

SPRING ANALYSIS OUTPUT
29 Apr 1985

15:48:23

TRIGGER
SPRING

For:
ROUND MUSIC WIRE WITH PLAIN ENDS

OUTSIDE DIAMETER..... .109+/- .004
WIRE DIAMETER..... .023+/- .0003
HOLE DIAMETER..... .112
PIN DIAMETER..... 0.000
TOTAL TURNS..... 17.0
ACTIVE TURNS..... 17.0
FREE LENGTH..... .650+/- .030
SOLID HEIGHT..... .414+/- .005
WAHL CORRECTION FACTOR... 1.44
SPRING RATE..... 37.20
DIA. CHANGE FL to SH..... .0007
MEAN DIAMETER..... .086
SPRING INDEX..... 3.74

STRESS AND LOAD:

LOAD AT .560in..... 3.348
EXPECTED LOAD VARIATION... 3.11 TO 3.58
STRESS AT .560in..... 86679.8
LOAD AT .545in..... 3.906
EXPECTED LOAD VARIATION... 3.63 TO 4.18
STRESS AT .545in..... 101126.4
FORCE TO SOLID..... 8.78
STATIC STRESS AT SOLID.... 227293.7
TOTAL STRESS AT SOLID.... 227293.7
ENERGY..... .05
TENSILE STRENGTH..... 339662.4
DESIGN STRESS AS 62%.... 210590.7
TOTAL STRESS AS
PERCENT OF TENSILE STRESS. 66.9

.560 - 2.3#

SPRING ANALYSIS OUTPUT
29 Apr 1985

15:45:37

For:
ROUND MUSIC WIRE WITH PLAIN ENDS

OUTSIDE DIAMETER..... .109+/- .004
WIRE DIAMETER..... .022+/- .0003
HOLE DIAMETER..... .112
PIN DIAMETER..... 0.000
TOTAL TURNS..... 16.0
ACTIVE TURNS..... 16.0
FREE LENGTH..... .650+/- .030
SOLID HEIGHT..... .374+/- .005
WAHL CORRECTGION FACTOR... 1.41
SPRING RATE..... 31.96
DIA. CHANGE FL to SH..... .0009
MEAN DIAMETER..... .087
SPRING INDEX..... 3.95

STRESS AND LOAD:
LOAD AT .560in..... 2.876
EXPECTED LOAD VARIATION... 2.68 TO 3.08
STRESS AT .560in..... 84348.6
LOAD AT .545in..... 3.356
EXPECTED LOAD VARIATION... 3.12 TO 3.59
STRESS AT .545in..... 98406.6
FORCE TO SOLID..... 8.82
STATIC STRESS AT SOLID.... 258668.9
TOTAL STRESS AT SOLID.... 258668.9
ENERGY..... .05
TENSILE STRENGTH..... 341995.6
DESIGN STRESS AS 62%..... 212037.3
TOTAL STRESS AS
PERCENT OF TENSILE STRESS. 75.6