

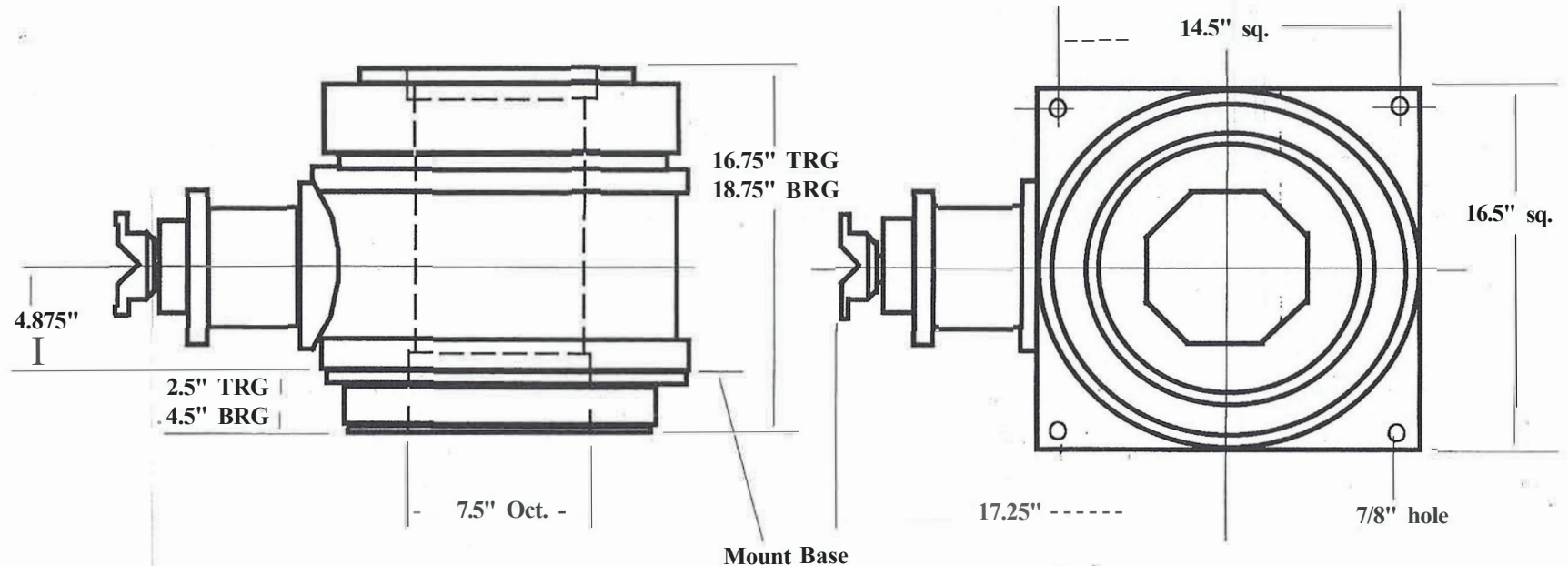
## Rotary Table Specifications (2003)

### Mayhew RT-7.5

Type - Bottom or Top ring gear & pinion, enclosed oil bath  
Standard Opening - 7.5"  
Drive Type - 7-1/2" Octagon  
Load Capacity @ 50 RPM - 5,220 in. lb.  
Gear Ratio - 5.86 to 1  
Weight (less master bushing) - 480 lbs.  
Weight (with master bushing) - 538 lbs.  
Pinion Gear - 7T Spiral bevel  
Ring Gear - 41 T Spiral Bevel  
Pinion Shaft - 1-5/8" Taper /ft.

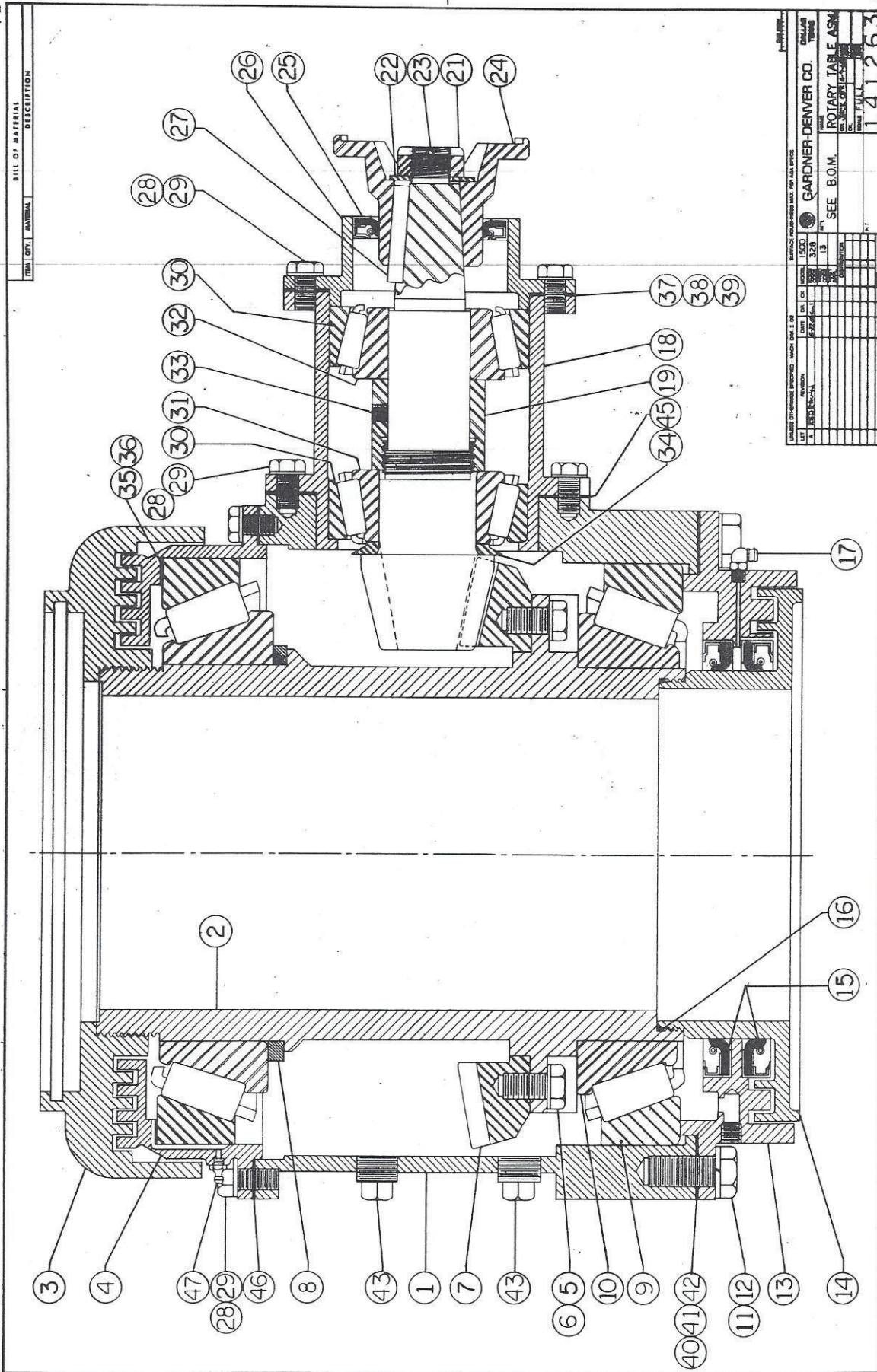
[NDS Home Page Hyperlink](#)

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PB



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ITEM	QUAN.	PART NO.	NEW NO.	DESCRIPTION
1	1	2003-1B	111 467	CASE
2	1	2003-3C	111 373	SLEEVE
3	1	2003-6	110 374	CAP
4	1	2003-2	111 860	COVER
5	12	2003-28	127 269	CAPSCREW - 9/16" N.F. x 1-1/4"
6	12	2003-31	121 074	LOCKWASHER - 9/16"
7	1		143 999	RING GEAR (INCLUDES ITEM 20-PINION #144 000)
8	1	2003-10	101 586	BEARING RING
9	2	2003-18	106 319	BEARING CUP - TIMKEN #96140
10	2	2003-19	106 240	BEARING CONE - TIMKEN #96900
11	8	2003-26	127 242	CAPSCREW - 3/4" N.F. x 1-1/2" LONG H.T.
12	8	2003-29	121 077	LOCKWASHER - 3/4"
13	1	2003-4	110 833	BEARING RETAINER
14	1	2003-5	109 963	BOTTOM NUT
15	2	2003-21	106 757	GREASE SEAL - VICTOR #61500
16	1	2003-45	108 517	"O" RING - ARROWHEAD #6230-45
17	1	2003-32	107 803	GREASE FITTING - ALEMITE #1613
18	1	2003-7	108 267	PINION HOUSING
19	1	2003-13	108 271	PINION BEARING SPACER
20				
21	1	601-29	100 839	NUT - FORD #351165-S
22	1	601-32B	100 918	WASHER - 2" O.D. x 1-1/32" I.D. x 1/8"
23	1		122 135	COTTER PIN - 1/8" x 3" LONG
24	1		102 015	YOKE - 6C
25	1	1008-12	106692	GREASE SEAL - NATIONAL #55079
26	1	2003-8	108 268	GREASE SEAL RETAINER

NAME	DATE	REV.	SPEC. CH. #	DATE	REV.	SPEC. CH. #	DATE	REV.	SPEC. CH. #	DATE	REV.	SPEC. CH. #
ROTARY TABLE ASSEMBLY -												
GEAR WITH 6C YOKE												
DESCRIPTION												
STATION #1												
GARDNER - DENVER CO., DALLAS, TEXAS												

DATE 1-8-65  
 SHEET NO. 1 OF 2  
 ASSEM. NO. 2003  
 MODEL NO. 1000  
 SPEC. NO. 141 263

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ITEM	QUAN.	PART NO.	NEW NO.	DESCRIPTION
27	1	614-34	105 527	KEY - 7/16" x 7/16" x 2-1/2"
28	24	2003-27	124 856	CAPSCREW - 1/2" N.F. x 1-1/4" LONG
29	24	2003-30	121 073	LOCKWASHER - 1/2"
30	2	2003-15	106 287	BEARING CUP - TIMKEN #5535
31	1	2003-16	106 202	BEARING CONE - TIMKEN #5582
32	1	2003-17	106 201	BEARING CONE - TIMKEN #5565
33	1		123 388	SET SCREW - 3/8" x 1/2" STD.
34	1	2003-12	101 098	= PINION SPACER
35	1	2003-52A	109 400	SHIM .015
36	1	2003-52B	116 039	SHIM .030
37	1	2003-36D	102 101	SHIM .005
38	1	2003-36E	116 034	SHIM .015
39	1	2003-36F	121 982	SHIM .030
40	1	2003-37D	102 037	SHIM .005
41	1	2003-37E	115 939	SHIM .015
42	1	2003-37F	116 026	SHIM .030
43	2	SF-5S-211	122 286	PIPE PLUG - 3/4"
44	1	SF-2S-211	122 836	PIPE PLUG - 1/4"
45	1	2003-59	122 544	GASKET .015" THICK
46	1	2003-60	122 543	GASKET .015" THICK
47	1		107 801	GREASE - ALEMITE #1641

NAME	REV.	DATE	SPEC. CH. #	REV.	DATE	SPEC. CH. #	DATE	1-8-65	WL	KERR
ROTARY TABLE ASSEMBLY - 2003 BOTTOM RING										
GEAR WITH 6C YOKE									2	2
DESCRIPTION STATION #1									SHEET NO.	CK.
									ASSEM. NO.	
									MODEL NO.	
									SPEC. NO.	141 263

GARDNER - DENVER CO., DALLAS, TEXAS

Assuming the table is removed from the Drill, the following procedure should be tried:

1. Some method of holding the input yoke will be required. This can be a bar or wrench with one end attached to the yoke and the other end resting on the floor.
2. If the Rotary has operated for any great length of time between repairs, there is a good possibility that the top cap threads will be extremely tight.
3. If a pavement breaker is available, good results have been obtained in the past by using this method - tac weld a block to the top cap and use the shock blow of the breaker to help loosen the cap. The threads are left hand so the cap should be rotated clockwise for removal. Another alternative would be to use a heavy hammer in lieu of the pavement breaker and as a last resort, a small amount of heat could be applied to the outer surface of the cap to try to expand the threads in the cap. Caution, excessive heat will be detrimental to the top bearing.
4. The bottom nut has right hand threads and should be easier to remove than the top cap. If not, then the same procedure as outlined above should be followed except no heat should be used.
5. After the nuts are removed, the pinion housing can be removed. If the pinion bearings are to be replaced, then the yoke will have to be removed first.
6. The cover can now be removed and replacements or repair work accomplished.
7. When the rotary is re-assembled, the two gears should have approximately .015" back lash for proper adjustment.
8. To adjust for back lash, remove or add shims to bottom grease seal retainer, do not change shim on pinion shaft housing, as depth of pinion is set at the factory.



**GARDNER-DENVER CO**  
DALLAS, TEXAS USA

TITLE

ROTARY TABLE DISASSEMBLY PROCEDURE

SHEET

3 1 of 1

PUBLICATION NO.

PB141263

## ROTARY TABLE ASSEMBLY INSTRUCTIONS - 7-1/2-INCH

1. Assemble Pinion Housing separately first. Tighten bearing next to gear by tightening spacer nut and setscrew (spot drill shaft). Use shims between seal retainer and pinion housing to slightly preload pinion bearings.
2. Assemble rotary sleeve. Assemble bottom grease retainer to housing use shims between bottom grease seal retainer and rotary housing. Shims may have to be added or removed to adjust back lash after final assembly.
3. Assemble rotary sleeve into housing. Put bottom nut on then top nut. Bottom nut has right hand threads and top left-hand threads.
4. Pinion housing can be installed now. The two gears should have approximately .015" back lash for adjustment.
5. To adjust for back lash, remove or add shims to bottom grease seal retainer, use .030" gasket on pinion shaft housing, as depth of pinion should be correct.
6. Rotary should be run and checked for heat in pinion housing and rotary case area. Excessive preload will cause heat immediately. Rotary will hold 6 quarts of SAE 90W for ambient temperature 20 deg to 110 deg F.



**GARDNER-DENVER CO**  
DALLAS, TEXAS USA

TITLE  
ROTARY TABLE ASSEMBLY INSTRUCTIONS

SHEET  
1 OF 1

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