



DATE: April 14, 1994

SUBJECT: Top Drive Maintenance

SERIAL NUMBERS: All

DISCUSSION: Main bearing end play must be maintained within the acceptable range for optimum performance and longevity.

- RECOMMENDATION:**
1. Check the bearing clearance (end play) according to the attached instruction sheet. The clearance should be checked monthly.
 2. If bearing end play exceeds 0.010in (0.25 mm), shims should be removed from between the upper bearing seat and the main housing until the end play is within the following range:

Minimum	0.001 in 0.025 mm
Maximum	0.003 in 0.075 mm

Do not set the bearing tighter than 0.001in (0.025mm) as overload may result as the temperature changes.

3. If all the shims are removed after several re-shim procedures, contact Canrig for instructions for modifications to allow for more adjustment.
4. Precut shims in various thicknesses are available from Canrig.

SHIM THICKNESS	TOP DRIVE 60XX SERIES	TOP DRIVE 8035/1050
.002"	587-28-002	681-11-1-002
.003"	587-28-003	681-11-1-003
.005"	587-28-005	681-11-1-005
.010"	587-28-010	681-11-1-010
.030"	587-28-030	681-11-1-030

INFORMATION :

For further information contact:

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CANRIG DRILLING TECHNOLOGY

TOP DRIVE DRILLING SYSTEM

MAIN BEARING END PLAY – INSPECTION PROCEDURE

1. REMOVE THE WASHPIPE.
2. PLACE THE BASE OF THE DIAL INDICATOR ON TOP OF THE UPPER SEAL CARRIER (OR SIDE OF BONNET) AND THE PLUNGER ON THE TOP OF THE UPPER SEAL RING.
3. LOAD THE END OF THE QUILL AGAINST THE TOP AND BOTTOM OF ITS FREE TRAVEL. (NOTE: QUILL TRAVEL = 8 INCHES)
4. READ THE END PLAY ON THE DIAL.
END PLAY = 0.001/0.003 INCHES
5. TO ADJUST THIS END PLAY, ADD OR REMOVE SHIMS BETWEEN THE UPPER BEARING SEAT AND THE MAIN HOUSING.

<u>MODEL</u>	<u>SHIM PART No.</u>
6025E	C-3-587-28
8035E	C-3-681-11-1
1050E	C-3-681-11-1

