

Dimensional Drawings for C20 Series Transmission

As used with CM, CS, CG and CX Series Pump Models

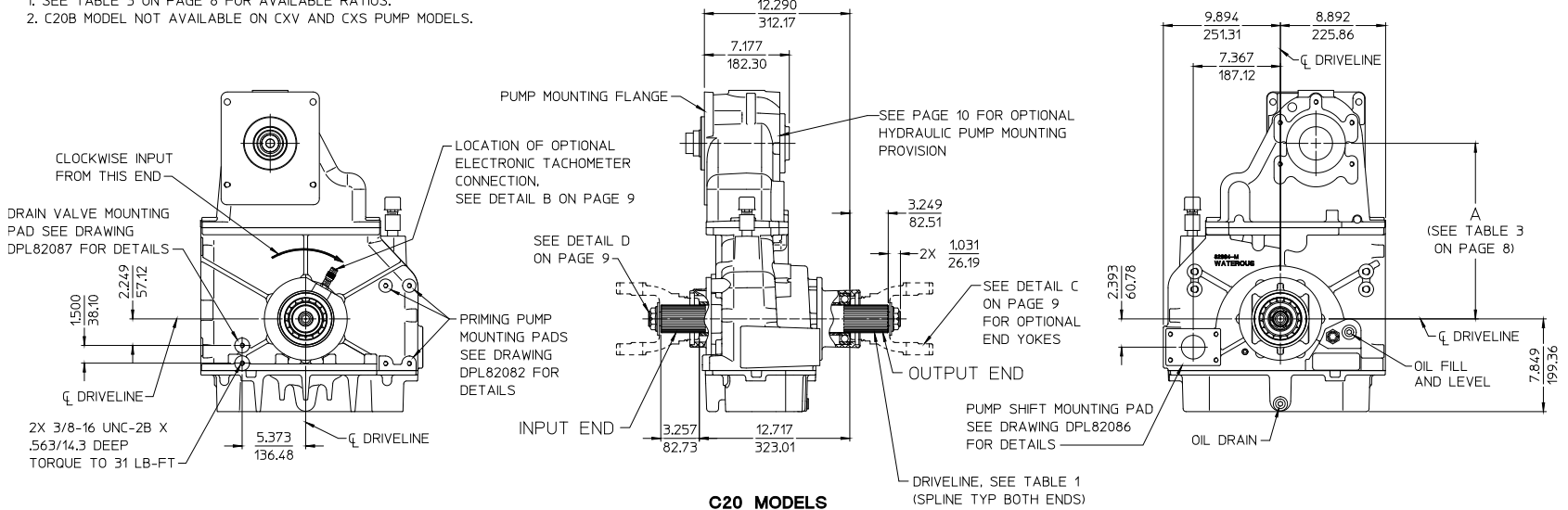
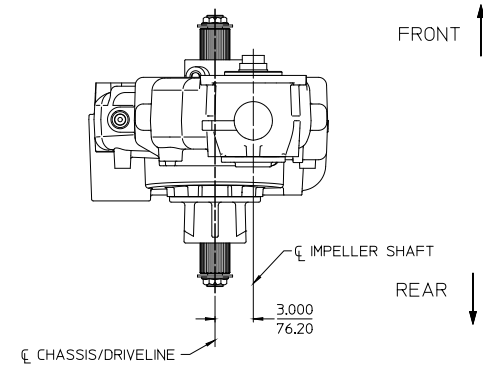
Index:

Pump Model	Transmission Mounting on Pump	Pump Mounting on Transmission	See Page							
			Transmission			Optional Items				Mounting Bracket Attachment Locations
			Input and Output Shaft	Input Shaft Only	Ratio and Drop Dimensions	End Yokes and Companion Flanges	Electronic Tachometer	Hydraulic Pump Mounting Provision	Oil Cooler	
CM and CS Series	Rear of Pump	-	2	3	8	9	9	10	13	-
	Front of Pump	-	4	5	8	9	9	-	-	-
CG Series	-	Front (Input Shaft) Side	2	3	8	9	9	-	-	11
CX Series	-	Front (Input Shaft) Side	2	3	8	9	9	-	-	11
	-	Rear (Output Shaft) Side	6	7	8	9	9	-	-	12

TABLE 1 - AVAILABLE DRIVELINE / MODELS								
DRIVELINE			OPTIONAL END YOKES AND COMPANION FLANGES AVAILABLE FROM WATEROUS, SEE DETAIL C ON PAGE 9					MODEL
TYPE	SIZE	SPLINE	YOKE		CROSS AND BEARING KIT	COMPANION FLANGE		C20B C20C C20D C20E C20F
			SPICER SERIES	PART NUMBER		SPICER SERIES	PART NUMBER	
EXTRA HEAVY DUTY	2.35 INCH	2.350-46T INVOLUTE	1710	V 2837	V 2839	1480/1610	V 3719	
			1810	V 2838	V 2840	1650/1710	V 3619	
			SPL140	V 3388	V 3389	ISO 8667	63714	
			1710 HR	V 4101	--	--	--	
			1810 HR	V 4102	--	--	--	

TABLE 2 - C20 SERIES TRANSMISSION AVAILABLE FOR:		
PUMP MODEL	IMPELLER SHAFT TYPE	TRANSMISSION MODEL
CM, CMU, CM/CGV, CS, CSU	SEPARABLE	C20B, C20C, C20D, C20E, C20F
CGV, CGVG, CXV, CXS	ONE-PIECE	

- NOTES:
 1. SEE TABLE 3 ON PAGE 8 FOR AVAILABLE RATIOS.
 2. C20B MODEL NOT AVAILABLE ON CXV AND CXS PUMP MODELS.



**C20 MODELS
 INPUT AND OUTPUT SHAFT**

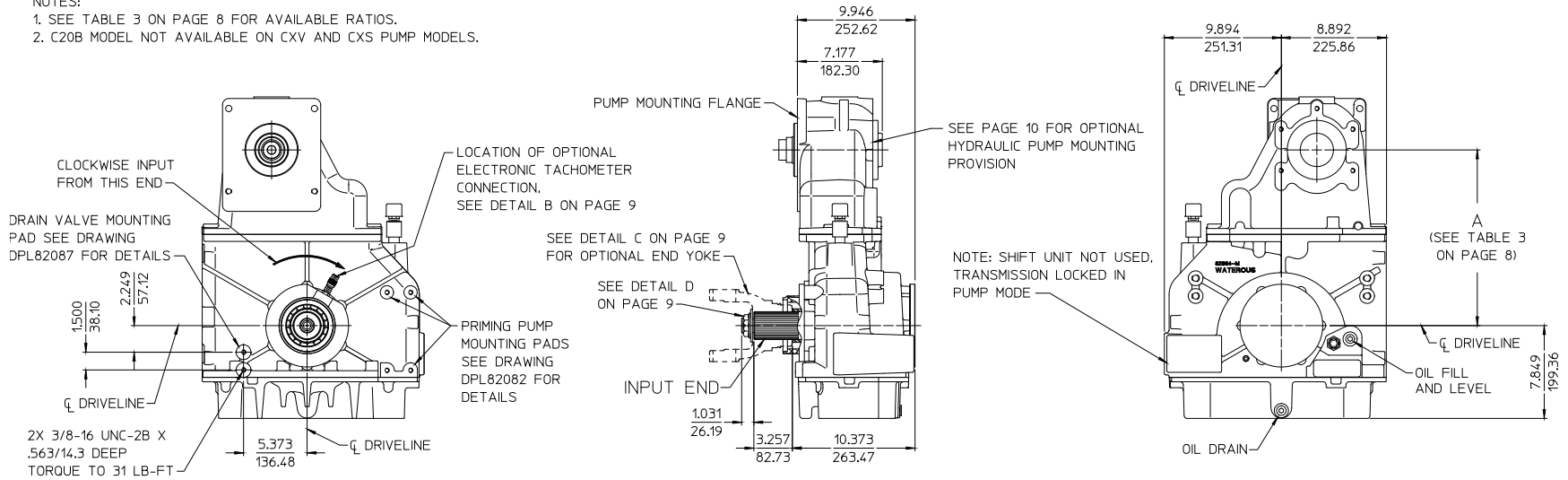
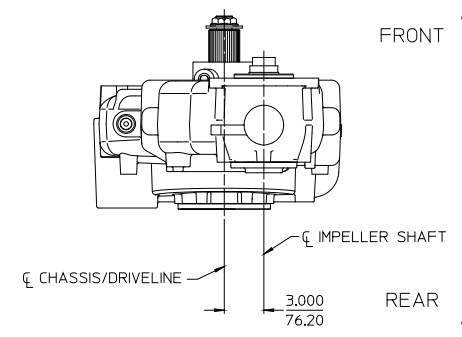
REAR MOUNTED TRANSMISSION ON PUMP OR
 FRONT (INPUT SHAFT) SIDE MOUNTED PUMP ON TRANSMISSION
 SPLIT SHAFT DRIVE, CLOCKWISE INPUT
 (C20D 2.27 RATIO SHOWN)

ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
 (INCH / MILLIMETER)

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**C20 MODELS
 INPUT SHAFT ONLY**

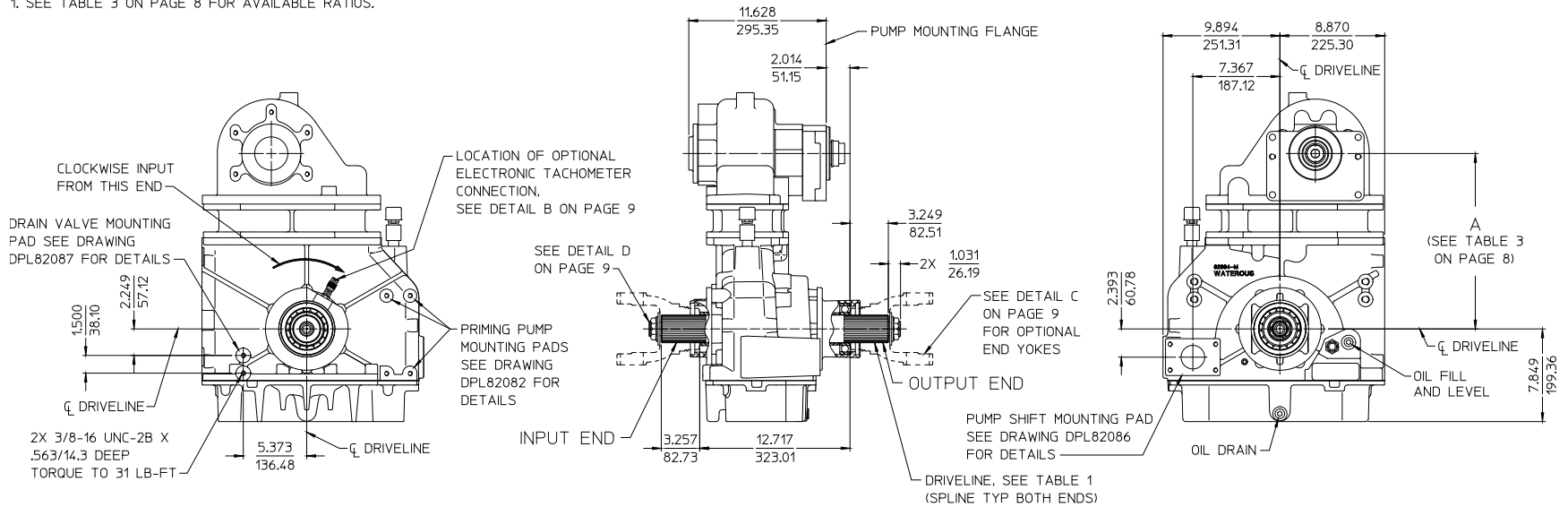
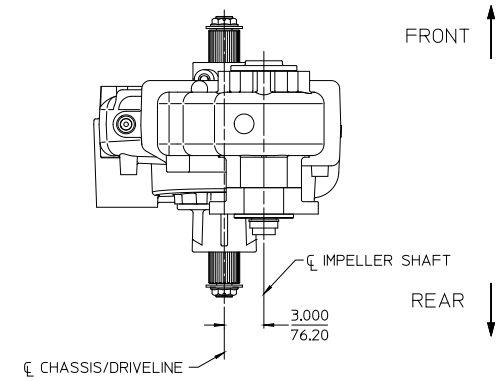
REAR MOUNTED TRANSMISSION ON PUMP OR
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NOTE:
1. SEE TABLE 3 ON PAGE 8 FOR AVAILABLE RATIOS.



C20 MODELS
INPUT AND OUTPUT SHAFT

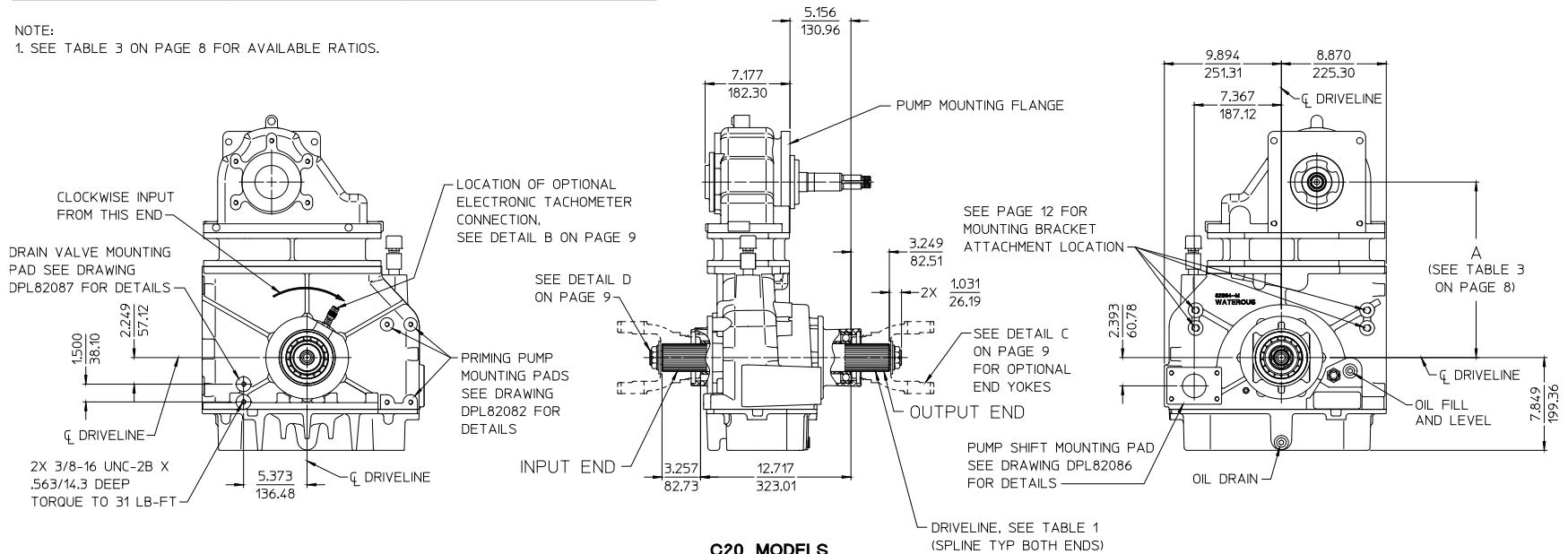
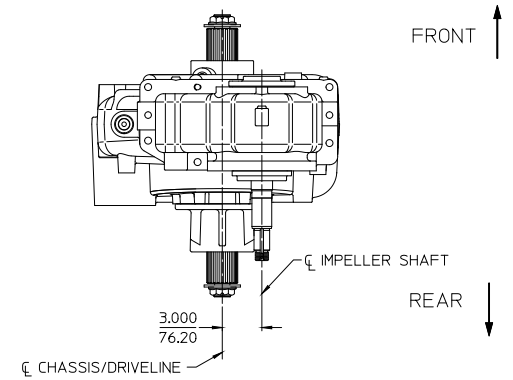
FRONT MOUNTED TRANSMISSION ON PUMP
SPLIT SHAFT DRIVE, CLOCKWISE INPUT
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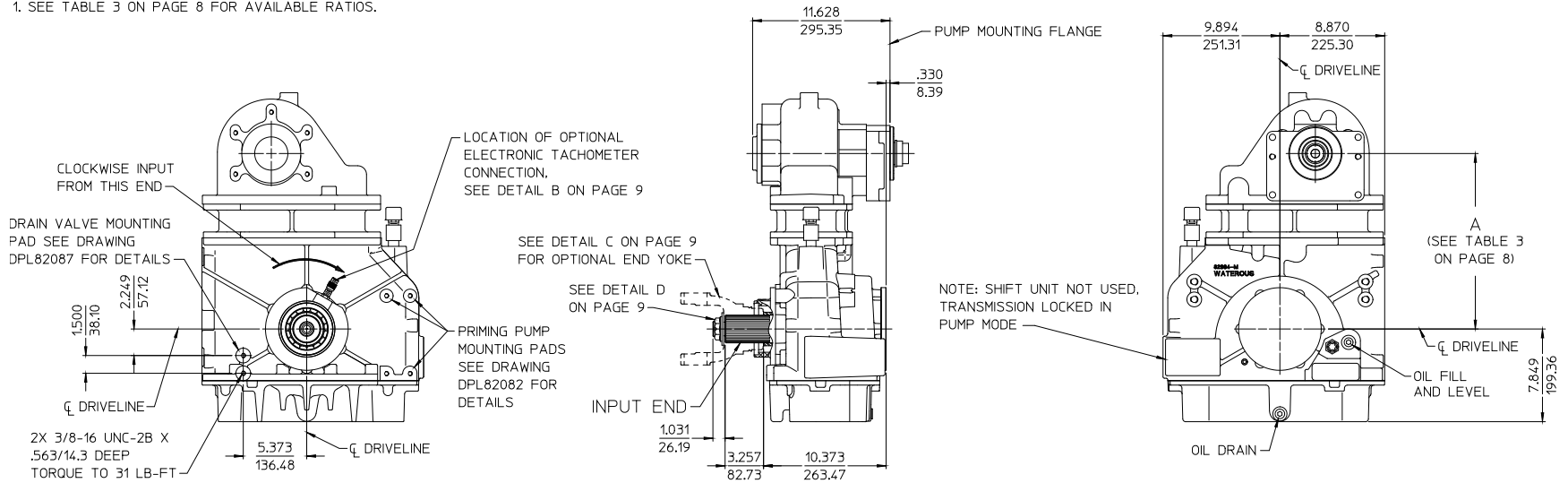
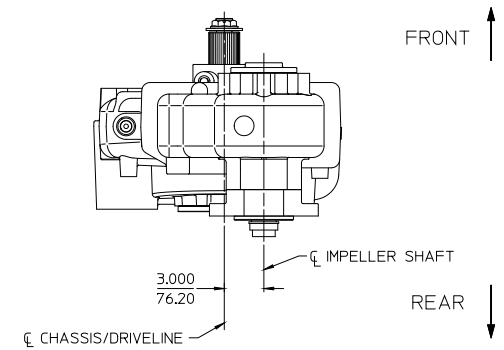
REAR (OUTPUT SHAFT) SIDE PUMP MOUNTING ON TRANSMISSION
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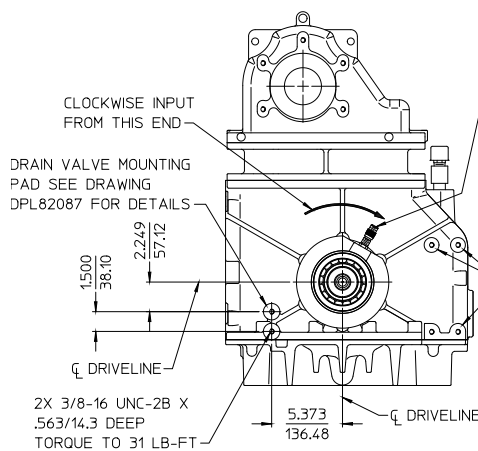
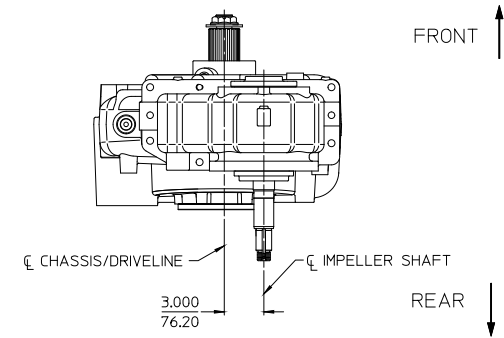
FRONT MOUNTED TRANSMISSION ON PUMP
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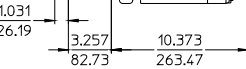
LOCATION OF OPTIONAL ELECTRONIC TACHOMETER CONNECTION, SEE DETAIL B ON PAGE 9

SEE DETAIL C ON PAGE 9 FOR OPTIONAL END YOKES

SEE DETAIL D ON PAGE 9

PRIMING PUMP MOUNTING PADS SEE DRAWING DPL82082 FOR DETAILS

INPUT END

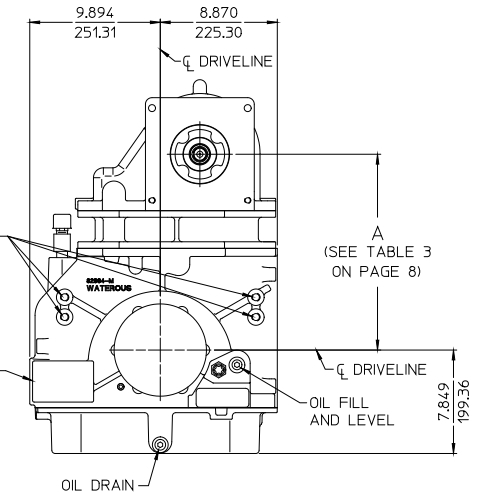


2.812
71.42

PUMP MOUNTING FLANGE

SEE PAGE 11 FOR MOUNTING BRACKET ATTACHMENT LOCATIONS

NOTE: SHIFT UNIT NOT USED, TRANSMISSION LOCKED IN PUMP MODE



C20 MODELS

INPUT SHAFT ONLY

REAR (OUTPUT SHAFT) SIDE PUMP MOUNTING ON TRANSMISSION
CLOCKWISE INPUT
(C20D 2.27 RATIO SHOWN)

ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
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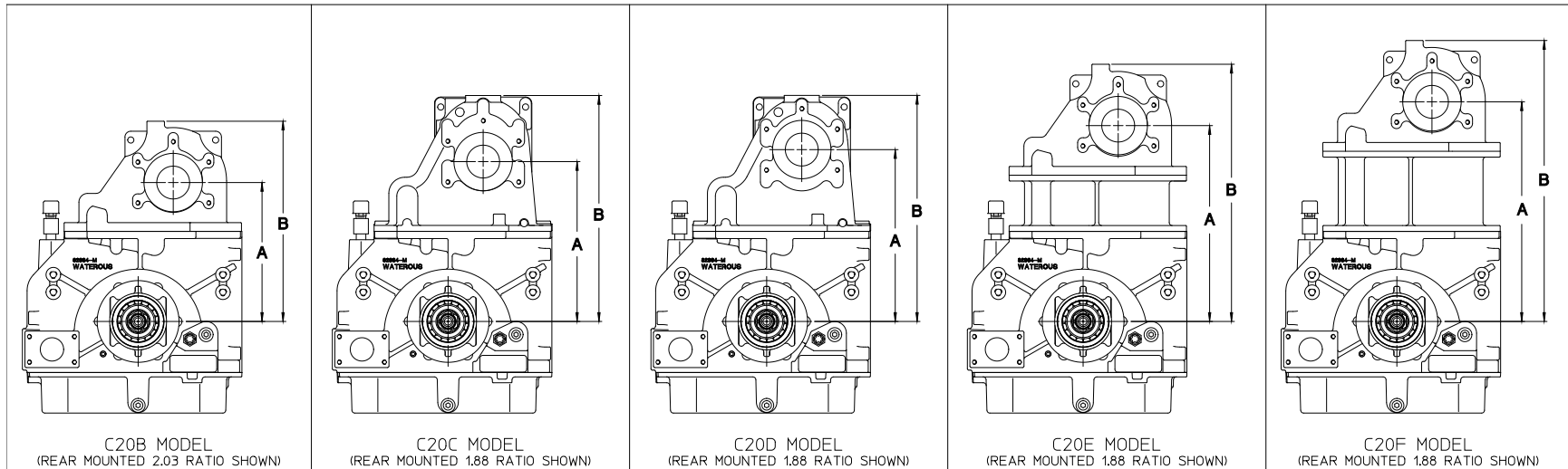
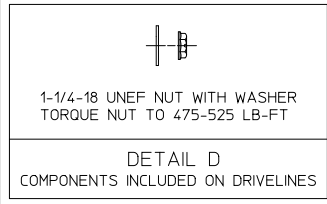
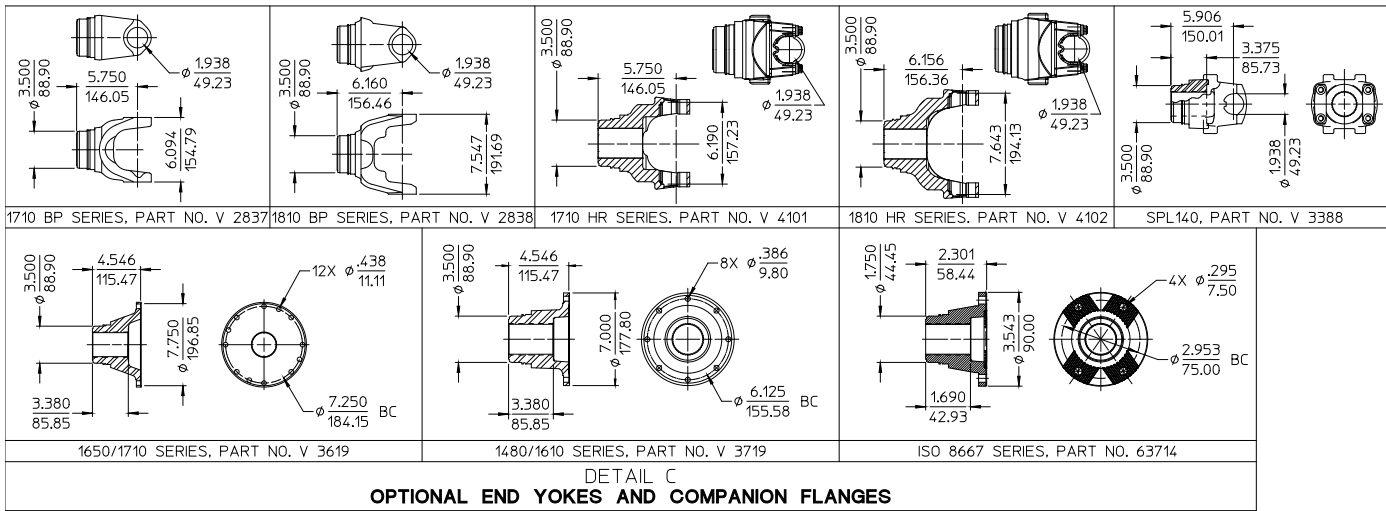
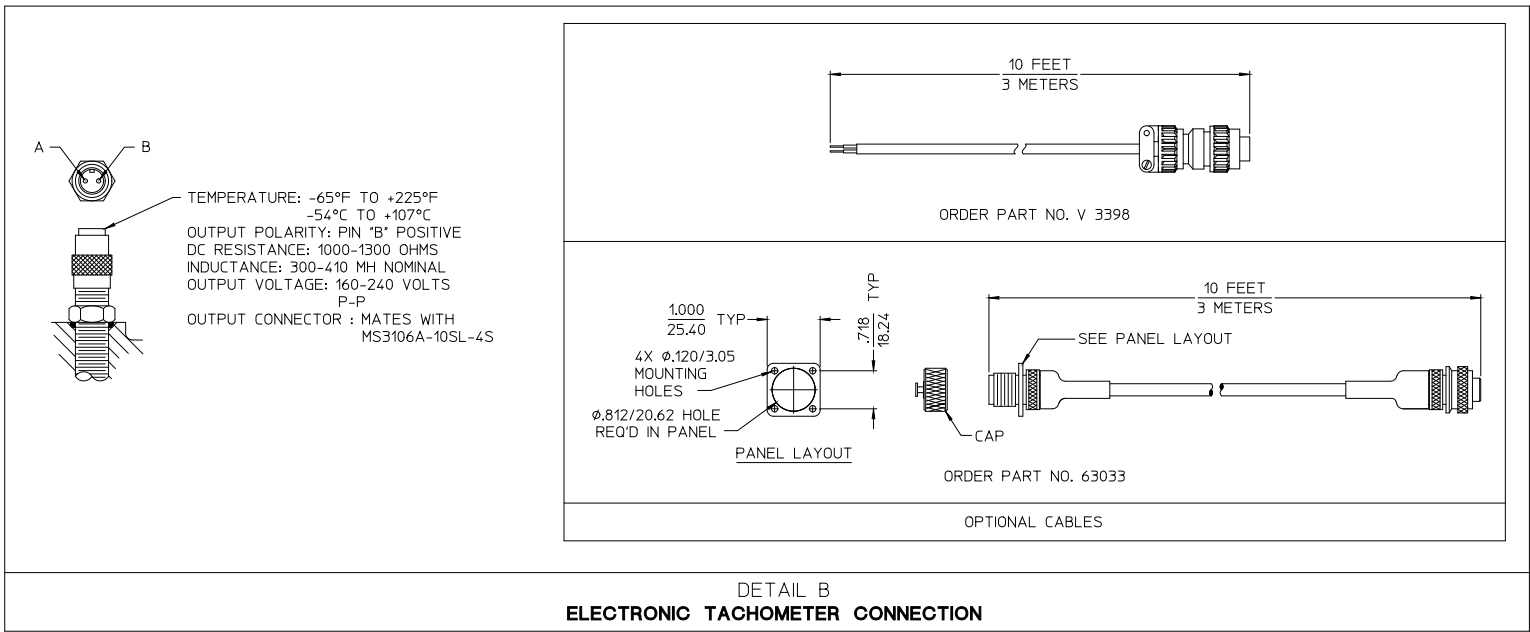


TABLE 3 - AVAILABLE RATIOS

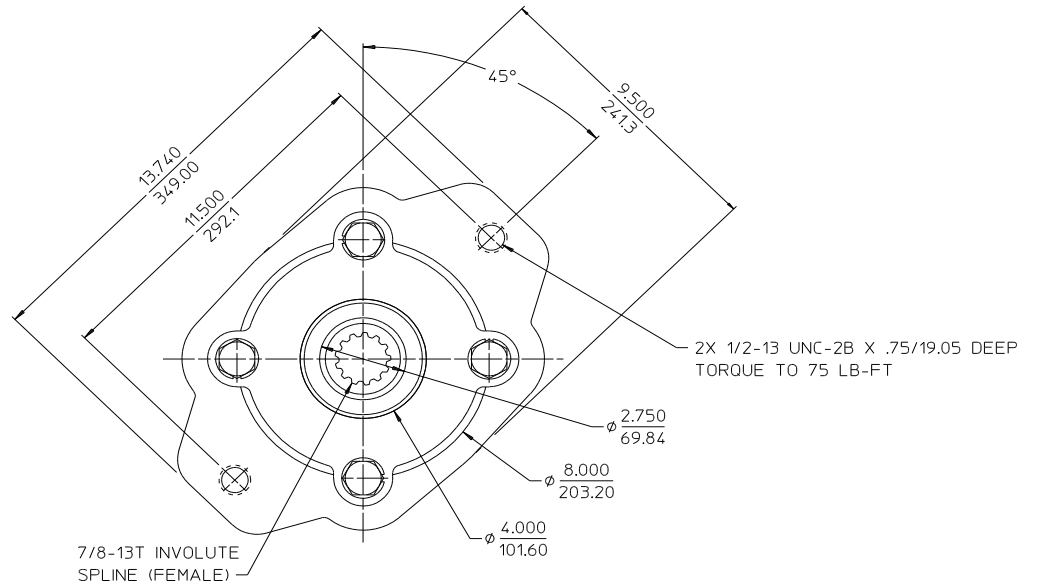
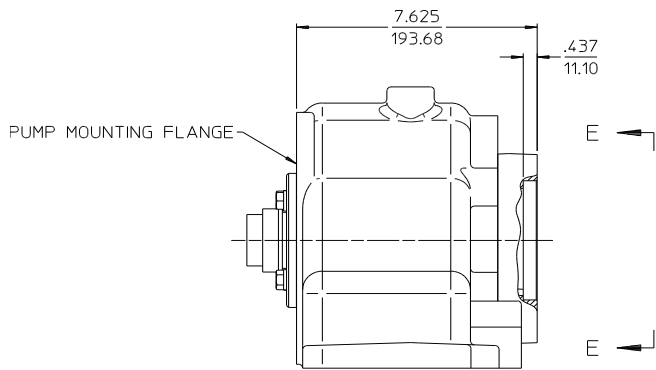
DRIVE TO DRIVEN RATIO	C20B		C20C		C20D		C20E		C20F	
	DIMENSION A	DIMENSION B	DIMENSION A	DIMENSION B	DIMENSION A	DIMENSION B	DIMENSION A	DIMENSION B	DIMENSION A	DIMENSION B
1.27	12.250/311.15	17.194/436.73	14.312/363.52	19.607/498.02	14.825/376.56	19.412/493.06	16.861/428.27	22.011/559.08	18.892/479.86	24.042/610.67
1.41	11.840/300.74	17.149/435.58	13.899/353.03	19.400/492.76	14.931/379.25	19.415/493.14	16.971/431.06	22.011/559.08	19.002/482.65	24.042/610.67
1.48	12.326/313.08	17.270/438.66	13.878/352.50	19.482/494.84	14.907/378.64	19.391/492.53	16.951/430.56	21.991/558.57	18.981/482.12	24.021/610.13
1.58	12.205/310.01	17.149/435.58	13.756/349.40	19.360/491.74	14.788/375.62	19.375/492.13	16.830/427.48	21.980/558.29	18.861/479.07	24.011/609.88
1.69	12.290/312.17	17.234/437.74	13.839/351.51	19.340/491.24	14.876/377.85	19.360/491.74	16.923/429.84	22.073/560.65	18.961/481.61	24.111/612.42
1.79	11.958/303.73	17.211/437.16	14.045/356.74	19.340/491.24	15.072/382.83	19.350/491.49	17.127/435.03	22.071/560.60	19.168/486.87	24.112/612.44
1.88	12.129/308.08	17.169/436.09	13.690/347.73	19.350/491.49	14.717/373.81	19.360/491.74	16.773/426.03	22.026/559.46	18.809/477.75	24.062/611.17
1.97	12.306/312.57	17.250/438.15	13.870/352.30	19.371/492.02	14.912/378.76	19.396/492.66	16.970/431.04	22.010/559.05	19.012/482.90	24.052/610.92
2.03	11.896/302.16	17.149/435.58	13.984/355.19	19.375/492.13	15.028/381.71	19.402/492.81	17.086/433.98	22.030/559.56	19.132/485.95	24.076/611.53
2.27	12.240/310.90	17.184/436.47	13.811/350.80	19.415/493.14	14.856/377.34	19.340/491.24	16.920/429.77	21.960/557.78	18.971/481.86	24.011/609.88
2.46	11.941/303.30	17.194/436.73	14.036/356.51	19.433/493.60	15.087/383.21	19.365/491.87	17.154/435.71	22.098/561.29	19.205/487.81	24.149/613.38
2.68	12.169/309.09	17.209/437.11	13.746/349.15	19.350/491.49	14.793/375.74	19.380/492.25	16.865/428.37	22.015/559.18	18.923/480.64	24.073/611.45

ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
(INCH
MILLIMETER)

RATIO AND DROP DIMENSIONS



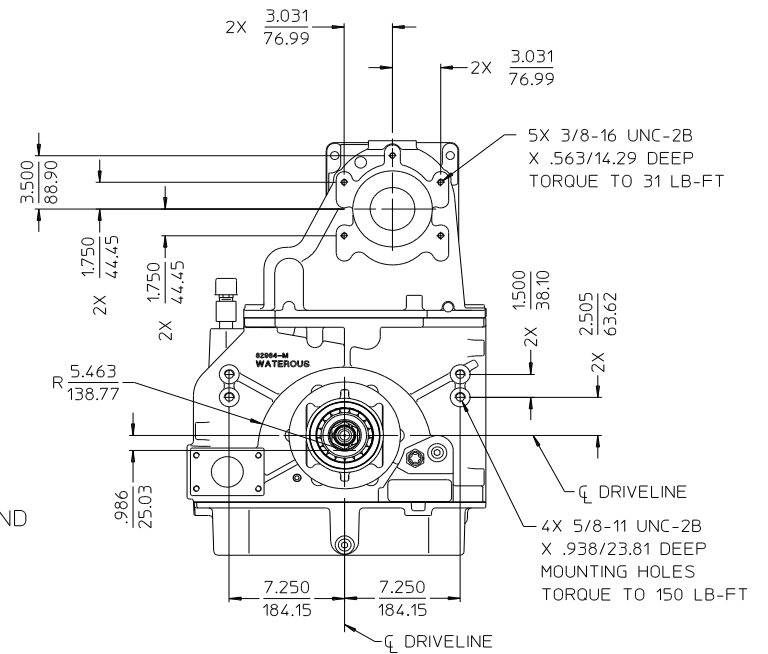
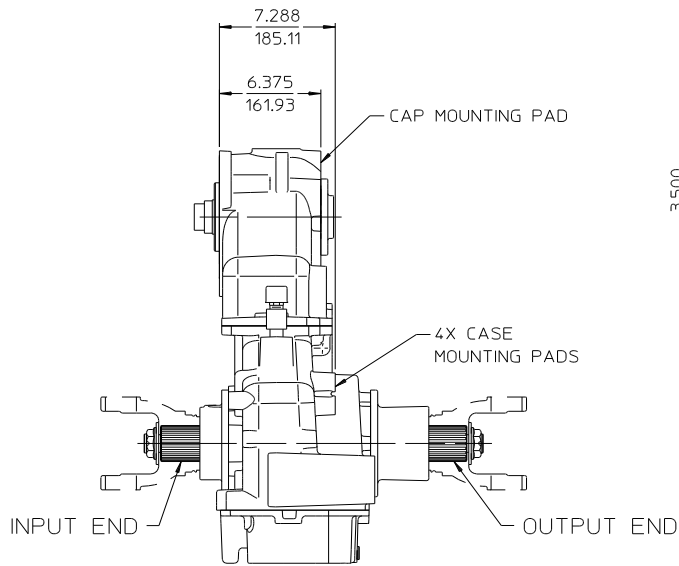
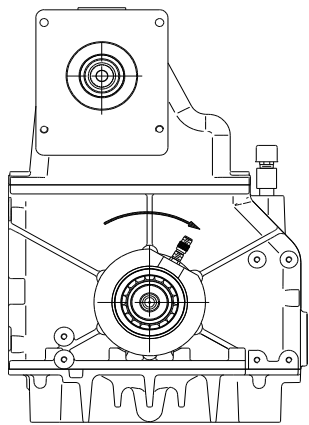
ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
 (INCH
 MILLIMETER)



VIEW E-E
 HYDRAULIC PUMP ADAPTER FLANGE
 USED FOR SAE J744 CLASS B 2-BOLT
 HYDRAULIC PUMP WITH MALE
 7/8-13T 16/32 PITCH INVOLUTE SPLINE

ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
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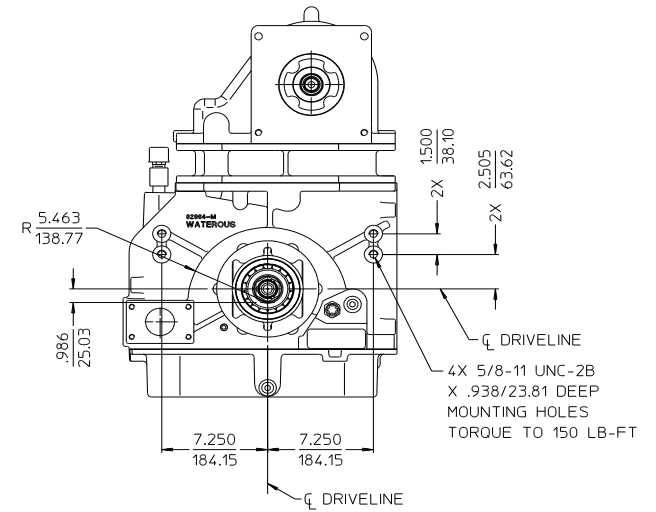
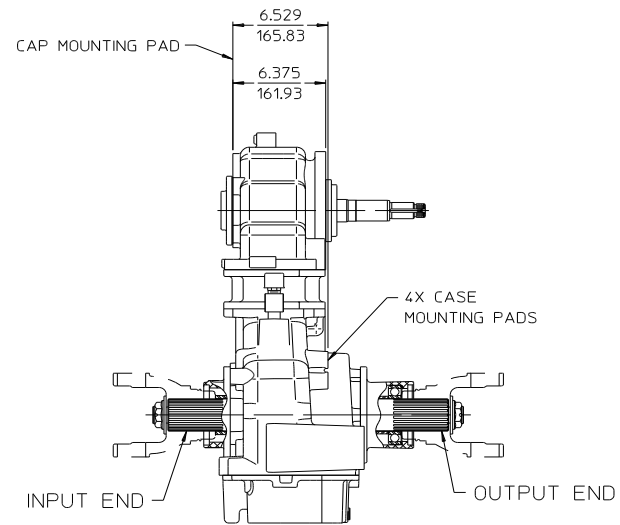
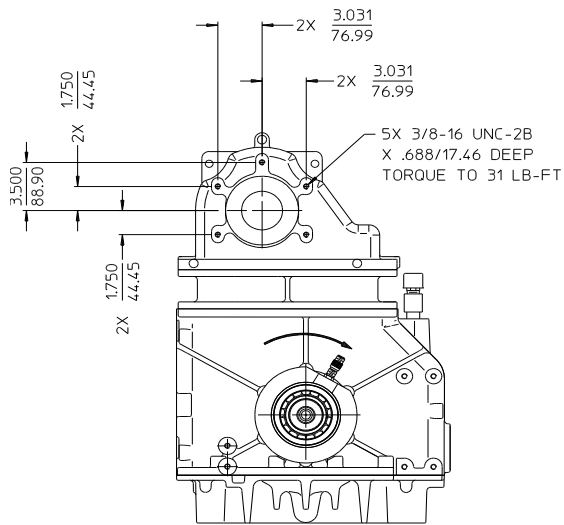
OPTIONAL HYDRAULIC PUMP MOUNTING PROVISION



ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
 (INCH / MILLIMETER)

MOUNTING BRACKET ATTACHMENT LOCATIONS

WHEN PUMP IS MOUNTED ON FRONT (INPUT SHAFT) SIDE OF TRANSMISSION



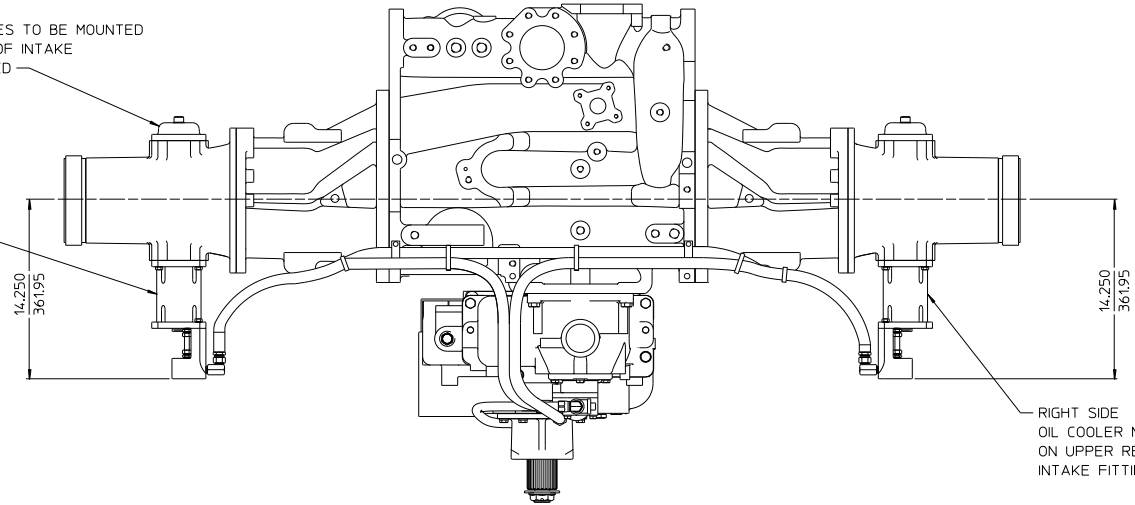
ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
(INCH
MILLIMETER)

MOUNTING BRACKET ATTACHMENT LOCATIONS

WHEN PUMP IS MOUNTED ON REAR (OUTPUT SHAFT) SIDE OF TRANSMISSION

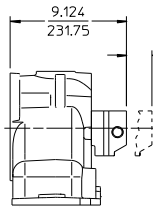
SPECIFY ZINC ANODES TO BE MOUNTED
ON OPPOSITE SIDE OF INTAKE
FITTINGS IF REQUIRED

LEFT SIDE
OIL COOLER MOUNTED
ON UPPER REAR INTAKE
FITTING PAD

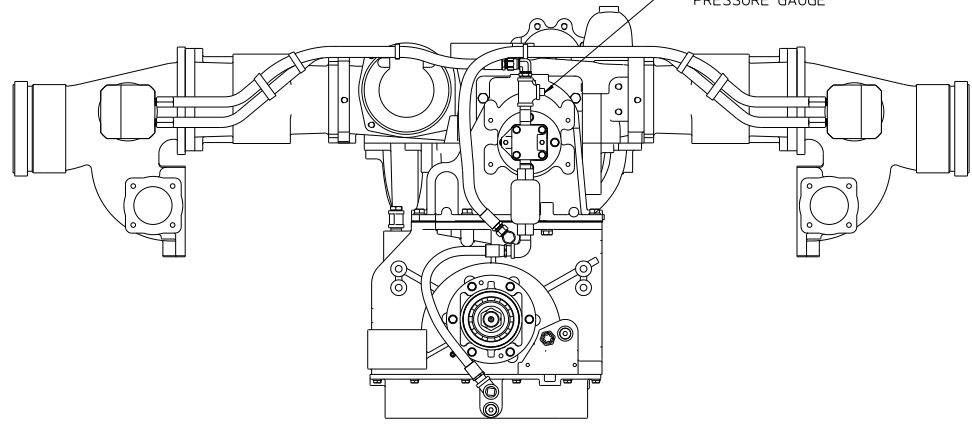


RIGHT SIDE
OIL COOLER MOUNTED
ON UPPER REAR
INTAKE FITTING PAD

1/2 NPT TAP FOR OPTIONAL
PRESSURE GAUGE



REQUIRED FOR
REMOVAL OF OIL PUMP



ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
(INCH)
(MILLIMETER)

OPTIONAL OIL COOLER