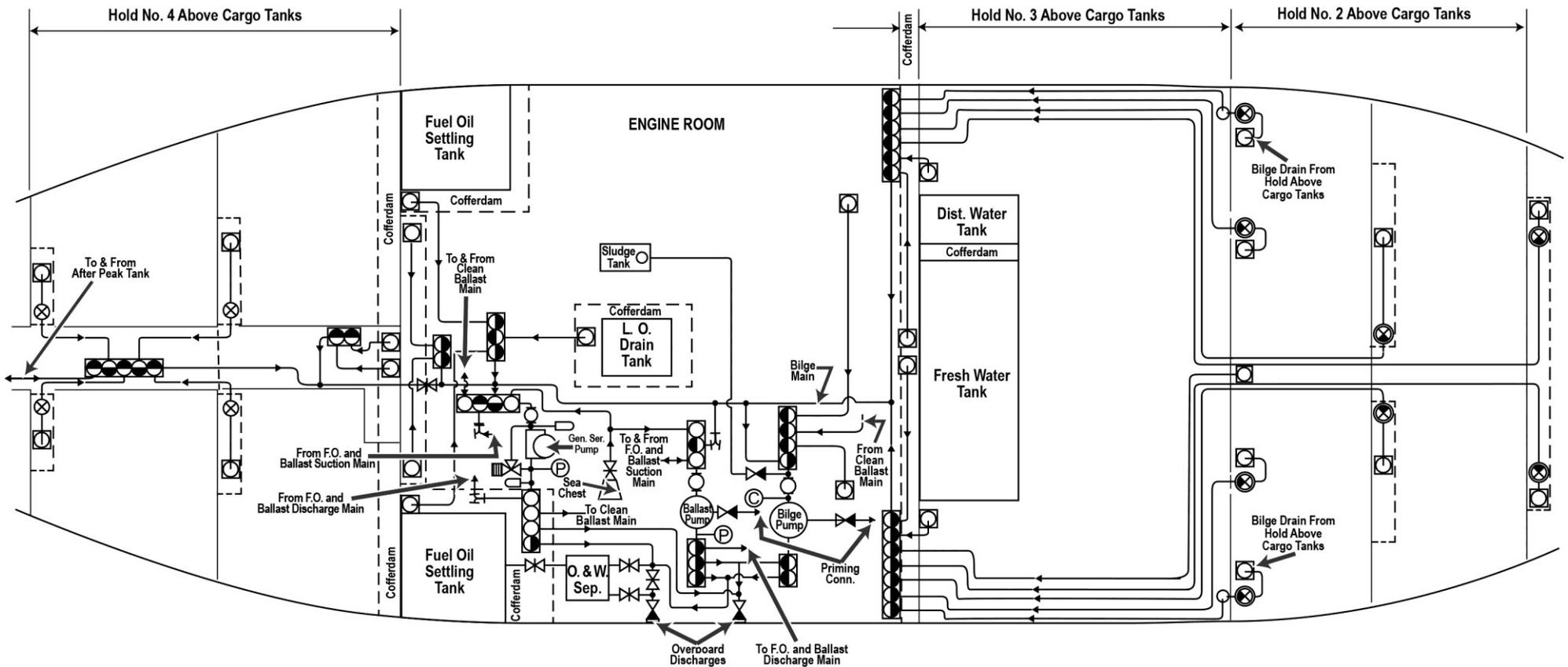
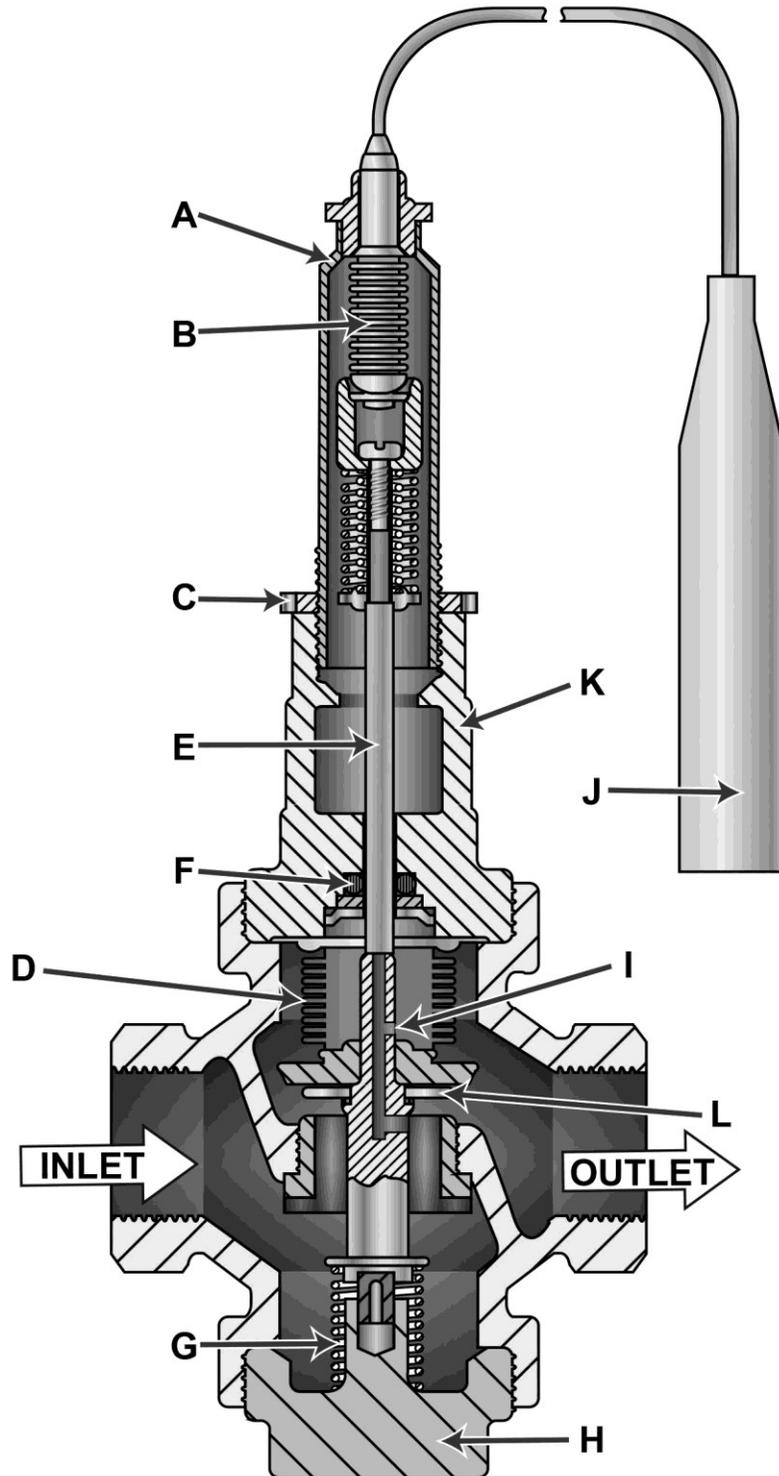


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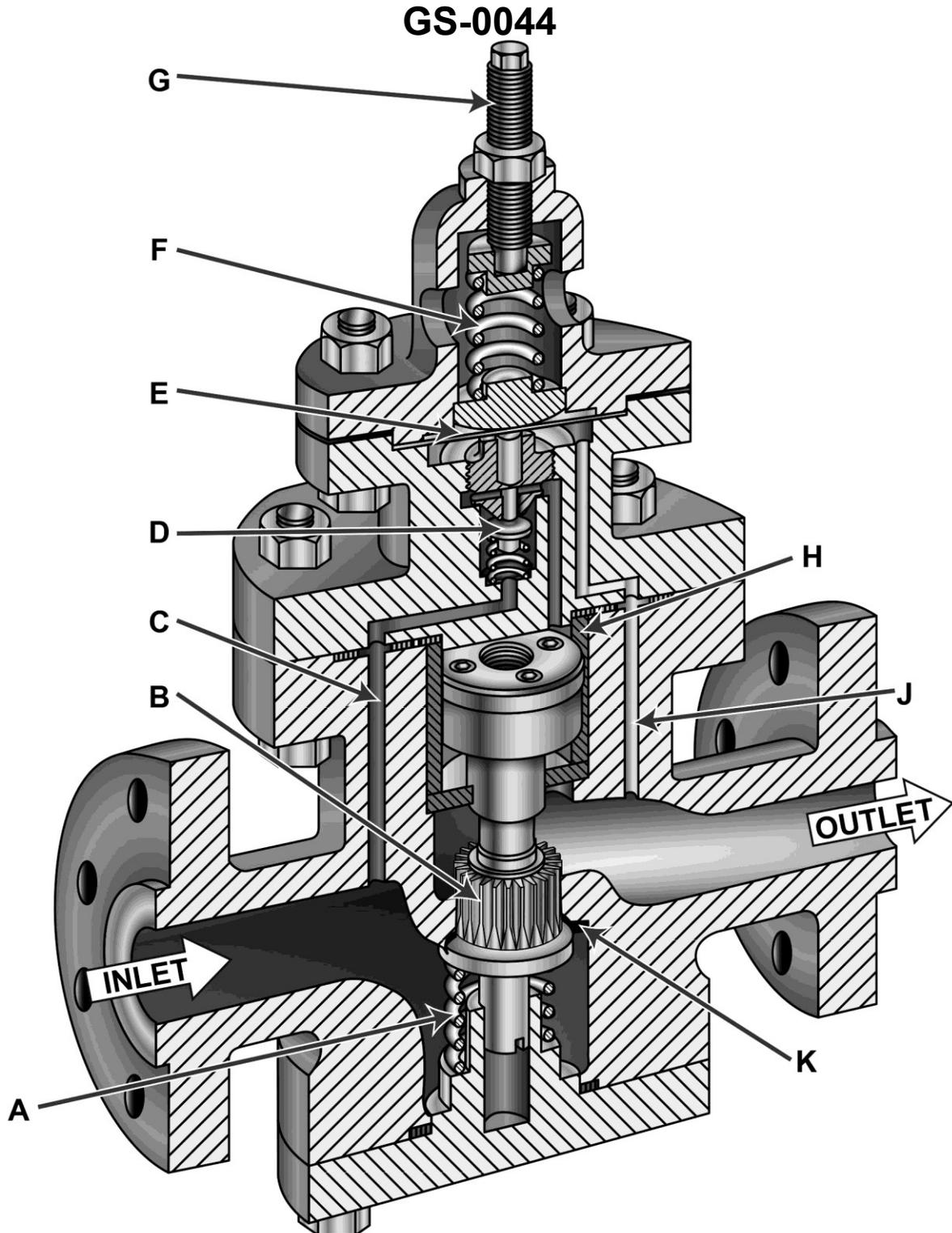
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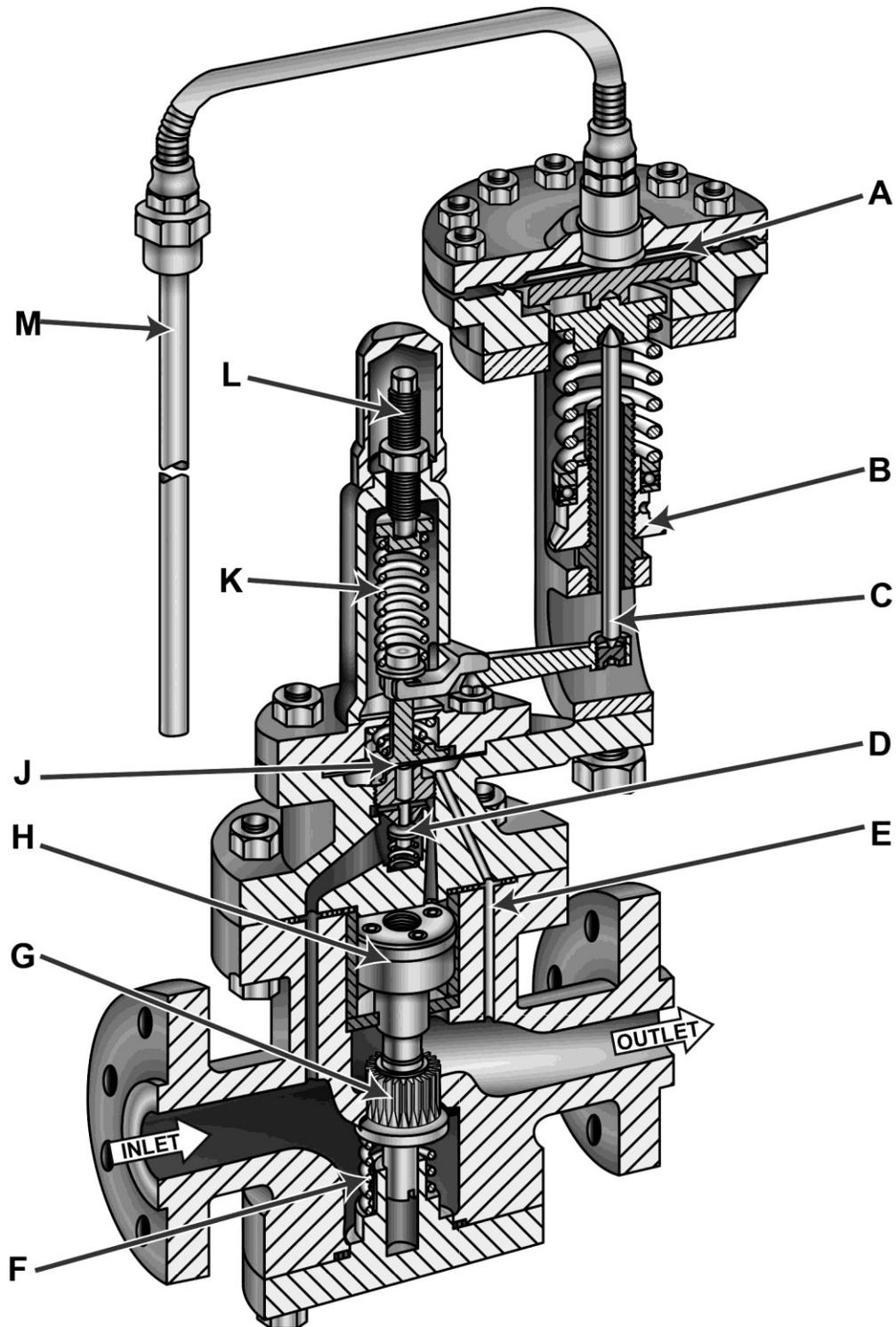


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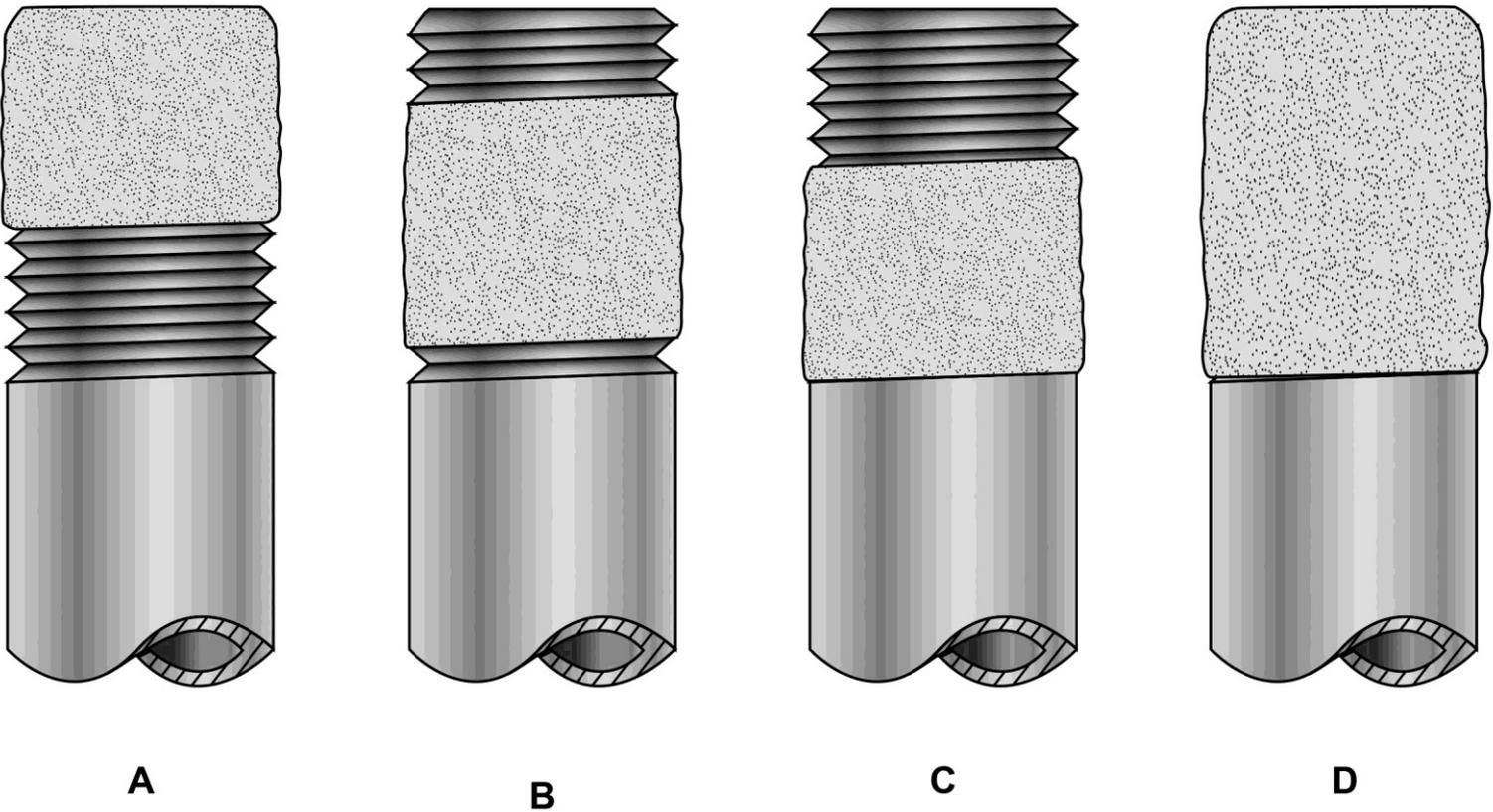


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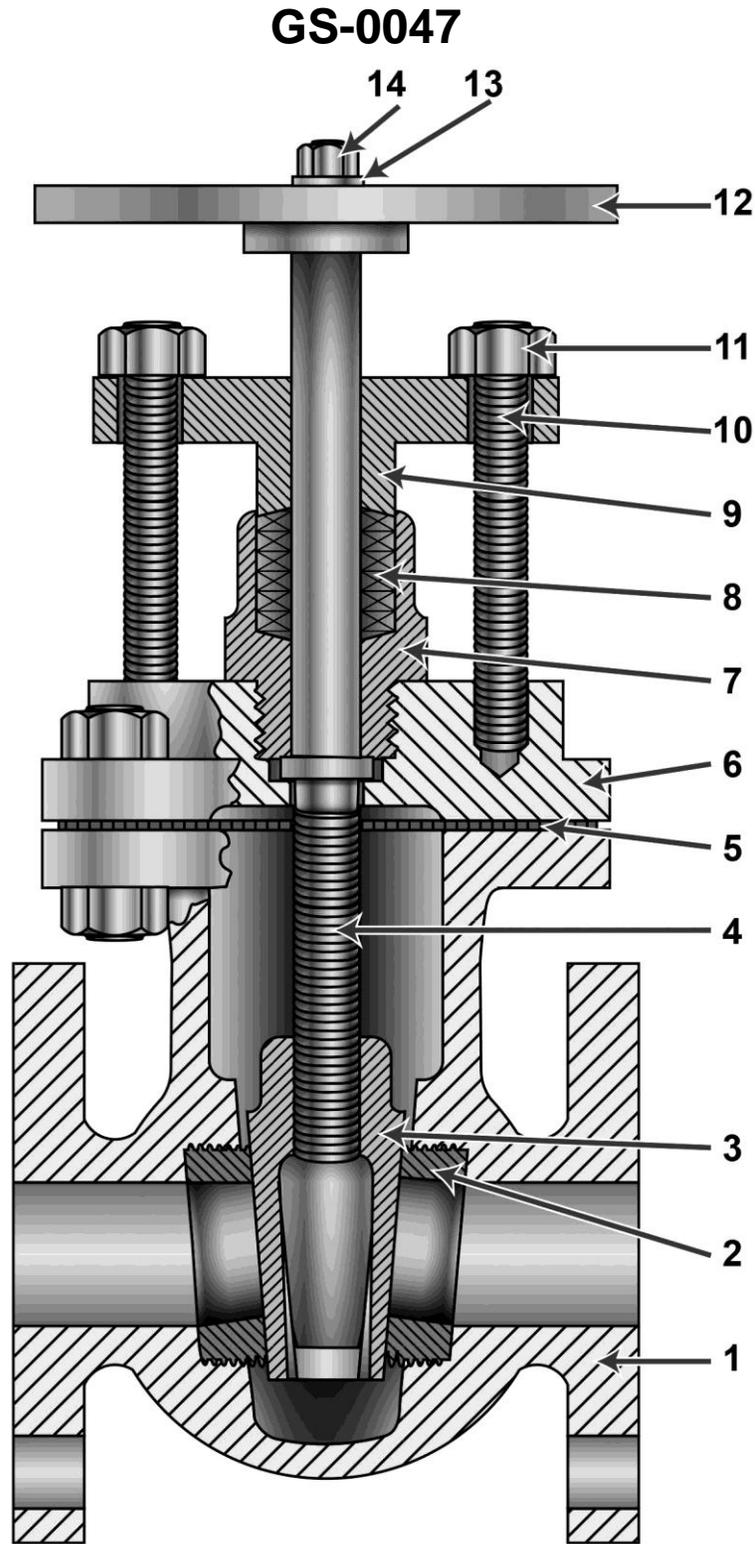
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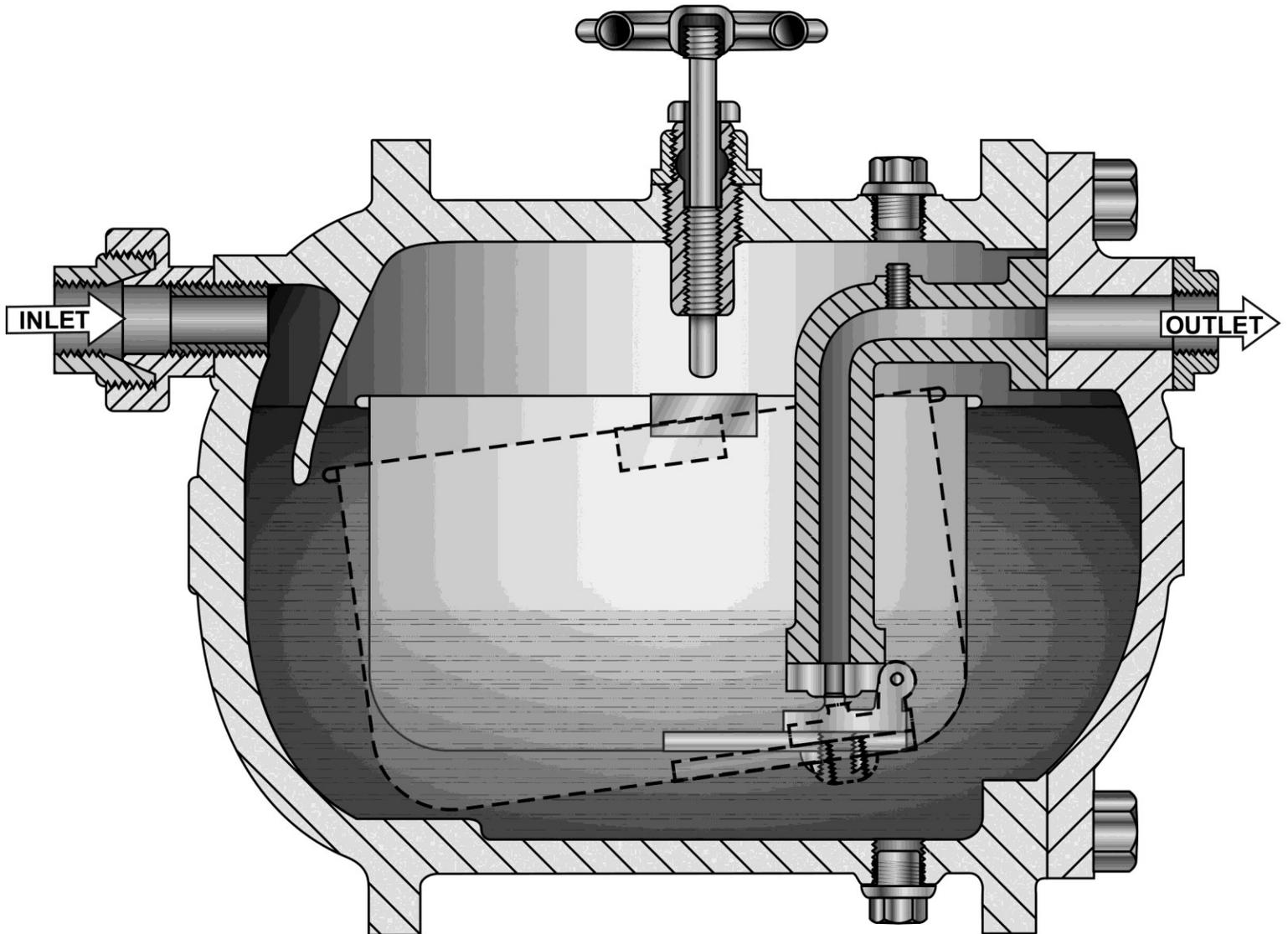


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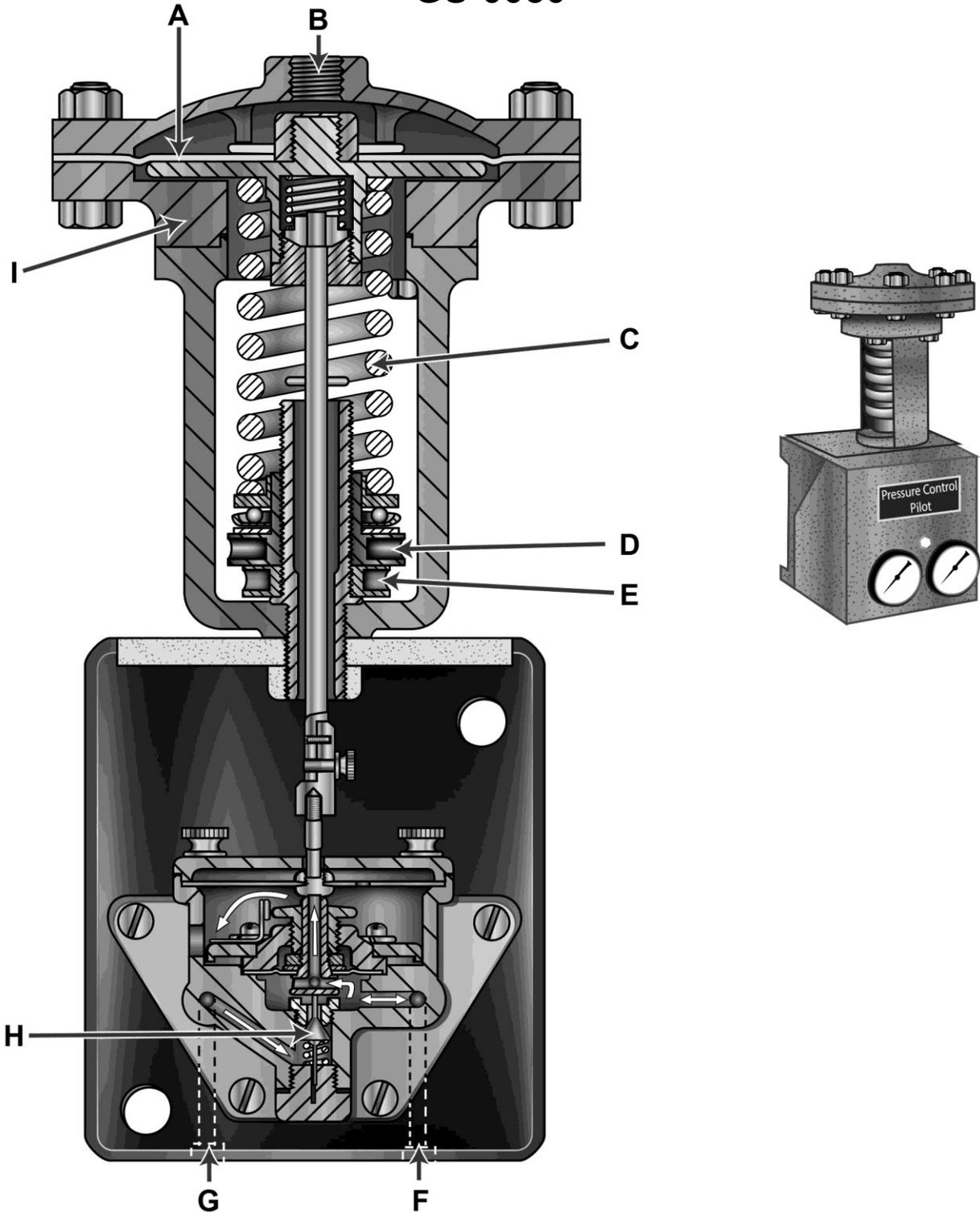
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NAVEDTRA 14151

GS-0048



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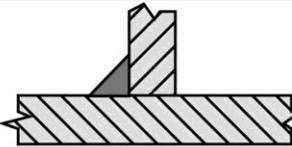
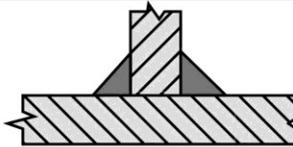
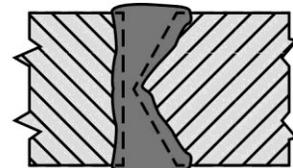
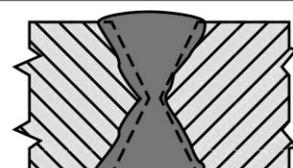
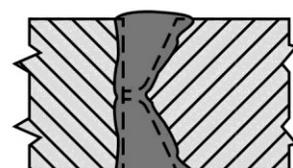
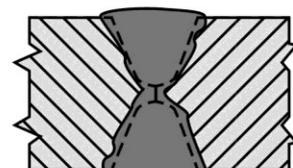
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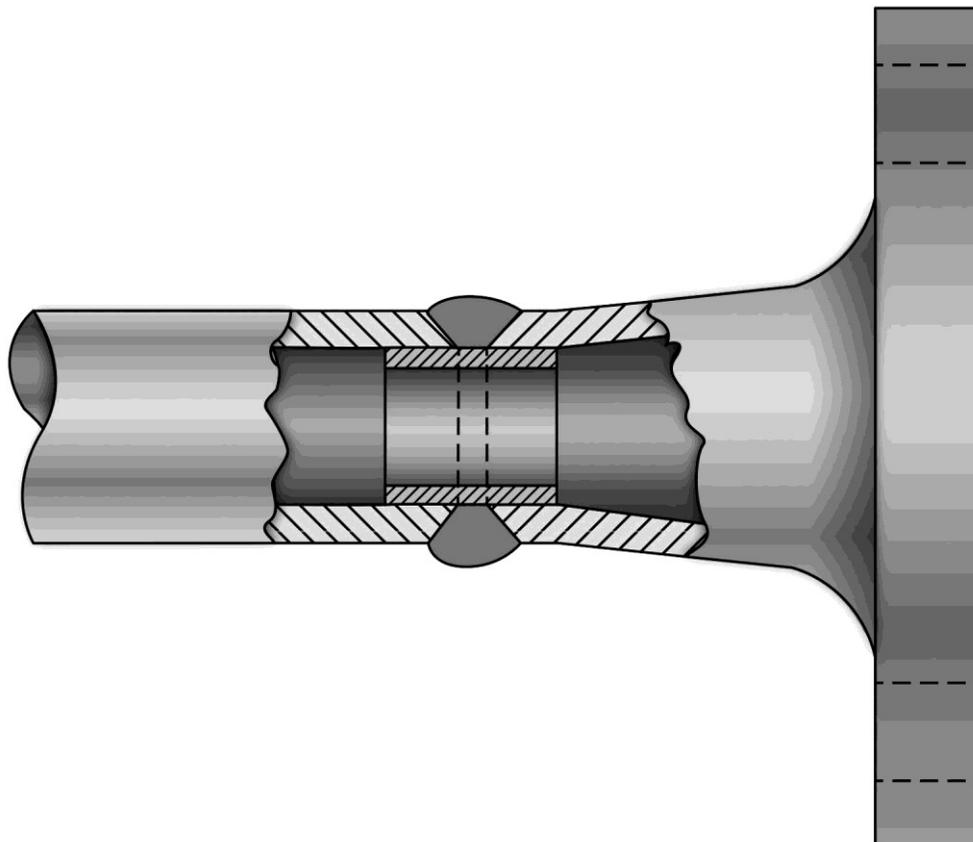
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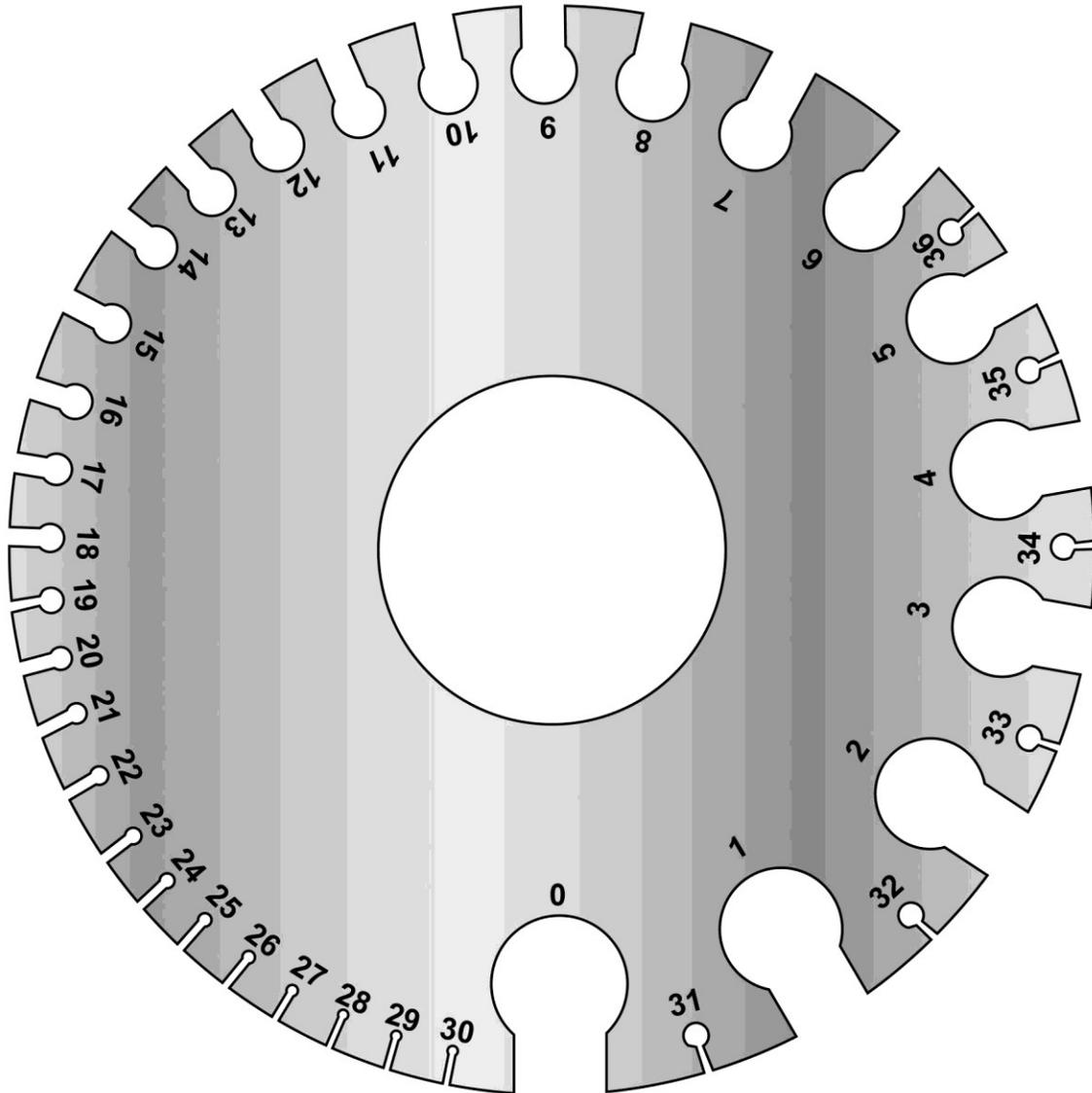
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	A	B
1		
2		
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4		
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GS-0078

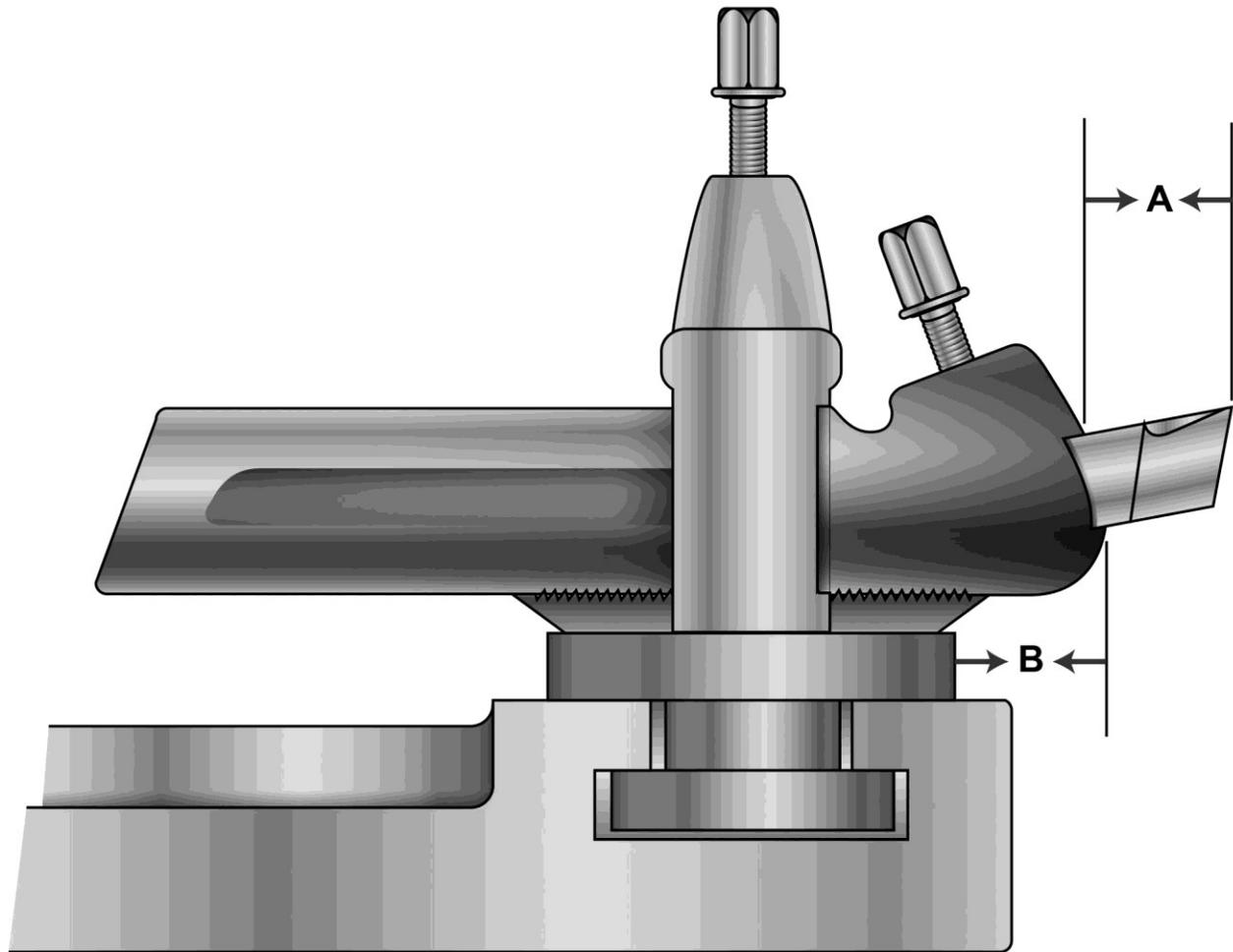


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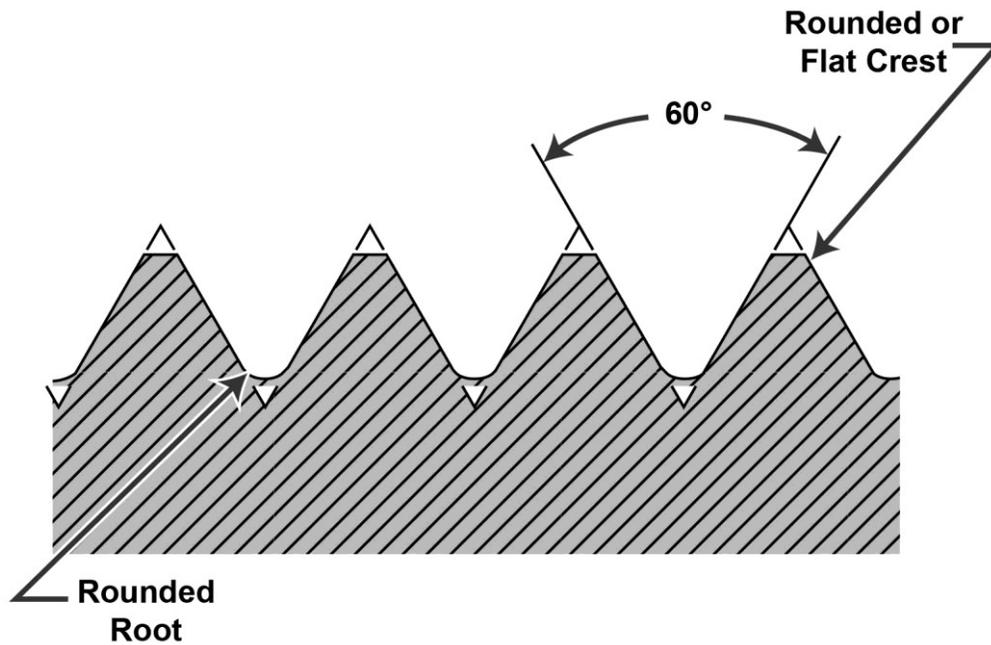
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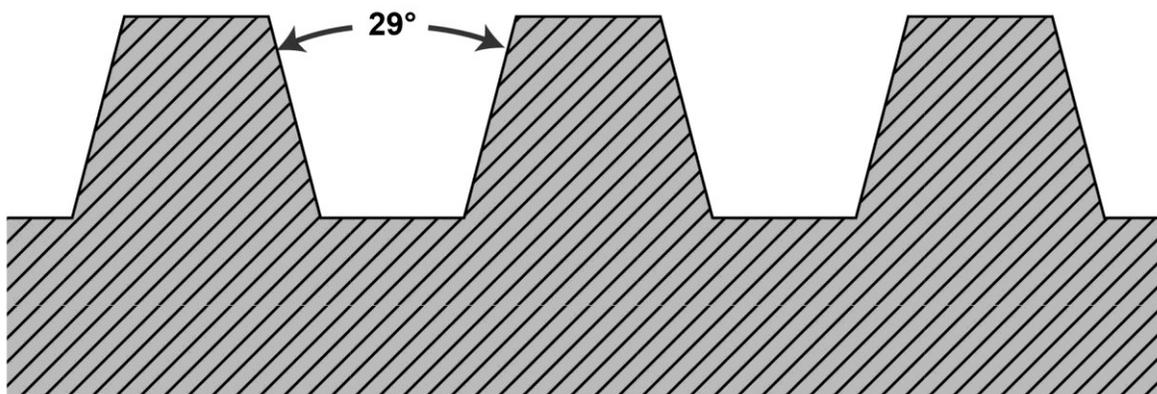


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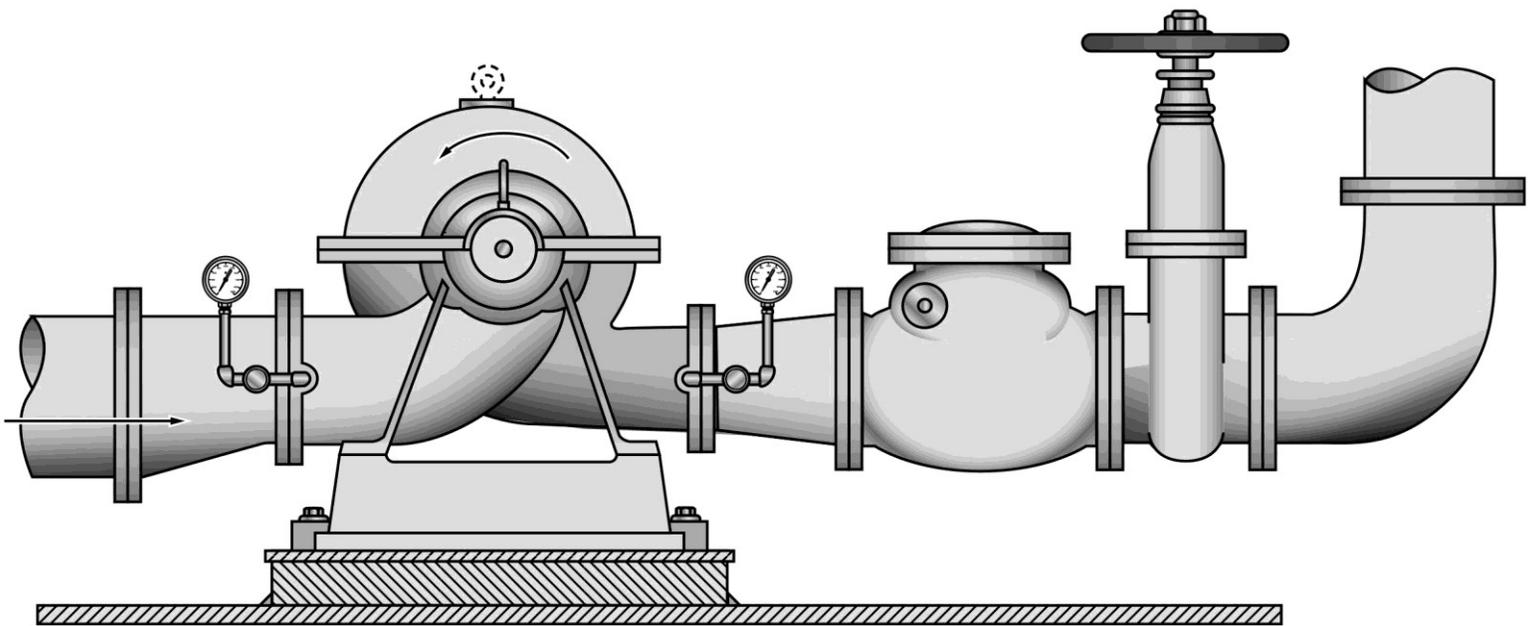
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GS-0088



GS-0089

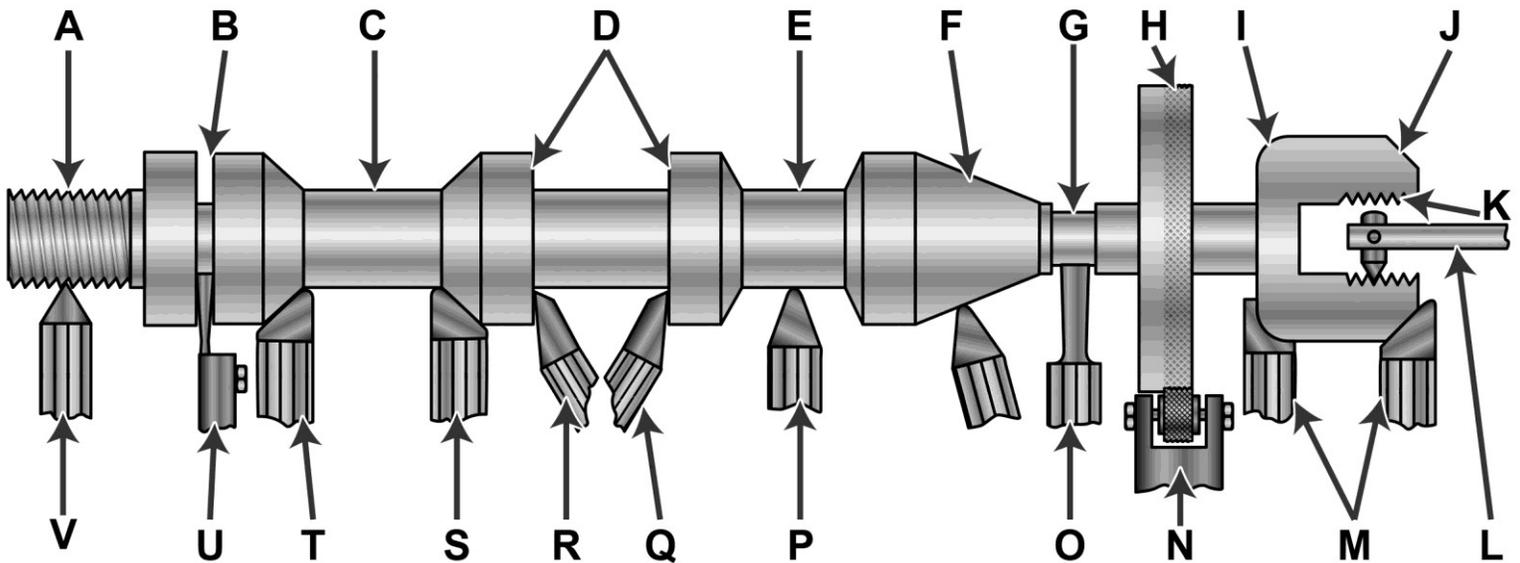


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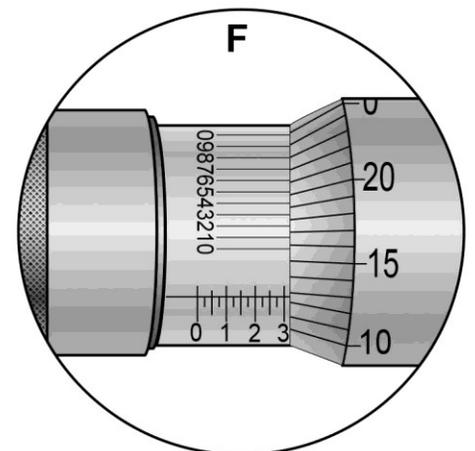
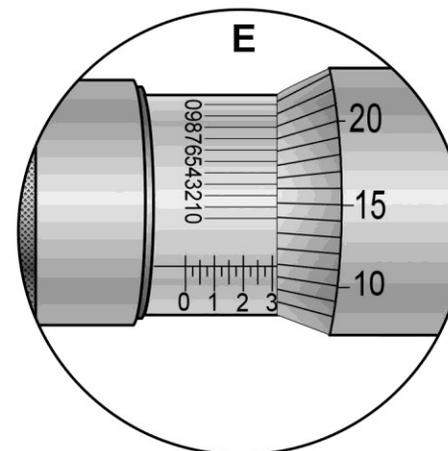
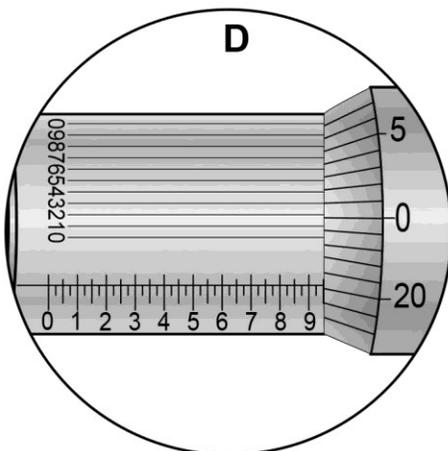
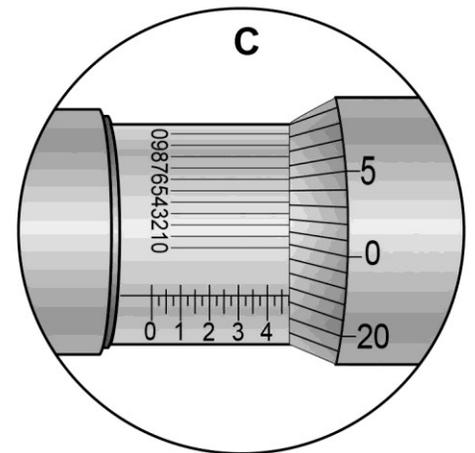
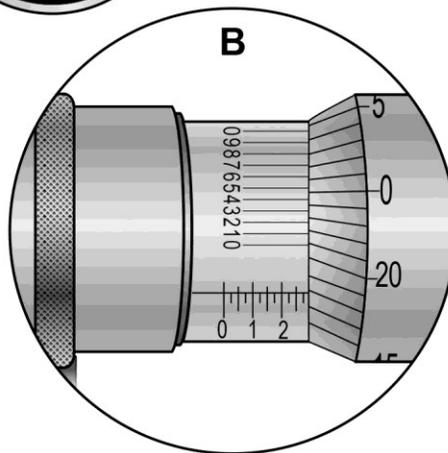
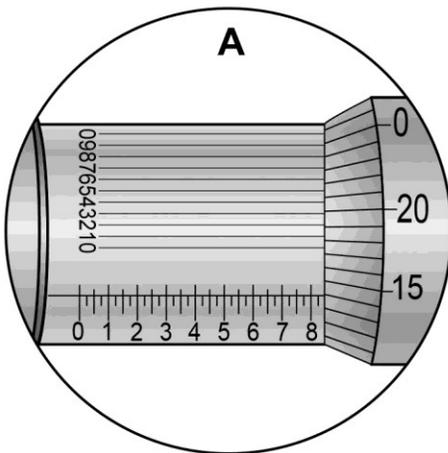
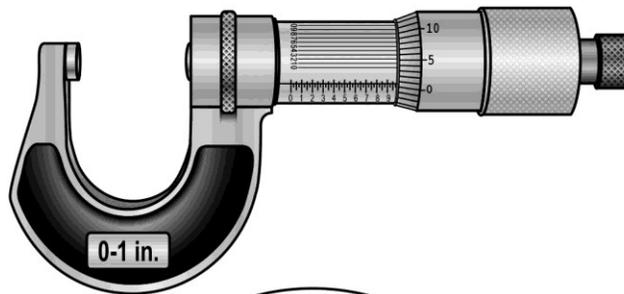


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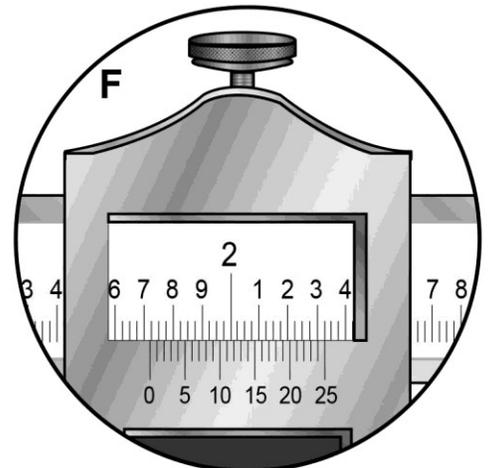
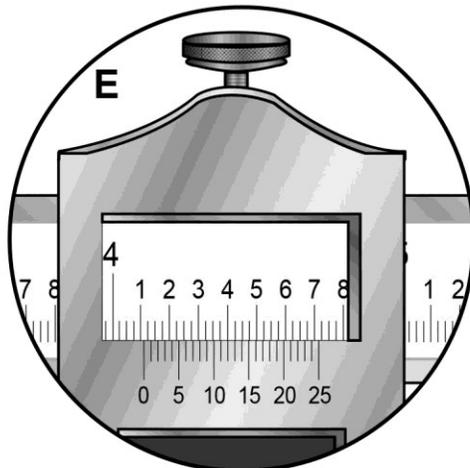
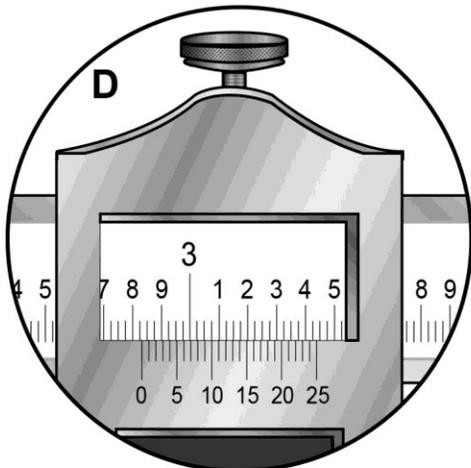
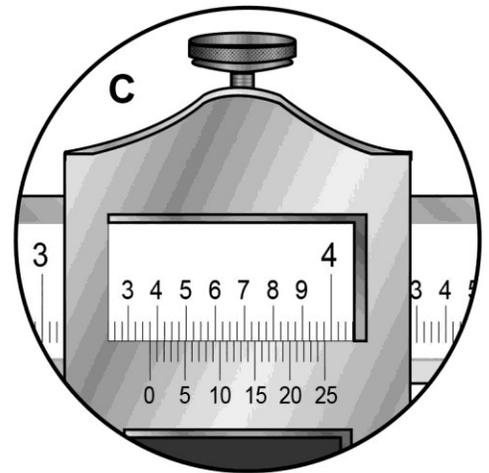
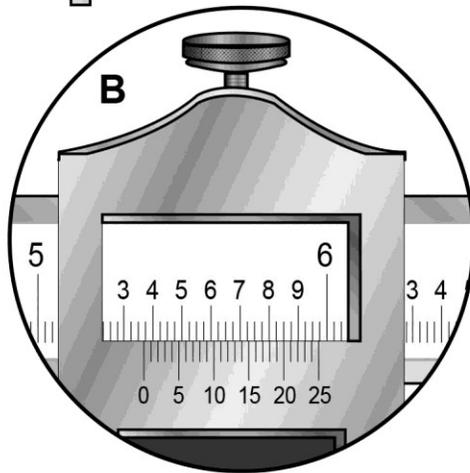
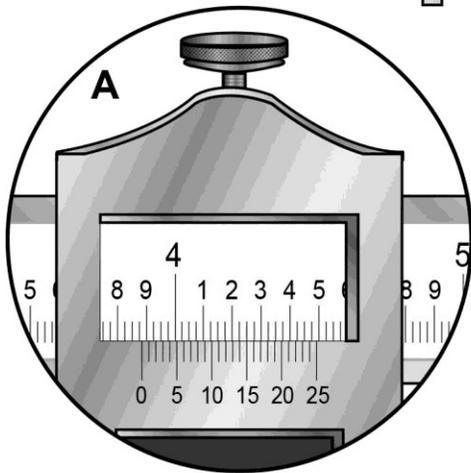
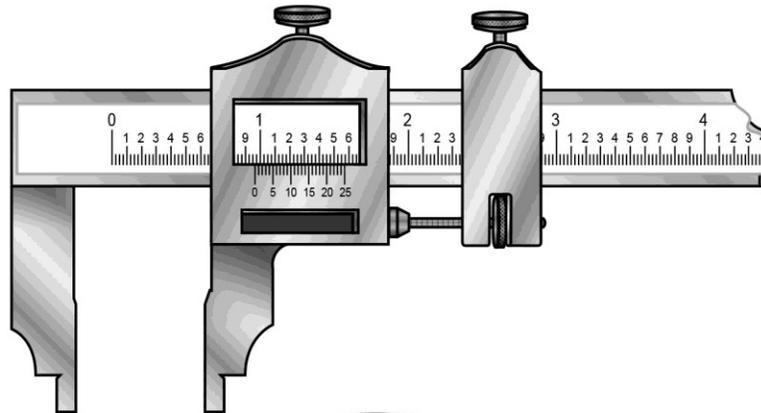
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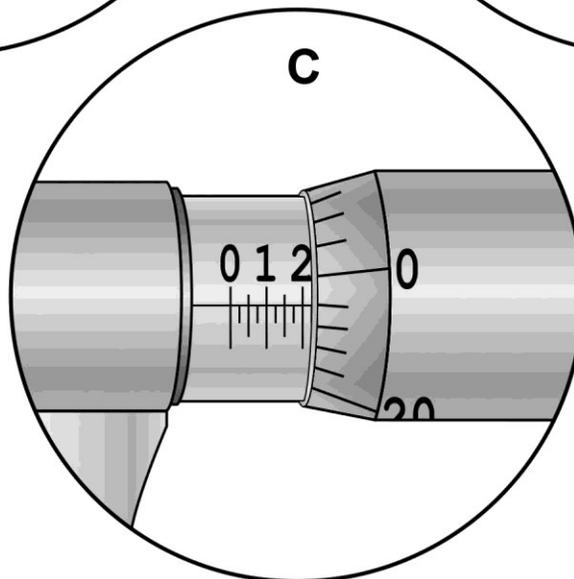
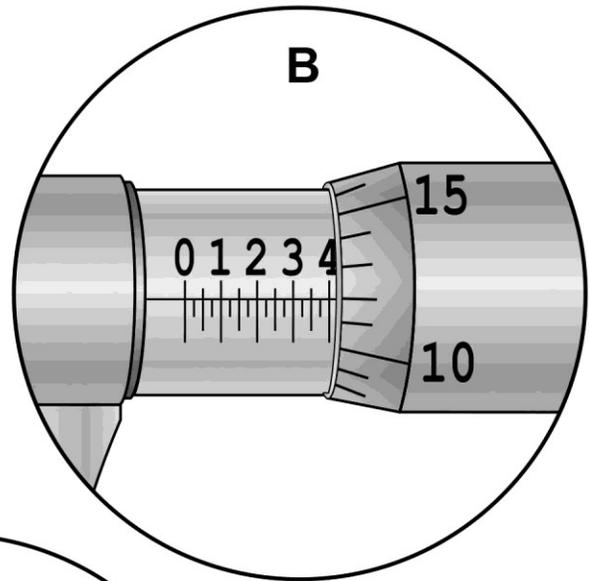
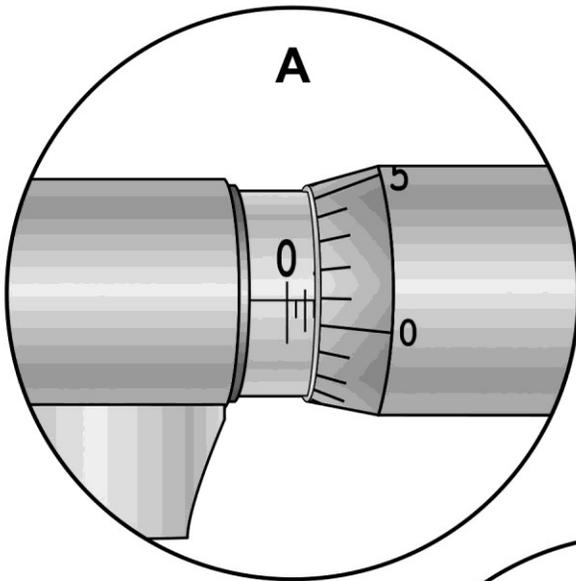
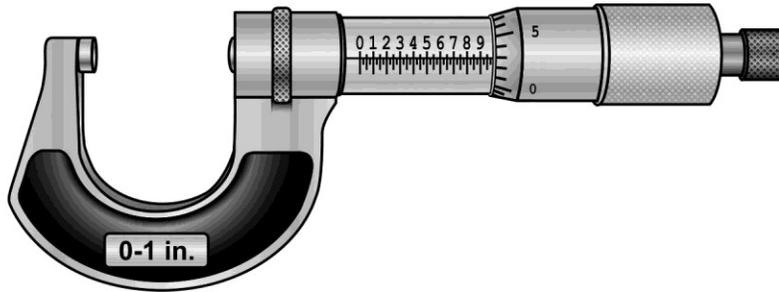
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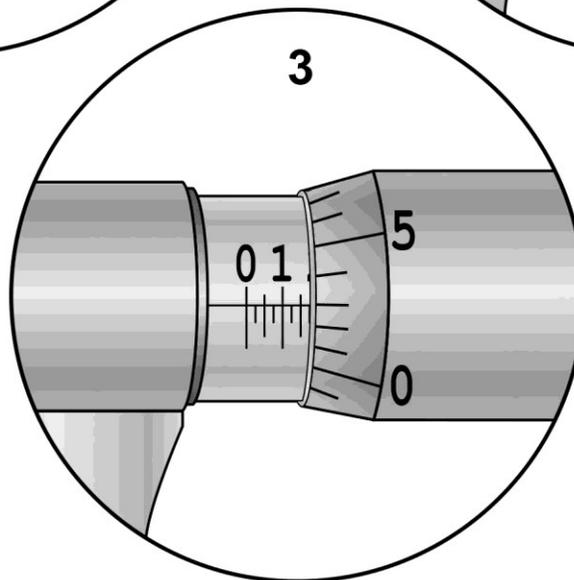
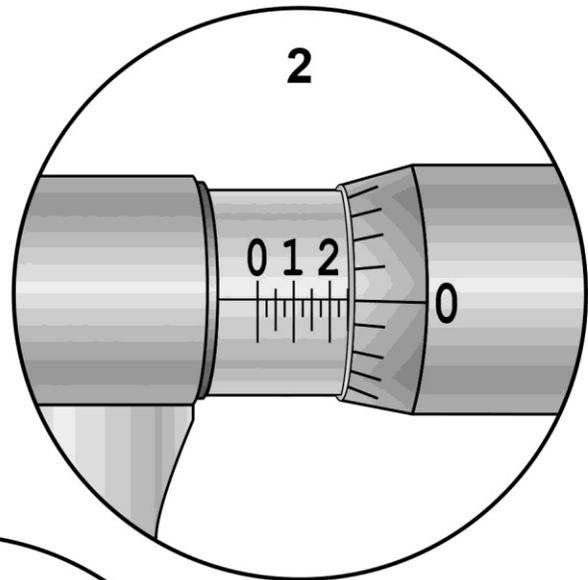
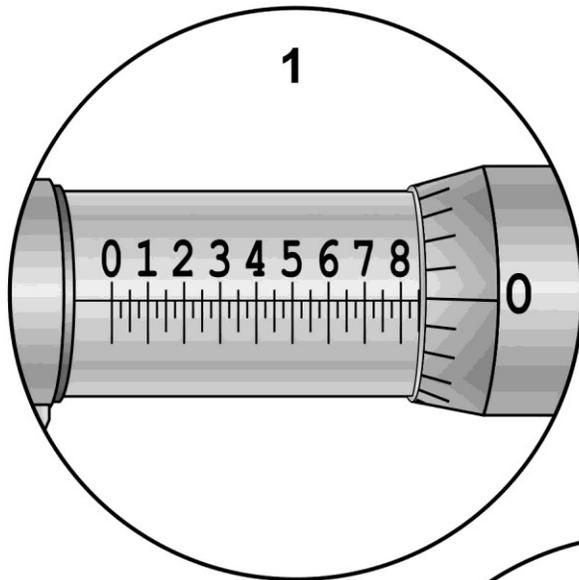
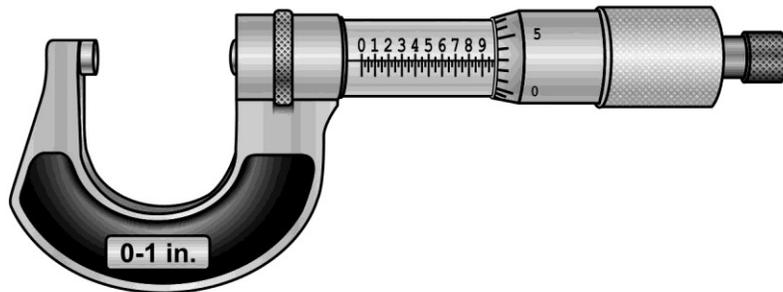
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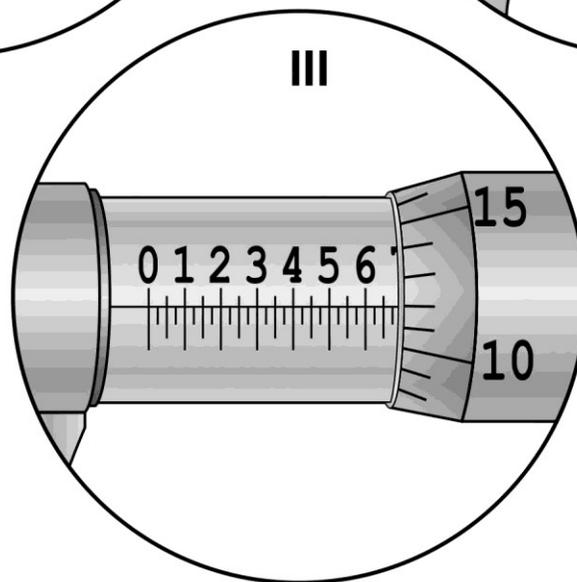
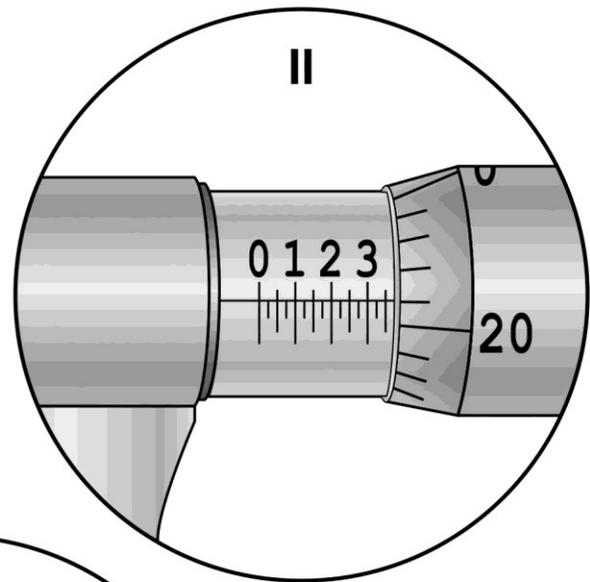
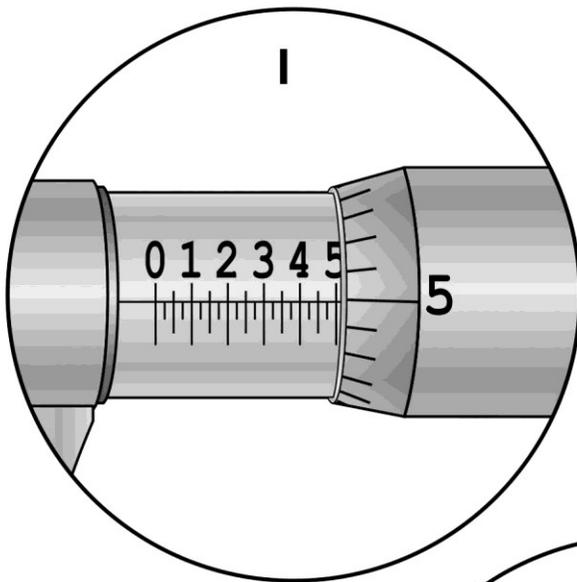
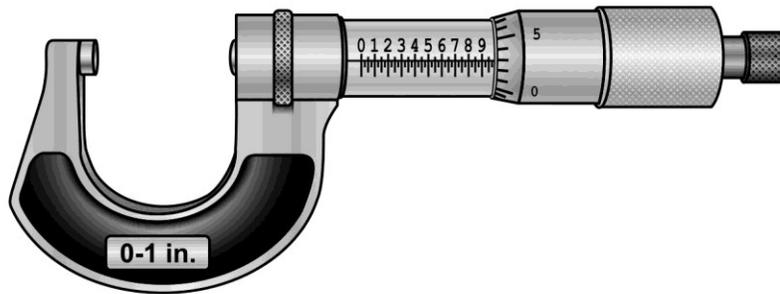
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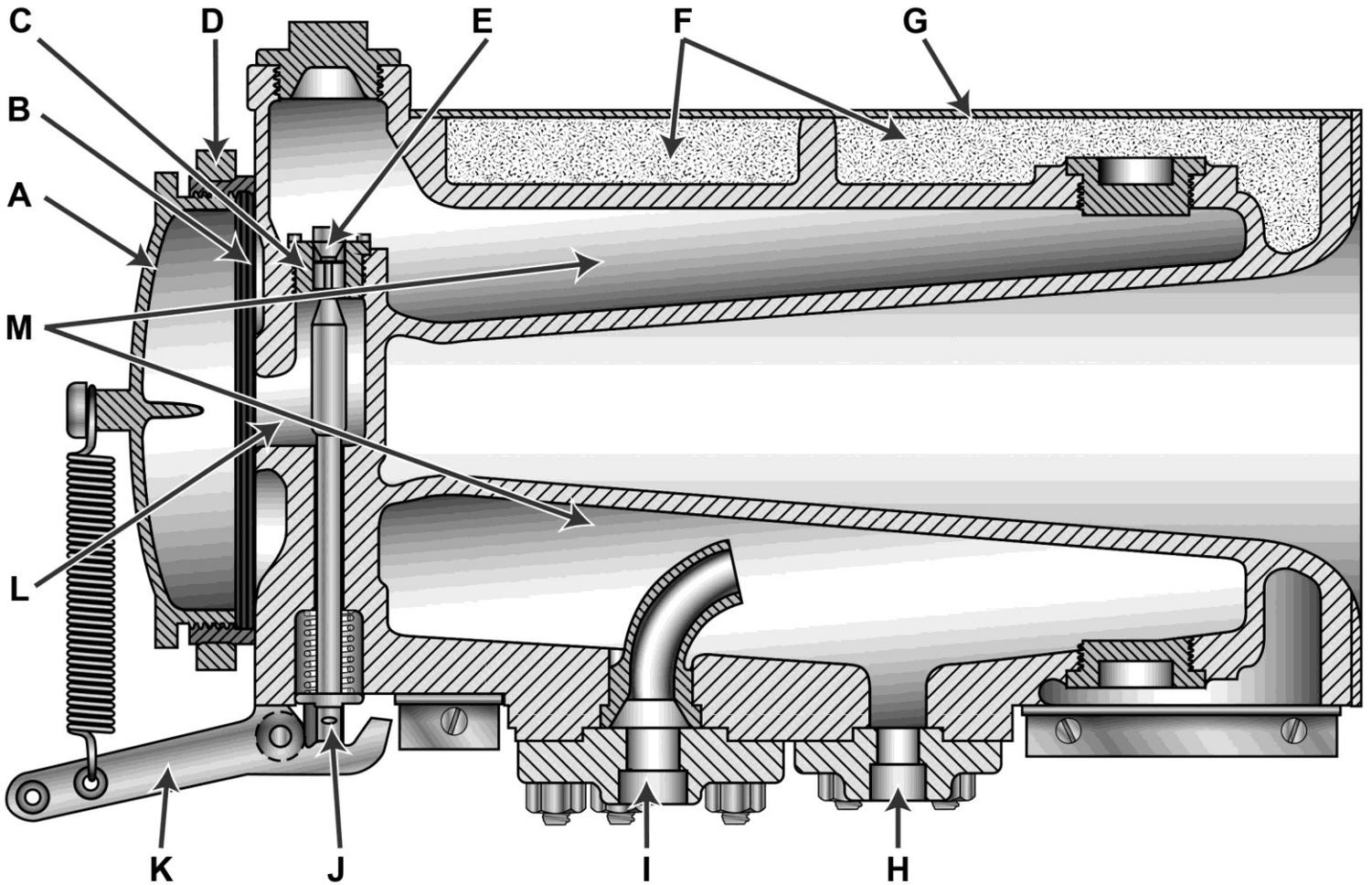
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GS-0095

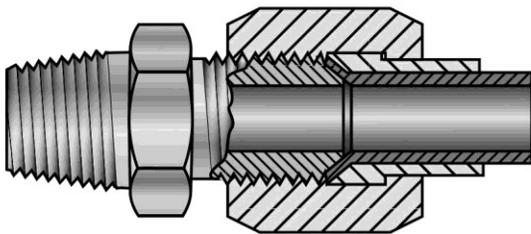


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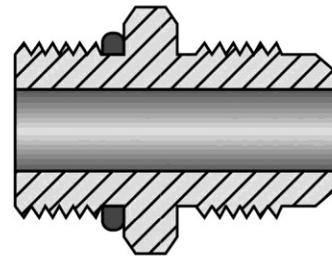


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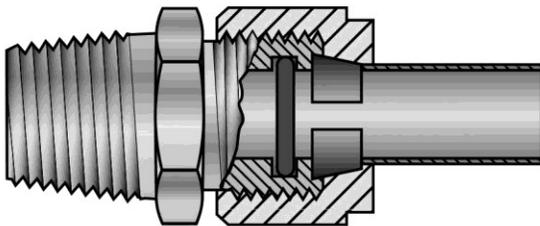
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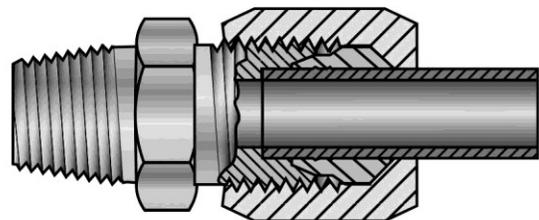
A



B



C



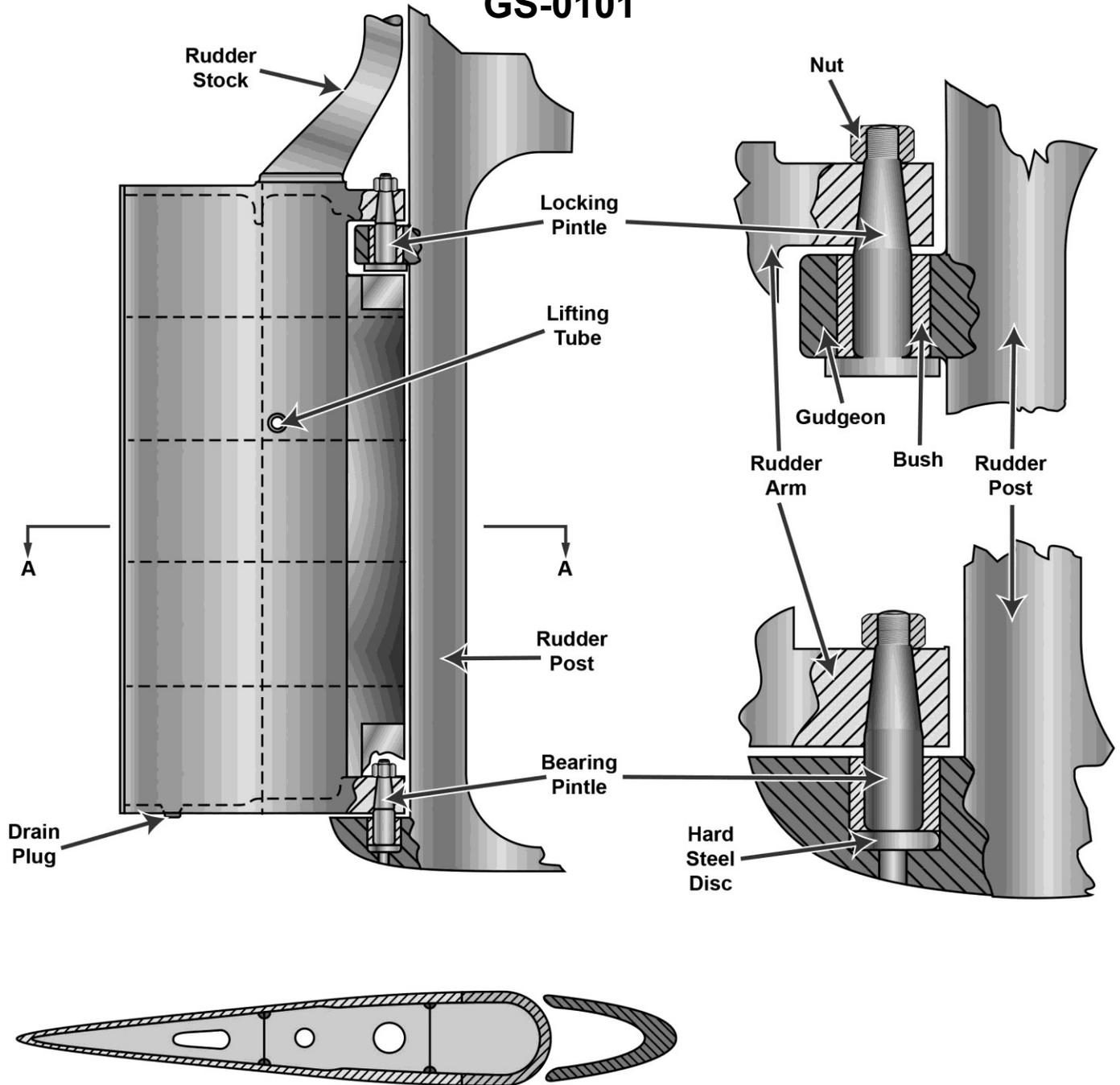
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Section A-A

Unbalanced Rudder

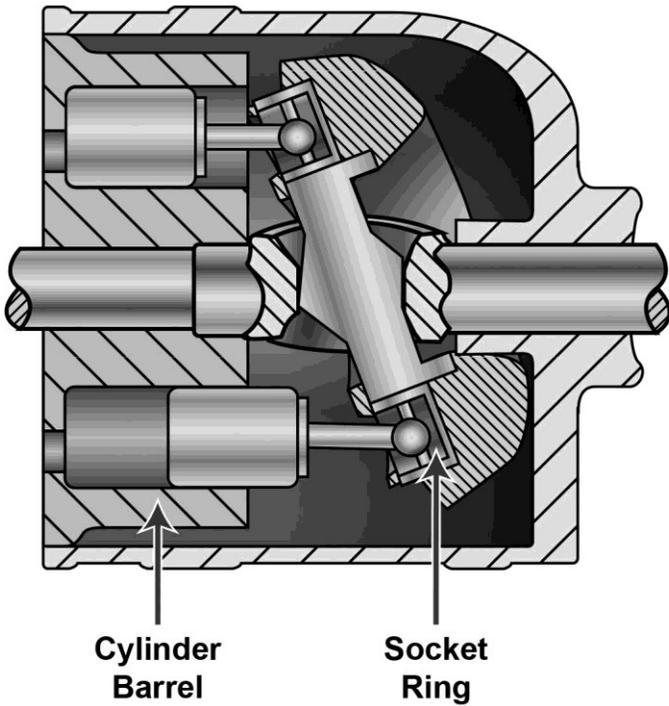
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Locking & Bearing Pintle Detail

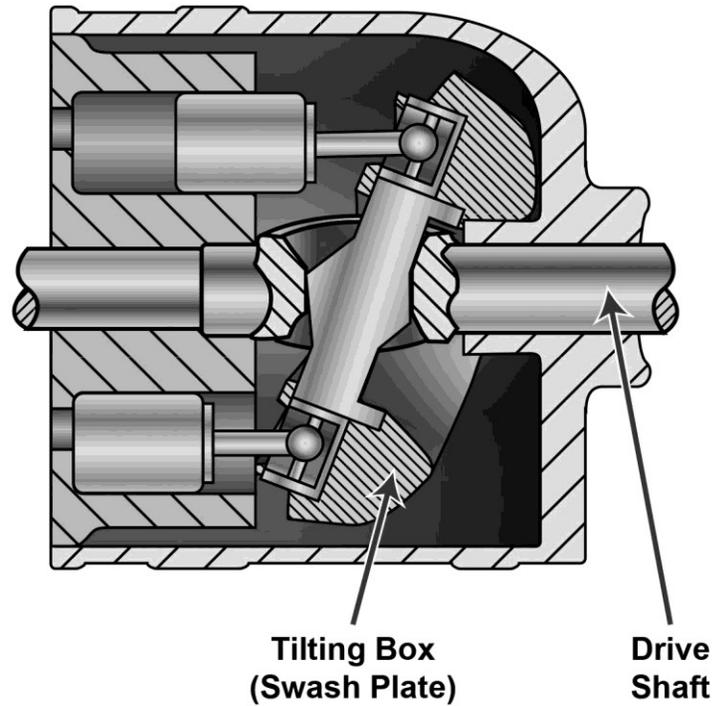
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I

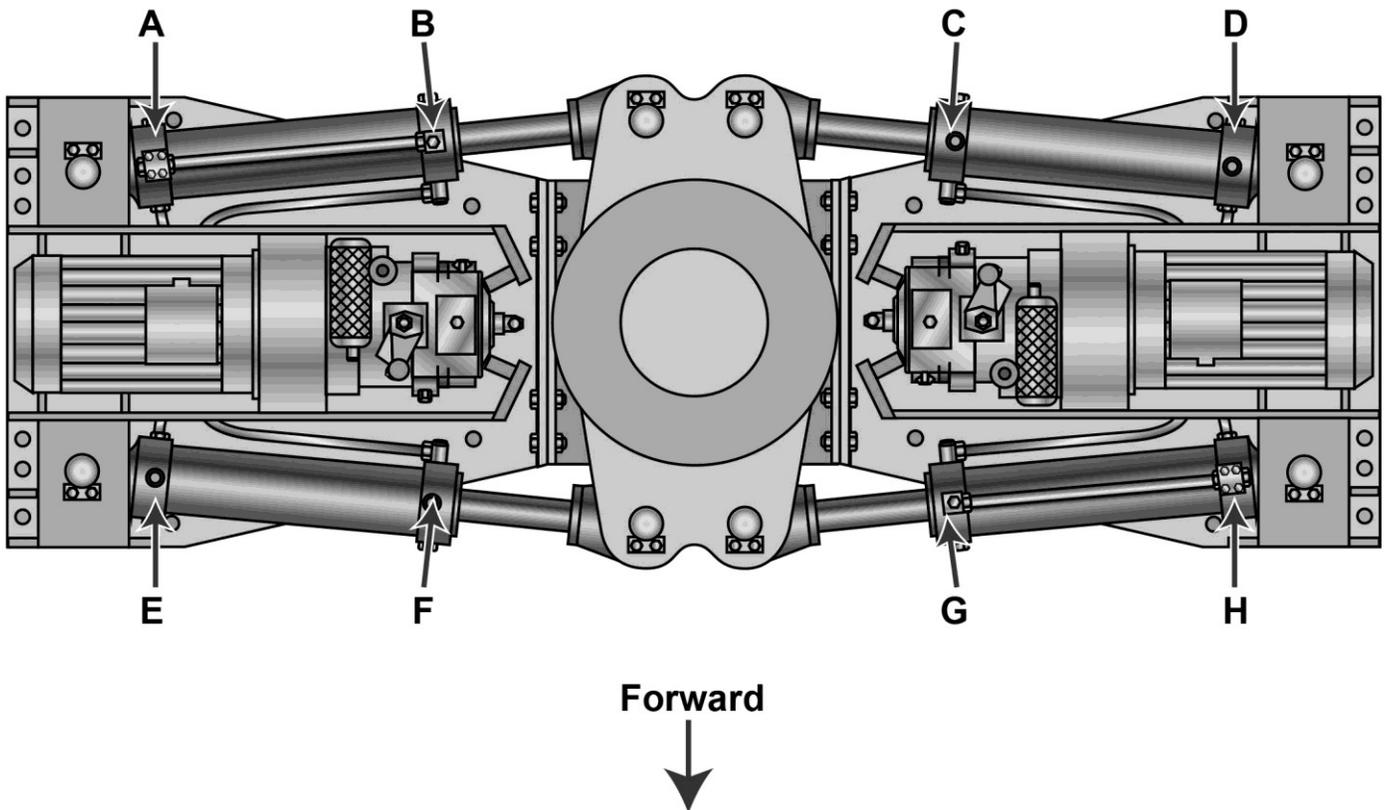


II



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GS-0104



STEERING SPECIFICATION

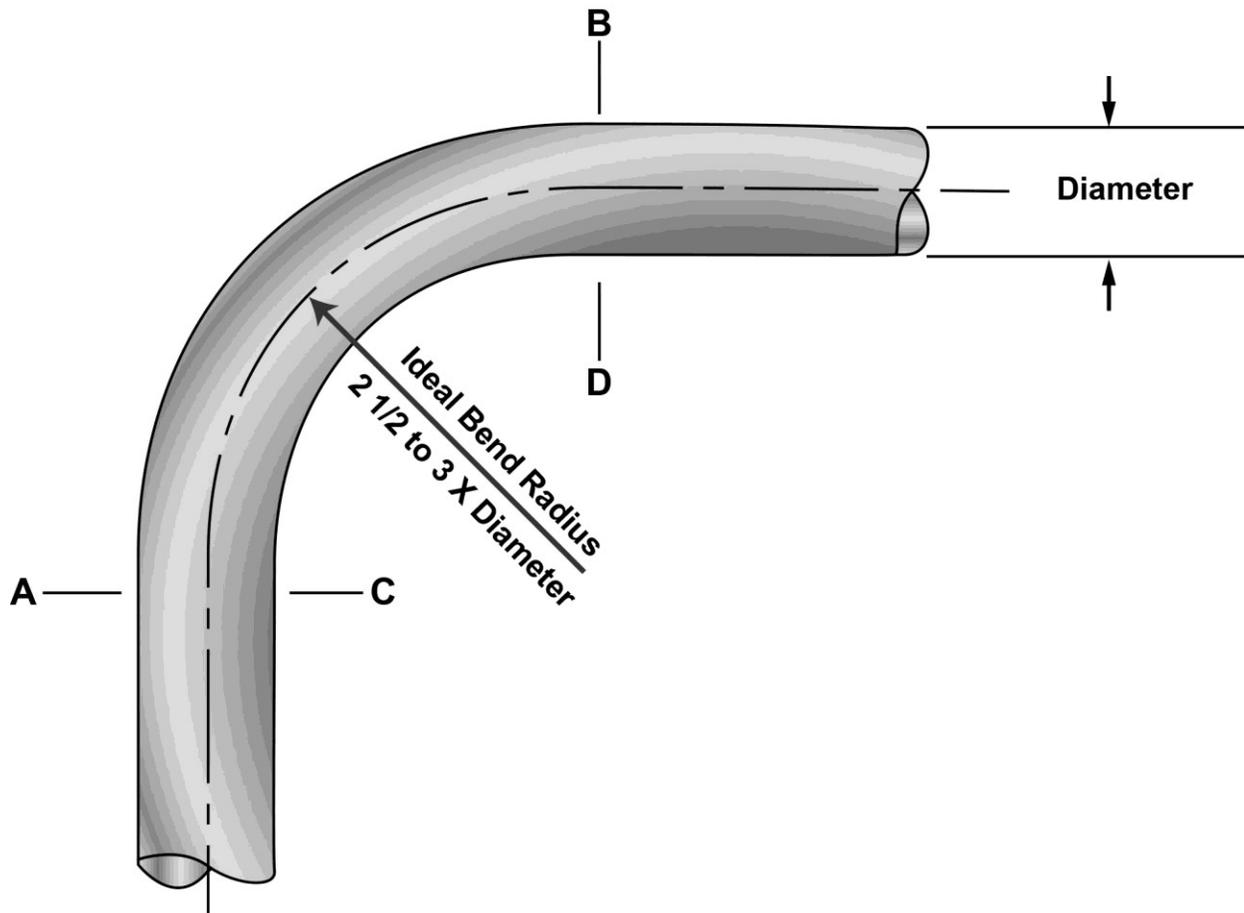
Cylinders	12-inch bore, 65-inch stroke
Hydraulic power units	222 gpm port and starboard units
Pump motors	Electric, each 150-hp., 1,800 r.p.m.
System Working pressure	1,850 p.s.i. maximum
Tiller radius	48 inches
Rudder stock diameter	30.2 inches
Rudder torque	24,000,000 inch-pounds maximum
Hardover to hardover angle	70 degrees
Hardover to hardover time	28 seconds for 65 degrees

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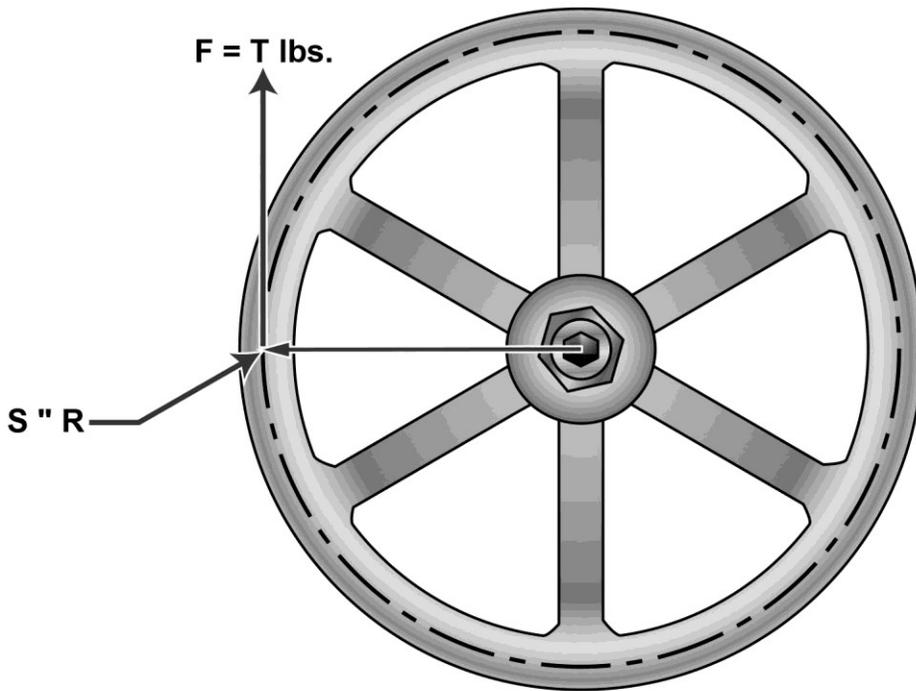


Figure I

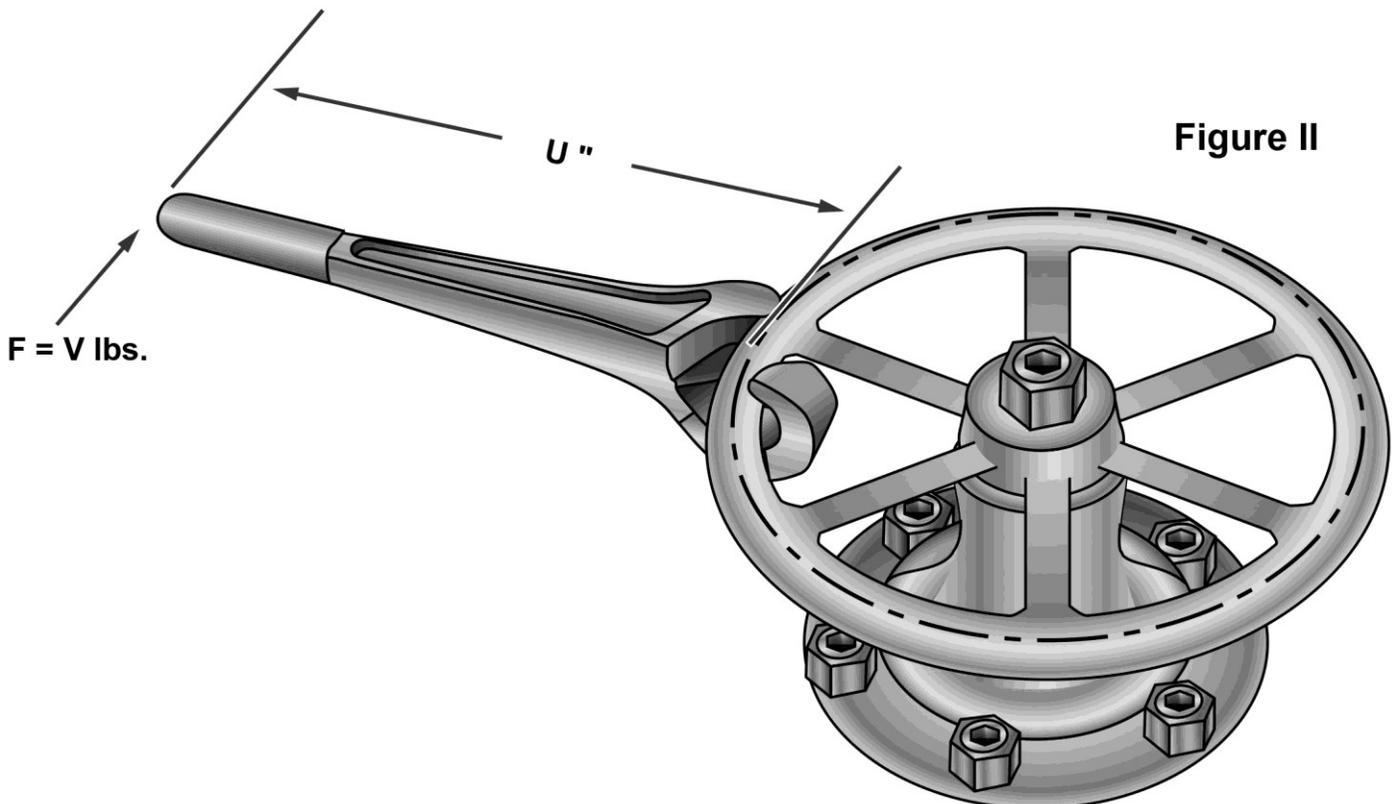
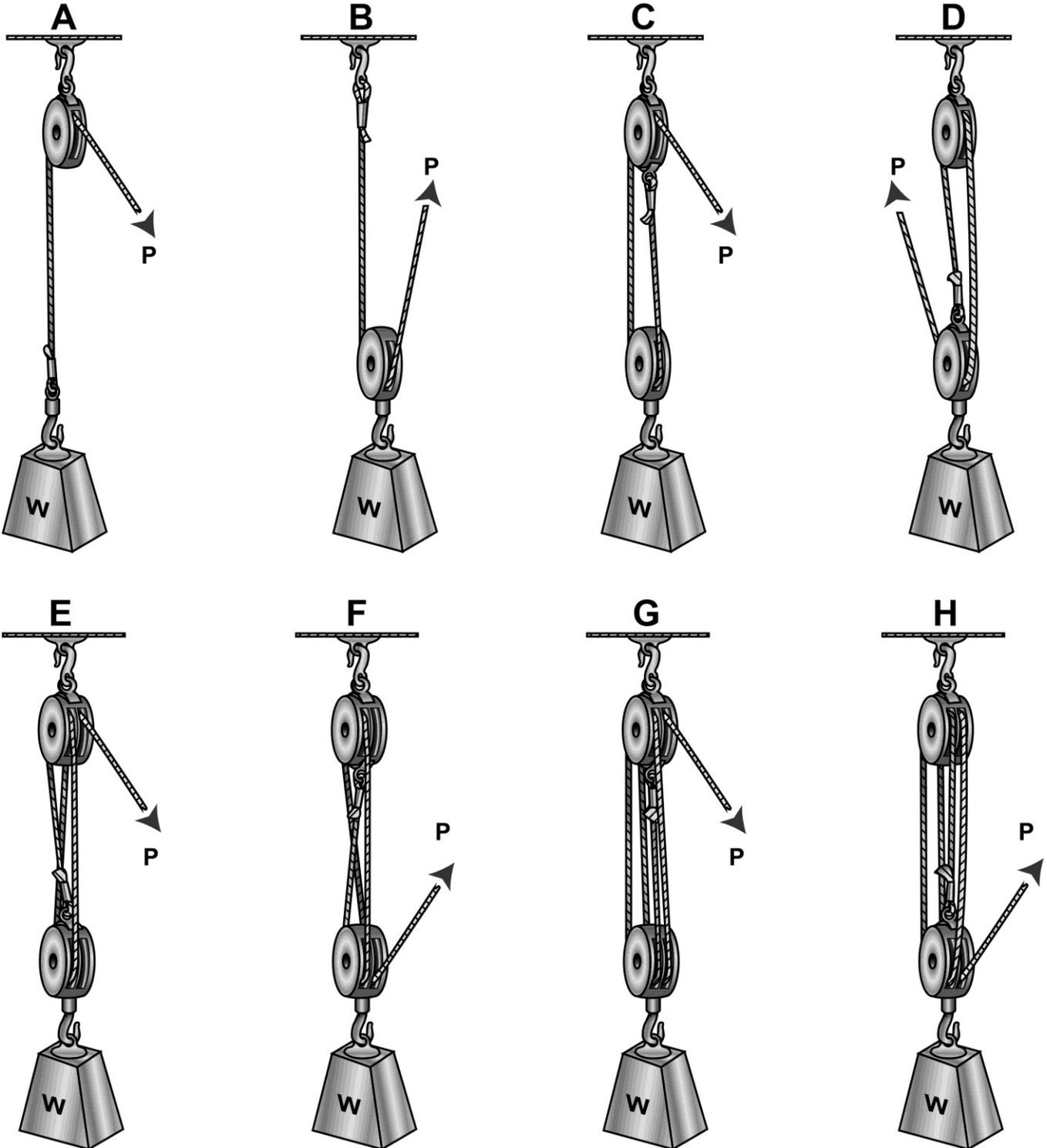


Figure II

GS-0110

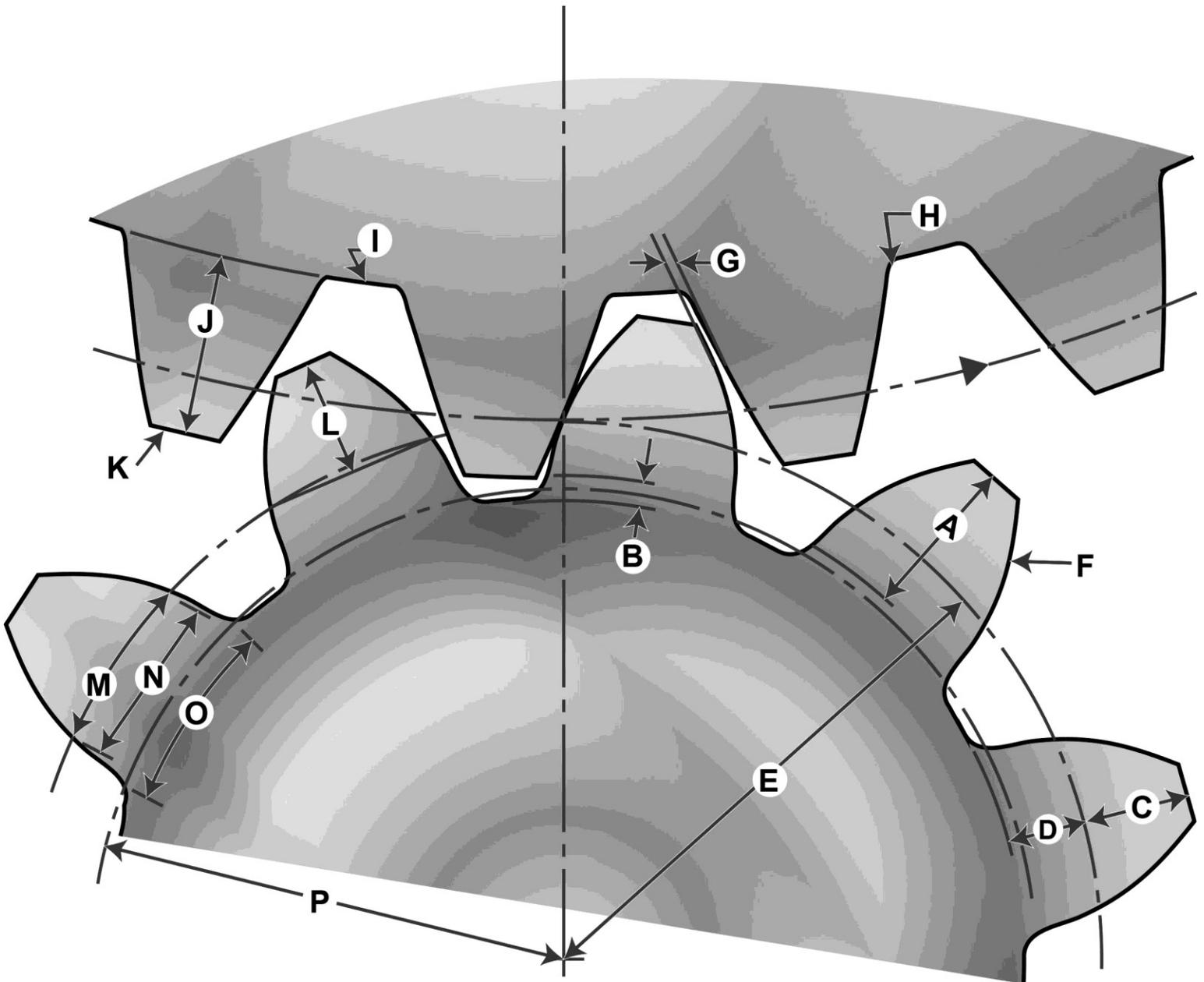


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