flipIT® monitor mount system

US Patent No. 7,509,912

Technical Support:
www.smartdesks.com
800-770-7042

Procedure for these models:

- **FIK-19**
- **FIH-19**
- **FIK-23**
- **FIH-23**

Models FIK-19 and FIK-23 include a keyboard tray which assists in opening the flipIT® lid.

1. Use included templates for cutting table top and pilot holes; or

2. Start on page 8 to install flipIT® into a factory-cut table top with pilot holes.

This manual is used for all flipIT® monitor mount systems. The difference in cut-out width dimension has no impact on the installation procedure.

The appropriate template is included with your flipIT Kit for 19 or 23 configuration.

ATTENTION:
The weight of the monitor counterbalances the force of the pneumatic cylinder (gas spring).

It is advised to install the gas spring just before installing the monitor. If the gas spring is installed without a monitor, take care to control the lid by hand. The lid will open too fast if the monitor is not installed.

Models FIH-19 and FIH-23 have no keyboard tray, but include a PULL handle for opening.

Tools needed for full installation:

• power drill/screw gun
• tape measure
• commercial grade jig saw*
• Phillips #2 screwdriver bit
• 3/8" drill bit
• 1/8" drill bit
• pencil
• masking tape
• SAFETY GOGGLES

* STOP!

The installer must possess the skill to cut within tolerance of the template layout line if no factory-cutout is made in the table top. Do not attempt this installation without this level of craftsmanship skill.

Only skills of using a screw driver and wrench are required for installation into a factory-made cutout.
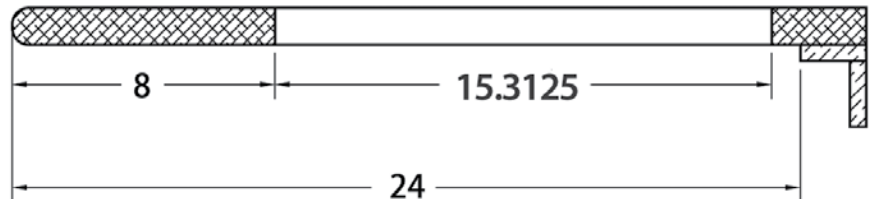
Notes for easy installation

Whenever possible, install the flipIT before assembling the desk. You will be installing from the top and the underside: sawhorses are recommended. If the desk is assembled, see if the desktop can be removed. Always protect the surface of your desktop and work safely with power tools.

• The template guides the placement of the cutout 8" from the user edge.

• If the front edge is contoured concave or convex, experiment with a scrap piece to allow placement of keyboard tray or handle.

• When 2 or more flipITs are installed side by side, keep a 30" interval between centers.

• Other factors may enter in: the placement of legs, brackets and CPU holders may require greater distance between centers.
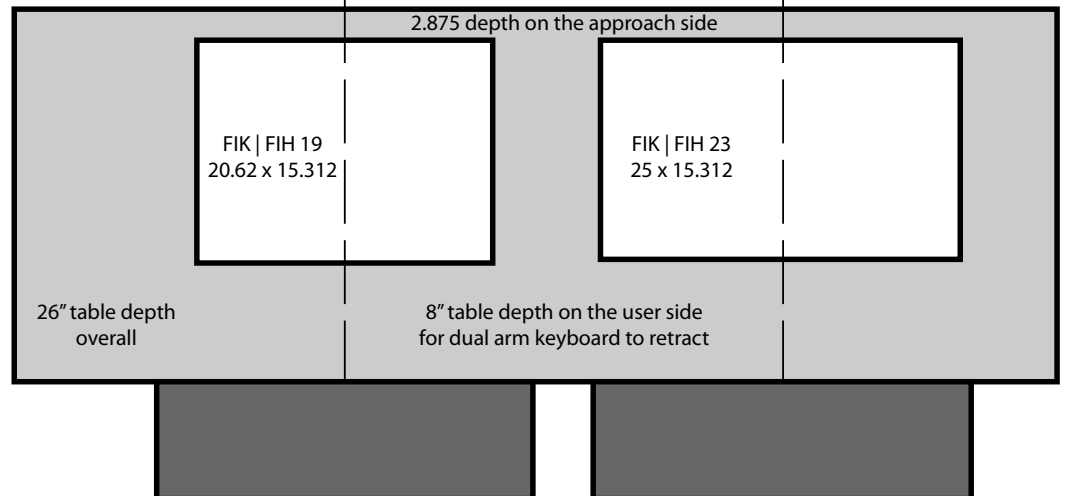

WARNING: Power Tools Are Dangerous
Review the safety procedures supplied by your power tool manufacturers for your safety's sake. Always use safety glasses and wear proper apparel that won't get caught in moving parts. CBT Supply, Inc. will not be held liable for misuse of tools and disregard for power tool manufacturers' safety precautions.
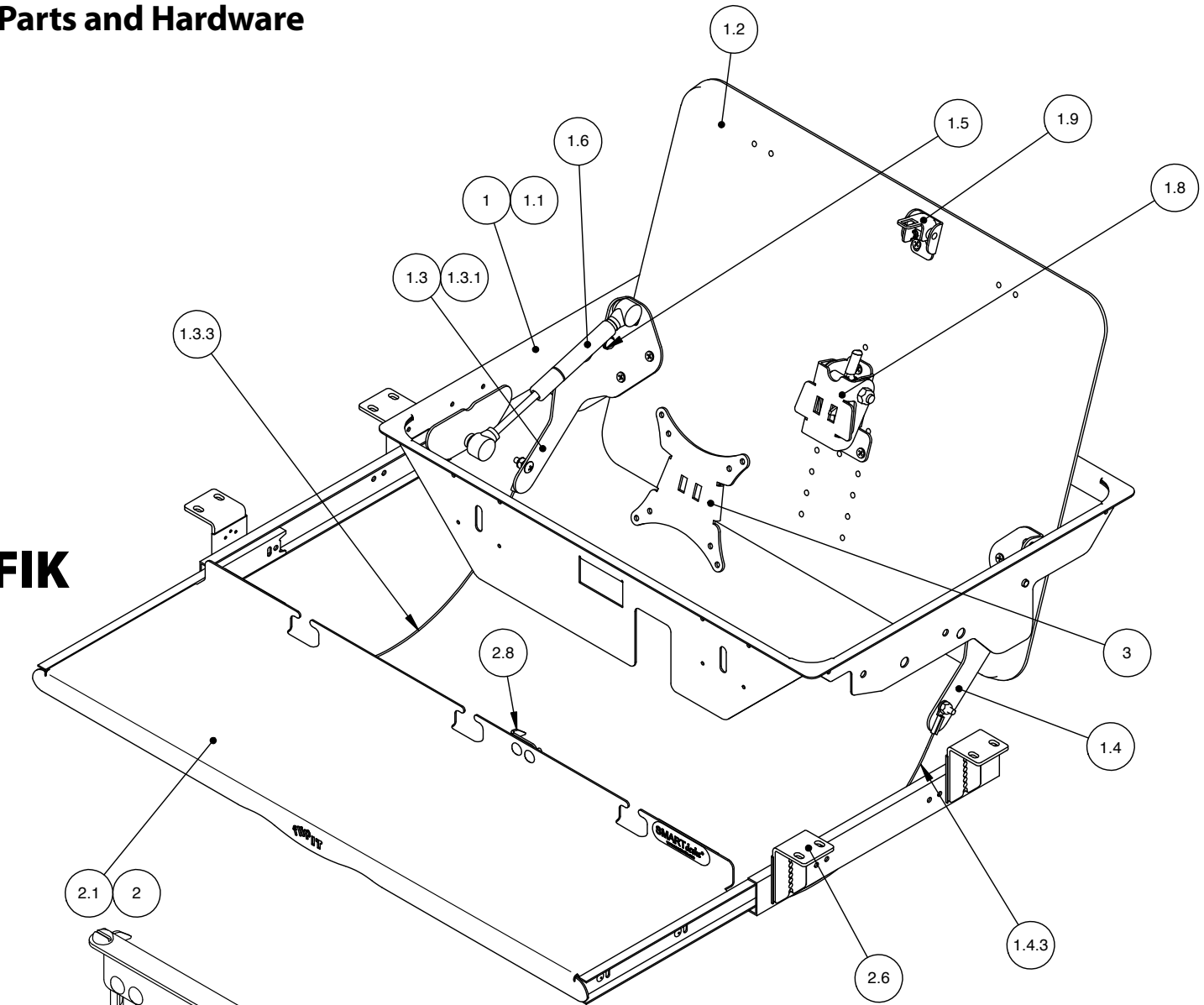

8   15.3125

24

Position FIK workstations 30" between centers

2.875 depth on the approach side

FIK | FIH 19
20.62 x 15.312

FIK | FIH 23
25 x 15.312

26" table depth overall

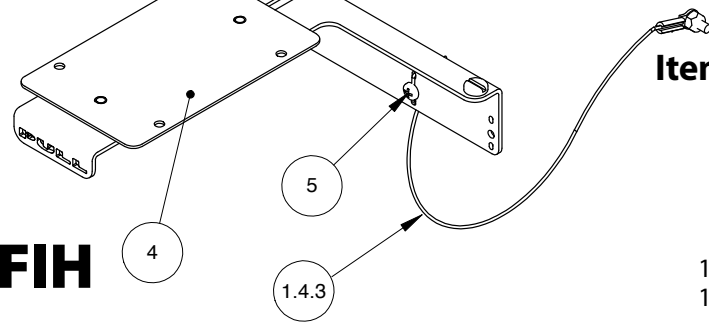8" table depth on the user side for dual arm keyboard to retract
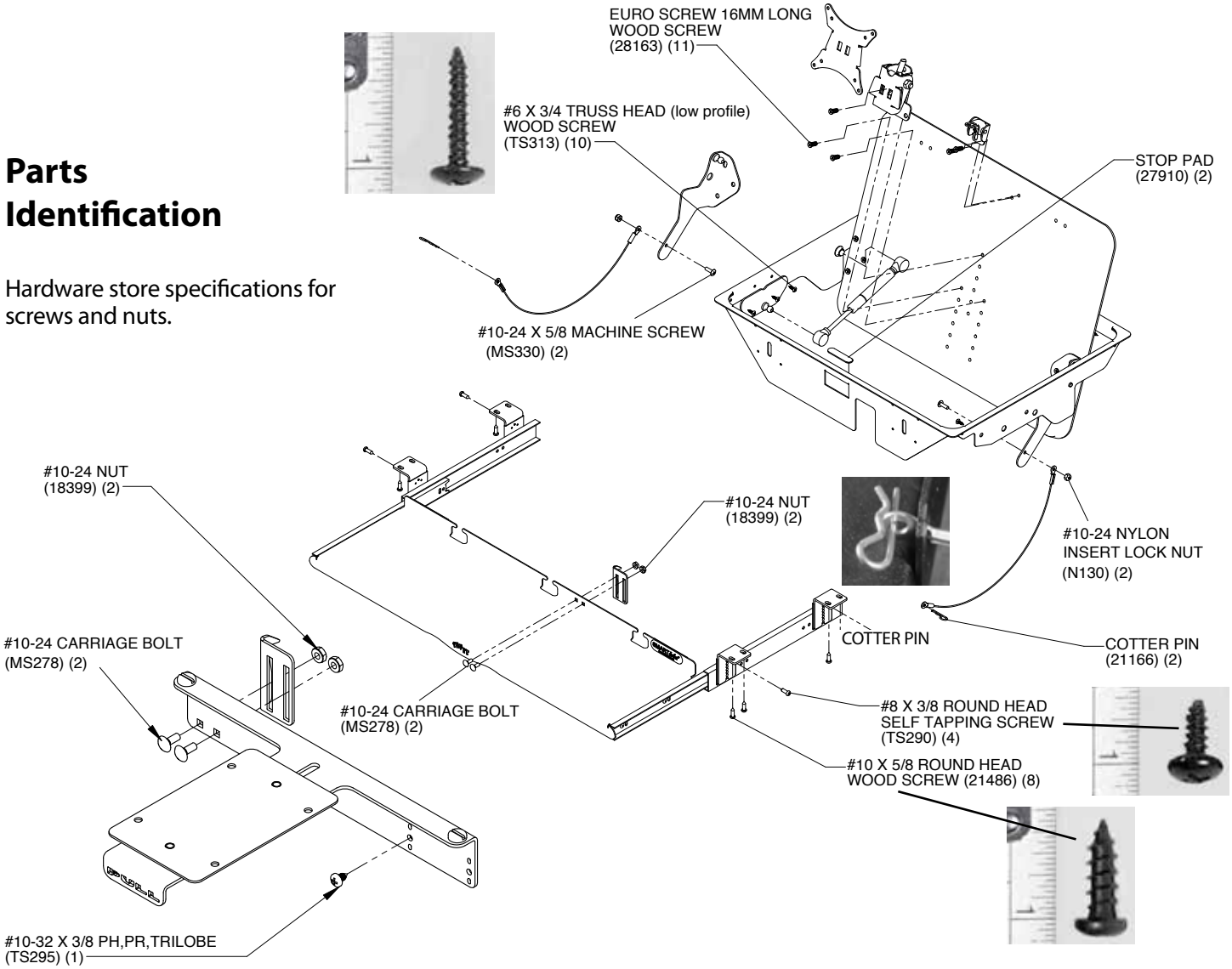
Parts and Hardware

FIK

FIH

Parts Identification

If there is an issue with function, use this chart to identify the part to our service team.

Item No.	Qty.	Part ID	Description
1	1	31500	flipIT FIK|H-19 Desktop Assembly
1	1	31450	flipIT FIK|H-23 Desktop Assembly
1.1	1	31498	Grommet / Subassembly
1.2	1	31499	Top Lid
1.3	1	29784	LH Cable Arm Assembly
1.3.1	1	28473-LH	LH Arm Catch Assembly
1.3.3	1	29763	Cable Assembly
1.4	1	29785	RH Cable / Arm Assembly
1.4.3	1	29763	Cable Assembly
1.5	2	27332	Bushing
1.6	1	27919	Gas Spring
1.8	1	28190	Flat Screen Tilt Assembly
1.9	1	31459	Pivot Keeper Assembly
2	1	31462	26"w Keyboard Tray Assembly
2.1	1	31455	26" Keyboard Tray Subassembly
2.6	4	29222	Slide Mounting Bracket
2.8	1	31456	Latch Hook
3	1	27888	VESA Mounting Bracket
4	1	31534	Latch / PULL Handle Assembly
5	1	TS295	#10-32 3/8 Trilobe

Parts Identification

Hardware store specifications for screws and nuts.

EURO SCREW 16MM LONG
WOOD SCREW
(28163) (11)

#6 X 3/4 TRUSS HEAD (low profile)
WOOD SCREW
(TS313) (10)

STOP PAD
(27910) (2)

#10-24 X 5/8 MACHINE SCREW
(MS330) (2)

#10-24 NUT
(18399) (2)

#10-24 NUT
(18399) (2)

#10-24 NYLON
INSERT LOCK NUT
(N130) (2)

COTTER PIN

#10-24 CARRIAGE BOLT
(MS278) (2)

#10-24 CARRIAGE BOLT
(MS278) (2)

COTTER PIN
(21166) (2)

#8 X 3/8 ROUND HEAD
SELF TAPPING SCREW
(TS290) (4)

#10 X 5/8 ROUND HEAD
WOOD SCREW (21486) (8)
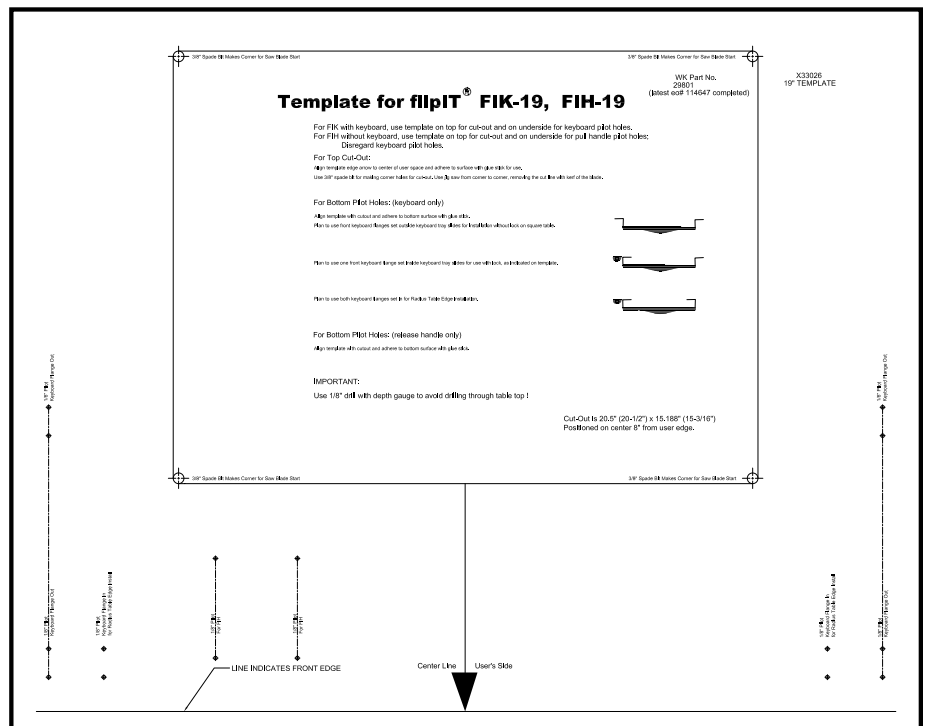
#10-32 X 3/8 PH,PR,TRILOBE
(TS295) (1)

Paper template

Provided appropriate for your flipIT Kit:

Not used when installing into a factory made, flipIT Ready product.

Cut-out placement is referenced from the center line of the user space. Make the cut-out top surface up. The spade bit will make a clean hole from the top.

The same template is used on the underside for making pilot holes for keyboard tray or PULL handle, referencing the center line of the user side front edge.

Template for flipIT® FIK-19, FIH-19

For FIK with keyboard, use template on top for cut-out and on underside for keyboard pilot holes.
For FIH without keyboard, use template on top for cut-out and on underside for pull handle pilot holes:
Disregard keyboard pilot holes.

For Top Cut-Out:
Align template edge arrow to center of user space and adhere to surface with glue stick for use.
Use 3/8" spade bit for making corner holes for cut-out. Use 3/8 saw from corner to corner, removing the cut line with kerf of the blade.

For Bottom Pilot Holes: (keyboard only)
Align template with cut-out and adhere to bottom surface with glue stick.
Plan to use front keyboard flanges set out side keyboard tray slides for installation without lock on square tables.

Plan to use one front keyboard flange and inside keyboard tray slides for use with lock, as indicated on template.

Plan to use both keyboard flanges set in for Radius Table Edge Installation.

For Bottom Pilot Holes: (release handle only)
Align template with cut-out and adhere to bottom surface with glue stick.

IMPORTANT:
Use 1/8" drill with depth gauge to avoid drilling through table top !

Cut-Out is 20.5" (20-1/2") x 15.188" (15-3/16")
Positioned on center 8" from user edge.

X33026
19" TEMPLATE

WK Part No.
29801
(latest eo# 114647 completed)

3/8" Spade Bit Makes Corner for Saw Blade Start

LINE INDICATES FRONT EDGE

Center Line   User's Side

Make cutout using template

- Determine the center of the user space and mark this center line in pencil.

EDGE   Center Line   User's Side
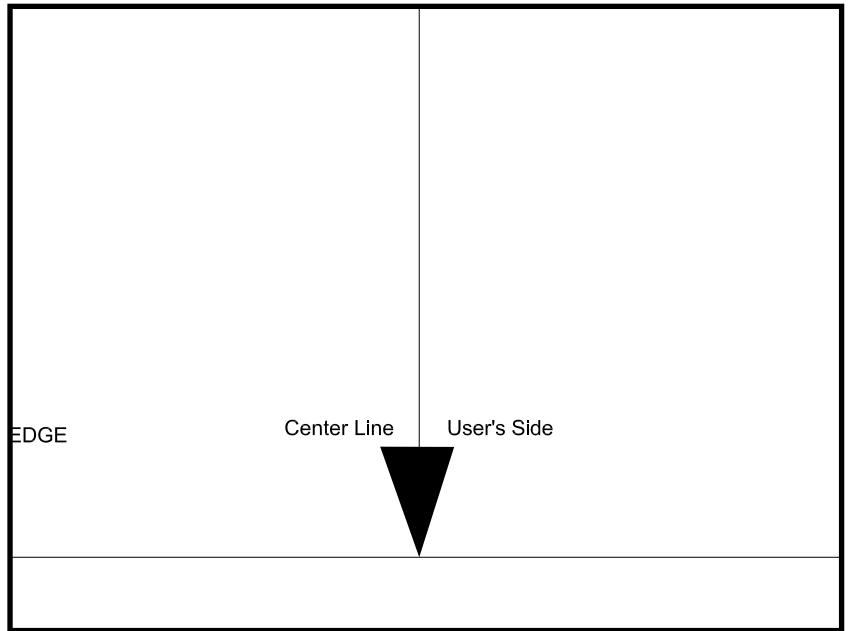
- Fold template at user edge and align with center line and front edge

- Table top surface up: tape the template in position, keeping the paper as flat as possible.

3/8" Spade Bit Makes Corner for Saw Blade Start
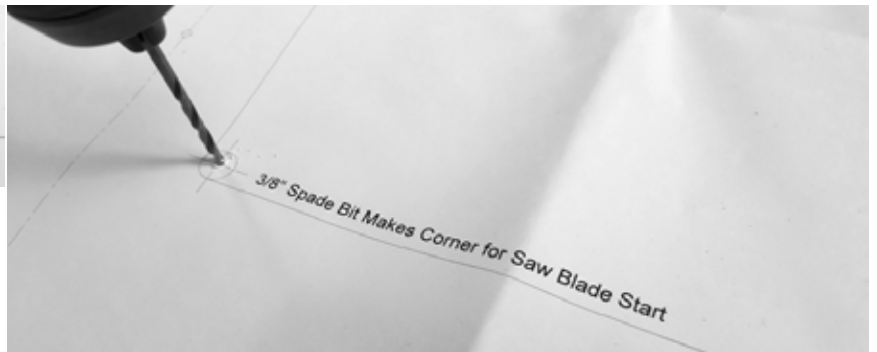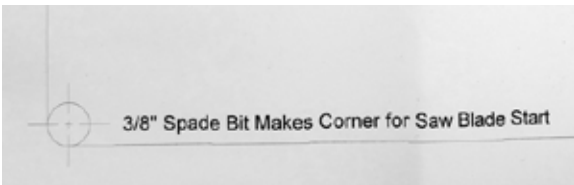
- For accurate placement , use a 1/8" drill bit to mark the drilling center for the 3/8" spade bit.
- After all 4 centers are marked, carefully remove the template.

3/8" Spade Bit Makes Corner for Saw Blade Start
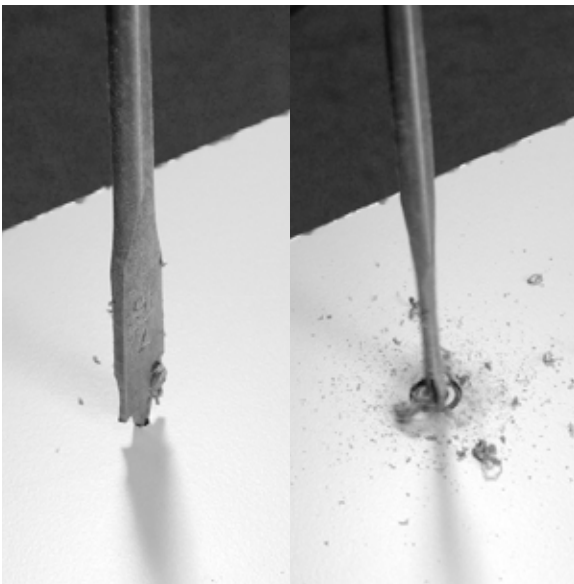
- Using your drill center pilots…   …make 4 corner holes in your desktop using a 3/8" spade bit.
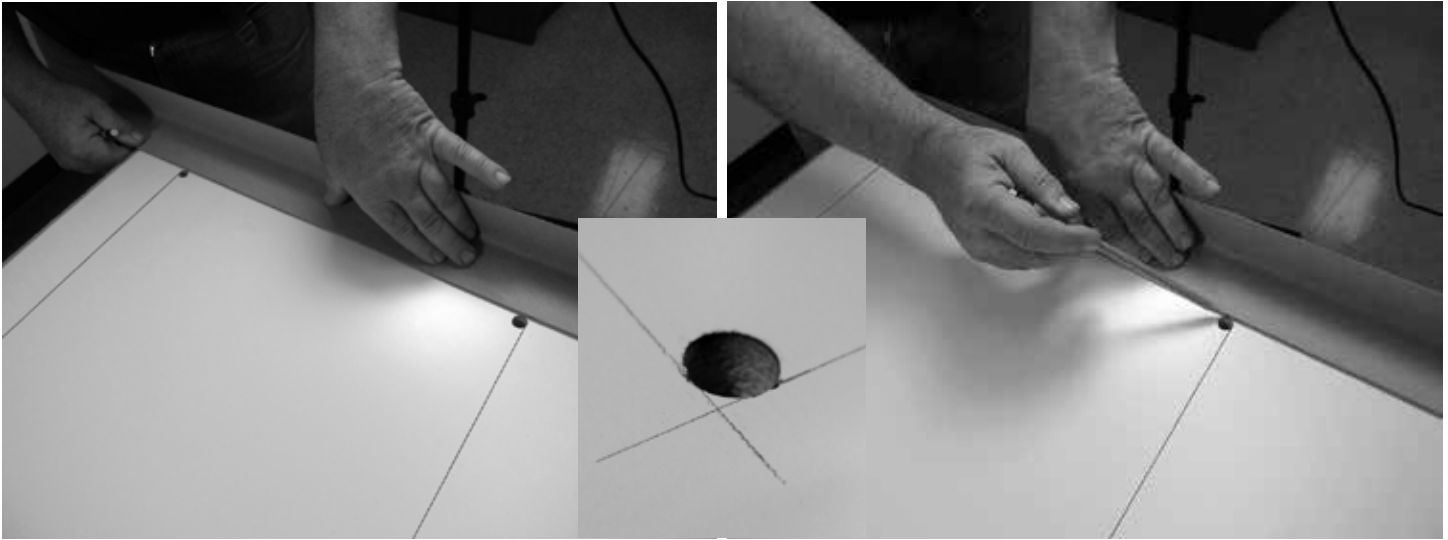
- Use a straight edge to scribe lines for making the cut-out that are tangent to the 3/8″ holes
- Use a jig saw, starting the cut at the point of tangency
- Remove the scribed line with the kerf of the blade
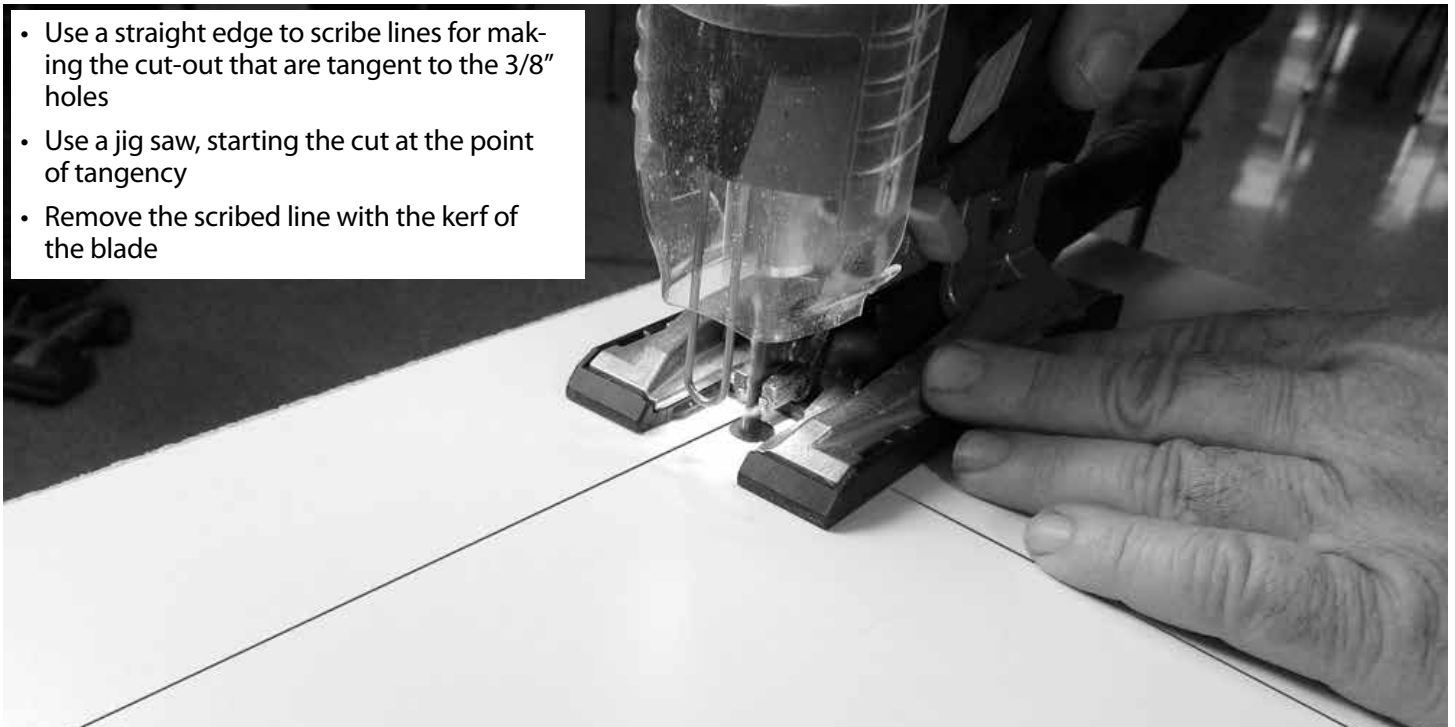
- Your corners should look like the above
- Your perfectly cut table top should look like the one on the right
- The flipIT collar has a trim flange that will hide any slight imperfections in the cut line and finish the installation
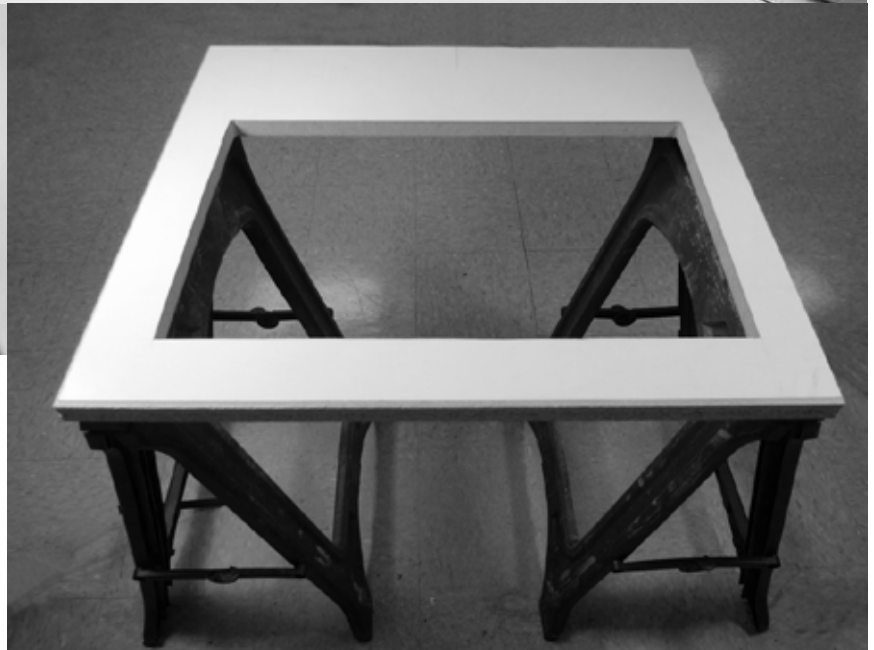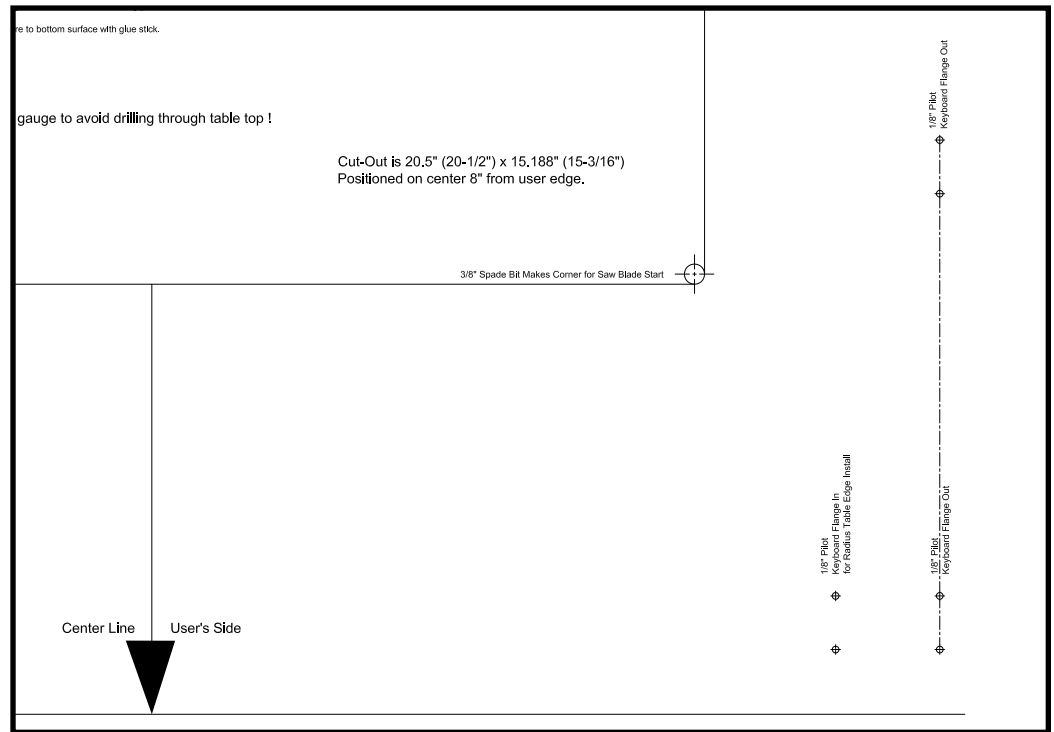
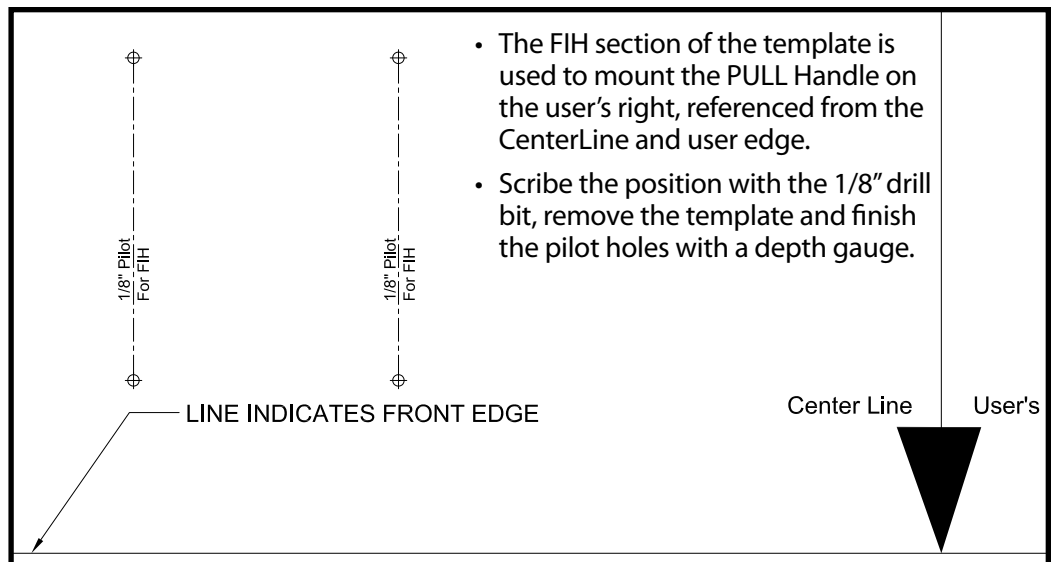# Make pilot holes for Keyboard Tray (FIK) or Pull Handle (FIH)

- Turn the table top over to work on the underside

- If you are installing the FIK-19 or FIK-23, use the same template used for making the top cut-out.

- Align the template to the Center Line of the user side. You will also be able to reference the actual cut-out to assure alignment.

Template for flipIT® FIK-19, FIH-19
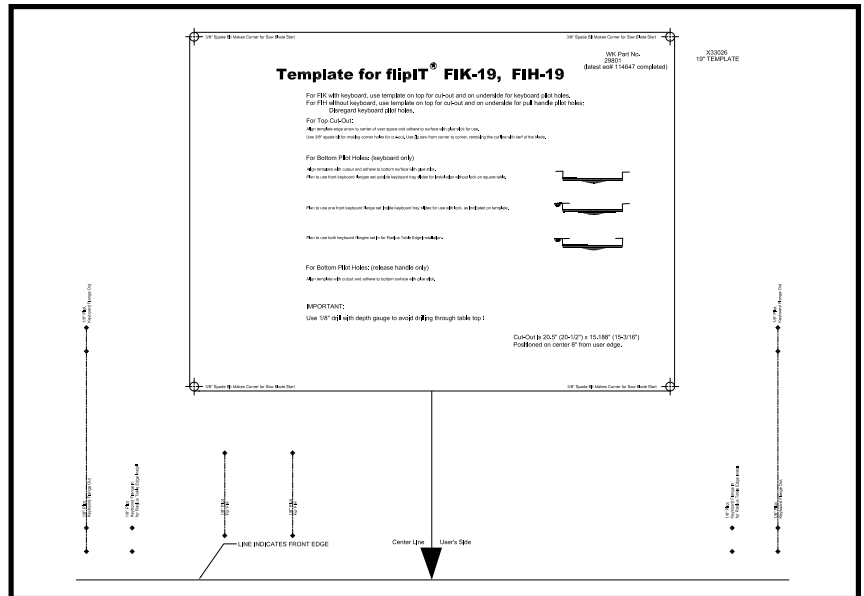
- Use a 1/8" drill bit to scribe the placement of the pilot holes

- Note that the choice of flange in or flange out is possible to accommodate the tight placement of other fixtures or base cabinet restrictions.

- If you need to change your mind about which to use, scribe all of the pilot holes.

- To finish the pilot holes, remove the paper template, use a depth gauge on the drill bit, and make 3/8" deep holes.

- **Take care to not drill completely through your table top and ruin the surface!**

Cut-Out is 20.5" (20-1/2") x 15.188" (15-3/16")
Positioned on center 8" from user edge.

3/8" Spade Bit Makes Corner for Saw Blade Start

1/8" Pilot Keyboard Flange Out

1/8" Pilot Keyboard Flange In for Radius Table Edge Install

1/8" Pilot Keyboard Flange Out

Center Line   User's Side

Make a depth gauge using tape if you don't have a metal one with a set screw.

- The FIH section of the template is used to mount the PULL Handle on the user's right, referenced from the CenterLine and user edge.

- Scribe the position with the 1/8" drill bit, remove the template and finish the pilot holes with a depth gauge.

1/8" Pilot For FIH

1/8" Pilot For FIH

LINE INDICATES FRONT EDGE

Center Line   User's

Installation into factory made, flipIT-Ready top

FIK-19 and FIK-23 Models

- Assess the installation advantages of mounting L bracket flanges in (toward the Center Line) or flanges out (away from the Center Line).

- Using the four self-tapping metal screws, select the 4th notch of the L bracket and install the four L brackets.

- Place keyboard tray over the pilot holes and install with screw gun and #2 Phillips blade: eight #10, 5/8" round head wood screws.
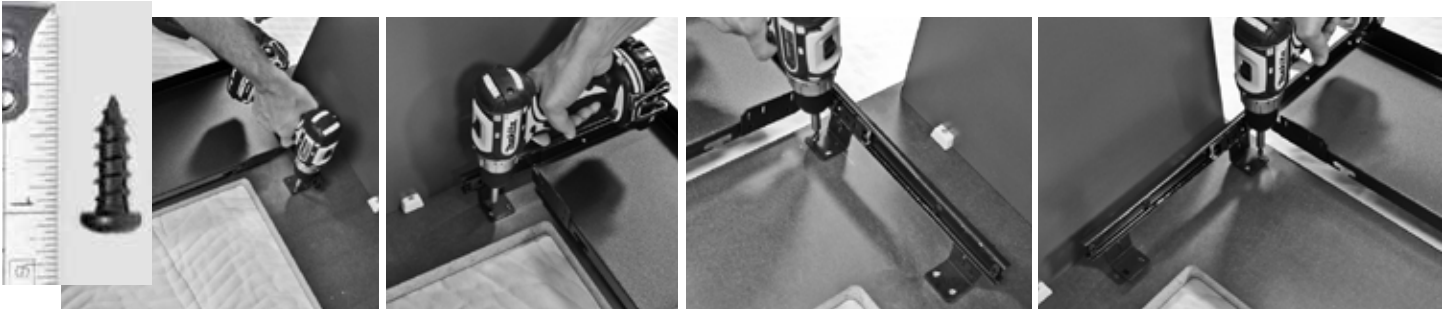
FIH-19 and FIH-23 Models
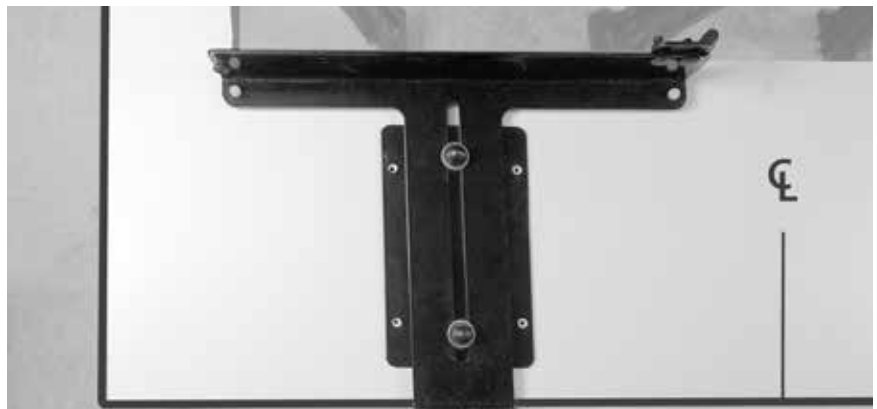
- The PULL Handle assembly includes four #10, 5/8" round head wood screws, a cable with eyelet end and a self-tapping metal screw— #10-32 x 3/8 PH, PR, Trilobe (TS295)— used to connect the flipIT lid to the assembly.

- Position the assembly over the pilot holes and install it with the wood screws

# Install the flipIT® into the Cut-Out (all models)

- Hold the flipIT lid assembly by the trim collar
- Let the cable drop through the cut-out and orient the assembly diagonally to capture the cable arm assemblies

- Align the flipIT lid to the cut-out
- Note: the corners are fragile until installed

- Span your grasp to avoid pinching your fingers and let the assembly drop into place

User side

Approach side

Four Corners   Two above gas spring anchor plate
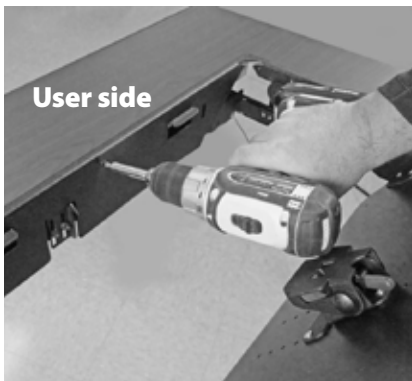
- Install the collar using a screw gun with #2 Phillips blade in eight places: 4 corners, middle of front and back sides, and two above the anchor plate and post for the gas spring to give it extra reinforcement.

- Use #6 x 3/4 Truss Head (low profile) Wood Screws

- The lid latch hook registers to the same position for both the FIK and FIH flipIT models

- Top thicknesses vary, and the latch hook must pass through the keeper, which is mounted to the lid.

Use a 3/8" open end wrench to make the adjustment for smooth opening and closing. The gas spring must be operational.
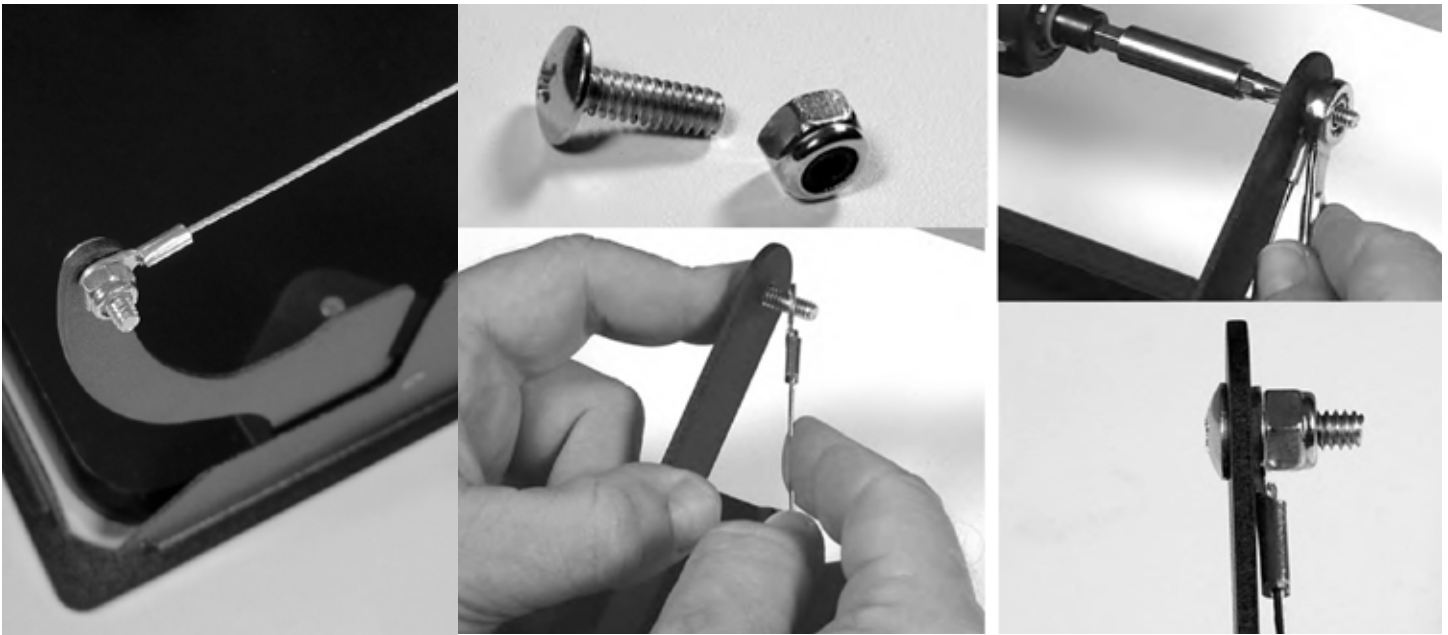
Cables should be attached loosely

The cable on the flipIT cable arm assembly ships attached, but if it should need adjustment, do not overtighten the cable. It needs to work freely. Adjust it with a 3/8" open end wrench and #2 Phillips blade screwdriver.

# FIH Models

Attaching cable arm to PULL handle

- Thread the cable to the set of holes that line up with the FIH-19 or FIH-23 model.

- FIH-19 inside hole set

- FIH-23 outside hole set

- Install the self-tapping metal screw into the middle hole

- Tension the cable so it is a straight line, but not as tight as a guitar string. If the cable is over-stretched the lid will not close flush.

- Too much slack, and the tipping point may not be reached for opening.

- Fully tighten the screw to hold the cable in place: #2 Phillips blade.

Outside Hole Set for FIH-23

Inside Hole Set for FIH-19

FIK Models
Attach cables with cotter pins

- The dual arm keyboard tray has slots that align with the FIK-19 and FIK-23

- Choose the slot that gives the cable the most freedom to move without being tangled.

- Slip the cotter pin through the eyelet in the end of the cable to secure it.

- NOTE: If the cable tension is too tight, the lid will not close. If this occurs, it is likely that the keyboard tray is too far forward to the user side. The easiest remedy is to use a small 3/8" S hook you can purchase at a hardware store to lengthen the cable. Cable ties will also work.
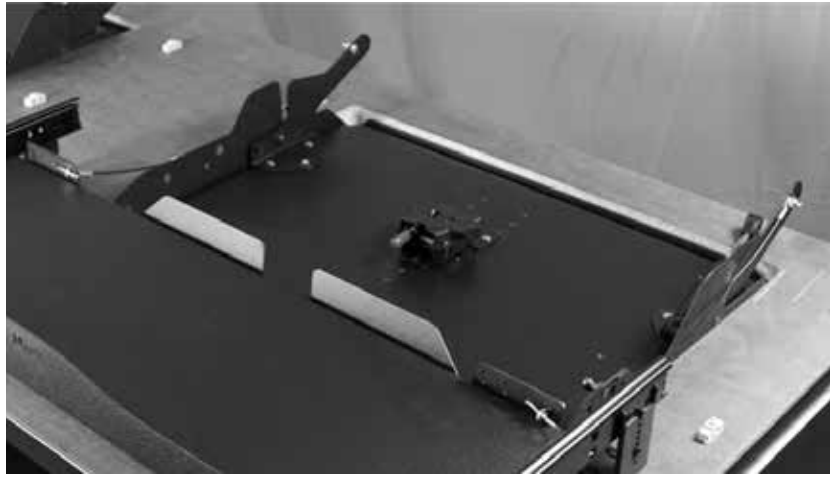

Attach gas spring

- The gas spring ships attached to the flipIT lid assembly

- Pry off the locking hub on the free end with a flat blade screwdriver

- Press the gas spring to the post on the frame

- Replace the locking hub by pressing it in place

- **NOTE:**
  The chrome shaft end of the gas spring attaches to the frame to prolong its service life.

Install VESA mount

- Remove the stand from your monitor and use the screws provided with your display to install the female part of the mount.

- Bring the monitor to the male half of the mounting system and let the monitor snug into place. Gravity does the work.

- A spring loaded keeper pin with a red release knob will engage.

- To remove the display, push back the keeper and lift the display up out of the couple.
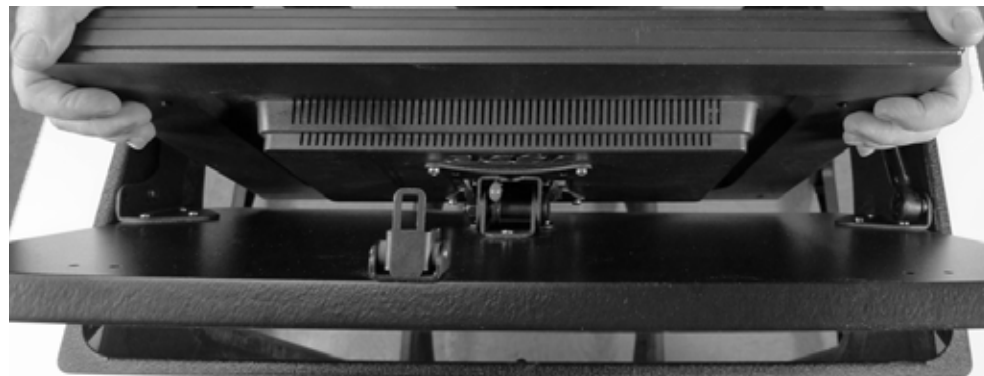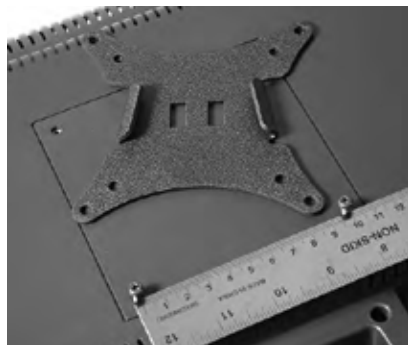
The male half of the VESA mount is attached to the flipIT lid with three Euroscrews. Additional mounting locations, at half-inch intervals, are provided to fine-tune the balance of the opening performance. If the monitor is mounted too high, it will not pass through the cutout.

If it is mounted too low, the opening might be too fast (like jumping off a teeter totter).

The VESA mount provides screen angle adjustment.

- Adjust the screen angle by grasping the lid and display top and squeeze the top to reduce the angle.

- Increase the angle by holding the lid with one hand and the top of the display with the other, then bring the display toward you.