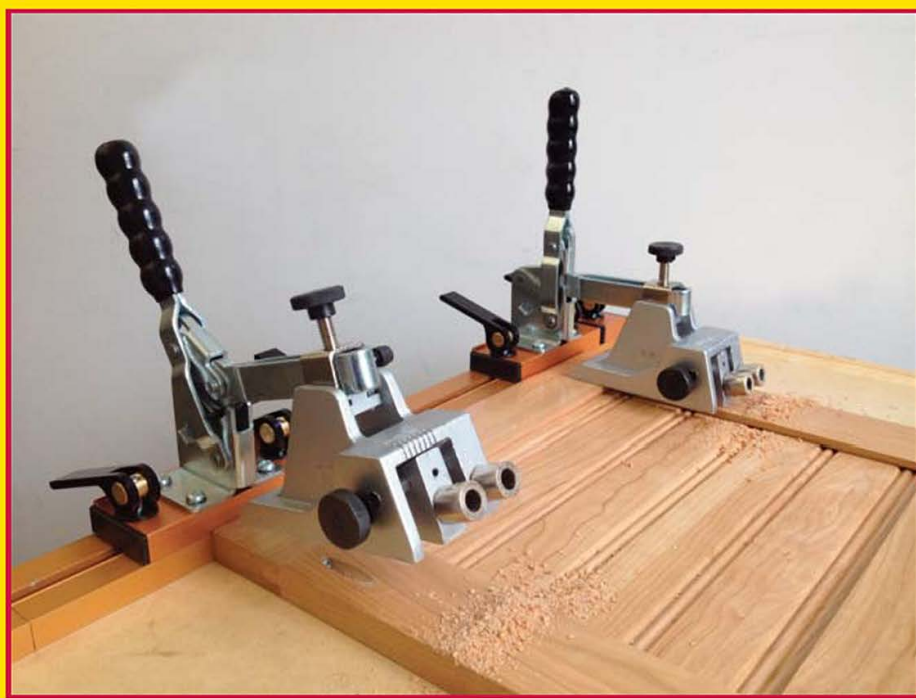




# PROFESSIONAL FACE FRAME JIG SYSTEM USER'S MANUAL



**Single Jig System**



**Double Jig System**

# INTRODUCTION

The all-new Face Frame Jig System from General Tools & Instruments allows you to create a professional production setup in just minutes for fast, precise fabrication and assembly of cabinet face frames and doors.

With this system, wood frame and door components can be aligned, securely clamped, bored for pocket holes and screwed together in one operation.

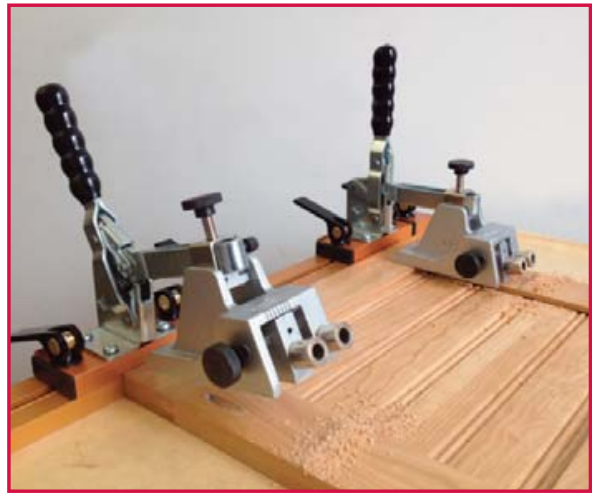
The system will accommodate finished wood stock widths from 1-1/4 in. to 2-1/2 in. and thicknesses of 3/4 in. to 1 in.

The Face Frame **Double** Jig System comes complete with everything you need to get started: two (2) 20 inch slotted T-Track Rails with 22 black mounting screws; two (2) pre-assembled Clamp Mount Jigs for clamping your work pieces and boring the pocket holes, and two (2) Carriage Stops clamps for re-positioning the jig(s) in their subsequent drilling positions.

The Face Frame **Single** Jig System comes complete with one (1) 20 inch slotted T-Track Rail with 11 black mounting screws; one (1) pre-assembled Clamp Mount Jig and two (2) Carriage Stops.

Each kit also includes:

- 100 self-tapping fasteners which can also be used for mounting the guide rails to your workbench or an auxiliary work platform
- A stepped drill bit with adjustable stop collar and hex wrench for boring the pocket holes
- A 6 inch long square-drivebit to drive the self-tapping fasteners.



**Double Jig System**



**Single Jig System**



# Here's how easy it is to set up and use the Face Frame Jig System:

## STEP 1 – WORK TABLE SETUP

Using the black mounting screws provided, attach the slotted T-Track Rails to your workbench or other suitable work surface. (**Fig's 1 & 2**)

For convenience, you can create an auxiliary work table using 3/4 in. plywood or MDF measuring approximately 24x48-in. This will allow adequate space to construct most cabinet-size doors and face frames.

For additional convenience, or if you are making multiple doors or face frames, we recommend creating a production template by adding an auxiliary fence at the left end of the T-Track Rails, using a length of straight stock mounted at a 90-degree angle. (**Fig 3**) Use a framing square or try-square to ensure that this fence is positioned correctly, and securely clamp or screw it to your work table.

If you choose not to install a fence, use a square to scribe a line on the work table at a 90-degree angle (perpendicular) to the T-Track. Use this line as a reference mark and position your first workpiece against the T-Track with its top end aligned to the line. Place your second workpiece (face frame end rail) against the reference line or auxiliary fence so that its end butts tightly against the stile. Use your square to check that these pieces form a 90-degree right angle. (**Fig 4**)

## STEP 2 – INSTALLING THE JIGS

Install the first pre-assembled jig by inserting its adjustable T-Screw into the slot in the rail. (**Fig 5**) Adjust the two

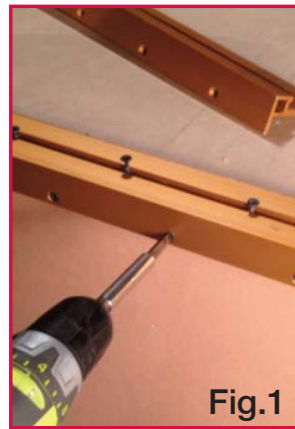


Fig.1

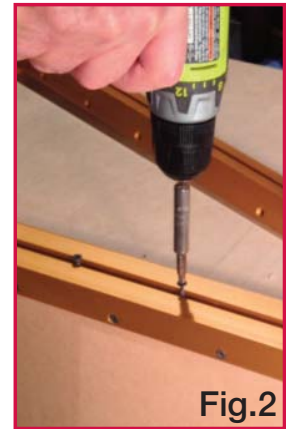


Fig.2



Fig.3



Fig.4



Fig.5

quick-release levers so the jig slides freely along the rail but can be easily tightened or loosened. (Note: If the clamp levers do not easily lock and release, remove the jig and give the T-Screw a half-turn, then reinstall the jig on the rail.) Position this jig at the left end of the rail, but do not lock it in place at this time.

Slide a second jig onto the rail and position it approximately at the location of the frame's bottom rail piece. (Fig 6)

### **STEP 3: ADJUSTING THE JIG FOR THE PROPER STOCK THICKNESS**

Now that your jig is in position refer to the scribed registration marks on the left side of the jig which correspond to the thickness of your face frame stock. The inner line is for nominal 5/4 in. wood stock (1 in. actual thickness), and the forward line is for nominal 1 in. stock (3/4 in. actual thickness). Loosen the small knob on the left side of the Clamp Mount arm to position this line. (Fig 7)

Now, push the jigs top lever forward to clamp the jig onto the face frame joint. Using the large top knob on the jig arm to adjust the clamping pressure. (Note: Too much pressure can distort or move the frame pieces out of position; too little pressure will allow unwanted movement in the work pieces when you drill the pocket holes.) (Fig 8) With the top knob adjusted for pressure and the stock thickness markings still aligned, tighten the small adjustment knob so the jig head won't reposition itself.

### **STEP 4: ADJUSTING THE DRILL BIT FOR THE PROPER FASTENER DEPTH**

Now that the stock thickness and the pressure of the jig have been set, position the rail piece offset to the style and to the drilling position of the jig. With the stop collar loose on the drill bit,

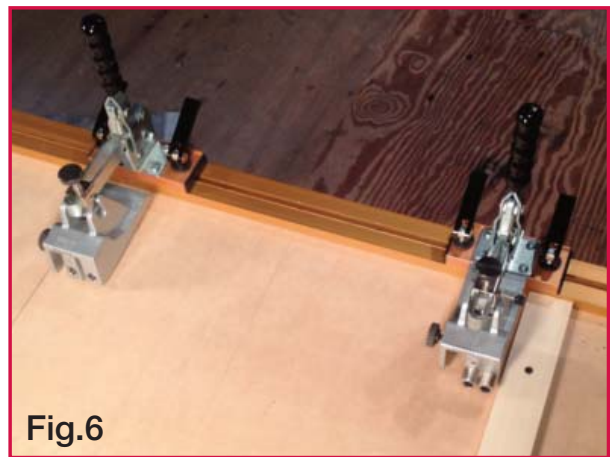


Fig.6

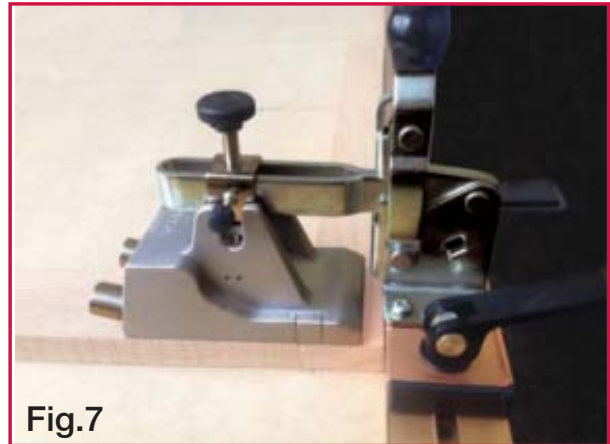


Fig.7

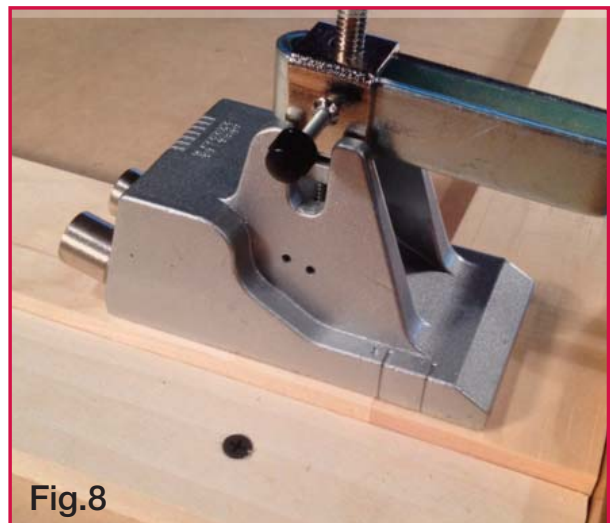


Fig.8



Fig.9



insert the drill bit into one of the jig's pocket hole guides so that you can see the drill bit protrude beneath the jig with the rail piece behind it. **(Fig 9)** Align the drill bit so that the tip is against the style or to a small depth into the style. This depth will determine the bottom of the pocket where the fastener head will sit. The adjustment of this depth will depend on several factors including whether or not you will be using plugs to seal the drill holes. **(Fig 10)** Then tighten it securely using the provided Allen wrench.

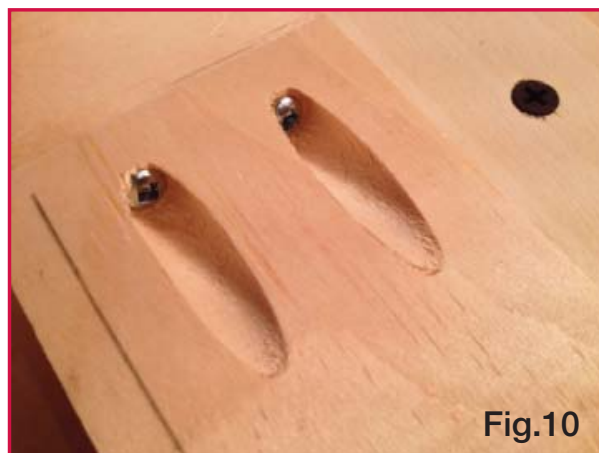


Fig.10

### STEP 5 – POSITIONING THE JIG(S) AND THE CARRIAGE STOPS

Set-up differs when you are using a single jig or both jigs as you can keep one jig in a fixed position and move the other jig along the T-Track Rails between the two carriage stops. Or, if using a single jig, you can use this single jig between two carriage stops if you are building a simple rectangular face frame.

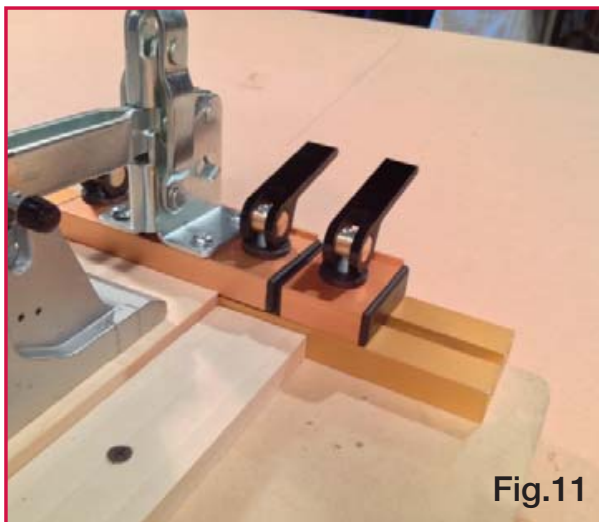


Fig.11

When using a single jig, position the jig on the left rail position and slide the Carriage Stop onto the left end of the extrusion bar so that it is tight against the jig then lock it in place. **(Fig 11)** This will enable you to unlock and move the jig to other points along the T-Track Rail such as when adding rail pieces at different intervals, and then returning the jig to its original position without having to repeat the alignment steps. So, with a single jig, move the jig to the second position and align it for drilling. Now slide the second carriage stop onto the right end of the T-Track Rail and fasten it up against the jig. **(Fig's 12 & 13)**

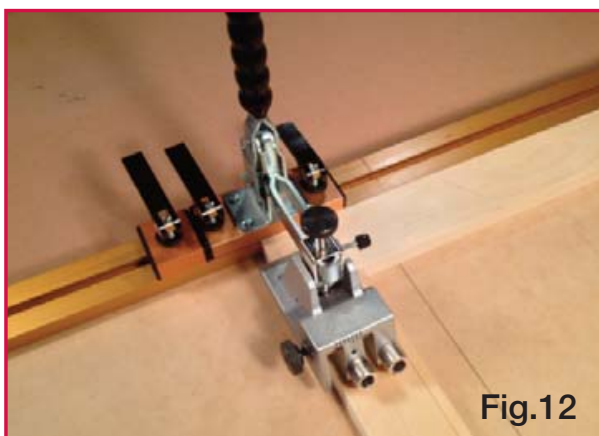
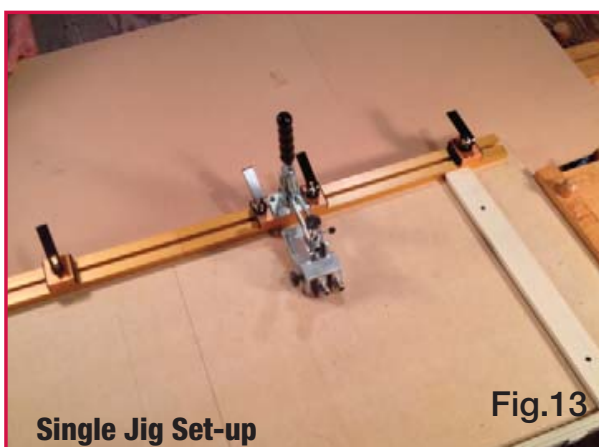


Fig.12



Single Jig Set-up

Fig.13

## STEP 6 – ADJUSTING THE POKETHOLE GUIDES

Align the jig above your workpieces and use the knurled knob on the forward right side to adjust the pocket hole guides so that both guides are roughly centered on the face frame rail. The jig has the capacity to create pocket holes spaced from 3/4 in. to 1-1/2 in. apart. You can use the scribed lines on the jig, which are spaced at 1/8 in. intervals, to quickly register the position of the right-hand (adjustable) pocket hole guide. **(Fig 14)**

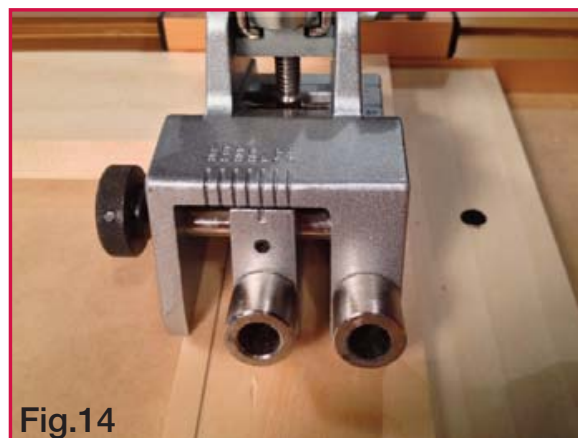


Fig.14

**NOTE:** If the face frame sections will be slotted to receive an insert panel, mark the depth of this groove on the face of the rail and center the guides on the remaining wood width. **(Fig 15)** This will ensure that the pocket holes maintain an adequate distance from the groove and the rail's outer edge. Secure the pocket hole guide using the provided allen wrench. **(Fig 16)**



Fig.15

With the pocket hole guides aligned, secure the jig in place on the extrusion bar using the two locking levers. With a two jig system (or a system with more than two jigs) you can secure all the jigs in their production positions without using the carriage stops or shuttling the jig on the T-Tracks from position to position. **(Fig 17)**

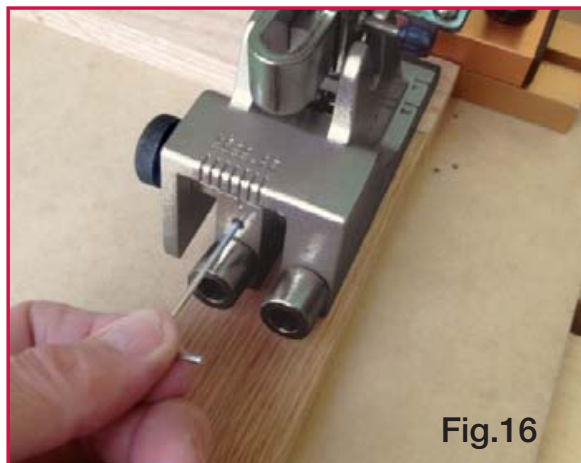


Fig.16

## STEP 7 – POSITION THE FACE FRAME SECTIONS

To create your first face frame corner (top horizontal rail to vertical stile), begin by sliding the jig to the left end of the T-Track and placing your first workpiece (face frame stile) flat on the table against the T-Track so that its top end butts against the auxiliary fence. Position your top rail at 90° to the stile flat against the fence. **(Fig 17)**

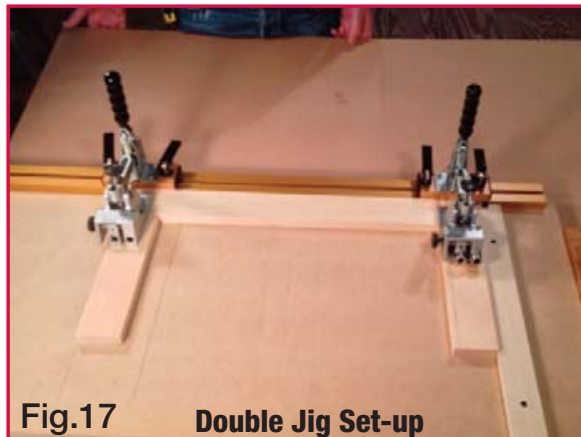


Fig.17

Double Jig Set-up



## STEP 8 – BORE THE POCKET HOLES

Insert the bit into one pocket hole and bring the drill up to full-rpm speed to bore the hole. Using multiple plunges run the bit fully into the hole until the stop collar touches the jig. Repeat this step to bore the second hole. **(Fig 18)**



Fig.18

## STEP 9 – INSERT THE SELF-TAPPING FASTENERS

After boring the holes and with the jig still locked in place complete the joint by inserting both fasteners in their pocket holes using the square-drive bit in your drill/driver. **(Fig 19)**

(Note: using two drivers, with the drill bit installed in one and the screw bit in the other, will help to speed these fabrication steps).



Fig.19

## STEP 10 - REPOSITIONING THE JIG

Loosen the two locking levers on the Jig and slide the jig to its second position. Align the second rail piece as described in step 6. **(Fig 20)**



Fig.20

## STEP 11 - FINISHING THE FACE FRAME

After securing the second rail, loosen the jig and rotate the face frame 180 degrees. With the jig still in place in the second position place the other stile against the T-Track. Position the assembled frame pieces against your fence as you did previously. Then tighten the clamp and bore your pocket holes in the bottom rail and fasten it with screws. Finally, loosen the jig and return it to the first position and complete the final joint. **(Fig 21)**

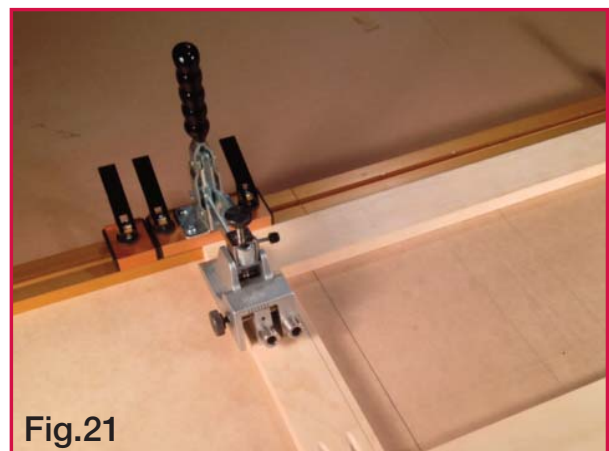
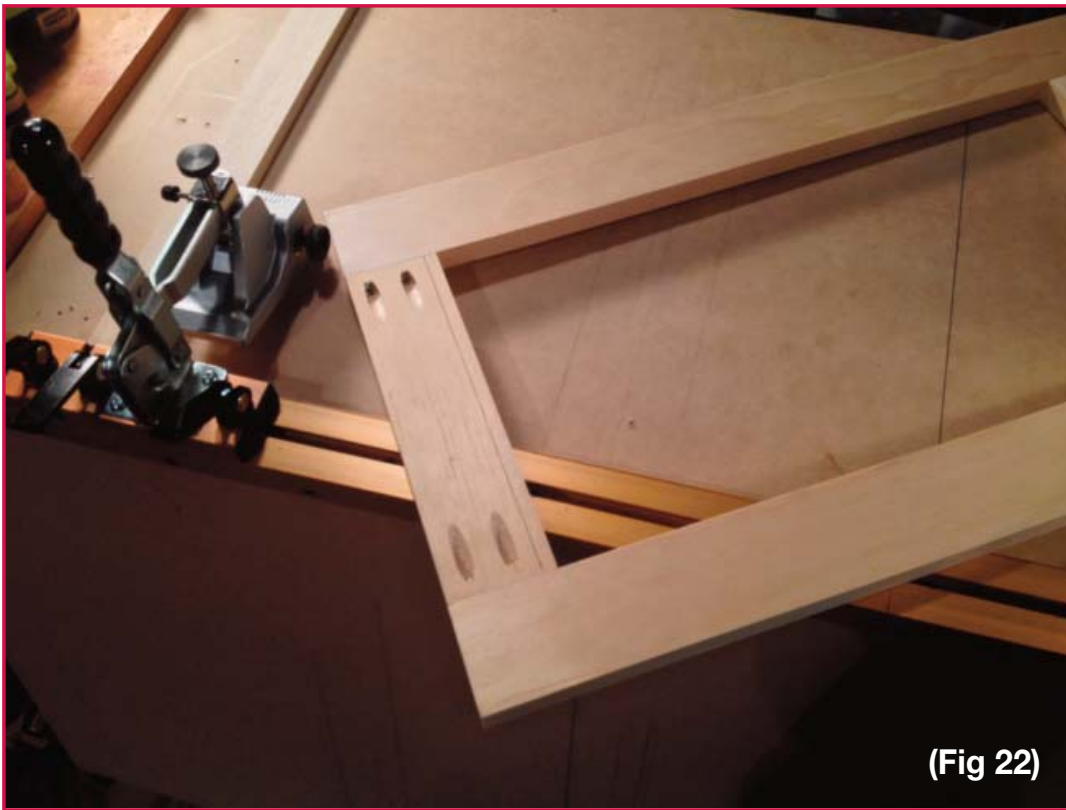


Fig.21

Your face frame is now complete. **(Fig 22) (last page)**



(Fig 22)



## Specialty Tools & Instruments

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