PALMGREN®

12” Heavy Duty Rotary Table

DESCRIPTION

The Palmgren 12” Rotary Table is used for indexing, circular cutting, angle setting, boring, and spot facing operations. It can be set for use in the horizontal or vertical planes.

The Rotary Table is a precision work positioning device It allows the operator to mill or drill components at exact intervals around a fixed axis. The Meehanite cast iron table is precision-machined, with a Morse taper 4 center hole.

The table is graduated with a 360° scale. A micro collar graduated to one minute with a ten second accuracy vernier scale is provided. Features include lock-down handles and crank disengagement mechanism.

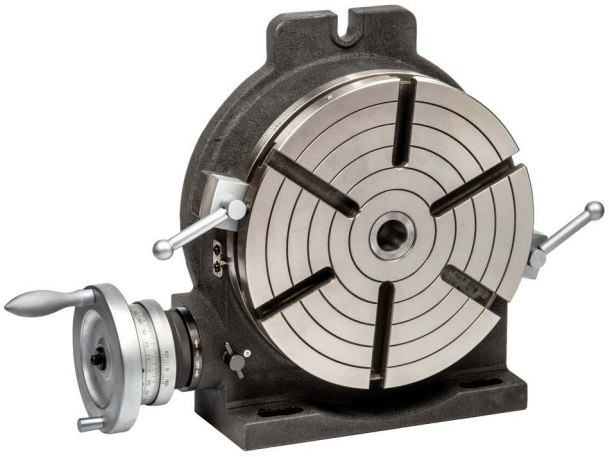

Figure 1 12” Rotary Table 9634118

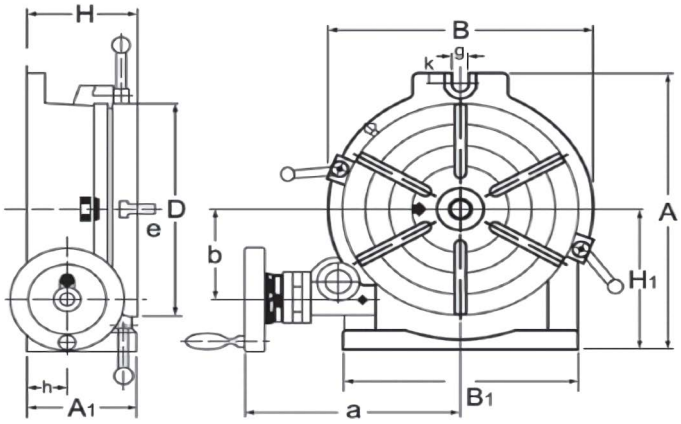

Figure 2 Dimensions

SPECIFICATIONS

Item (see diagram)	Specification
Table Size	12”
Height (A)	15.275"
A1	4.843"
B	13"
B1	2”
D	12"
H	4.921"
H1	7.638"
b	9.852
e	0.630”
g	0.709”
h	1.687”
k	0.6875
Number of T-slots	6
T-slot size	0.625"
Taper in center (MT)	4MT
Worm gear Ratio	90:1
Degree per one handle rotation	4°
Scale of micro collar	1'
Vernier reading	10”
Weight	130 pounds
Flat supported weight	265 pounds
Standing supported weight	130 pounds

SAFETY

⚠ WARNING .

- For your safety, read all instructions and wear safety glasses complying with United States ANSI Z87.1. Everyday glasses have only impact resistant lenses. They are NOT safety glasses. Use guards and eye shields.
- Be alert and think clearly. Never work when tired, intoxicated, or when taking medications that cause drowsiness.
- Ensure installation location can support the rotary table's weight.
- Keep work area clean. Cluttered work areas invite accidents.
- Some materials such as magnesium, titanium and aluminum have flammable properties. Consult with the supplier of these materials for safe drilling and milling operations.
- Wear ANSI-approved ear protection if drilling or milling operations extend for long periods of time.
- Wear proper apparel when drilling or milling. Do not wear loose clothing, gloves, neckties, rings, bracelets or other jewelry that may get caught in moving parts of the machine.
- Keep visitors at a safe distance from work area. Keep children out of workplace. Handle workpiece correctly. Protect hands from possible injury.
- Do not overreach. Keep proper footing and balance.
- Understand and obey all safety instructions supplied with mill or other machines on which the rotary table is used.
- Always secure rotary table to work surface or machine.
- Always secure workpiece to rotary table clamping surface if used.
- Always secure face plate to rotary table clamping surface if used.
- Secure rotary table clamping surface with lock-down handles whenever possible.
- Maintain and lubricate the tool properly.

⚠ **PROPOSITION 65 WARNING:** Some dust created by using power tools contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.
Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement, and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area and work with approved safety equipment. Always wear OSHA/NIOSH approved, properly fitting face mask or respirator when using such tools.

UNPACKING AND INSTALLATION

Unpack the Rotary Table and inspect it carefully for loose, missing, or damaged parts. If any damage or loss has occurred, a claim must be filed with the carrier immediately. Check for completeness. Immediately report missing parts to dealer.

All tools should be visually inspected before each use, in addition to regular periodic maintenance inspections.

Mount rotary table securely to machine work surface. Table can be mounted horizontally or vertically using the slots provided. Ensure table is rigidly and safely secured.

Before use, fill base with premium circulating oil. There are two oil ports: one on tool housing inside the handwheel; one in a T-slot on top of the table.

IMPORTANT: Many unpainted steel surfaces have been coated with a protectant. Remove before use with mild solvents, such as mineral spirits, and a soft cloth. Avoid getting solvent on paint or rubber/plastic parts. Solvents may deteriorate these finishes. Use soap and water on paint, plastic or rubber components. After cleaning, cover all exposed surfaces with a light coating of oil.

⚠ CAUTION Never use highly volatile solvents. Nonflammable solvents are recommended to avoid possible fire hazard.

OPERATION

Refer to Figure 3.

1. Always rotate handwheel (#15) clockwise, to eliminate any backlash in the worm gear. If handwheel is rotated past desired position, rotate handwheel one full turn counterclockwise and then rotate handwheel clockwise to desired position.
2. To rotate table by hand if desired: disengage worm shaft (#6) from the table (#2). Loosen setscrew handle (#11) by turning it counterclockwise and turn vernier collar clockwise until it is snug. Table can now be rotated by hand. To engage worm shaft, turn back vernier collar. Secure set screw handle (#11).
3. To lock table into position: rotate clamp handles (#19) clockwise until snug. Turn handles counterclockwise to free table.
4. The table has a scale to indicate the angle of rotation. The indicator can be used to verify the angle of rotation on scale. To adjust indicator, loosen the screws and move the indicator along the slot. Secure the screws after completing adjustment.
5. The center sleeve has been ground for a Morse Taper No. 4. Centers with a 4MT shank can be mounted to the rotary table for precision centering and measuring operations.
6. The table's gear ratio is 1:90. 90 rotations of the handwheel will rotate the table exactly one full rotation. One rotation of the handwheel is equal to 4° rotation of the table. The micro collar is graduated into one minute increments.
7. The vernier scale (#12) on the vernier collar measures angle rotation to an accuracy of ten seconds. Read the degrees and minutes from the micro collar and use the vernier collar scale to read to ten seconds.

MAINTENANCE

Worm shaft adjustment

To adjust for wear in the worm shaft, adjust lock nut (#16). Remove handwheel (#15) and micro-collar (#13). Tighten locknut until play is removed from engaged worm shaft and clamping surface. Do not overtighten locknut. Replace micro-collar and handwheel.

Eccentric sleeve limit screw adjustment

The nut (#07) regulates the rotation at eccentric sleeve. If the worm shaft does not engage table properly when vernier collar is rotated counterclockwise, then unscrew the nut (#07) and adjust the threaded pin until proper engagement is achieved.

Lubrication

Keep rotary table clean and free of dirt or chips. Check oil level frequently and replenish as needed. Do not use rotary table without adequate oil.

PARTS LIST

Item	Description	Part No.	Qty.
1	Base body	965204601	1
2	Table	965204701	1
3	Taper sleeve	965204801	1
4	Table nut	965204901	1
5	Worm wheel	965205001	1
6	Worm shaft	965205101	1
7	Nut	965205201	1
8	Eccentric sleeve	965205301	1
9	Sleeve ring	965205401	1
10	Sleeve	965205501	1
11	Set screw handle	965205601	1
12	Vernier ring	965205701	1
13	Micro-collar	965205801	1
15	Handwheel	965205901	1
16	Nut	965206001	1
17	Clamp piece	965206101	1
18	Clamp bolt	965206201	2
19	Clamp handle	965206301	1
20	Retaining plate	965206401	1
21	Ring	965206501	1
25	Collar	965206601	1

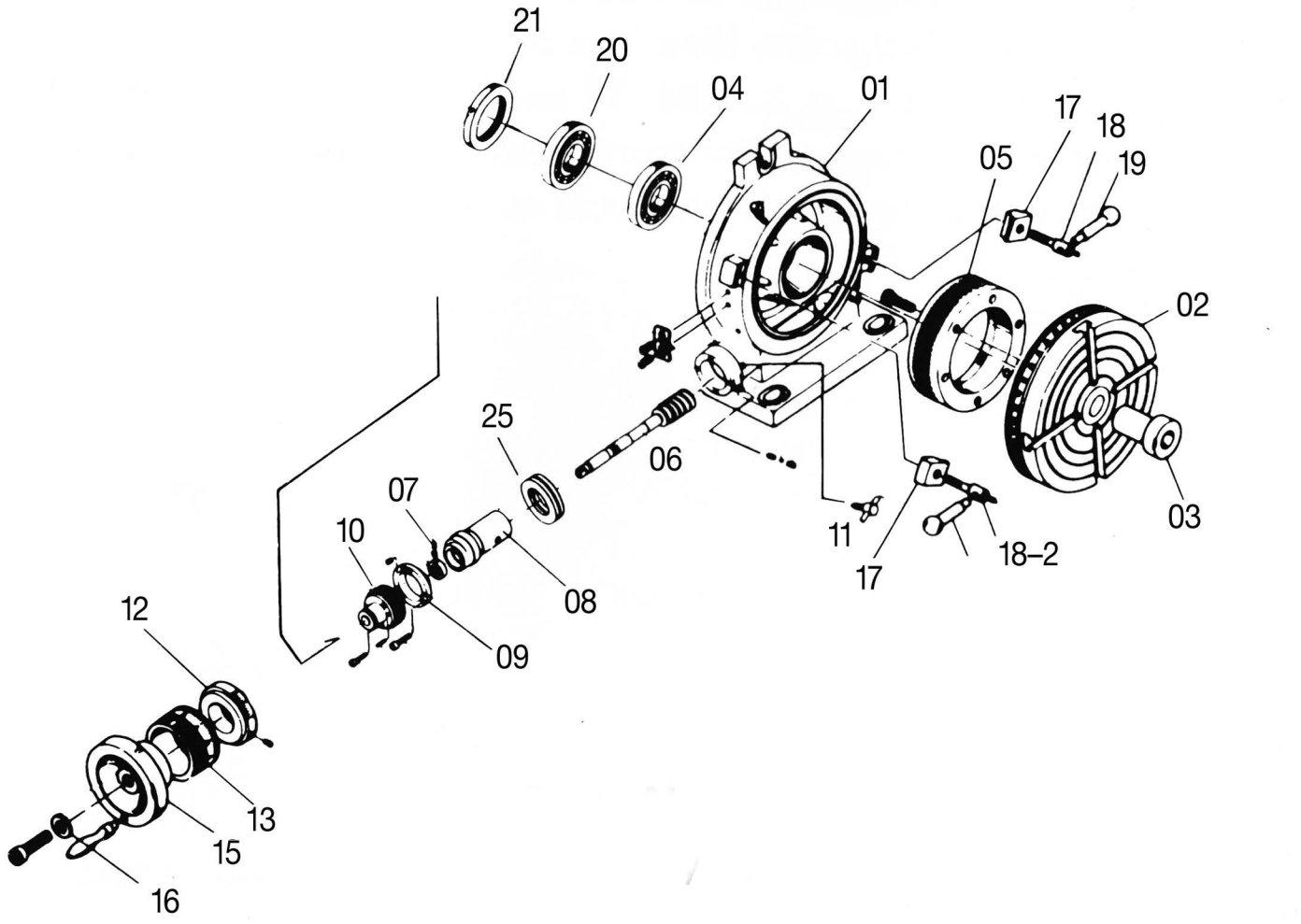

Figure 3 Replacement Parts

PALMGREN WARRANTY

C. H. Hanson / Palmgren warrants their products to be free of defects in material or workmanship. This warranty does not cover defects due directly or indirectly to misuse, abuse, normal wear and tear, failure to properly maintain the product, heated, ground or otherwise altered, or used for a purpose other than that for which is was intended.

The warranty does not cover expendable and/or wear part (i.e., v-belts, screws, abrasives, jaws), damage to tools arising from alteration, abuse or use other than their intended purpose, packing and freight. The duration of this warranty is expressly limited to the terms noted below beginning from the date of delivery to the original user.

The Palmgren branded items carry the following warranties on parts:

All vises, clamps, positioning tables, arbor presses, tombstones, jack screws and vise accessories - **LIFETIME**.

All bench grinders, drill presses, tapping machines, band saws, lathes, milling machines, abrasive finishing machines and work stands - **3 YEARS**.

The obligation of C.H. Hanson / Palmgren is limited solely to the repair or replacement, at our option, at its factory or authorized repair agent of any part that should prove inoperable. Purchaser must lubricate and maintain the product under normal operating conditions at all times. Prior to operation become familiar with product and the included materials, i.e., warnings, cautions and manuals.

Failure to follow these instructions will void the warranty.

This warranty is the purchaser's exclusive remedy against C.H. Hanson for any inoperable parts in its product. Under no circumstances is C.H. Hanson liable for any direct, indirect, incidental, special or consequential damages including loss of profits in any way related to the use or inability to use our products. This warranty gives you specific legal rights which may vary from state to state.

PALMGREN

Palmgren - a C.H. Hanson Company
2000 N. Aurora Rd., Naperville, IL 60563 U.S.A.
or call 1-800-827-3398