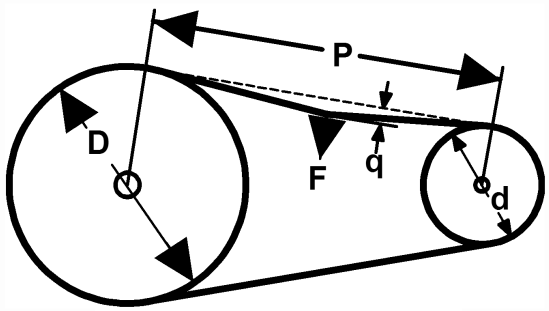
BESTORQ®

SIMPLIFIED PROCEDURE FOR TENSIONING STANDARD 2-PULLEY TIMING BELT DRIVES WITH A COMPRESSION TENSIONING PENCIL or BESTORQ TENSIONING ELECTRONIC SCALE

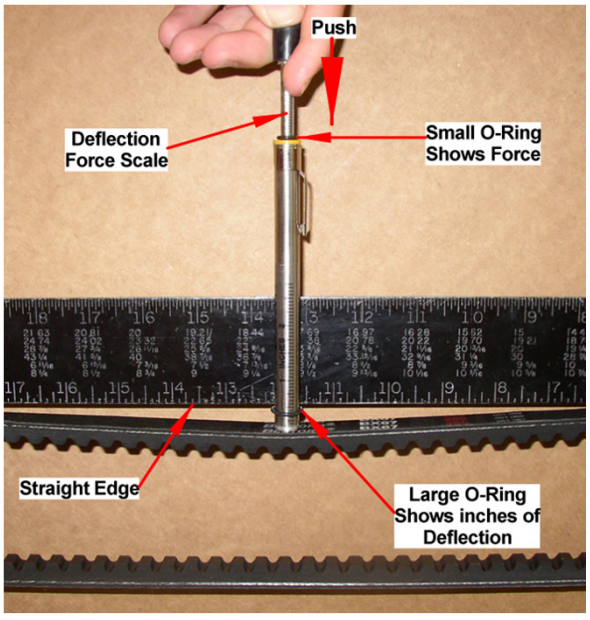


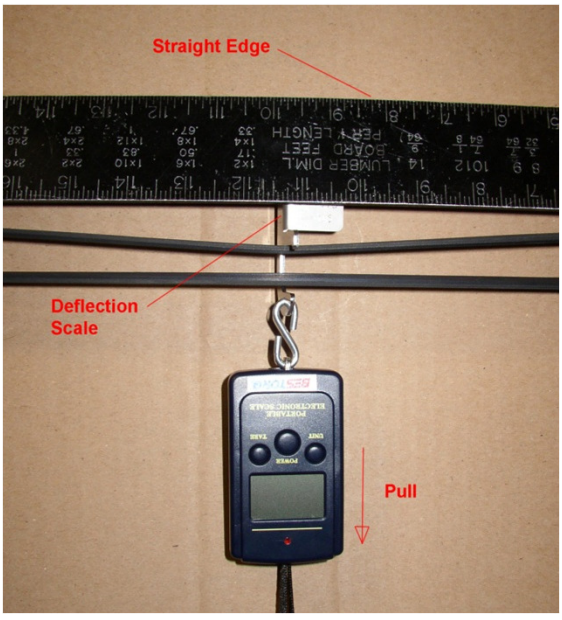
TENSION PENCIL (compression gage)

1. Measure the span length “P”.
2. Set the large O-Ring on the number of inches obtained by dividing the span length “P” inches by 32 or 64 or 128 depending on what amount of deflection is the easier to read. For example, if the span was 32 inches the most convenient deflection amount to use would be 32/64 inches or 1/2 inch
3. Set the small O ring on the deflection force scale to zero.
4. Place the tension gage directly on one belt at the center of the span. Push down on the gage until the large O-Ring lines up with the straight edge laid across the back of the belt pulley-to-pulley.
5. Remove the tension gage and read the force applied by looking at the position of the small O-Ring. The force “F” you apply should be what is shown in the table. on the next page.

BESTORQ ELECTONIC SCALE (Tension gage)

1. Measure the span length “P”.
2. At the center of the span length apply a force “F”, perpendicular to the belt span, large enough to deflect the belt 1/64 inch (or 1/32 inch or 1/128 inch) for every 1 inch of belt span “q”. For example, if the span was 32 inches the most convenient deflection amount to use would be 32/64 inches or 1/2 inch
3. Place the straight edge in place and place the hook across the belt at the center of the span. Pull down on the gage until the calculated deflection is reached and observe the scale reading.
4. The force “F” you apply should be what is shown in the table. on the next page.





Deflection Settings Table for Tensioning Timing Belt Drives

Belt Tooth Profile	Belt Width	Number of Teeth (small pulley)	Belt Deflection Setting for 1/64" Deflection per 1" of belt span		Belt Deflection Setting for 1/32" Deflection per 1" of belt span		Belt Deflection Setting for 1/128" Deflection per 1" of belt span	
			Used Belt	New Belt	Used Belt	New Belt	Used Belt	New Belt
5M	9	36 or less	1.2	1.5	2.4	3	0.6	0.75
		37 or more	1.3	1.7	2.6	3.4	0.65	0.85
	15	36 or less	2.1	2.7	4.2	5.4	1.05	1.35
		37 or more	2.3	2.9	4.6	5.8	1.15	1.45
	25	36 or less	3.7	4.7	7.4	9.4	1.85	2.35
		37 or more	4.0	5.2	8	10.4	2	2.6
8M	20	31 or less	4.0	5.0	8	10	2	2.5
		32 or more	5.0	7.0	10	14	2.5	3.5
	30	31 or less	6.0	8.0	12	16	3	4
		32 or more	8.0	11.0	16	22	4	5.5
	50	31 or less	11.0	14.0	22	28	5.5	7
		32 or more	14.0	19.0	28	38	7	9.5
	85	31 or less	---	---	---	---	---	---
		32 or more	25.0	32.0	50	64	12.5	16
14M	40	34 or less	14.0	19.0	28	38	7	9.5
		35 or more	17.0	22.0	34	44	8.5	11
	55	34 or less	22.0	28.0	44	56	11	14
		35 or more	24.0	32.0	48	64	12	16
	85	34 or less	35.0	46.0	70	92	17.5	23
		35 or more	40.0	52.0	80	104	20	26
	115	34 or less	50.0	65.0	100	130	25	32.5
		35 or more	56.0	74.0	112	148	28	37
	170	34 or less	---	---	---	---	---	---
		35 or more	85.0	110.0	170	220	42.5	55
20M	115	ALL	80.0	105.0	160	210	40	52.5
	170	ALL	120.0	160.0	240	320	60	80
	230	ALL	165.0	220.0	330	440	82.5	110
	290	ALL	215.0	285.0	430	570	107.5	142.5
	340	ALL	250.0	340.0	500	680	125	170
L	050	36 or less	0.6	0.8	1.2	1.6	0.3	0.4
		37 or more	0.8	1.0	1.6	2	0.4	0.5
	075	36 or less	1.0	1.2	2	2.4	0.5	0.6
		37 or more	1.2	1.4	2.4	2.8	0.6	0.7
	100	36 or less	1.4	1.6	2.8	3.2	0.7	0.8
		37 or more	1.6	2.0	3.2	4	0.8	1
H	075	31 or less	2.5	3.0	5	6	1.25	1.5
		32 or more	3.0	3.5	6	7	1.5	1.75
	100	31 or less	3.5	3.8	7	7.6	1.75	1.9
		32 or more	3.8	4.5	7.6	9	1.9	2.25
	150	31 or less	5.4	6.5	10.8	13	2.7	3.25
		32 or more	6.5	7.8	13	15.6	3.25	3.9
	200	31 or less	7.5	9.0	15	18	3.75	4.5
		32 or more	9.0	10.8	18	21.6	4.5	5.4