

# U.S. TSUBAKI LAMBDA® CHAINS

A - DRIVE CHAINS

## Horsepower Ratings

The horsepower ratings shown in these charts are based on the following conditions.

1. The chains are operated under ordinary conditions. The ambient temperatures during typical operating conditions range between 14°F and 302°F. They should not be used in an atmosphere in which abrasive dust or corrosive gas is present or where humidity is high.
2. The two transmission shafts are horizontal and the chains are properly installed.
3. The load does not change significantly during transmission. The Service Factors given in Table I on page A-22 should be taken into account when the chains are used under various operating conditions.

### RSD50-LAMBDA®

No. of Teeth	HORSEPOWER RATINGS									
	Maximum Speed - Small Sprocket (rpm)									
Small Spkt.	10	25	50	100	200	300	400	500	700	900
11	0.16	0.38	0.71	1.33	2.48	3.58	4.64	5.66	6.67	7.67
12	0.19	0.42	0.78	1.46	2.72	3.93	5.09	6.22	7.33	8.42
13	0.20	0.46	0.86	1.59	2.98	4.28	5.55	6.78	7.99	
14	0.21	0.50	0.92	1.73	3.22	4.64	6.00	7.34	8.66	
15	0.23	0.54	0.99	1.86	3.47	5.00	6.47	7.92		
16	0.25	0.58	1.07	2.00	3.73	5.36	6.94	8.48		
17	0.27	0.62	1.14	2.13	3.97	5.72	7.41	9.06		
18	0.28	0.66	1.22	2.27	4.22	6.08	7.88			
19	0.31	0.68	1.29	2.40	4.48	6.45	8.36			
20	0.32	0.72	1.35	2.53	4.73	6.82	8.83			
21	0.34	0.76	1.43	2.68	4.99	7.18	9.32			
22	0.35	0.80	1.50	2.81	5.24	7.56				
23	0.38	0.84	1.58	2.95	5.51	7.93				
24	0.39	0.88	1.66	3.08	5.76	8.30				
25	0.40	0.92	1.73	3.23	6.02	8.67				
26	0.43	0.97	1.81	3.36	6.29	9.05				
28	0.46	1.05	1.96	3.65	6.81	9.81				
30	0.50	1.13	2.10	3.93	7.33					
32	0.54	1.21	2.27	4.21	7.87					
35	0.59	1.33	2.49	4.64	8.66					
40	0.67	1.54	2.87	5.36	10.0					
45	0.76	1.74	3.27	6.08						

### RSD40-LAMBDA®

No. of Teeth	HORSEPOWER RATINGS										
	Maximum Speed - Small Sprocket (rpm)										
Small Spkt.	10	25	50	100	200	300	400	500	700	900	1000
11	0.08	0.19	0.35	0.64	1.21	1.73	2.24	2.73	3.70	4.65	5.11
12	0.09	0.20	0.38	0.71	1.31	1.90	2.47	3.00	4.07	5.11	
13	0.09	0.23	0.42	0.76	1.43	2.06	2.68	3.28	4.44	5.56	
14	0.11	0.24	0.44	0.83	1.55	2.24	2.91	3.55	4.81		
15	0.11	0.25	0.48	0.90	1.68	2.41	3.14	3.83	5.19		
16	0.12	0.28	0.52	0.97	1.80	2.59	3.35	4.10	5.55		
17	0.13	0.29	0.55	1.03	1.92	2.76	3.58	4.38			
18	0.13	0.31	0.59	1.10	2.04	2.95	3.81	4.66			
19	0.15	0.34	0.62	1.17	2.17	3.12	4.05	4.95			
20	0.16	0.35	0.66	1.23	2.29	3.30	4.28	5.23			
21	0.16	0.38	0.70	1.29	2.41	3.47	4.50	5.51			
22	0.17	0.39	0.72	1.35	2.53	3.66	4.73	5.79			
23	0.17	0.42	0.76	1.42	2.67	3.83	4.97	6.07			
24	0.19	0.43	0.80	1.49	2.79	4.02	5.20				
25	0.20	0.44	0.83	1.55	2.91	4.20	5.44				
26	0.20	0.47	0.87	1.62	3.04	4.38	5.67				
28	0.23	0.51	0.95	1.77	3.30	4.74	6.14				
30	0.24	0.55	1.02	1.90	3.55	5.11					
32	0.25	0.59	1.09	2.04	3.81	5.48					
35	0.28	0.64	1.21	2.24	4.20	6.03					
40	0.32	0.75	1.39	2.59	4.84						
45	0.38	0.84	1.58	2.95	5.50						

### RSD60-LAMBDA®

No. of Teeth	HORSEPOWER RATINGS									
	Maximum Speed - Small Sprocket (rpm)									
Small Spkt.	10	25	50	100	150	200	250	300	400	500
11	0.29	0.67	1.26	2.35	3.39	4.38	5.36	6.31	8.19	10.0
12	0.32	0.74	1.38	2.59	3.71	4.81	5.88	6.94	8.99	11.0
13	0.35	0.80	1.51	2.81	4.06	5.25	6.42	7.57	9.80	
14	0.39	0.87	1.64	3.06	4.40	5.70	6.96	8.20	10.6	
15	0.42	0.94	1.76	3.28	4.73	6.13	7.49	8.83	11.4	
16	0.44	1.01	1.89	3.52	5.08	6.57	8.04	9.46		
17	0.47	1.09	2.01	3.77	5.41	7.02	8.58	10.1		
18	0.51	1.15	2.14	3.99	5.76	7.47	9.13	10.7		
19	0.54	1.22	2.28	4.24	6.11	7.91	9.68	11.4		
20	0.56	1.29	2.40	4.48	6.46	8.36	10.2	12.0		
21	0.59	1.35	2.53	4.73	6.81	8.82	10.8			
22	0.63	1.42	2.67	4.97	7.16	9.27	11.3			
23	0.66	1.50	2.79	5.21	7.51	9.73	11.9			
24	0.68	1.57	2.92	5.46	7.87	10.2	12.5			
25	0.72	1.64	3.06	5.71	8.22	10.6	13.0			
26	0.75	1.72	3.19	5.95	8.58	11.1				
28	0.82	1.85	3.46	6.45	9.29	12.0				
30	0.87	2.00	3.73	6.94	10.0	13.0				
32	0.94	2.14	3.99	7.45	10.7					
35	1.03	2.36	4.40	8.20	11.8					
40	1.19	2.72	5.08	9.48	13.7					
45	1.35	3.10	5.76	10.8						

**RSD80-LAMBDA®**

No. of Teeth Small Spkt.	HORSEPOWER RATINGS									
	Maximum Speed - Small Sprocket (rpm)									
	10	25	50	75	100	125	150	200	250	300
11	0.66	1.51	2.81	4.06	5.27	6.43	7.57	9.82	12.0	14.2
12	0.72	1.66	3.10	4.46	5.78	7.06	8.32	10.8	13.2	
13	0.79	1.81	3.38	4.87	6.30	7.71	9.07	11.8	14.3	
14	0.86	1.96	3.66	5.27	6.82	8.35	9.84	12.7	15.5	
15	0.92	2.12	3.94	5.68	7.36	8.99	10.6	13.7		
16	0.99	2.27	4.22	6.08	7.88	9.64	11.4	14.7		
17	1.06	2.41	4.52	6.50	8.42	10.3	12.1	15.7		
18	1.13	2.57	4.80	6.92	8.95	11.0	12.9			
19	1.19	2.72	5.09	7.33	9.49	11.6	13.7			
20	1.26	2.88	5.37	7.75	10.0	12.3	14.5			
21	1.33	3.04	5.67	8.16	10.6	12.9	15.3			
22	1.39	3.19	5.96	8.59	11.1	13.5	16.1			
23	1.47	3.35	6.26	9.01	11.7	14.2	16.8			
24	1.54	3.51	6.55	9.44	12.2	14.9				
25	1.61	3.67	6.85	9.85	12.8	15.5				
26	1.68	3.82	7.14	10.3	13.3	16.4				
28	1.82	4.14	7.73	11.1	14.5	17.7				
30	1.96	4.46	8.34	12.0	15.5					
32	2.10	4.78	8.94	12.9	16.6					
35	2.32	5.28	9.84	14.2	18.4					
40	2.67	6.10	11.4	16.4						
45	3.03	6.92	12.9	18.6						

**RSD100-LAMBDA®**

No. of Teeth Small Spkt.	HORSEPOWER RATINGS									
	Maximum Speed - Small Sprocket (rpm)									
	10	25	50	75	100	125	150	175	200	225
11	1.10	2.52	4.70	6.77	8.77	10.7	12.6	14.5	16.4	18.2
12	1.21	2.76	5.16	7.44	9.64	11.8	13.9	15.9	18.0	
13	1.33	3.02	5.63	8.11	10.5	12.8	15.1	17.4		
14	1.43	3.27	6.10	8.78	11.4	13.9	16.4	18.8		
15	1.54	3.52	6.57	9.46	12.3	15.0	17.7			
16	1.65	3.78	7.05	10.1	13.1	16.1	18.9			
17	1.77	4.03	7.52	10.8	14.1	17.2				
18	1.88	4.29	8.00	11.5	14.9	18.2				
19	2.00	4.54	8.48	12.2	15.8	19.3				
20	2.10	4.80	8.97	12.9	16.8	20.5				
21	2.22	5.07	9.45	13.7	17.7					
22	2.33	5.32	9.93	14.3	18.5					
23	2.45	5.59	10.4	15.0	19.4					
24	2.56	5.84	10.9	15.7	20.4					
25	2.68	6.11	11.4	16.5	21.3					
26	2.80	6.38	11.9	17.2						
28	3.03	6.90	12.9	18.6						
30	3.26	7.44	13.9	20.0						
32	3.50	7.97	14.9	21.4						
35	3.86	8.79	16.4							
40	4.45	10.2	18.9							
45	5.05	11.5	21.6							

**RSD120-LAMBDA®**

No. of Teeth Small Spkt.	HORSEPOWER RATINGS											
	Maximum Speed - Small Sprocket (rpm)											
	5	10	15	20	25	30	40	50	60	80	100	125
11	1.09	2.02	2.91	3.78	4.61	5.44	7.04	8.60	10.1	13.1	16.1	19.6
12	1.19	2.22	3.20	4.14	5.07	5.98	7.73	9.46	11.1	14.5	17.7	21.6
13	1.30	2.43	3.48	4.52	5.52	6.51	8.43	10.3	12.2	15.7	19.3	23.5
14	1.41	2.63	3.78	4.89	5.99	7.05	9.14	11.2	13.2	17.0	20.9	
15	1.51	2.83	4.07	5.28	6.45	7.60	9.85	12.0	14.2	18.4	22.5	
16	1.62	3.03	4.37	5.66	6.92	8.15	10.6	12.9	15.1	19.7	24.1	
17	1.73	3.23	4.66	6.04	7.39	8.70	11.3	13.8	16.2	21.0		
18	1.85	3.44	4.96	6.42	7.85	9.25	12.0	14.6	17.3	22.3		
19	1.96	3.65	5.25	6.81	8.32	10.2	12.7	15.5	18.4	23.6		
20	2.06	3.86	5.56	7.20	8.81	10.4	13.4	16.5	19.3	25.0		
21	2.18	4.06	5.86	7.59	9.27	10.9	14.2	17.3	20.4			
22	2.29	4.28	6.17	7.97	9.76	11.5	14.9	18.2	21.4			
23	2.40	4.49	6.46	8.38	10.2	12.1	15.7	19.0	23.4			
24	2.52	4.69	6.77	8.77	10.7	12.6	16.4	20.0	24.5			
25	2.63	4.91	7.08	9.15	11.2	13.2	17.2	20.9	25.6			
26	2.75	5.12	7.37	9.56	11.7	13.8	17.8	21.8				
28	2.98	5.55	7.99	10.3	12.7	14.9	19.3	23.6				
30	3.20	5.98	8.60	11.2	13.7	16.1	20.8	25.5				
32	3.43	6.41	9.23	12.0	14.6	17.3	22.4	27.4				
35	3.78	7.06	10.2	13.2	16.1	19.0	24.5					
40	4.37	8.15	11.7	15.3	18.6	22.0	28.3					
45	4.96	9.26	13.3	17.3	21.2	24.8						

**RSD140-LAMBDA®**

No. of Teeth Small Spkt.	HORSEPOWER RATINGS										
	Maximum Speed - Small Sprocket (rpm)										
	5	10	15	20	25	30	40	50	60	80	100
11	1.70	3.16	4.57	5.91	7.22	8.51	11.0	13.5	15.9	20.6	25.2
12	1.86	3.48	5.01	6.50	7.93	9.36	12.1	14.9	17.4	22.7	
13	2.04	3.79	5.47	7.08	8.66	10.2	13.2	16.2	19.0	24.7	
14	2.20	4.11	5.92	7.67	9.38	11.1	14.3	17.6	20.6	26.7	
15	2.37	4.42	6.38	8.27	10.1	11.9	15.4	18.9	22.2		
16	2.55	4.74	6.84	8.86	10.8	12.8	16.5	20.2	23.9		
17	2.72	5.07	7.30	9.46	11.6	13.7	17.7	21.6	25.5		
18	2.90	5.39	7.77	10.1	12.3	14.5	18.8	22.9	27.1		
19	3.07	5.72	8.23	10.7	13.0	15.4	20.0	24.4			
20	3.24	6.04	8.70	11.3	13.8	16.2	21.0	25.7			
21	3.42	6.37	9.18	11.9	14.5	17.2	22.2	27.1			
22	3.59	6.70	9.65	12.5	15.3	18.0	23.3	28.5			
23	3.77	7.02	10.1	13.1	16.1	18.9	24.5				
24	3.94	7.36	10.6	13.7	16.8	19.8	25.6				
25	4.11	7.69	11.1	14.3	17.6	20.6	26.8				
26	4.30	8.03	11.6	15.0	18.4	21.6	27.9				
28	4.66	8.69	12.5	16.2	19.8	23.3	30.3				
30	5.01	9.37	13.5	17.4	21.3	25.2					
32	5.37	10.0	14.5	18.8	22.9	26.9					
35	5.92	11.1	15.9	20.6	25.2	29.8					
40	6.85	12.8	18.4	23.9	29.1						