



GEAR CHARTS (ratio 2.375)

Final Drive Ratio (FDR) Chart											
SPUR GEAR 48 PITCH											
	78	79	80	81	82	83	84	85	86	87	
PINION SIZE	12	15.44	15.64	15.83	16.03	16.23	16.43	16.63	16.82	17.02	17.22
	13	14.25	14.43	14.62	14.80	14.98	15.16	15.35	15.53	15.71	15.89
	14	13.23	13.40	13.57	13.74	13.91	14.08	14.25	14.42	14.59	14.76
	15	12.35	12.51	12.67	12.83	12.98	13.14	13.30	13.46	13.62	13.78
	16	11.58	11.73	11.88	12.02	12.17	12.32	12.47	12.62	12.77	12.91
	17	10.90	11.04	11.18	11.32	11.46	11.60	11.74	11.88	12.01	12.15
	18	10.29	10.42	10.56	10.69	10.82	10.95	11.08	11.22	11.35	11.48
	19	9.75	9.88	10.00	10.13	10.25	10.38	10.50	10.63	10.75	10.88
	20	9.26	9.38	9.50	9.62	9.74	9.86	9.98	10.09	10.21	10.33
	21	8.82	8.93	9.05	9.16	9.27	9.39	9.50	9.61	9.73	9.84
	22	8.42	8.53	8.64	8.74	8.85	8.96	9.07	9.18	9.28	9.39
	23	8.05	8.16	8.26	8.36	8.47	8.57	8.67	8.78	8.88	8.98
	24	7.72	7.82	7.92	8.02	8.11	8.21	8.31	8.41	8.51	8.61
	25	7.41	7.51	7.60	7.70	7.79	7.89	7.98	8.08	8.17	8.27
	26	7.13	7.22	7.31	7.40	7.49	7.58	7.67	7.76	7.86	7.95
	27	6.86	6.95	7.04	7.13	7.21	7.30	7.39	7.48	7.56	7.65
	28	6.62	6.70	6.79	6.87	6.96	7.04	7.13	7.21	7.29	7.38
	29	6.39	6.47	6.55	6.63	6.72	6.80	6.88	6.96	7.04	7.13
	30	6.18	6.25	6.33	6.41	6.49	6.57	6.65	6.73	6.81	6.89
	31	5.98	6.05	6.13	6.21	6.28	6.36	6.44	6.51	6.59	6.67
	32	5.79	5.86	5.94	6.01	6.09	6.16	6.23	6.31	6.38	6.46
	33	5.61	5.69	5.76	5.83	5.90	5.97	6.05	6.12	6.19	6.26
	34	5.45	5.52	5.59	5.66	5.73	5.80	5.87	5.94	6.01	6.08

Final Drive Ratio (FDR) Chart																	
SPUR GEAR 64 PITCH																	
	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118		
PINION SIZE	18	13.72	13.85	13.99	14.12	14.25	14.38	14.51	14.65	14.78	14.91	15.04	15.17	15.31	15.44	15.57	
	19	13.00	13.13	13.25	13.38	13.50	13.63	13.75	13.88	14.00	14.13	14.25	14.38	14.50	14.63	14.75	
	20	12.35	12.47	12.59	12.71	12.83	12.94	13.06	13.18	13.30	13.42	13.54	13.66	13.78	13.89	14.01	
	21	11.76	11.88	11.99	12.10	12.21	12.33	12.44	12.55	12.67	12.78	12.89	13.01	13.12	13.23	13.35	
	22	11.23	11.34	11.44	11.55	11.66	11.77	11.88	11.98	12.09	12.20	12.31	12.41	12.52	12.63	12.74	
	23	10.74	10.84	10.95	11.05	11.15	11.26	11.36	11.46	11.57	11.67	11.77	11.88	11.98	12.08	12.18	
	24	10.29	10.39	10.49	10.59	10.69	10.79	10.89	10.98	11.08	11.18	11.28	11.38	11.48	11.58	11.68	
	25	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	
	26	9.50	9.59	9.68	9.77	9.87	9.96	10.05	10.14	10.23	10.32	10.41	10.50	10.60	10.69	10.78	
	27	9.15	9.24	9.32	9.41	9.50	9.59	9.68	9.76	9.85	9.94	10.03	10.12	10.20	10.29	10.38	
	28	8.82	8.91	8.99	9.08	9.16	9.25	9.33	9.42	9.50	9.58	9.67	9.75	9.84	9.92	10.01	
	29	8.52	8.60	8.68	8.76	8.84	8.93	9.01	9.09	9.17	9.25	9.34	9.42	9.50	9.58	9.66	
	30	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	
	31	7.97	8.04	8.12	8.20	8.27	8.35	8.43	8.50	8.58	8.66	8.73	8.81	8.89	8.96	9.04	
	32	7.72	7.79	7.87	7.94	8.02	8.09	8.16	8.24	8.31	8.39	8.46	8.54	8.61	8.68	8.76	
	33	7.48	7.56	7.63	7.70	7.77	7.84	7.92	7.99	8.06	8.13	8.20	8.28	8.35	8.42	8.49	
	34	7.26	7.33	7.40	7.47	7.54	7.61	7.68	7.75	7.82	7.89	7.96	8.03	8.10	8.17	8.24	
	35	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	
	36	6.86	6.93	6.99	7.06	7.13	7.19	7.26	7.32	7.39	7.45	7.52	7.59	7.65	7.72	7.78	
	37	6.68	6.74	6.80	6.87	6.93	7.00	7.06	7.13	7.19	7.25	7.32	7.38	7.45	7.51	7.57	
	38	6.50	6.56	6.63	6.69	6.75	6.81	6.88	6.94	7.00	7.06	7.13	7.19	7.25	7.31	7.38	

Rubber Tire Rollout Chart (63mm diameter)																	
SPUR GEAR 48 PITCH																	
	78	79	80	81	82	83	84	85	86	87							
PINION SIZE	12	12.81	12.65	12.49	12.34	12.19	12.04	11.90	11.76	11.62	11.49						
	13	13.88	13.71	13.54	13.37	13.20	13.05	12.89	12.74	12.59	12.45						
	14	14.95	14.76	14.58	14.40	14.22	14.05	13.88	13.72	13.56	13.40						
	15	16.02	15.82	15.62	15.42	15.24	15.05	14.87	14.70	14.53	14.36						
	16	17.09	16.87	16.66	16.45	16.25	16.06	15.87	15.68	15.50	15.32						
	17	18.15	17.92	17.70	17.48	17.27	17.06	16.86	16.66	16.46	16.28						
	18	19.22	18.98	18.74	18.51	18.28	18.06	17.85	17.64	17.43	17.23						
	19	20.29	20.03	19.78	19.54	19.30	19.07	18.84	18.62	18.40	18.19						
	20	21.36	21.09	20.82	20.57	20.32	20.07	19.83	19.60	19.37	19.15						
	21	22.42	22.14	21.86	21.59	21.33	21.07	20.82	20.58	20.34	20.11						
	22	23.49	23.20	22.91	22.62	22.35	22.08	21.81	21.56	21.31	21.06						
	23	24.56	24.25	23.95	23.65	23.36	23.08	22.81	22.54	22.28	22.02						
	24	25.63	25.30	24.99	24.68	24.38	24.08	23.80	23.52	23.24	22.98						
	25	26.70	26.36	26.03	25.71	25.39	25.09	24.79	24.50	24.21	23.93						
	26	27.76	27.41	27.07	26.74	26.41	26.09	25.78	25.48	25.18	24.89						
	27	28.83	28.47	28.11	27.76	27.43	27.10	26.77	26.46	26.15	25.85						
	28	29.90	29.52	29.15	28.79	28.44	28.10	27.76	27.44	27.12	26.81						
	29	30.97	30.58	30.19	29.82	29.46	29.10	28.75	28.42	28.09	27.76						
	30	32.04	31.63	31.23	30.85	30.47	30.11	29.75	29.40	29.06	28.72						
	31	33.10	32.68	32.28	31.88	31.49	31.11	30.74	30.38	30.02	29.68						
	32	34.17	33.74	33.32	32.91	32.50	32.11	31.73	31.36	30.99	30.64						
	33	35.24	34.79	34.36	33.93	33.52	33.12	32.72	32.34	31.96	31.59						
	34	36.31	35.85	35.40	34.96	34.54	34.12	33.71	33.32	32.93	32.55						

Foam Tire Rollout Chart (116 Tooth 64P Spur)													
TIRE DIAMETER													
		53	54	55	56	57	58	59	60	61	62	63	
PINION SIZE	18	10.87	11.08	11.28	11.49	11.69	11.90	12.10	12.31	12.51	12.72	12.92	
	19	11.48	11.69	11.91	12.13	12.34	12.56	12.78	12.99	13.21	13.43	13.64	
	20	12.08	12.31	12.54	12.77	12.99	13.22	13.45	13.68	13.90	14.13	14.36	
	21	12.69	12.92	13.16	13.40	13.64	13.88	14.12	14.36	14.60	14.84	15.08	
	22	13.29	13.54	13.79	14.04	14.29	14.54	14.79	15.04	15.30	15.55	15.80	
	23	13.89	14.16	14.42	14.68	14.94	15.20	15.47	15.73	15.99	16.25	16.51	
	24	14.50	14.77	15.04	15.32	15.59	15.87	16.14	16.41	16.69	16.96	17.23	
	25	15.10	15.39	15.67	15.96	16.24	16.53	16.81	17.10	17.38	17.67	17.95	
	26	15.71	16.00	16.30	16.59	16.89	17.19	17.48	17.78	18.08	18.37	18.67	
	27	16.31	16.62	16.93	17.23	17.54	17.85	18.16	18.46	18.77	19.08	19.39	
	28	16.91	17.23	17.55	17.87	18.19	18.51	18.83	19.15	19.47	19.79	20.11	
	29	17.52	17.85	18.18	18.51	18.84	19.17	19.50	19.83	20.16	20.49	20.82	
	30	18.12	18.46	18.81	19.15	19.49	19.83	20.17	20.52	20.86	21.20	21.54	
	31	18.73	19.08	19.43	19.79	20.14	20.49	20.85	21.20	21.55	21.91	22.26	
	32	19.33	19.69	20.06	20.42	20.79	21.15	21.52	21.88	22.25	22.61	22.98	
	33	19.93	20.31	20.69	21.06	21.44	21.81	22.19	22.57	22.94	23.32	23.70	
34	20.54	20.93	21.31	21.70	22.09	22.48	22.86	23.25	23.64	24.03	24.41		
35	21.14	21.54	21.94	22.34	22.74	23.14	23.54	23.93	24.33	24.73	25.13		
36	21.75	22.16	22.57	22.98	23.39	23.80	24.21	24.62	25.03	25.44	25.85		
37	22.35	22.77	23.19	23.62	24.04	24.46	24.88	25.30	25.72	26.15	26.57		
38	22.95	23.39	23.82	24.25	24.69	25.12	25.55	25.99	26.42	26.85	27.29		

QUICK REFERENCE TABLE

Key Guide	<div><div></div>Harder / Increase / Higher / Lengthen / Do not Use</div>		FRONT															REAR												
			<div><div></div>Softer / Decrease / Lower / Shorten / Use</div>		Order of importance																									
	1																													
			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	
				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	
	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	
				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	
	Corner Exit			2	6	3	5	7	2	1	3	4	3	4	5	5	6	8	5	5	2	1	1	4	2	3	4	3	3	
How to get rid of OVERSTEER	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	
	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	
				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	
	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	
				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 Exit			2	6	3	5	7	2	1	3	4	3	4	5	5	6	8	5	5	2	1	1	4	2	3	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	
	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	
				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	
	Mid Corner			6	8	2	1		2	1	1	2	5	5	4	4	5	5	6	1	2	1	1	2	5	5	5	5	3	
How to get rid of TRACTION ROLL	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	
STRAIGHT LINE STABILITY To make Better				7	5	3	7	4	7	5	3	8	4	8	8	8	8	5		5	6	7	7	3	8	4	8	6	6	2
STEERING RESPONSE To make Faster					6	4	4	5	1	2	4	2	1	4							4	2	3	4	4	3	4			4

QUICK REFERENCE TABLE

Key Guide	<div><div></div>Harder / Increase / Higher / Lengthen / Do not Use</div>		FRONT															REAR												
			<div><div></div>Softer / Decrease / Lower / Shorten / Use</div>																											
	<div><div>1</div>Order of importance</div>		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	
				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	
	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	
				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	
	Corner Exit			2	6	3	5	7	2	1	3	4	3	4	5	5	6	8	5	5	2	1	1	4	2	3	4	3	3	
How to get rid of OVERSTEER	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	
	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	
				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	
	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	
				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 Exit			2	6	3	5	7	2	1	3	4	3	4	5	5	6	8	5	5	2	1	1	4	2	3	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	
	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	
				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	
	Mid Corner			6	8	2	1		2	1	1	2	5	5	4	4	5	5	6	1	2	1	1	2	5	5	5	5	3	
How to get rid of TRACTION ROLL	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	
STRAIGHT LINE STABILITY 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
STEERING RESPONSE To make Faster						6	4	4	5	1	2	4	2	1	4						4	2	3	4	4	3	4			4