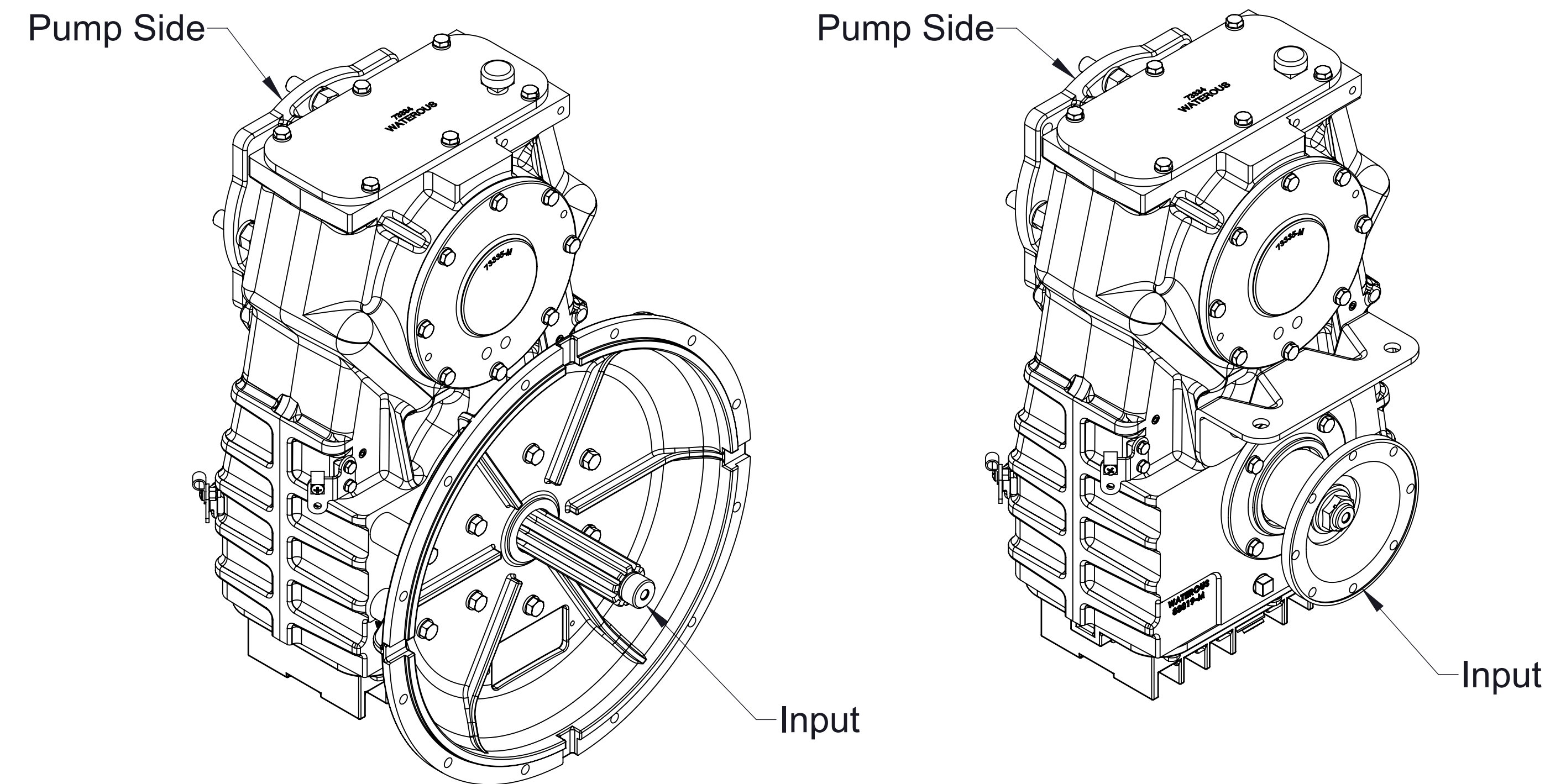


QC Series Transmission Service Parts List

As used with CR, CRU-2 and S100 Series Fire Pump

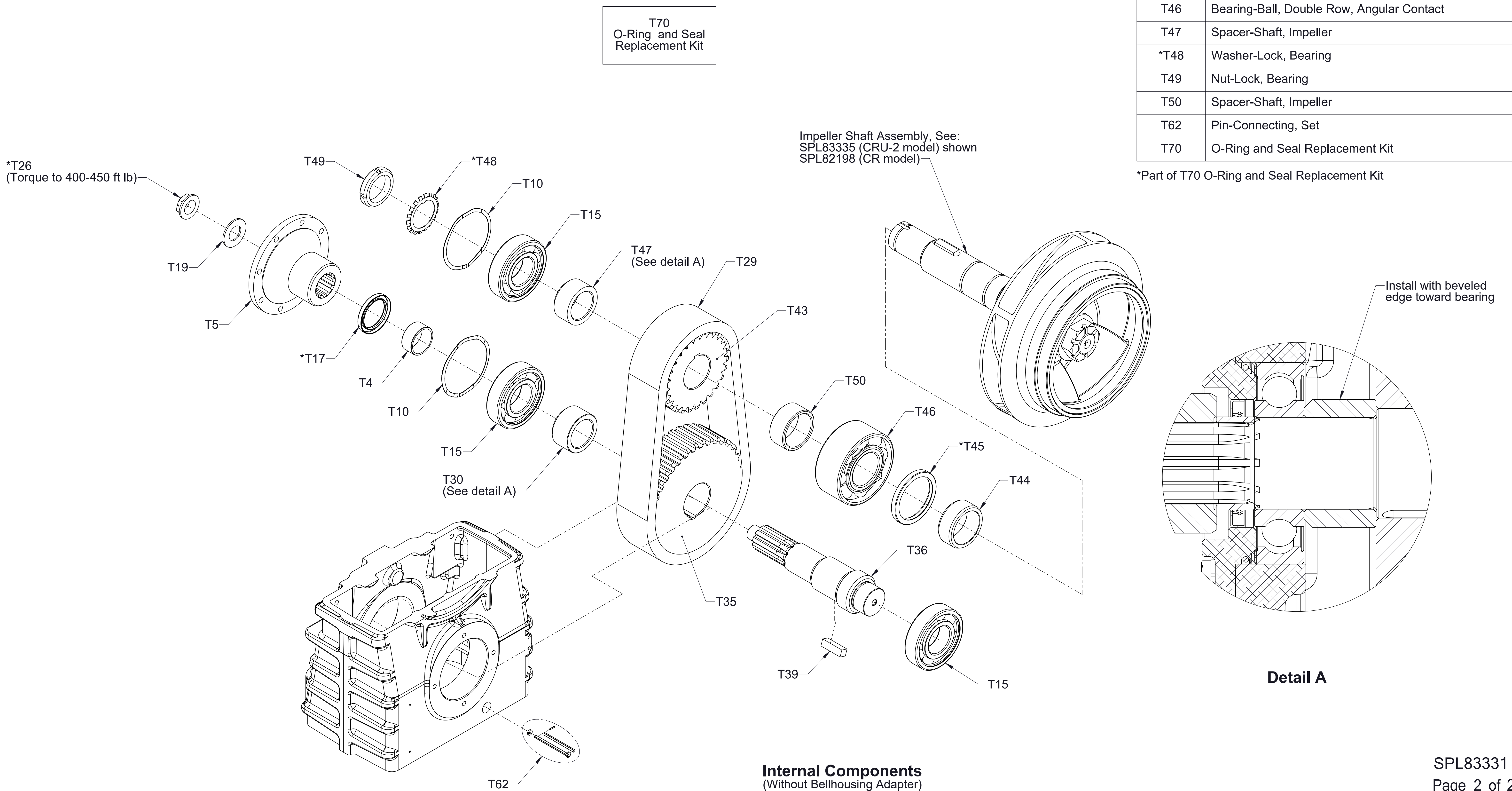


With Bellhousing Adapter

Without Bellhousing Adapter

Pump Model (Located on Serial Plate)	Case Mounting (Viewed from Input Side)	Bellhousing Adapter	See Page				
			Internal Components	External Components		Cross Section View	Cooling Lines
				Input Shaft Side and Bottom of Case	Output Shaft Side and Top of Case		
CRQC	Rotated 45° Clockwise	No	2	4	5	14	16
	Vertical		2	6	7		16
	Vertical	Yes	3	8	9		16
	Inverted		3	10	11		17
CRUQC-2	Vertical	No	2	6	7		18
	Rotated 45° Clockwise		2	4	5		19
	Vertical	Yes	3	8	9		18
	Inverted		3	10	11		20
S100QC	Vertical	Yes	3	8	12	15	21
	Inverted		3	10	13		22

Ref No.	Description
T4	Sleeve-Seal, Oil
T5	Flange-Companion
T10	Spring-Wave
T15	Bearing, Ball, Single Row
*T17	Seal-Oil, 2 x 2-3/4 in
T19	Washer-Plain, 1 in
*T26	Nut-Self Locking, 1-20 UNEF-2B
T29	Chain and Pin Set-3/4 in Pitch
T30	Spacer-Shaft, Drive
T35	Sprocket-Drive
T36	Shaft-Drive
T39	Key-Square, 1/2 x 1-3/4 in
T43	Sprocket-Driven
T44	Sleeve-Seal, Oil
*T45	Seal-Oil, 3 x 3-3/4 in
T46	Bearing-Ball, Double Row, Angular Contact
T47	Spacer-Shaft, Impeller
*T48	Washer-Lock, Bearing
T49	Nut-Lock, Bearing
T50	Spacer-Shaft, Impeller
T62	Pin-Connecting, Set
T70	O-Ring and Seal Replacement Kit

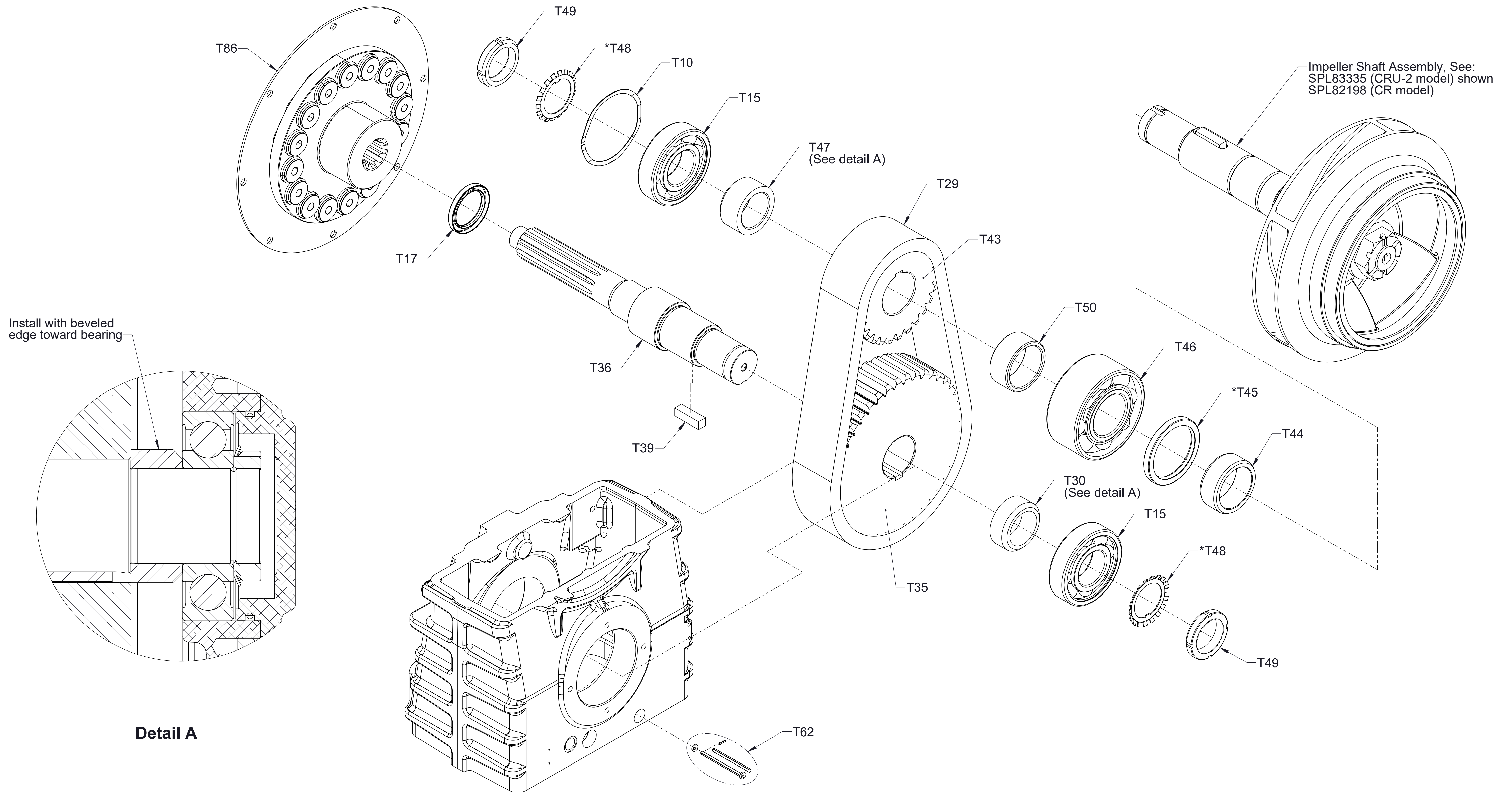


*Part of T70 O-Ring and Seal Replacement Kit

Ref No.	Description	Ref No.	Description
T10	Spring-Wave	*T45	Seal-Oil, 3 x 3-3/4 in
T15	Bearing, Ball, Single Row	T46	Bearing-Ball, Double Row, Angular Contact
T17	Seal-Oil, 2 x 2-3/4 in	T47	Spacer-Shaft, Impeller
T29	Chain and Pin Set-3/4 in Pitch	*T48	Washer-Lock, Bearing
T30	Spacer-Shaft, Drive	T49	Nut-Lock, Bearing
T35	Sprocket-Drive	T50	Spacer-Shaft, Impeller
T36	Shaft-Drive	T62	Pin-Connecting, Set
T39	Key-Square, 1/2 x 1-3/4 in	T70	O-Ring and Seal Replacement Kit
T43	Sprocket-Driven	T86	Plate-Drive (Optional)
T44	Sleeve-Seal, Oil		

*Part of T70 O-Ring and Seal Replacement Kit

T70
O-Ring and Seal
Replacement Kit

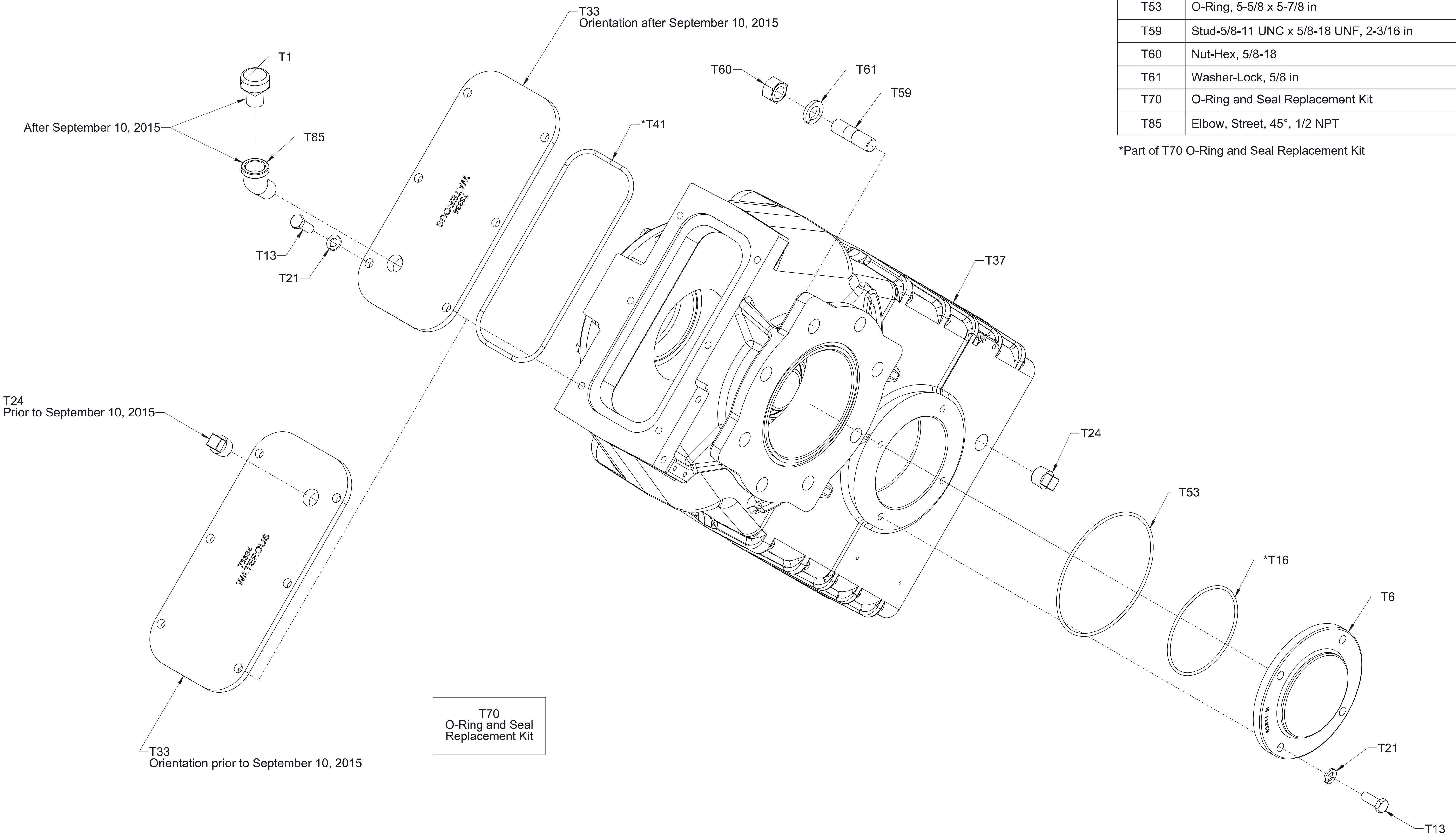


Detail A

Internal Components
(With Bellhousing Adapter)

Ref No.	Description
T1	Breather, 1/2 NPT
T6	Cover-Bearing
T13	Screw-Hex Hd, 3/8-16 x 1 in
*T16	O-Ring, 4 x 4-1/4 in
T21	Washer-Lock, 3/8 in
T24	Plug-Pipe, Square Hd, 1/2 NPT
T33	Cover-Case
T37	Case-Transmission
*T41	O-Ring, 7-3/4 X 8-1/8 in
T53	O-Ring, 5-5/8 x 5-7/8 in
T59	Stud-5/8-11 UNC x 5/8-18 UNF, 2-3/16 in
T60	Nut-Hex, 5/8-18
T61	Washer-Lock, 5/8 in
T70	O-Ring and Seal Replacement Kit
T85	Elbow, Street, 45°, 1/2 NPT

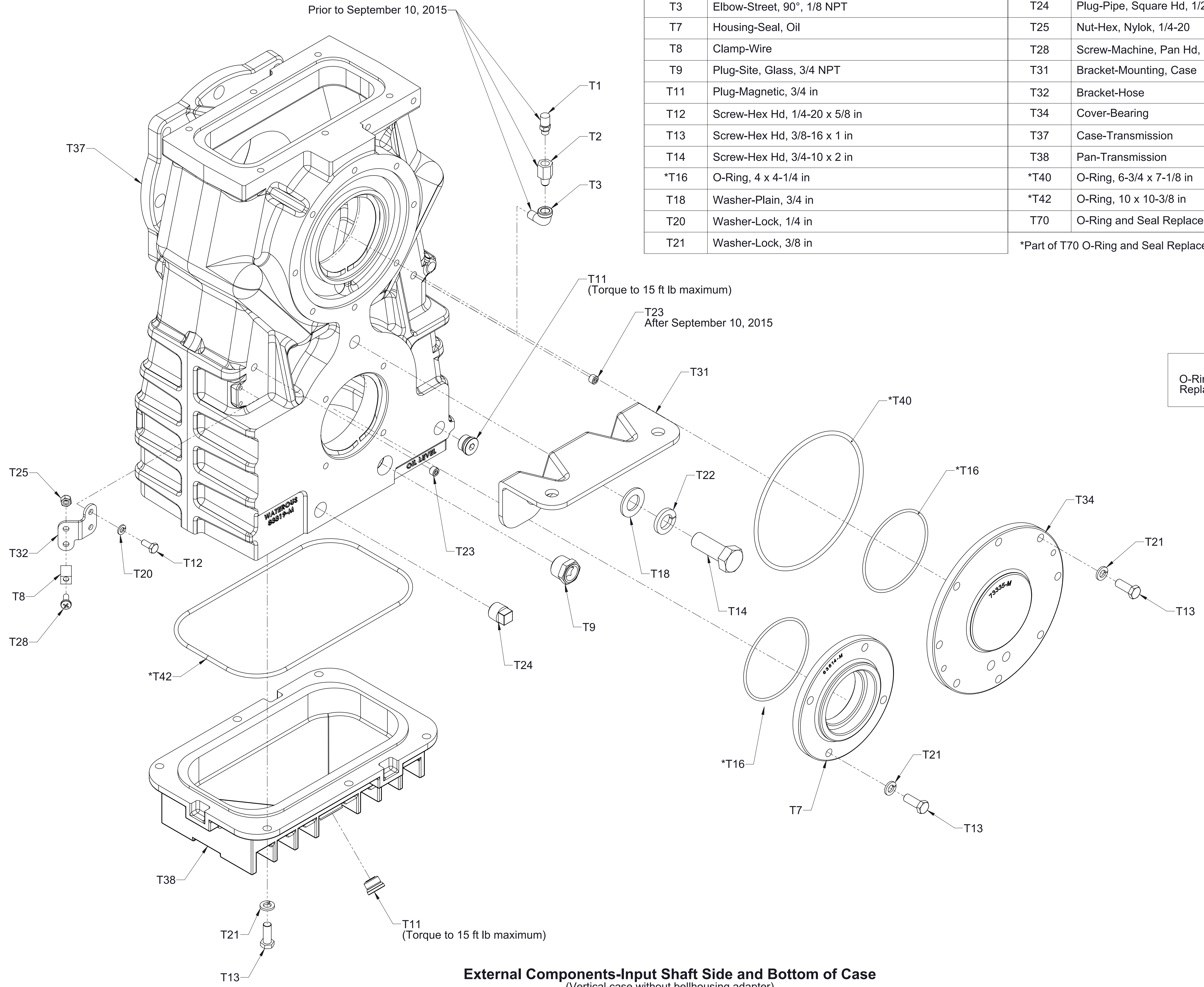
*Part of T70 O-Ring and Seal Replacement Kit



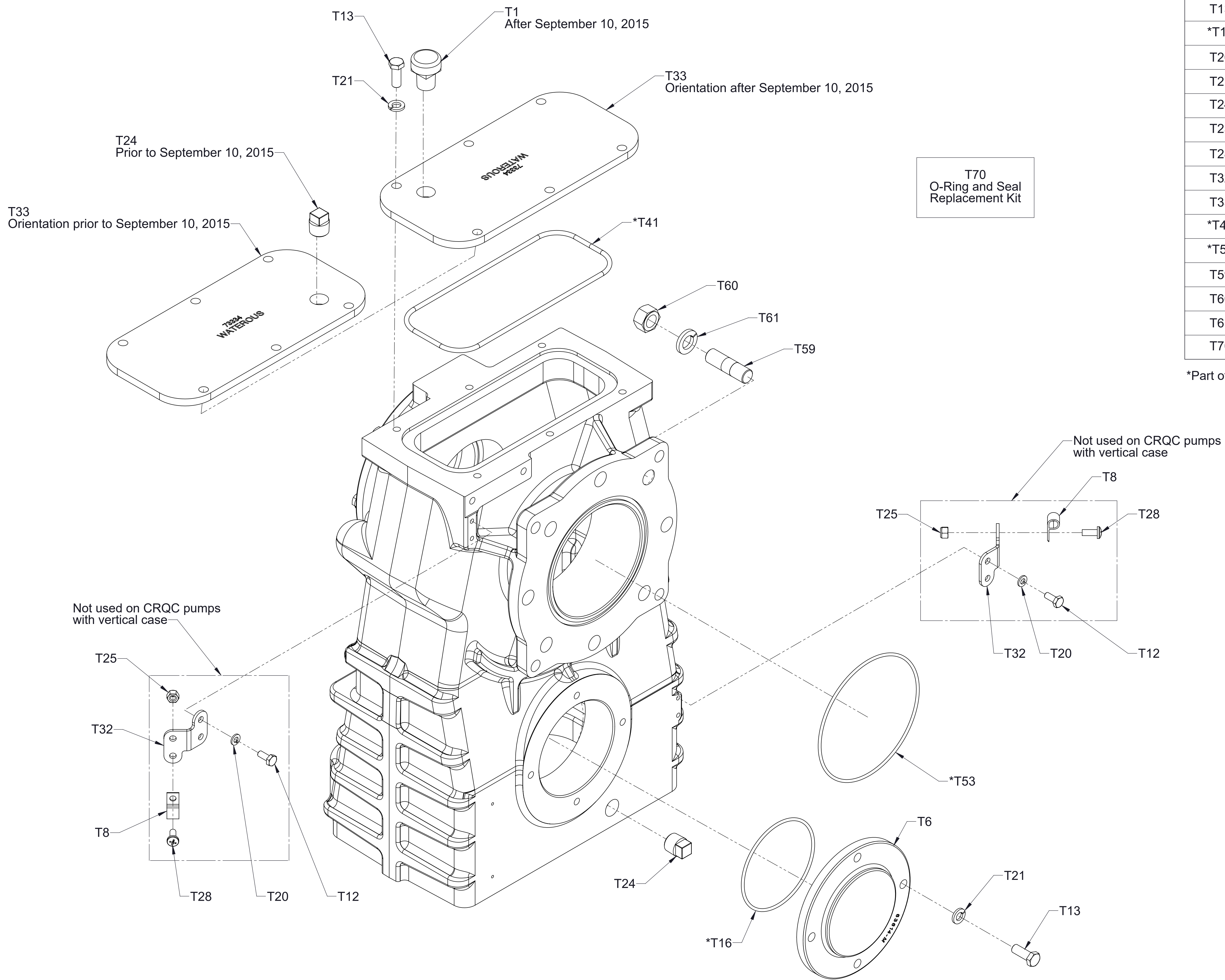
External Components-Output Shaft side and Top of Case
(Case rotated 45° clockwise)

Ref No.	Description	Ref No.	Description
T1	Breather-Oil	T22	Washer-Lock, 3/4 in
T2	Snubber, 1/8 MNPT x 1/8 FNPT	T23	Plug-Pipe, Headless, 1/8 NPT
T3	Elbow-Street, 90°, 1/8 NPT	T24	Plug-Pipe, Square Hd, 1/2 NPT
T7	Housing-Seal, Oil	T25	Nut-Hex, Nylok, 1/4-20
T8	Clamp-Wire	T28	Screw-Machine, Pan Hd, 1/4-20 x 5/8 in
T9	Plug-Site, Glass, 3/4 NPT	T31	Bracket-Mounting, Case
T11	Plug-Magnetic, 3/4 in	T32	Bracket-Hose
T12	Screw-Hex Hd, 1/4-20 x 5/8 in	T34	Cover-Bearing
T13	Screw-Hex Hd, 3/8-16 x 1 in	T37	Case-Transmission
T14	Screw-Hex Hd, 3/4-10 x 2 in	T38	Pan-Transmission
*T16	O-Ring, 4 x 4-1/4 in	*T40	O-Ring, 6-3/4 x 7-1/8 in
T18	Washer-Plain, 3/4 in	*T42	O-Ring, 10 x 10-3/8 in
T20	Washer-Lock, 1/4 in	T70	O-Ring and Seal Replacement Kit
T21	Washer-Lock, 3/8 in		

*Part of T70 O-Ring and Seal Replacement Kit



External Components-Input Shaft Side and Bottom of Case
(Vertical case without bellhousing adapter)

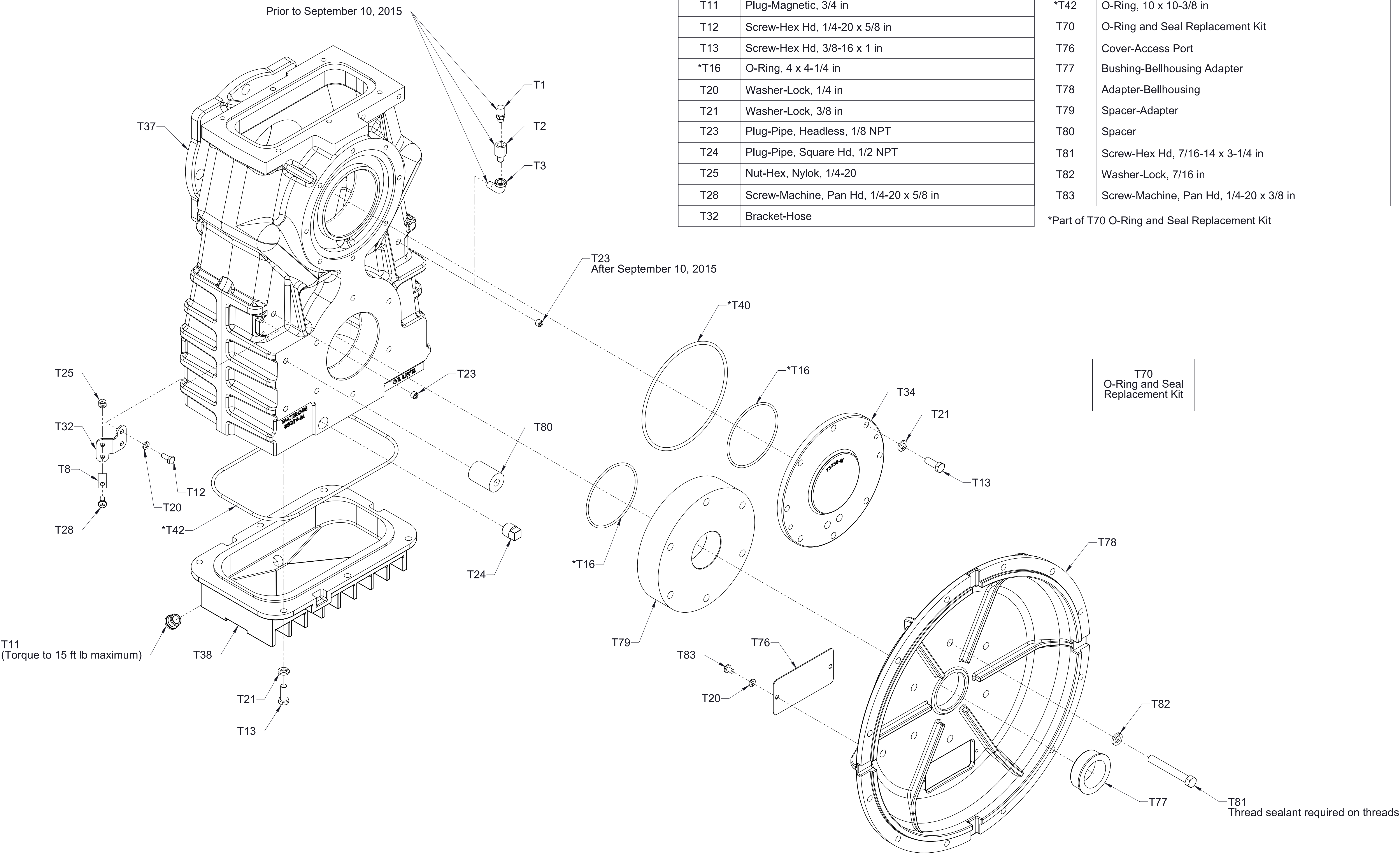


Ref No.	Description
T1	Breather, 1/2 NPT
T6	Cover-Bearing
T8	Clamp-Wire
T12	Screw-Hex Hd, 1/4-20 x 5/8 in
T13	Screw-Hex Hd, 3/8-16 x 1 in
*T16	O-Ring, 4 x 4-1/4 in
T20	Washer-Lock, 1/4 in
T21	Washer-Lock, 3/8 in
T24	Plug-Pipe, Square Hd, 1/2 NPT
T25	Nut-Hex, Nylok, 1/4-20
T28	Screw-Machine, Pan Hd, 1/4-20 x 5/8 in
T32	Bracket-Hose
T33	Cover-Case
*T41	O-Ring, 7-3/4 X 8-1/8 in
*T53	O-Ring, 5-5/8 x 5-7/8 in
T59	Stud-5/8-11 UNC x 5/8-18 UNF, 2-3/16 in
T60	Nut-Hex, 5/8-18
T61	Washer-Lock, 5/8 in
T70	O-Ring and Seal Replacement Kit

*Part of T70 O-Ring and Seal Replacement Kit

External Components-Output Shaft Side and Top of Case
(Vertical case without bellhousing adapter)

Ref No.	Description	Ref No.	Description
T1	Breather-Oil	T34	Cover-Bearing
T2	Snubber, 1/8 MNPT x 1/8 FNPT	T37	Case-Transmission
T3	Elbow-Street, 90°, 1/8 NPT	T38	Pan-Transmission
T8	Clamp-Wire	*T40	O-Ring, 6-3/4 x 7-1/8 in
T11	Plug-Magnetic, 3/4 in	*T42	O-Ring, 10 x 10-3/8 in
T12	Screw-Hex Hd, 1/4-20 x 5/8 in	T70	O-Ring and Seal Replacement Kit
T13	Screw-Hex Hd, 3/8-16 x 1 in	T76	Cover-Access Port
*T16	O-Ring, 4 x 4-1/4 in	T77	Bushing-Bellhousing Adapter
T20	Washer-Lock, 1/4 in	T78	Adapter-Bellhousing
T21	Washer-Lock, 3/8 in	T79	Spacer-Adapter
T23	Plug-Pipe, Headless, 1/8 NPT	T80	Spacer
T24	Plug-Pipe, Square Hd, 1/2 NPT	T81	Screw-Hex Hd, 7/16-14 x 3-1/4 in
T25	Nut-Hex, Nylok, 1/4-20	T82	Washer-Lock, 7/16 in
T28	Screw-Machine, Pan Hd, 1/4-20 x 5/8 in	T83	Screw-Machine, Pan Hd, 1/4-20 x 3/8 in
T32	Bracket-Hose		*Part of T70 O-Ring and Seal Replacement Kit

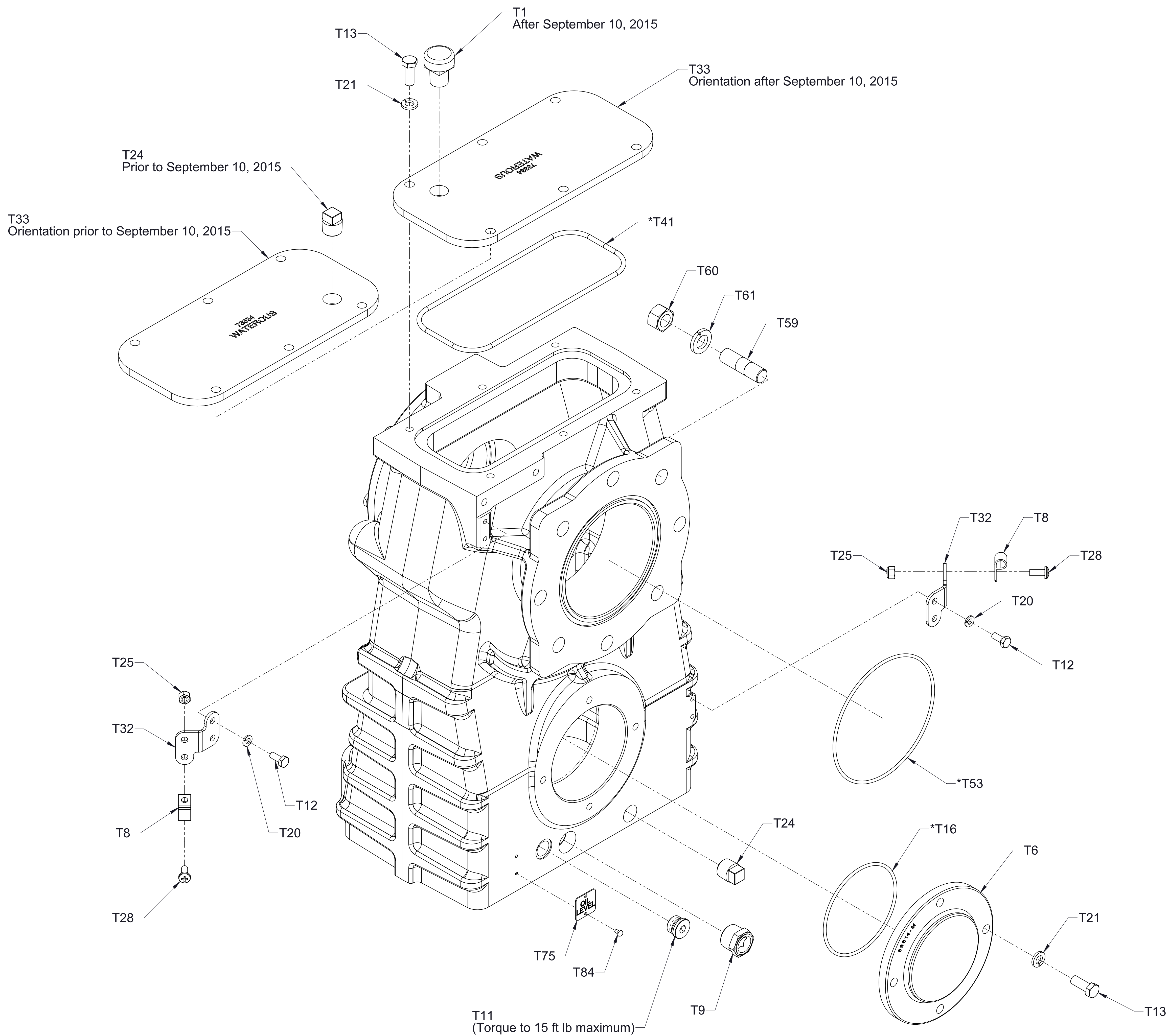


External Components-Input Shaft Side and Bottom of Case
(Vertical case with bellhousing adapter)

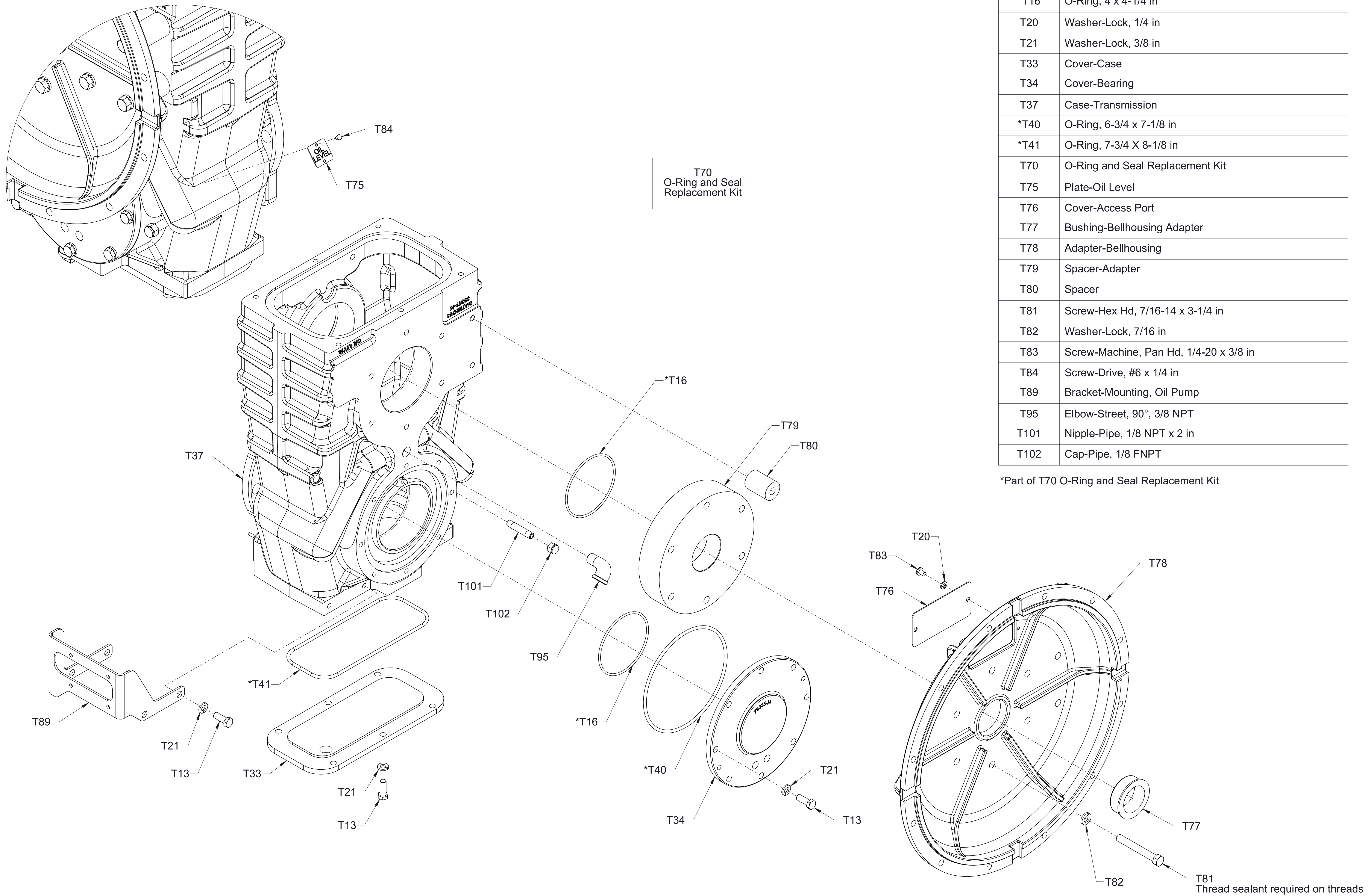
Ref No.	Description
T1	Breather, 1/2 NPT
T6	Cover-Bearing
T8	Clamp-Wire
T9	Plug-Site, Glass, 3/4 NPT
T11	Plug-Magnetic, 3/4 in
T12	Screw-Hex Hd, 1/4-20 x 5/8 in
T13	Screw-Hex Hd, 3/8-16 x 1 in
*T16	O-Ring, 4 x 4-1/4 in
T20	Washer-Lock, 1/4 in
T21	Washer-Lock, 3/8 in
T24	Plug-Pipe, Square Hd, 1/2 NPT
T25	Nut-Hex, Nylok, 1/4-20
T28	Screw-Machine, Pan Hd, 1/4-20 x 5/8 in
T32	Bracket-Hose
T33	Cover-Case
*T41	O-Ring, 7-3/4 X 8-1/8 in
*T53	O-Ring, 5-5/8 x 5-7/8 in
T59	Stud-5/8-11 UNC x 5/8-18 UNF, 2-3/16 in
T60	Nut-Hex, 5/8-18
T61	Washer-Lock, 5/8 in
T70	O-Ring and Seal Replacement Kit
T75	Plate-Oil Level
T84	Screw-Drive, #6 x 1/4 in

*Part of T70 O-Ring and Seal Replacement Kit

T70
O-Ring and Seal
Replacement Kit



External Components-Output Shaft Side and Top of Case
(Vertical case with bellhousing adapter)



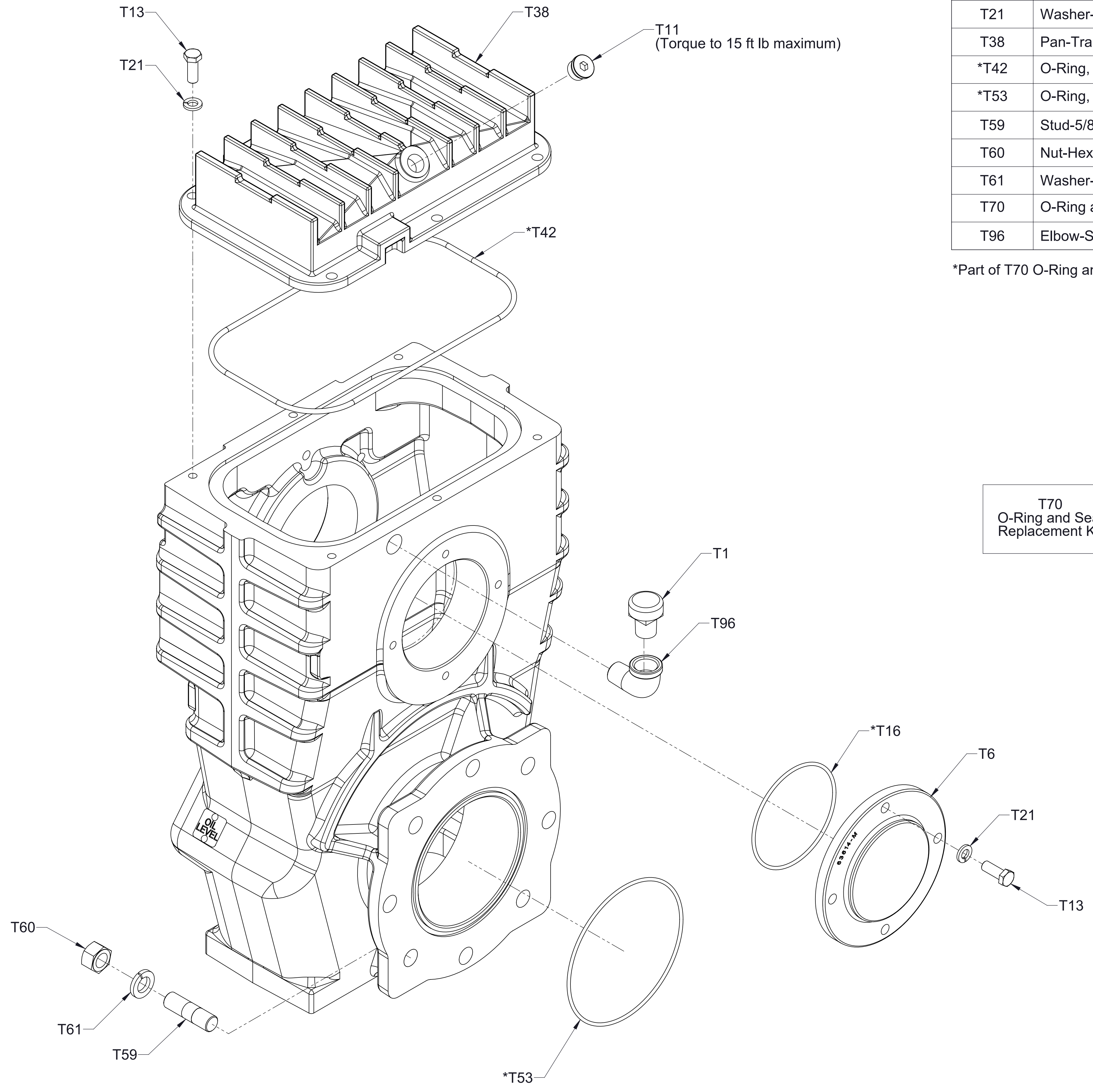
Ref No.	Description
T13	Screw-Hex Hd, 3/8-16 x 1 in
*T16	O-Ring, 4 x 4-1/4 in
T20	Washer-Lock, 1/4 in
T21	Washer-Lock, 3/8 in
T33	Cover-Case
T34	Cover-Bearing
T37	Case-Transmission
*T40	O-Ring, 6-3/4 x 7-1/8 in
*T41	O-Ring, 7-3/4 X 8-1/8 in
T70	O-Ring and Seal Replacement Kit
T75	Plate-Oil Level
T76	Cover-Access Port
T77	Bushing-Bellhousing Adapter
T78	Adapter-Bellhousing
T79	Spacer-Adapter
T80	Spacer
T81	Screw-Hex Hd, 7/16-14 x 3-1/4 in
T82	Washer-Lock, 7/16 in
T83	Screw-Machine, Pan Hd, 1/4-20 x 3/8 in
T84	Screw-Drive, #6 x 1/4 in
T89	Bracket-Mounting, Oil Pump
T95	Elbow-Street, 90°, 3/8 NPT
T101	Nipple-Pipe, 1/8 NPT x 2 in
T102	Cap-Pipe, 1/8 FNPT

*Part of T70 O-Ring and Seal Replacement Kit

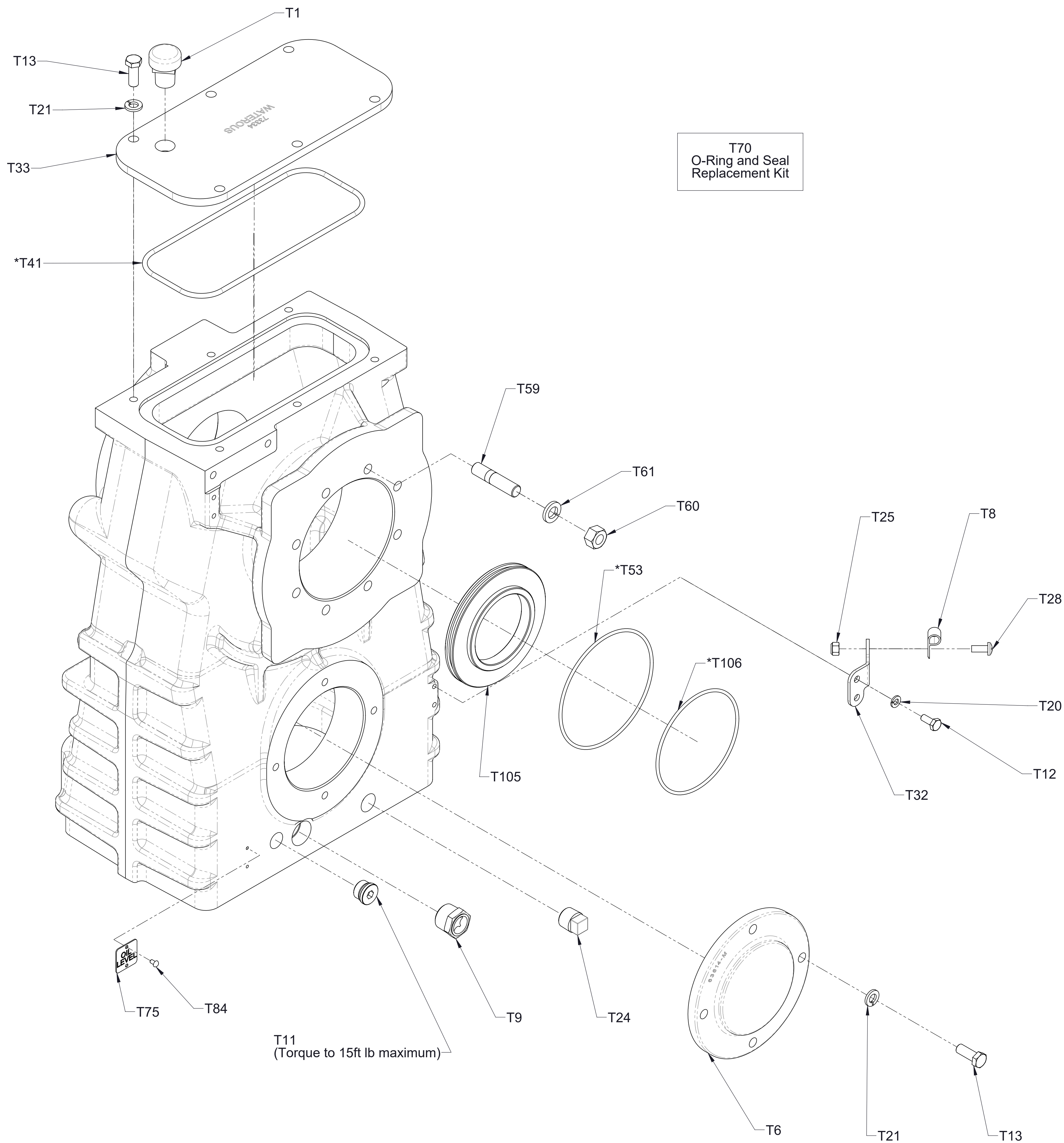
External Components-Input Shaft Side and Bottom of Case
(Inverted case with bellhousing adapter)

Ref No.	Description
T1	Breather, 1/2 NPT
T6	Cover-Bearing
T11	Plug-Magnetic, 3/4 in
T13	Screw-Hex Hd, 3/8-16 x 1 in
*T16	O-Ring, 4 x 4-1/4 in
T21	Washer-Lock, 3/8 in
T38	Pan-Transmission
*T42	O-Ring, 10 x 10-3/8 in
*T53	O-Ring, 5-5/8 x 5-7/8 in
T59	Stud-5/8-11 UNC x 5/8-18 UNF, 2-3/16 in
T60	Nut-Hex, 5/8-18
T61	Washer-Lock, 5/8 in
T70	O-Ring and Seal Replacement Kit
T96	Elbow-Street, 90°, 1/2 NPT

*Part of T70 O-Ring and Seal Replacement Kit



External Components-Output Shaft Side and Top of Case
(Inverted case with Bellhousing Adapter)



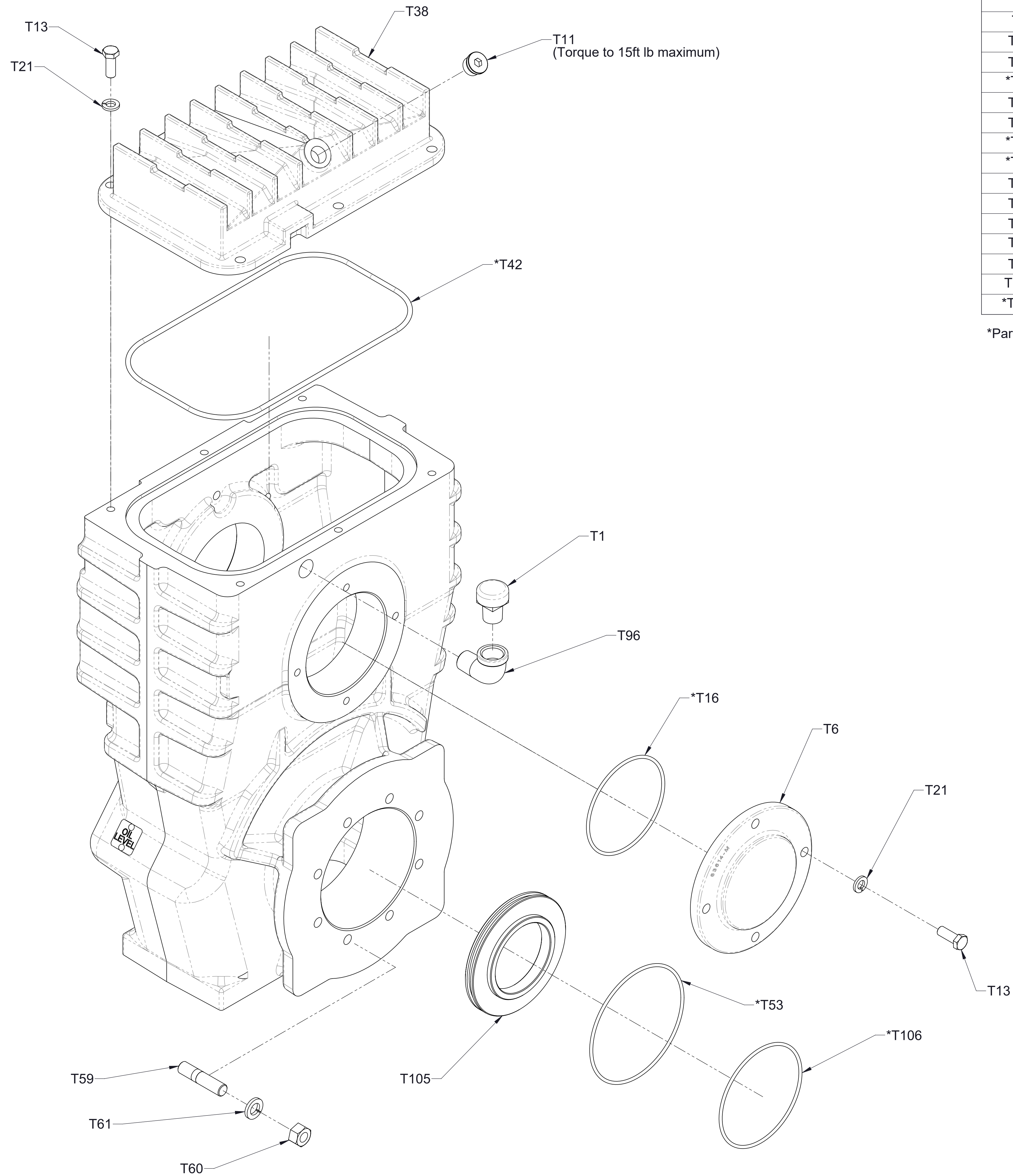
T70
O-Ring and Seal
Replacement Kit

T11
(Torque to 15ft lb maximum)

Ref No.	Description
T1	Breather, 1/2 NPT
T6	Cover-Bearing
T8	Clamp-Wire
T9	Plug-Site, Glass, 3/4 NPT
T11	Plug-Magnetic, 3/4 in
T12	Screw-Hex Hd, 1/4-20 x 5/8 in
T13	Screw-Hex Hd, 3/8-16 x 1 in
T20	Washer-Lock, 1/4 in
T21	Washer-Lock, 3/8 in
T24	Plug-Pipe, Square Hd, 1/2 NPT
T25	Nut-Hex, Nylok, 1/4-20
T28	Screw-Machine, Pan Hd, 1/4-20 x 5/8 in
T32	Bracket-Hose
T33	Cover-Case
*T41	O-Ring, 7-3/4 X 8-1/8 in
*T53	O-Ring, 4-7/8 x 5-1/8 in
T59	Stud-Coarse, 1/2-13 x 2-1/4 in
T60	Nut-Hex, 1/2-13
T61	Washer-Lock, 1/2 in
T70	O-Ring and Seal Replacement Kit
T75	Plate-Oil Level
T84	Screw-Drive, #6 x 1/4 in
T105	Plate-Adapter
*T106	O-Ring, 4-1/4 x 4-1/2 in

*Part of T70 O-Ring and Seal Replacement Kit

External Components-Output Shaft Side and Top of Case
(S100 Vertical with bellhousing adapter)



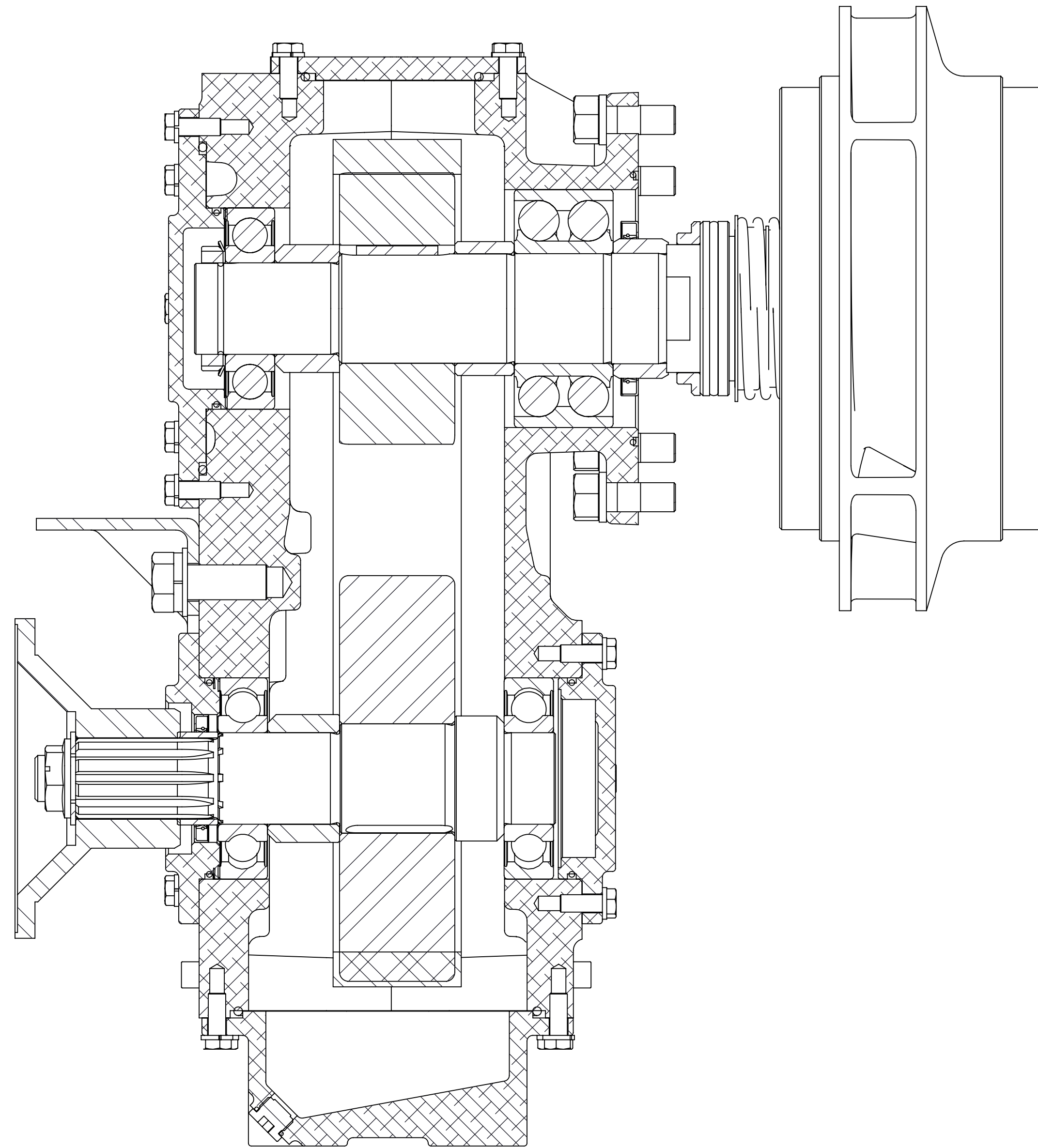
Ref No.	Description
T1	Breather, 1/2 NPT
T6	Cover-Bearing
T11	Plug-Magnetic, 3/4 in
T13	Screw-Hex Hd, 3/8-16 x 1 in
*T16	O-Ring, 4 x 4-1/4 in
T21	Washer-Lock, 3/8 in
T38	Pan-Transmission
*T42	O-Ring, 10 x 10-3/8 in
*T53	O-Ring, 4-7/8 x 5-1/8 in
T59	Stud-Coarse, 1/2-13 x 2-1/4 in
T60	Nut-Hex, 1/2-13
T61	Washer-Lock, 1/2 in
T70	O-Ring and Seal Replacement Kit
T96	Elbow-Street, 90°, 1/2 NPT
T105	Plate-Adapter
*T106	O-Ring, 4-1/4 x 4-1/2 in

*Part of T70 O-Ring and Seal Replacement Kit

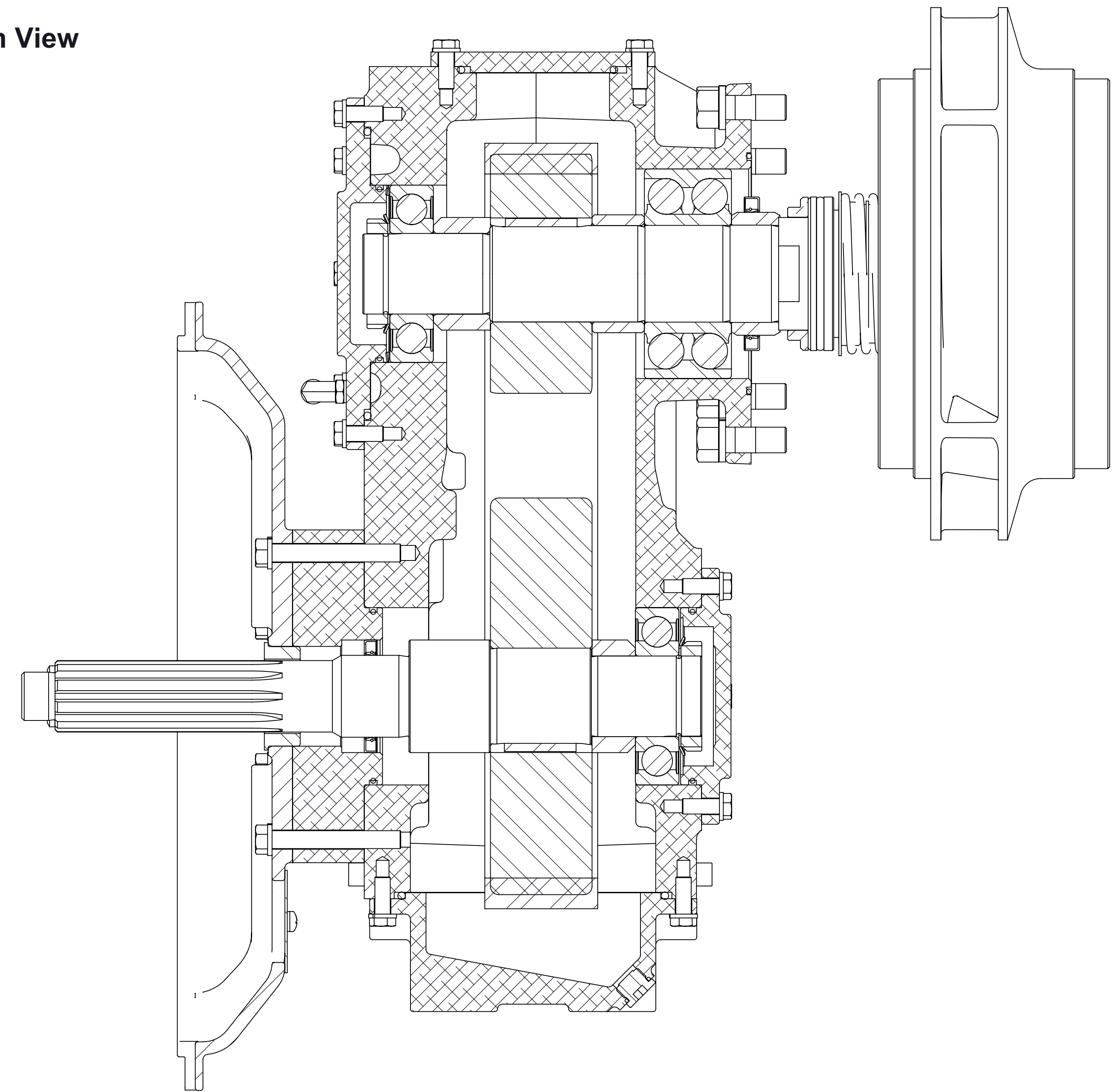
T70
O-Ring and Seal
Replacement Kit

External Components-Output Shaft Side and Top of Case
(S100 Inverted with bellhousing adapter)

Cross Section View



**CRQC and CRUQC-2 Driveline
without Bellhousing Adapter**
(See sheets 2-11 for part numbers)

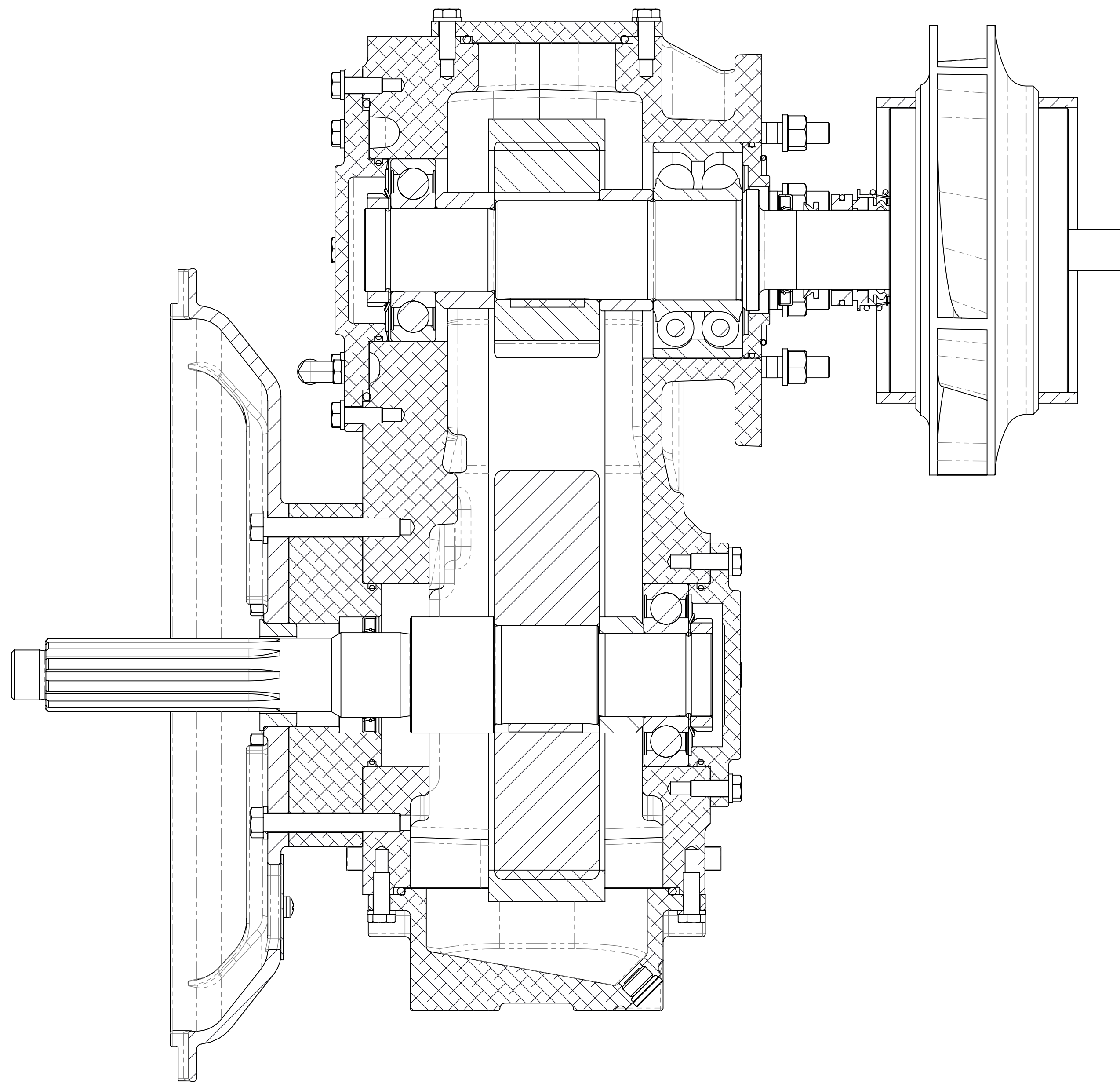


**CRQC and CRUQC-2 Driveline
with Bellhousing Adapter**
(See sheets 2-11 for part numbers)

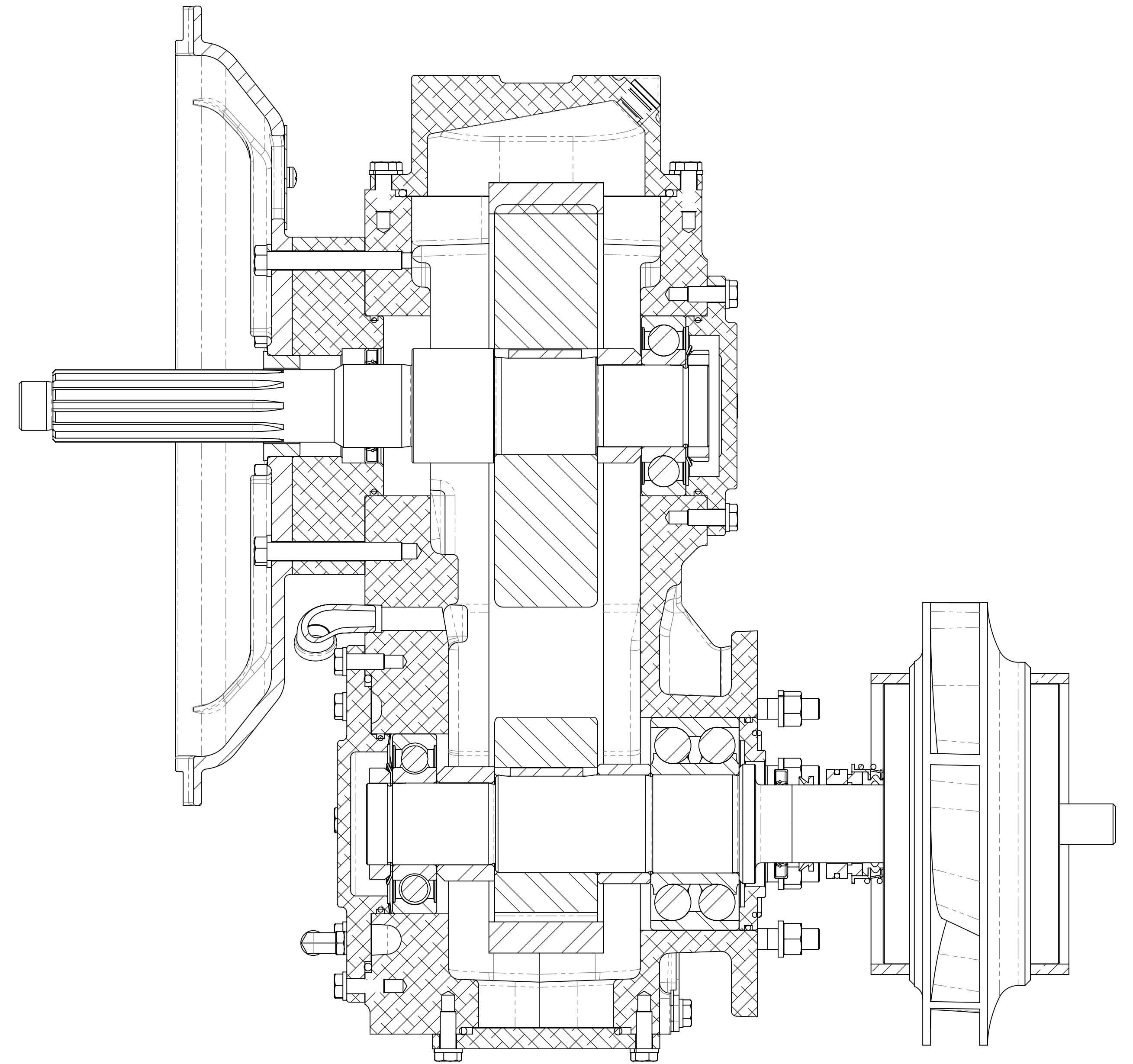
For Components See the Following:

Pump Model	Case Mounting (Viewed from Input Side)	Bellhousing Adapter	See Page		
			Internal Components	External Components	
				Input Shaft Side and Bottom of Case	Output Shaft Side and Top of Case
CRQC	Rotated 45° Clockwise	No	2	4	5
	Vertical		2	6	7
	Vertical	Yes	3	8	9
	Inverted		3	10	11
CRUQC-2	Vertical	No	2	6	7
	Rotated 45° Clockwise		2	4	5
	Vertical	Yes	3	8	9
	Inverted		3	10	11

Cross Section View



S100QC Vertical with Bellhousing Adapter
(See page 3, 8 or 12 for part numbers)

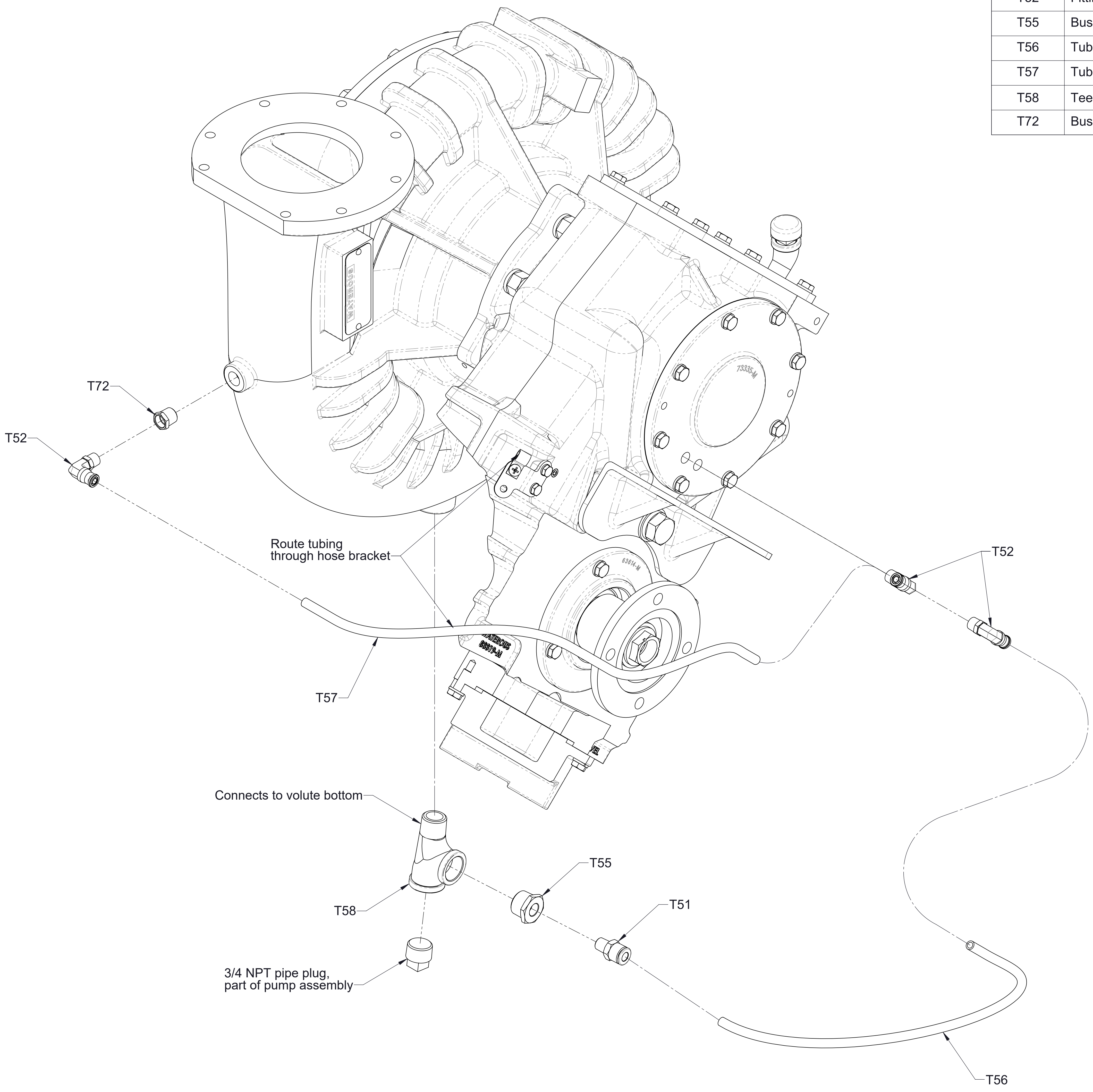


S100QC Inverted with Bellhousing Adapter
(See page 3, 10 or 13 for part numbers)

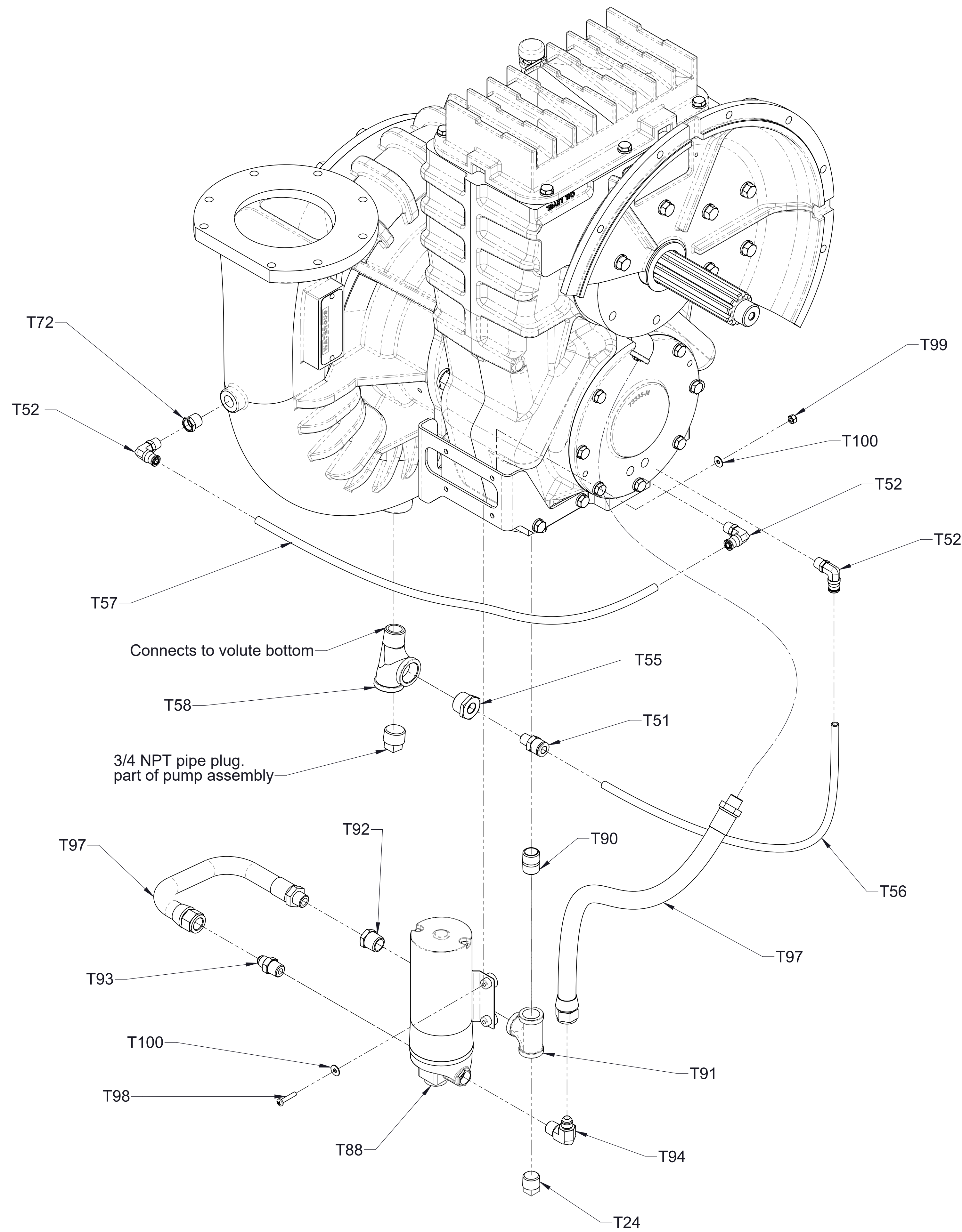
For Components See the Following:

Pump Model	Case Mounting (Viewed from Input Side)	Bellhousing Adapter	See Page		
			Internal Components	External Components	
				Input Shaft Side and Bottom of Case	Output Shaft Side and Top of Case
S100QC	Vertical	Yes	3	8	12
	Inverted	Yes	3	10	13

Ref No.	Description
T51	Adapter-3/8 PTC x 1/4 MNPT
T52	Fitting-Elbow, 3/8 PTC x 1/4 MNPT, 90°
T55	Bushing-Reducing, Pipe, 3/4 x 1/4 NPT
T56	Tubing-Nylon, 3/8 in
T57	Tubing-Nylon, 3/8 in
T58	Tee-Street, 3/4 NPT
T72	Bushing-Reducing, 3/8 MNPT x 1/4 FNPT



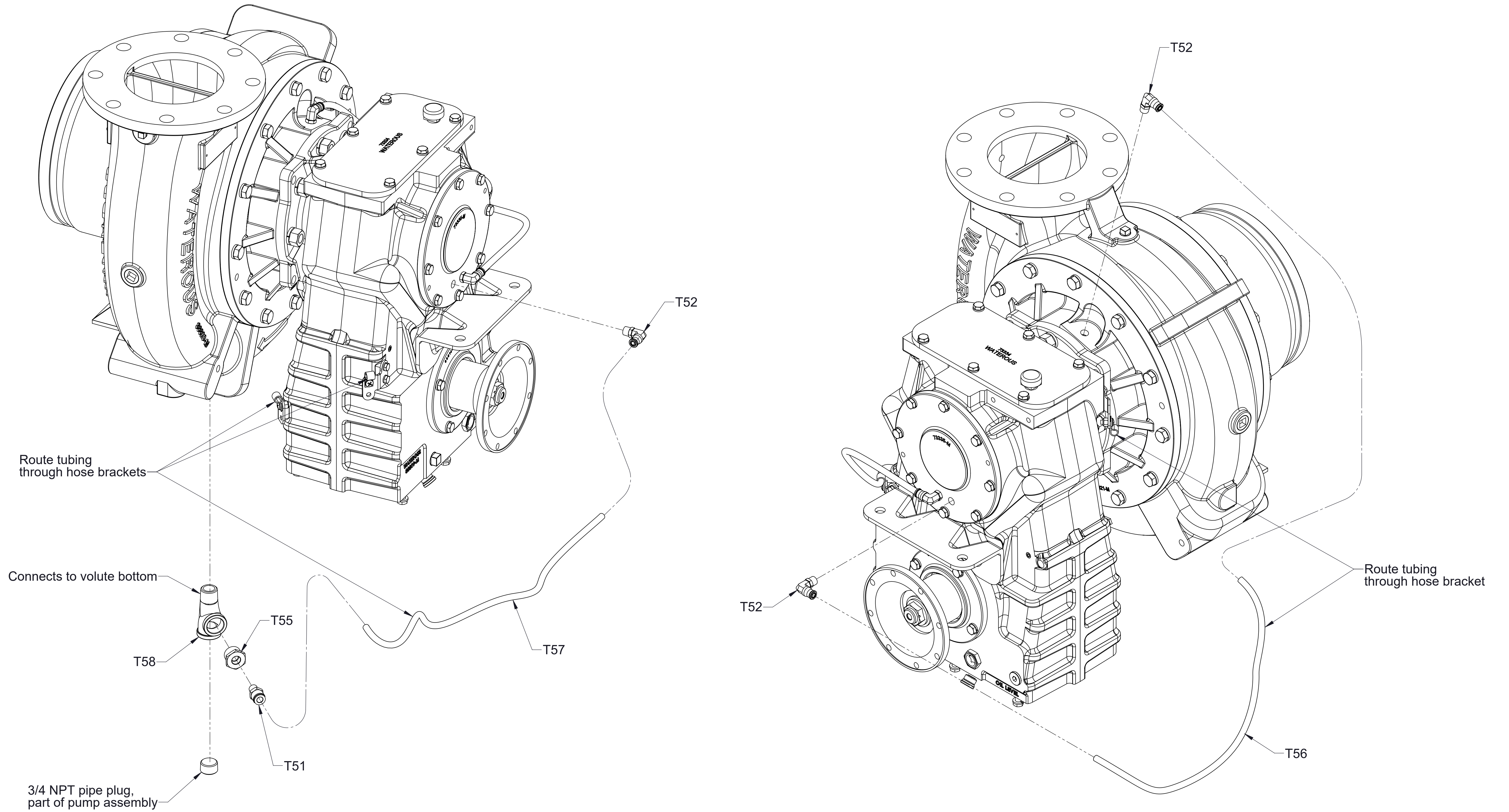
CR Cooling Lines
 (Case rotated 45° clockwise (shown) or mounted vertical)



Ref No.	Description
T24	Plug-Pipe, Square Hd, 1/2 NPT
T51	Adapter-3/8 PTC x 1/4 MNPT
T52	Fitting-Elbow, 3/8 PTC x 1/4 MNPT, 90°
T55	Bushing-Reducing, Pipe, 3/4 x 1/4 NPT
T56	Tubing-Nylon, 3/8 in
T57	Tubing-Nylon, 3/8 in
T58	Tee-Street, 3/4 NPT
T72	Bushing-Reducing, 3/8 MNPT x 1/4 FNPT
T88	Pump-Oil, 12V
T90	Nipple-Pipe, 1/2 NPT x 1-1/8 in
T91	Tee-Standard, Pipe, 1/2 NPT
T92	Bushing-Reducing, Pipe, 1/2 x 3/8 NPT
T93	Adapter-Male, 3/8 Flare x 3/8 NPT
T94	Elbow-Male, 3/8 NPT x 3/8 Flare
T97	Hose Assembly
T98	Screw-Machine, Pan Hd, #10-24 x 1 in
T99	Nut-Hex, Nylok, #10-32
T100	Washer-Flat, Machine Screw, #10

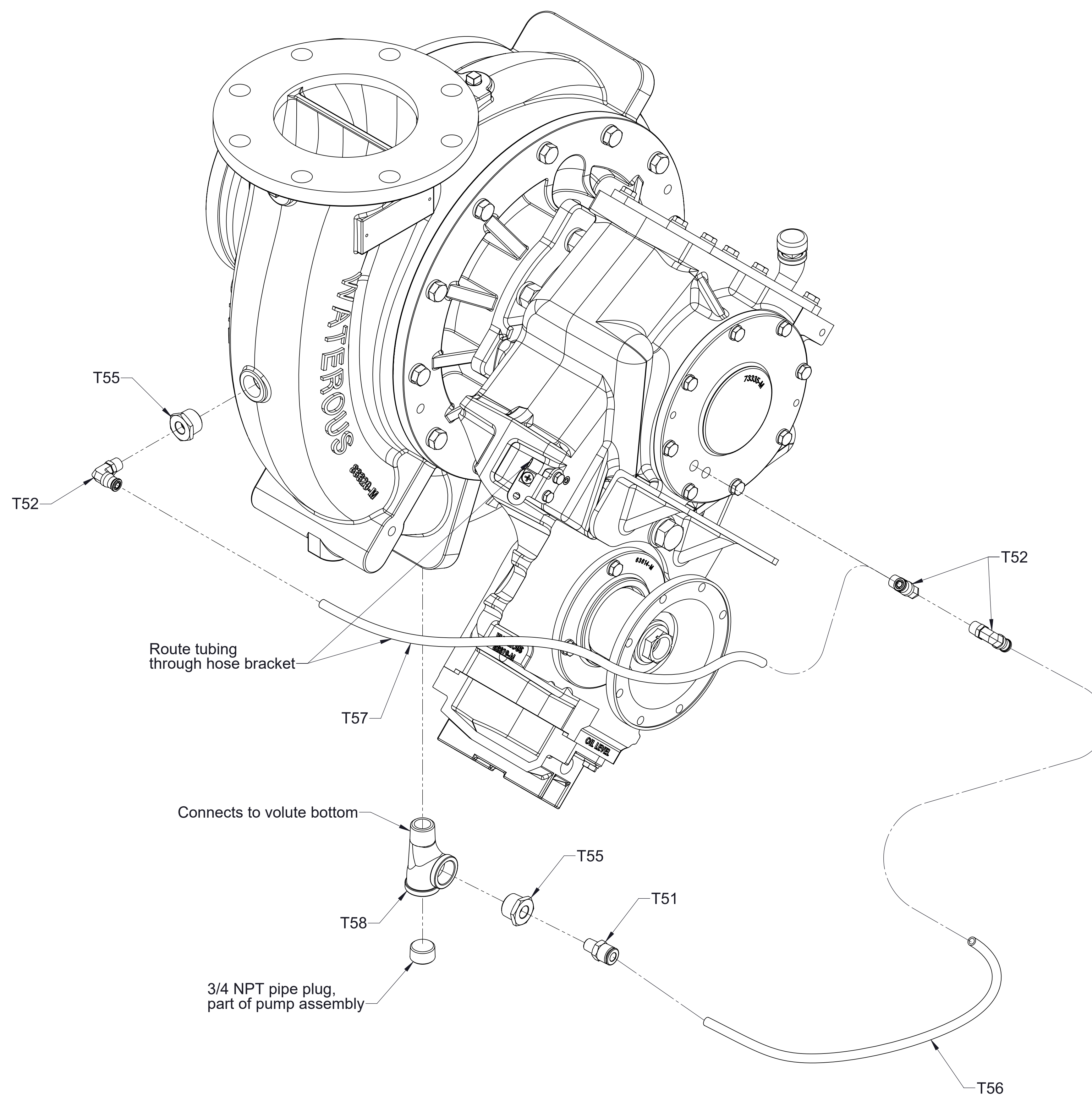
CR Cooling Lines and Oil Pump
(Inverted case with bellhousing adapter)

Ref No.	Description
T51	Adapter-3/8 PTC x 1/4 MNPT
T52	Fitting-Elbow, 3/8 PTC x 1/4 MNPT, 90°
T55	Bushing-Reducing, Pipe, 3/4 x 1/4 NPT
T56	Tubing-Nylon, 3/8 in
T57	Tubing-Nylon, 3/8 in
T58	Tee-Street, 3/4 NPT



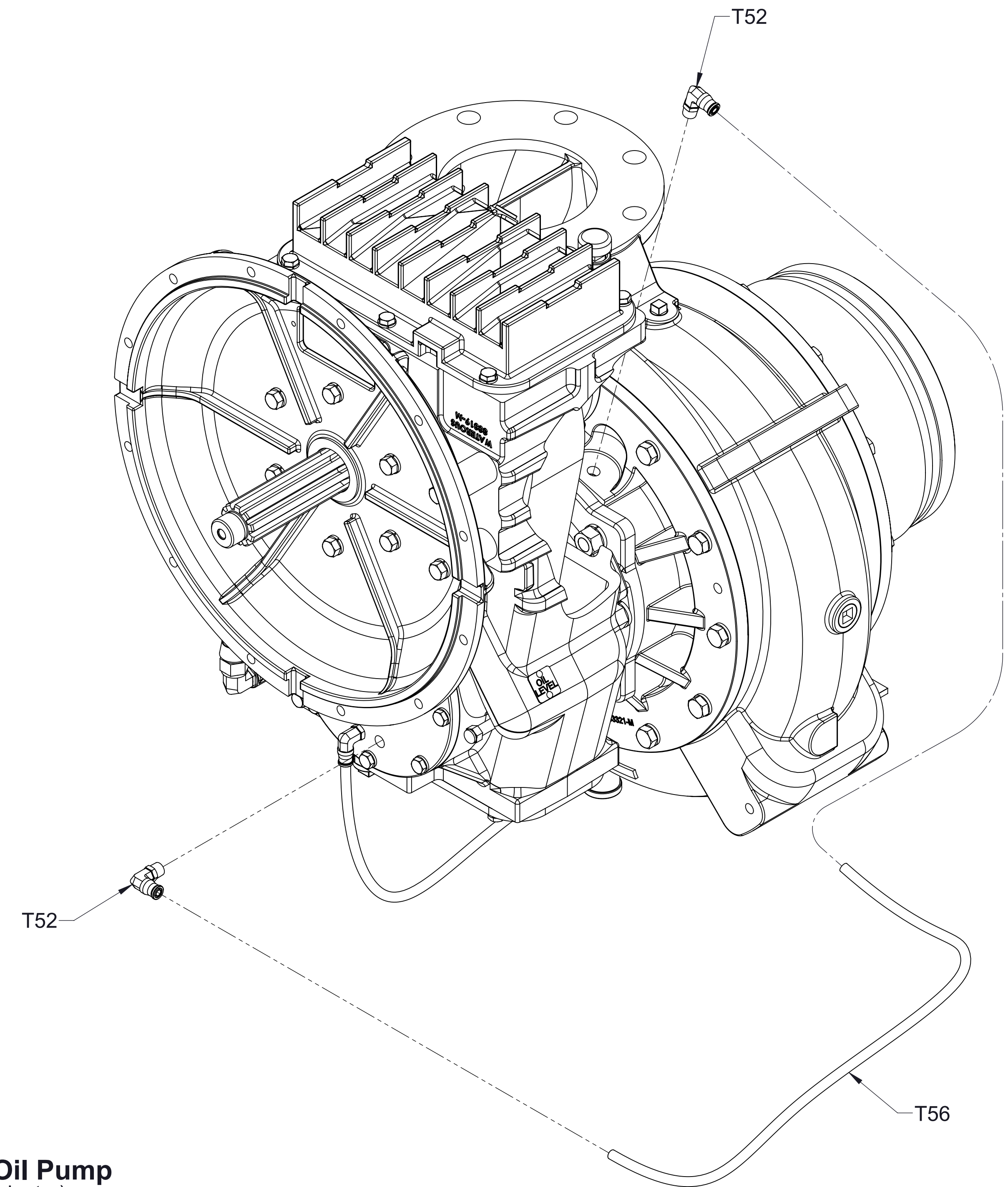
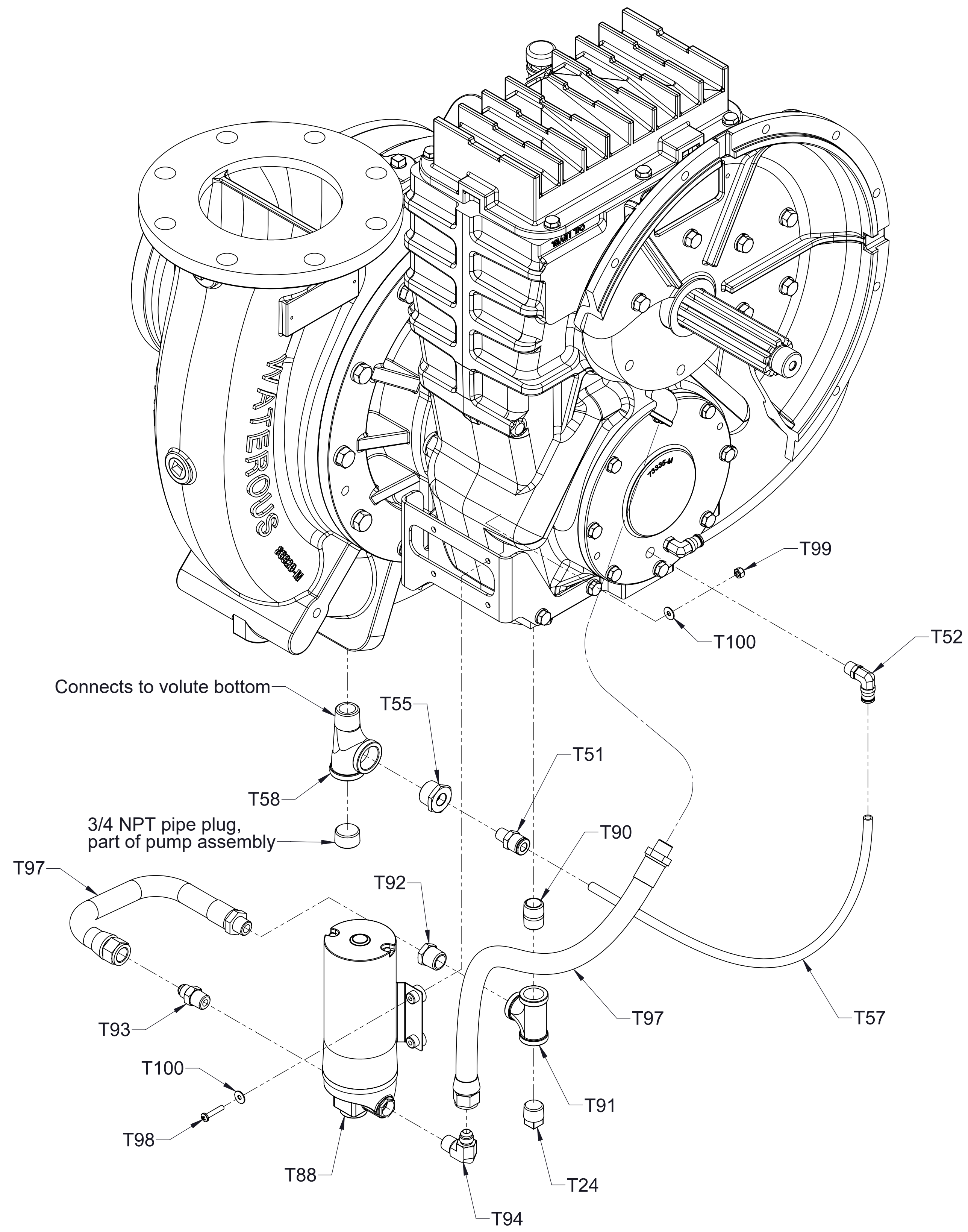
CRU-2 Cooling Lines
(Vertical case)

Ref No.	Description
T51	Adapter-3/8 PTC x 1/4 MNPT
T52	Fitting-Elbow, 3/8 PTC x 1/4 MNPT, 90°
T55	Bushing-Reducing, Pipe, 3/4 x 1/4 NPT
T56	Tubing-Nylon, 3/8 in
T57	Tubing-Nylon, 3/8 in
T58	Tee-Street, 3/4 NPT



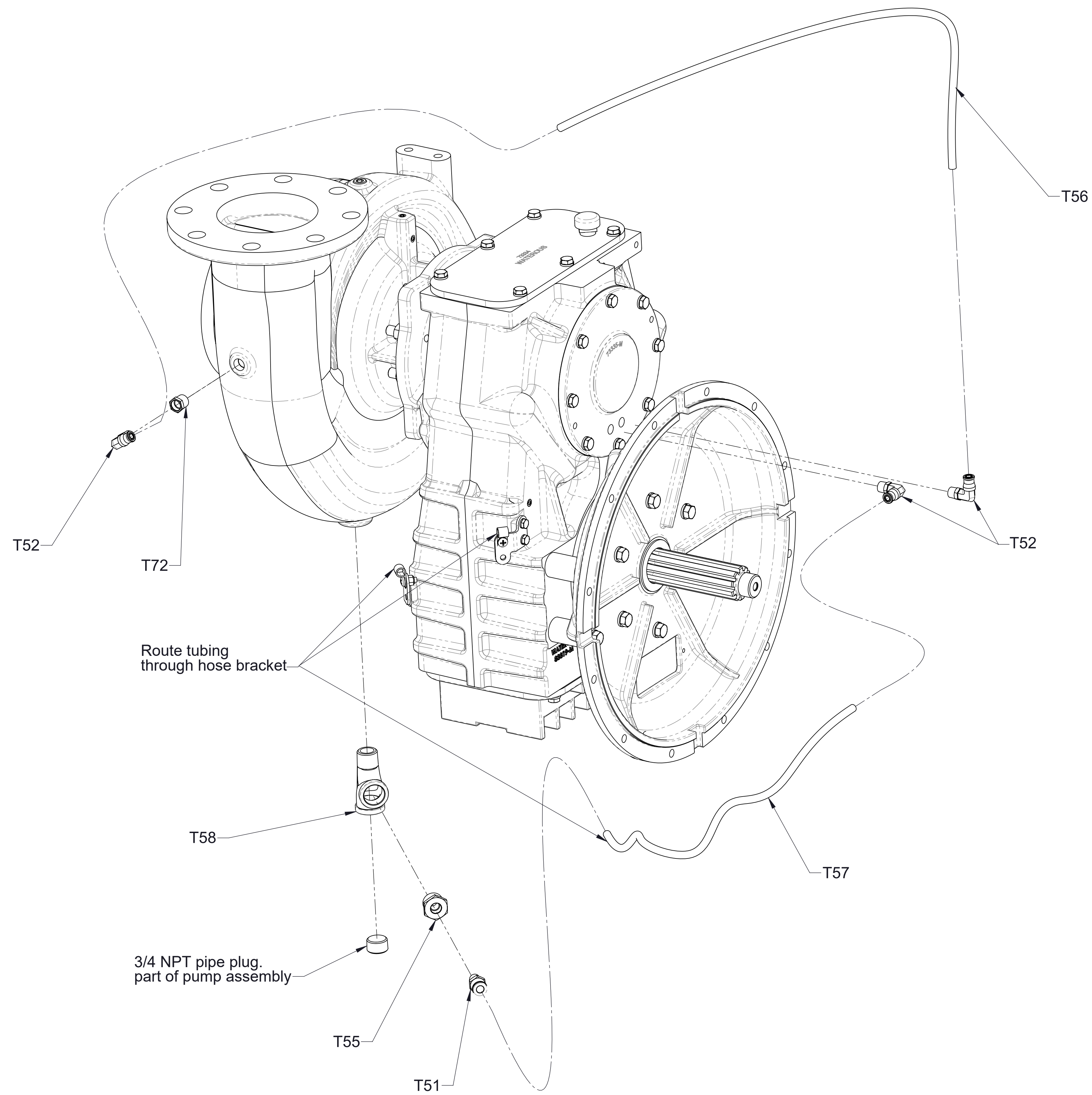
CRU-2 Cooling Lines
(Case rotated 45° clockwise)

Ref No.	Description
T24	Plug-Pipe, Square Hd, 1/2 NPT
T51	Adapter-3/8 PTC x 1/4 MNPT
T52	Fitting-Elbow, 3/8 PTC x 1/4 MNPT, 90°
T55	Bushing-Reducing, Pipe, 3/4 x 1/4 NPT
T56	Tubing-Nylon, 3/8 in
T57	Tubing-Nylon, 3/8 in
T58	Tee-Street, 3/4 NPT
T88	Pump-Oil, 12V
T90	Nipple-Pipe, 1/2 NPT x 1-1/8 in
T91	Tee-Standard, Pipe, 1/2 NPT
T92	Bushing-Reducing, Pipe, 1/2 x 3/8 NPT
T93	Adapter-Male, 3/8 Flare x 3/8 NPT
T94	Elbow-Male, 3/8 NPT x 3/8 Flare
T97	Hose Assembly
T98	Screw-Machine, Pan Hd, #10-24 x 1 in
T99	Nut-Hex, Nylok, #10-32
T100	Washer-Flat, Machine Screw, #10

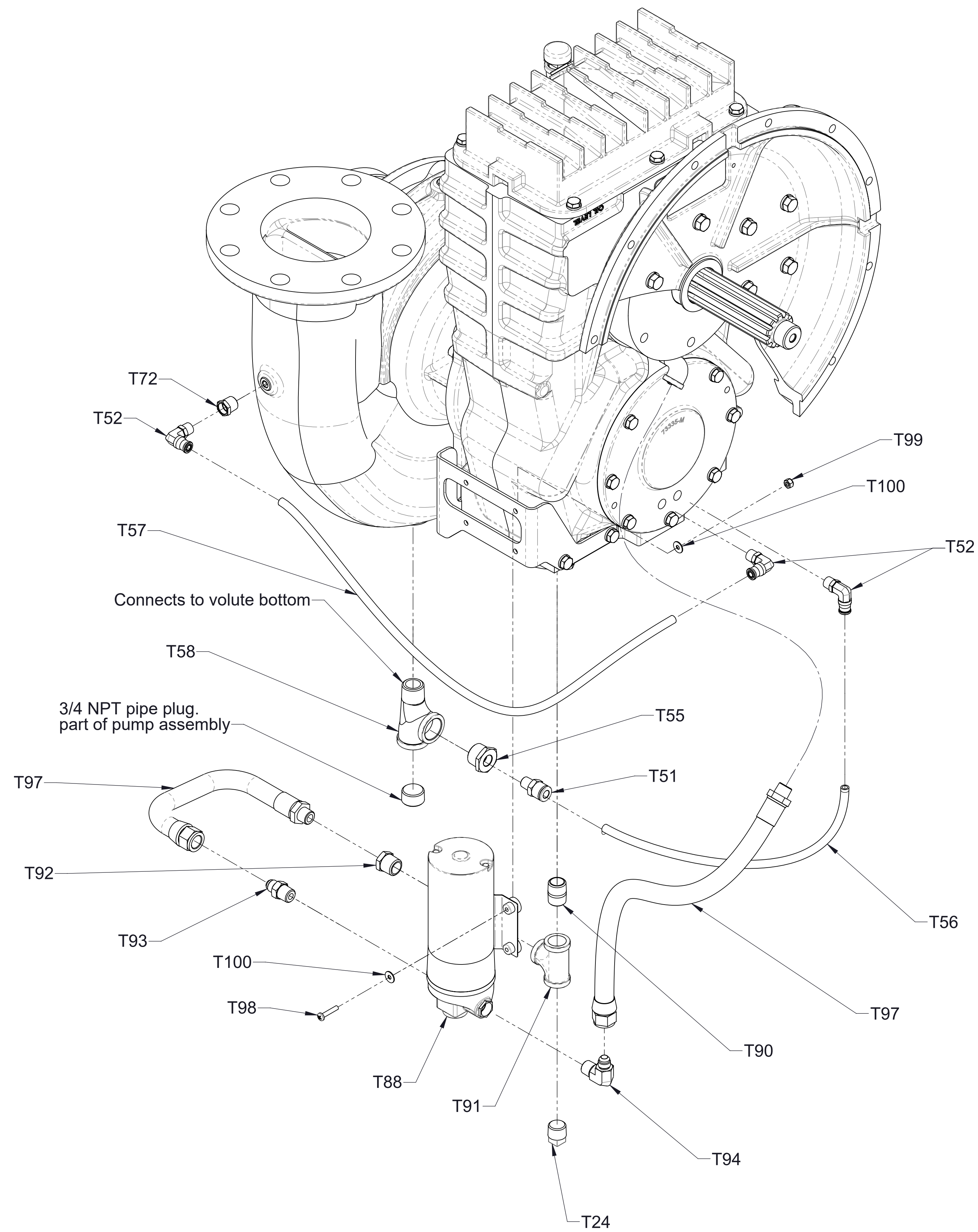


CRU-2 Cooling Lines and Oil Pump
(Inverted case with bellhousing adapter)

Ref No.	Description
T51	Adapter-3/8 PTC x 1/4 MNPT
T52	Fitting-Elbow, 3/8 PTC x 1/4 MNPT, 90°
T55	Bushing-Reducing, Pipe, 3/4 x 1/4 NPT
T56	Tubing-Nylon, 3/8 in
T57	Tubing-Nylon, 3/8 in
T58	Tee-Street, 3/4 NPT
T72	Bushing-Reducing, 3/8 MNPT x 1/4 FNPT



S100 Cooling Lines
(Vertical case with bellhousing adapter)



Ref No.	Description
T24	Plug-Pipe, Square Hd, 1/2 NPT
T51	Adapter-3/8 PTC x 1/4 MNPT
T52	Fitting-Elbow, 3/8 PTC x 1/4 MNPT, 90°
T55	Bushing-Reducing, Pipe, 3/4 x 1/4 NPT
T56	Tubing-Nylon, 3/8 in
T57	Tubing-Nylon, 3/8 in
T58	Tee-Street, 3/4 NPT
T72	Bushing-Reducing, 3/8 MNPT x 1/4 FNPT
T88	Pump-Oil, 12V
T90	Nipple-Pipe, 1/2 NPT x 1-1/8 in
T91	Tee-Standard, Pipe, 1/2 NPT
T92	Bushing-Reducing, Pipe, 1/2 x 3/8 NPT
T93	Adapter-Male, 3/8 Flare x 3/8 NPT
T94	Elbow-Male, 3/8 NPT x 3/8 Flare
T97	Hose Assembly
T98	Screw-Machine, Pan Hd, #10-24 x 1 in
T99	Nut-Hex, Nylok, #10-32
T100	Washer-Flat, Machine Screw, #10

S100 Cooling Lines and Oil Pump
(Inverted case with bellhousing adapter)