



		Final Drive Ratio (FDR) Chart																		
		SPUR GEAR 48 PITCH																		
PINION SIZE		69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87
12	10.93	11.08	11.24	11.40	11.56	11.72	11.88	12.03	12.19	12.35	12.51	12.67	12.83	12.98	13.14	13.30	13.46	13.62	13.78	
13	10.08	10.23	10.38	10.52	10.67	10.82	10.96	11.11	11.25	11.40	11.55	11.69	11.84	11.98	12.13	12.28	12.42	12.57	12.72	
14	9.36	9.50	9.64	9.77	9.91	10.04	10.18	10.31	10.45	10.59	10.72	10.86	10.99	11.13	11.26	11.40	11.54	11.67	11.81	
15	8.74	8.87	8.99	9.12	9.25	9.37	9.50	9.63	9.75	9.88	10.01	10.13	10.26	10.39	10.51	10.64	10.77	10.89	11.02	
16	8.19	8.31	8.43	8.55	8.67	8.79	8.91	9.03	9.14	9.26	9.38	9.50	9.62	9.74	9.86	9.98	10.09	10.21	10.33	
17	7.71	7.82	7.94	8.05	8.16	8.27	8.38	8.49	8.61	8.72	8.83	8.94	9.05	9.16	9.28	9.39	9.50	9.61	9.72	
18	7.28	7.39	7.49	7.60	7.71	7.81	7.92	8.02	8.13	8.23	8.34	8.44	8.55	8.66	8.76	8.87	8.97	9.08	9.18	
19	6.90	7.00	7.10	7.20	7.30	7.40	7.50	7.60	7.70	7.80	7.90	8.00	8.10	8.20	8.30	8.40	8.50	8.60	8.70	
20	6.56	6.65	6.75	6.84	6.94	7.03	7.13	7.22	7.32	7.41	7.51	7.60	7.70	7.79	7.89	7.98	8.08	8.17	8.27	
21	6.24	6.33	6.42	6.51	6.60	6.70	6.79	6.88	6.97	7.06	7.15	7.24	7.33	7.42	7.51	7.60	7.69	7.78	7.87	
22	5.96	6.05	6.13	6.22	6.30	6.39	6.48	6.56	6.65	6.74	6.82	6.91	7.00	7.08	7.17	7.25	7.34	7.43	7.51	
23	5.70	5.78	5.87	5.95	6.03	6.11	6.20	6.28	6.36	6.44	6.53	6.61	6.69	6.77	6.86	6.94	7.02	7.10	7.19	
24	5.46	5.54	5.62	5.70	5.78	5.86	5.94	6.02	6.10	6.18	6.25	6.33	6.41	6.49	6.57	6.65	6.73	6.81	6.89	
25	5.24	5.32	5.40	5.47	5.55	5.62	5.70	5.78	5.85	5.93	6.00	6.08	6.16	6.23	6.31	6.38	6.46	6.54	6.61	
26	5.04	5.12	5.19	5.26	5.33	5.41	5.48	5.55	5.63	5.70	5.77	5.85	5.92	5.99	6.07	6.14	6.21	6.28	6.36	
27	4.86	4.93	5.00	5.07	5.14	5.21	5.28	5.35	5.42	5.49	5.56	5.63	5.70	5.77	5.84	5.91	5.98	6.05	6.12	
28	4.68	4.75	4.82	4.89	4.95	5.02	5.09	5.16	5.23	5.29	5.36	5.43	5.50	5.56	5.63	5.70	5.77	5.84	5.90	
29	4.52	4.59	4.65	4.72	4.78	4.85	4.91	4.98	5.04	5.11	5.18	5.24	5.31	5.37	5.44	5.50	5.57	5.63	5.70	
30	4.37	4.43	4.49	4.56	4.62	4.69	4.75	4.81	4.88	4.94	5.00	5.07	5.13	5.19	5.26	5.32	5.38	5.45	5.51	
31	4.23	4.29	4.35	4.41	4.47	4.54	4.60	4.66	4.72	4.78	4.84	4.90	4.96	5.03	5.09	5.15	5.21	5.27	5.33	
32	4.10	4.16	4.22	4.28	4.33	4.39	4.45	4.51	4.57	4.63	4.69	4.75	4.81	4.87	4.93	4.99	5.05	5.11	5.17	
33	3.97	4.03	4.09	4.15	4.20	4.26	4.32	4.38	4.43	4.49	4.55	4.61	4.66	4.72	4.78	4.84	4.89	4.95	5.01	
34	3.86	3.91	3.97	4.02	4.08	4.14	4.19	4.25	4.30	4.36	4.41	4.47	4.53	4.58	4.64	4.69	4.75	4.81	4.86	

		Final Drive Ratio (FDR) Chart																		
		SPUR GEAR 64 PITCH																		
PINION SIZE		100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118
18	10.56	10.66	10.77	10.87	10.98	11.08	11.19	11.29	11.40	11.51	11.61	11.72	11.82	11.93	12.03	12.14	12.24	12.35	12.46	
19	10.00	10.10	10.20	10.30	10.40	10.50	10.60	10.70	10.80	10.90	11.00	11.10	11.20	11.30	11.40	11.50	11.60	11.70	11.80	
20	9.50	9.60	9.69	9.79	9.88	9.98	10.07	10.17	10.26	10.36	10.45	10.55	10.64	10.74	10.83	10.93	11.02	11.12	11.21	
21	9.05	9.14	9.23	9.32	9.41	9.50	9.59	9.68	9.77	9.86	9.95	10.04	10.13	10.22	10.31	10.40	10.50	10.59	10.68	
22	8.64	8.72	8.81	8.90	8.98	9.07	9.15	9.24	9.33	9.41	9.50	9.59	9.67	9.76	9.85	9.93	10.02	10.10	10.19	
23	8.26	8.34	8.43	8.51	8.59	8.67	8.76	8.84	8.92	9.00	9.09	9.17	9.25	9.33	9.42	9.50	9.58	9.67	9.75	
24	7.92	8.00	8.08	8.15	8.23	8.31	8.39	8.47	8.55	8.63	8.71	8.79	8.87	8.95	9.03	9.10	9.18	9.26	9.34	
25	7.60	7.68	7.75	7.83	7.90	7.98	8.06	8.13	8.21	8.28	8.36	8.44	8.51	8.59	8.66	8.74	8.82	8.89	8.97	
26	7.31	7.38	7.45	7.53	7.60	7.67	7.75	7.82	7.89	7.97	8.04	8.11	8.18	8.26	8.33	8.40	8.48	8.55	8.62	
27	7.04	7.11	7.18	7.25	7.32	7.39	7.46	7.53	7.60	7.67	7.74	7.81	7.88	7.95	8.02	8.09	8.16	8.23	8.30	
28	6.79	6.85	6.92	6.99	7.06	7.13	7.19	7.26	7.33	7.40	7.46	7.53	7.60	7.67	7.74	7.80	7.87	7.94	8.01	
29	6.55	6.62	6.68	6.75	6.81	6.88	6.94	7.01	7.08	7.14	7.21	7.27	7.34	7.40	7.47	7.53	7.60	7.67	7.73	
30	6.33	6.40	6.46	6.52	6.59	6.65	6.71	6.78	6.84	6.90	6.97	7.03	7.09	7.16	7.22	7.28	7.35	7.41	7.47	
31	6.13	6.19	6.25	6.31	6.37	6.44	6.50	6.56	6.62	6.68	6.74	6.80	6.86	6.93	6.99	7.05	7.11	7.17	7.23	
32	5.94	6.00	6.06	6.12	6.18	6.23	6.29	6.35	6.41	6.47	6.53	6.59	6.65	6.71	6.77	6.83	6.89	6.95	7.01	
33	5.76	5.82	5.87	5.93	5.99	6.05	6.10	6.16	6.22	6.28	6.33	6.39	6.45	6.51	6.56	6.62	6.68	6.74	6.79	
34	5.59	5.64	5.70	5.76	5.81	5.87	5.92	5.98	6.04	6.09	6.15	6.20	6.26	6.31	6.37	6.43	6.48	6.54	6.59	
35	5.43	5.48	5.54	5.59	5.65	5.70	5.75	5.81	5.86	5.92	5.97	6.03	6.08	6.13	6.19	6.24	6.30	6.35	6.41	
36	5.28	5.33	5.38	5.44	5.49	5.54	5.59	5.65	5.70	5.75	5.81	5.86	5.91	5.96	6.02	6.07	6.12	6.18	6.23	
37	5.14	5.19	5.24	5.29	5.34	5.39	5.44	5.49	5.55	5.60	5.65	5.70	5.75	5.80	5.85	5.91	5.96	6.01	6.06	
38	5.00	5.05	5.10	5.15	5.20	5.25	5.30	5.35	5.40	5.45	5.50	5.55	5.60	5.65	5.70	5.75	5.80	5.85	5.90	

		Rubber Tire Rollout Chart (63mm diameter)																		
		SPUR GEAR 48 PITCH																		
PINION SIZE		69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87
12	18.11	17.85	17.60	17.35	17.11	16.88	16.66	16.44	16.23	16.02	15.82	15.62	15.42	15.24	15.05	14.87	14.70	14.53	14.36	
13	19.62	19.34	19.06	18.80	18.54	18.29	18.05	17.81	17.58	17.35	17.13	16.92	16.71	16.51	16.31	16.11	15.92	15.74	15.56	
14	21.12	20.82	20.53	20.24	19.97	19.70	19.43	19.18	18.93	18.69	18.45	18.22	18.00	17.78	17.56	17.35	17.15	16.95	16.75	
15	22.63	22.31	22.00	21.69	21.39	21.10	20.82	20.55	20.28	20.02	19.77	19.52	19.28	19.05	18.82	18.59	18.37	18.16	17.95	
16	24.14	23.80	23.46	23.14	22.82	22.51	22.21	21.92	21.63	21.36	21.09	20.82	20.57	20.32	20.07	19.83	19.60	19.37	19.15	
17	25.65	25.29	24.93	24.58	24.25	23.92	23.60	23.29	22.99	22.69	22.40	22.12	21.85	21.58	21.32	21.07	20.82	20.58	20.34	
18	27.16	26.77	26.40	26.04	25.71	25.38	25.06	24.74	24.43	24.13	23.84	23.56	23.28	22.99	22.72	22.46	22.21	21.97	21.72	
19	28.67	28.26	27.86	27.48	27.10	26.73	26.38	26.03	25.69	25.36	25.04	24.73	24.42	24.12	23.83	23.55	23.27	23.00	22.74	
20	30.18	29.75	29.33	28.92	28.52	28.14	27.76	27.40	27.04	26.70	26.36	26.03	25.71	25.39	25.09	24.79	24.50	24.21	23.93	
21	31.69	31.23	30.79	30.37	29.95	29.55	29.15	28.77	28.40	28.03	27.68	27.33	26.99	26.66	26.34	26.03	25.72	25.42	25.13	
22	33.20	32.72	32.26	31.81	31.38	30.95	30.54	30.14	29.75	29.37	28.99	28.63	28.28	27.93	27.60	27.27	26.95	26.63	26.33	
23	34.71	34.21	33.73	33.26	32.80	32.36	31.93	31.51	31.10	30.70	30.31	29.93	29.56	29.20	28.85	28.51	28.17	27.84	27.52	
24	36.21	35.70	35.19	34.71	34.23	33.77	33.32	32.88	32.45	32.04	31.63	31.23	30.85	30.47	30.11	29.75	29.40	29.06	28.72	
25	37.72	37.18	36.66	36.15	35.66	35.17	34.71	34.25	33.80	33.37	32.95	32.54	32.13	31.74	31.36	30.99	30.62	30.27	29.92	
26	39.23	38.67	38.13	37.60	37.08	36.58	36.09	35.62	35.16	34.71	34.27	33.84	33.42	33.01	32.61	32.23	31.85	31.48	31.12	
27	40.74	40.16	39.59	39.04	38.51	37.99	37.48	36.99	36.51	36.04	35.58	35.14	34.71	34.28	33.87	33.47				

# QUICK REFERENCE TABLE

Key Guide		FRONT															REAR													
		Off-Throttle	On-Throttle	Downstops	Camber	Caster	Ride Height	Toe	Roll Center	Anti-Roll bar	Tires	Shock Springs	Shock Damping	Shock Position	One-Way Front Axle	Solid Front Axle	Front Differential	Downstops	Camber	Ride Height	Roll Center	Anti-Roll bar	Tires	Shock Springs	Shock Damping	Shock Position	Rear Differential	Solid Rear Axle	Gurney Strip	
How to get rid of UNDERSTEER	Corner Entry			5	6	4	5	5	3	1	1	3	3	4	5	5	6	3	6	5	2	1	3	3	3	4	4	3	3	
	Mid Corner			5	6	4	5	8	3	1	1	3	5	4	5	5	6	7	6	5	2	1	3	3	5	4	4	5	3	
	Corner Exit			2	6	3	5	8	2	1	3	4	5	4	5	5	6	8	5	5	2	1	1	3	5	4	4	3	3	
	Braking			6	6	4	5	7	4	2	4	4	5	4	3	3	4	3	4	5	2	1	1	3	3	3			3	
How to get rid of OVERSTEER	Corner Entry			5	6	4	5	5	3	1	1	3	3	4	5	5	6	3	6	5	2	1	3	3	3	4	4	3	3	
	Mid Corner			2	6	3	5	8	2	1	3	4	3	4	5	5	6	7	5	5	2	1	1	3	3	4	4	3	3	
	Corner Exit			5	6	4	5	8	3	1	1	3	5	4	5	5	6	7	6	5	2	1	3	3	5	4	4	5	3	
	Braking			2	6	3	5	8	2	1	3	4	5	4	5	5	6	8	5	5	2	1	1	3	5	4	4	3	3	
How to get rid of TRACTION ROLL	Corner Entry					8	2	1		2	1	1	2	3	4	4	4	5	3	6	1	2	1	1	3	4	5	2	2	3
	Mid Corner			6	8	2	1		2	1	1	3	4	5	4	4	5	5	6	1	2	1	1	2	3	4	2	2	3	
	Corner Exit			6	8	2	1		2	1	1	3	4	5	4	4	5		6	1	2	1	1	2	3	4	2	2	3	
	Braking					8	2	1		2	1	1	2	3	4	4	4	5	3	6	1	2	1	1	3	4	5	2	2	3
<b>STRAIGHT LINE STABILITY</b> To make Better				7	5	3	7	4	7	5	3	8	4	8	8	8	8		5	6	7	7	3	8	4	8	6	6	2	
<b>STEERING RESPONSE</b> To make Faster					6	4	4	5	1	2	4	2	1	4						4	2	3	4	4	3	4			4	

Key Guide

Harder / Increase / Higher / Lengthen / Do not Use

Softer / Decrease / Lower / Shorten / Use

1 Order of importance