

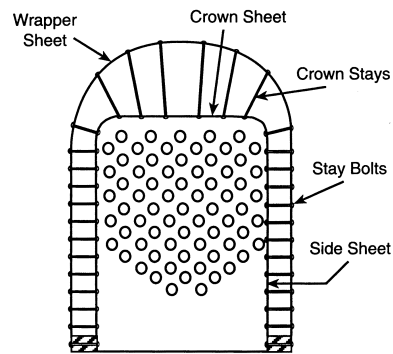
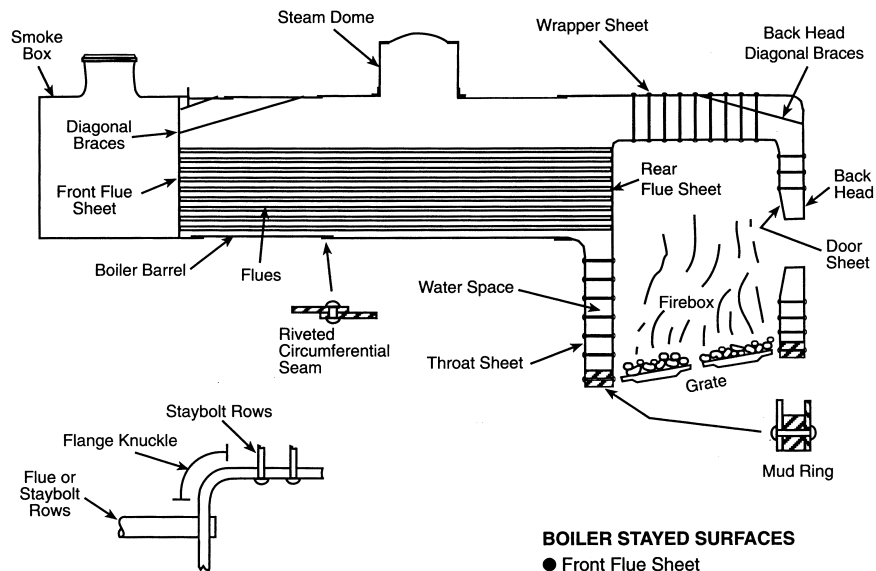
APPENDIX B TO PART 230—DIAGRAMS AND DRAWINGS

Appendix B to Part 230—Diagrams and Drawings

Reference 230.8
Drawing 1

BOILER: STAYED AND UNSTAYED SURFACES

Section Through Locomotive Boiler



SECTION THROUGH FIREBOX

BOILER STAYED SURFACES

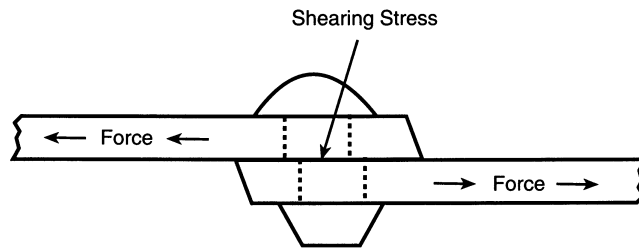
- Front Flue Sheet
- Rear Flue Sheet
- Wrapper Sheet
- Door Sheet
- Side Sheets
- Crown Sheet
- Throat Sheet
- Back Head
- Stayed Section of Thermic Syphons

BOILER UNSTAYED SURFACES

- Boiler Barrel
- Steam Dome
- Arch Tubes
- Thermic Syphon Neck
- Firebox Circulators
- Knuckle Section of Flanged Sheet

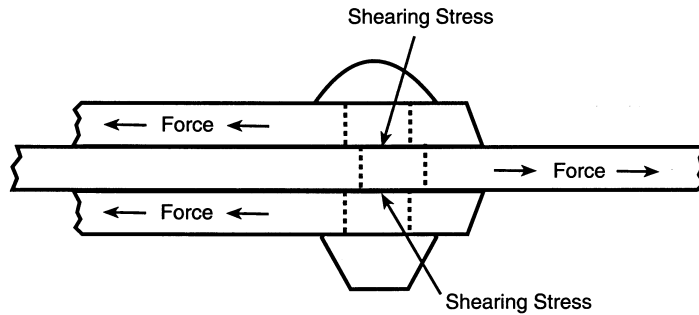
Reference 230.27
Drawing 2

RIVET IN SINGLE SHEAR



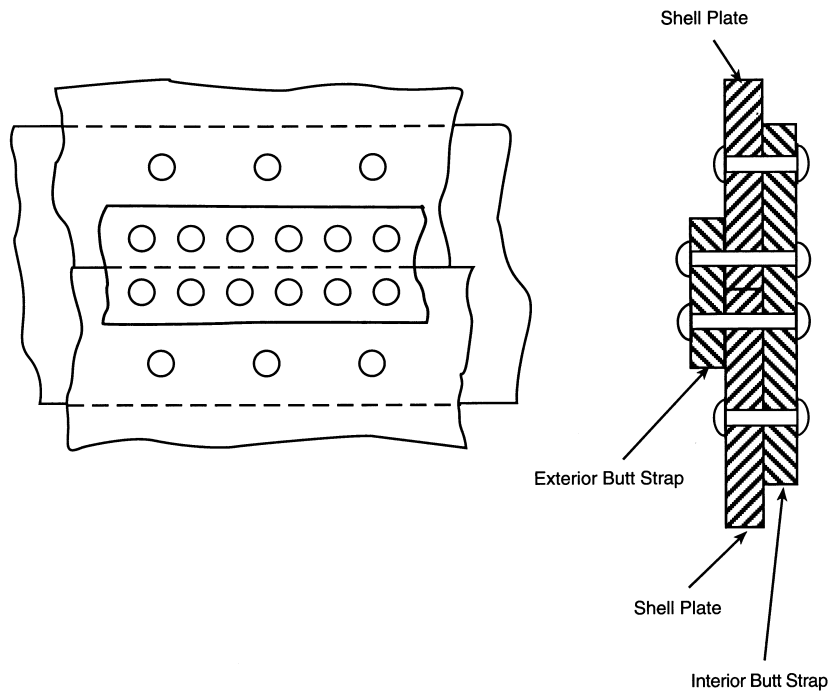
Reference 230.27
Drawing 3

RIVET IN DOUBLE SHEAR



Reference 230.34(b)
Drawing 4

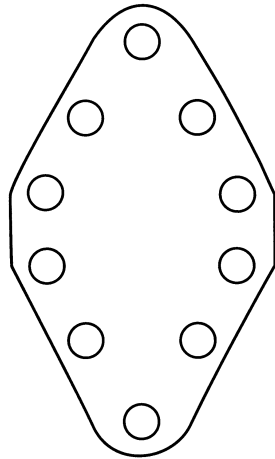
RIVETED BUTT SEAM



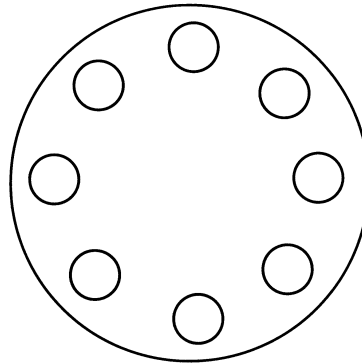
Reference 230.34(a)
Drawing 5

RIVETED BOILER PATCH

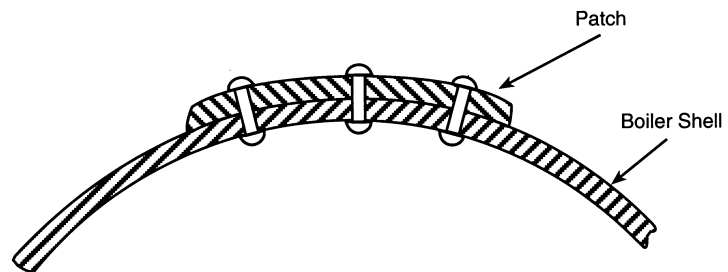
Diagonal Riveted Patch



Circular Riveted Patch



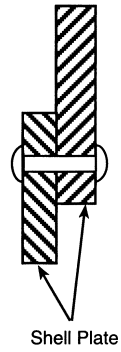
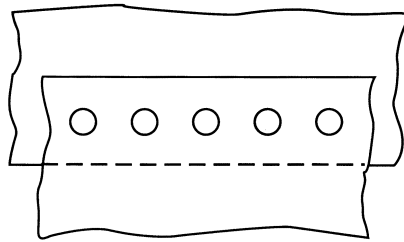
Typical Riveted Patch Installation



Patch may be installed on Boiler Shell Interior or Exterior

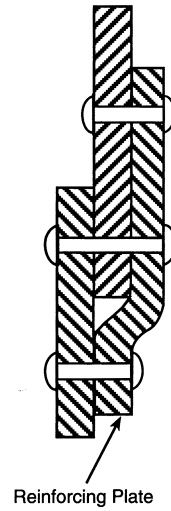
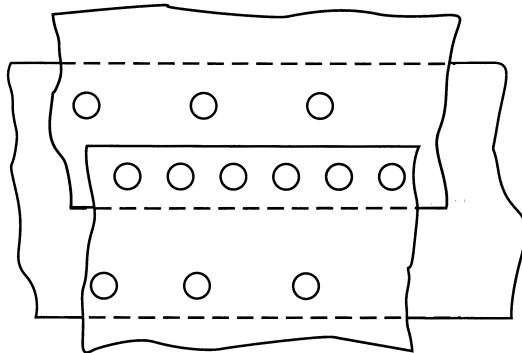
Reference 230.30
Drawing 6

RIVETED LAP SEAM



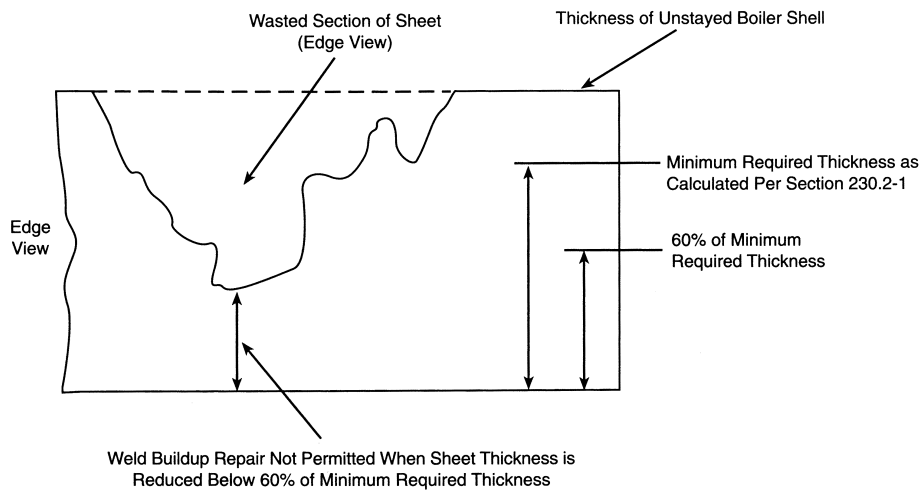
Reference 230.30
Drawing 7

RIVETED LAP SEAM WITH REINFORCING PLATE



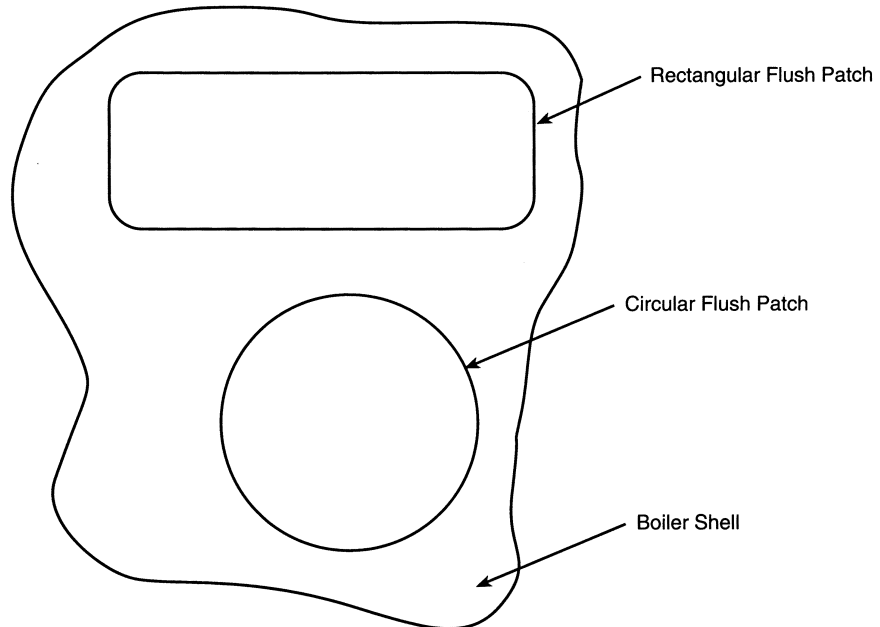
Reference 230.33(c)
Drawing 8

WELD BUILDUP REPAIR OF WASTED UNSTAYED BOILER SHEET

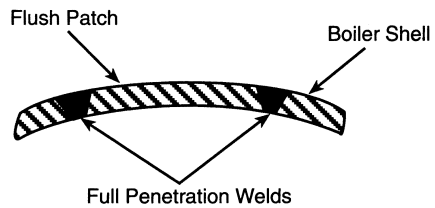


Reference 230.33(d)
Drawing 9

FLUSH PATCHES ON UNSTAYED SECTION OF BOILER SHELL

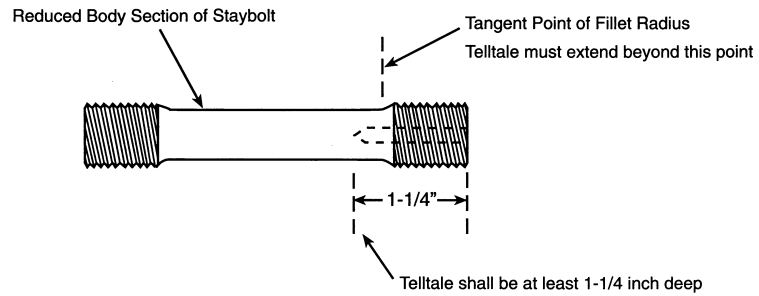


Typical Flush Patch Installation



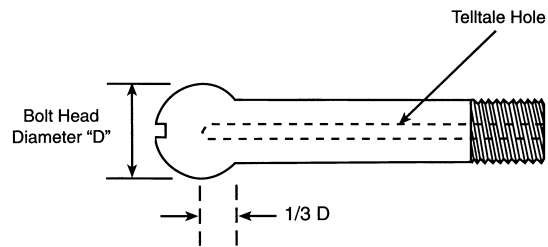
Reference 230.38(b)
Drawing 10

ARRANGEMENT OF TELLTALE HOLE IN REDUCED-BODY STAYBOLT



Reference 230.41(b)
Drawing 11

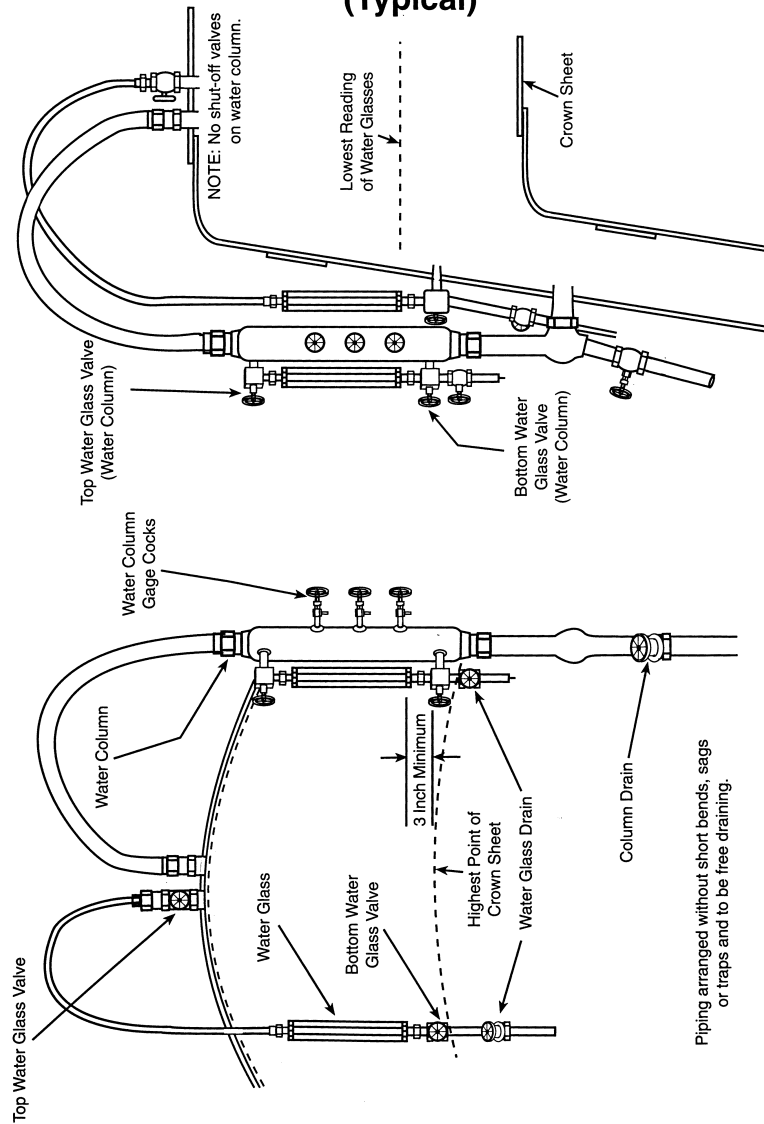
ARRANGEMENT OF TELLTALE HOLE IN HOLLOW FLEXIBLE STAYBOLT



Minimum Telltale Hole Depth into Bolt Head
To Equal 1/3 of Bolt Head Diameter (1/3 D)

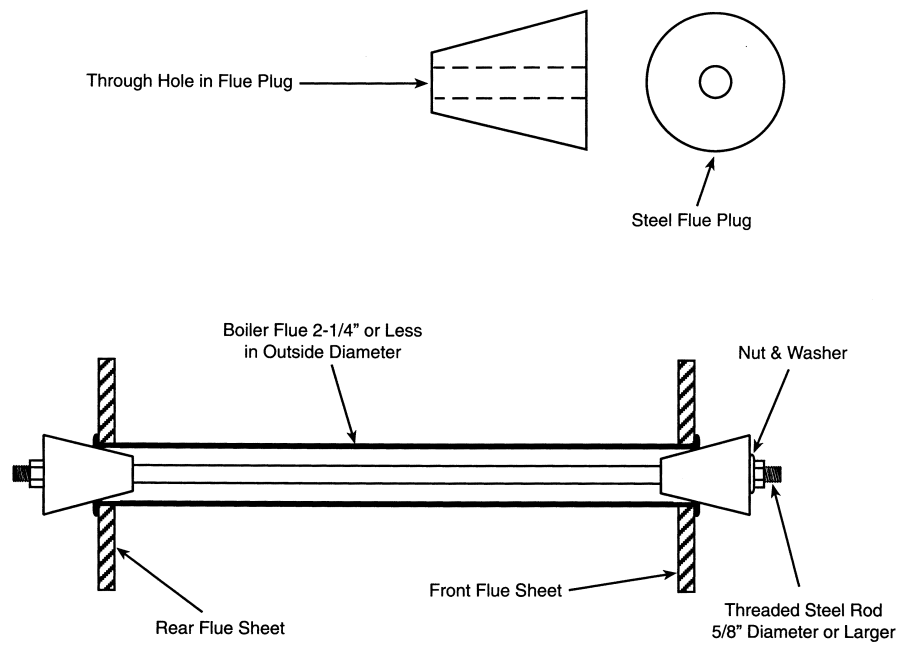
Reference 230.51
Drawing 12

GENERAL ARRANGEMENT OF WATER GLASS AND WATER COLUMN VALVES (Typical)



Reference 230.58(b)
Drawing 13

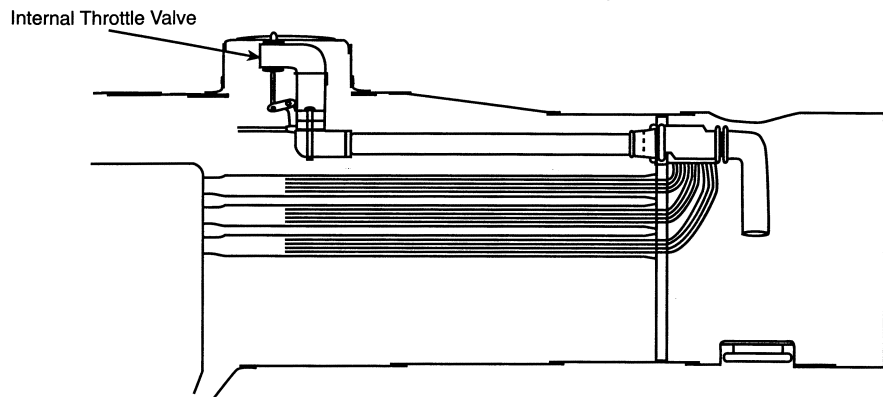
INSTALLATION OF FLUE PLUG



Reference 230.62
Drawing 14

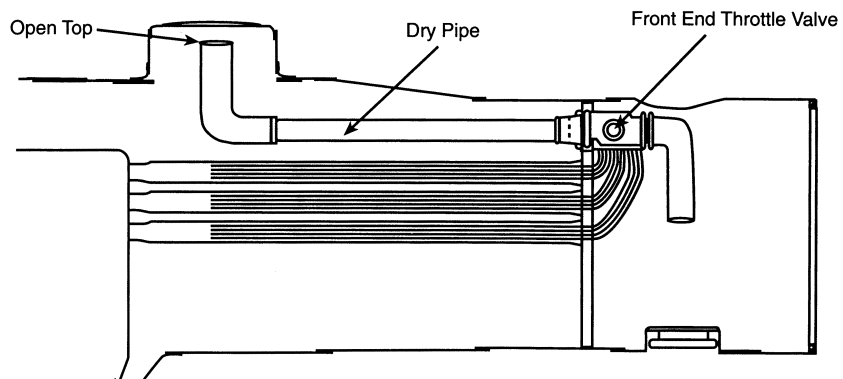
DRY PIPE

Arrangement of Dry Pipe Subject to Pressure



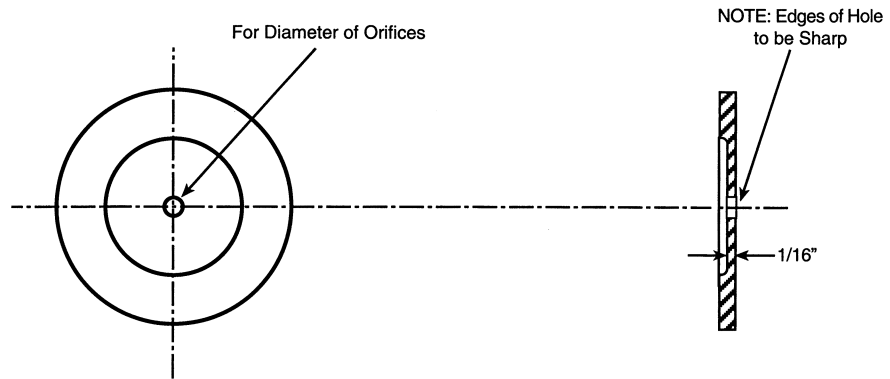
Reference 230.62
Drawing 15

Arrangement of Dry Pipe Not Subject to Pressure



Reference 230.71(b)
Drawing 16

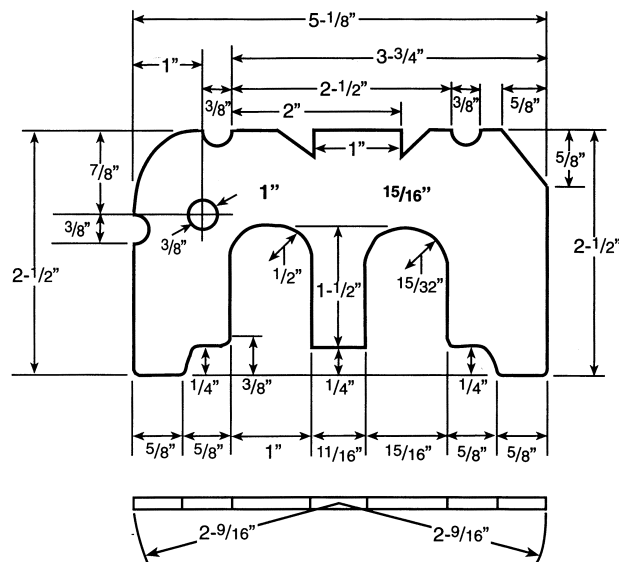
ORIFICE



Reference 230.113
Drawing 17

WHEEL DEFECT GAUGE

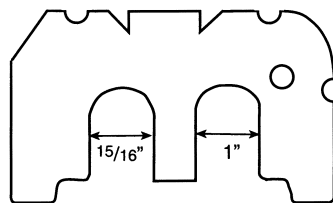
This gauge to be used in determining flat spots, worn flanges, and broken rims.



Reference 230.113
Drawing 18

WHEEL DEFECT GAUGE

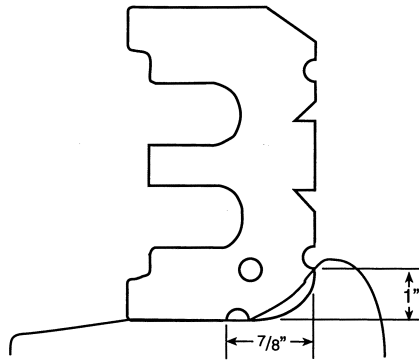
Method of gauging worn Flanges.



Reference 230.113
Drawing 19

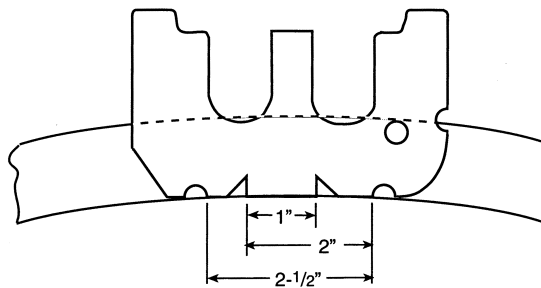
WHEEL DEFECT GAUGE

Method of gauging worn flanges.



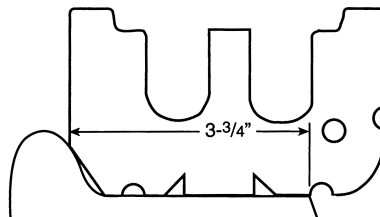
Reference 230.113
Drawing 20

Method of gauging shelled and flat spots.



Reference 230.113
Drawing 21

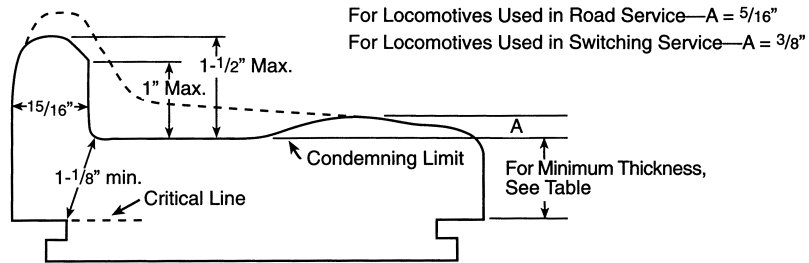
Method of gauging broken rims.



Reference 230.112
Drawing 22

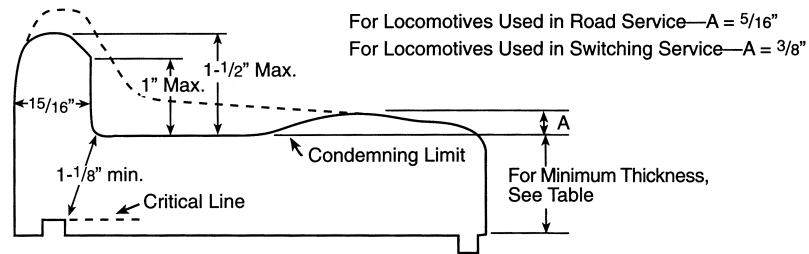
STEEL TIRE

Retaining ring type fastening. Driving and trailing wheels.



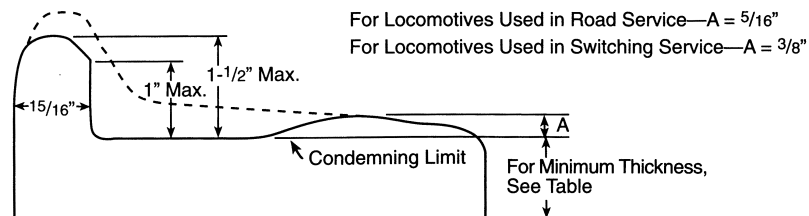
Reference 230.112
Drawing 23

Shrinkage fastening with shoulder and retaining segments. Driving and trailing wheels.



Reference 230.112
Drawing 24

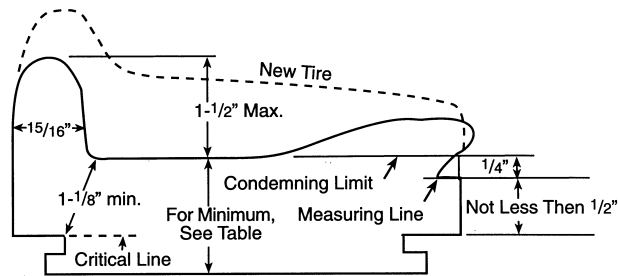
Shrinkage fastening. Driving and trailing wheels.



Reference 230.112
Drawing 25

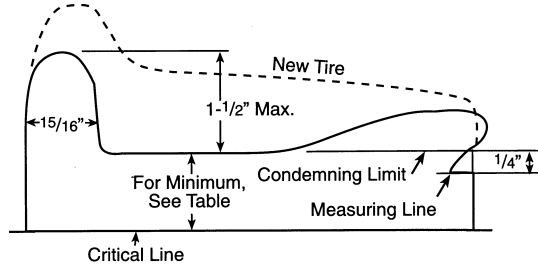
STEEL TIRE

Retaining ring type fastening. Minimum thickness for steel tires. Engine and tender.



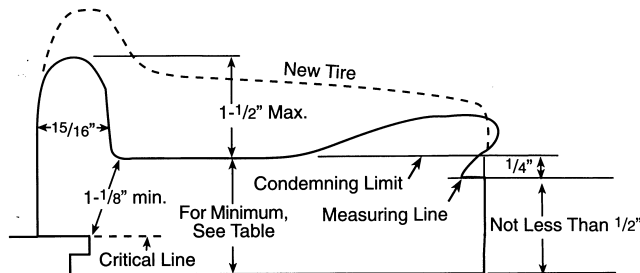
Reference 230.112
Drawing 26

Shrinkage fastening only. Minimum thickness for steel tires. Engine and tender.



Reference 230.112
Drawing 27

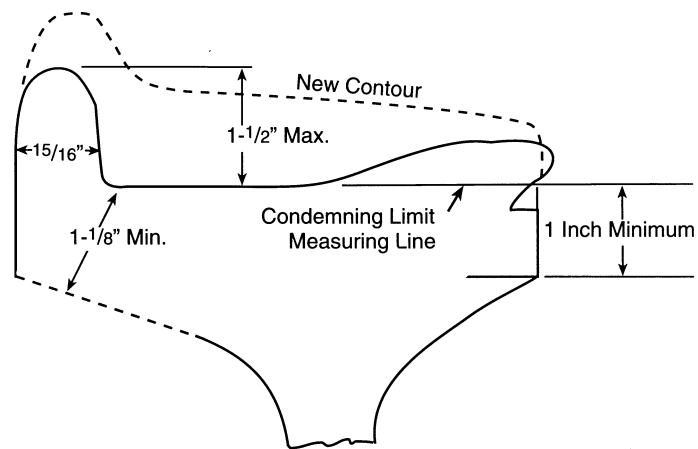
Retaining ring fastening. Minimum thickness for steel tires. Engine and tender.



Reference 230.113(j)
Drawing 28

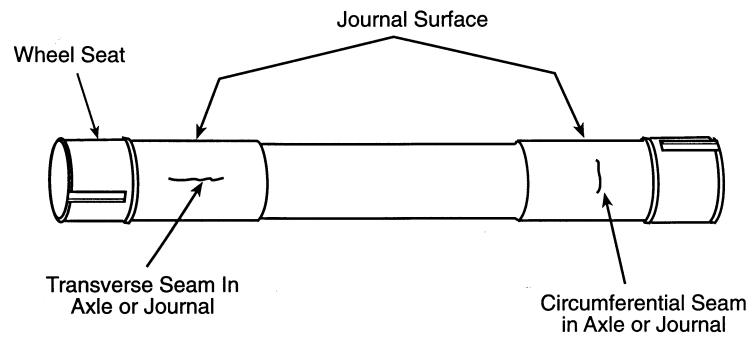
STEEL WHEELS

Minimum thickness of rim. Engine and tender truck wheels.



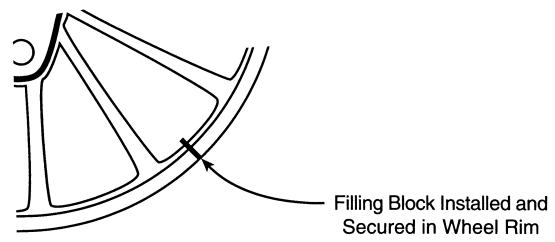
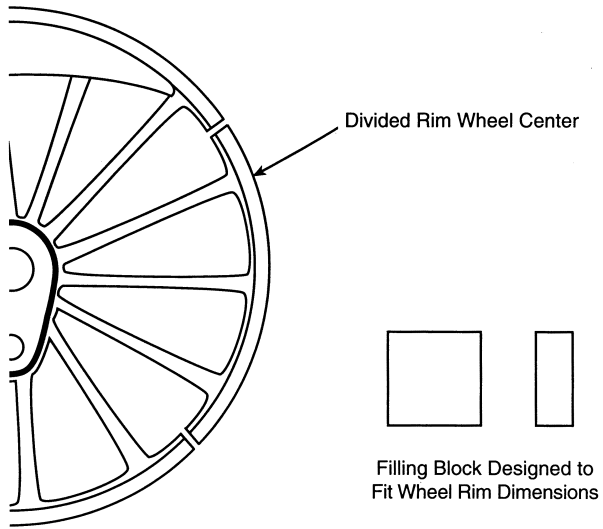
Reference 230.98
Drawing 29

SEAMS IN AXLES



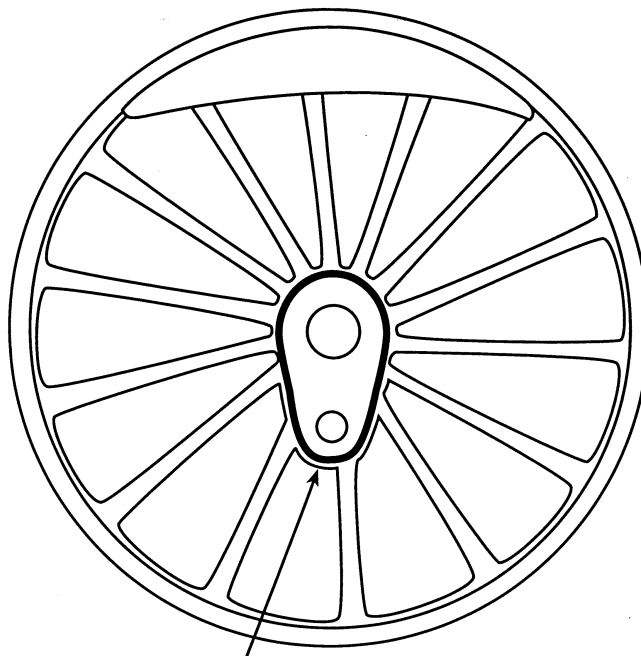
Reference 230.114(a)
Drawing 30

FILLING BLOCK FOR DIVIDED-RIM WHEEL CENTER



Reference 230.114(c)
Drawing 31

BANDED WHEEL HUB



Steel Band Applied to Repair
Cracked Wheel Hub