



Document Number	Issue Date	Rev. Date
<b>SPL82747</b>	<b>01/06/04</b>	<b>11/29/17</b>

## TC10 Series P.T.O. Service Parts List

Components				See Page
Case Assembly	Viewed from Input Side			1, 2
	Viewed from Output Side			3, 4
	Spacers and Shims			5, 6
	Hardware	Lower Section of Case		7, 8
		Between Cap and Case	Model TC10B	9, 10
			Model TC10C	11, 12
			Model TC10D, TC10E, TC10F	13, 14
Driveline	Input and Output Shaft			15, 16
	Input Shaft Only			17, 18
Output Shaft	Single Output	Front (Input Shaft Side)		19, 20
		Rear (Output Shaft Side)		21, 22
	Dual Output	Front (Input Shaft Side) and Rear (Output Shaft Side)		23, 24

**Note: When ordering parts please supply P.T.O. serial number.**



## Case Assembly - Input Side of Case

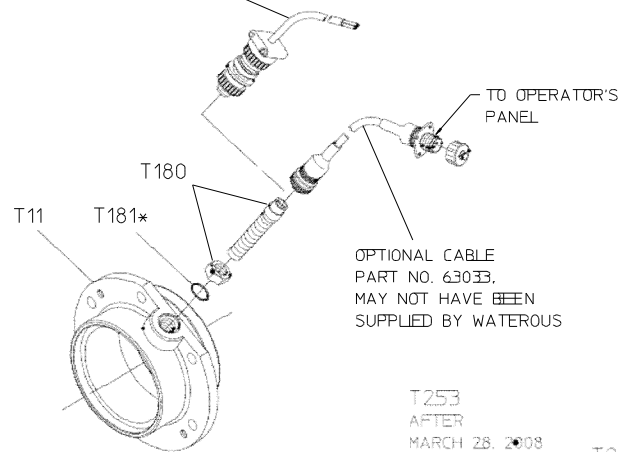
REF. NO.	DESCRIPTION
T9	Lock Washer, M10
T11	Drive Shaft Housing
T27	Breather, 1/2 NPT
T28	Chain Case Assembly
T46	Shift Shaft
T51	Heavy Spirol Pin, 5/16 x 1-3/8 in.
T58	Magnetic Drain Plug, 3/4-16 (Includes OOring T181)
T59	Spring Housing
T60	Heavy Spirol Pin, 1/4 x 1-1/4 in.
T61	Shift Lock Spring
T62	Shift Arm
T65	Case Cap

REF. NO.	DESCRIPTION
T99	Spacer (.010, .025, .031)
T100	Spacer
T135	Hex Hd Screw, M10 x 25 mm
T136	Hex Hd Screw, M10 x 20 mm
T141	Gasket Repair Kit
T180	Magnetic Tachometer Pickup
T181	O-ring, 5/8 x 3/4 in.
T182	O-ring, 4-3/4 x 5 in.
T245	O-ring, 5-1/4 x 5-1/2 in.
T246	Socket Hd Screw, M10 x 25 mm
T253	Set Screw, 5/8-18 x 5/8 in.
T254	V-ring Seal

### Hardware Torque Specifications:

Screw Size	Torque Specifications
M10	36-40 lb-ft
M12	64-69 lb-ft

OPTIONAL CABLE  
PART NO. V 3398.  
MAY NOT HAVE BEEN  
SUPPLIED BY WATEROUS



OPTIONAL CABLE  
PART NO. 63033.  
MAY NOT HAVE BEEN  
SUPPLIED BY WATEROUS

OPTIONAL ELECTRONIC  
TACHOMETER

T253  
AFTER  
MARCH 28, 2008

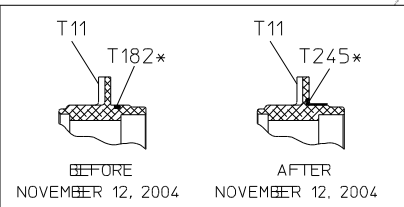
T11  
PRIOR TO  
MARCH 28, 2008

T100  
CONFIGURATION SHOWN  
FOR MODEL TC10.  
SEE PAGES 5 AND 6  
FOR SPECIFIC  
SPACER DETAILS

DRAIN VALVE  
MOUNTING PAD

T9  
T136

APPLY LOCTITE #242  
(BLUE) TO THREADS



T182\* OR  
T245\*  
SEE DETAIL  
AT LEFT

APPLY LOCTITE #242  
(BLUE) TO THREADS

T11  
AFTER  
MARCH 28, 2008

T246  
AFTER  
AUGUST 28, 2006

T135  
PRIOR TO  
AUGUST 28, 2006

WITHOUT TACHOMETER

# **CASE ASSEMBLY - INPUT SIDE OF CASE**

"C" DROP SHOWN (MODEL TC10C)

SEE PAGES 9 THROUGH 14  
FOR FLANGE HARDWARE

T254  
AFTER  
JULY 14, 2008

T51

T62

T60

T61

T46  
SEE PAGES 15 THRU 18  
FOR SPECIFIC  
DRIVELINE DETAILS

T99  
SEE PAGES 5 AND 6  
FOR SPECIFIC SPACER  
DETAILS

T28  
FURNISHED WITH PIVOT PIN (T37),  
O-RINGS (T39 & T49), SPIRAL PIN (T60),  
SLIP BEARINGS (T112 & T190),  
SERIAL PLATE (T139), DRIVE SCREWS (T140),  
V-RING SEAL (T254) AND FLANGE BEARING (T255)

T141

GASKET AND  
SHIM REPAIR KIT

\*PART OF T141 GASKET  
AND SHIM REPAIR KIT

SEE PAGES 7 AND 8 FOR CASE  
FLANGE HARDWARE

T181\*

T58

PRIMING PUMP  
MOUNTING PADS

TC10 SERIES TRANSMISSION

SPL82747

WATEROUS COMPANY

SOUTH ST. PAUL, MN 55075

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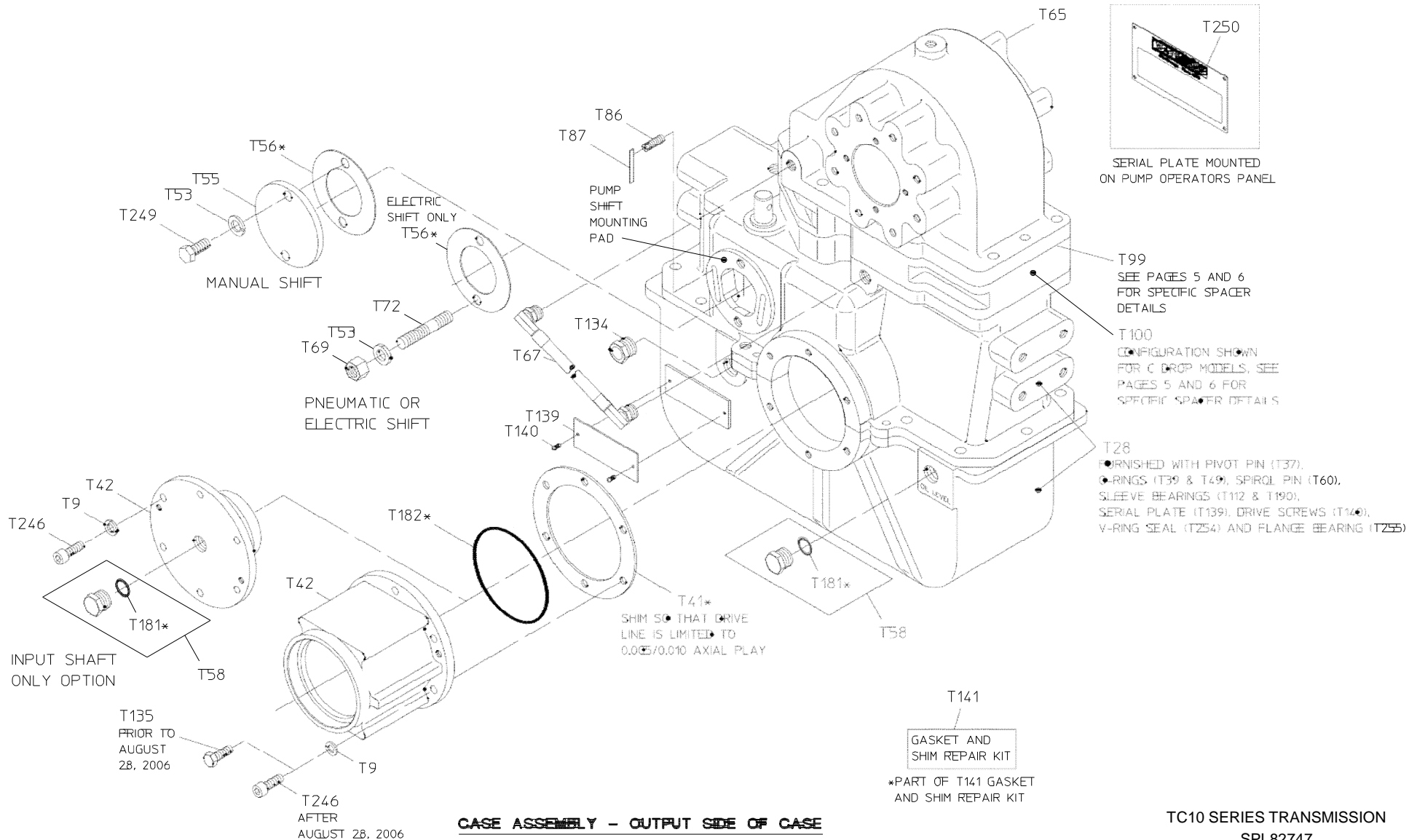
## Case Assembly - Output Side of Case

REF. NO.	DESCRIPTION
T9	Lock Washer, M10
T28	Chain Case Assembly
T41	Shim (.005, .007, .010)
T42	Coupling Shaft Housing
T53	Lock Washer, M12
T55	Shift Cover
T56	Shift Cover Gasket
T58	Magnetic Drain Plug, 3/4-16 (Includes O-ring T181)
T65	Case Cap
T67	Hose
T69	Hex Nut, M12
T72	Threaded Stud, M12 x 35 mm
T86	Adjusting Screw

REF. NO.	DESCRIPTION
T87	Adjusting Screw Retainer
T99	Spacer (.010, .025, .031)
T100	Spacer
T134	Sight Plug
T135	Hex Hd Screw, M10 x 25 mm
T139	Serial Plate
T140	Round Hd Drive Screw, No. 6 6 1/4 in.
T141	Gasket Repair Kit
T181	O-ring, 5/8 x 3/4 in.
T182	O-ring, 4-3/4 x 5 in.
T246	Socket Hd Screw, M10 x 25 mm
T249	Hex Hd Screw, M12 x 25 mm
T250	Operator's Panel Serial Plate

### Hardware Torque Specifications:

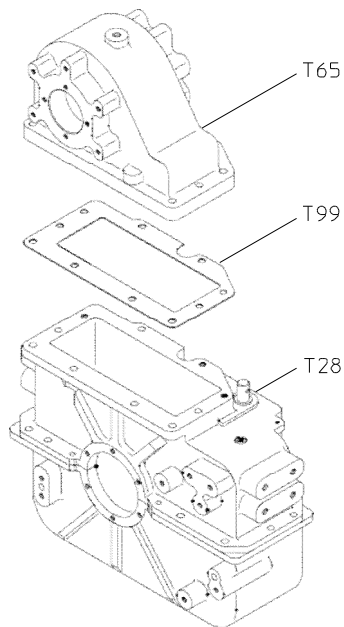
Screw Size	Torque Specifications
M10	36-40 lb-ft
M12	64-69 lb-ft



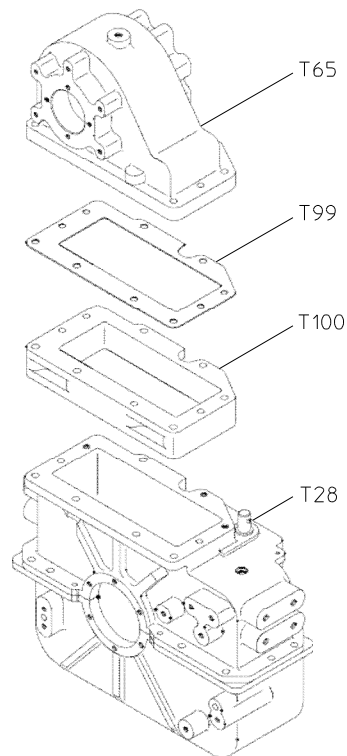
## Case Assembly - Spacers and Shims

REF. NO.	DESCRIPTION
T28	Chain Case Assembly
T65	Case Cap

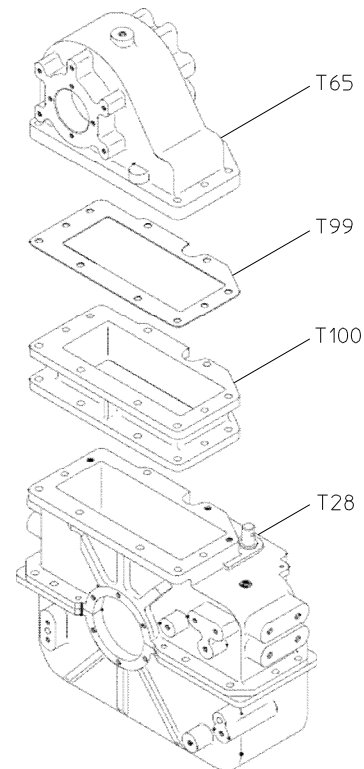
REF. NO.	DESCRIPTION
T99	Spacer (.010, .025, .031)
T100	Spacer



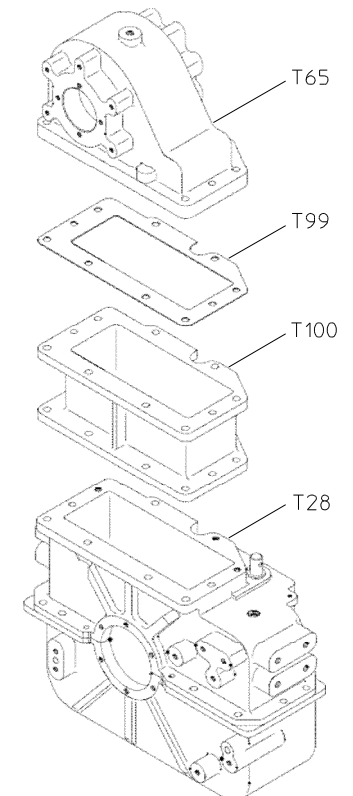
MODEL TC10B



MODEL TC10C



MODEL TC10D



MODEL TC10E & TC10F

RATIOS	QTY OF T99 SHIMS														
	MODEL TC10B			MODEL TC10C			MODEL TC10D			MODEL TC10E			MODEL TC10F		
	.010 BROWN	.025 WHITE	.031 ORANGE	.010 BROWN	.025 WHITE	.031 ORANGE	.010 BROWN	.025 WHITE	.031 ORANGE	.010 BROWN	.025 WHITE	.031 ORANGE	.010 BROWN	.025 WHITE	.031 ORANGE
1.14	1	1	0	4	2	0	1	0	3	0	3	0	0	1	1
1.27	1	0	0	1	6	2	1	0	2	0	1	1	0	0	1
1.41	0	0	0	1	2	0	0	3	0	0	1	1	0	0	1
1.48	3	1	1	3	2	0	2	0	1	0	0	1	1	0	0
1.58	0	0	0	2	0	0	1	1	0	0	1	0	0	0	0
1.69	5	0	0	0	0	0	0	1	0	0	1	3	0	4	0
1.79	0	0	2	0	0	0	1	0	0	2	1	1	1	1	1
1.88	2	0	0	0	0	0	0	1	0	1	1	1	0	1	1
1.97	1	1	1	0	0	1	0	1	1	0	2	0	2	1	0
2.03	0	0	0	1	1	0	0	0	2	1	1	0	3	0	0
2.27	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
2.46	2	1	0	0	0	3	0	1	0	1	0	3	1	0	3
2.73	0	0	3	1	1	0	2	1	1	0	1	1	0	1	1

**CASE ASSEMBLY - SPACERS AND SHIMS**



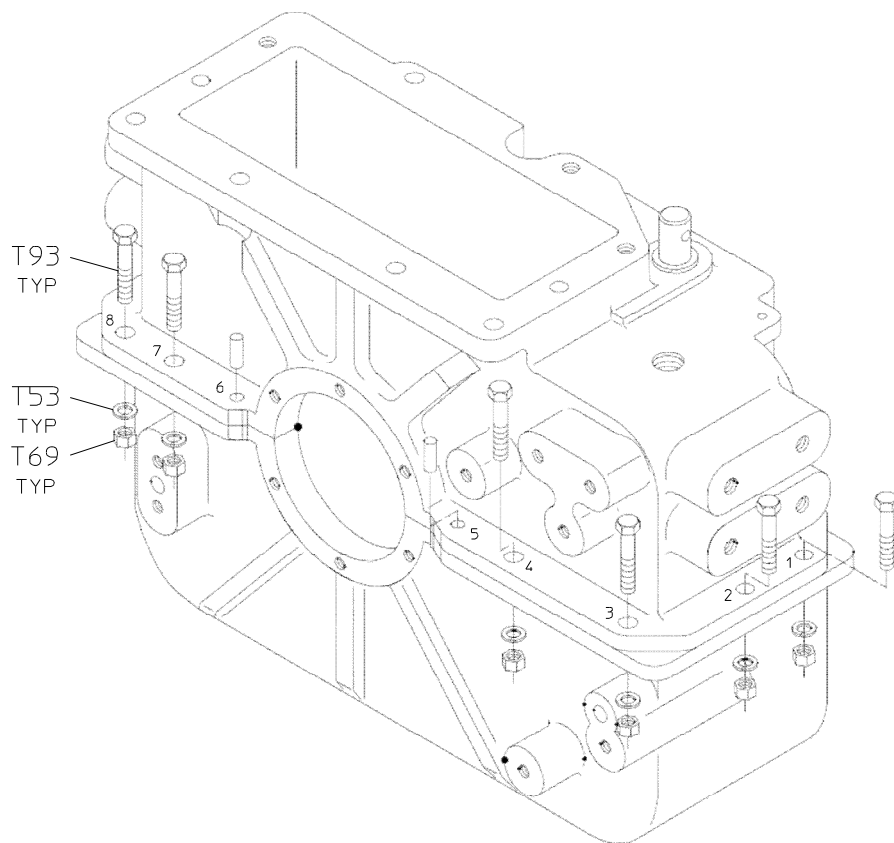
## Case Hardware - Lower Section

REF. NO.	DESCRIPTION
T52	Hex Hd Screw, M12 x 30 mm
T53	Lock Washer, M12
T69	Hex Nut, M12

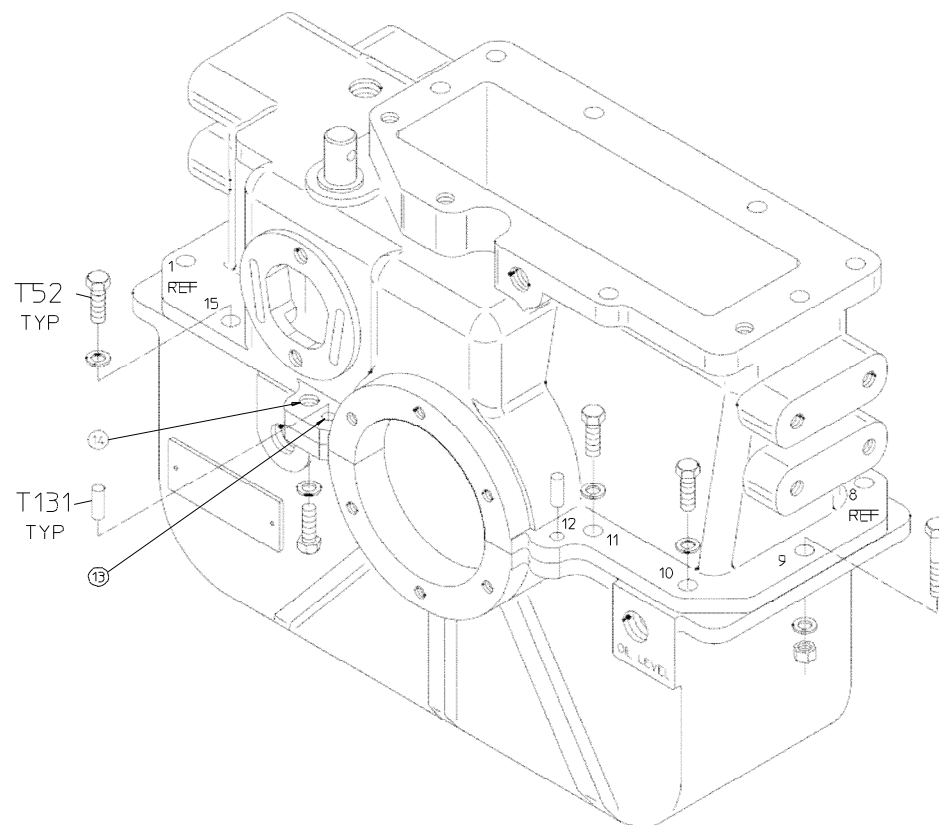
REF. NO.	DESCRIPTION
T93	Hex Hd Screw, M12 x 45 mm
T131	Dowel Pin, 3/4 x 1 in.

### Hardware Torque Specifications:

Screw Size	Torque Specifications
M10	36-40 lb-ft
M12	64-69 lb-ft



**INPUT SIDE OF CASE**



**OUTPUT SIDE OF CASE**

**CASE FLANGE HARDWARE**

REF NO.	HARDWARE DESCRIPTION	HOLE NUMBER															QTY
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
T52	HEX HD SCREW, M12 X 30mm										1	1			1	1	4
T53	LOCK WASHER, M12	1	1	1	1			1	1	1	1	1			1	1	11
T69	HEX NUT, M12	1	1	1	1			1	1	1							7
T93	HEX HD SCREW, M12 X 45mm	1	1	1	1			1	1	1							7
T131	DOWEL PIN, 3/8 X 1"					1	1						1	1			4

**CASE HARDWARE — LOWER SECTION**

TC10 SERIES TRANSMISSION  
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WATEROUS COMPANY  
SOUTH ST. PAUL, MN 55075  
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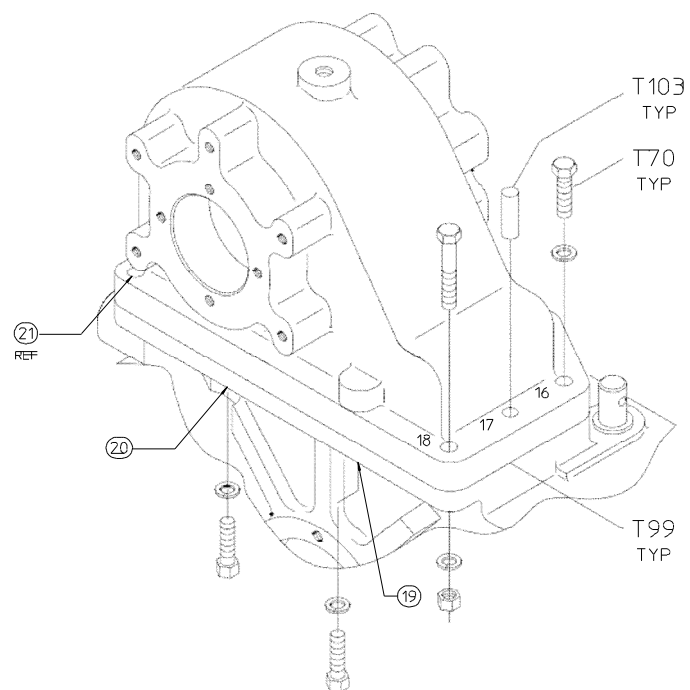
## Case Hardware - Between Cap and Case, TC10B

REF. NO.	DESCRIPTION
T53	Lock Washer, M12
T68	Hex Hd Screw, M12 x 60 mm
T69	Hex Nut, M12

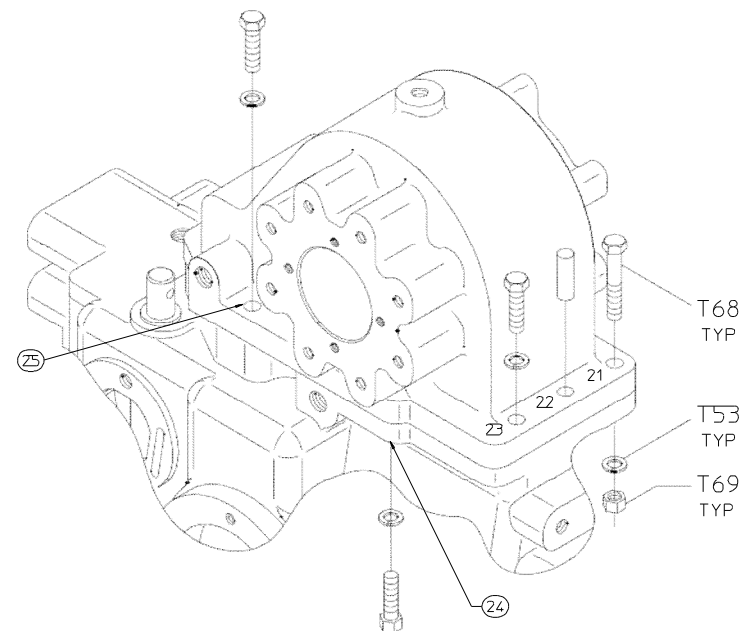
REF. NO.	DESCRIPTION
T70	Hex Hd Scerw, M12 x 40 mm
T99	Spacer (.010, .025, .031)
T103	Dowel Pin, 1/2 x 1-1/2 in.

### Hardware Torque Specifications:

Screw Size	Torque Specifications
M10	36-40 lb-ft
M12	64-69 lb-ft



**INPUT SIDE OF CASE**



**OUTPUT SIDE OF CASE**

NOTE:  
HOLES 19, 20 AND 24 ARE BLIND HOLES THAT ARE  
TAPPED INTO THE CAP AND ARE NOT SHOWN.

FLANGE HARDWARE BETWEEN CAP (T65) AND CASE (T28)

REF NO.	HARDWARE DESCRIPTION	HOLE NUMBER										QTY
		16	17	18	19	20	21	22	23	24	25	
T53	LOCKWASHER, M12	1		1	1	1	1		1	1	1	8
T68	HEX HD SCREW, M12 X 60mm			1			1					2
T69	HEX NUT, M12			1			1					2
T70	HEX HD SCREW, M12 X 40mm	1			1	1			1	1	1	6
T103	DOWEL PIN, 1/2 X 1 1/2		1					1				2

**CASE HARDWARE — BETWEEN CAP AND CASE, TC10B**

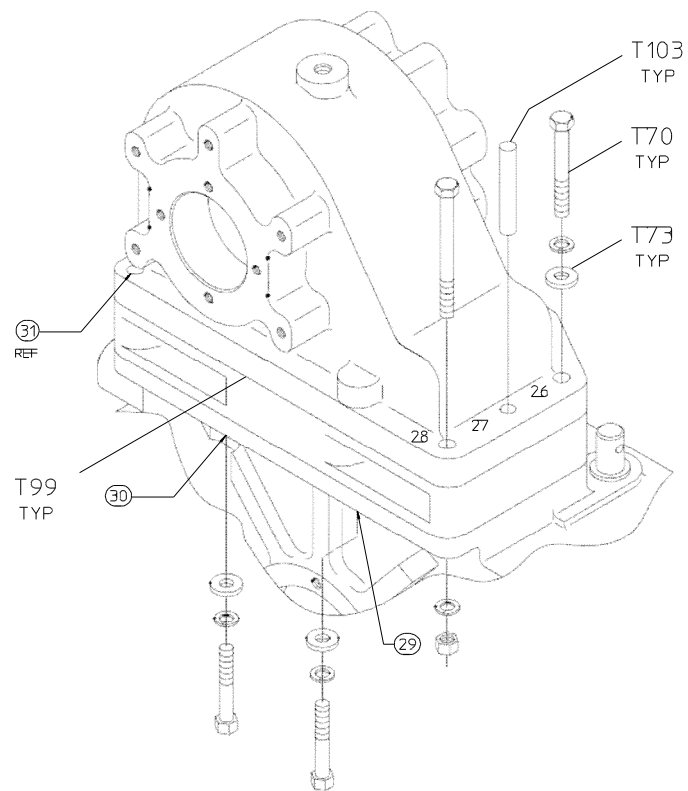
## Case Hardware - Between Cap and Case, TC10C

REF. NO.	DESCRIPTION
T53	Lock Washer, M12
T68	Hex Hd Screw, M12 x 100 mm
T69	Hex Nut, M12
T70	Hex Hd Scerw, M12 x 90 mm

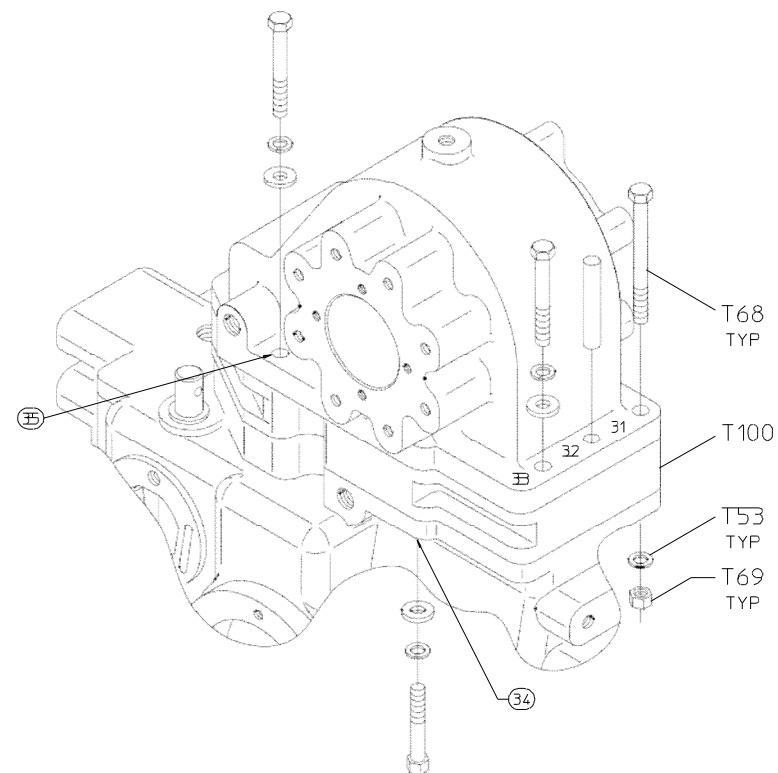
REF. NO.	DESCRIPTION
T73	Extra Thick Washer, 1/2 in.
T99	Spacer (.010, .025, .031)
T100	Spacer
T103	Dowel Pin, 1/2 x 1-1/2 in.

### Hardware Torque Specifications:

Screw Size	Torque Specifications
M10	36-40 lb-ft
M12	64-69 lb-ft



**INPUT SIDE OF CASE**



**OUTPUT SIDE OF CASE**

FLANGE HARDWARE BETWEEN CAP (T65) AND CASE (T28)

REF NO.	HARDWARE DESCRIPTION	HOLE NUMBER											QTY
		26	27	28	29	30	31	32	33	34	35		
T53	LOCKWASHER, M12	1		1	1	1	1		1	1	1	8	
T68	HEX HD SCREW, M12 X 100mm			1			1					2	
T69	HEX NUT, M12			1			1					2	
T70	HEX HD SCREW, M12 X 90mm	1			1	1			1	1	1	6	
T73	WASHER-EXTRA THICK, 1/2	1			1	1			1	1	1	6	
T103	DOWEL PIN, 1/2 X 3		1					1				2	

**CASE HARDWARE - BETWEEN CAP AND CASE, TC100**

NOTE:  
HOLES 29, 30 AND 34 ARE BLIND HOLES THAT ARE TAPPED INTO THE CAP AND ARE NOT SHOWN.

TC10 SERIES TRANSMISSION  
SPL82747  
WATEROUS COMPANY  
SOUTH ST. PAUL, MN 55075  
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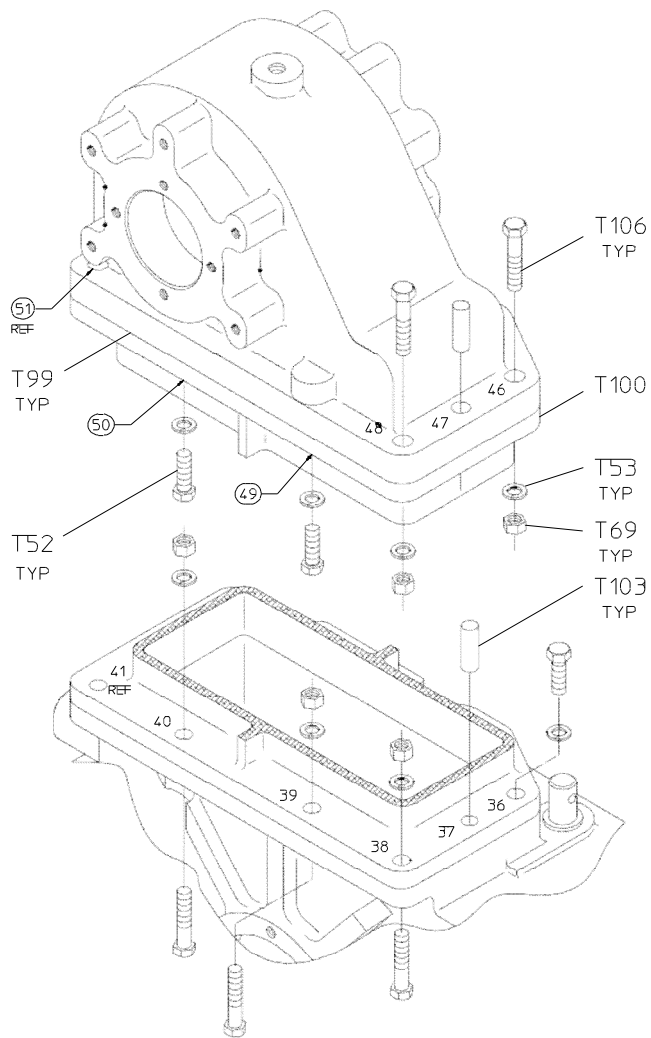
## Case Hardware - Between Cap and Case, TC10D, TC10E & TC10F

REF. NO.	DESCRIPTION
T52	Hex Hd Screw, M12 x 30 mm
T53	Lock Washer, M12
T69	Hex Nut, M12
T99	Spacer (.010, .025, .031)

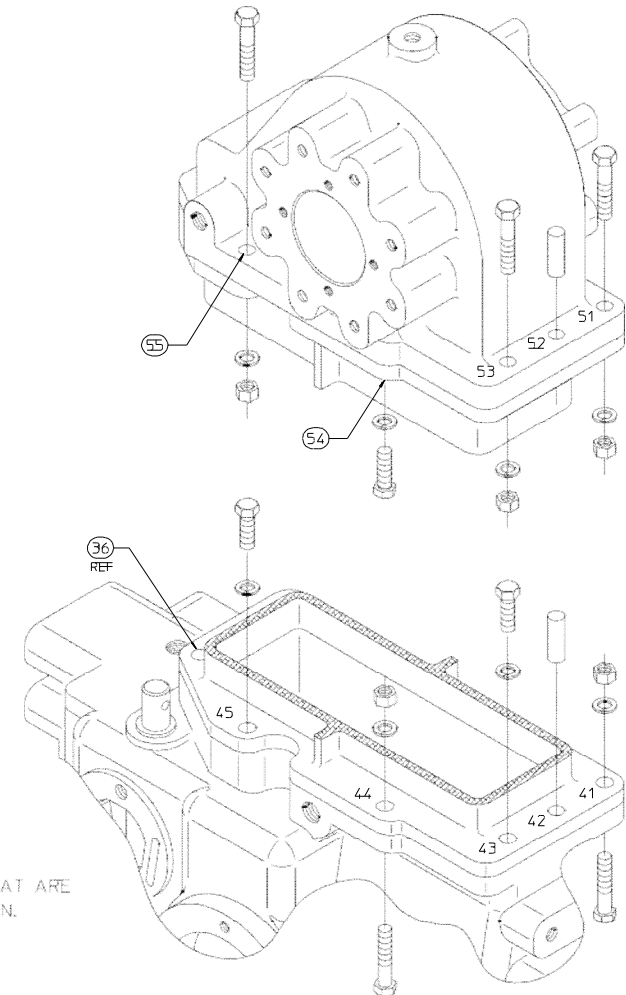
REF. NO.	DESCRIPTION
T100	Spacer
T103	Dowel Pin, 1/2 x 1-1/2 in.
T106	Hex Hd Screw, M12 x 50 mm

### Hardware Torque Specifications:

Screw Size	Torque Specifications
M10	36-40 lb-ft
M12	64-69 lb-ft



**INPUT SIDE OF CASE**



**OUTPUT SIDE OF CASE**

NOTE:  
HOLES 49, 50 AND 54 ARE BLIND HOLES THAT ARE  
TAPPED INTO THE CAP AND ARE NOT SHOWN.

FLANGE HARDWARE BETWEEN CAP (T45) AND CASE (T28)

REF NO.	HARDWARE DESCRIPTION	HOLE NUMBER																				QTY
		36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	
T52	HEX HD SCREW, M12 X 30mm	1							1		1				1	1				1		6
T53	LOCKWASHER, M12	1		1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	16
T69	HEX NUT, M12			1	1	1	1			1	1	1		1			1		1	1	1	10
T103	DOWEL PIN, 1/2 X 1-1/2		1					1					1					1				4
T106	HEX HD SCREW, M12 X 50mm			1	1	1	1			1		1		1			1		1	1	1	10

**CASE HARDWARE - BETWEEN CAP AND CASE, TC10D, TC10E & TC10F**

TC10 SERIES TRANSMISSION  
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## Driveline - Input and Output Shaft

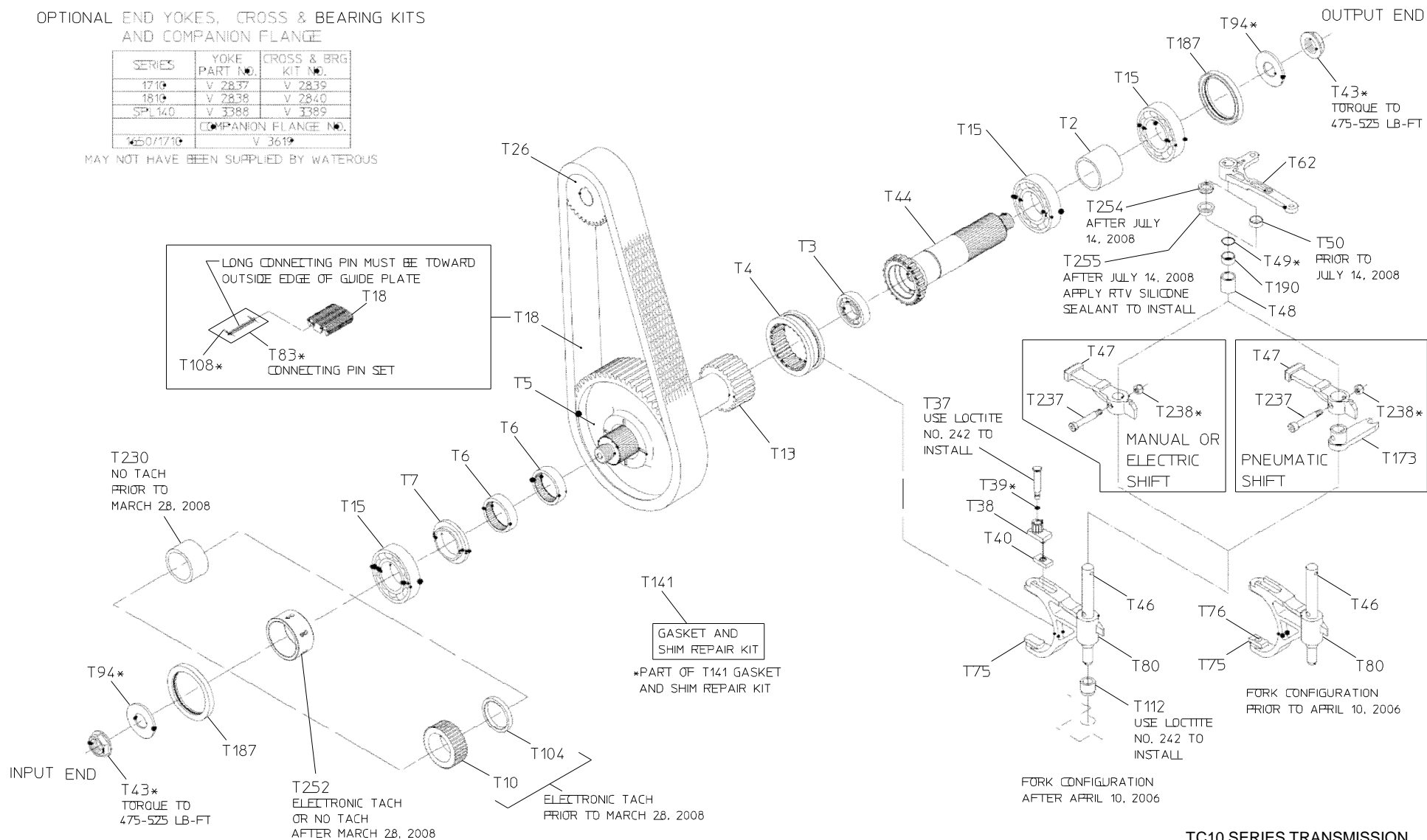
REF. NO.	DESCRIPTION
T2	Shaft Coupling Spacer
T3	Ball Bearing
T4	Shift Collar
T5	Drive Sprocket
T6	Needle Bearing
T7	Thrust Washer
T10	Tachometer Pulse Generator
T13	Drive Shaft
T15	Ball Bearing
T18	Chain
T37	Pivot Pin, 5/8 x 2-3/4 in.
T38	Locking Arm
T39	O-ring, 1/4 x 3/8 in.
T40	Shifter Shoe
T43	Self-Locking Nut, 1-1/4-18
T44	Coupling Shaft
T46	Shift Shaft
T47	Sector Gear
T48	Sector Spacer
T49	O-ring, 7/8 x 1 in.

REF. NO.	DESCRIPTION
T50	Sleeve Bearing
T62	Shift Arm
T75	Shifter Shoe
T76	Shifter Shoe Stud
T80	Shift Fork Subassembly
T83	Connecting Set Pin
T94	Plain Washer, 1-1/4 in.
T104	Drive Shaft Spacer
T108	Spirol Pin, 1/16 x 1/4 in.
T112	Sleeve
T141	Gasket Repair Kit
T173	Shift Lever
T187	Oil Seal, 3-1/2 x 4-3/8 in.
T190	Sleeve Bearing
T230	Drive Shaft Spacer
T237	Shoulder Screw, 3/8 x 1-3/4 in.
T238	Lock Nut, 5/16-18
T252	Tachometer Ring
T254	V-Ring Seal
T255	Flange Bearing

OPTIONAL END YOKES, CROSS & BEARING KITS  
AND COMPANION FLANGE

SERIES	YOKE PART NO.	CROSS & BRG KIT NO.
1710	V 2837	V 2839
1810	V 2838	V 2840
SPL 140	V 3388	V 3389
	COMPANION FLANGE NO.	
1650/1710	V 3619	

MAY NOT HAVE BEEN SUPPLIED BY WATEROUS



DEVELOPMENT - INPUT AND OUTPUT SHAFT

TC10 SERIES TRANSMISSION  
SPL82747  
WATEROUS COMPANY  
SOUTH ST. PAUL, MN 55075  
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## Driveline - Input and Shaft Only

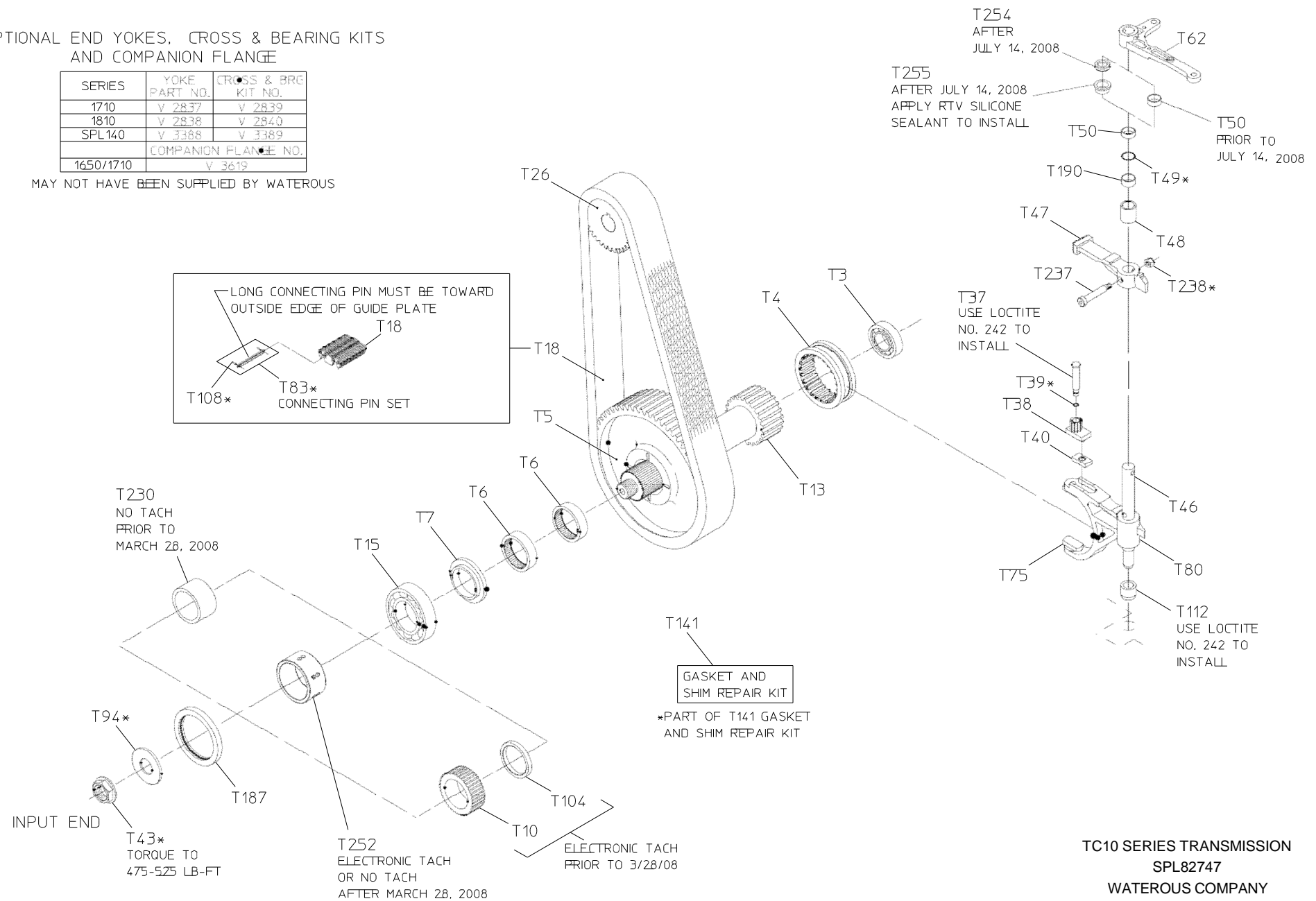
REF. NO.	DESCRIPTION
T3	Ball Bearing
T4	Shift Collar
T5	Drive Sprocket
T6	Needle Bearing
T7	Thrust Washer
T10	Tachometer Pulse Generator
T13	Drive Shaft
T15	Ball Bearing
T18	Chain
T37	Pivot Pin, 5/8 x 2-3/4 in.
T38	Locking Arm
T39	O-ring, 1/4 x 3/8 in.
T40	Shifter Shoe
T43	Self-Locking Nut, 1-1/4-18
T46	Shift Shaft
T47	Sector Gear
T48	Sector Spacer
T49	O-ring, 7/8 x 1 in.
T50	Sleeve Bearing

REF. NO.	DESCRIPTION
T62	Shift Arm
T75	Shifter Shoe
T76	Shifter Shoe Stud
T80	Shift Fork Subassembly
T83	Connecting Set Pin
T94	Plain Washer, 1-1/4 in.
T104	Drive Shaft Spacer
T108	Spirol Pin, 1/16 x 1/4 in.
T112	Sleeve
T141	Gasket Repair Kit
T187	Oil Seal, 3-1/2 x 4-3/8 in.
T190	Sleeve Bearing
T230	Drive Shaft Spacer
T237	Shoulder Screw, 3/8 x 1-3/4 in.
T238	Lock Nut, 5/16-18
T252	Tachometer Ring
T254	V-Ring Seal
T255	Flange Bearing

## OPTIONAL END YOKES, CROSS & BEARING KITS AND COMPANION FLANGE

SERIES	YOKE PART NO.	CROSS & BRG KIT NO.
1710	V 2837	V 2839
1810	V 2838	V 2840
SPL140	V 3388	V 3389
	COMPANION FLANGE NO.	
1650/1710	V 3619	

MAY NOT HAVE BEEN SUPPLIED BY WATEROUS



### DRIVELINE - INPUT SHAFT ONLY

TC10 SERIES TRANSMISSION  
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WATEROUS COMPANY  
SOUTH ST. PAUL, MN 55075  
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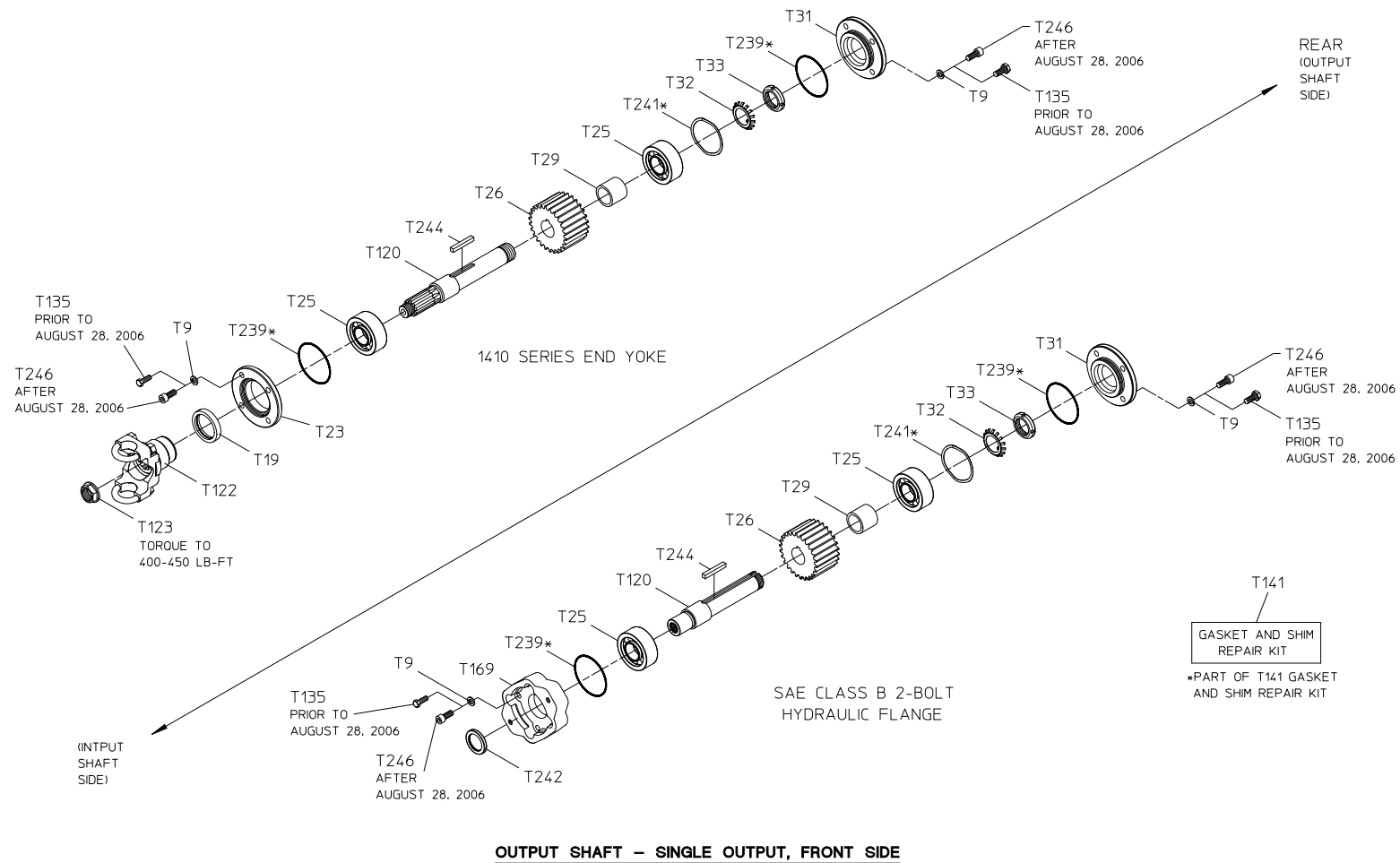
## Output Shaft - Single Output, Front Side

REF. NO.	DESCRIPTION
T9	Lock Washer, M10
T19	Oil Seal
T23	Oil Seal Housing
T25	Ball Bearing
T26	Driven Sprocket
T29	Spacer
T31	Bearing Cover Gasket
T32	Bearing Nut Washer
T33	Bearing Lock Nut
T120	Driven Shaft

REF. NO.	DESCRIPTION
T122	End Yoke
T123	Self-Locking Nut, 1 in.
T135	Hex Hd Screw, M10 x 25 mm
T141	Gasket Repair Kit
T169	Hydraulic Pump Adapter
T239	O-ring, 2-3/4 x 3 in.
T241	Wave Spring
T242	Oil Seal
T244	Square Key, 5/16 x 2-5/16 in.
T246	Socket Hd Screw, M10 x 25 mm

### Hardware Torque Specifications:

Screw Size	Torque Specifications
M10	36-40 lb-ft
M12	64-69 lb-ft



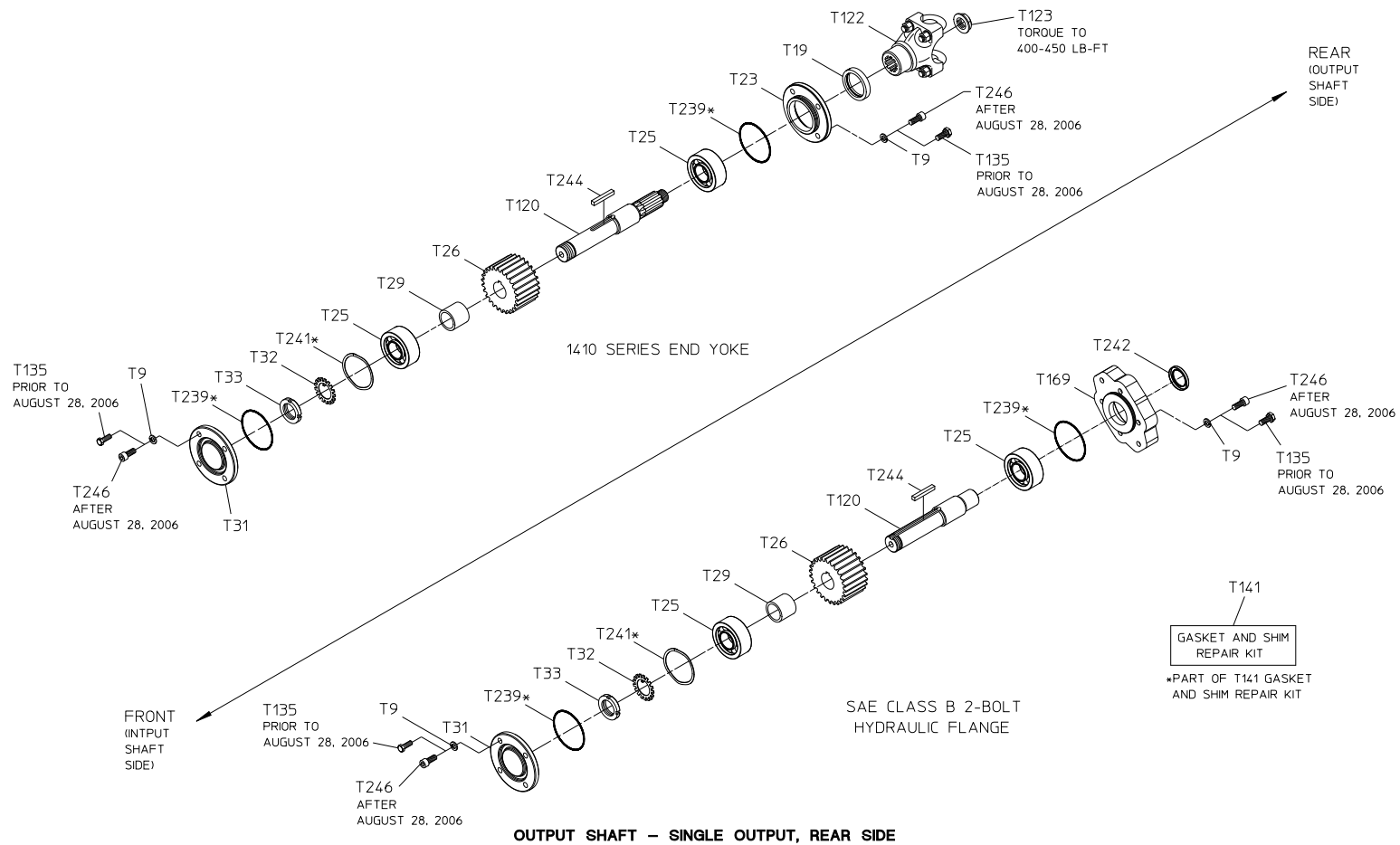
## Output Shaft - Single Output, Rear Side

REF. NO.	DESCRIPTION
T9	Lock Washer, M10
T19	Oil Seal
T23	Oil Seal Housing
T25	Ball Bearing
T26	Driven Sprocket
T29	Spacer
T31	Bearing Cover Gasket
T32	Bearing Nut Washer
T33	Bearing Lock Nut
T120	Driven Shaft

REF. NO.	DESCRIPTION
T122	End Yoke
T123	Self-Locking Nut, 1 in.
T135	Hex Hd Screw, M10 x 25 mm
T141	Gasket Repair Kit
T169	Hydraulic Pump Adapter
T239	O-ring, 2-3/4 x 3 in.
T241	Wave Spring
T242	Oil Seal
T244	Square Key, 5/16 x 2-5/16 in.
T246	Socket Hd Screw, M10 x 25 mm

### Hardware Torque Specifications:

Screw Size	Torque Specifications
M10	36-40 lb-ft
M12	64-69 lb-ft





## Output Shaft - Dual Output, Both Front and Rear Sides

REF. NO.	DESCRIPTION
T9	Lock Washer, M10
T19	Oil Seal
T23	Oil Seal Housing
T25	Ball Bearing
T26	Driven Sprocket
T29	Spacer
T120	Driven Shaft
T122	End Yoke
T123	Self-Locking Nut, 1 in.

REF. NO.	DESCRIPTION
T135	Hex Hd Screw, M10 x 25 mm
T141	Gasket Repair Kit
T169	Hydraulic Pump Adapter
T239	O-ring, 2-3/4 x 3 in.
T241	Wave Spring
T242	Oil Seal
T243	Retaining Ring
T244	Square Key, 5/16 x 2-5/16 in.
T246	Socket Hd Screw, M10 x 25 mm

### Hardware Torque Specifications:

Screw Size	Torque Specifications
M10	36-40 lb-ft
M12	64-69 lb-ft

