	BLACKMER	960626 Page 1 of 1	FORM 535	
	INSTALLATION INSTRUCTIONS FOR THE CRANE #9 SEAL IN NP PUMPS MECHANICAL SEALS SHOULD BE INSTALLED AS ILLUSTRATED BELOW	Effective	JAN 1983	
No	te:			
1.	All traces of old packing must be removed. 7. Slide the seal assembly			
2.	All flicks, builts of scratches of shall flust be smoothed	<ul> <li>9. Replace the pipe plug.</li> <li>10. For the NP3, the packing gland is reversed to become the seal retainer. A pinned shim is provided and must be installed between the seal retainer and the stationary seat.</li> </ul>		
3.	so the mechanical seal O-Rings will slide on the shaft the seal retainer. A pinr or bore during installation. Use a grease or an oil be installed between the			
4.	The polished seal faces (7) must be kept spotlessly 11. Install the seal retainer stationary seat (3), and			
5.	Install the rotary seal unit (2), polished face out, on the shaft and then remove and discard the packing tape or clips which keep the springs from falling out during shipment.	some in design eat should mate shaft. The rot d while the sea	<ul> <li>The polished</li> <li>with the rotary</li> <li>ary seal unit</li> </ul>	
6.	Remove the pipe plug (5) and note the position of the groove machined in the shaft, relative to the pipe plug hole.	y.		
	-ROTARY SEAL U	NIT ②		
	SEAL RETAINER (4)	JG (5) STUFFIN BOX	G	
		<u>}</u>		
	SEAL	SET SCREV	W ①	
	∠SEAL FACES ⑦			

Blackmer

1809 Century Avenue, Grand Rapids, Michigan 49503-1530, U.S.A. Telephone: (616) 241-1611 / Fax: (616) 241-3752 E-Mail: blackmer@blackmer.com / Internet: www.blackmer.com