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Dimensional Drawings for C20 Series Transmission As used with CM, CS, CG and CX Series Pump Models

Index:

						See F	Page			
	Transmission	Pump Mount-		Transmiss	sion	Optional Items				Mounting
Pump Model	Mounting on Pump	ing on Trans- mission	Input and Output Shaft	Input Shaft Only	Ratio and Drop Dimensions	End Yokes and Companion Flanges	Electronic Ta- chometer	Hydraulic Pump Mounting Provision	Oil Cooler	Bracket At- tachement Locations
CM and CS	Rear of Pump	-	2	3	8	9	9	10	13	-
Series	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	-	1	11
CA Series	-	Rear (Output Shaft) Side	6	7	8	9	9	-	-	12

	TABLE 1 - AVAILABLE DRIVELINE / MODELS									
	DRIVEL	INE	AV		END YOKES AND OM WATEROUS, SE			MODEL		
TYPE	SIZE	SPLINE	YC	YOKE CROSS AND		COMPANION FLANGE				
	EXTRA HEAVY DUTY 2.35 2.350-46T INCH INVOLUTE				PART NUMBER	BEARING KIT	SPICER SERIES	PART NUMBER	C20B	
			V 2837	V 2839	1480/1610	V 3719	C20D			
		INVOLUTE	1810	V 2838	V 2840	1650/1710	V 3619	C20E		
5011			SPL140	V 3388	V 3389	ISO 8667	63714	C20F		
			1810 HR	V 4102						

TABLE 2 - C20	SERIES TRANSMISSI	ON 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	(200, (200, (200, (200, (200

NOTES:

1. SEE TABLE 3 ON PAGE 8 FOR AVAILABLE RATIOS.

2. C20B MODEL NOT AVAILABLE ON CXV AND CXS PUMP MODELS. 12.290 8.892 9.894 312.17 251.31 225.86 7.177 7.367 -G DRIVELINE 182.30 187.12 PUMP MOUNTING FLANGE -SEE PAGE 10 FOR OPTIONAL HYDRAULIC PUMP MOUNTING -LOCATION OF OPTIONAL PROVISION CLOCKWISE INPUT ELECTRONIC TACHOMETER FROM THIS END-CONNECTION, SEE DETAIL B ON PAGE 9 3.249 DRAIN VALVE MOUNTING 82.51 PAD SEE DRAWING (SEE TABLE 3 SEE DETAIL D ON PAGE 8) DPL82087 FOR DETAILS-ON PAGE 9--SEE DETAIL C ON PAGE 9 PRIMING PUMP FOR OPTIONAL VG DRIVELINE MOUNTING PADS END YOKES SEE DRAWING OIL FILL OUTPUT END DPL82082 FOR AND LEVEL DETAILS € DRIVELINE PUMP SHIFT MOUNTING PAD 2X 3/8-16 UNC-2B X INPUT END SEE DRAWING DPL82086 12,717 5.373 - Q DRIVELINE OIL DRAIN-FOR DETAILS -.563/14.3 DEEP 82.73 323.01 136.48 TORQUE TO 31 LB-FT-DRIVELINE, SEE TABLE 1

ALL DIMENSIONS SHOWN AS INCH/MILLIMETER $\left(\frac{\text{INCH}}{\text{MILLIMETER}}\right)$

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

C20 MODELS
INPUT AND OUTPUT SHAFT

(SPLINE TYP BOTH ENDS)

FRONT

REAR

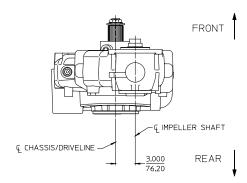
G IMPELLER SHAFT

3.000 76.20

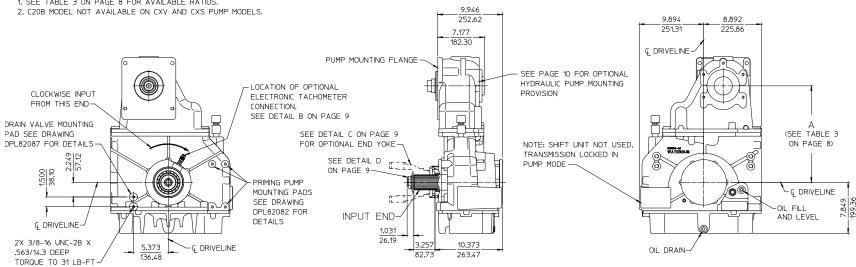
€ CHASSIS/DRIVELINE

TABLE 1 - AVAILABLE DRIVELINE / MODELS										
DRIVELINE I					END YOKES AND OM WATEROUS, SI			MODEL		
TYPE	SIZE	SPLINE	YOKE		CROSS AND	COMPANIO	N FLANGE			
			SPICER SERIES	PART NUMBER	BEARING KIT	SPICER SERIES	PART NUMBER	C20B		
FXTRA			1710	V 2837	V 2839	1480/1610	V 3719	C20C		
HEAVY	HEAVY DUTY INCH INVO		1810	V 2838	V 2840	1650/1710	V 3619	C20D C20E		
DUTY		INVOLUTE	SPL140	V 3388	V 3389	ISO 8667	63714	C20F		
			1810 HR	V 4102						

TABLE 2 - C20	SERIES TRANSMISSI	ON 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	(206, (200, (200, (206, (206		



1. SEE TABLE 3 ON PAGE 8 FOR AVAILABLE RATIOS.



C20 MODELS INPUT SHAFT ONLY

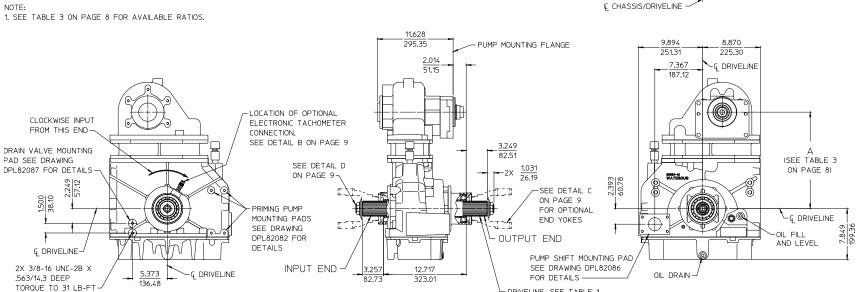
ALL DIMENSIONS SHOWN AS INCH/MILLIMETER $\left(\frac{\text{INCH}}{\text{MILLIMETER}}\right)$

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

	TABLE 1 - AVAILABLE DRIVELINE / MODELS												
DRIVELINE OPTIONAL END Y AVAILABLE FROM WA					END YOKES AND OM WATEROUS, SI			MODEL					
TYPE	SIZE	SPLINE	YOKE		CROSS AND	COMPANIO	N FLANGE						
	HEAVY NCH INVOLUTE	ΕΥΤΡΔ		SPICER SERIES	PART NUMBER	BEARING KIT	SPICER SERIES	PART NUMBER	C20B				
FXTRA									1710	V 2837	V 2839	1480/1610	V 3719
HEAVY		1810	V 2838	V 2840	1650/1710	V 3619	C20F						
DUTY		SPL140	V 3388	V 3389	ISO 8667	63714	C20F						
		1810 HR	V 4102										

TABLE 2 - C20	SERIES TRANSMISSI	ON AVAILABLE FOR:
PUMP MODEL	IMPELLER SHAFT TYPE	TRANSMISSION MODEL
CM, CMU, CS, CSU	SEPARABLE	C20B, C20C, C20D, C20E, C20F





C20 MODELS INPUT AND OUTPUT SHAFT

DRIVELINE, SEE TABLE 1 (SPLINE TYP BOTH ENDS)

ALL DIMENSIONS SHOWN AS INCH/MILLIMETER INCH (MILLIMETER)

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

FRONT

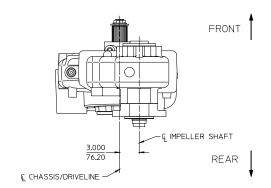
REAR

G IMPELLER SHAFT

3.000 76.20

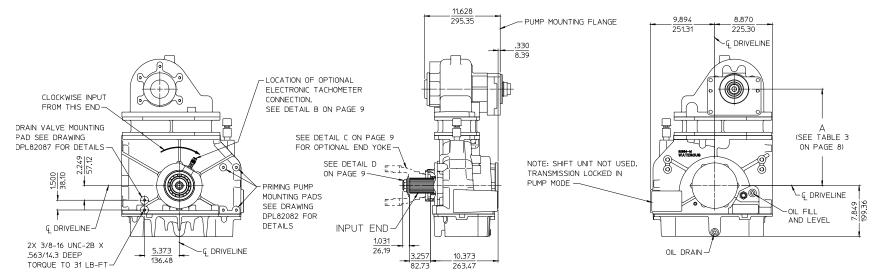
TABLE 1 - AVAILABLE DRIVELINE / MODELS										
DRIVELINE I					END YOKES AND OM WATEROUS, SI			MODEL		
TYPE	SIZE	SPLINE	YOKE		CROSS AND	COMPANIO	N FLANGE			
	VY 2.35 2.350-46T	FXTRA		SPICER SERIES	PART NUMBER	BEARING KIT	SPICER SERIES	PART NUMBER	C20B	
FXTRA				1710	V 2837	V 2839	1480/1610	V 3719	C20C	
HEAVY		1810	V 2838	V 2840	1650/1710	V 3619	C20D C20F			
DUTY		SPL140	V 3388	V 3389	ISO 8667	63714	C20F			
		1810 HR	V 4102							

TABLE 2 - C20	SERIES TRANSMISSI	ON AVAILABLE FOR:
PUMP MODEL	IMPELLER SHAFT TYPE	TRANSMISSION MODEL
CM, CMU, CS, CSU	SEPARABLE	C20B, C20C, C20D, C20E, C20F



NOTE:

1. SEE TABLE 3 ON PAGE 8 FOR AVAILABLE RATIOS.



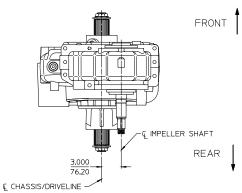
C20 MODELS INPUT SHAFT ONLY

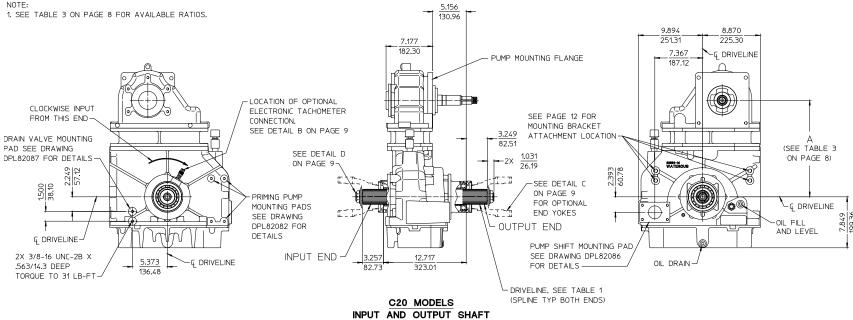
ALL DIMENSIONS SHOWN AS INCH/MILLIMETER $\left(\frac{\text{INCH}}{\text{MILLIMETER}}\right)$

FRONT MOUNTED TRANSMISSION ON PUMP CLOCKWISE INPUT (C20D 2.27 RATIO SHOWN)

	TABLE 1 - AVAILABLE DRIVELINE / MODELS										
I DRIVELINE I					END YOKES AND OM WATEROUS, SE			MODEL			
TYPE	SIZE	SPLINE	YOKE		CROSS AND	COMPANIO	N FLANGE				
	EXTRA HEAVY DUTY 2.35 2.350-46T INCH INVOLUTE	SPICER SERIES	PART NUMBER	BEARING KIT	SPICER SERIES	PART NUMBER	C20B				
EXTRA				.		1710	V 2837	V 2839	1480/1610	V 3719	C20C
HEAVY			1810	V 2838	V 2840	1650/1710	V 3619	C20E			
DUTY		INVOLUTE	SPL140	V 3388	V 3389	ISO 8667	63714	C20F			
		1810 HR	V 4102	-	-	-					

TABLE 2 - C20	SERIES TRANSMISSI	ON AVAILABLE FOR:
PUMP MODEL	IMPELLER SHAFT TYPE	TRANSMISSION MODEL
CXV, CXS	ONE-PIECE	C20B, C20C, C20D, C20E, C20F



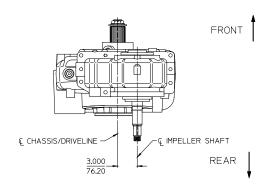


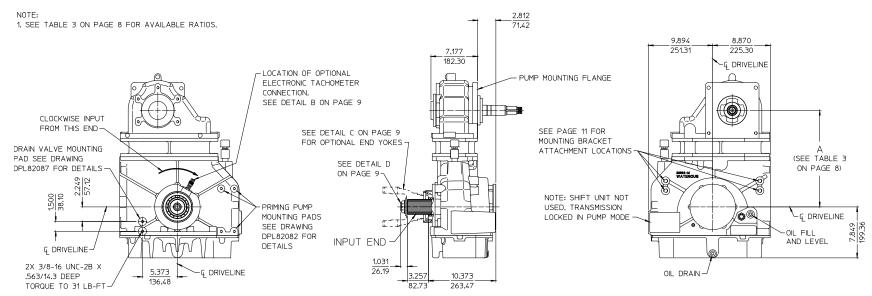
ALL DIMENSIONS SHOWN AS INCH/MILLIMETER $\left(\frac{\text{INCH}}{\text{MILLIMETER}}\right)$

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

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	YC	KE	CROSS AND	COMPANIO		
EXTRA HEAVY DUTY	2.35 INCH		SPICER SERIES	PART NUMBER	BEARING KIT	SPICER SERIES	PART NUMBER	C20B C20C C20D C20E C20F
			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	
			1810 HR	V 4102				

TABLE 2 - C20	SERIES TRANSMISSI	ON AVAILABLE FOR:
PUMP MODEL	IMPELLER SHAFT TYPE	TRANSMISSION MODEL
CXV, CXS	ONE-PIECE	C20B, C20C, C20D, C20E, C20F





C20 MODELS INPUT SHAFT ONLY

ALL DIMENSIONS SHOWN AS INCH/MILLIMETER $\left(\frac{\text{INCH}}{\text{MILLIMETER}}\right)$

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

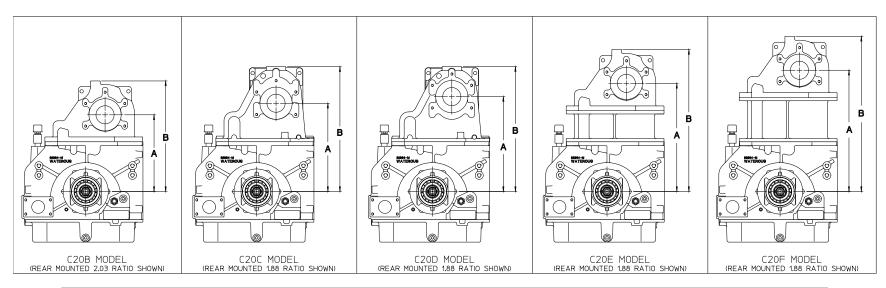
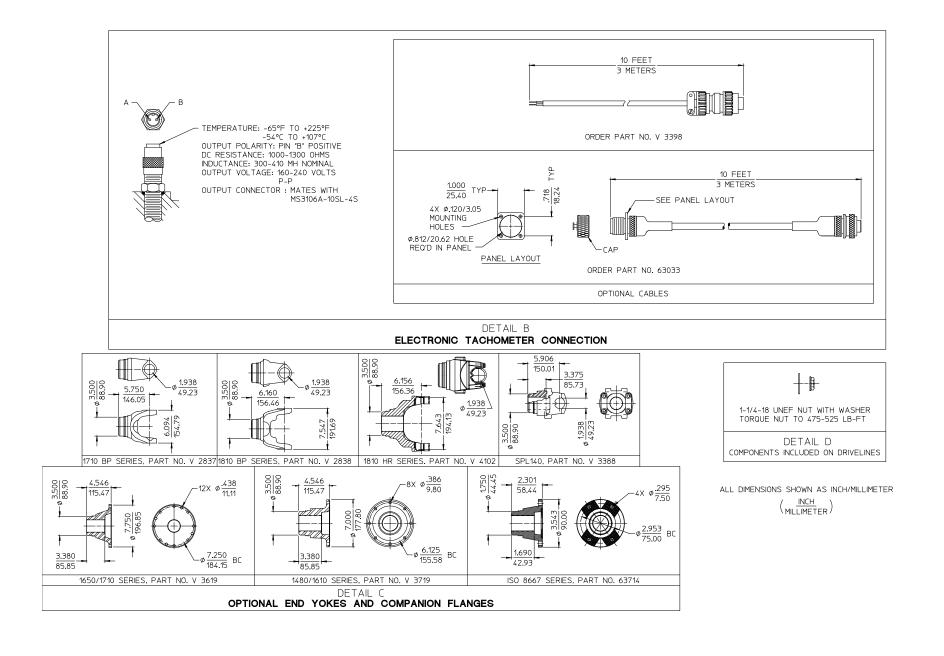
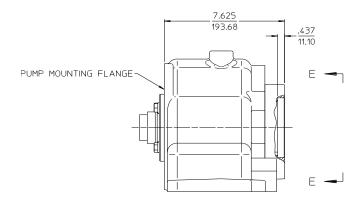


TABLE 3 - AVAILABLE RATIOS										
DRIVE TO DRIVEN RATIO	C20B		C20C		C20D		C20E		C20F	
	DIMENSION A	DIMENSION B								
1.27	12.250/311.15	17.194/436.73	14.312/363.52	19.607/498.02	14.825/376.56	19,412/493.06	16.861/428.27	22.011/559.08	18.892/479.86	24.042/610.67
1,41	11.840/300.74	17.149/435.58	13.899/353.03	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

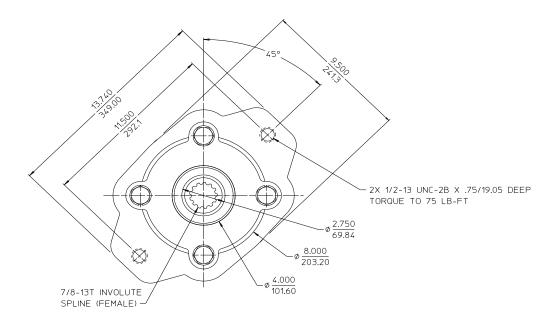
RATIO AND DROP DIMENSIONS

ALL DIMENSIONS SHOWN AS INCH/MILLIMETER ${\rm (NCH \choose MILLIMETER)}$



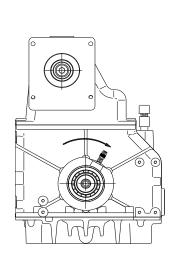


ALL DIMENSIONS SHOWN AS INCH/MILLIMETER $\left(\begin{array}{c} INCH \\ MILLIMETER \end{array} \right)$

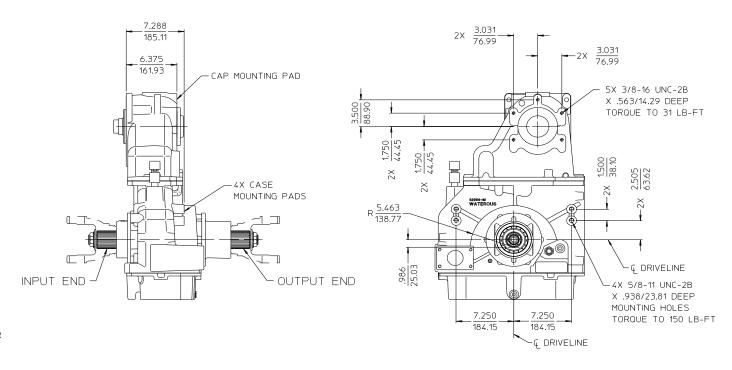


VIEW E-E
HYDRAULIC PUMP ADAPTER FLANGE
USED FOR SAE J744 CLASS B 2-BOLT
HYDRAULIC PUMP WITH MALE
7/8-13T 16/32 PITCH INVOLUTE SPLINE

OPTIONAL HYDRAULIC PUMP MOUNTING PROVISION

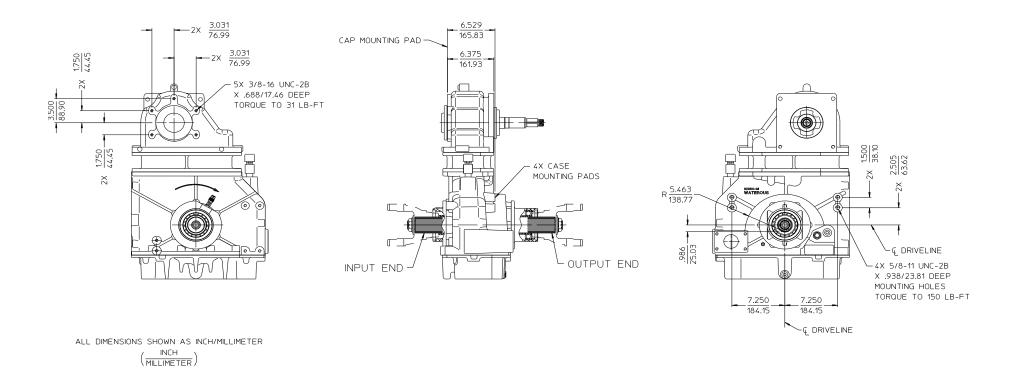


ALL DIMENSIONS SHOWN AS INCH/MILLIMETER $\left(\frac{\text{INCH}}{\text{MILLIMETER}}\right)$



MOUNTING BRACKET ATTACHMENT LOCATIONS

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



MOUNTING BRACKET ATTACHMENT LOCATIONS

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

