

SPRING ANALYSIS OUTPUT
26 Apr 1984

15:23:38

For:
ROUND MUSIC WIRE WITH SQUARED AND GROUND ENDS

OUTSIDE DIAMETER..... .217+/- .008
WIRE DIAMETER..... .032+/- .0004
HOLE DIAMETER..... .220
PIN DIAMETER..... .125
TOTAL TURNS..... 6.0
ACTIVE TURNS..... 4.0
FREE LENGTH..... .480+/- .015
SOLID HEIGHT..... .192+/- .002
WAHL CORRECTGION FACTOR... 1.26
SPRING RATE.....59.52
DIA. CHANGE FL to SH..... .0043
MEAN DIAMETER..... .185
SPRING INDEX..... 5.78

STRESS AND LOAD:

LOAD AT .375in..... 6.249
EXPECTED LOAD VARIATION... 5.62 TO 6.87
STRESS AT .375in..... 113493.3
LOAD AT .340in..... 8.332
EXPECTED LOAD VARIATION... 7.50 TO 9.17
STRESS AT .340in..... 151324.3
FORCE TO SOLID..... 17.14
STATIC STRESS AT SOLID.... 311295.8
TOTAL STRESS AT SOLID..... 311295.8
ENERGY..... .26
TENSILE STRENGTH..... 322820.1
DESIGN STRESS AS 65%..... 209833.0
TOTAL STRESS AS
PERCENT OF TENSILE STRESS. 96.4