



UNION CHAIN DIVISION - ENGINEERING INFORMATION - SPROCKETS

Torque Values (Inch Pounds)

RPM	Horsepower									
	1/8	1/4	1/2	3/4	1	1 1/2	2	2 1/2	3	5
0.10	78,871	157,562	315,125	472,687						
0.20	39,390	78,781	157,562	236,343	315,125	472,687				
0.30	26,260	52,520	105,040	157,562	210,083	315,125	420,166			
0.40	19,695	39,390	78,781	118,171	157,562	236,343	315,125	393,906	472,682	
0.50	15,756	31,512	63,025	94,537	126,050	189,075	252,100	315,125	378,150	
0.60	13,130	26,260	52,520	78,781	105,040	157,562	210,083	262,604	315,125	
0.70	11,254	22,508	45,017	67,526	90,035	135,053	180,071	225,089	270,107	450,178
0.80	9,847	19,695	39,390	59,085	78,781	118,171	157,562	196,953	236,343	393,906
0.90	8,753	17,507	35,013	52,520	70,027	105,041	140,055	175,069	210,083	350,138
1.00	7,878	15,756	31,512	47,268	63,025	94,537	126,050	157,562	189,075	315,125
1.25	6,302	12,605	25,210	37,815	50,420	75,630	100,840	126,050	151,260	252,100
1.50	5,252	10,504	21,008	31,512	42,016	63,025	84,033	105,041	126,050	210,083
1.75	4,501	9,003	18,006	27,010	36,014	54,021	72,028	90,035	108,042	180,071
2.00	3,929	7,878	15,756	23,634	31,512	47,268	63,025	78,781	94,537	157,562
2.50	3,151	6,302	12,604	18,907	25,210	37,815	50,420	63,025	76,630	126,050
3.00	2,626	5,252	10,504	15,756	21,008	31,512	42,016	52,520	63,025	105,041
4.00	1,969	3,939	7,878	11,817	15,756	23,634	31,512	39,406	47,268	78,781
5.00	1,575	3,151	6,302	9,453	12,605	18,907	25,210	31,512	37,815	63,025
6.00	1,313	2,626	5,252	7,878	10,504	15,756	21,008	26,260	31,512	52,520
7.00	1,125	2,250	4,501	6,752	9,003	13,505	18,007	22,508	27,010	45,017
8.00	984	1,969	3,939	5,908	7,878	11,817	15,756	19,695	23,634	39,390
9.00	875	1,750	3,501	5,252	7,002	10,504	14,005	17,506	21,008	35,013
10.00	787	1,575	3,151	4,726	6,302	9,453	12,605	15,756	18,907	31,512
12.00	656	1,313	2,626	3,939	5,252	7,878	10,504	13,130	15,756	26,260
14.00	562	1,125	2,250	3,376	4,501	6,752	9,003	11,254	13,505	22,508
16.00	492	984	1,969	2,954	3,939	5,908	7,878	9,847	11,817	19,695
18.00	437	874	1,750	2,626	3,501	5,252	7,002	8,753	10,504	17,506
20.00	393	787	1,575	2,363	3,151	4,826	6,302	7,878	9,453	15,756
25.00	315	630	1,260	1,890	2,521	3,781	5,042	6,302	7,563	12,605
30.00	262	525	1,050	1,575	2,100	3,151	4,201	5,232	6,302	10,504
40.00	197	394	787	1,181	1,575	2,363	3,151	3,940	4,726	7,878
50.00	157	315	630	945	1,260	1,890	2,521	3,151	3,781	6,302
60.00	131	262	525	787	1,050	1,575	2,100	2,626	3,151	5,252
70.00	112	225	450	675	900	1,350	1,800	2,250	2,701	4,501
80.00	98	196	393	590	787	1,181	1,575	1,969	2,363	3,939
90.00	87	175	350	525	700	1,050	1,400	1,750	2,100	3,501
100.00	78	157	315	472	630	945	1,260	1,575	1,890	3,151

Torque Values (Inch Pounds) (Continued)

RPM	Horsepower									
	7 1/2	10	15	20	25	30	35	40	50	75
1.00	472,687									
1.25	878,150									
1.50	815,125	420,166								
1.75	270,107	360,142								
2.00	236,343	315,125	472,687							
2.50	189,075	252,100	378,150							
3.00	157,562	210,083	315,125	420,166						
4.00	118,171	157,562	236,343	315,125	393,906	472,687				
5.00	94,537	126,050	189,075	252,100	315,125	378,150	441,175			
6.00	78,781	105,041	157,562	210,083	262,604	315,125	367,645	420,166		
7.00	67,526	90,035	135,053	180,071	225,089	270,107	315,125	360,143	450,178	
8.00	59,058	78,781	118,171	157,562	196,953	236,343	275,734	315,125	393,906	
9.00	52,520	70,027	105,041	140,055	175,069	210,083	245,097	280,111	350,138	
10.00	47,268	63,025	94,537	126,050	157,562	189,075	220,587	252,100	315,125	472,687
12.00	39,390	52,520	78,781	105,041	131,302	157,562	183,823	210,083	262,604	393,906
14.00	33,733	45,017	67,526	90,035	112,544	135,053	157,562	180,071	225,089	337,633
16.00	29,543	39,390	39,058	78,781	98,476	118,172	137,867	157,562	196,953	295,429
18.00	26,260	35,013	52,520	70,027	87,534	105,041	122,548	140,055	175,069	262,604
20.00	23,634	31,512	47,268	63,025	78,781	94,537	110,293	126,050	157,562	236,343
25.00	18,907	25,210	37,815	50,420	63,025	75,630	88,235	100,840	126,050	189,075
30.00	15,756	21,008	31,512	42,016	52,520	63,025	73,529	84,033	105,041	157,562
40.00	11,817	15,756	23,634	31,512	39,390	47,268	55,146	63,025	78,781	118,172
50.00	9,453	12,605	18,907	25,210	31,512	37,815	44,117	50,420	63,025	94,537
60.00	7,878	10,504	15,756	21,008	26,260	31,512	36,764	42,016	52,520	78,781
70.00	6,752	9,003	13,505	18,007	22,508	27,010	31,512	36,014	45,017	67,526
80.00	5,908	7,878	11,817	15,756	19,695	23,634	27,573	31,512	39,390	59,086
90.00	5,252	7,002	10,504	14,005	17,506	21,008	24,509	28,011	35,013	52,520
100.00	4,726	6,302	9,453	12,605	15,756	18,907	22,058	25,210	31,512	47,268