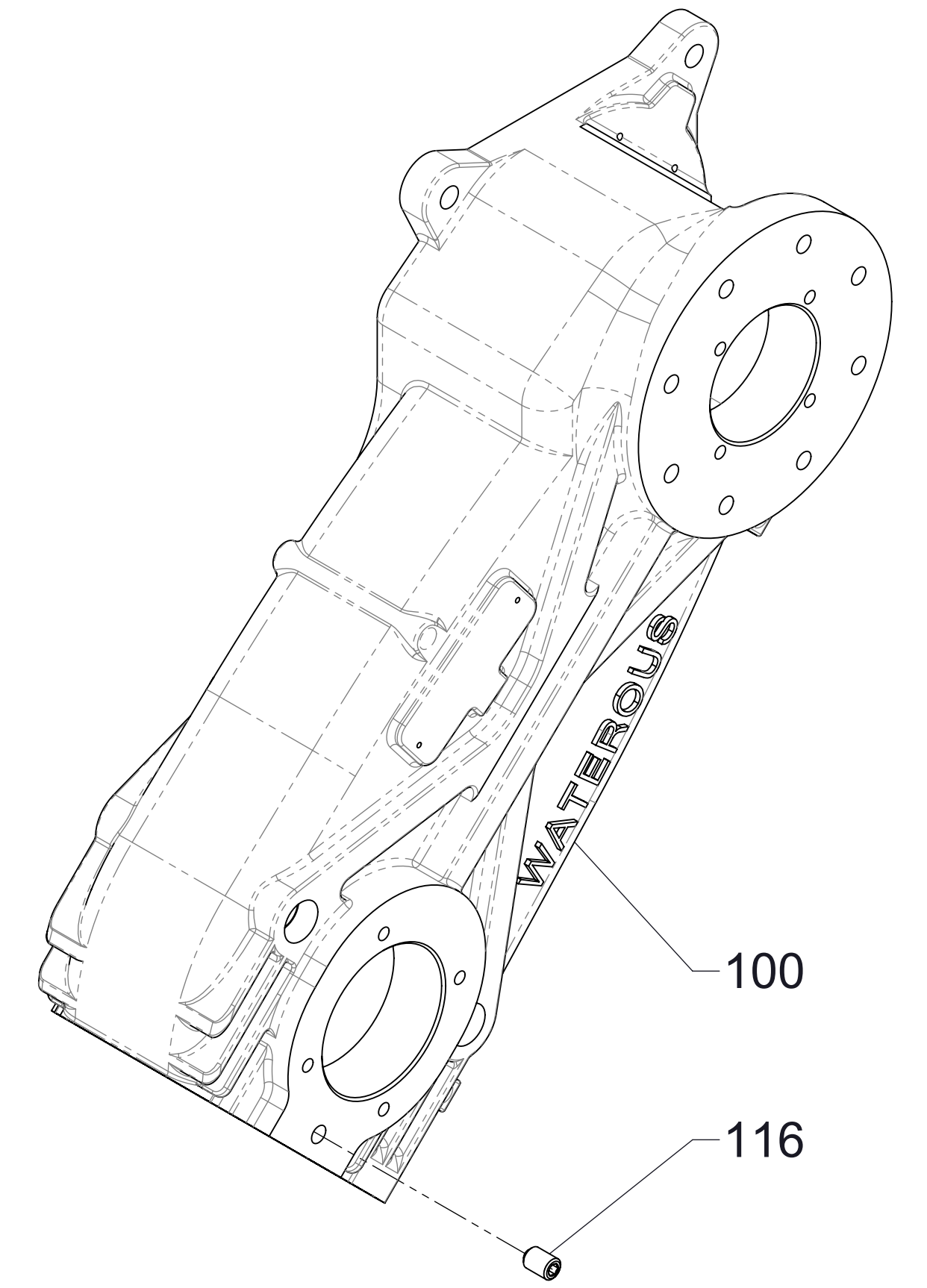
1.00 Ratio Assemblies



1.70 & 1.90 Ratio Assemblies



2.10 Ratio Assemblies  
 Note: No set screws needed,  
 drive sprocket extends below case.

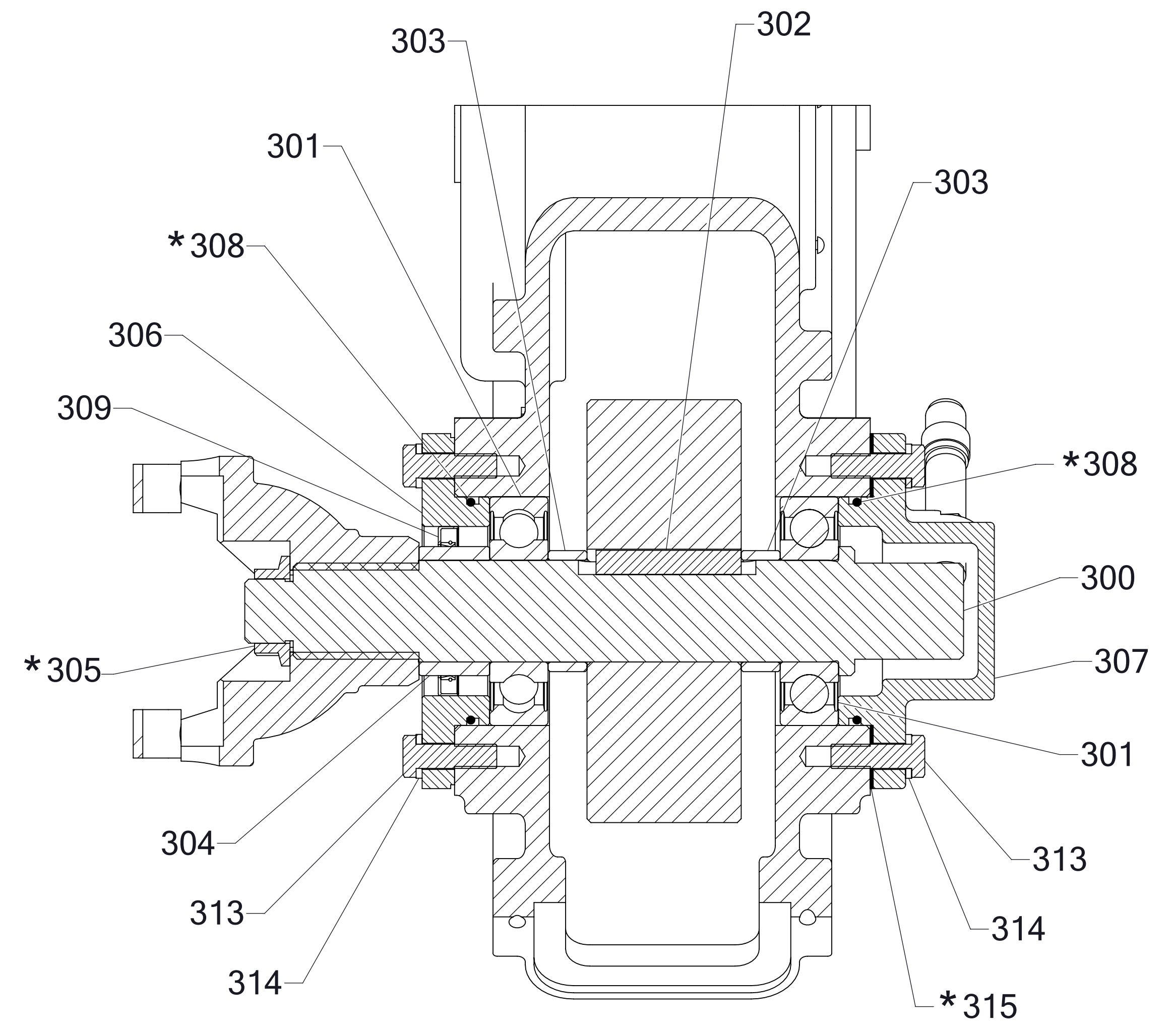


1.70 & 1.90 Ratio Assemblies (S100 only)

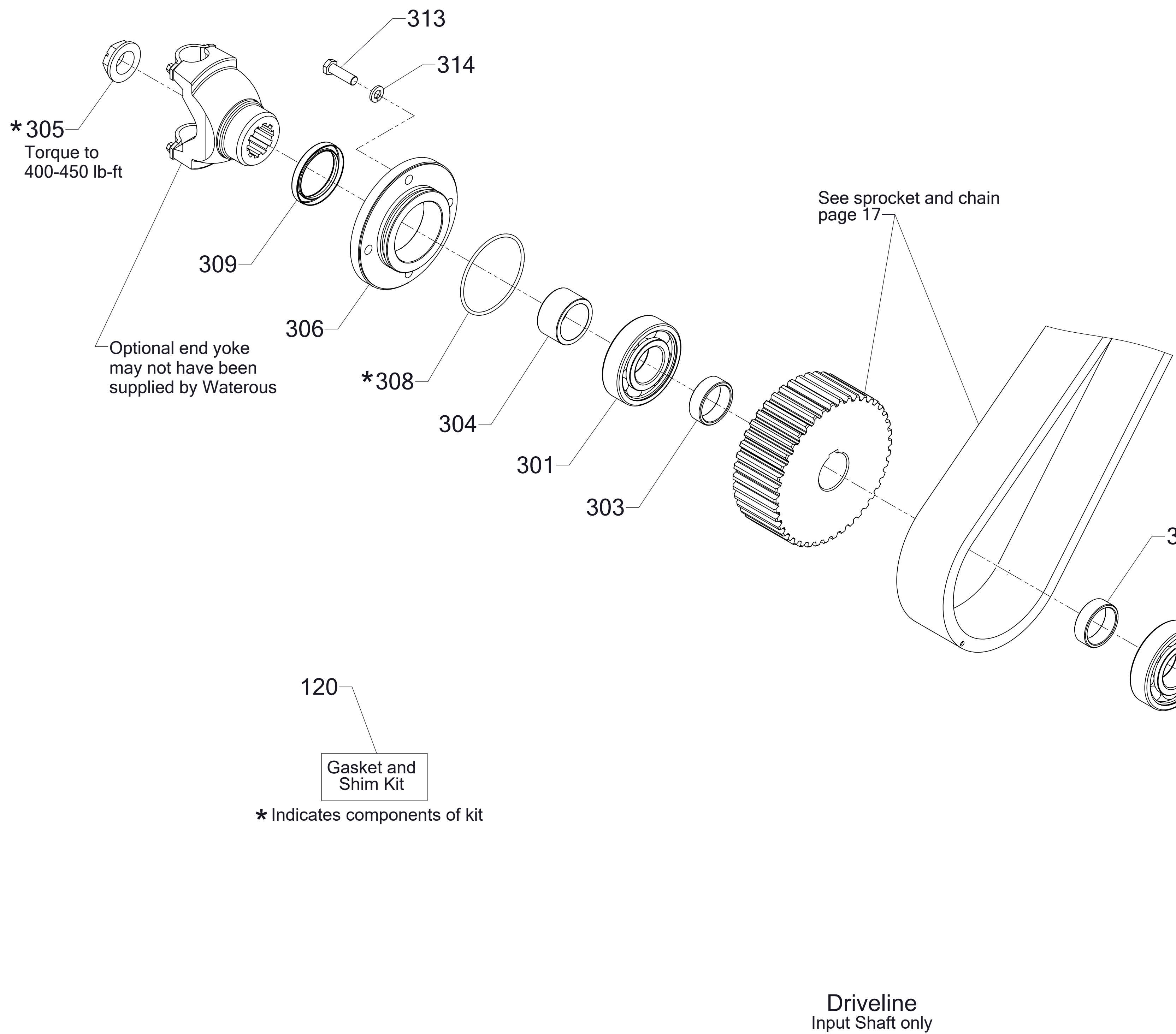
Note:  
 1. Apply Loctite 242 to set screws.



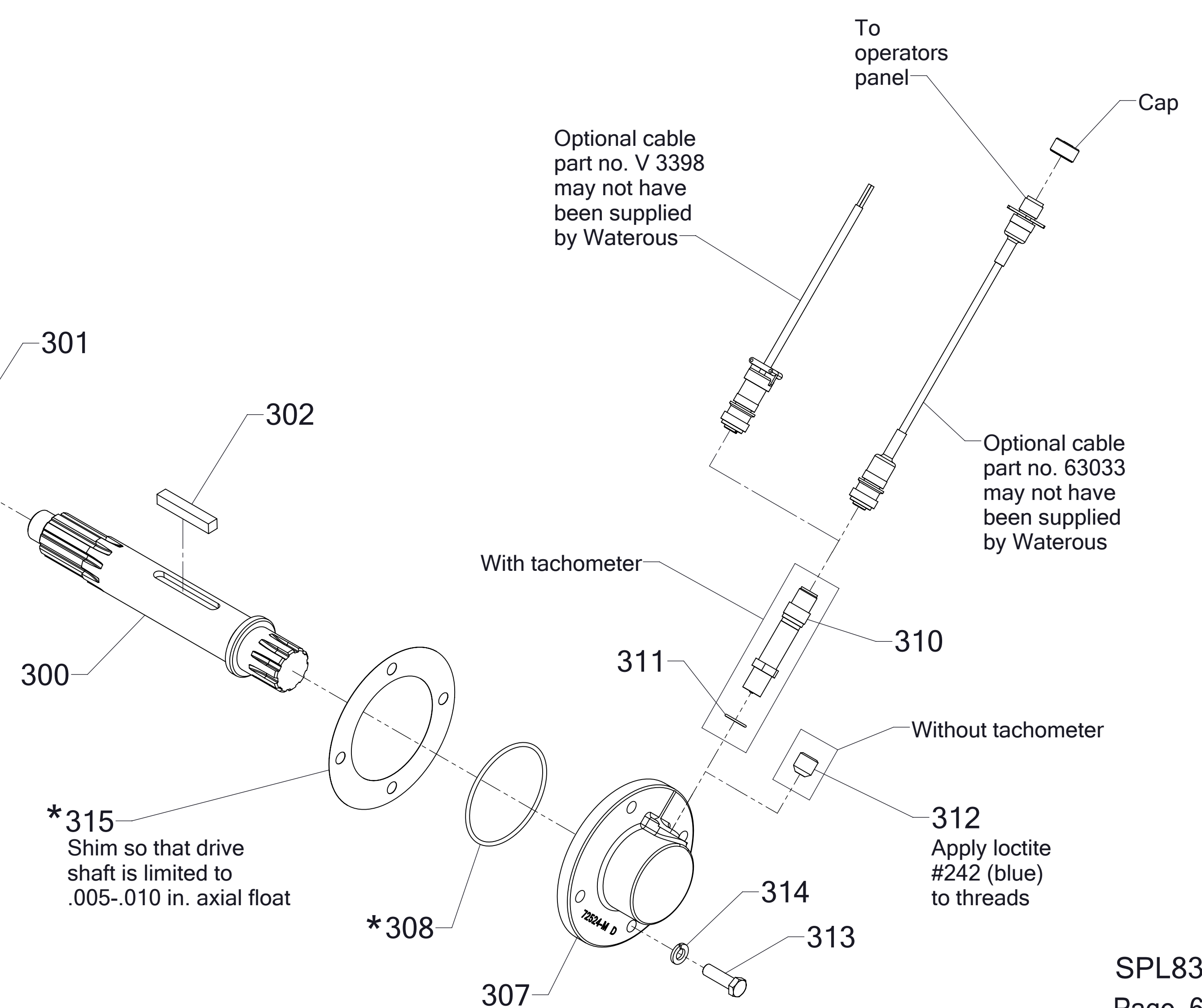
Ref No.	Description
120	Gasket and Shim Repair Kit
300	Shaft-Drive
301	Bearing, Ball, Single Row, 40 x 90 x 23 mm
302	Key-Square, 3/8 x 2-1/4 in
303	Spacer-Shaft, Drive
304	Sleeve-Seal, Oil, Ø1.574 x Ø2.000 x 1.094 in
305	Nut-Self Locking, 1-20 UNEF-2B
306	Housing-Oil Seal
307	Housing-Tachometer
308	O-Ring, 3-1/4 x 3-1/2 in
309	Seal-Oil, 2 x 2-5/8 in
310	Pickup-Magnetic
311	O-Ring, 5/8 x 3/4 in
312	Screw-Set, Cup Point, Hex Soc, 5/8-18 x 5/8 in
313	Screw-Hex Hd, 3/8-16 x 1-1/4 in
314	Washer-Lock, 3/8 in
315	Shim-Drive Shaft Housing



Cross Section View



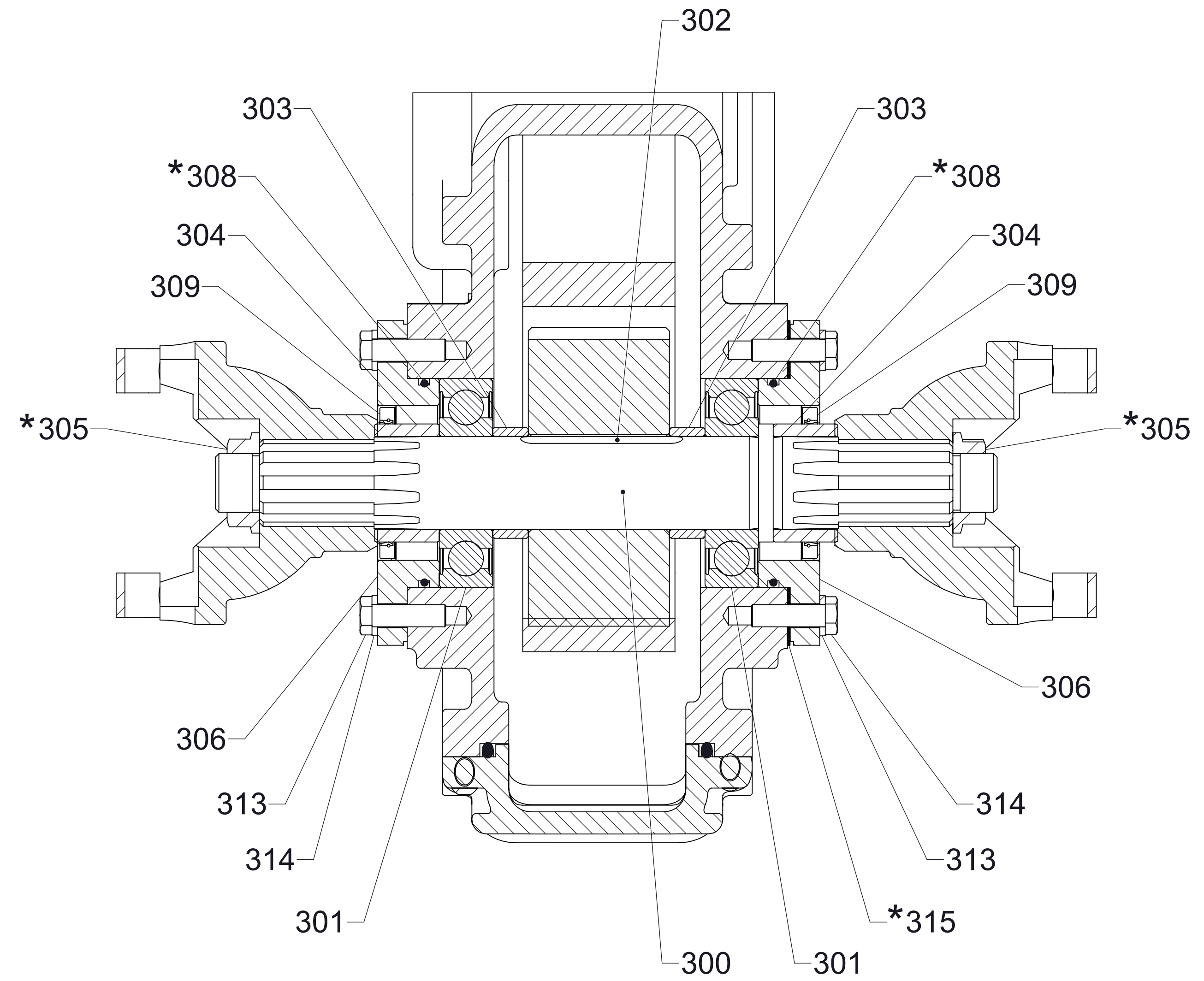
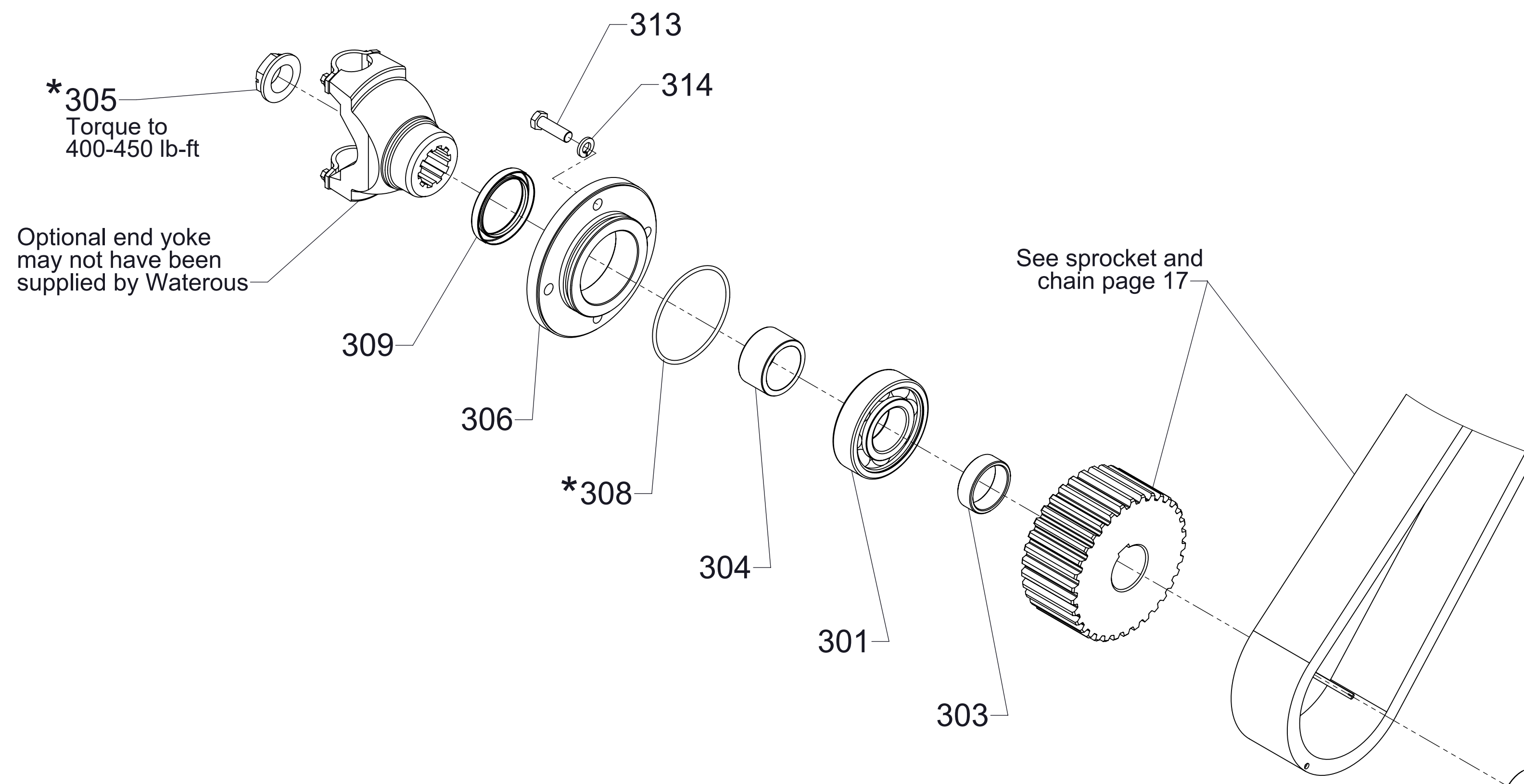
Driveline Input Shaft only



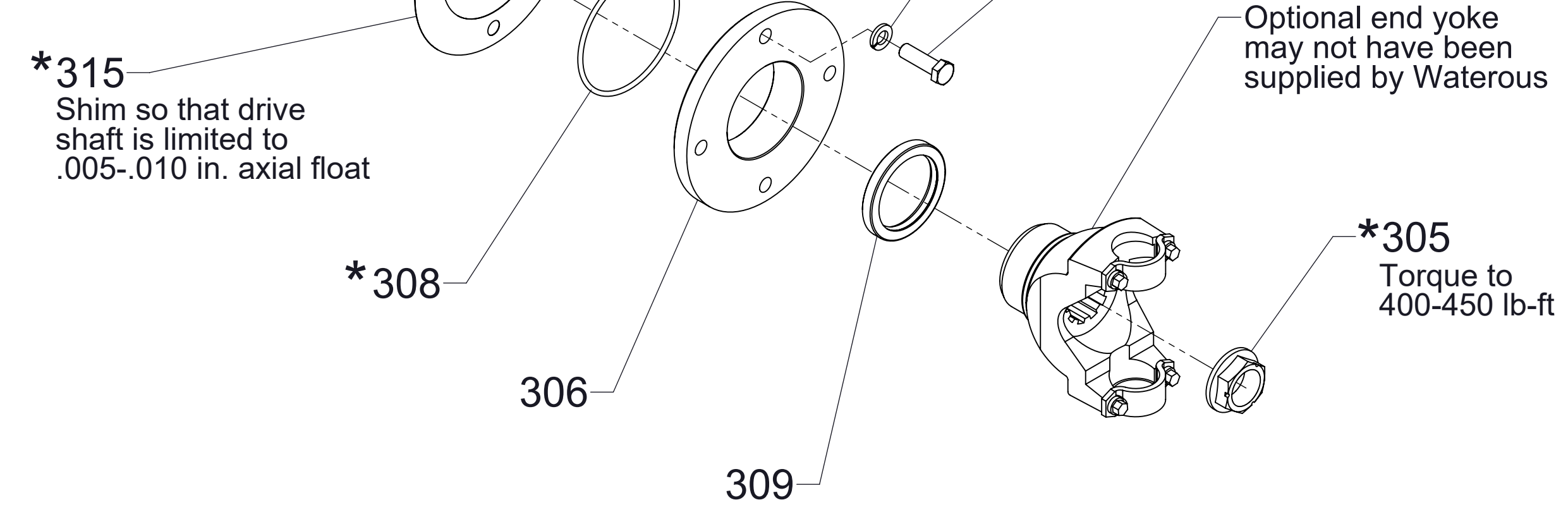
120  
Gasket and Shim Kit  
\* Indicates components of kit



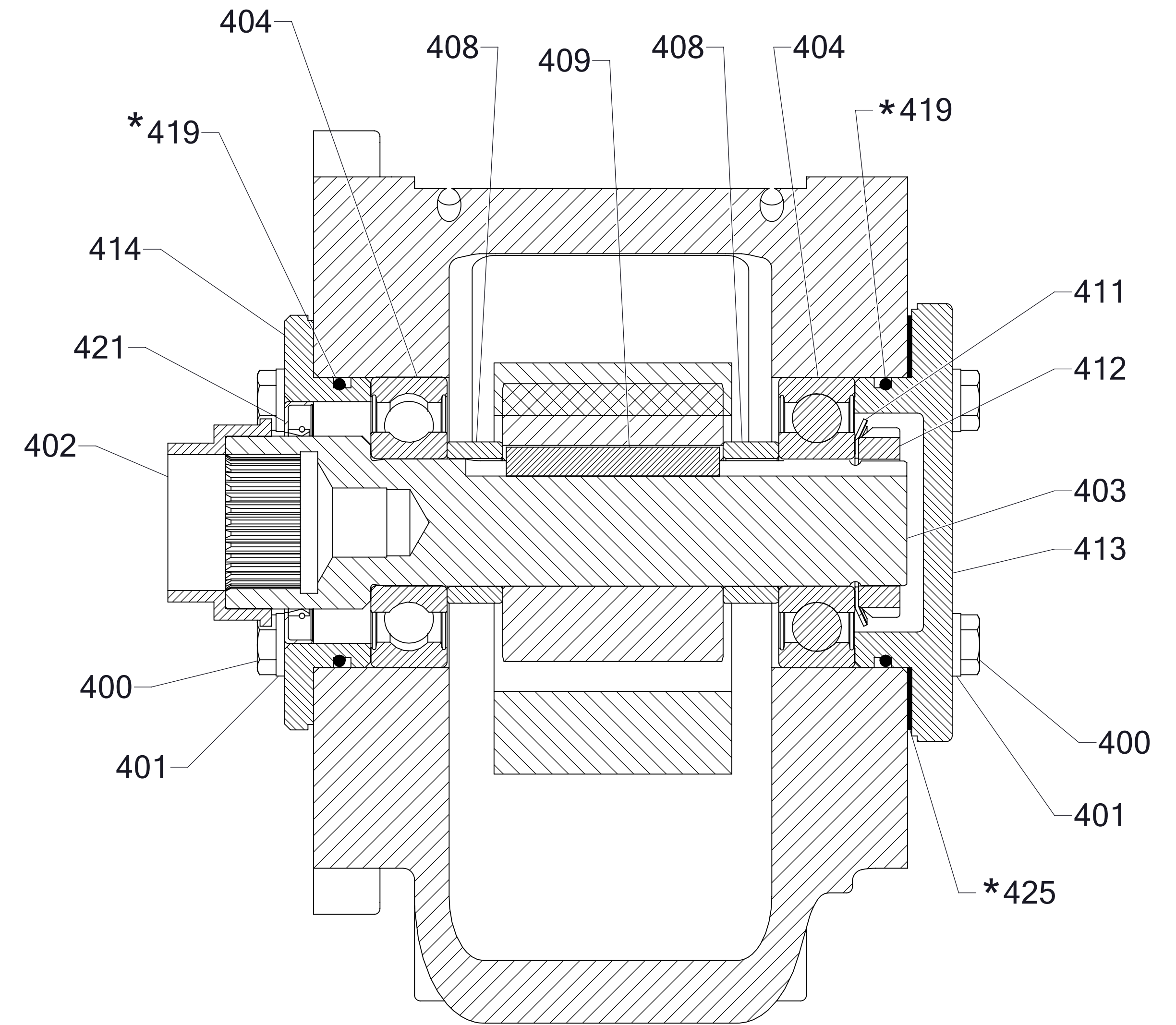
Ref No.	Description
120	Gasket & Shim Repair Kit
300	SHAFT-DRIVE
301	Bearing, Ball, Single Row, 40 x 90 x 23 mm
302	Key-Square, 3/8 x 2-1/4 in
303	Spacer-Shaft, Drive
304	Sleeve-Seal, Oil, Ø1.574 x Ø2.000 x 1.094 in
305	Nut-Self Locking, 1-20 UNEF-2B
306	Housing-Oil Seal, 5-1/2 O.D.
308	O-Ring, 3-1/4 x 3-1/2 in
309	Seal-Oil, 2 x 2-5/8 in
313	Screw-Hex Hd, 3/8-16 x 1-1/4 in
314	Washer-Lock, 3/8 in
315	Shim-Drive Shaft Housing



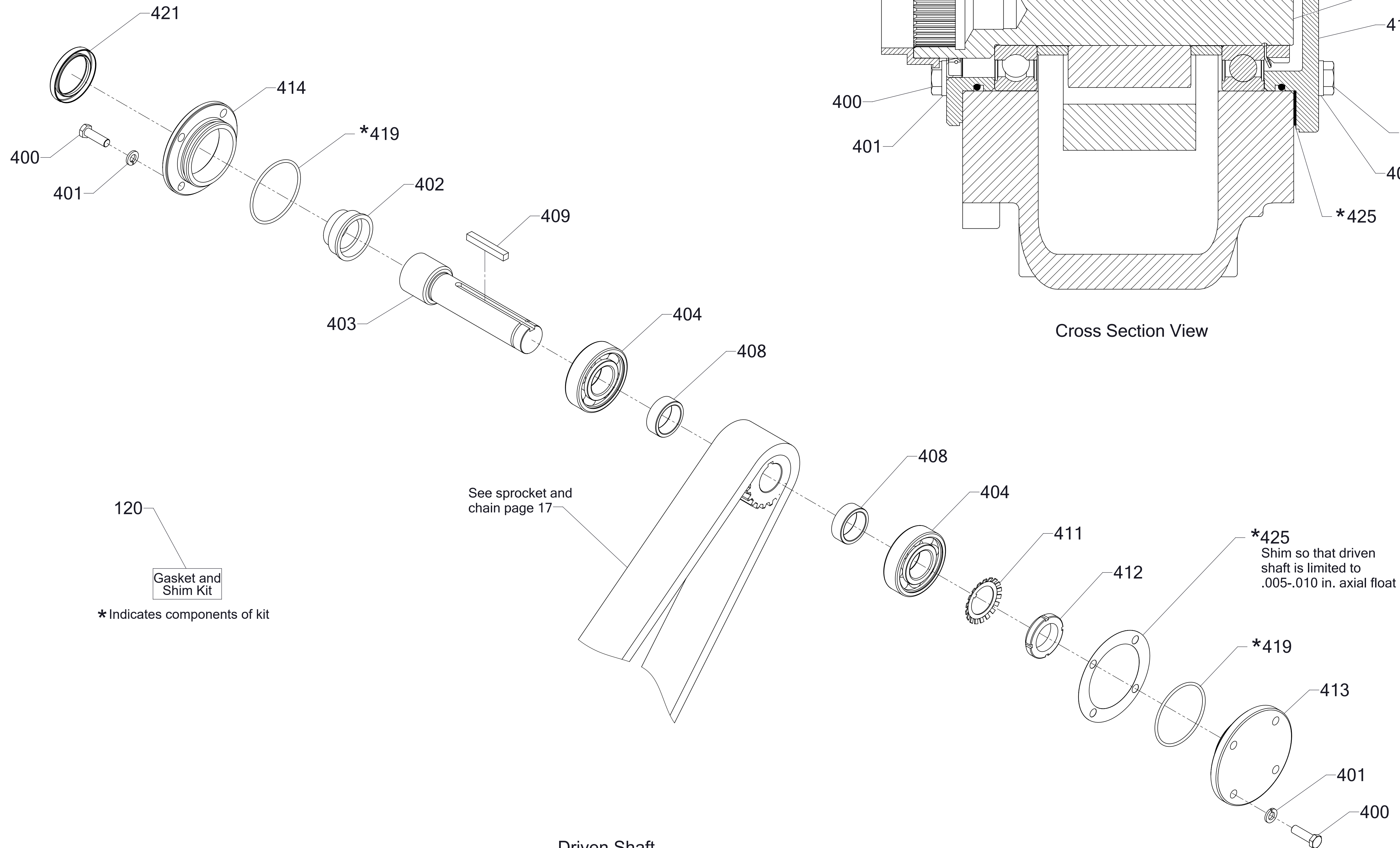
Driveline  
Input and Output Shaft



Ref No.	Description
120	Gasket & Shim Repair Kit
400	Screw-Hex Hd, 3/8-16 x 1-1/4 in
401	Washer-Lock, 3/8 in
402	Boot-Sealing
403	SHAFT-DRIVEN (PA)
404	Bearing, Ball, Single Row, 35 x 80 x 21 mm
408	Spacer-Shaft, Driven
409	Key-Square, 5/16 x 2-5/16 in
411	Washer-Lock, Bearing, W07
412	Nut-Lock, Bearing, N07
413	HOUSING-OIL SEAL, 4-3/4 OD (PA)
414	Housing-Oil Seal, 4-1/2 OD
419	O-Ring, 2-7/8 x 3-1/8 in
421	Seal-Oil, 1-7/8 x 2-5/8 in
425	Shim-Drive Shaft Housing



Cross Section View



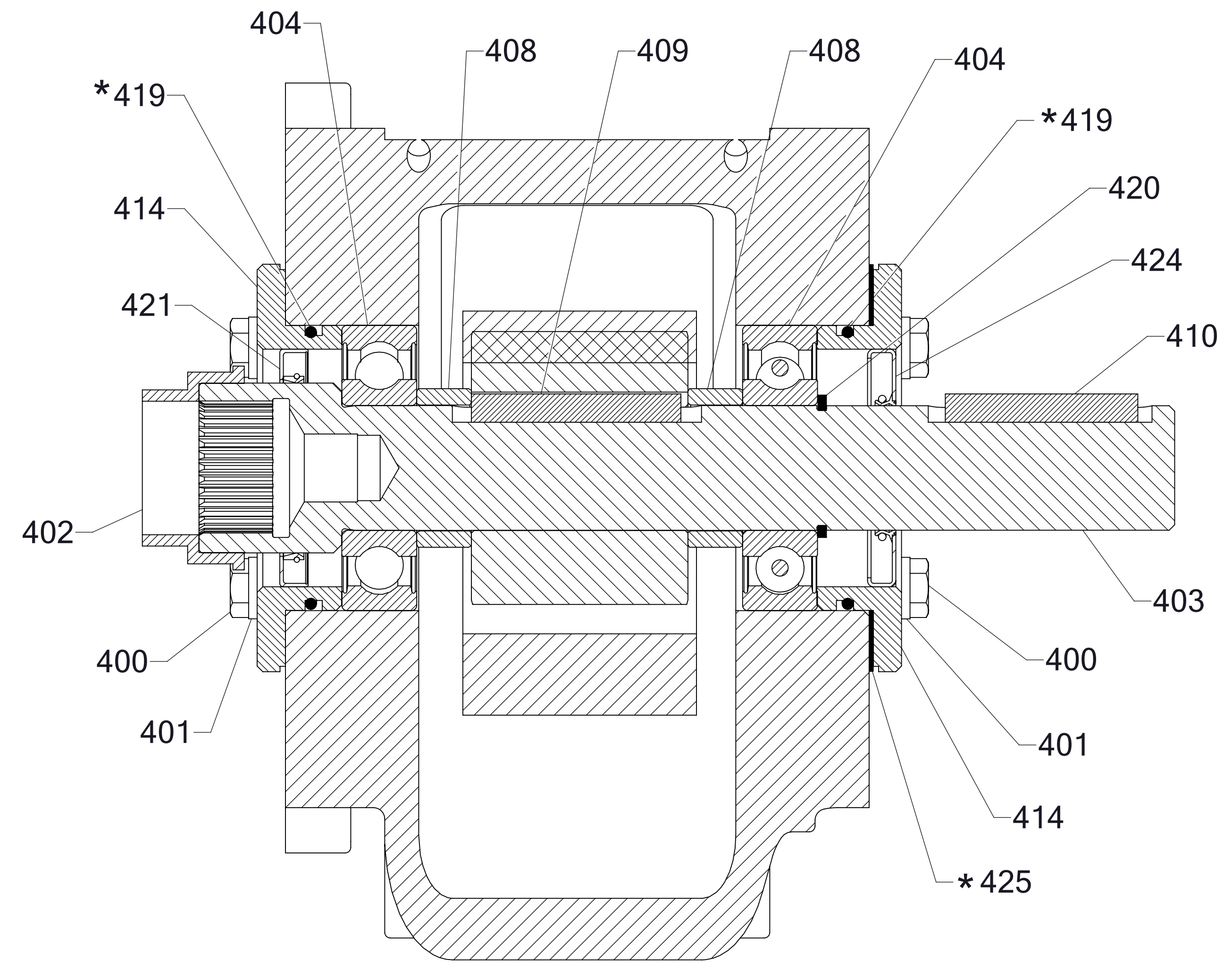
120  
Gasket and Shim Kit  
\* Indicates components of kit

Driven Shaft  
Separable with No Rear Output  
CM, CMU, CS, CSU, HLU Pump Models

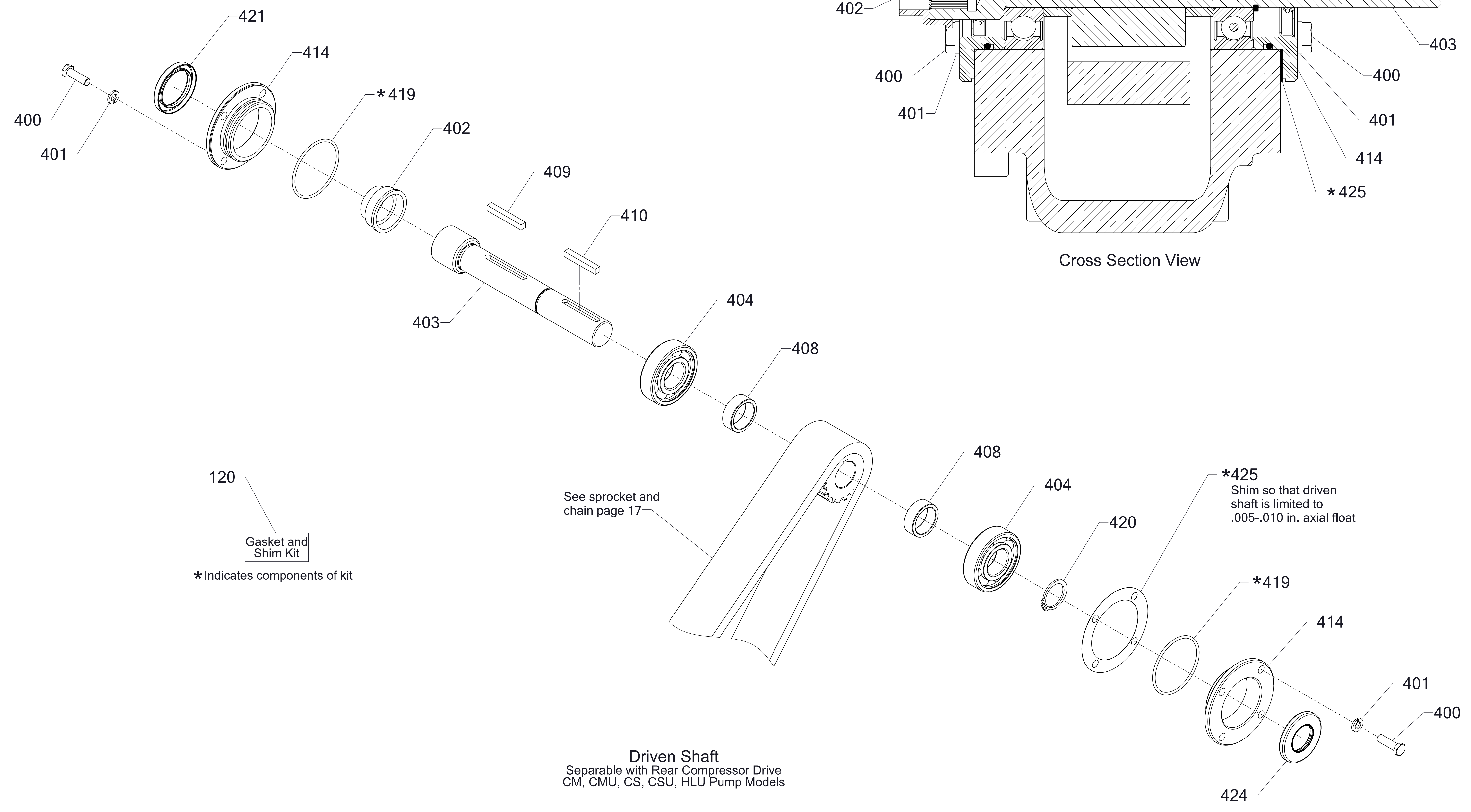
\*425  
Shim so that driven shaft is limited to .005-.010 in. axial float



Ref No.	Description
120	Gasket & Shim Repair Kit
400	Screw-Hex Hd, 3/8-16 x 1-1/4 in
401	Washer-Lock, 3/8 in
402	Boot-Sealing
403	SHAFT-DRIVEN, PA (COMPRESSOR DRIVE)
404	Bearing, Ball, Single Row, 35 x 80 x 21 mm
408	Spacer-Shaft, Driven
409	Key-Square, 5/16 x 2-5/16 in
410	Key-Square, 5/16 x 2-1/8 in
414	Housing-Oil Seal, 4-1/2 OD
419	O-Ring, 2-7/8 x 3-1/8 in
420	Ring-Retaining, External, 1-3/8 in Shaft Dia
421	Seal-Oil, 1-7/8 x 2-5/8 in
424	Seal-Oil, Dual Lip, 1-3/8 x 2-5/8
425	Shim-Driven Shaft Housing



Cross Section View



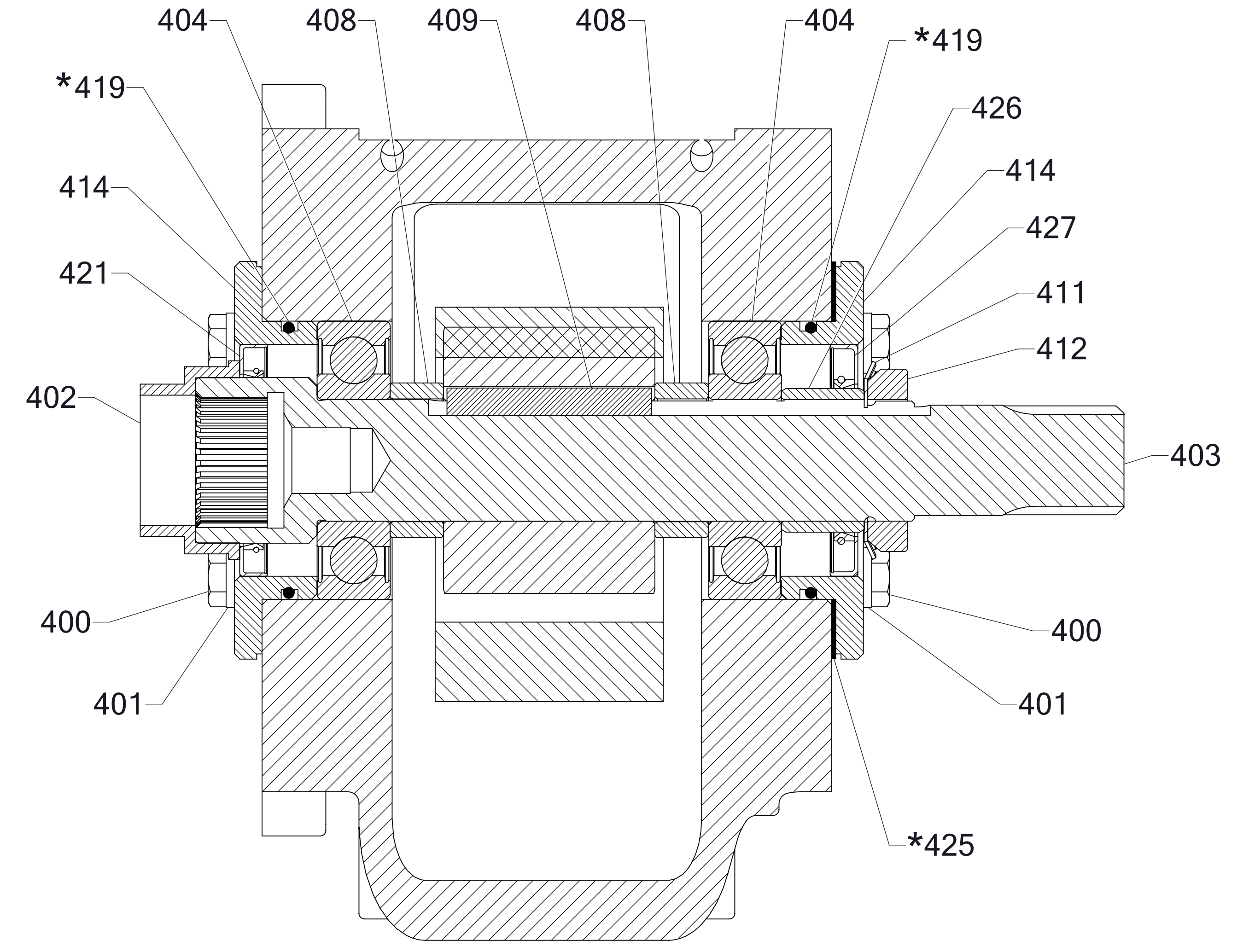
120  
Gasket and Shim Kit  
\* Indicates components of kit

See sprocket and chain page 17

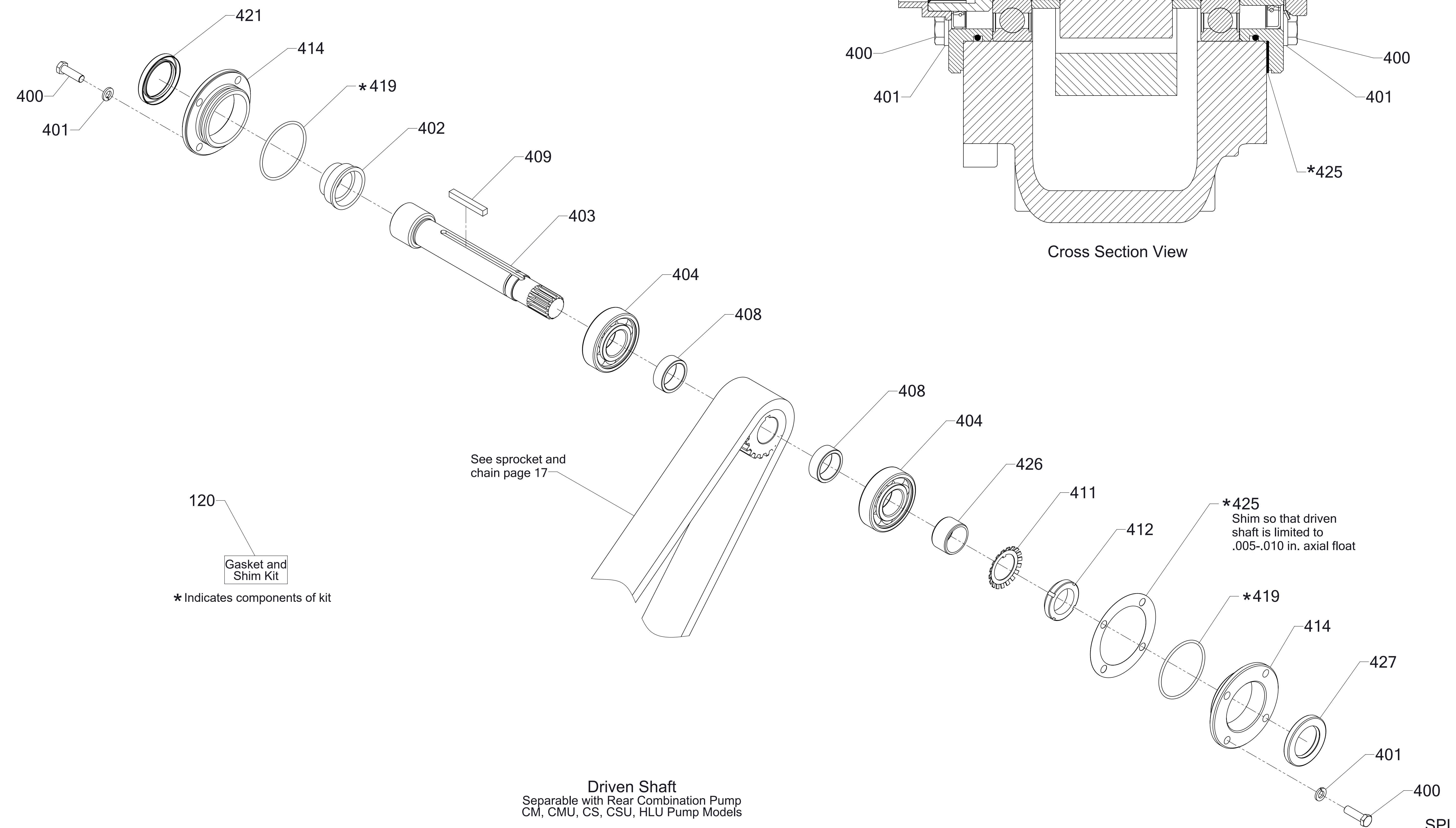
Driven Shaft  
Separable with Rear Compressor Drive  
CM, CMU, CS, CSU, HLU Pump Models

\*425  
Shim so that driven shaft is limited to .005-.010 in. axial float

Ref No.	Description
120	Gasket & Shim Repair Kit
400	Screw-Hex Hd, 3/8-16 x 1-1/4 in
401	Washer-Lock, 3/8 in
402	Boot-Sealing
403	SHAFT-DRIVEN (C10, CMPA, CPK)
404	Bearing, Ball, Single Row, 35 x 80 x 21 mm
408	Spacer-Shaft, Driven
409	Key-Square, 5/16 x 2-5/16 in
411	Washer-Lock, Bearing, W07
412	Nut-Lock, Bearing, N07
414	Housing-Oil Seal, 4-1/2 OD
419	O-Ring, 2-7/8 x 3-1/8 in
421	Seal-Oil, 1-7/8 x 2-5/8 in
425	Shim-Drive Shaft Housing
426	Sleeve-Seal, Oil
427	Seal-Oil, 1-5/8 x 2-5/8 in



Cross Section View

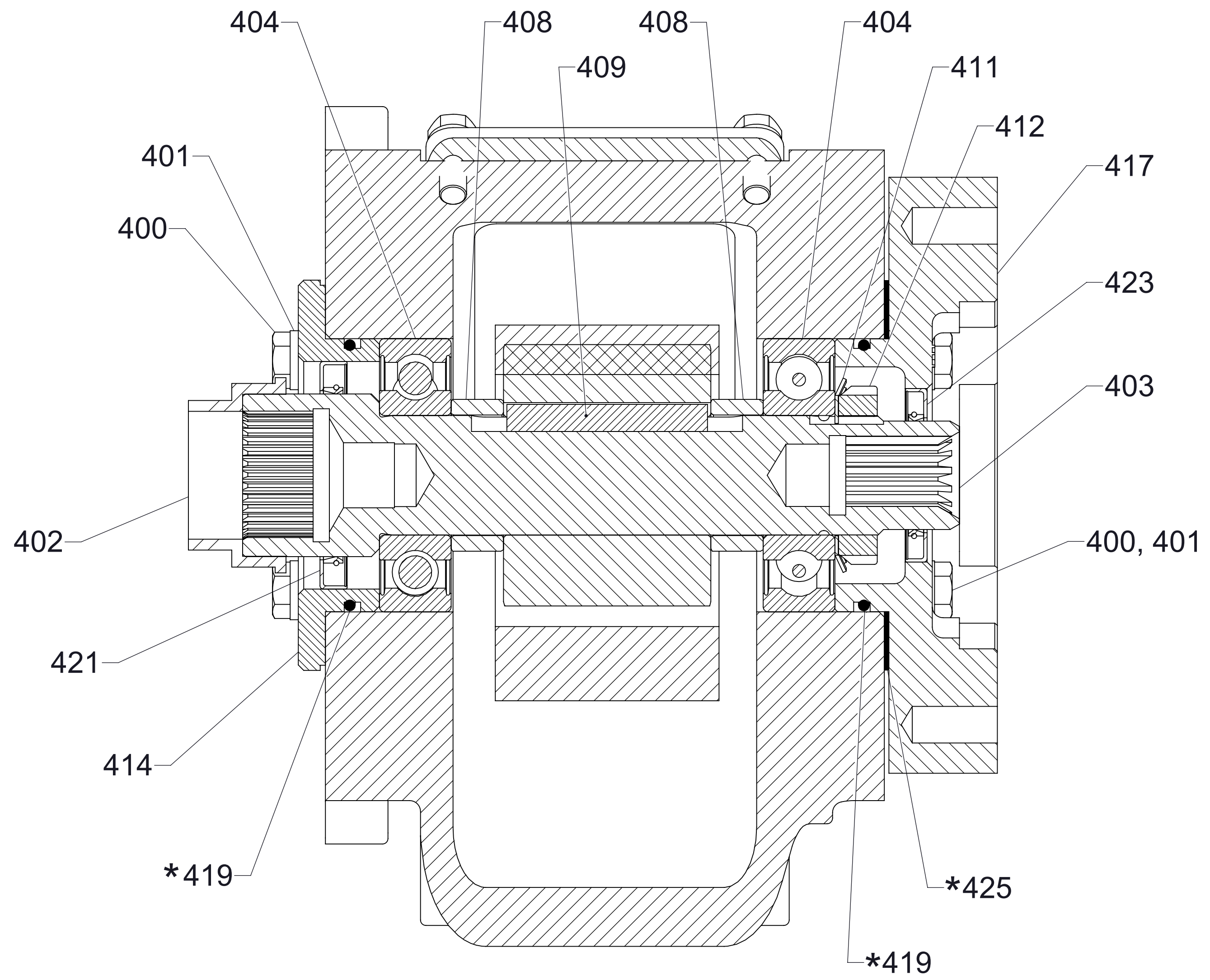


120  
Gasket and Shim Kit  
\* Indicates components of kit

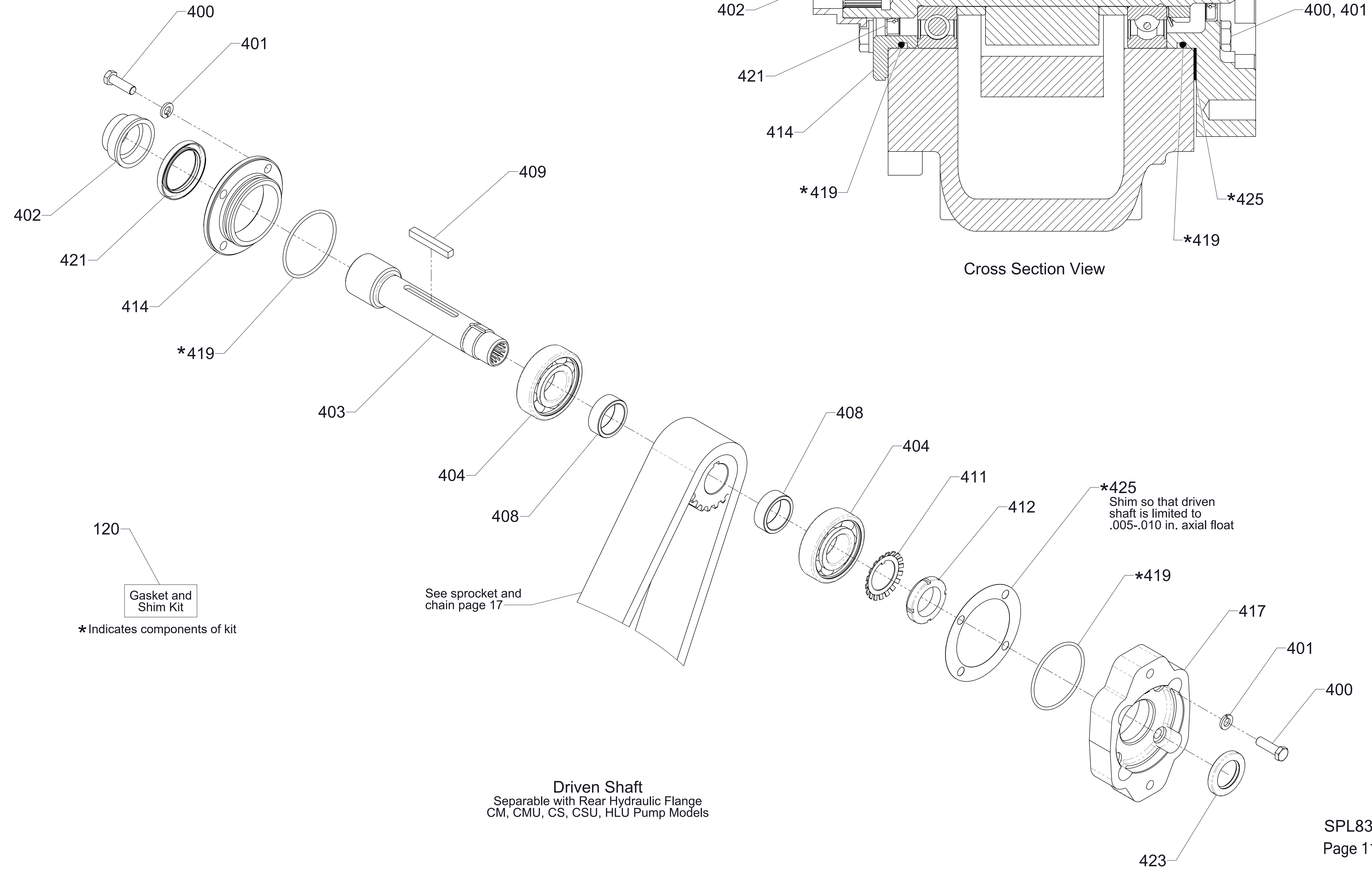
**Driven Shaft**  
Separable with Rear Combination Pump  
CM, CMU, CS, CSU, HLU Pump Models



Ref No.	Description
120	Gasket & Shim Repair Kit
400	Screw-Hex Hd, 3/8-16 x 1-1/4 in
401	Washer-Lock, 3/8 in
402	Boot-Sealing
403	Shaft-Driven, Separable with Rear Hydraulic Connection
404	Bearing, Ball, Single Row, 35 x 80 x 21 mm
408	Spacer-Shaft, Driven
409	Key-Square, 5/16 x 2-5/16 in
411	Washer-Lock, Bearing, W07
412	Nut-Lock, Bearing, N07
414	Housing-Oil Seal, 4-1/2 OD
417	Adapter-Hydraulic Flange
419	O-Ring, 2-7/8 x 3-1/8 in
421	Seal-Oil, 1-7/8 x 2-5/8 in
423	Seal-Oil, 1-1/4 x 2 in
425	Shim-Driven Shaft Housing

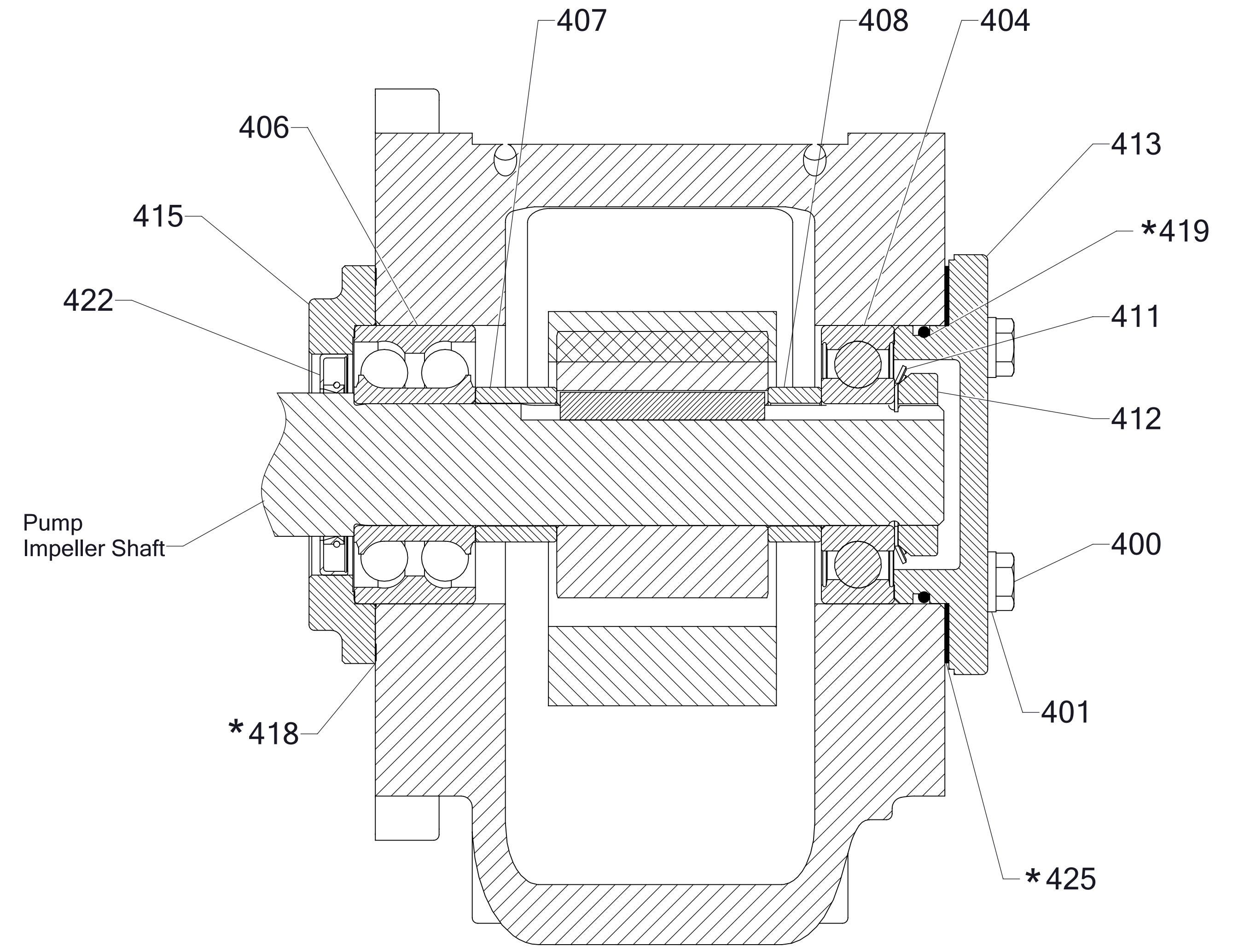


Cross Section View

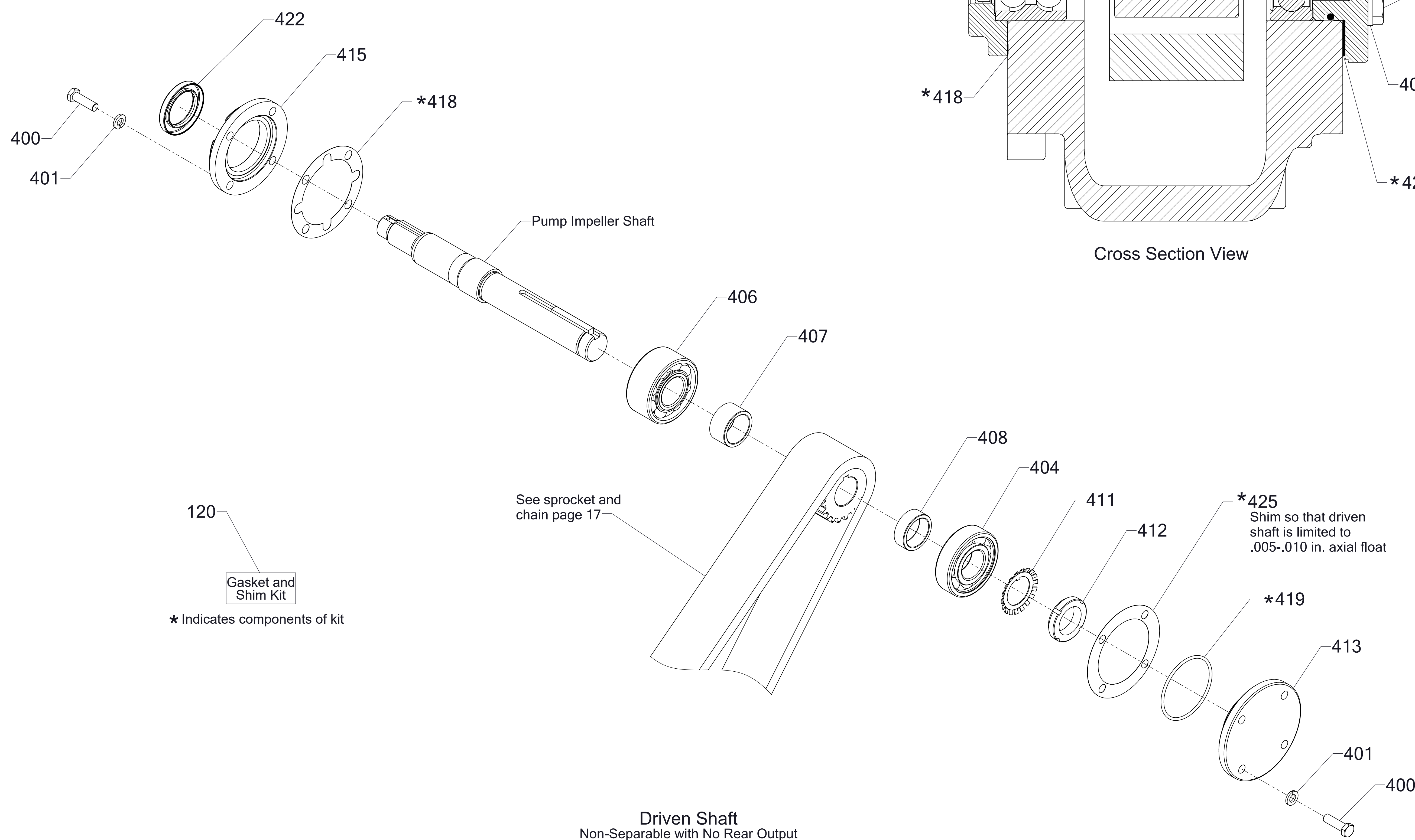


Driven Shaft  
Separable with Rear Hydraulic Flange  
CM, CMU, CS, CSU, HLU Pump Models

Ref No.	Description
120	Gasket & Shim Repair Kit
400	Screw-Hex Hd, 3/8-16 x 1-1/4 in
401	Washer-Lock, 3/8 in
404	Bearing, Ball, Single Row, 35 x 80 x 21 mm
406	Bearing, Ball, Double Row, 35 x 80 x 34.9 mm
407	SPACER-SHAFT, DRIVEN (PA)
408	Spacer-Shaft, Driven
411	Washer-Lock, Bearing, W07
412	Nut-Lock, Bearing, N07
413	HOUSING-OIL SEAL, 4-3/4 OD (PA)
415	Housing-Seal, Oil
418	Gasket
419	O-Ring, 2-7/8 x 3-1/8 in
422	Seal-Oil, 1-5/8 x 2-1/2 in
425	Shim-Driven Shaft Housing



Cross Section View



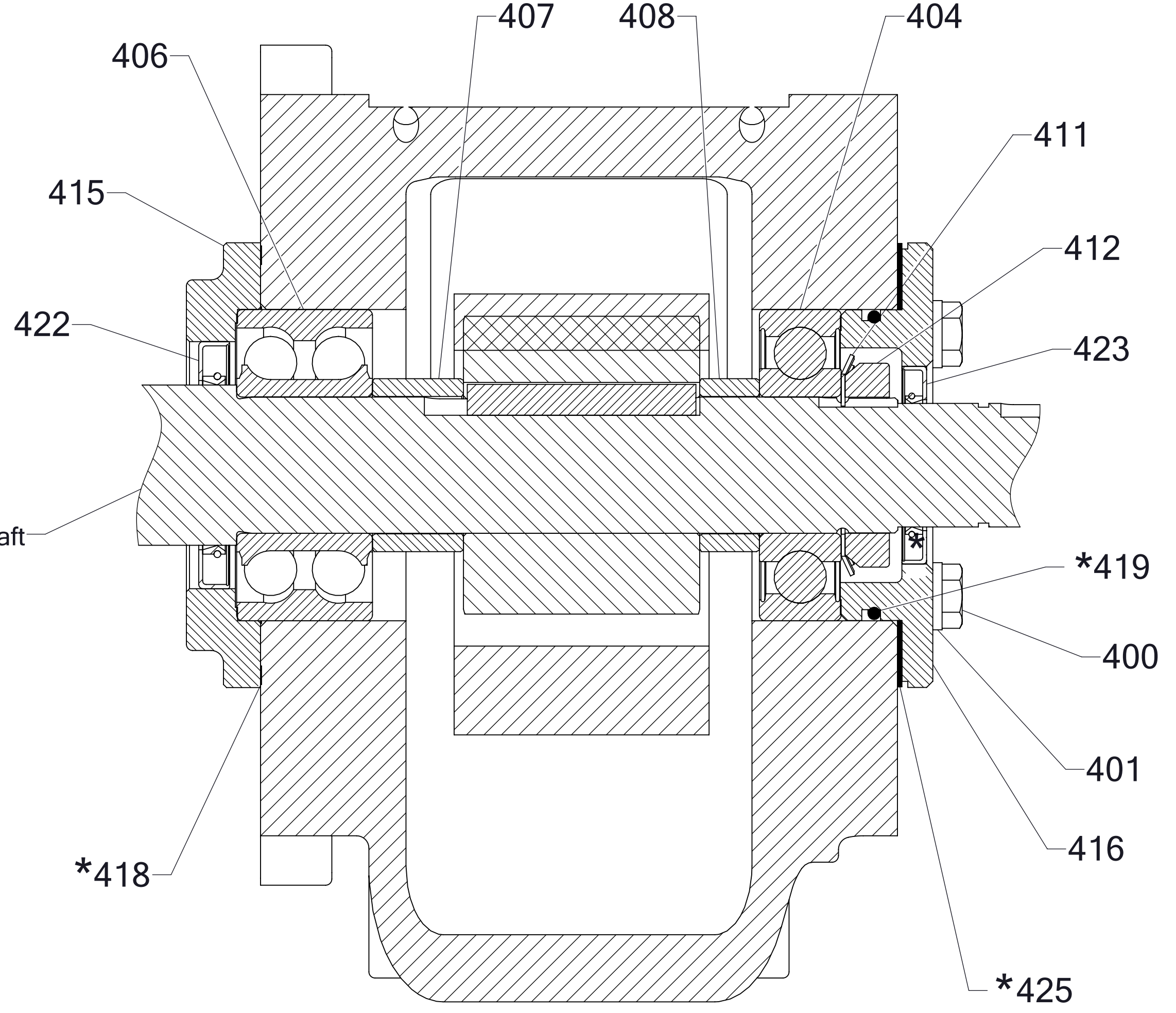
Driven Shaft  
Non-Separable with No Rear Output  
CG, CL, CX Pump Models

120  
Gasket and Shim Kit  
\* Indicates components of kit

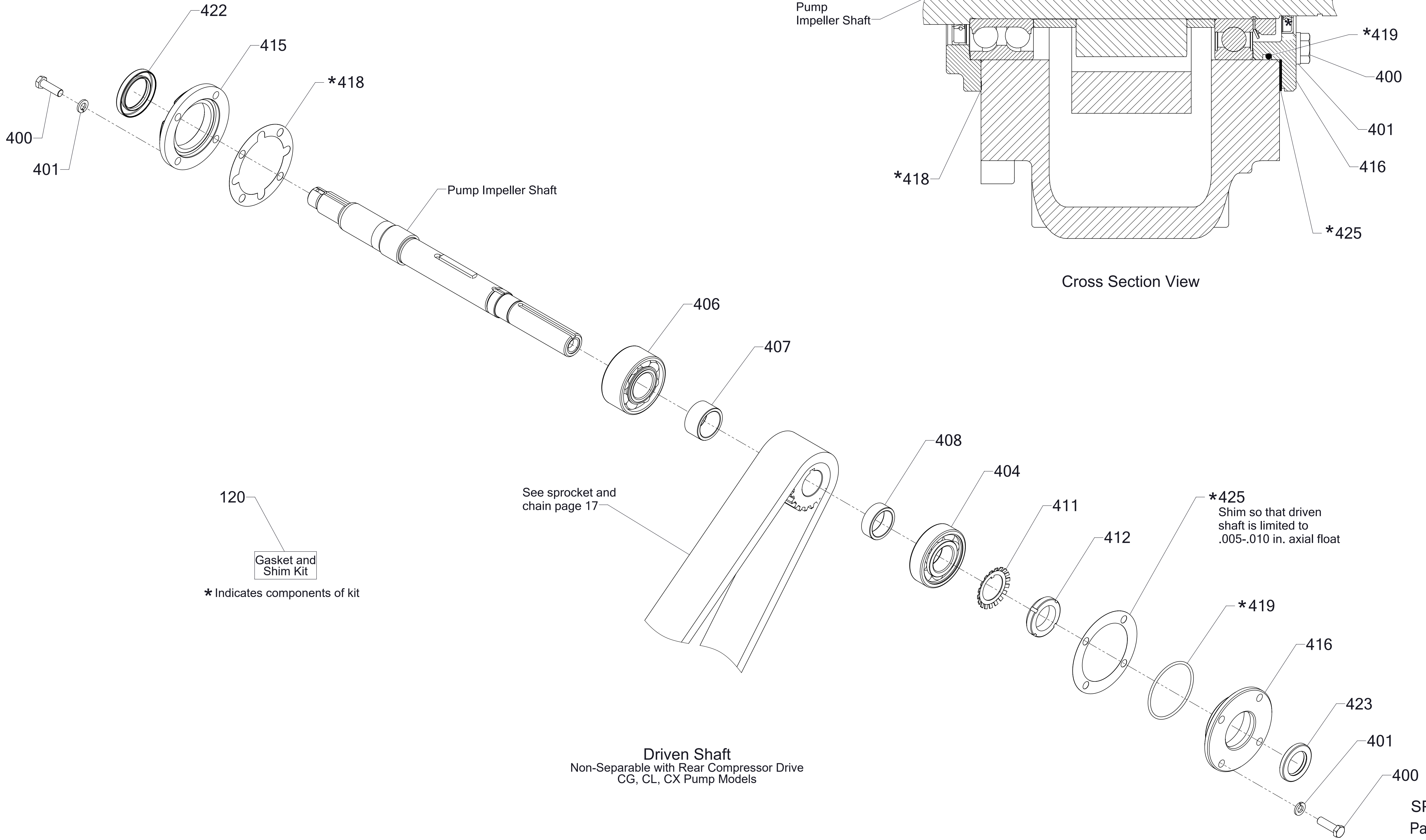
\*425  
Shim so that driven shaft is limited to .005-.010 in. axial float



Ref No.	Description
120	Gasket & Shim Repair Kit
400	Screw-Hex Hd, 3/8-16 x 1-1/4 in
401	Washer-Lock, 3/8 in
404	Bearing, Ball, Single Row, 35 x 80 x 21 mm
406	Bearing, Ball, Double Row, 35 x 80 x 34.9 mm
407	SPACER-SHAFT, DRIVEN (PA)
408	Spacer-Shaft, Driven
411	Washer-Lock, Bearing, W07
412	Nut-Lock, Bearing, N07
415	HOUSING-OIL SEAL, 4-1/2 OD (PA)
416	Housing-Seal, Oil
418	Gasket
419	O-Ring, 2-7/8 x 3-1/8 in
422	Seal-Oil, 1-5/8 x 2-1/2 in
423	Seal-Oil, 1-1/4 x 2 in
425	Shim-Driven Shaft Housing



Cross Section View

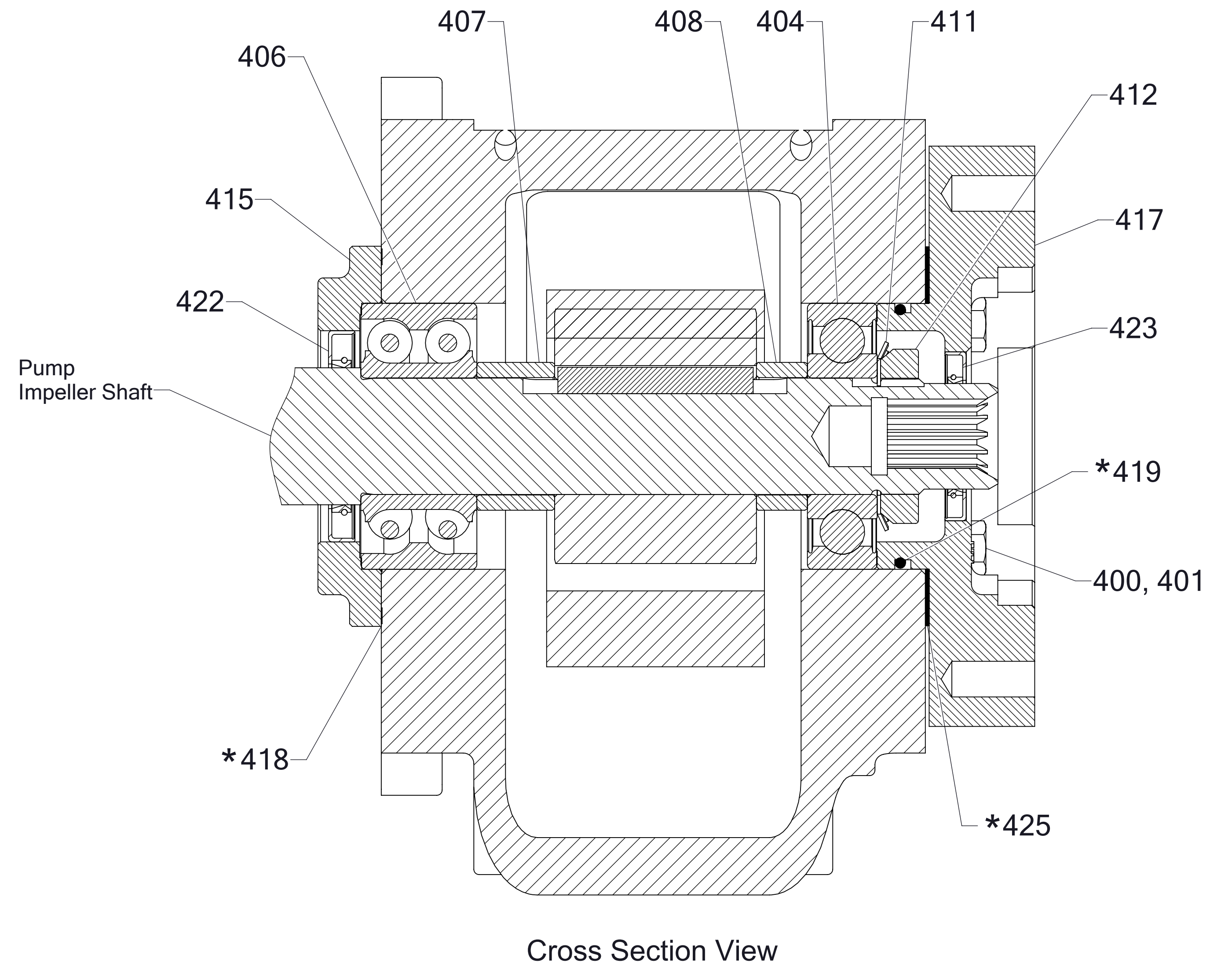
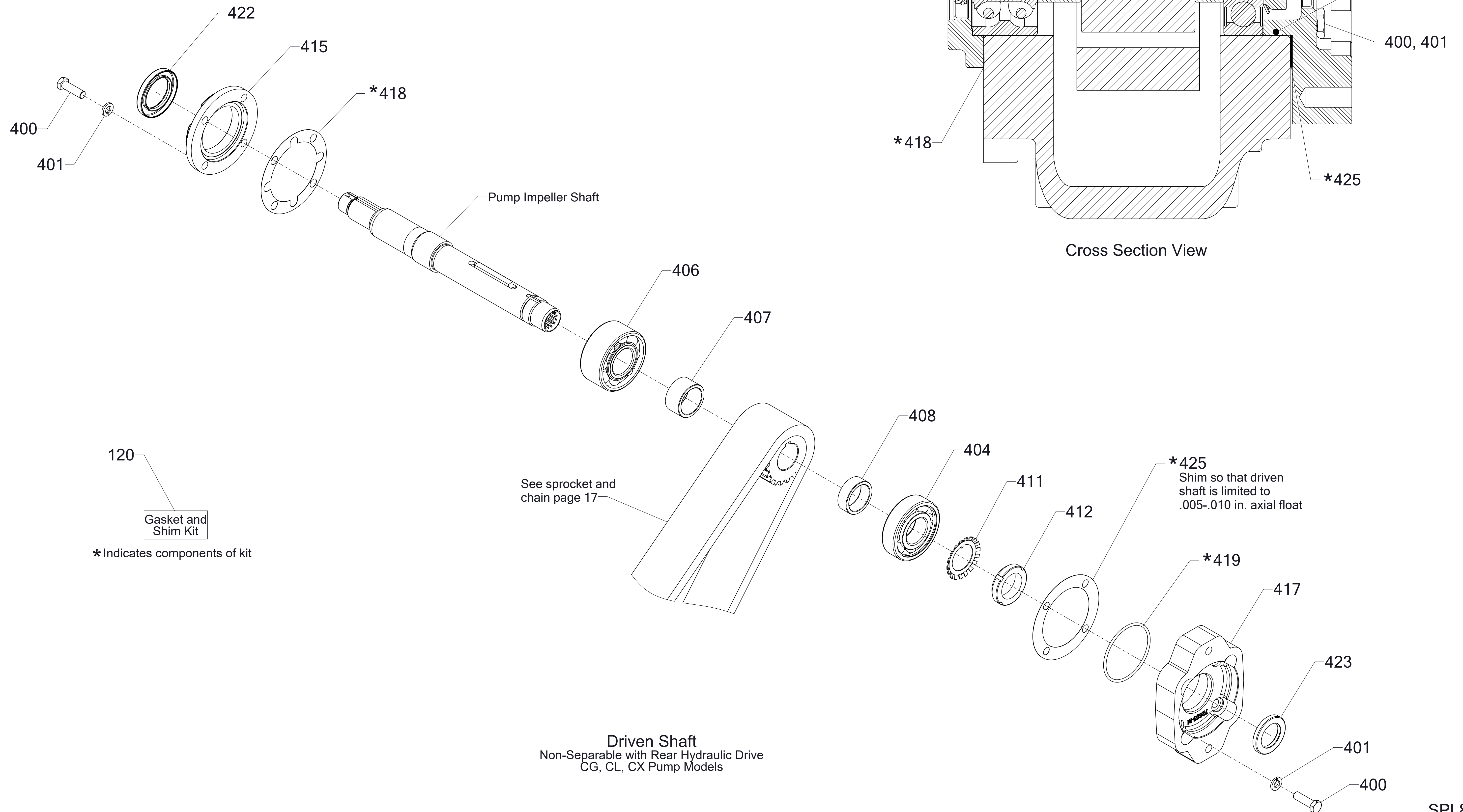


120  
Gasket and Shim Kit  
\* Indicates components of kit

See sprocket and chain page 17

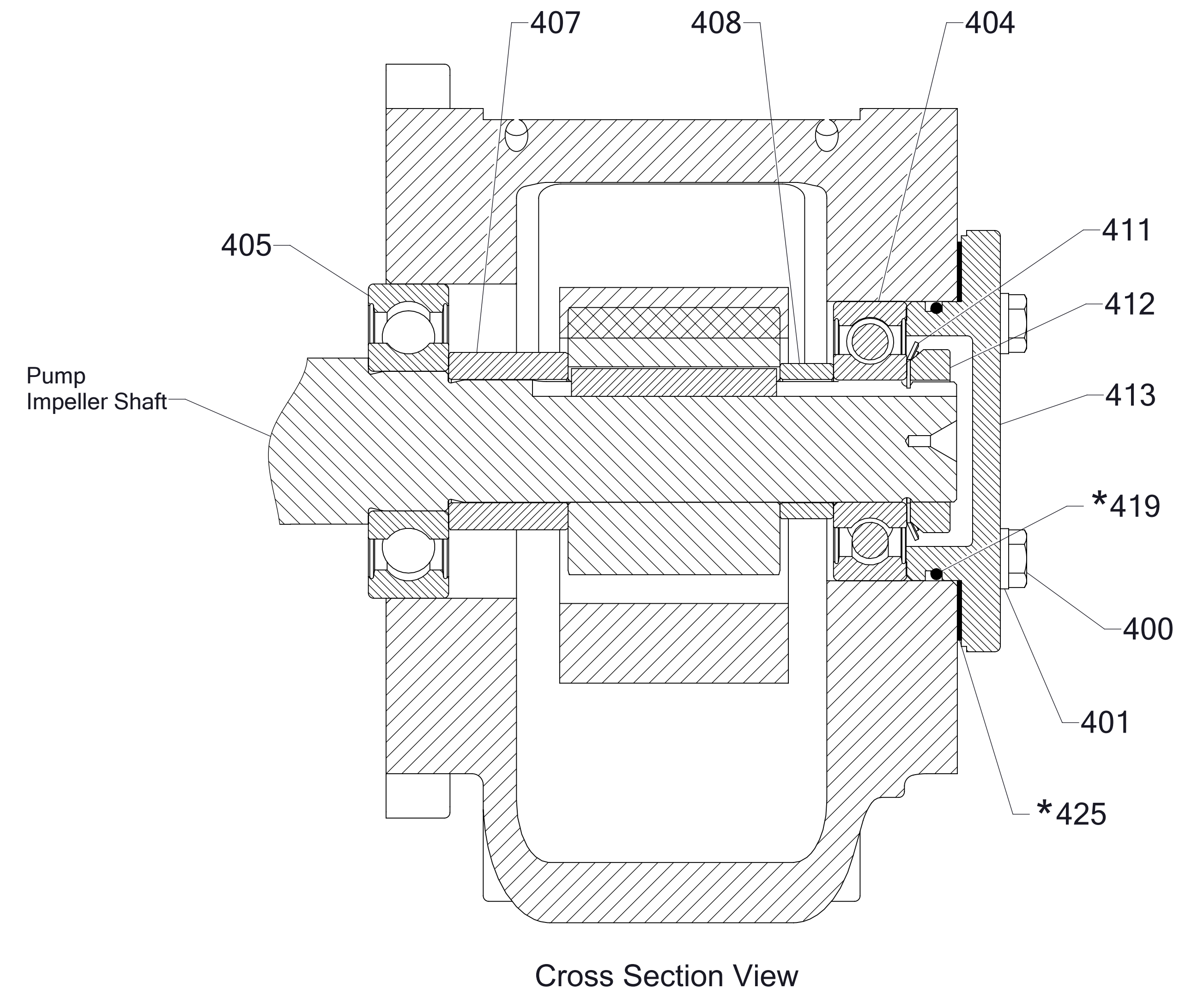
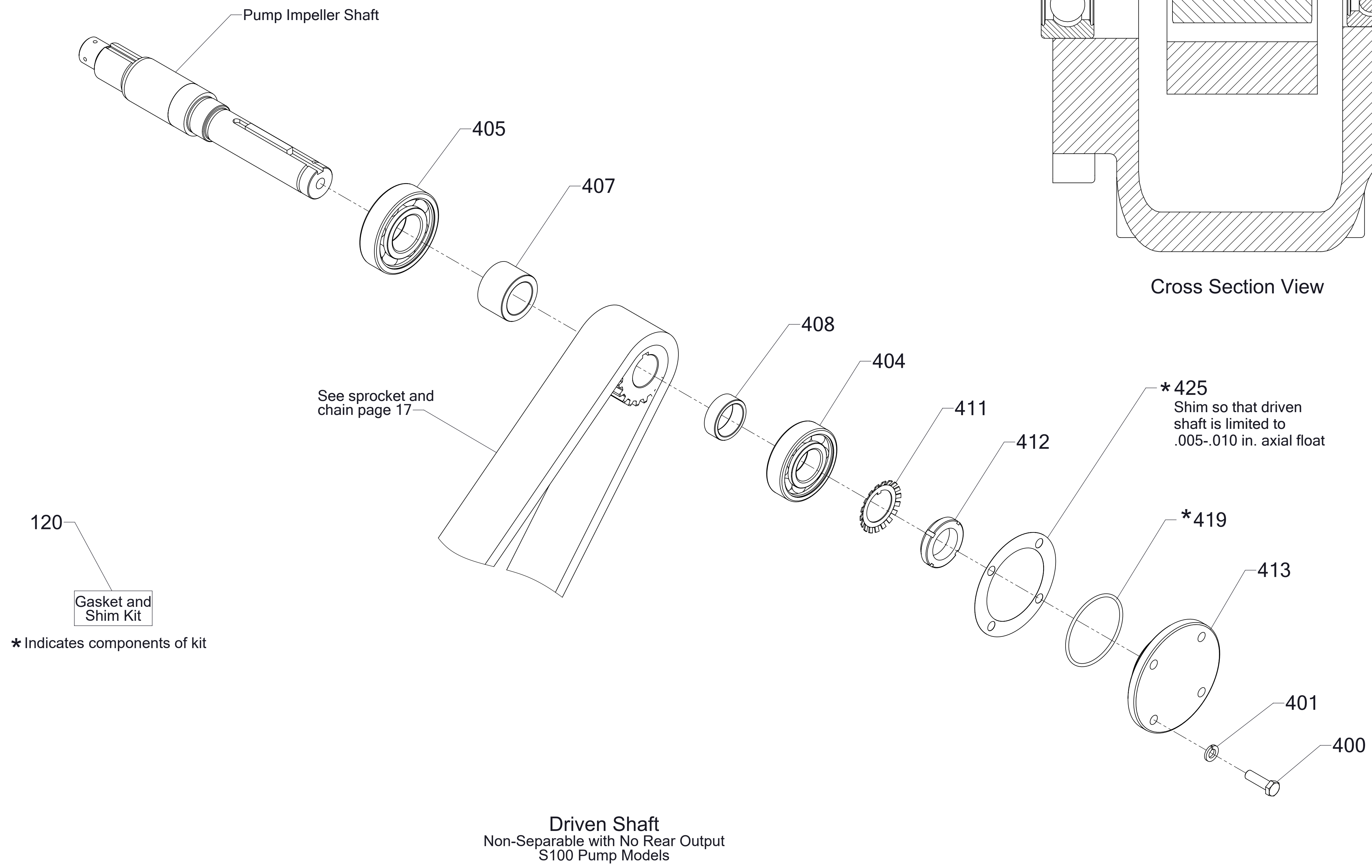
**Driven Shaft**  
Non-Separable with Rear Compressor Drive  
CG, CL, CX Pump Models

Ref No.	Description
120	Gasket & Shim Repair Kit
400	Screw-Hex Hd, 3/8-16 x 1-1/4 in
401	Washer-Lock, 3/8 in
404	Bearing, Ball, Single Row, 35 x 80 x 21 mm
406	Bearing, Ball, Double Row, 35 x 80 x 34.9 mm
407	SPACER-SHAFT, DRIVEN (PA)
408	Spacer-Shaft, Driven
411	Washer-Lock, Bearing, W07
412	Nut-Lock, Bearing, N07
415	Housing-Seal, Oil
417	Adapter-Hydraulic Flange
418	Gasket
419	O-Ring, 2-7/8 x 3-1/8 in
422	Seal-Oil, 1-5/8 x 2-1/2 in
423	Seal-Oil, 1-1/4 x 2 in
425	Shim-Drive Shaft Housing

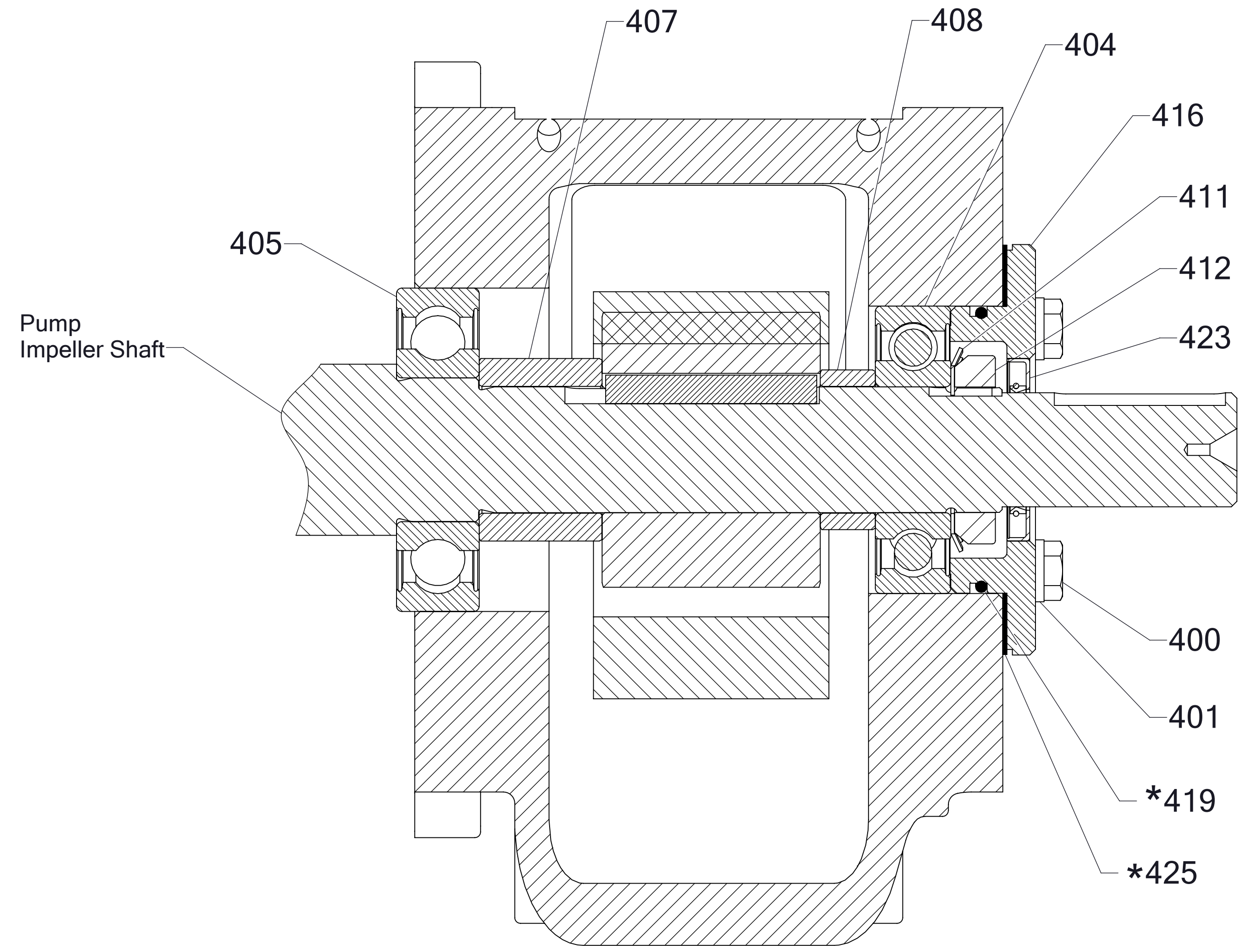




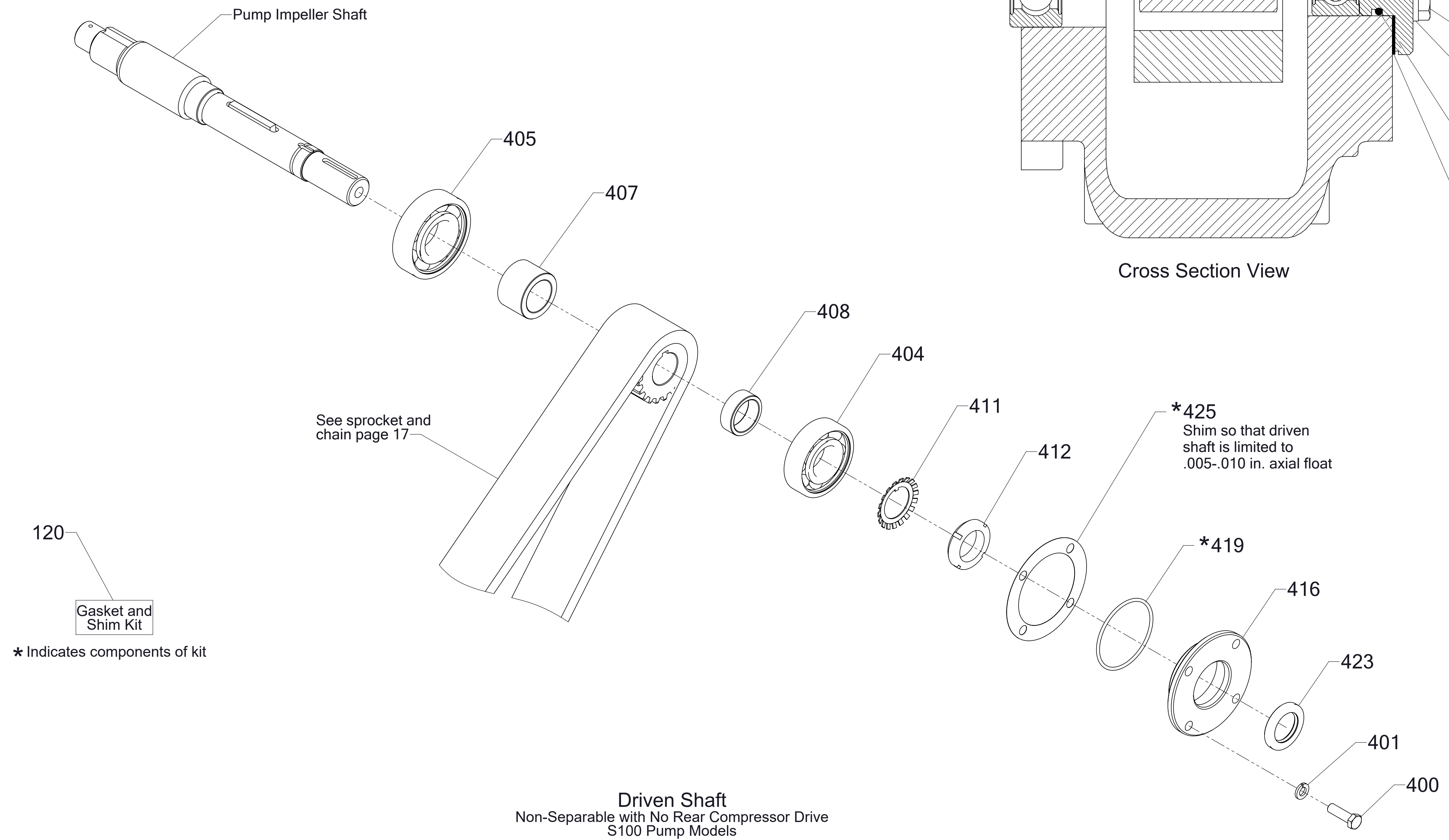
Ref No.	Description
120	Gasket & Shim Repair Kit
400	Screw-Hex Hd, 3/8-16 x 1-1/4 in
401	Washer-Lock, 3/8 in
404	Bearing, Ball, Single Row, 35 x 80 x 21 mm
405	Bearing, Ball, Single Row, 40 x 90 x 23 mm
407	SPACER-SHAFT, DRIVEN (S100PA)
408	Spacer-Shaft, Driven
411	Washer-Lock, Bearing, W07
412	Nut-Lock, Bearing, N07
413	HOUSING-OIL SEAL, 4-3/4 OD (PA)
419	O-Ring, 2-7/8 x 3-1/8 in
425	Shim-Driven Shaft Housing



Ref No.	Description
120	Gasket & Shim Repair Kit
400	Screw-Hex Hd, 3/8-16 x 1-1/4 in
401	Washer-Lock, 3/8 in
404	Bearing, Ball, Single Row, 35 x 80 x 21 mm
405	Bearing, Ball, Single Row, 40 x 90 x 23 mm
407	SPACER-SHAFT, DRIVEN (S100PA)
408	Spacer-Shaft, Driven
411	Washer-Lock, Bearing, W07
412	Nut-Lock, Bearing, N07
416	HOUSING-OIL SEAL, 4-1/2 OD (PA)
419	O-Ring, 2-7/8 x 3-1/8 in
423	Seal-Oil, 1-1/4 x 2 in
425	Shim-Driven Shaft Housing



Cross Section View

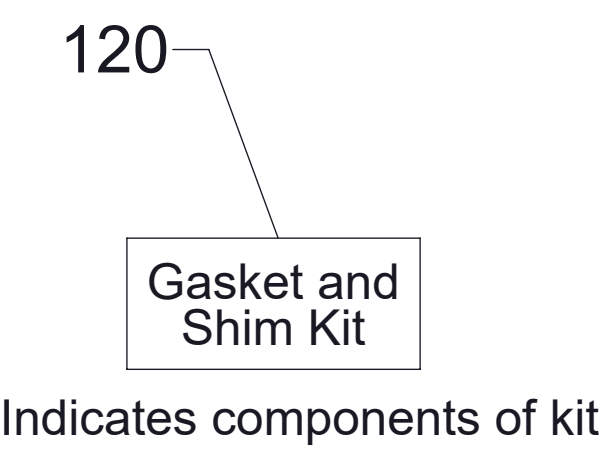
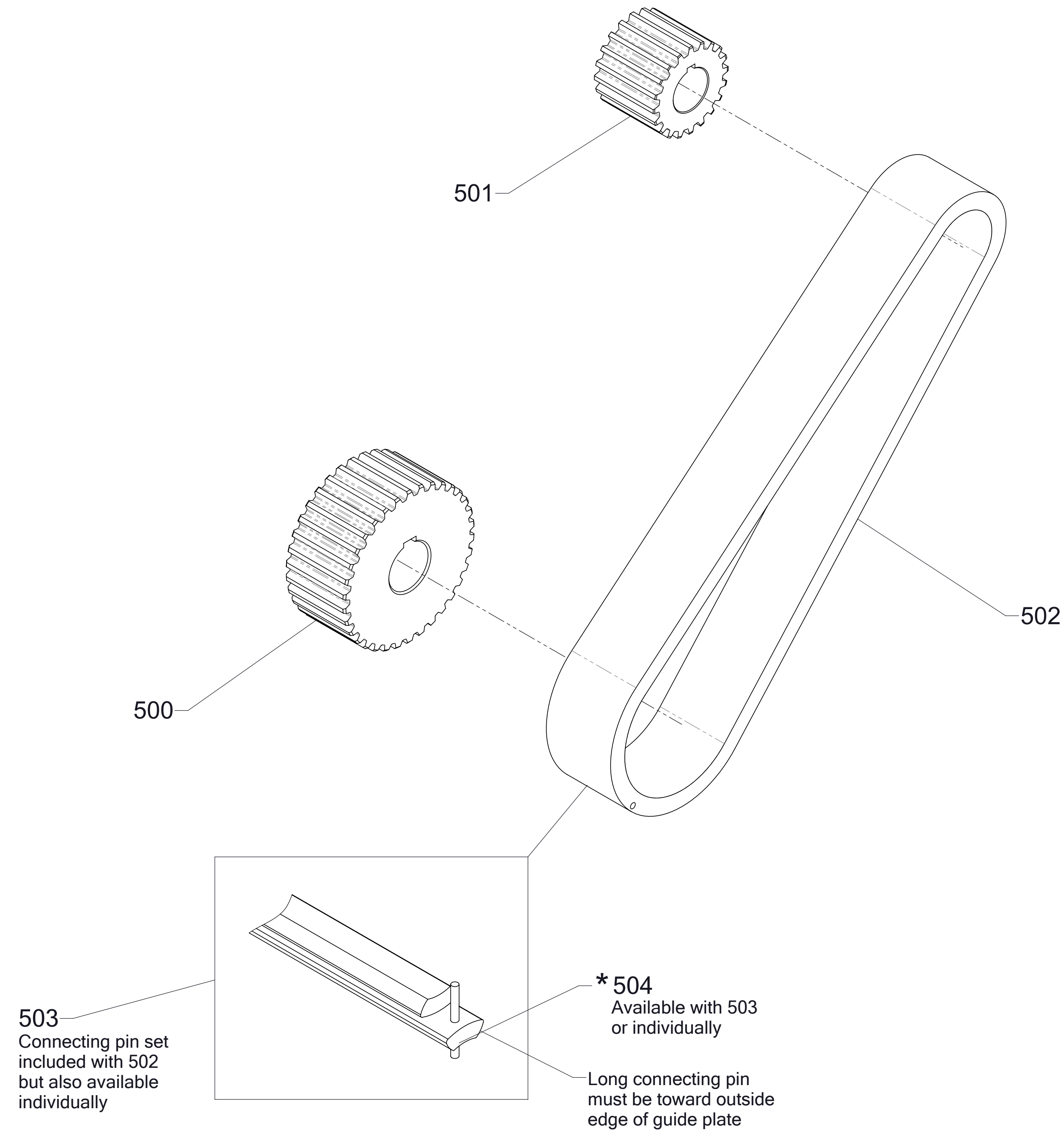


120  
Gasket and Shim Kit  
\* Indicates components of kit

**Driven Shaft**  
Non-Separable with No Rear Compressor Drive  
S100 Pump Models

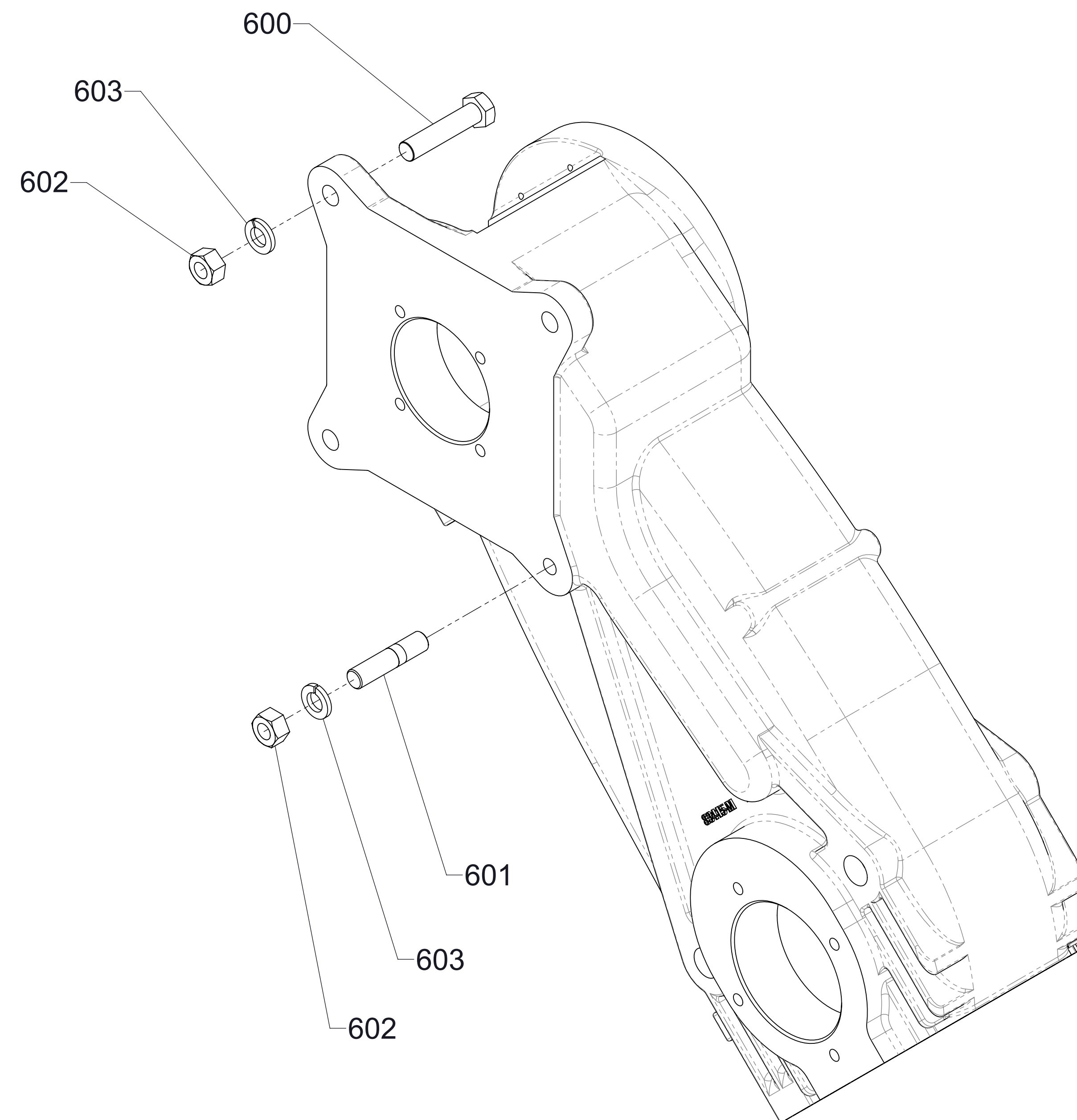


Ref No.	Description
120	Gasket & Shim Repair Kit
500	Sprocket-Drive
501	Sprocket-Driven
502	Chain-Drive-HV, 1/2 Pitch, 2-1/2in Wide (PA)
503	Pin Set-Connecting
504	Pin-Spirol, Heavy, 1/16 x 5/16in



Sprockets and Chain

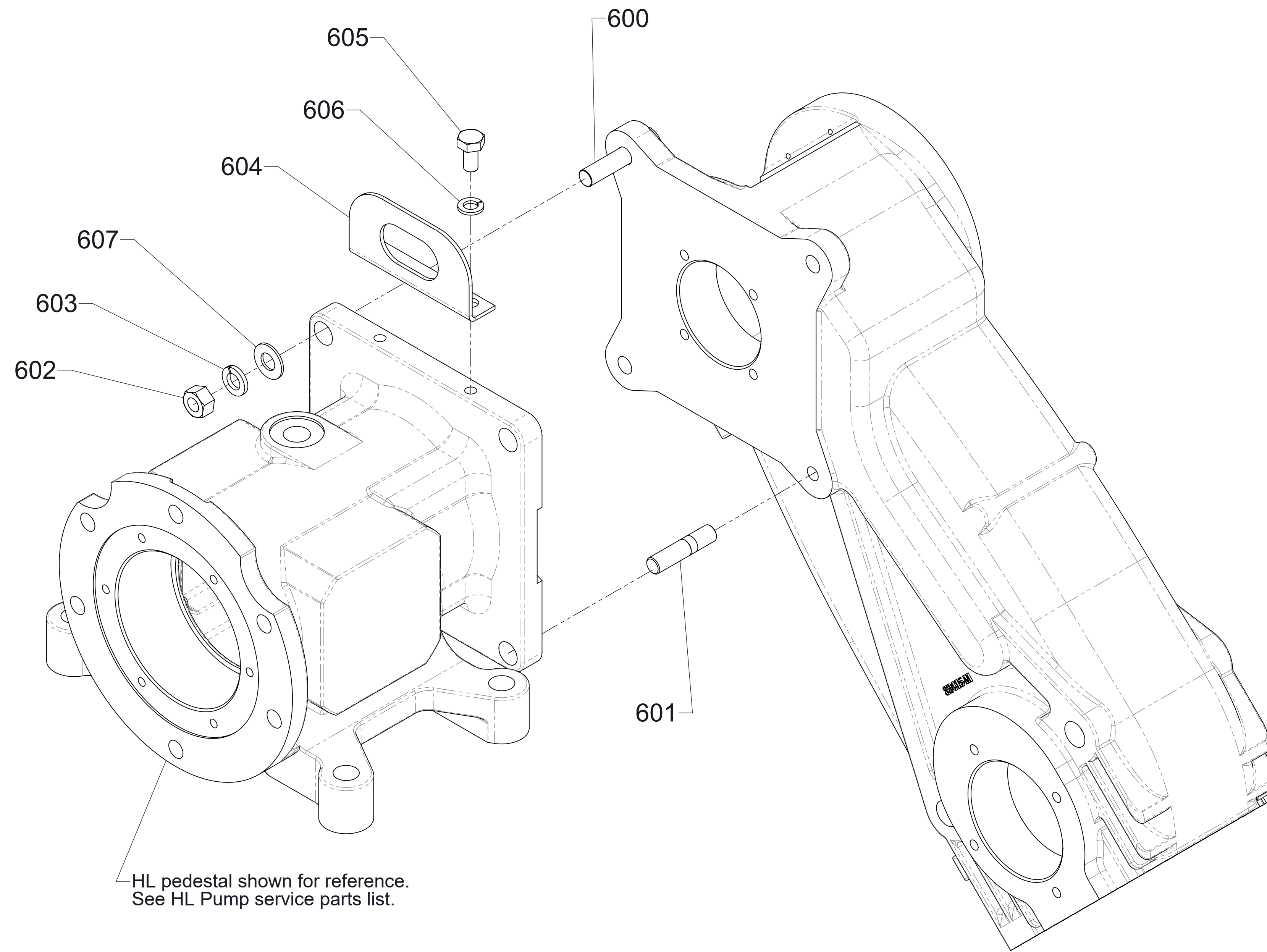
Ref No.	Description
600	Screw-Hex Hd, 1/2-13 x 2-1/4 in
601	Stud-Coarse, 1/2-13 x 2-1/4 in
602	Nut-Hex, 1/2-13
603	Washer-Lock, 1/2 in



**Pump Mounting Hardware**  
 CM, CS, CG, CL, CX Pump Models

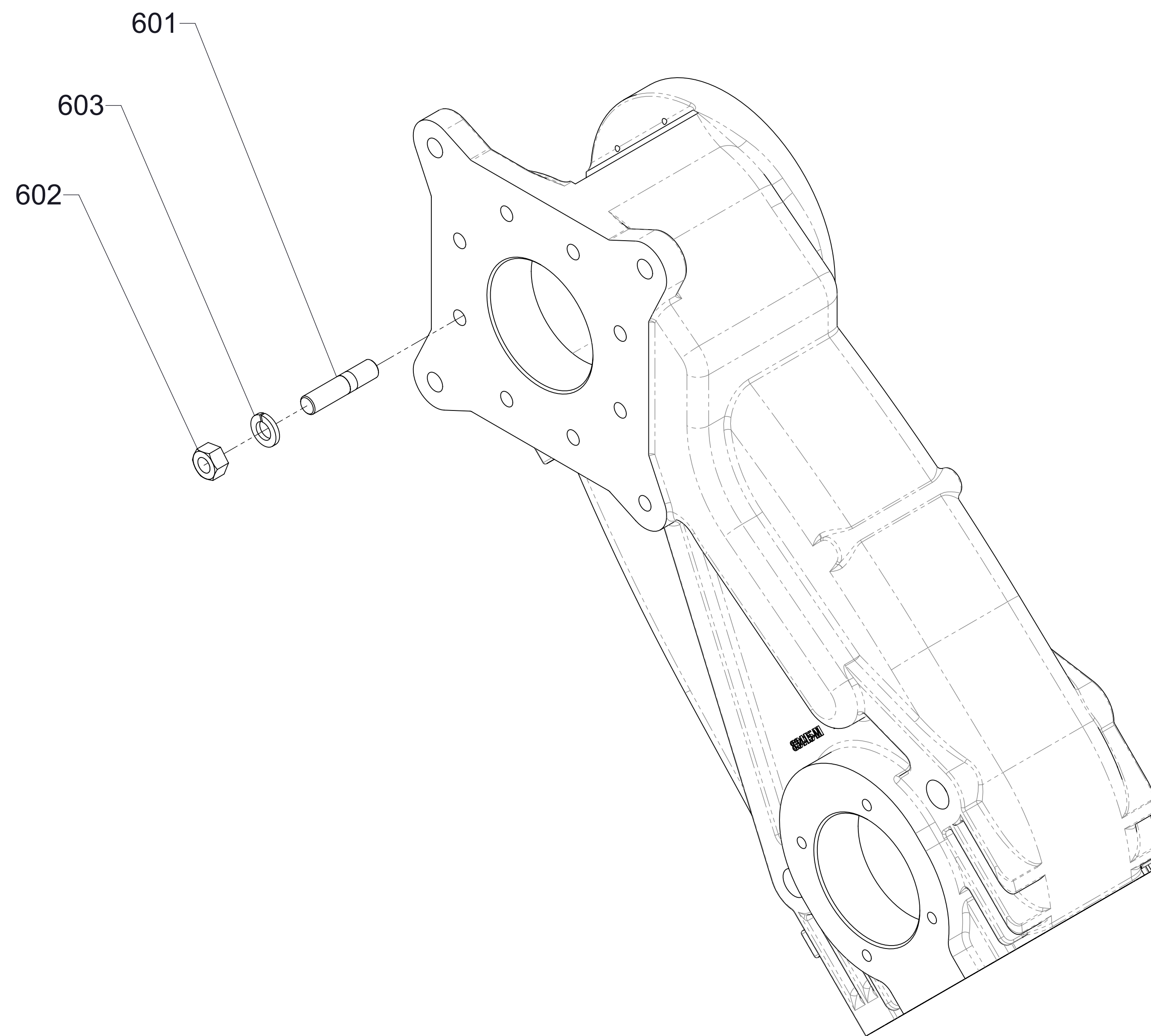


Ref No.	Description
600	Screw-Hex Hd, 1/2-13 x 2-1/4 in
601	Stud-Coarse, 1/2-13 x 2-1/4 in
602	Nut-Hex, 1/2-13
603	Washer-Lock, 1/2 in
604	Bracket-Lifting
605	Screw-Hex Hd, M10-1.5 x 20 mm
606	Washer-Lock, 10 mm
607	Washer-Plain, 1/2 in



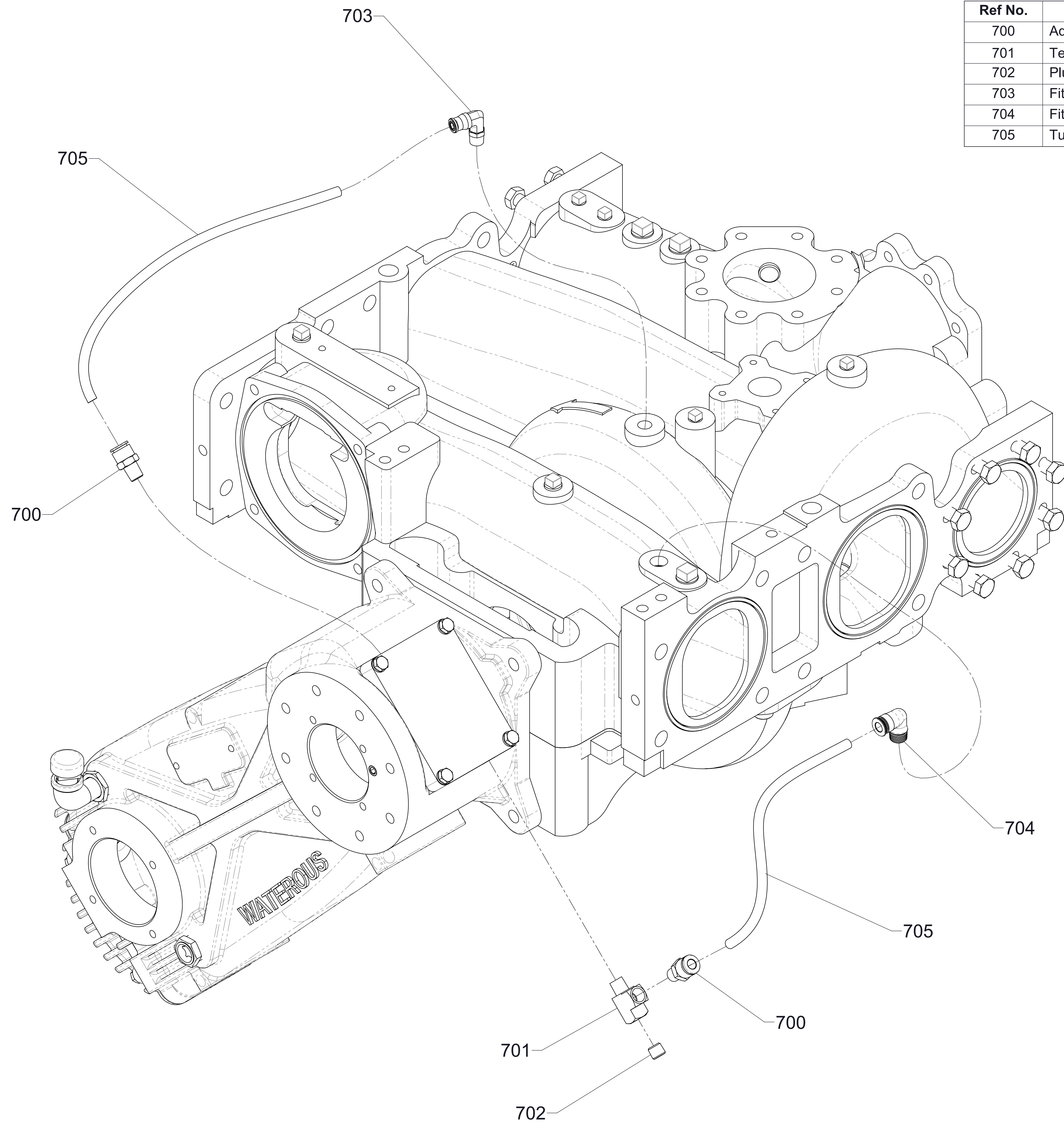
Pump Mounting Hardware  
HLU Pump Models

Ref No.	Description
601	Stud-Coarse, 1/2-13 x 2-1/4 in
602	Nut-Hex, 1/2-13
603	Washer-Lock, 1/2 in



Pump Mounting Hardware  
S100 Pump Models



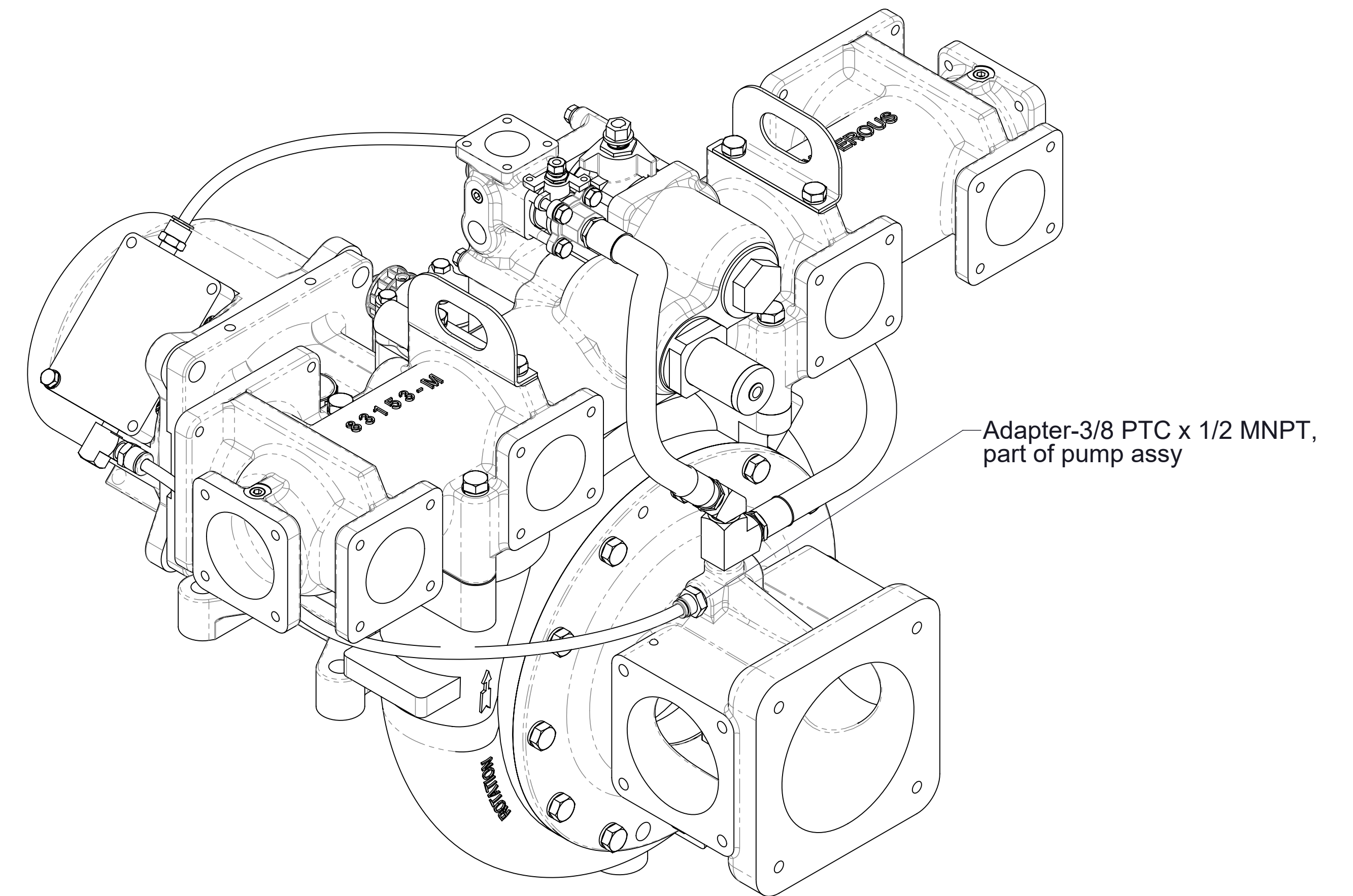
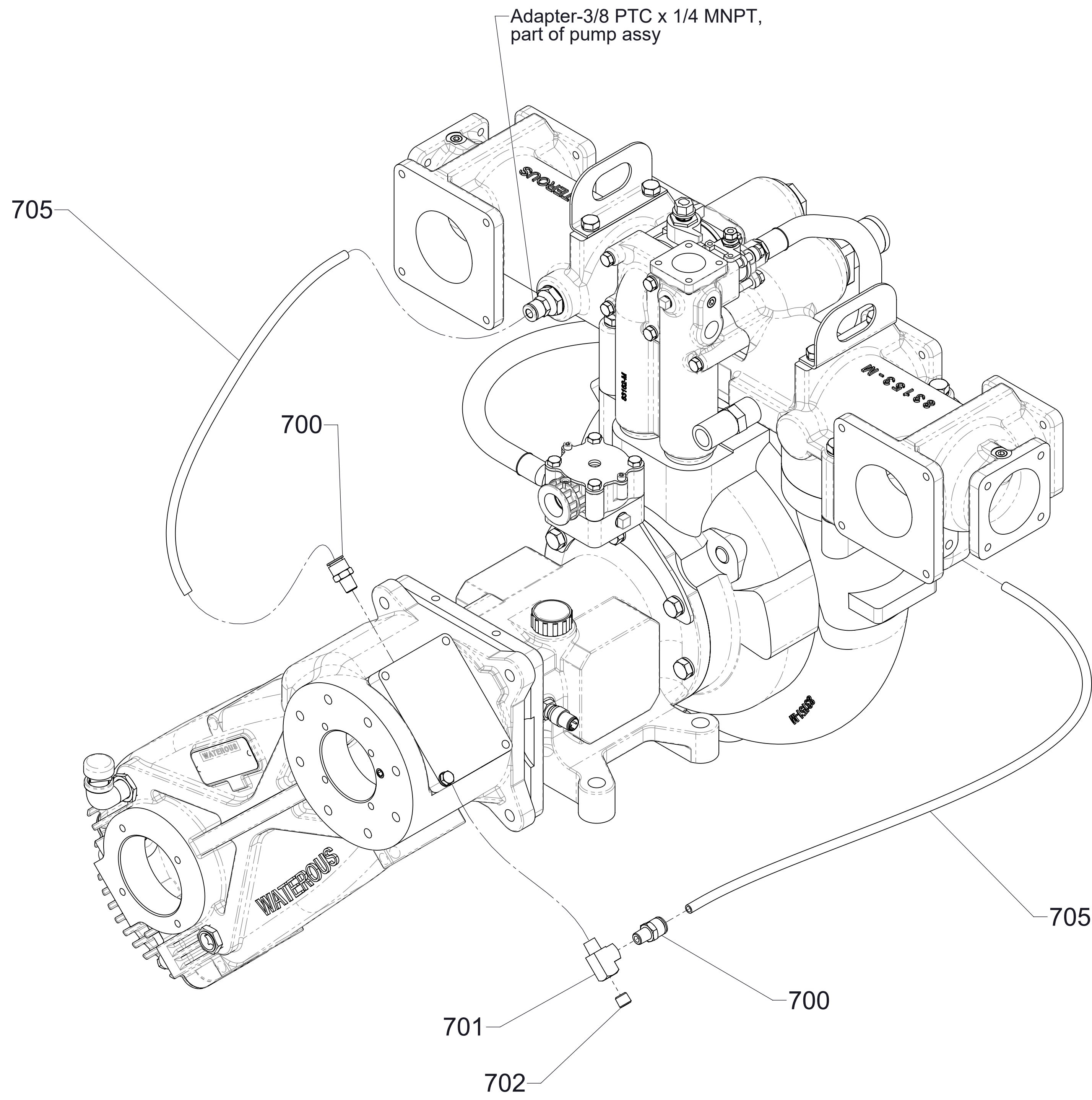


Ref No.	Description
700	Adapter-3/8 PTC x 1/4 MNPT
701	Tee-Run, 1/4 FNPT x 1/4 MNPT x 1/4 FNPT
702	Plug-Pipe, Headless, 1/4 NPT
703	Fitting-Elbow, 3/8 PTC x 1/4 MNPT, 90°
704	Fitting-Elbow, 3/8 PTC x 3/8 MNPT, 90°
705	Tubing, Green

Oil Cooler Lines  
CM, CS Pump Models



Ref No.	Description
700	Adapter-3/8 PTC x 1/4 MNPT
701	Tee-Run, 1/4 FNPT x 1/4 MNPT x 1/4 FNPT
702	Plug-Pipe, Headless, 1/4 NPT
705	Tubing, 3/8, Green



Oil Cooler Lines  
HLU Pump Models