

SPRING ANALYSIS OUTPUT
22 Mar 1985

09:58:25

N/70 SEAR
~~SEAR~~ SPRING
~~TRIGGER~~For:
ROUND MUSIC WIRE WITH PLAIN ENDS

OUTSIDE DIAMETER..... .248+/- .008
WIRE DIAMETER..... .038+/- .0004
HOLE DIAMETER..... .250
PIN DIAMETER..... 0.000
TOTAL TURNS..... 9.0
ACTIVE TURNS..... 9.0
FREE LENGTH..... .727+/- .030
SOLID HEIGHT..... .380+/- .004
WAHL CORRECTGION FACTOR... 1.29
SPRING RATE.....40.41
DIA. CHANGE FL to SH..... .0016
MEAN DIAMETER..... .202
SPRING INDEX..... 5.32

STRESS AND LOAD:

LOAD AT .470in..... 10.384
EXPECTED LOAD VARIATION... 9.55 TO 11.22
STRESS AT .470in..... 125525.5
LOAD AT .410in..... 12.009
EXPECTED LOAD VARIATION... 11.78 TO 13.83
STRESS AT .410in..... 154831.0
FORCE TO SOLID..... 14.02
STATIC STRESS AT SOLID.... 169483.8
TOTAL STRESS AT SOLID.... 169483.8
ENERGY..... .70
TENSILE STRENGTH..... 314388.7
DESIGN STRESS AS 62%..... 194921.0
TOTAL STRESS AS
PERCENT OF TENSILE STRESS. 53.9



SPRING ANALYSIS OUTPUT
22 Mar 1985

10:11:25

N/70
TRIGGER
~~TRIGGER~~ SPRING
~~TRIGGER~~

For:

ROUND MUSIC WIRE WITH SQUARED AND GROUND ENDS

OUTSIDE DIAMETER..... .244+/- .008
WIRE DIAMETER..... .048+/- .0004
HOLE DIAMETER..... .250
PIN DIAMETER..... .135
TOTAL TURNS..... 6.0
ACTIVE TURNS..... 4.0
FREE LENGTH..... .360+/- .015
SOLID HEIGHT..... .288+/- .002
WAHL CORRECTGION FACTOR... 1.39
SPRING RATE.....**.** 253.363819497

DIA. CHANGE FL to SH..... .0007
MEAN DIAMETER..... .196
SPRING INDEX..... 4.08

STRESS AND LOAD:

LOAD AT .360in..... 0.000
EXPECTED LOAD VARIATION... 0.00 TO 0.00
STRESS AT .360in..... 0.0
LOAD AT .289in..... 17.989
EXPECTED LOAD VARIATION... 16.19 TO 19.79
STRESS AT .289in..... 113160.1
FORCE TO SOLID..... 18.24
STATIC STRESS AT SOLID.... 114753.9
TOTAL STRESS AT SOLID..... 114753.9
ENERGY..... .64
TENSILE STRENGTH..... 303279.1
DESIGN STRESS AS 62%..... 188033.0
TOTAL STRESS AS
PERCENT OF TENSILE STRESS. 37.8