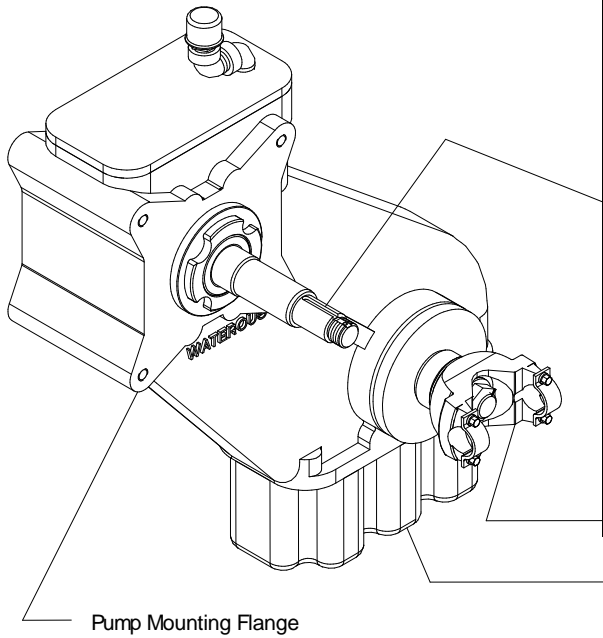




Document Number	Issue Date	Rev. Date
SPL82026	08/12/94	11/22/17

PA Transmission Service Parts List

Index:



Components					See Page	
Type	Pump Model		Connection Opposite Pump			
	Pump Series	Complete Pump/Transmission Model <i>(Located on Pump Serial Plate)</i>				
Driven Shaft	Separable Impeller Shaft	CM, CS	CMPA, CMUPA CSPA, CSUPA	None	2, 3	
			Combination Pump	4, 5		
			Shaft with 1-3/8-10 SAE Spline	6, 7		
	Non-Separable Impeller Shaft	CG	CGNPA, CGRPA, CGGPA CGVPA, CGVNPA CGVRPA, CGVGPA	None	8, 9	
			CL	CLRPA, CLSPA, CLVPA	Shaft with Key (Compressor Drive)	10, 11
			CX	CXNPA, CXRPA, CXVPA		
S100			S100PA	None	12, 13	
Driveline <i>(Input Shaft Only)</i>				14, 15		
Case Assembly	Vertical Mounting			16, 17		
	Horizontal Mounting			18, 19		
				20, 21		

Note: When ordering parts please supply Pump and/or Transmission Serial Number.

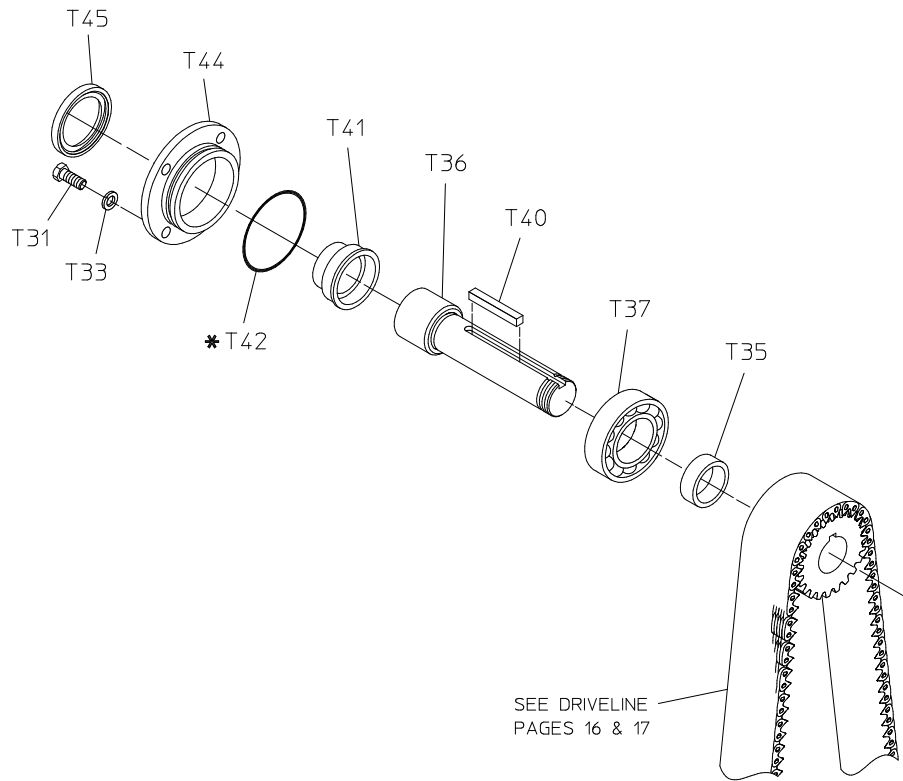
Waterous Company 125 Hardman Avenue South, South St. Paul, Minnesota 55075 USA (651) 450-5000

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

Driven Shaft, Separable Impeller Shaft CM & CS Pump Series

REF. NO.	DESCRIPTION
T31	Hex hd screw, 3/8-16 x 1-1/4 in.
T33	Lockwasher, 3/8 in.
T35	Driven shaft spacer
T36	Driven shaft
T37	Ball bearing, single row
T38	Bearing lock washer
T39	Bearing lock nut
T40	Square key, 5/16 x 5/16 x 2-5/16 in.

REF. NO.	DESCRIPTION
T41	Sealing boot
T42	O-ring, 2-7/8 x 3-1/8 in.
T43	Oil seal housing
T44	Oil seal housing
T45	Oil seal, 1-7/8 x 2-5/8 in.
T50	Driven shaft shim, 0.005 and 0.010 in. thick
T53	Gasket and shim repair kit

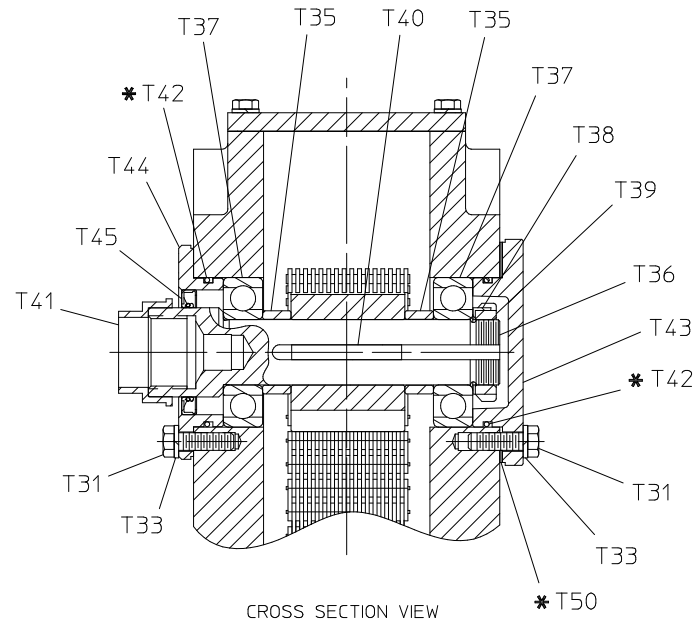


SEE DRIVELINE
PAGES 16 & 17

T53 GASKET AND SHIM KIT

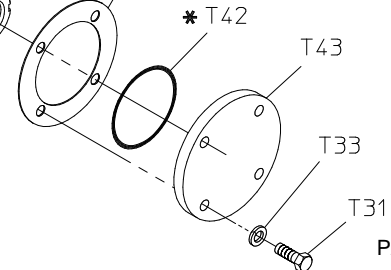
* INDICATES COMPONENTS OF KIT

DRIVEN SHAFT
SEPARABLE IMPELLER SHAFT
CM, CS PUMP SERIES



CROSS SECTION VIEW

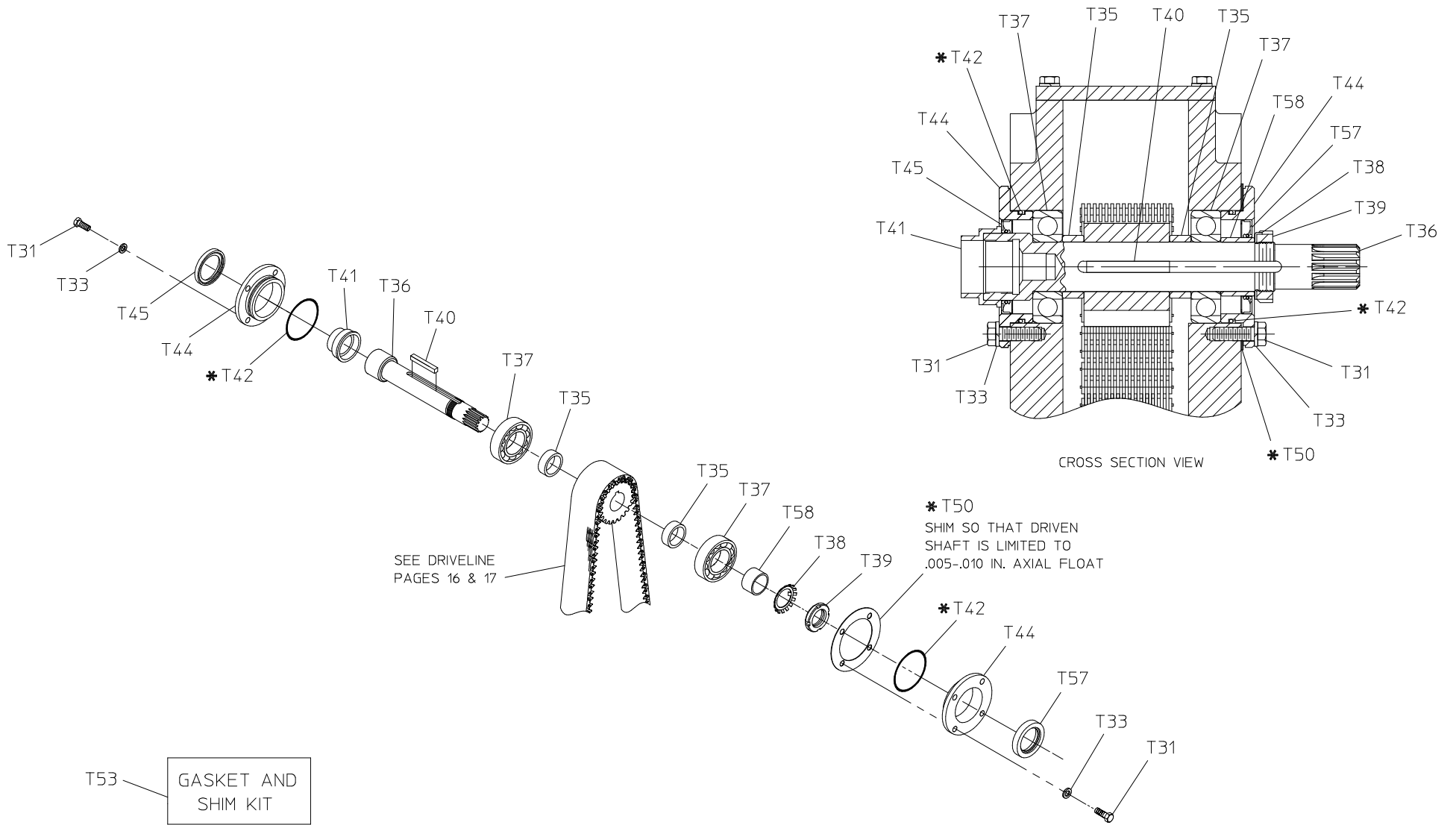
* T50
SHIM SO THAT DRIVEN
SHAFT IS LIMITED TO
.005-.010 IN. AXIAL FLOAT



Driven Shaft, Separable Impeller Shaft CM & CS Pump Series Combination Pump

REF. NO.	DESCRIPTION
T31	Hex hd screw, 3/8-16 x 1-1/4 in.
T33	Lockwasher, 3/8 in.
T35	Driven shaft spacer
T36	Driven shaft
T37	Ball bearing, single row
T38	Bearing lock washer
T39	Bearing lock nut
T40	Square key, 5/16 x 5/16 x 2-5/16 in.

REF. NO.	DESCRIPTION
T41	Sealing boot
T42	O-ring, 2-7/8 x 3-1/8 in.
T44	Oil seal housing
T45	Oil seal, 1-7/8 x 2-5/8 in.
T50	Driven shaft shim, 0.005 and 0.010 in. thick
T53	Gasket and shim repair kit
T57	Oil seal, 1-5/8 x 2-5/8 in.
T58	Oil seal sleeve



SEE DRIVELINE
PAGES 16 & 17

CROSS SECTION VIEW

* T50
SHIM SO THAT DRIVEN
SHAFT IS LIMITED TO
.005-.010 IN. AXIAL FLOAT

GASKET AND
SHIM KIT

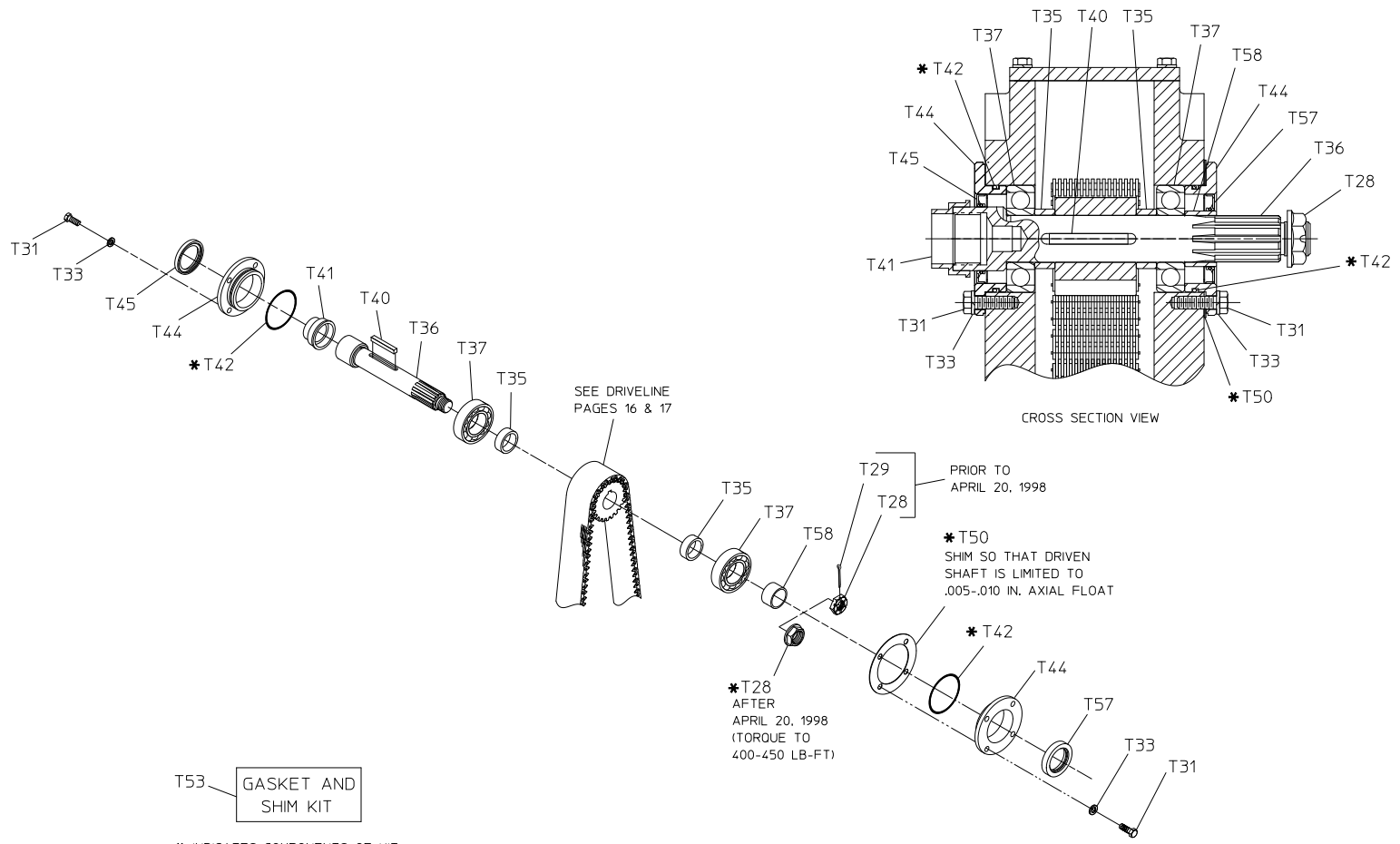
* INDICATES COMPONENTS OF KIT

DRIVEN SHAFT
SEPARABLE IMPELLER SHAFT
CM, CS PUMP SERIES
COMBINATION PUMP

Driven Shaft, Separable Impeller Shaft CM & CS Pump Series with 1-3/8-10 SAE Spline

REF. NO.	DESCRIPTION
T28	Shaft nut
T29	Cotter pin, 1/8 x 1-3/4 in.
T31	Hex hd screw, 3/8-16 x 1-1/4 in.
T33	Lockwasher, 3/8 in.
T35	Driven shaft spacer
T36	Driven shaft
T37	Ball bearing, single row
T40	Square key, 5/16 x 5/16 x 2-5/16 in.

REF. NO.	DESCRIPTION
T41	Sealing boot
T42	O-ring, 2-7/8 x 3-1/8 in.
T44	Oil seal housing
T45	Oil seal, 1-7/8 x 2-5/8 in.
T50	Driven shaft shim, 0.005 and 0.010 in. thick
T53	Gasket and shim repair kit
T57	Oil seal, 1-5/8 x 2-5/8 in.
T58	Oil seal sleeve



T53 GASKET AND SHIM KIT

* INDICATES COMPONENTS OF KIT

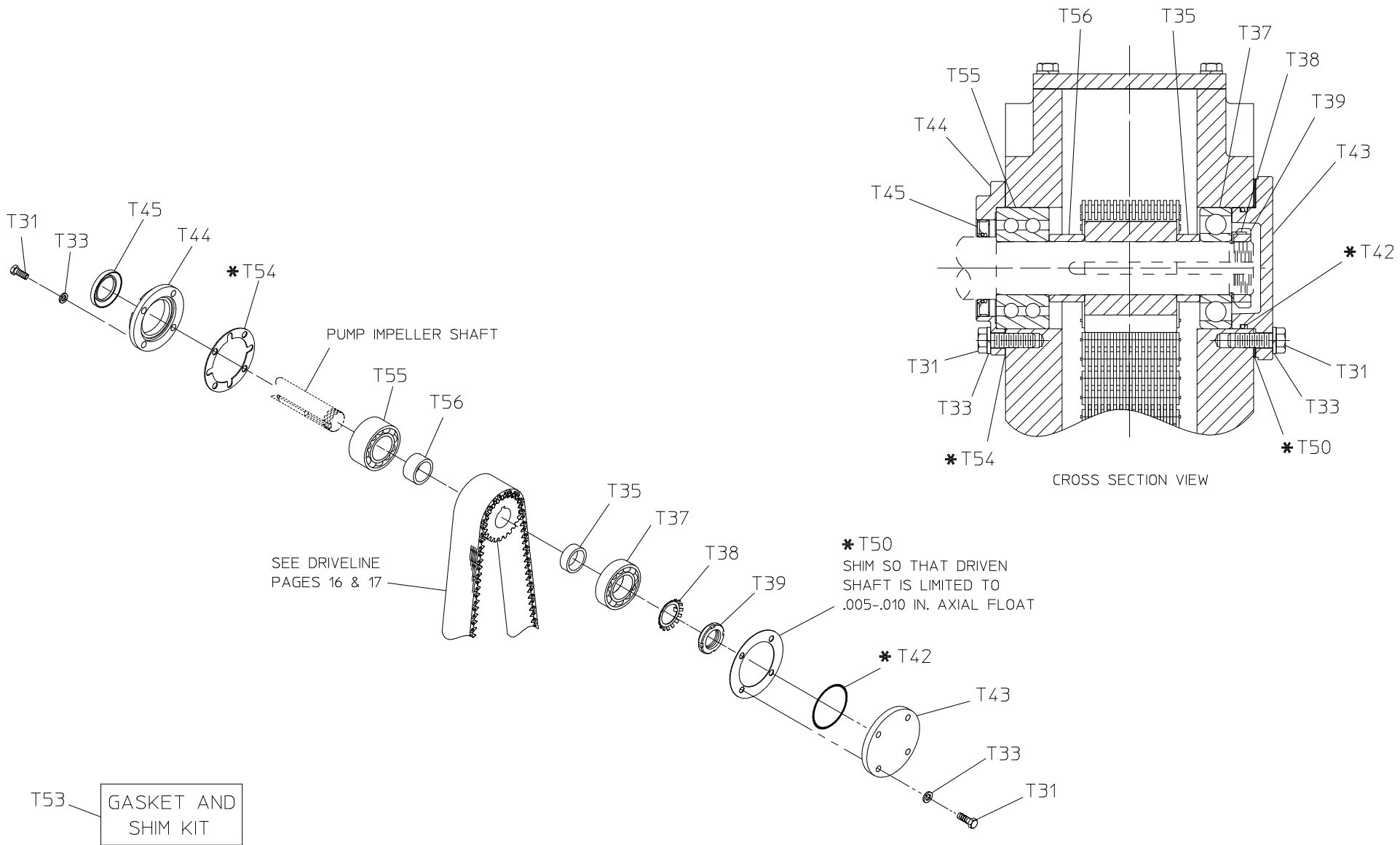
DRIVEN SHAFT

SEPARABLE IMPELLER SHAFT
 CM, CS PUMP SERIES
 SHAFT WITH 1-3/8-10 SAE SPLINE

Driven Shaft, Non-Separable Impeller Shaft CG, CL & CX Pump Series

REF. NO.	DESCRIPTION
T31	Hex hd screw, 3/8-16 x 1-1/4 in.
T33	Lockwasher, 3/8 in.
T35	Driven shaft spacer
T37	Ball bearing, single row
T38	Bearing lock washer
T39	Bearing lock nut

REF. NO.	DESCRIPTION
T42	O-ring, 2-7/8 x 3-1/8 in.
T43	Oil seal housing
T44	Oil seal housing
T45	Oil seal, 1-5/8 x 2-1/2 in.
T50	Driven shaft shim, 0.005 and 0.010 in. thick
T53	Gasket and shim repair kit
T54	Gasket
T55	Ball bearing, double row
T56	Driven shaft spacer



T53 GASKET AND SHIM KIT

* INDICATES COMPONENTS OF KIT

DRIVEN SHAFT

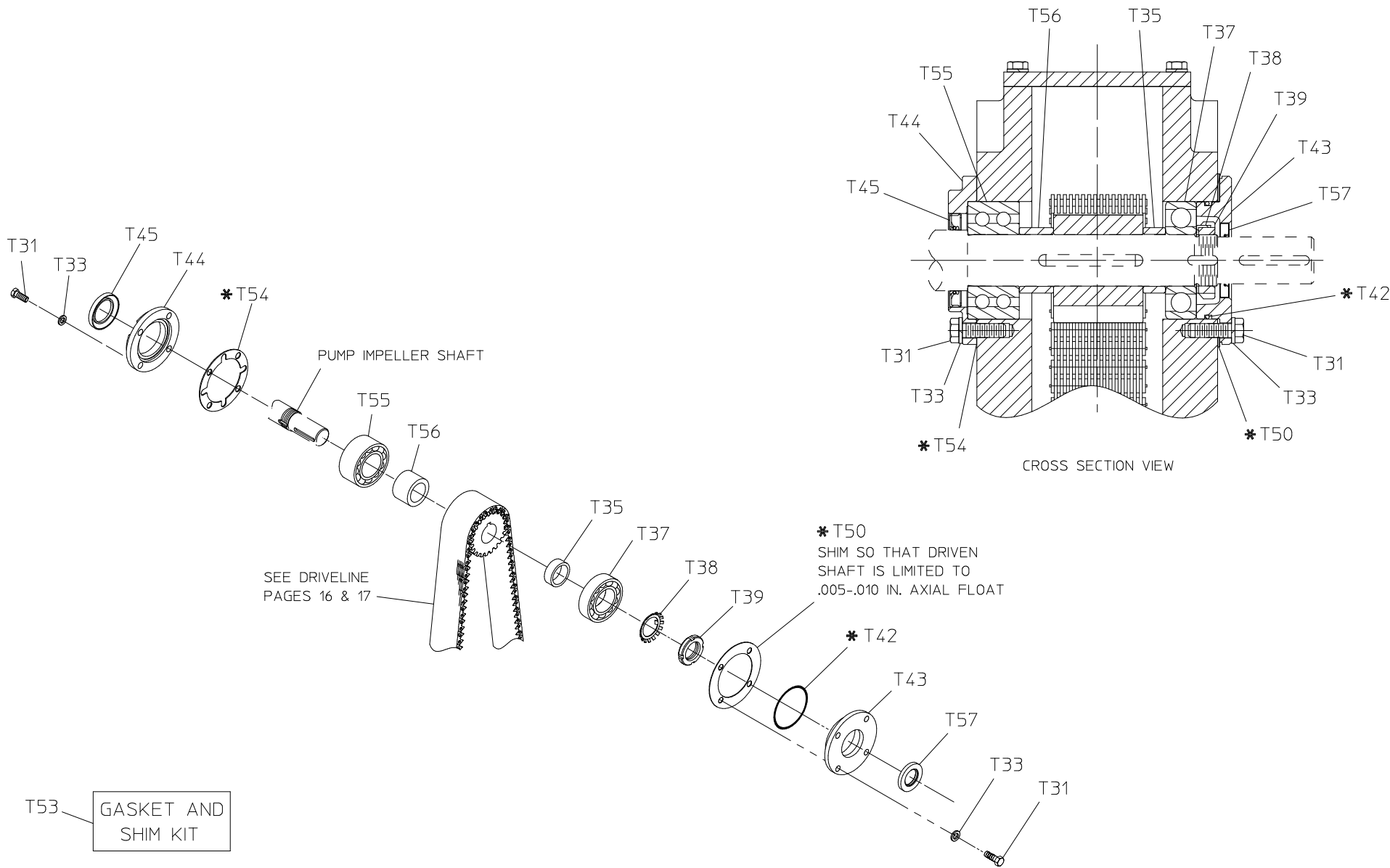
NON-SEPARABLE IMPELLER SHAFT
CG, CL, CX PUMP SERIES

PA TRANSMISSION ASSEMBLY
SPL82026
WATEROUS COMPANY
SOUTH ST. PAUL, MN 55075
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Driven Shaft, Non-Separable Impeller Shaft CX Pump Series with Keyed Shaft (Compressor Drive)

REF. NO.	DESCRIPTION
T31	Hex hd screw, 3/8-16 x 1-1/4 in.
T33	Lockwasher, 3/8 in.
T35	Driven shaft spacer
T36	Driven shaft
T37	Ball bearing, single row
T38	Bearing lock washer
T39	Bearing lock nut

REF. NO.	DESCRIPTION
T42	O-ring, 2-7/8 x 3-1/8 in.
T43	Oil seal housing
T44	Oil seal housing
T45	Oil seal, 1-5/8 x 2-1/2 in.
T50	Driven shaft shim, 0.005 and 0.010 in. thick
T53	Gasket and shim repair kit
T54	Gasket
T55	Ball bearing, double row
T56	Driven shaft spacer
T57	Oil seal, 1-1/4 x 2 in.



SEE DRIVELINE
PAGES 16 & 17

T53 — GASKET AND SHIM KIT

* INDICATES COMPONENTS OF KIT

DRIVEN SHAFT

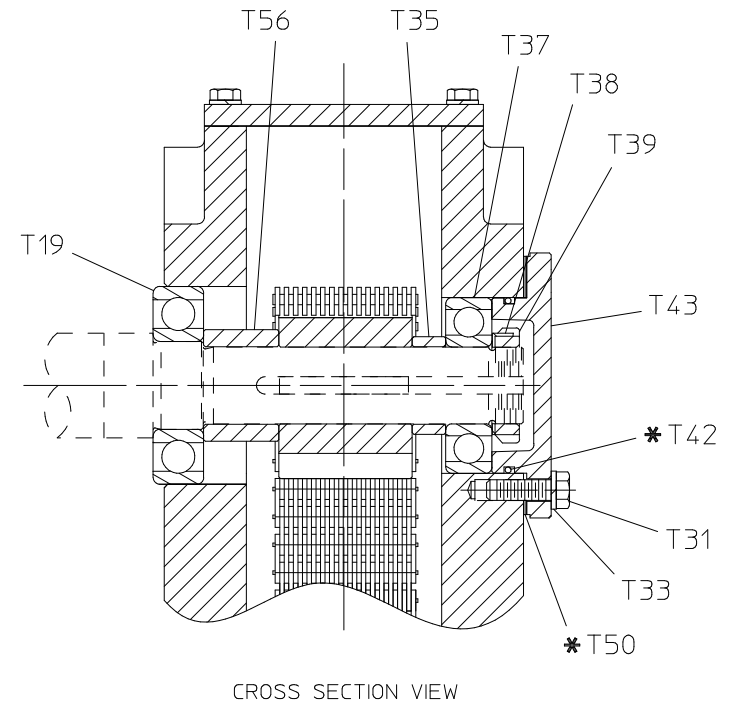
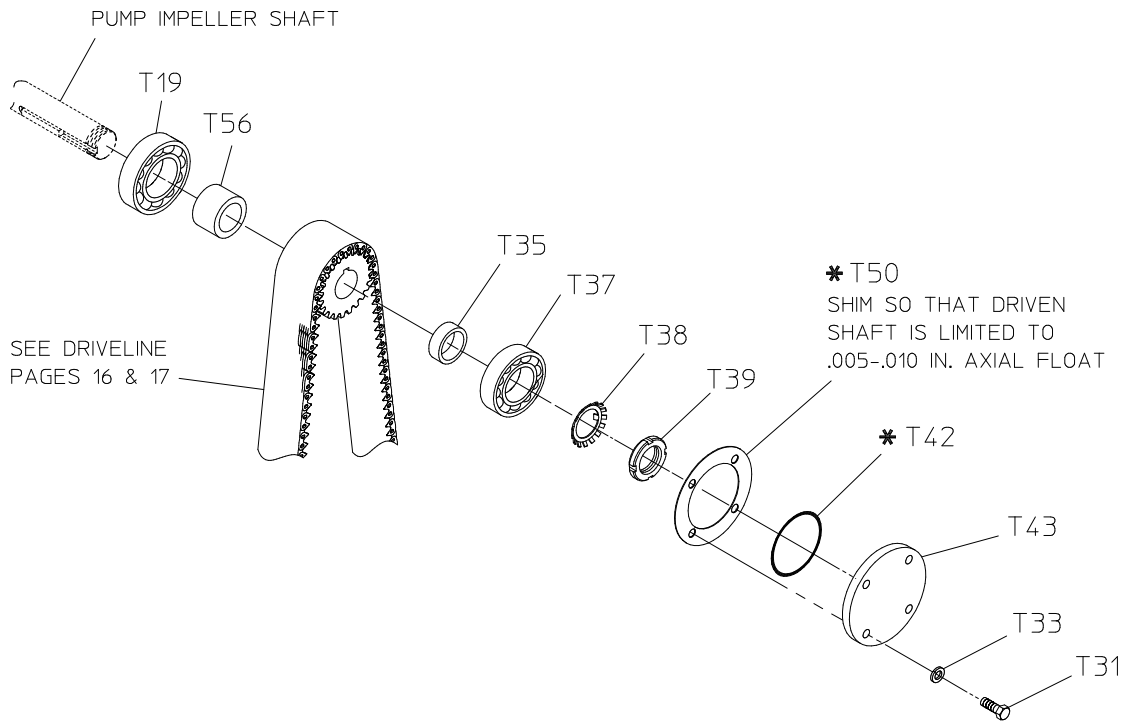
NON-SEPARABLE IMPELLER SHAFT
CX PUMP SERIES
SHAFT WITH KEY (COMPRESSOR DRIVE)

PA TRANSMISSION ASSEMBLY
SPL82026
WATEROUS COMPANY
SOUTH ST. PAUL, MN 55075
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Driven Shaft, Non-Separable Impeller Shaft S100 Pump Series

REF. NO.	DESCRIPTION
T19	Ball bearing, single row
T31	Hex hd screw, 3/8-16 x 1-1/4 in.
T33	Lockwasher, 3/8 in.
T35	Driven shaft spacer
T37	Ball bearing, single row
T38	Bearing lock washer
T39	Bearing lock nut

REF. NO.	DESCRIPTION
T42	O-ring, 2-7/8 x 3-1/8 in.
T43	Oil seal housing
T50	Driven shaft shim, 0.005 and 0.010 in. thick
T53	Gasket and shim repair kit
T56	Driven shaft spacer



T53 GASKET AND SHIM KIT

* INDICATES COMPONENTS OF KIT

DRIVEN SHAFT

NON-SEPARABLE IMPELLER SHAFT
S100 PUMP SERIES

PA TRANSMISSION ASSEMBLY
SPL82026

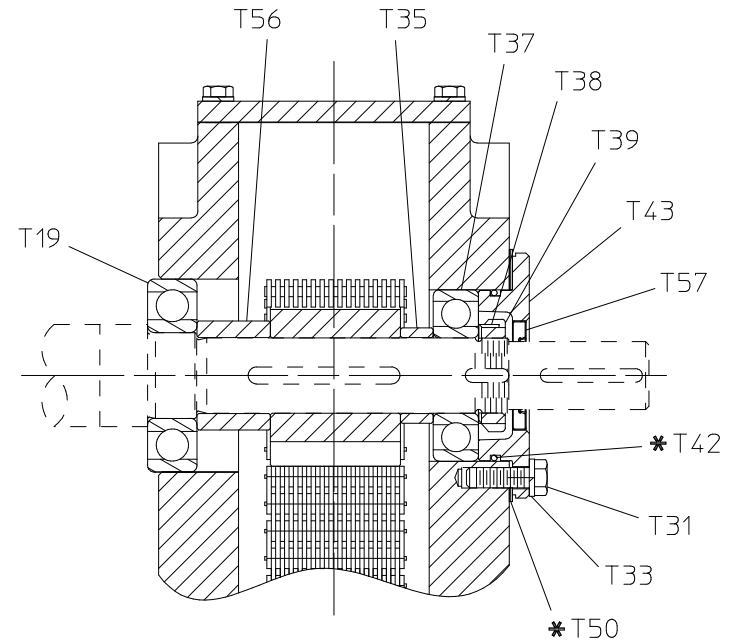
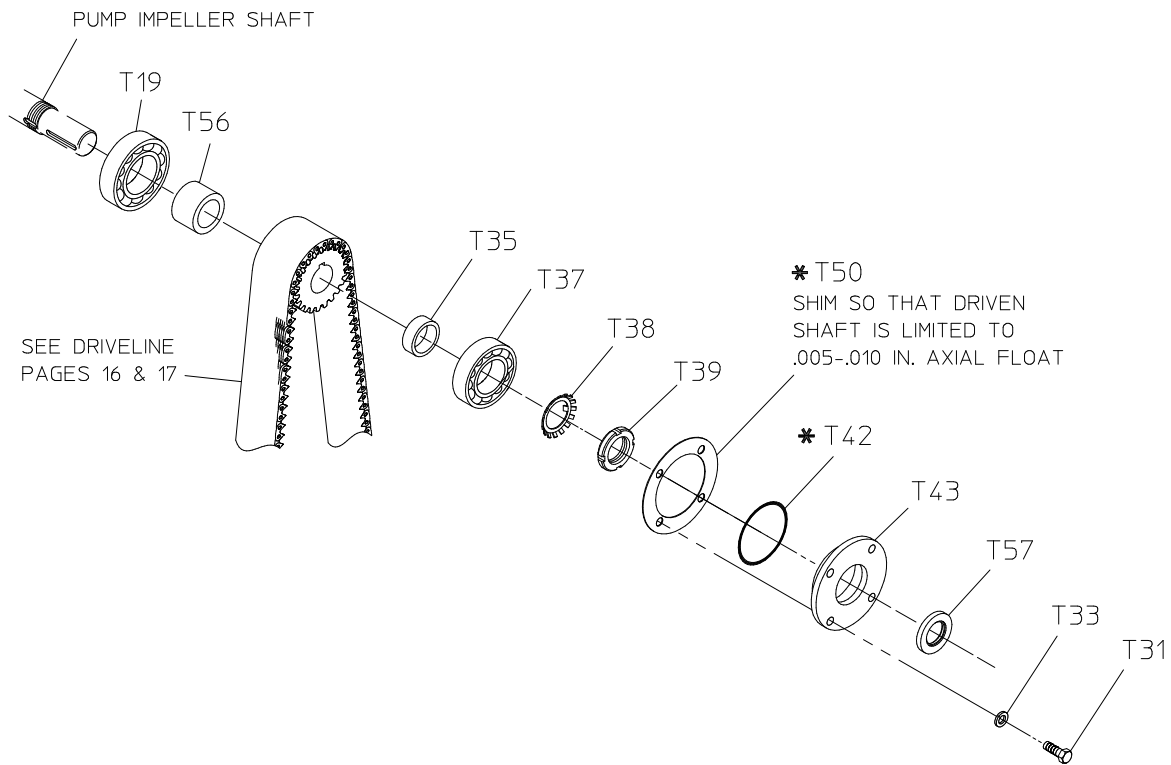
WATEROUS COMPANY
SOUTH ST. PAUL, MN 55075

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Driven Shaft, Non-Separable Impeller Shaft S100 Pump Series with Keyed Shaft (Compressor Drive)

REF. NO.	DESCRIPTION
T19	Ball bearing, single row
T31	Hex hd screw, 3/8-16 x 1-1/4 in.
T33	Lockwasher, 3/8 in.
T35	Driven shaft spacer
T37	Ball bearing, single row
T38	Bearing lock washer
T39	Bearing lock nut

REF. NO.	DESCRIPTION
T42	O-ring, 2-7/8 x 3-1/8 in.
T43	Oil seal housing
T50	Driven shaft shim, 0.005 and 0.010 in. thick
T53	Gasket and shim repair kit
T56	Driven shaft spacer
T57	Oil seal, 1-1/4 x 2 in.



CROSS SECTION VIEW

T53 GASKET AND SHIM KIT

* INDICATES COMPONENTS OF KIT

DRIVEN SHAFT

NON-SEPARABLE IMPELLER SHAFT
 S100 PUMP SERIES
 SHAFT WITH KEY (COMPRESSOR DRIVE)

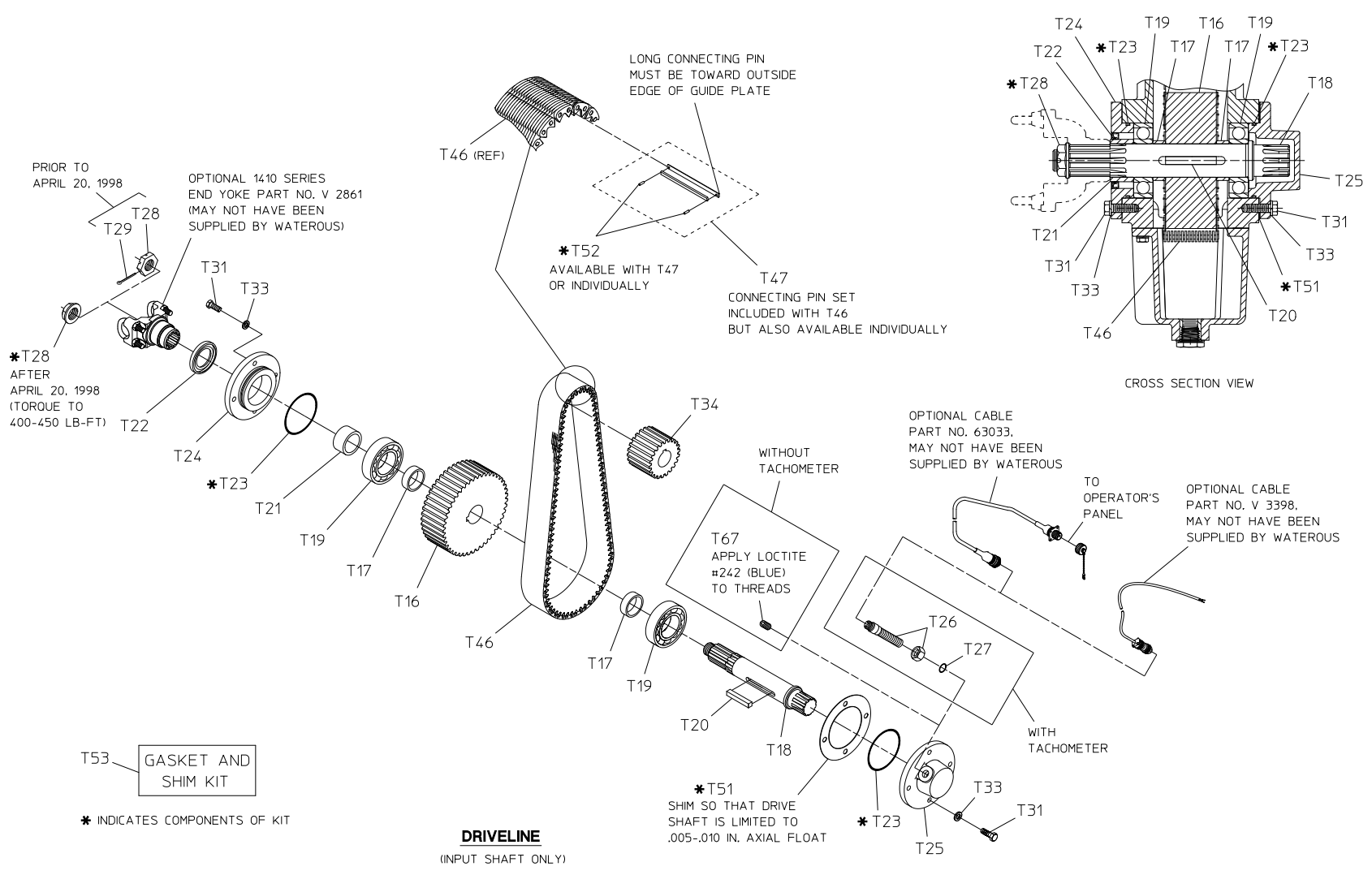
PA TRANSMISSION ASSEMBLY
 SPL82026

WATEROUS COMPANY
 SOUTH ST. PAUL, MN 55075

Driveline (Input Shaft Only)

REF. NO.	DESCRIPTION
T16	Drive sprocket
T17	Drive shaft spacer
T18	Drive shaft
T19	Ball bearing, single row
T20	Square key, 3/8 x 3/8 x 2-1/4 in.
T21	Oil seal sleeve
T22	Oil seal, 2 x 2-5/8 in.
T23	O-ring, 3-1/4 x 3-1/2 in.
T24	Oil seal housing
T25	Tachometer housing
T26	Magnetic pick-up
T27	O-ring, 5/8 x 3/4 in.
T28	Shaft nut

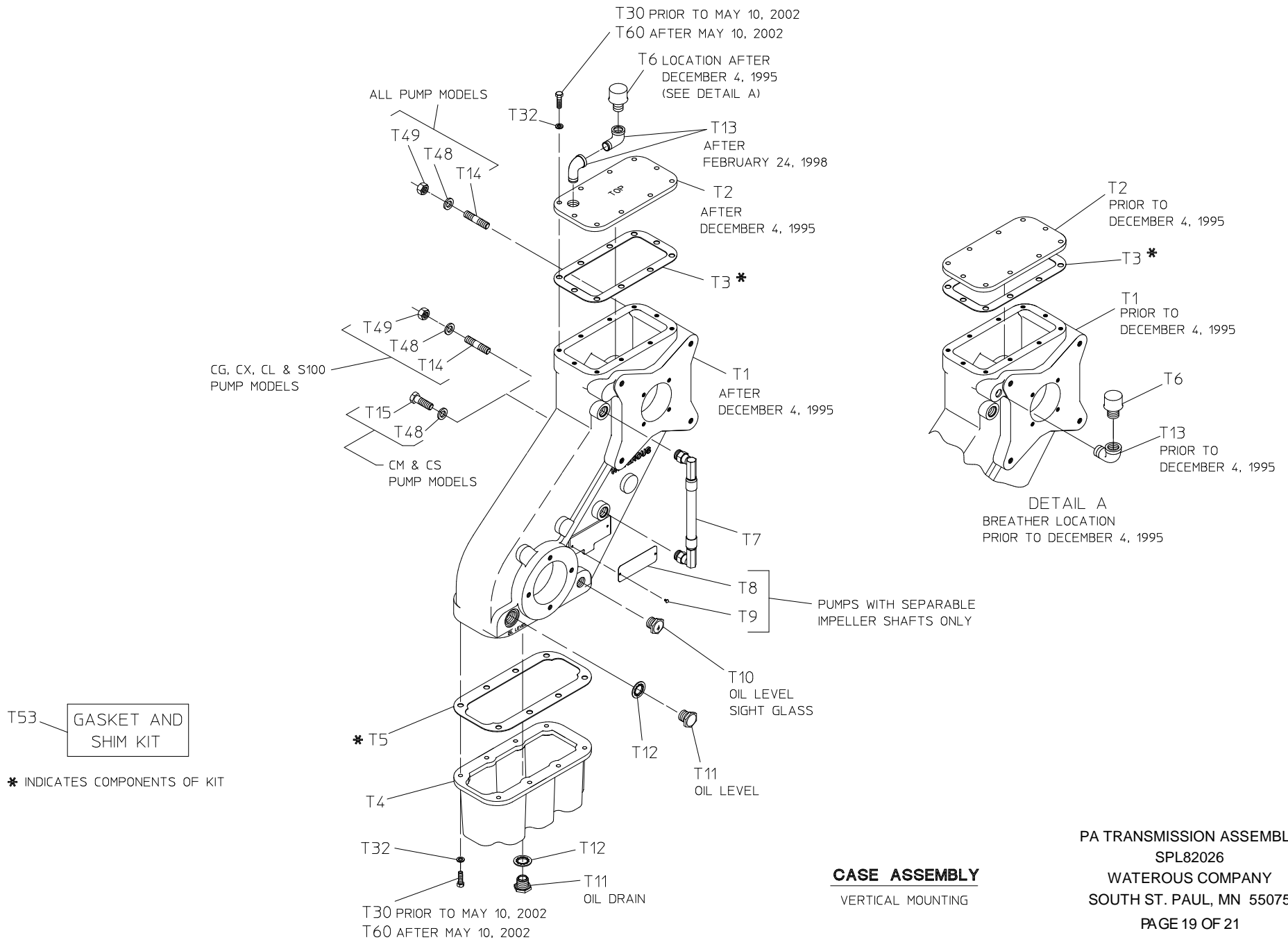
REF. NO.	DESCRIPTION
T29	Cotter pin, 1/8 x 1-3/4 in.
T31	Hex hd screw, 3/8-16 x 1-1/4 in.
T33	Lockwasher, 3/8 in.
T34	Driven sprocket
T46	Drive chain
T47	Connecting pin set
T51	Drive shaft shim, 0.005 and 0.010 in. thick
T52	Spirol pin, heavy, 1/16 in.
T53	Gasket and shim repair kit
T67	Hex socket set screw, 5/8-18 x 5/8 in.



Case Assembly Vertical Mounting

REF. NO.	DESCRIPTION
T1	Chain case assembly
T2	Top cover
T3	Top gasket
T4	Case bottom assembly
T5	Bottom gasket
T6	Breather, 1/2 NPT
T7	Hose assembly
T8	Serial plate
T9	Rnd hd drive screw, no. 6 x 1/4 in.
T10	Sight plug
T11	Drain plug
T12	Plug seal
T13	Elbow, 90°, 1/2 in.
T14	Stud, 1/2-13 x 1/2-13 x 2-1/4 in.
T15	Screw, 1/2-13 x 1-1/2 in.

REF. NO.	DESCRIPTION
T30	Hex hd screw, 5/16-18 x 1 in.
T32	Lockwasher, 5/16 in.
T48	Lock washer, 1/2 in.
T49	Hex nut, 1/2-13
T53	Gasket and shim repair kit
T60	Hex hd screw, 5/16-18 x 7/8 in.



CASE ASSEMBLY
VERTICAL MOUNTING

PA TRANSMISSION ASSEMBLY
SPL82026
WATEROUS COMPANY
SOUTH ST. PAUL, MN 55075
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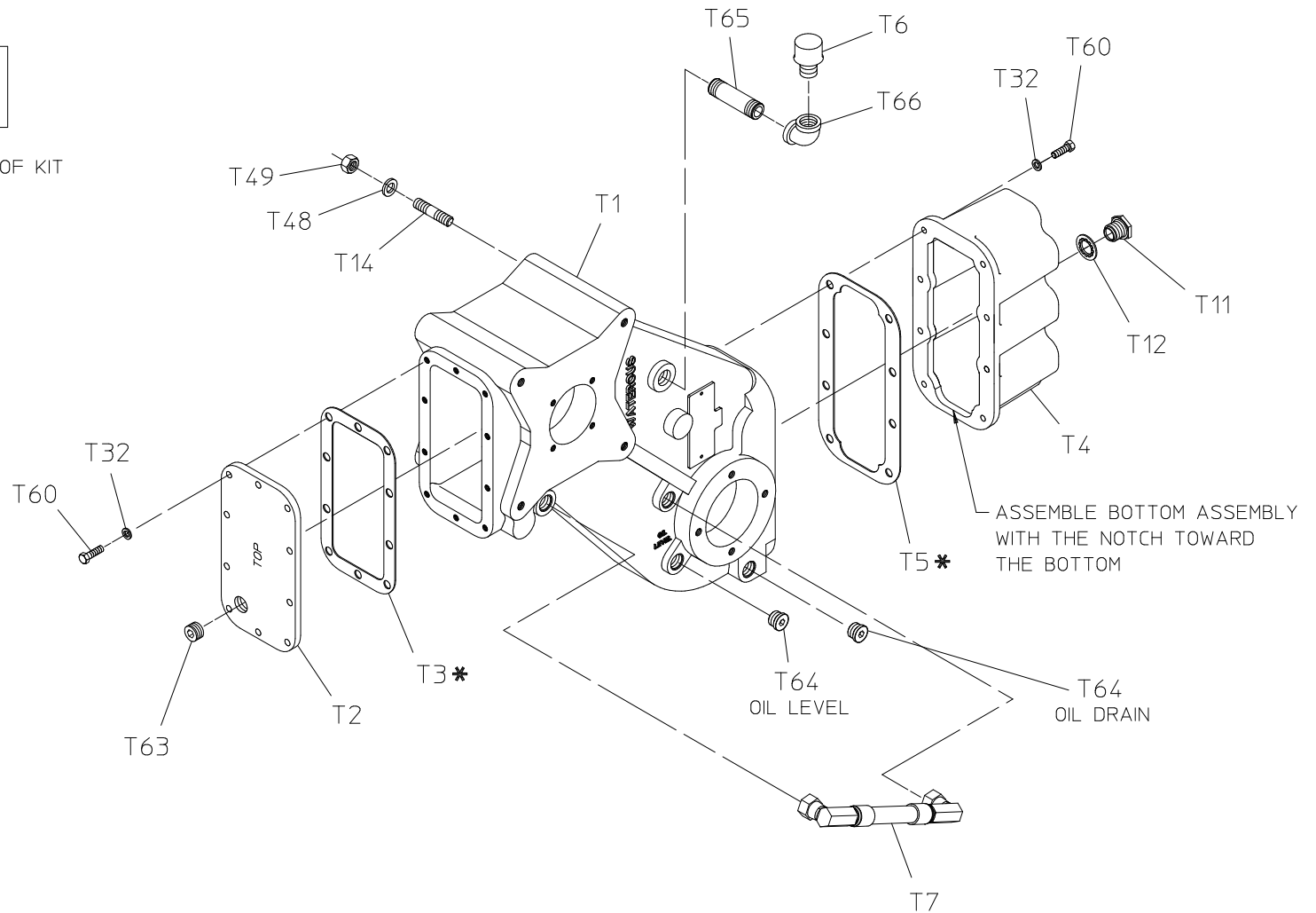
Case Assembly Horizontal Mounting

REF. NO.	DESCRIPTION
T1	Chain case assembly
T2	Top cover
T3	Top gasket
T4	Case bottom assembly
T5	Bottom gasket
T6	Breather, 1/2 NPT
T7	Hose assembly
T11	Drain plug
T12	Plug seal
T14	Stud, 1/2-13 x 1/2-13 x 2-1/4 in.

REF. NO.	DESCRIPTION
T32	Lockwasher, 5/16 in.
T48	Lock washer, 1/2 in.
T49	Hex nut, 1/2-13
T53	Gasket and shim repair kit
T60	Hex hd screw, 5/16-18 x 7/8 in.
T63	Headless pipe plug, 1/2 NPT
T64	Headless plug, 3/4-16 (magnetic)
T65	Pipe nipple, 1/2 x 3 in.
T66	Standard elbow, 90°, 1/2 in.

T53 GASKET AND SHIM KIT

* INDICATES COMPONENTS OF KIT



CASE ASSEMBLY
HORIZONTAL MOUNTING