

25.8

math for formula

Gd,to the 4th divided by 8ND, to the 3rd			
11250000	G =	constant	
0.148	d =	wire diameter in inches	WD
3.13	N=	number active coils	AC
0.667	D=	means dia in inches	OD-WD
8	8=	constant	
Rate =	lbs per inch	725.844	lbs @ 20 mm math check 558.9574157 725.8445 725.83

New

New

book

Adnoh

math for formula

mm	in		
3.7592	0.148	wire dia	NEW
20.701	0.815	spring OD	NEW
16.9418	0.667	wire MEAN dia	NEW
25.8	1.01574803	(new) free length (height)	NEW
19.96	0.78582677	installed compressed length	NEW
5.84	0.22992126	mm compressed (travle)	MATH CHECK
0.22992	1	0.77008 in	

LB'S

20% 111.791483

NEED	155	LBS @ 20 MM, NEW PILOT SPRING,new fiber#,new steel# (Adnoh)
0.00%	166.89	Increase From rate @20mm via shim

% over stock 7.67% lbs 725.84
Spring poundage

COMPRESSED LENGTH	mm	in	
	19.96	0.786	
SOLID LENGTH	19.558	0.770	
REMAINDER before SL	0.402	0.016	11.49
poundes remainig for shimming			11.49
Base rate			166.89
0.00% increase in rate			166.89
Rate at SL		0.789	178.37
Shim thickness	0	0.000	0.00
shim thickness remainig	0.402	0.016	11.49
max % increase	6.88%		
% increase	0.00%		
shim for stock poundage	-0.416	-0.016	-11.89

SPECIFICATIONS

unit: mm (in)

ITEM	STANDARD	SERVICE LIMIT
Torque limiter Disc thickness	2.52-2.68 (0.099-0.106)	2.45 (0.096)
Plate warpage	—	0.2 (0.008)
Spring free length	26.9 (1.06)	26.0 (1.02)

INCH to MM conversion

inch	mm	enter MM
0.00		
enter inch	0.00	

PLATE	mm
H=	1.39 New
Go Ody=	1 used
Adnoh	1.38 used

Disc	mm
H=	2.64 Measured New
Book=	2.6 Average Book, Stock
Go Ody	2.35 Failure used
Adnoh	2.6 Measured used

Stack part thickness	#1 Plate (5)	#2 Plate (5)	#3 Plate (5)	#4 Plate (5)	#1 Disc (3)	#2 Disc (3)	#3 Disc (3)	Total
Stock new	1.39	1.39	1.39	1.39	2.64	2.64	2.64	13.48 Book, Stock, average
Stack part thickness	#1 Plate (5)	#2 Plate (5)	#3 Plate (5)	#4 Plate (5)	#1 Disc (3)	#2 Disc (3)	#3 Disc (3)	
Yours	1.58	1.58	1.58	1.58	2.4	2.4	2.4	13.52 new plate

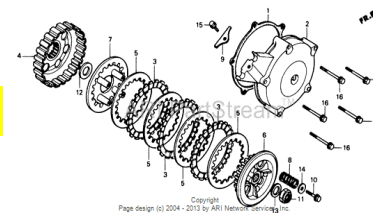
Total Thickness 13.48 MM STOCK

YOUR Thickness 13.52 MM Yours

Difference -0.04 MM,This is used as an adjustment factor for the springs installed poundage. A positive number would indacate a shim adjustment

Spring Free Length

#1	25.8
#2	25.8
#3	25.8
#4	25.8
Average	25.8



Here's the spring test results,done at 1mm increments.

25mm-40lbs
24mm-60lbs
23mm-80lbs
22mm-100lbs
21mm-120lbs
20mm-150lbs checked with verniers 3 times
19mm-170lbs-nearly bound.

150 lbs at 20 mm

This is an old well used tester,rate seems to be around 20lb / 1mm compression.