

Arch Hold Down



Model: AH-3 AH-3T



298007101

Revision A 2022-10-11

Contents

1. Foreword.....	2
2. Warranty Information & Limitations.....	3
3. Application.....	3
4. Identification & Specification.....	4
5. Operations.....	6
6. Maintenance.....	9

1.前言.....	12
2.质保信息.....	12
3.适用范围.....	12
4.组成及参数信息.....	13
5.操作说明.....	15
6.日常维护.....	17

Exploded View and Parts List.....	18
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English Version

1. Foreword

Congratulations on your new AH-3 /AH-3T Arch Hold Down! We appreciate your support in Harvey and hope that this product will serve you well for many years to come!

In order to acquaint you to your new AH-3 /AH-3T Arch Hold Down, please carefully review the information provided in this manual before assembling or operating this product. This user manual is intended to help you better understand how to safely assembly, properly use, and maintain your tool. While this manual tries to cover all aspects of proper usage and safety regulations, unfortunately we cannot cover everything. It is assumed that the operator has experience with operating all tools and machineries used in conjunction with our product. Failure to follow necessary and proper safety precautions can result in serious damage or bodily injuries. We recommend that the operator familiarize themselves with the product before using the product. If you are unsure or need additional information about our product, then please contact Harvey service team for assistance.

As a company, Harvey strives to continuously improve our products. We reserve the rights to modify specifications, designs, operation, and maintenance instructions as necessary without advance notice.

2. Warranty Information & Limitations

All Harvey products are warranted to be free from defects in material and craftsmanship. We stand by our product and offer a limited one-year warranty from the date of purchase. All warranty claims, repairs, replacements should be serviced by Harvey or an authorized Harvey service professional. Defective parts will be repaired or replaced by Harvey at no additional charge. The warranty will not cover the following:

- ◆ Normal wear, tear, and consumable parts
- ◆ Abuse, misuse, or neglect of the product
- ◆ Lack of proper care and maintenance
- ◆ Use of non-genuine Harvey parts and/or components
- ◆ Unauthorized repairs, alterations or modifications
- ◆ Any force majeure, fire or explosion

3. Application

The AH-3 /AH-3T Arch Hold Down can be used for holding down a workpiece in many different applications, however the intended purpose of the two versions offered are as follows:

- **Model AH-3 (suitable for workbenches):** Secured onto a workbench by inserting through a workbench dog holes.
- **Model AH-3T (suitable for Harvey sliding table & sliding table saws):** Secured onto the T-slot of your Harvey ST-1400/ST-1500 sliding tables or any sliding table saw with a suitable T-slot.

IMPORTANT NOTE:

For AH-3T Arch Hold Down, the hold down **does NOT fit standard 3/4" T-slots** as it was designed for sliding tables. The T-slot Locking Block has two sectional dimensions to adapt to different types of T-slots. The dimensions for T-Slot are as follows:

T-Slot Top Width: 15.5mm (5/8" in.)

T-Slot Height: 13mm (1/2" in.)

T-Slot Bottom Width (Cross Section 1): 30mm (1-3/16" in.)

T-Slot Bottom Width (Cross Section 2): 20mm (25/32" in.)

4. Identification & Specification

4.1 AH-3T Arch Hold Down

No. Name

- A Pressure Knob
- B Quick Release Button
- C Locking Slider
- D Arch Set
- E Knurled Knob
- F T-slot Locking Block
- G Jaw Block

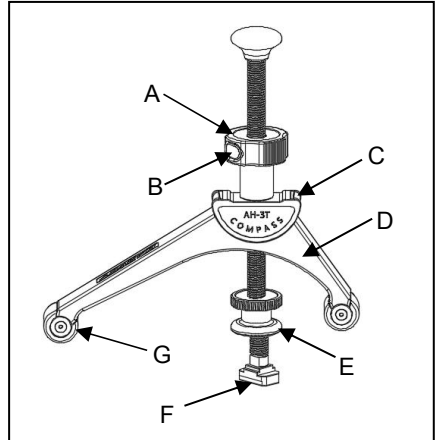


Fig.1

Specification

Max. Holding Force: 246 lb

Max. Holding Thickness: 4-5/16"

Max. Throat Depth: 3-5/32"

Package Dimension: 16-1/2"×9-5/16"×3"

Gross / Net Weight: 3.68lbs / 2.27lbs

Note: The size of the T-slot locking block is mainly suitable for the T-slot on the woodworking sliding table. It can be installed into the T-slot from two directions to adapt to different T-slots. The cross sections of the T-slot locking block are shown in Fig.2, among which Cross Section 2 is designed mainly be compatible with the Harvey ST-1400 and ST-1500 series sliding tables.

The longer leg is the balancing leg, and the shorter leg is the working leg used to clamp the workpiece.

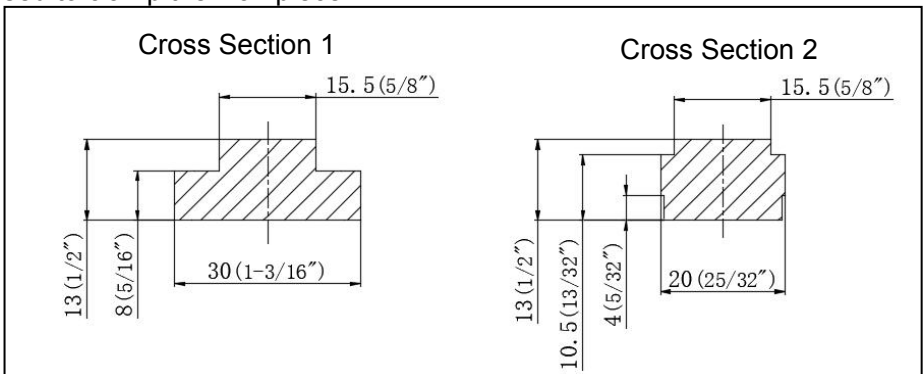


Fig.2

4.2 AH-3 Arch Hold Down

No. Name

- A Pressure Knob
- B Quick Release Button
- C Locking Slider
- D Arch Set
- E Stop Block
- F Knurled Knob
- G Jaw Block
- H Tension Block Set
- I Tension Block

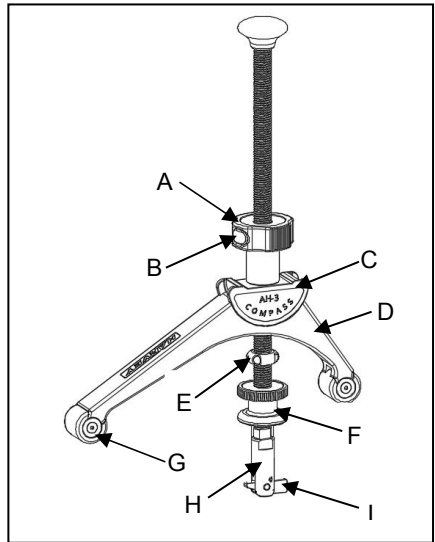


Fig.3

Specification

Max. Holding Force: 246 lb

Max. Holding Thickness: 4-5/16"

Max. Throat Depth: 3-5/32"

Compatible Table Hole Diameter: 3/4"~13/16"

Compatible Table Thickness: 2"~6"

Package Dimension: 16-1/2"×9-5/16"×3"

Gross / Net Weight: 4.01lbs / 2.6lbs

Note: For 6" bench tops, the maximum holding thickness is 4-5/16" inches. For bench tops of other thicknesses, the maximum holding thickness can be increased by padding one end of the arch set. The longer leg is the balancing leg, and the shorter leg is the working leg used to clamp the workpiece.

5. Operations

5.1 Operations of AH-3T (for Sliding Tables)

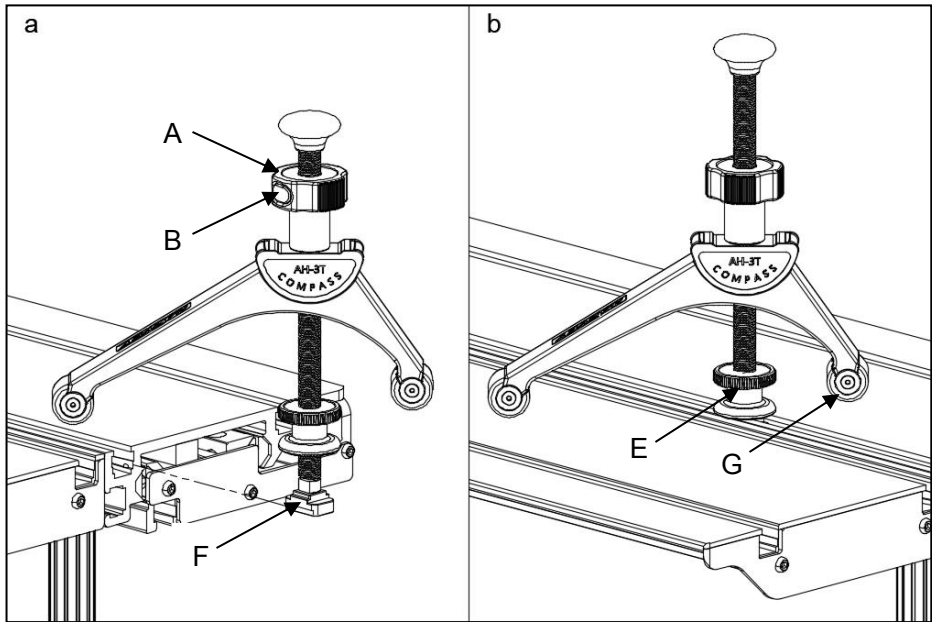


Fig.4

AH-3T is primarily intended for holding down a workpiece on the sliding table. The following instruction is applicable to the Harvey ST-1500 Sliding Table as an example to detail the operation of the hold down. However, for other applications, please use these instructions as reference.

1. Press and hold the **Quick Release Button (B)** to move the Arch Set Assembly upward along the lead screw (as shown in Fig. 4a).
2. Choose a suitable side for installing the **T-slot Locking Block (F)** and insert the T-slot Locking Block F into the T-slot on the sliding table (as shown in Fig. 4a).
 - For ST-1500 Sliding Table, Cross Section 2 of the T-slot Locking Block should be used.
3. Rotate the **Knurled Knob (E)** to secure the hold down to the sliding table (as shown in Fig. 4b).
4. With workpiece positioned underneath the hold down, press and hold the **Quick Release Button (B)** to slide the Arch Set Assembly downwards. The two **Jaw Blocks (G)** should be positioned close to

the workpiece and the table surface respectively.

5. Once positioned correctly, release **Quick Release Button (B)** and rotate the **Pressure Knob (A)** to secure the workpiece down to the sliding table.

Note: Always double check the hold down to ensure that the workpiece is firmly held down before performing any task. Multiple hold downs may be necessary to properly secure a workpiece.

5.2 Operations of AH-3 (for Workbenches)

The AH-3 Arch Down is primarily intended for the benches with a thickness of 2"~6". For benches of different thickness, the position of **Stop Block (E)** must be set before using. The adjusting method is as follows:

1. Measure the **thickness (t)** of the bench.
2. Loosen the two set screws on the **Stop Block (E)** and set distance (**L**) between the Stop Block (E) and the bottom of the arch hold down as shown in Fig. 5.

The distance of (**L**) = (**t**) + 2-3/16"

3. Once the position of Stop Block (E) is determined and set, then secure the set screws tightly.

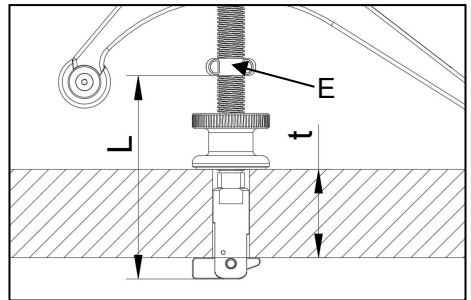


Fig.5

The following instruction is applicable for a 2" bench as an example to detail the operation of the hold down. However, for other applications, please use these instructions as reference.

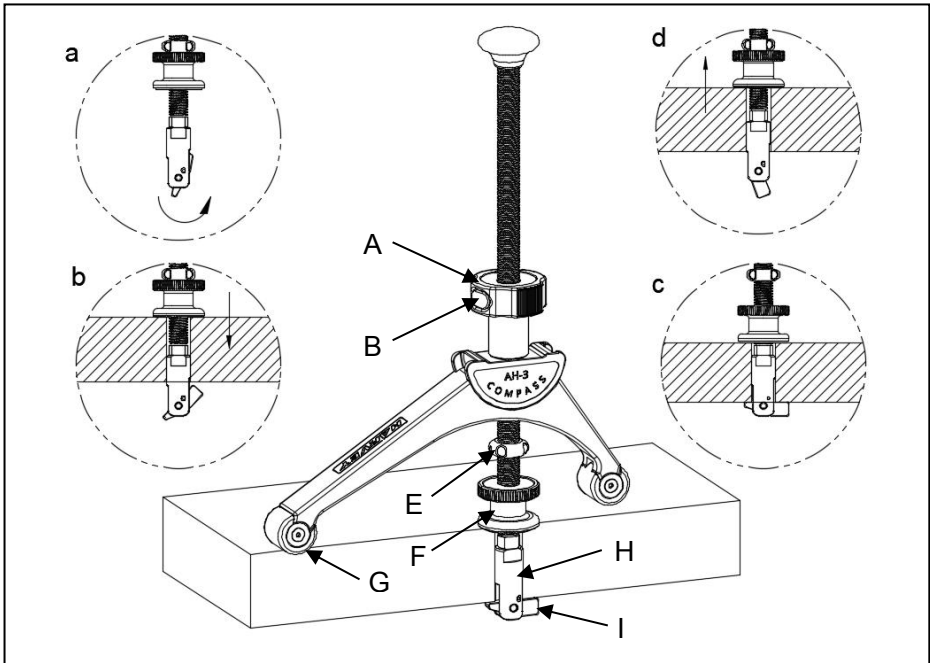


Fig.6

1. Before setting the **Stop Block (E)**, press and hold the **Quick Release Button (B)** to move the Arch Set Assembly upward along the lead screw allowing clearance for adjusting the Stop Block (E).
2. Adjust the **Stop Block (E)** to be suitable for a 2" bench as directed in the previous section above. For a 2" bench, the distance (L) should be as follow:

$$L = 2" \text{ (Bench thickness)} + 2\text{-}3/16"$$

$$L = 4\text{-}3/16"$$

3. Rotate and raise the **Knurled Knob (F)** to lightly touch the **Stop Block (E)**.

4. Rotate the **Tension Block (I)** to position the prong facing downward (as shown in Fig. 6a).
5. Insert the **Tension Block Set (H)** into the appropriate bench hole so that the **Knurled Knob (F)** rests on top of the bench surface (as shown in Fig. 6b).
6. Lift the Arch Hold Down assembly and rotate the **Knurled Knob (F)** to secure the hold down to the bench (as shown in Fig. 6c).
The **Tension Block (I)** should be latched underneath the bench while the **Knurled Knob (F)** is secured from the top of the bench.
7. With workpiece positioned underneath the hold down, press and hold the **Quick Release Button (B)** to slide the Arch Set Assembly downwards. The two **Jaw Blocks (G)** should be positioned close to the workpiece and the bench surface respectively.
8. Once positioned correctly, release **Quick Release Button (B)** and rotate the **Pressure Knob (A)** to secure the workpiece down to the bench surface.
9. When changing the hole position of the bench, rotate and raise the **Knurled Knob (F)** to lightly touch with the **Stop Block (E)**. This will allow the **Tension Block (I)** to swivel and allow you to remove the hold down from the hole (as shown in Fig. 6d).

6. Maintenance

To ensure the longevity of the Arch Hold Down, it is recommended to maintain the tool after each use. Always wipe and clean the Arch Hold Down of any dust, residue, or debris.

中文版本

1. 前言

本说明书与产品一起交付给客户。说明书包含对操作人员的要求、产品的适用环境以及正确安全的使用方法，但不包含全部的安全要求。在使用之前，操作人员必须仔细阅读并理解本说明书，才能有效的避免错误的安装和操作，保证人身安全。

2. 质保信息

质保期限

一年

购买凭证

请保留有效的购买凭证，以作保修及维修之用。

质保范围

自客户购买本产品之日起，本公司将向客户提供为期一年的质保服务，在质保期内，产品因质量缺陷免费维修。

以下原因造成的事故、故障等在保修范围以外：

- ◆ 滥用、误用、疏忽引起的事故。
- ◆ 缺乏维护导致的故障。
- ◆ 非授权维修改造。
- ◆ 正常磨损部件。
- ◆ 天灾、火灾、爆炸引起的故障。

本公司在任何情况下均不对因使用本公司产品而导致的死亡、人身伤害和财产损失负责。

任何部件经过检测确认出现工艺或材质的缺陷，我们将免费进行修理或者更换。

3. 适用范围

AH-3和AH-3T为两款适用于不同场景下的压紧器，主要用于木料的压紧。

AH-3（木工桌用压紧器）：通过木工桌上的预留圆孔固定压紧器。

AH-3T（T型槽用压紧器）：通过T型槽固定压紧器，该产品主要用于木工滑台，或配有合适T型槽的其它工作台面。

注意：该产品仅为辅助工具，在设备上使用时需遵守该设备的操作安全规范。

4. 组成及参数信息

4.1 AH-3T T 型槽用压紧器

编号 名称

- A 锁紧旋钮
- B 按钮
- C 压紧滑块
- D 拱形支架
- E 滚花旋钮
- F T 槽锁紧块
- G 压紧块

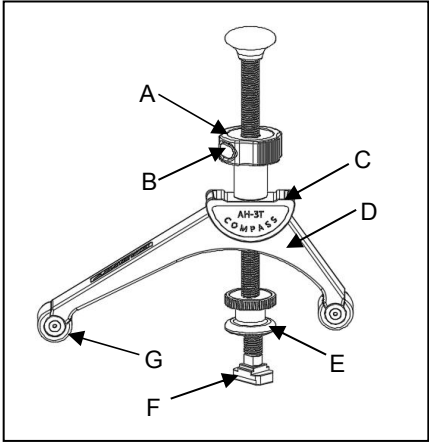


图 1

参数信息

- 最大夹持力：1100N (246lb)
- 最大压料厚度：110mm (4-5/16")
- 最大喉深：80mm (3-5/32")
- 包装尺寸：418mm×248mm×76mm (16-1/2"×9-5/16"×3")
- 毛重/净重：1.67kg (3.68lbs) /1.03kg (2.27lbs)

备注：该压紧器所配置 T 槽锁紧块的设计尺寸主要适用于木工滑台 T 型槽，可从两个方向滑入 T 槽，以适应不同的 T 型槽。不同方向的 T 槽锁紧块的截面如图 2 所示，其中截面 2 主要匹配海威 ST-1400 及 ST-1500 系列滑台。

拱形支架的的长臂用于平衡，短臂用于木料的压紧。

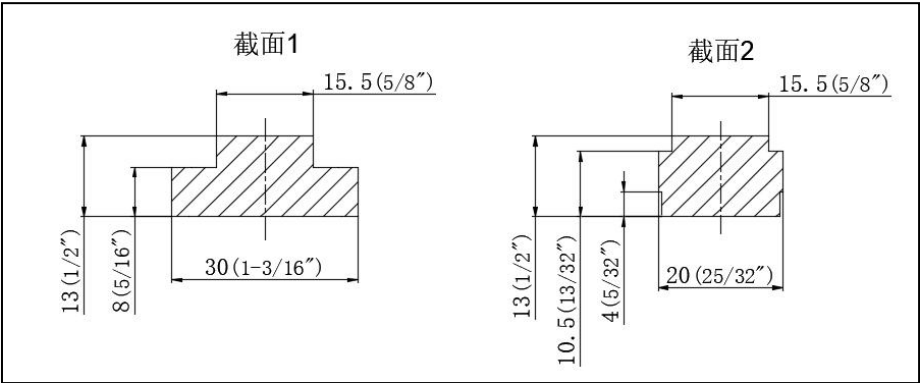


图 2

4.2 AH-3 木工桌用压紧器

编号	名称
----	----

A	锁紧旋钮
---	------

B	按钮
---	----

C	压紧滑块
---	------

D	拱形支架
---	------

E	限位块
---	-----

F	滚花旋钮
---	------

G	压紧块
---	-----

H	拉紧块固定座
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I	拉紧块
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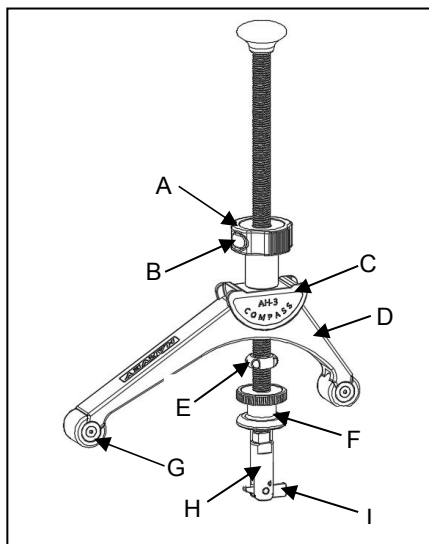


图 3

参数信息

最大夹持力：1100N (246lb)

最大压料厚度：110mm (4-5/16")

最大喉深：80mm (3-5/32")

适用木工桌孔直径：19~20.5mm (3/4"~13/16")

适用木工桌厚度：50~150mm (2"~6")

包装尺寸：418mm×248mm×76mm (16-1/2"×9-5/16"×3")

毛重/净重：1.82kg (4.01lbs) / 1.18kg (2.61lbs)

备注：上述参数中的最大压料厚度仅针对 6"厚木工桌，针对其他厚度的木工桌时，可采用垫高拱形支架一端的方式增加最大压料厚度。

拱形支架的的长臂用于平衡，短臂用于木料的压紧。

5. 操作说明

5.1 AH-3T 操作说明

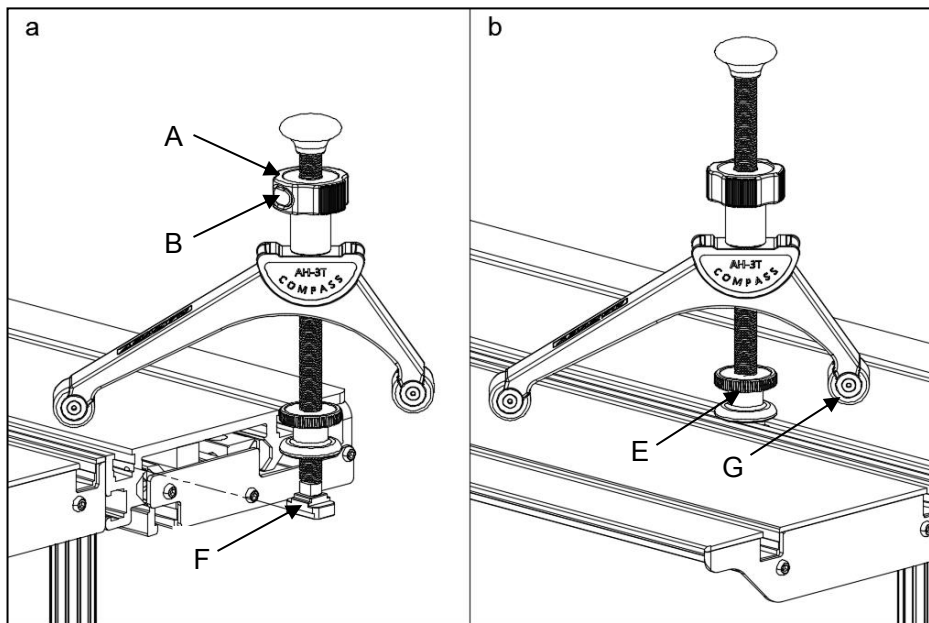


图 4

AH-3T 主要适用于木工滑台的压料，下面以海威 ST-1500 滑台上的运用为例，介绍该产品的操作，其余运用，参照该说明进行操作。

1. 按住按钮“B”，将拱形支架组件沿螺杆向上移动（如图 4. a 所示）；
2. 将 T 槽锁紧块“F”插入滑台上的 T 槽内（如图 4. a 所示），注意 T 槽锁紧块“F”的插入方向（ST-1500 滑台需选择 T 槽锁紧块的截面 2）；
3. 旋转滚花旋钮“E”，将压紧器固定到滑台上（如图 4. b 所示）；
4. 按住按钮“B”，向下快速移动拱形支架组件，使拱形支架组件上的两个压紧块“G”分别贴近木料和滑台平面；松开按钮“B”，旋转锁紧旋钮“A”，通过压紧块“G”将木料压紧在滑台上。

注意：

为保证安全，作业前需确保木料被有效压紧，必要时可使用多个压紧器。

5.2 AH-3 操作说明

AH-3 主要适用于厚度 2"~6" 的木工桌。针对不同厚度的木工桌，在使用前须先确定限位块“E”的位置。调节方法如下：

1. 测量出木工桌的厚度 t ；

2. 松开限位块“E”上的两颗紧定螺钉，调限位块“E”的位置，使限位块“E”距压紧器底部的距离 $L = t + 55\text{mm}$ ($t + 2 - 3/16"$)，然后拧紧“E”上的紧定螺钉（如图 5 所示）。

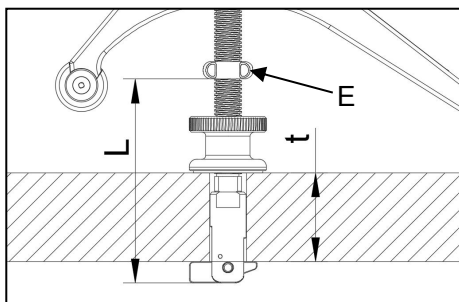


图 5

下面以厚 2" 木工桌上的运用为例，介绍该产品的操作，其余运用，参照该说明进行操作：

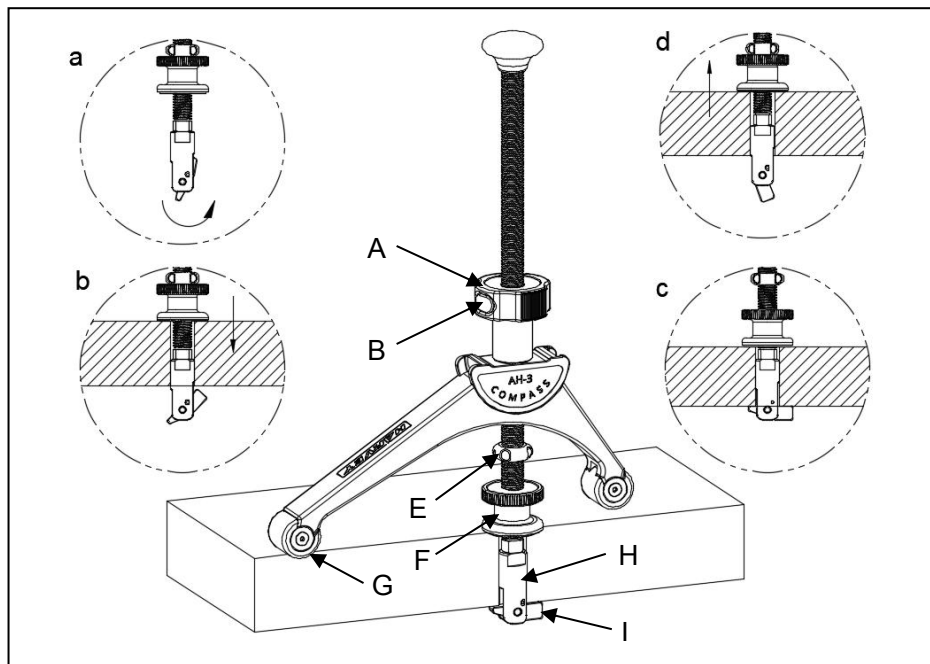


图 6

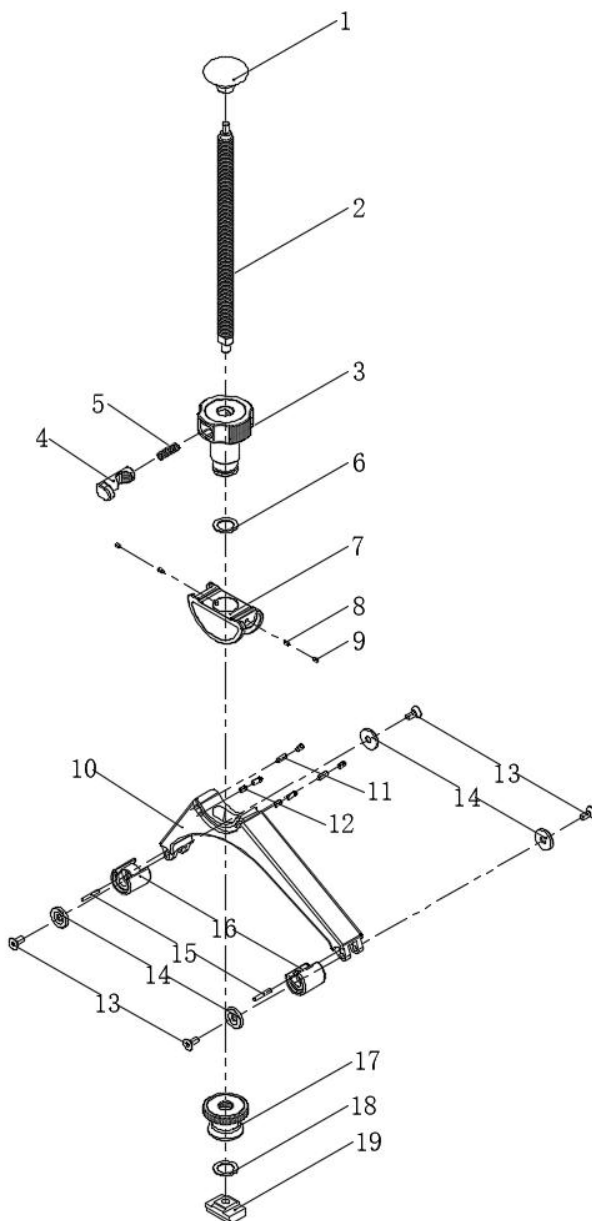
1. 先将限位块“E”按上述方法调到2"木工桌对应的位置固定，即 $L=50.8\text{mm}+55\text{mm}=105.8\text{mm}$ ；
2. 将滚花旋钮“F”旋转到轻贴限位块“E”的位置，然后将拉紧块“I”旋转到尖头朝下的位置（如图 6. a 所示）；
3. 将拉紧块固定座“H”插入到合适的木工桌孔内，使滚花旋钮“F”与木工桌台面接触（如图 6. b 所示）
4. 整体上提压紧器，然后旋转滚花旋钮“F”，将压紧器固定到木工桌上（如图 6. c 所示）；
5. 按住按钮“B”，向下快速移动拱形支架组件，使拱形支架组件上的两个压紧块“G”分别贴近木料和木工桌平面；松开按钮“B”，旋转锁紧旋钮“A”，通过压紧块“G”将木料压紧在木工桌台面上；
6. 如要更换木工桌孔位，只需将滚花旋钮“F”旋转到轻贴限位块“E”处，即可将压紧器从木工桌孔内取出（如图 6. d 所示）。

6. 日常维护

及时清理附着在产品上的木屑。

Exploded View and Parts List

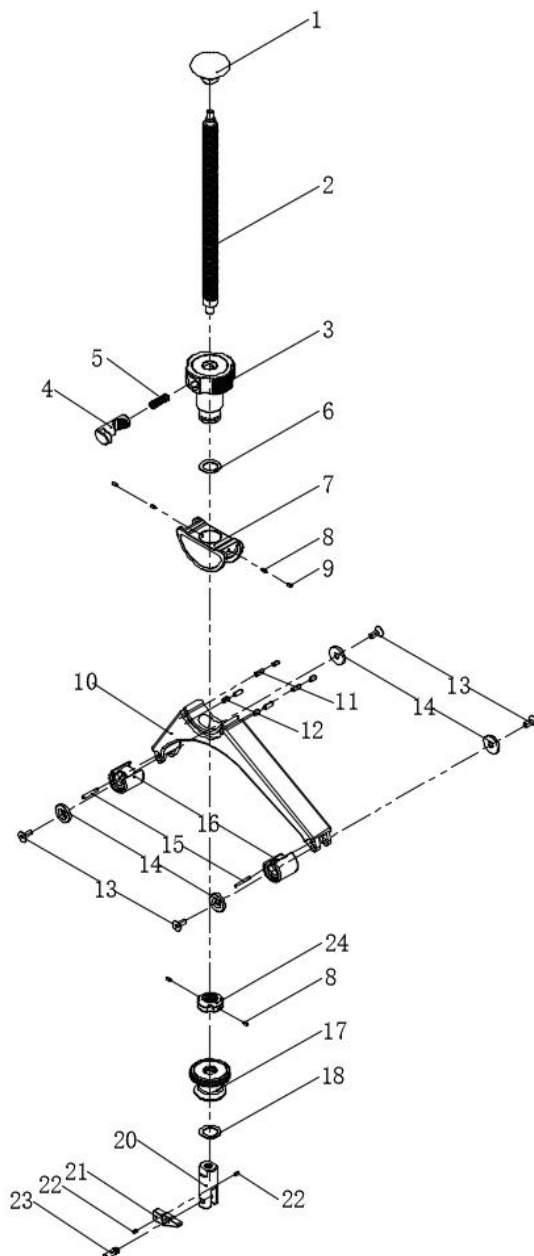
Arch Hold Down for T-Slot parts



Arch Hold Down for T-Slot parts list

REF	DESCRIPTION	QTY
1	Handle	1
2	Pillar Shaft (for sliding table)	1
3	Pressure Knob	1
4	Quick Release Button	1
5	Spring (0.6 x 8 x 20)	1
6	Stainless Steel Gasket	1
7	Locking Slider	1
8	Cylindrical End Set Screw M4 x 5	2
9	Concave End Set Screw M4 x 8	2
10	Arch Set	1
11	Nylon Head Bead Screw M5 x 8	4
12	Concave End Set Screw M5 x 6	4
13	Countersunk Head Screw M4 x 12	4
14	Jaw Block End Cap	4
15	Cylindrical Pin 3 x 20	2
16	Jaw Block	2
17	Knurled Knob	1
18	Nylon Gasket	1
19	T-slot Locking Block	1

Arch Hold Down for Bench parts



Arch Hold Down for Bench parts list

REF	DESCRIPTION	QTY
1	Handle	1
2	Pillar Shaft (for bench)	1
3	Pressure Knob	1
4	Quick Release Button	1
5	Spring (0.6 x 8 x 20)	1
6	Stainless Steel Gasket	1
7	Locking Slider	1
8	Cylindrical End Set Screw M4 x 5	2
9	Concave End Set Screw M4 x 8	2
10	Arch Set	1
11	Nylon Head Bead Screw M5 x 8	4
12	Concave End Set Screw M5 x 6	4
13	Countersunk Head Screw M4 x 12	4
14	Jaw Block End Cap	4
15	Cylindrical Pin 3 x 20	2
16	Jaw Block	2
17	Knurled Knob	1
18	Nylon Gasket	1
19	-	-
20	Tension Block Set	1
21	Tension Block	1
22	Bead Screw M3 x 4	2
23	Tension Block Pivot	1
24	Stop Block	1



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