

**Indexing Spacer
225-006 225-008**



6" & 8" SUPER SPACERS



OPERATION & PARTS MANUAL

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Indexing Spacer

225-006 225-008

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

DESCRIPTION

The dual position indexing spacer is designed for use in milling, drilling jig boring and many other common shop operations. The 24 position hardened and ground master index plate with six masking plates provides rapid indexing for divisions of 2,4,6,8,and 24. Satin chromed 360° graduated ring and adjustable vernier plate assures accurate reading up to five minutes.

Unpacking:

Check for shipping damage. If damage has occurred, a claim must be filed with carrier immediately. Check for completeness. Immediately report missing parts to dealer. Carefully remove tool from crate.

Important: The tool has been coated with a protective coating. In order to ensure proper fit and operation, the coating must be removed. Remove coating with mild solvents such as mineral spirits and a soft cloth.

Nonflammable solvents are recommended. After cleaning, cover all exposed surfaces with a light coating of oil.

!Caution ⚠:

Never use highly volatile solvents. Avoid getting cleaning solution on the paint, as it may tend to deteriorate these finishes. Use soap and water on painted components.

Refer to Fig 1.

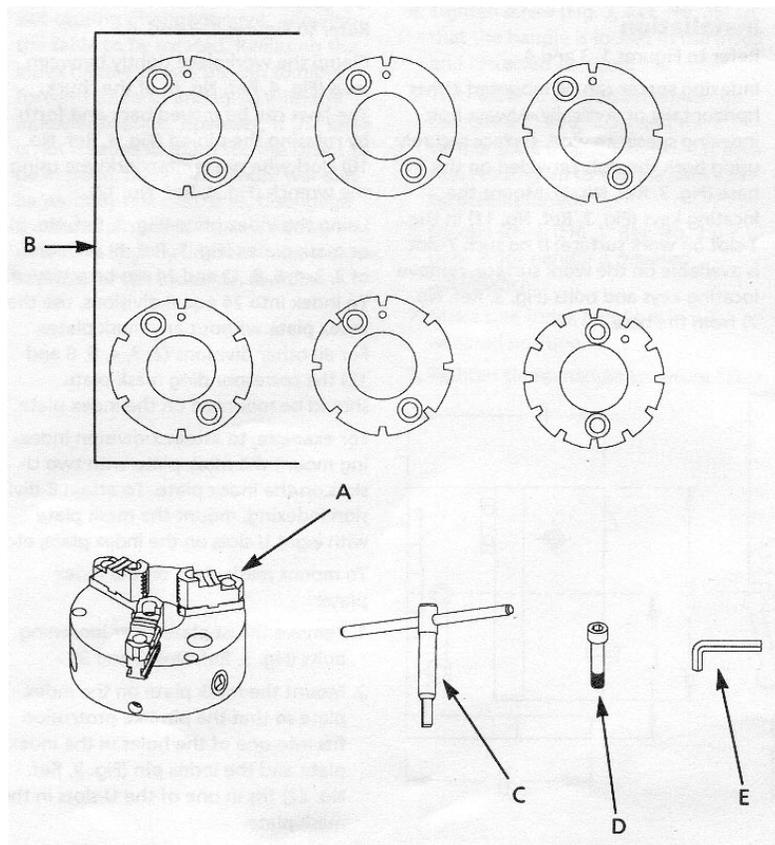


Figure 1 - Unpacking

The indexing spacer is shipped assembled except for the 3-jaw adjustable chuck. The chuck is packed in a carton inside the crate.

Locate and identify the following parts:

- A. 3-jaw adjustable chuck
- B. Six masking plates, one each for 2,3,4,6,8, and 12 division.
- C. Chuck wrench, one each.
- D. Socket head bolts, three each
- E. Socket head wrench

Specifications

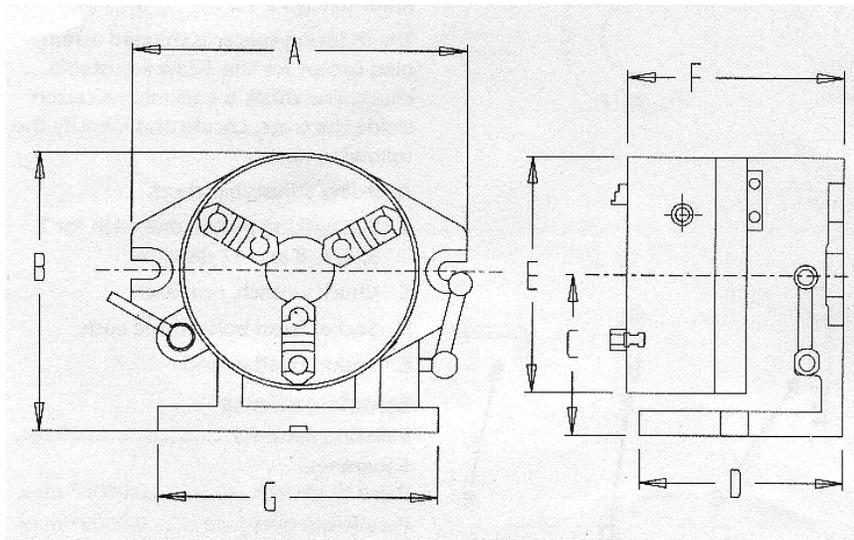
Indexing accuracy	25 sec.
Squareness (base to chuck)	0.0008" max.
Parallelism over face	0.0006" max.
Concentricity of chuck	0.0005" max.

Chuck center hole

6" Spacer	1.75"	8" Spacer	2.48"
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Indexing Spacer

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Dimensions

Refer to figure 2

Note: All dimensions are in inches

	6"	8"
A.	10 ¹ / ₄ "	12 ¹ / ₄ "
B.	8 ³ / ₄ "	10 ¹ / ₄ "
C.	5 ¹ / ₈ "	5 ⁵ / ₈ "
D.	5 ¹ / ₈ "	5 ⁷ / ₈ "
E.	6 ³ / ₄ "	8 ¹ / ₈ "
F.	6 ¹ / ₄ "	6 ⁷ / ₈ "
G.	8 ¹ / ₂ "	9 ⁷ / ₈ "

Figure 2 – Dimensions

General Safety Information

1. Read and follow all operating instructions before operating tool.
2. Understand and obey all safety instructions supplied with mill or other machines on which the tool is used.
3. Always secure tool to work surface.
4. Always secure chuck to indexing spacer table if used.
5. Always clamp workpiece tightly
6. Always tighten indexing spacer table prior to beginning machining.
7. Maintain and lubricate tool properly

Installation

Refer to figures 1,3,and 4

Indexing spacer can be mounted either horizontally or vertically. Always bolt indexing spacer to work surface securely using both the slots provided on the base. (Fig 3, Ref. No.1) Mount the locating keys (Fig 3. Ref No.11) in the T-slot on work surface. If no such T-slot is available on the work surface, remove locating keys and bolts (Fig. 3 Ref. No. 7) from the base. The chuck is shipped assembled. Mount chuck on the table (Fig.3, Ref. No. 27) so that the cover (Fig.4, Ref. No. 1) is seated evenly on the table. Tighten three bolts on the side of the chuck body (Fig. 4, Ref. Nos. 7 and 11) to equal torque. Secure chuck assembly tightly to table using bolts (Fig 1, Ref D)

Operation:

Refer to Figures 1, 3, and 4.

Clamp the workpiece tightly between jaws (Fig.4, Ref No. 6) of the chuck. The jaws can be moved back and forth by rotating the pinion (Fig.4, Ref. No.10) clockwise or counterclockwise using the wrench (Fig. 4, Ref. No. 12) Using the index plate (Fig. 3 Ref. No. 5), or mask plates (Fig 1 Ref B) divisions of 2,3,4,6,12, and 24 can be achieved. To index into 24 equal divisions, use the index plate without any mask plates. For all other divisions (2,3,4,6,8 and12) the corresponding mask plate should be mounted on the index plate. For example, to attain 2-division indexing, mount the mask plate with two U-slots on the index plate. To attain 8-division indexing, mount the mask plate with eight U-slots on the index plate, etc.

To mount mask plate on the index plate:

1. Remove thrust plate after loosening bolts (Fig.3, Ref. No. 2 and 3)
2. Mount the mask plate on the index plate so that the pin-like protrusion fits into one of the holes in the index plate and the index pin (Fig. 3, Ref. No 22) fits in one of the U-slots in the mask plate.
3. Secure thrust plate back to the index plate.

Operation (Continued)

The index handle (Fig. 3, Ref No. 26) is used to engage and disengage the index pin from the index/mask plate. When the index is in fully released position, the index pin is engaged with the index/mask plate.

Turning the index handle counterclockwise retracts the index pin out of the U-slot causing disengagement, allowing the table to be rotated. Releasing the index handle causes the pin to move forward towards engaging with the index/mask plate. However, if the table is not rotated so much for the U-slot to be in place, the index handle will only be partially released. If so, disengage the index pin as mentioned above, and turn table slightly until the next U-slot is in place for the index pin to fit in.

To perform indexing:

1. Turn clamp handle (Fig. 3, Ref No.14) counterclockwise to loosen it.
2. Turn index handle counterclockwise to disengage index pin.
3. Holding the index handle in the retracted position, lift index handle slightly.
4. Tighten screw (Fig. 3, Ref. No 25) so that the handle is locked in the lifted and retracted position.
5. Turn table to the required position. Using the 0°-360° scale and the vernier scale (Fig. 3, Ref. No 13) accurate reading up to five minutes can be accomplished.
6. Loosen screw (Fig.3, Ref. No 25) until index handle is released automatically.
7. Make sure index handle is in fully released position.
8. Tighten clamp handle to secure table.

Maintenance:

Refer to Figure 3.

Clamp Shoe Adjustment

When the clamp shoe is too tight, loosen both set screws (Ref. No. 19) equally until desired tension on the clamp shoe is reached.

Clamp Handle Position

If clamp handle is not in the proper position then the handle hits the base while turning it. To adjust the position of the clamp handle, remove screw (Ref. No. 16), take out bushing (Ref. No. 15), pull out clamp handle and reinsert it after slightly changing the angle, Insert bushing, tighten screw back and check if clamp handle can be moved freely.

Lubrication

Keep indexing spacer free of dirt or chips. Before Putting into use, fill base with adequate oil through the oil zert (Ref. No. 20). For ease of operation, frequently lubricate tool using the oil zert.

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Please provide following information:

-Model Number

-Serial Number (if any)

-Part descriptions and number as shown in parts list

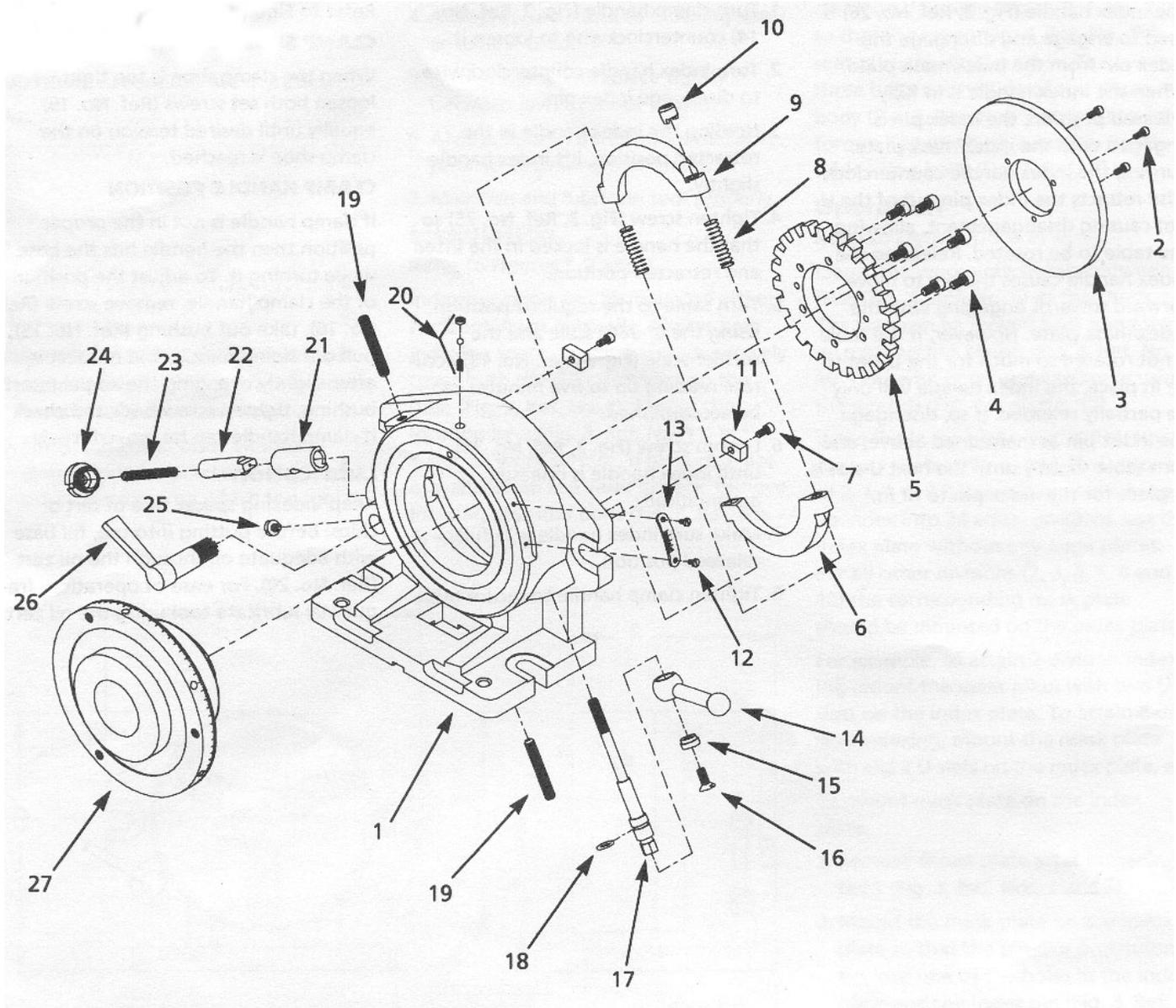


Figure 3 – Replacement Parts Illustration for Base Assembly

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Replacement Parts List for Base Assembly

Ref. No	Description	Part No.	Qty.
1	Base	9363	
2	5-0.8 x 12mm Socket head bolt	*	3
3	Thrust Plate	9364	1
4	8-1.25 x 16mm Socket head bolt	*	6
5	Index Plate	9365	1
6	Left Clamp shoe	9366	1
7	6-1.0 x 14mm Socket head bolt	*	2
8	Spring	9367	2
9	Right clamp shoe	9368	1
10	Shoe nut	9369	1
11	Locating Key	9278	2
12	4-0.7 x 8mm Fillister head screw	9370	2
13	Vernier scale	9371	1
14	Clamp handle	9372	1
15	Bushing	9373	1
16	8-1.25 x 16mm Flat head screw	9374	1
17	Clamp Shaft	9375	1
18	O-Ring	9376	1
19	10-1.5 x 64mm set screw	9377	2
20	Oil zert	9378	1
21	Sleeve	9379	1
22	Index Pin	9380	1
23	Spring	9381	1
24	Cover	9382	1
25	8-1.25 x 10mm Fillister head dog point set screw	9383	1
26	Index Handle	9384	1
27	Table	9385	1
∇	2 Division mask plate	9386	1
∇	3 Division mask plate	9387	1
∇	4 Division mask plate	9388	1
∇	6 Division mask plate	9389	1
∇	8 Division mask plate	9390	1
∇	12 Division mask plate	9391	1

∇ Not shown

(*) Standard hardware item available locally

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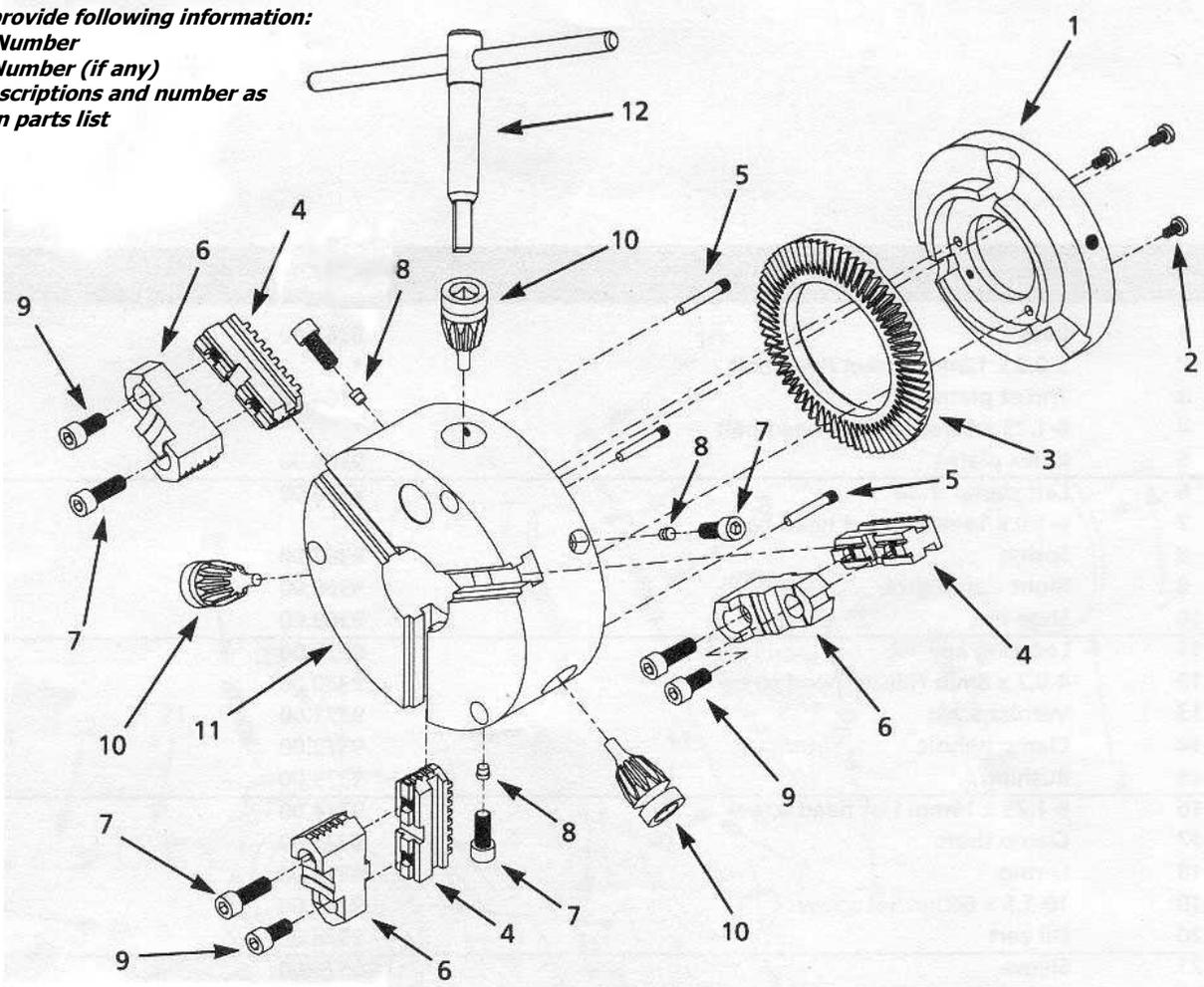


Figure 4 – Replacement Parts Illustration for Chuck

Replacement Parts List for Chuck

Ref. No.	Description	Part No.	Qty
1	Cover	9352	1
2	6-1.0 x 14mm Fillister head screw	9353	3
3	Scroll Gear	9354	1
4	Rack	9355	3
5	Threaded pin	9356	3
6	Jaws	9357	3
7	10- 1.5 x 20mm Socket head bolt	*	6
8	Stud	9358	3
9	10-1.5 x 26mm Socket head bolt	*	3
10	pinion	9359	3
11	Chuck body	9360	1
12	Chuck wrench	9361	1
∇	10-1.5 x 80mm Socket head bolt	9362	3

∇ Not shown

(*) Standard hardware item available locally

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Lathe Chuck Dimensions:

D Size	D1	D2	D3	H	H1	h	z-d
6-1/2"	3.15"	5.78"	1.73"	4.50"	2.75"	0.62"	3-M10
8-1/4"	4.72"	7.50"	2.48"	4.88"	2.99"	0.62"	3-M10

