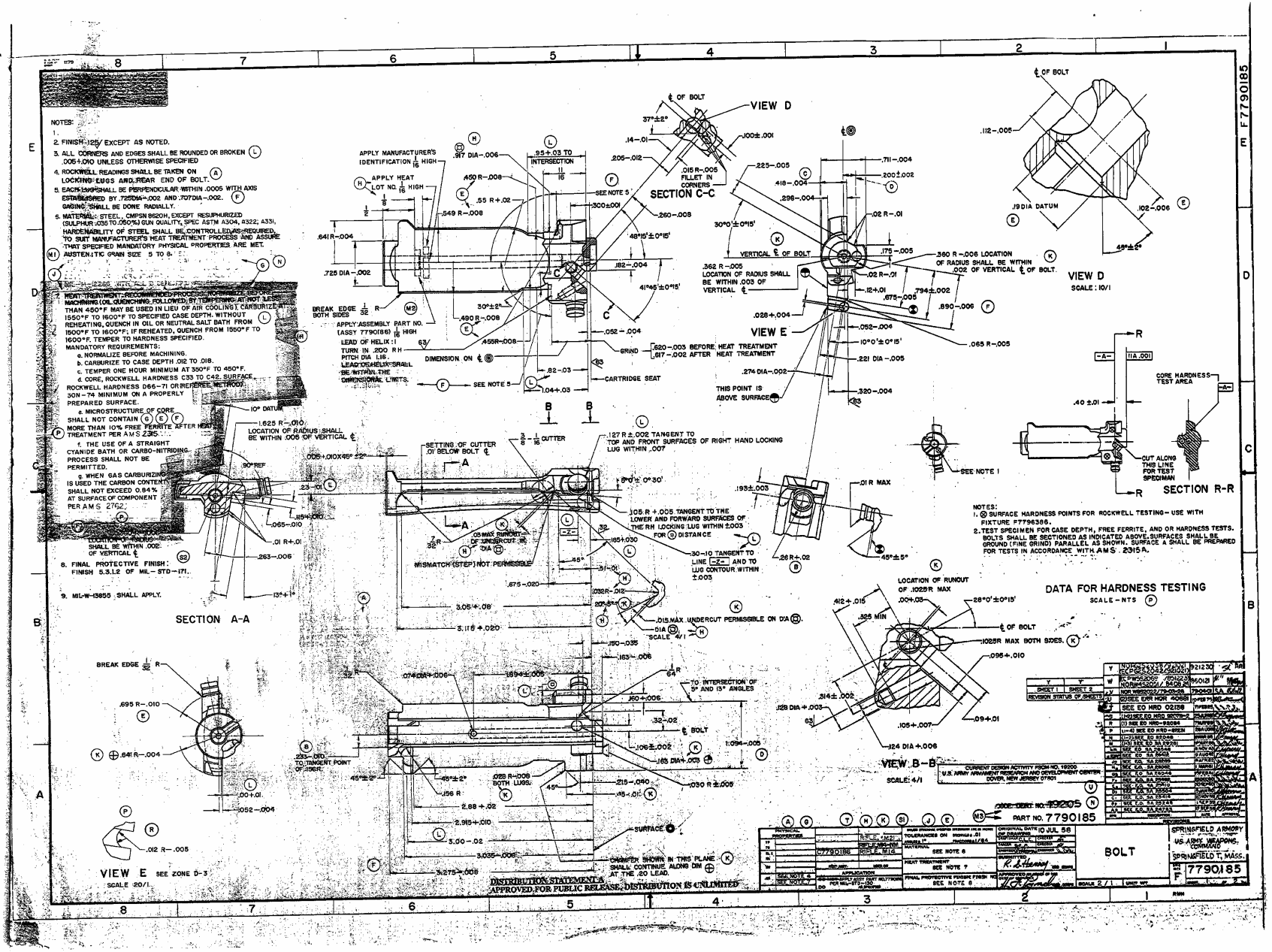
NOTES:
1.
2. FINISH 125/ EXCEPT AS NOTED.
3. ALL CORNERS AND EDGES SHALL BE ROUNDED OR BROKEN .005+.010 UNLESS OTHERWISE SPECIFIED
4. ROCKWELL READINGS SHALL BE TAKEN ON LOCKING LUGS AND REAR END OF BOLT.
5. EACH LUG SHALL BE PERPENDICULAR WITHIN .0005 WITH AXIS ESTABLISHED BY .725DIA-.002 AND .707DIA-.002. GAGING SHALL BE DONE RADIALLY.
6. MATERIAL: STEEL, CMPSN 8620H, EXCEPT RESULPHURIZED (SULPHUR .035 TO .050%) GUN QUALITY, SPEC ASTM A304, A322; A331, HARDENABILITY OF STEEL SHALL BE CONTROLLED AS REQUIRED, TO SUIT MANUFACTURER'S HEAT TREATMENT PROCESS AND ASSURE THAT SPECIFIED MANDATORY PHYSICAL PROPERTIES ARE MET.
AUSTENITIC GRAIN SIZE 5 TO 8.
7. HEAT TREATMENT: RECOMMENDED PROCESS: NORMALIZE BEFORE MACHINING (OIL QUENCHING FOLLOWED BY TEMPERING AT NOT LESS THAN 450°F MAY BE USED IN LIEU OF AIR COOLING). CARBURIZE AT 1550°F TO 1600°F TO SPECIFIED CASE DEPTH. WITHOUT REHEATING, QUENCH IN OIL OR NEUTRAL SALT BATH FROM 1500°F TO 1600°F; IF REHEATED, QUENCH FROM 1550°F TO 1600°F. TEMPER TO HARDNESS SPECIFIED.
MANDATORY REQUIREMENTS:
a. NORMALIZE BEFORE MACHINING.
b. CARBURIZE TO CASE DEPTH .012 TO .018.
c. TEMPER ONE HOUR MINIMUM AT 350°F TO 450°F.
d. CORE, ROCKWELL HARDNESS C33 TO C42. SURFACE, ROCKWELL HARDNESS D66-71 OR REFEREE METHOD 30N-74 MINIMUM ON A PROPERLY PREPARED SURFACE.
e. MICROSTRUCTURE OF CORE SHALL NOT CONTAIN MORE THAN 10% FREE FERRITE AFTER HEAT TREATMENT PER AMS 2315.
f. THE USE OF A STRAIGHT CYANIDE BATH OR CARBO-NITRIDING PROCESS SHALL NOT BE PERMITTED.
g. WHEN GAS CARBURIZING IS USED THE CARBON CONTENT SHALL NOT EXCEED 0.84% AT SURFACE OF COMPONENT PER AMS 2762.
8. FINAL PROTECTIVE FINISH: FINISH 5.3.1.2 OF MIL-STD-171.
9. MIL-W-13855 SHALL APPLY.
SECTION A-A
SECTION C-C
VIEW D
VIEW E
VIEW B-B
SCALE: 4/1
VIEW D
SCALE: 10/1
SECTION R-R
DATA FOR HARDNESS TESTING
SCALE - NTS
VIEW E SEE ZONE D-3
SCALE 20/1
NOTES:
1. SURFACE HARDNESS POINTS FOR ROCKWELL TESTING - USE WITH FIXTURE F7796386.
2. TEST SPECIMEN FOR CASE DEPTH, FREE FERRITE, AND OR HARDNESS TESTS. BOLTS SHALL BE SECTIONED AS INDICATED ABOVE. SURFACES SHALL BE GROUND (FINE GRIND) PARALLEL AS SHOWN. SURFACE A SHALL BE PREPARED FOR TESTS IN ACCORDANCE WITH AMS 2315A.
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