NACD

Standard Power Take-Offs

with 14" HD Clutches

North American Clutch & Driveline

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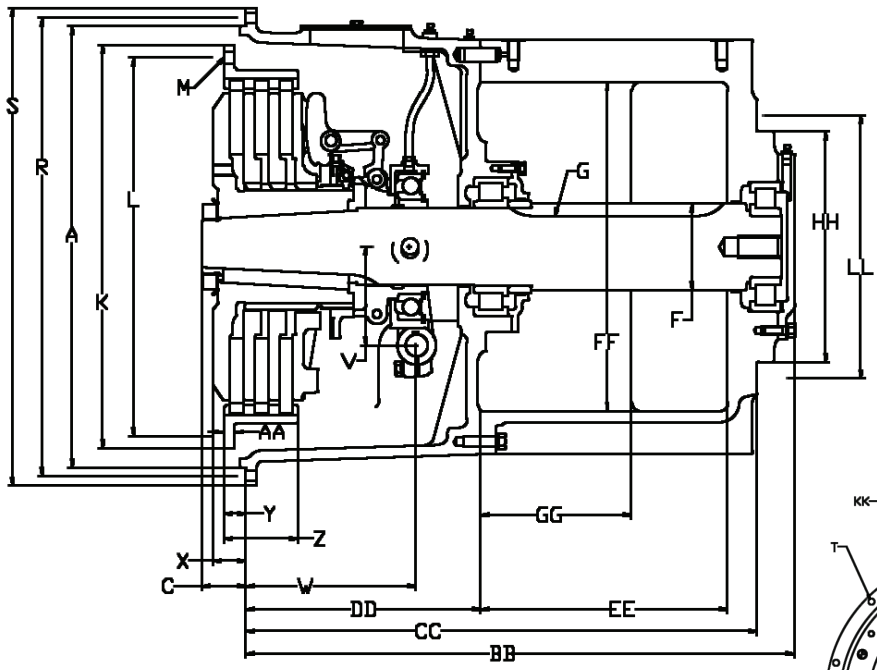
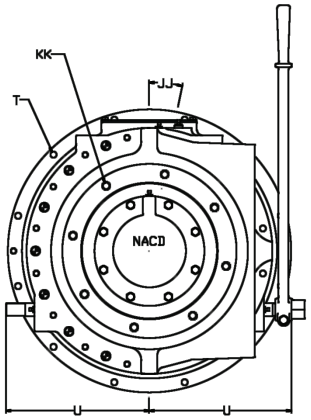
All dimensions are in inches unless otherwise specified. Listing subject to change without notice. * The figure listed below is torque capacity of the clutch. To determine the actual clutch torque capacity required for any given application the torque service factor must be considered. See the chart and formula on the back side of this sheet to calculate the proper clutch torque capacity for your application or contact your NACD sales representative for recommendations. The illustrations are shown for identification of dimensions only. They are not intended to necessarily depict the actual size, exact shape or internal configuration of the part numbers listed.

Important Notice: A support plate for three plate (TP) 14" PTO's is required in side load and in line applications.





PTO Part Number	Ball or Tapered Roller Bearing Type	Max RPM	Model			Application (in-line or side load)	Type of Facing	Type Release Bearing	Clutch Torque Capacity lb. Ft. *	A	C
			SAE Hsg Size	Clutch Size	Qty of Facings						
436086AM	Tapered	2200	1	14	3	Side Load	Organic	Ball	3150	20.125	2.00
436437AM	Tapered	2200	1	14	3	Side Load	Feramic	Ball	4035	20.125	2.00

PTO Part Number	Shaft		K	L	M (holes)		R	S	T (holes)		U	V	W
	F Dia +.000-.001	G Keyway			Qty	Dia			Qty	Dia			
436086AM	3.94	1 x 1/2	18.375	17.250	8	.531	20.875	21.75	12	.469	11.00	4.50	7.75
436437AM	3.94	1 x 1/2	18.375	17.250	8	.531	20.875	21.75	12	.469	11.00	4.50	7.75

PTO Part Number	X	Y	Z	AA	BB	CC	DD	EE	FF	GG	HH	JJ	KK (holes)		LL
													Qty	Dia	
436086AM	1.50	1.00	3.38	0.50	25.00	23.30	10.70	11.25	15.00	7.00 MAX	10.497	11.25°	8	.625	12.00
436437AM	1.50	1.00	3.38	0.50	25.00	23.30	10.70	11.25	15.00	7.00 MAX	10.497	11.25°	8	.625	12.00

Allowable Side Load Pulls:

The following formula can be used to calculate applied side load. Loads are calculated on proper tensioning of belts. If belts are tightened excessively, the resulting side load can exceed these limits

$$L = \frac{126000 \times H.P.}{N \times D} \times F \times A$$

L = Actual Applied Load (lbs.)
N = Shaft Speed (rev./min.)
D = Pitch Diameter of Sheaves, etc. (in.)
F = Load Factor (see below)

- 1.0 for chain
- 2.5 for V belt drive
- 3.5 for flat belt drive

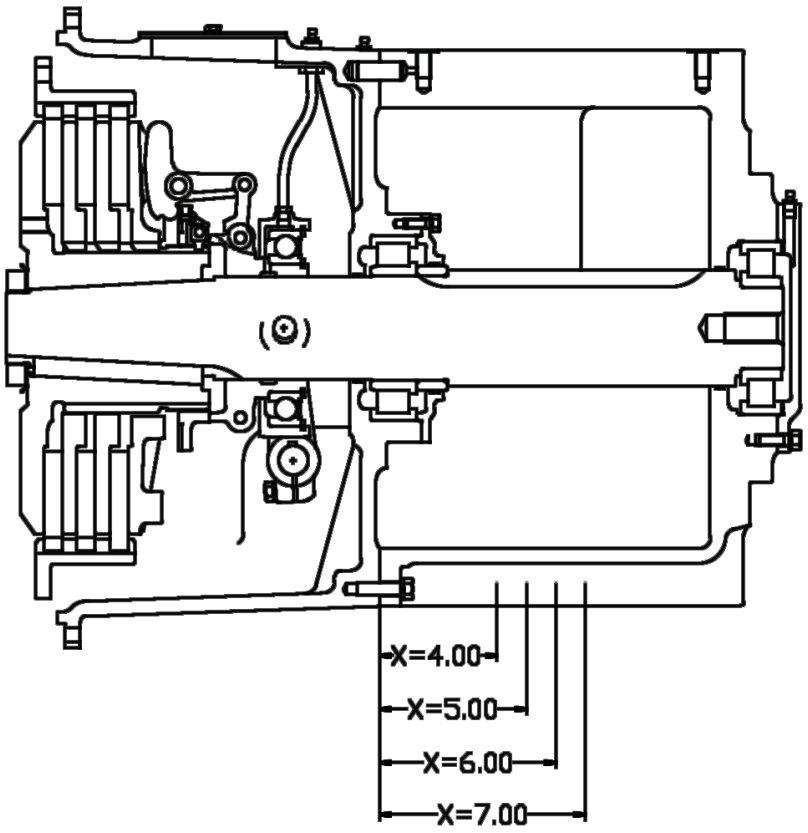
A = 1.0 for low & moderate duty drives
1.4 for severe duty shock loads or large inertia loads (reciprocating compressors, crusher, chippers, planers, etc.)

Required Clutch Torque Capacity Calculation:

Required Clutch Torque = Maximum Engine Torque x Service Factor

Blower or Vacuum	
• Centrifugal with free flow of air	1.7
• With high start-up inertia or subject to choking of air supply	4.0
Compressors	
• Reciprocating, 1 or 2 cylinders	4.0
• Reciprocating, 3 or more cylinders	2.5
• Roto screw or turbine	2.0
Conveyor	
• Fed uniformly	1.5
• Not fed uniformly	2.0
• Recriprocating	3.0
Drills	2.0
Generator	2.0
Pump	
• Centrifugal or turbine	1.5
• Dredge	2.0
• Mud or reciprocating	3.0
Rock Crusher, Hammer Mill	3.0
Snow Blower	2.0
Wood Chipper, Saw Mill	3.0

Ratings: Shafts, bearings and clutch capacities are rated on a conservative basis. For unusually heavy starting loads, frequent engagement service, or if prime mover is engine of less than 4 cylinders, consult our sales representatives for recommendations. Extremely low speed engines require special consideration.



Power Take-Off Part Numbers	436086AM, 436437AM			
	X" Distance			
RPM	4"	5"	6"	7"
1600	9612	10821	12378	11065
1800	9278	10445	11948	10681
2000	8989	10119	11576	10349
2200	8736	9835	11250	10057