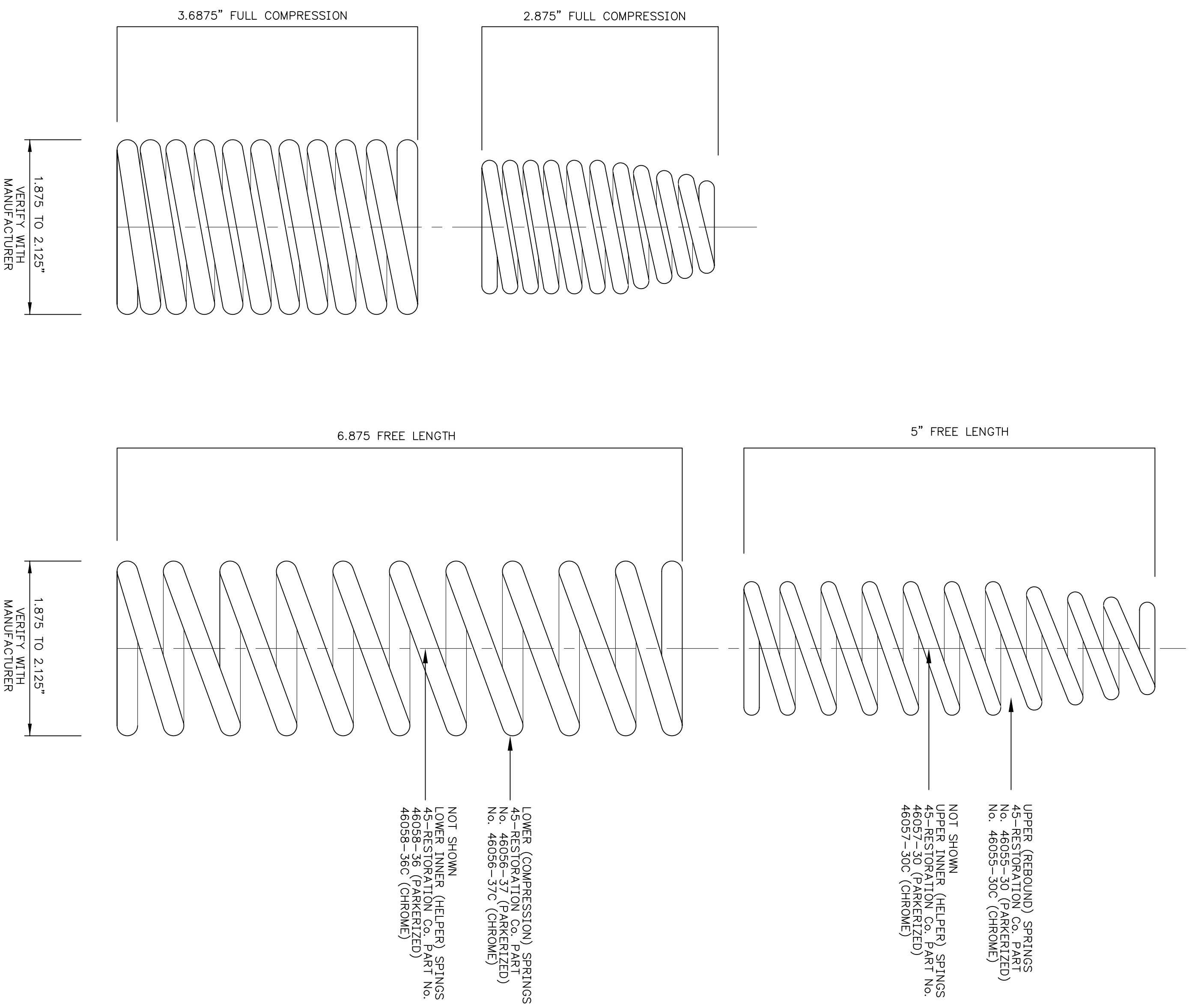
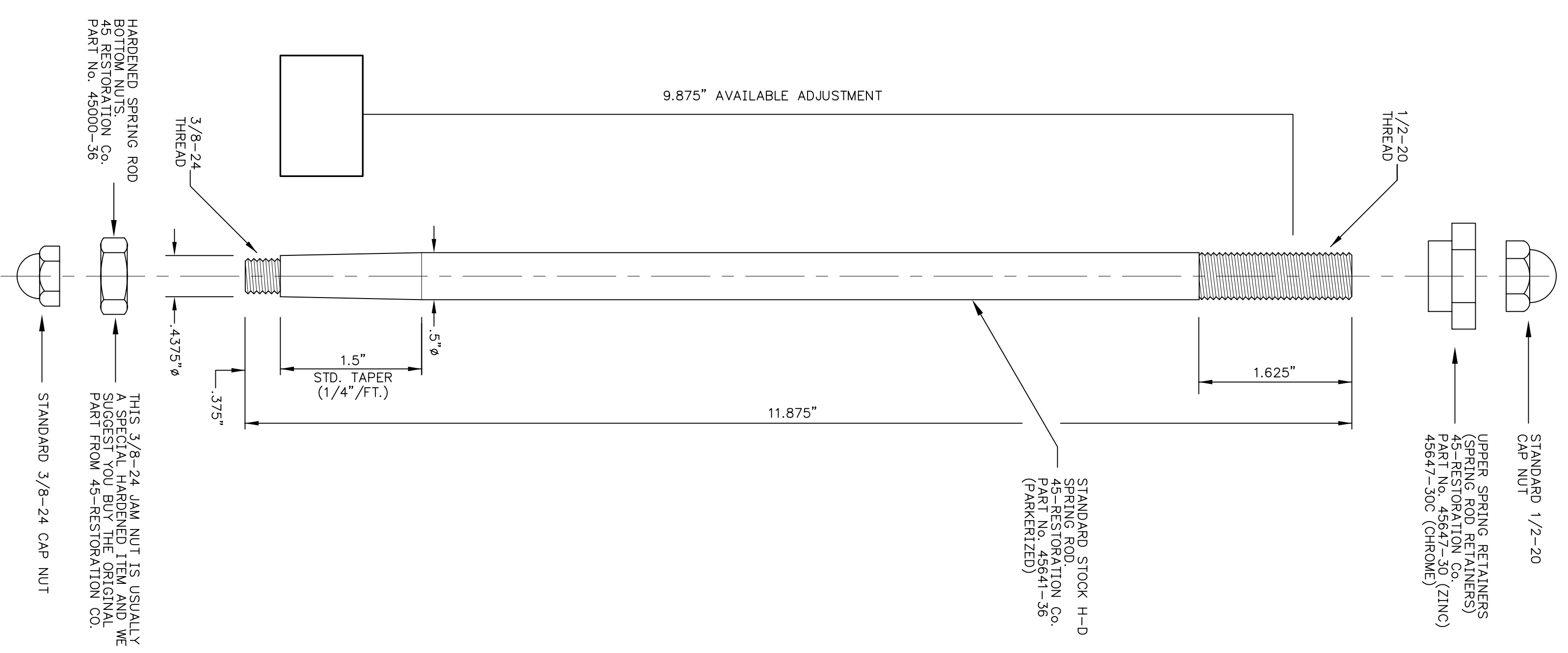
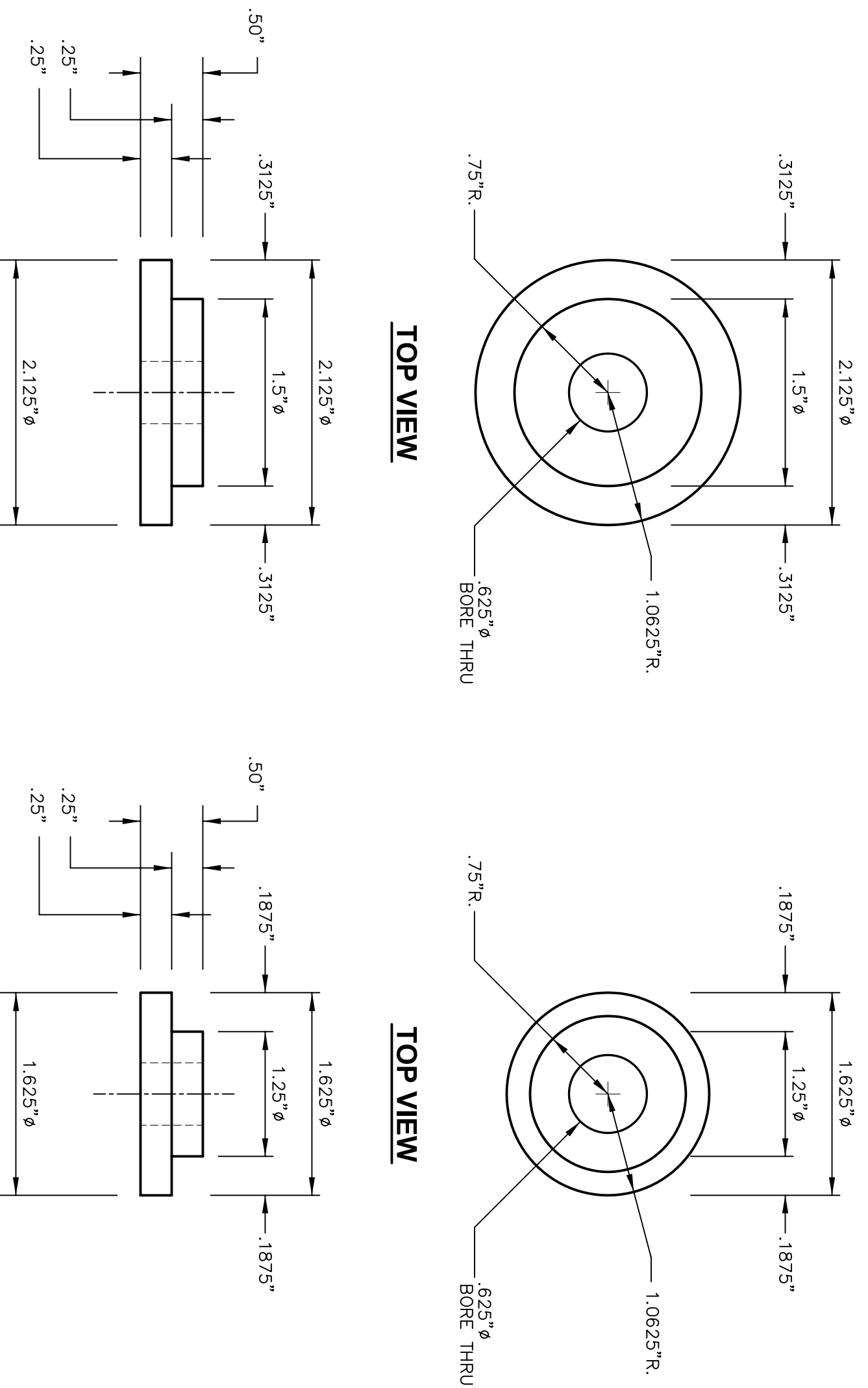
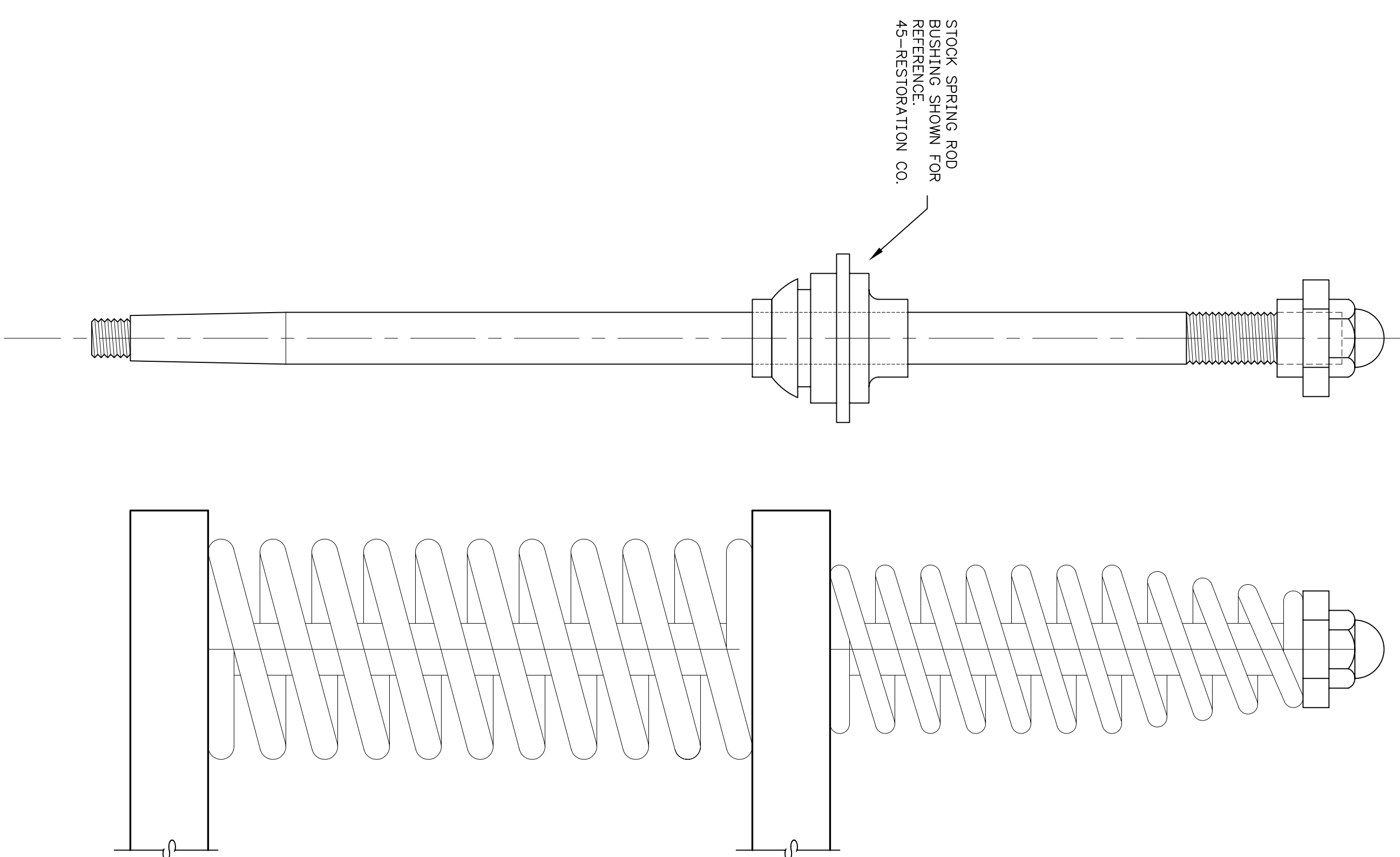


CHOPPER BUILDERS HANDBOOK



**SPRING ASSEMBLY
EXPLODED VIEW**
SCALE 1"=1"



SPRING ROD
SCALE 1"=1"
MATERIAL: 1018 STEEL
2 REQ'D.

- SPRING NOTES**
1. SPRINGS ARE AVAILABLE FROM A VARIETY OF MANUFACTURERS AND DIFFER IN DESIGN AND DIMENSIONS. 45-RESTORATION CO. SPRINGS FROM THESE VARIOUS SOURCES ARE NOT ALWAYS IDENTICAL WITH RESPECT TO WEIGHT, LENGTH, FREE LENGTH, AND FREE LENGTHS. WHEN BUYING SPRINGS FROM THE PARTS THAT ARE DIMENSIONAL V CONNECTED WITH THE KEY ON THE SPRING SEAT, PLEASE CHECK THE DIMENSIONS OF THE SPRING SEAT BEFORE YOU BUY YOUR SPRINGS TO BE SURE THEY WILL FIT.
 2. SPRING SEAT WEIGHT COMPARED TO ONE ANOTHER OR SQUARE SO ACCURATE IN LENGTH COMPARED TO ONE ANOTHER OR SQUARE SO IT IS A VERY GOOD IDEA TO PRESS THE FLATS ON THE ENDS OF THE SPRING SEAT INTO THE SPRING SEAT. BRINGING THEM SQUARE TO LENGTH WHILE AT THE SAME TIME BRINGING THEM SQUARE TO DIFFERENT SOURCE SPRINGS. DO NOT MIX AND MATCH SPRINGS FROM DIFFERENT SOURCES.
 3. THE USE OF "INNER" OR "HELPER" SPRINGS IS OPTIONAL AND DEPENDS UPON THE WEIGHT OF THE BIKE IN QUESTION AND THE WEIGHT OF THE CHOPPER. HELPER SPRINGS ARE NOT NECESSARY IF THE MAIN SPRINGS HAVE THE PROPER RATES AND FREE LENGTHS.
 4. IDEALLY THE SPRING SEAT SHOULD BE FABRICATED HAVING AN INSIDE DIAMETER AND AN OUTSIDE DIAMETER THAT IS .125" HIGHER THAN THE OUTSIDE SPRING DIAMETER.
 5. USING THE SUGGESTION ABOVE THE PAD AREA ON THE LOWER SPRING IS 1.325" HIGHER THAN THE OUTSIDE EDGE OF THE SPRING SEAT ON ALL SIDES. THE SPRING PREDESTAL SHOWN ON THESE DRAWINGS IS 1.325" HIGHER THAN THE OUTSIDE SPRING DIAMETER. THE SPRING SEAT ON THE OUTSIDE DIAMETER AND CAN BE REDUCED IF YOU'RE USING SMALLER SPRINGS.

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GARY W. WEISHAUPT

PERFORMANCE ENGINEERING
CHASSIS FABRICATION
FLOWBENCH TESTING
MACHINE WORK
RESTORATIONS

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PROJECT TITLE
CHOPPER BUILDERS HANDBOOK

SPRINGER FORKS

PLAN SF-19-1

Drawn By	GMW
Date	11-14-05
Checked By	HC
Date	11-16-05
Scale	1"=1"
Project No.	1"=1"
Sheet No.	-

Sheet Description
**SPRINGS SEATS
SPRING RODS**

Sheet No.
SF1.7