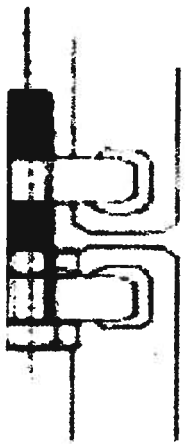


STEEL DRUM ASSEMBLY GUIDELINES

- 1) Covers must be firmly seated on the top of the drum with the gasket in place. Care must be taken to ensure that the gasket has not become dislodged, looped, or twisted during either removal or placement of the cover.
- 2) Snap the closing ring over the curl area of the drum, making sure that it is seated over the entire perimeter. For some ring/gasket combinations a mechanical head compressing device may be necessary to accomplish this.
- 3) Tighten the ring bolt with a torque wrench while using downward pressure on the cover and striking the outside of the closing ring with a non-sparking mallet. In order to compress the gasket uniformly, strike FIRMLY around the entire perimeter of the ring while tightening. Gradually tighten, while striking the entire perimeter of the ring until the torque stabilizes at 60-65 ft. lbs. Re-strike the entire perimeter of ring again and tighten bolt. Repeat these steps until bolt tightening resistance does not change.
- 4) For bolt ring closures, the gap between the closing ring ends should be between 1/16"-3/8". (The torque applied to the bolt should be at 60-65 ft.-lb.)



CLOSING RINGS/BOLT LOCKING RINGS

FOR OPENHEAD DRUMS WITH LOCKING RINGS

No jam nut needed with these shoulder bolts



The locking nut required for the proper application of 17H style rings (with non shoulder bolts) must be placed between the lugs on ring while tightening the 3/8 bolt. When bolt has been torqued as required, jam nut must be firmly tightened against the unthreaded lug using a open end wrench.

- 5) For side lever lock rings, the ring latch must be snapped securely in place. For top lever locking rings, the top lever must be fully locked into place under the securing bar.
- 6) Sealing the eyelet of lever rings is necessary not only for evidence of tampering, but for the integrity of the closure.

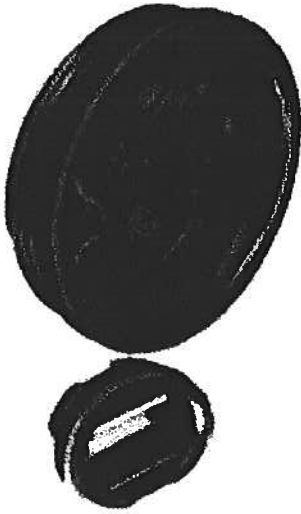
SPECIAL NOTES

- A) The components of a drum from one drum manufacturer should not be intermingled with those of another. Components from the same manufacturer from different drum specifications likewise should not be intermingled. This ensures proper fit of the subassemblies and performance of the drum.
- B) The use of non-sparking tools is recommended to close drums containing hazardous materials.

**STEEL DRUM
ASSEMBLY GUIDELINES**

ROCHE BROTHERS & ROCHE MANUFACTURING

ROUND HEAD PLUGS/RECOMMENDED TORQUES



<u>Steel Plugs w/</u>		
Rubber gaskets	$\frac{3}{4}$ "	$2\frac{1}{2}$ "
Polyethylene or Teflon gaskets	12 ft.-lb.	20 ft.-lb.
	20 ft.-lb.	30 ft.-lb.

<u>Zinc Die Cast Plugs w/</u>		
Rubber gaskets	12 ft.-lb.	20 ft.-lb.
Polyethylene or Teflon gaskets	20 ft.-lb.	30 ft.-lb.

<u>Nylon or Polypropylene Plugs w/</u>		
Rubber gaskets	8 ft.-lb.	20 ft.-lb.
Polyethylene or Teflon gaskets	8 ft.-lb.	30 ft.-lb.

<u>Hi-Density Polyethylene Plugs w/</u>		
rubber gaskets	8 ft.-lb.	15 ft.-lb.

<u>Self Gasketing Polyethylene Plug</u>	5 ft.-lb.	12 ft.-lb.
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**STEEL DRUM
ASSEMBLY GUIDELINES**

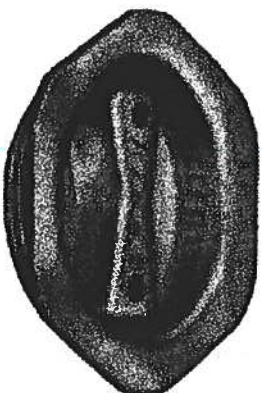
After filling out container it must be properly closed before being offered for transportation.

The assembly guidelines listed below should be followed to ensure the drum will perform to the marking level indicated thereon.

DRUM PLUGS

Tighten all plugs to the recommended torque, while taking care that the plugs are not cross threaded into the flange and that the plug gaskets do not become looped or twisted while tightening.

HEX HEAD PLUGS/RECOMMENDED TORQUE



	$2\frac{1}{2}$ "	
	30 ft.-lb.	15 ft.-lb.
	40 ft.-lb.	20 ft.-lb.

STEEL PLUGS

Rubber Gaskets	$\frac{3}{4}$ "
Plastic Gaskets	

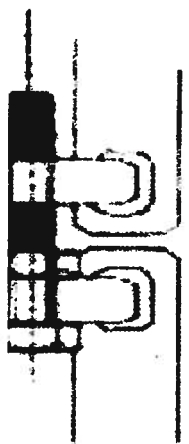
PLASTIC PLUGS

$2\frac{1}{2}$ "	20 ft.-lb.
$\frac{3}{4}$ "	9 ft.-lb.

CLOSURE INSTRUCTIONS

STEEL DRUM ASSEMBLY GUIDELINES

- 1) Covers must be firmly seated on the top of the drum with the gasket in place. Care must be taken to ensure that the gasket has not become dislodged, looped, or twisted during either removal or placement of the cover.
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CLOSING RINGS/BOLT LOCKING RINGS

FOR OPENHEAD DRUMS WITH LOCKING RINGS

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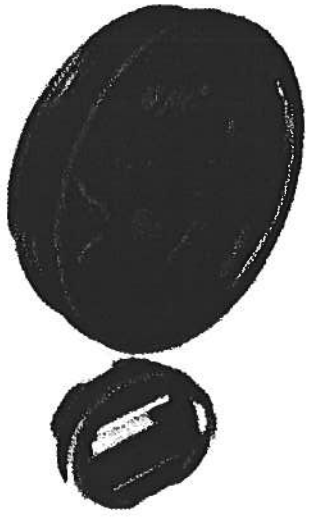
SPECIAL NOTES

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INSTRUCTIONS

**STEEL DRUM
ASSEMBLY GUIDELINES
ROCHE BROTHERS & ROCHE MANUFACTURING**

ROUND HEAD PLUGS/RECOMMENDED TORQUES



<u>Steel Plugs w/</u>		
Rubber gaskets	$\frac{3}{4}$ "	$2\frac{1}{2}$ "
Polyethylene or Teflon gaskets	12 ft.-lb. 20 ft.-lb.	20 ft.-lb. 30 ft.-lb.

<u>Zinc Die Cast Plugs w/</u>		
Rubber gaskets	12 ft.-lb.	20 ft.-lb.
Polyethylene or Teflon gaskets	20 ft.-lb.	30 ft.-lb.

<u>Nylon or Polypropylene Plugs w/</u>		
Rubber gaskets	8 ft.-lb.	20 ft.-lb.
Polyethylene or Teflon gaskets	8 ft.-lb.	30 ft.-lb.

<u>Hi-Density Polyethylene Plugs w/</u>		
rubber gaskets	8 ft.-lb.	15 ft.-lb.

<u>Self Gasketing Polyethylene Plug</u>	5 ft.-lb.	12 ft.-lb.
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**STEEL DRUM
ASSEMBLY GUIDELINES**

After filling out container it must be properly closed before being offered for transportation.

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DRUM PLUGS

Tighten all plugs to the recommended torque, while taking care that the plugs are not cross threaded into the flange and that the plug gaskets do not become looped or twisted while tightening.

HEX HEAD PLUGS/RECOMMENDED TORQUE



$2\frac{1}{2}$ "	Rubber Gaskets	$\frac{3}{4}$ "
30 ft.-lb.	Plastic Gaskets	15 ft.-lb.
40 ft.-lb.		20 ft.-lb.

STEEL PLUGS

PLASTIC PLUGS

$2\frac{1}{2}$ "	20 ft.-lb.
$\frac{3}{4}$ "	9 ft.-lb.

CLOSURE INSTRUCTIONS