Below are the breaking turns and breaking torque in ounces for 1/8, 3/16 and 1/4 inch rubber. Simply multiply the turns per inch by the length of your rubber motor in inches or find the torque for the number of stands you are using. The calculations below were made using L. Shermans 1994 equations. This is very good information for the rubber flier. While these figures are no substitute for breaking your own rubber to know the exact characteristics of the rubber you have, it does give you good starting and basic information on what tan II rubber can take. Shermans actual equations follow at the bottom of this page.

Breaking Turns Per Inch For 1/8 Inch Tan II Rubber

Strands of Rubber	Turns Per Inch
2	106
4	75
6	61
8	53
10	47
12	43
14	40
16	37.5
18	35
20	33.5
22	32
24	30.5
26	29
28	28
< 30	21

Breaking Torque In Ounces For 1/8 Inch Tan II Rubber

Strands of Rubber	Torque Ounces
2	2
4	7
6	12
8	19
10	25
12	33
14	41
16	46
18	58
20	62
22	76
24	86
26	96
28	106

30.....117

Breaking Turns Per Inch For 3/16 Inch Tan II Rubber

Strands of Rubber.....Turns Per Inch
2.....102
4.....72.5
6.....59
8.....51
10.....45.5
12.....41.5
14.....38.5
16.....36
18.....34
20.....32
22.....30.5
24.....29.5

Breaking Torque In Ounces for 3/16 Inch Tan II Rubber

Strands of Rubber.....Torque Ounces
2.....3
4.....9
6.....16
8.....24
10.....33
12.....52
16.....63
18.....74
20.....86
22.....98
24.....111

Breaking Turns Per Inch For 1/4 Inch Tan II Rubber

Strands Of Rubber.....Turns Per Inch
2.....99
4.....70
6.....57
8.....49
10.....44
12.....40

14.....37
16.....35
18.....33
20.....31

Breaking Torque In Ounces For 1/4 Inch Tan II Rubber

Strands Of Rubber.....Torque Ounces
2.....4
4.....11
6.....20
8.....30
10.....40
12.....52
14.....64
16.....78
18.....91
20.....106

Below are Shermans equations for both figuring turns per inch and breaking torque.

Breaking turns per inch = 80 x (2 - W) / square root of N

Where "W" is the width of the rubber and "N" is the number of strands.

Example: For 1/4 inch rubber and 16 strands - Breaking turns = 80 x (2 - 1/4 or .25) / square root of 16 or 80 x 1.75 / 4 = 35 turns per inch

Shermans equation for figuring breaking torque in ounces = {.45 + (5 x W)} x N to the 1.38 power - With same factors as above.

The example for this using the same parameters would be Torque = {.45 + (5 x .25)} x 16 to the 1.38 power

Torque = .45 + 2.5 x 16 to the 1.38 power or Torque = 1.70 x 45.89 or 78 ounces