

Instruction Manual

Model F700-1

PICTURE FRAMING

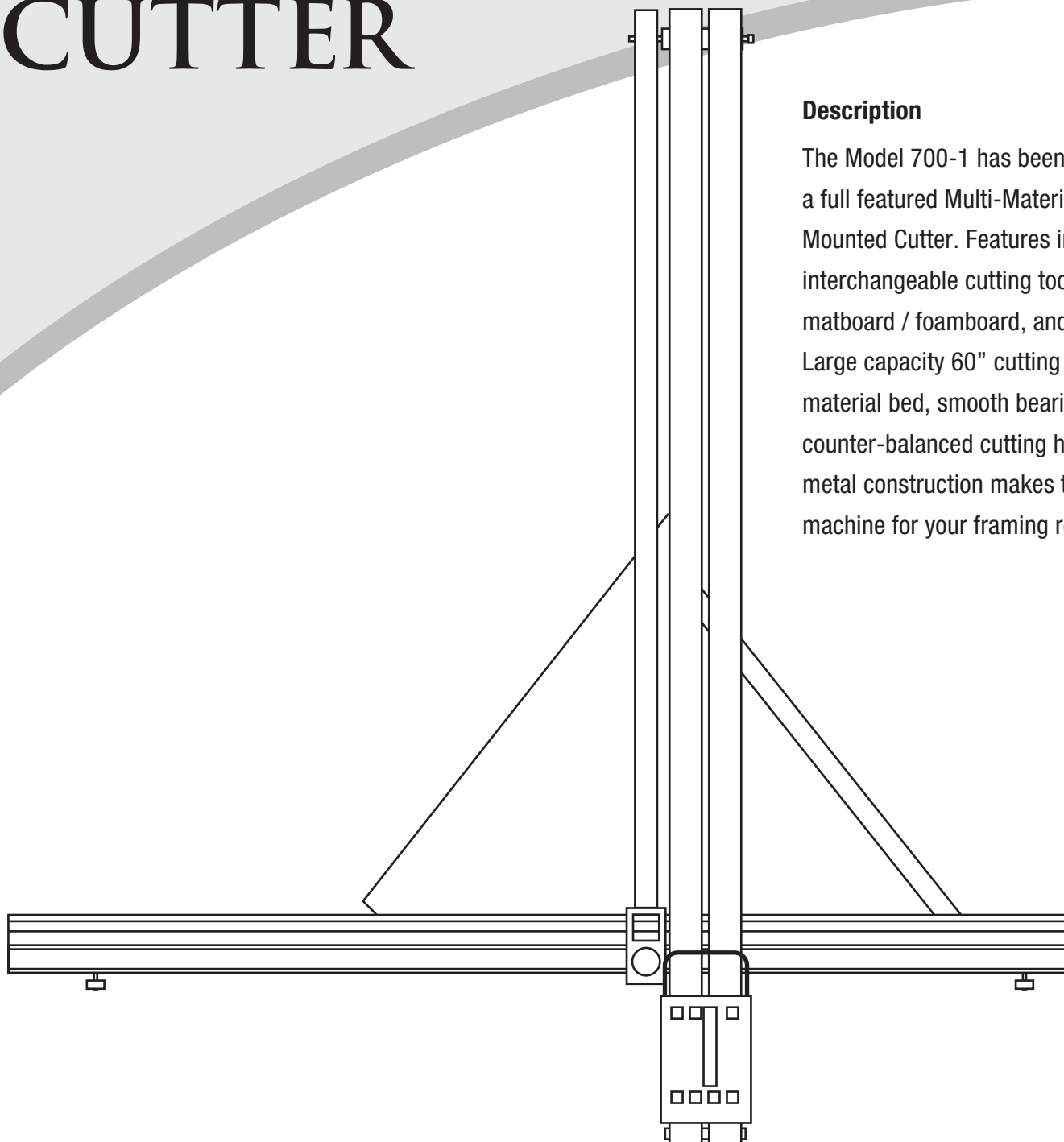
WALL MOUNT MULTI-MATERIAL CUTTER



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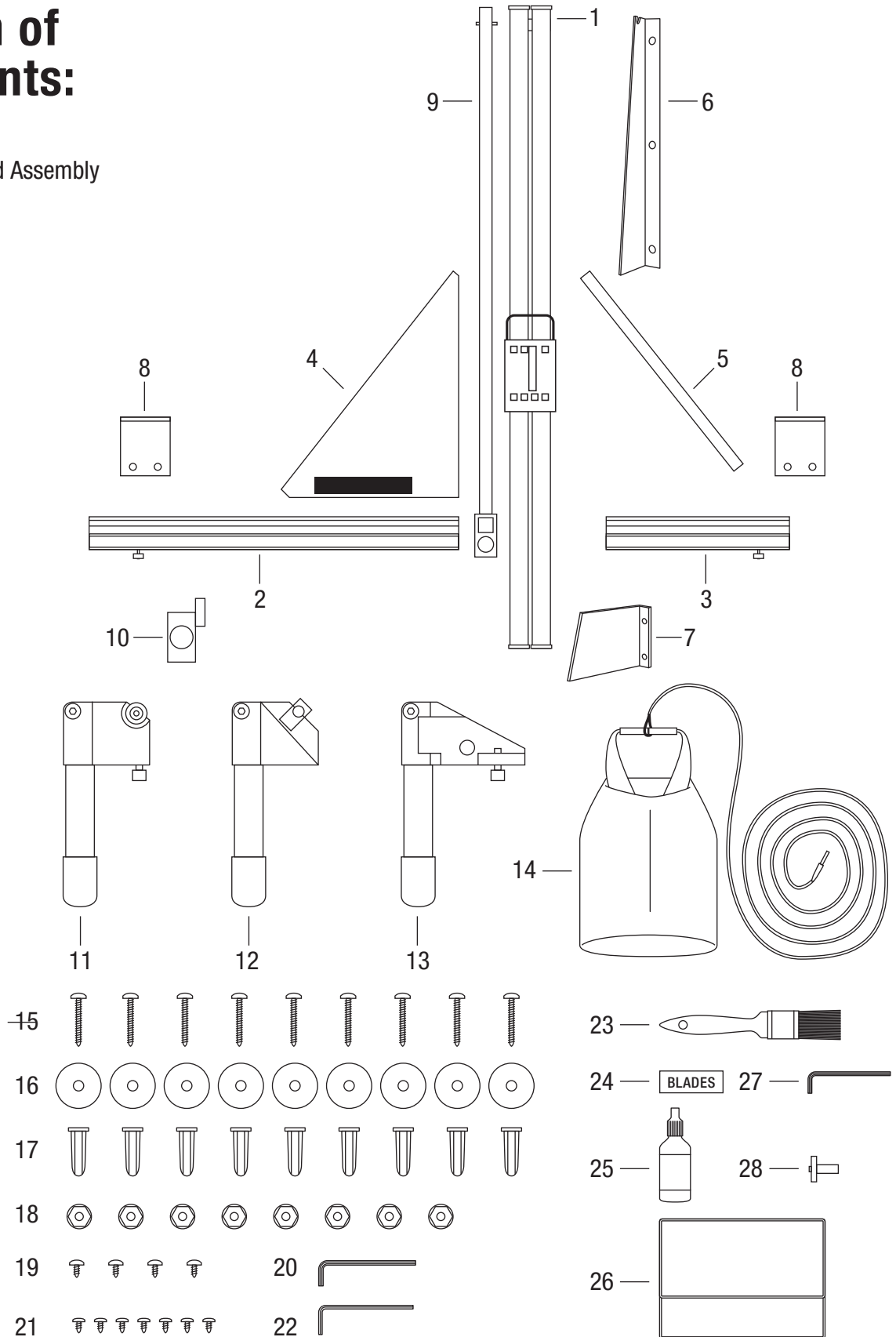
Description

The Model 700-1 has been designed as a full featured Multi-Material Wall Mounted Cutter. Features include interchangeable cutting tools for glass, matboard / foamboard, and plastic. Large capacity 60" cutting length, 48" material bed, smooth bearing guided and counter-balanced cutting head, solid all metal construction makes this an ideal machine for your framing requirements.

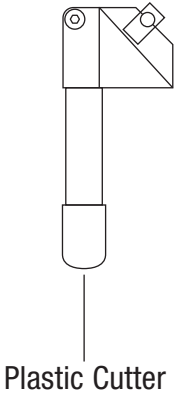
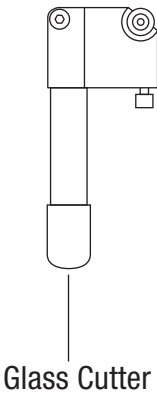
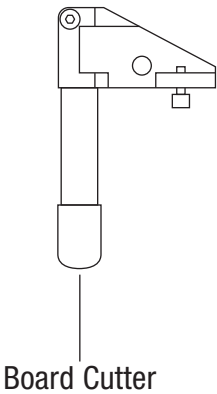
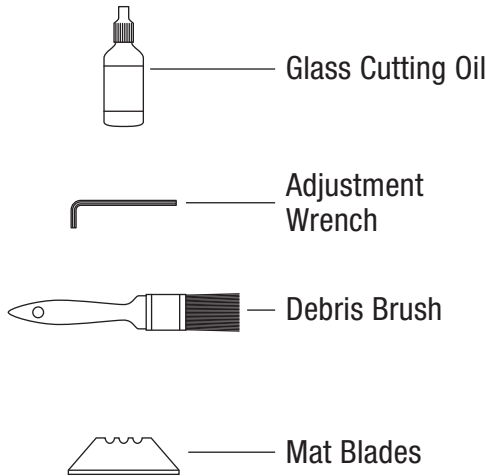
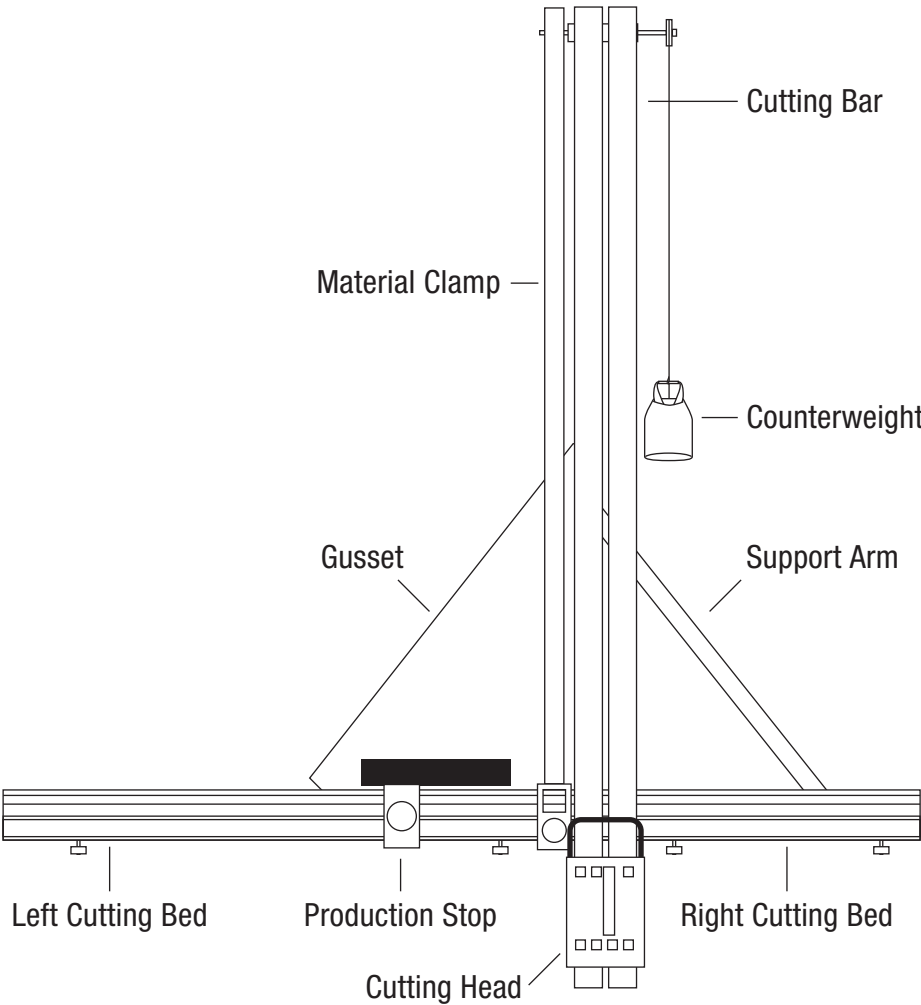


Identification of Carton Contents:

1. Cutting Bar / Cutting Head Assembly
2. Left Cutting Bed
3. Right Cutting Bed
4. Steel Gusset
5. Support Arm
6. Top Mounting Bracket
7. Bottom Mounting Bracket
8. Side Mounting Bracket
9. Material Clamp Assembly
10. Production Stop
11. Glass Cutting Tool
12. Plastic Cutting Tool
13. Mat Board Cutting Tool
14. Counter-Weight & Cable
15. Wall Screws (9)
16. Wall Washers (9)
17. Wall Mollies (9)
18. Mounting Nuts (8)
19. Support Arm Screws (4)
20. Support Arm Wrench
21. Gusset Screws (7)
22. Gusset Wrench
23. Debris Brush
24. Mat Blade 5-Pack
25. Glass Cutting Oil
26. Parts Tray
27. Adjustment Wrench
28. Pulley



Machine Components



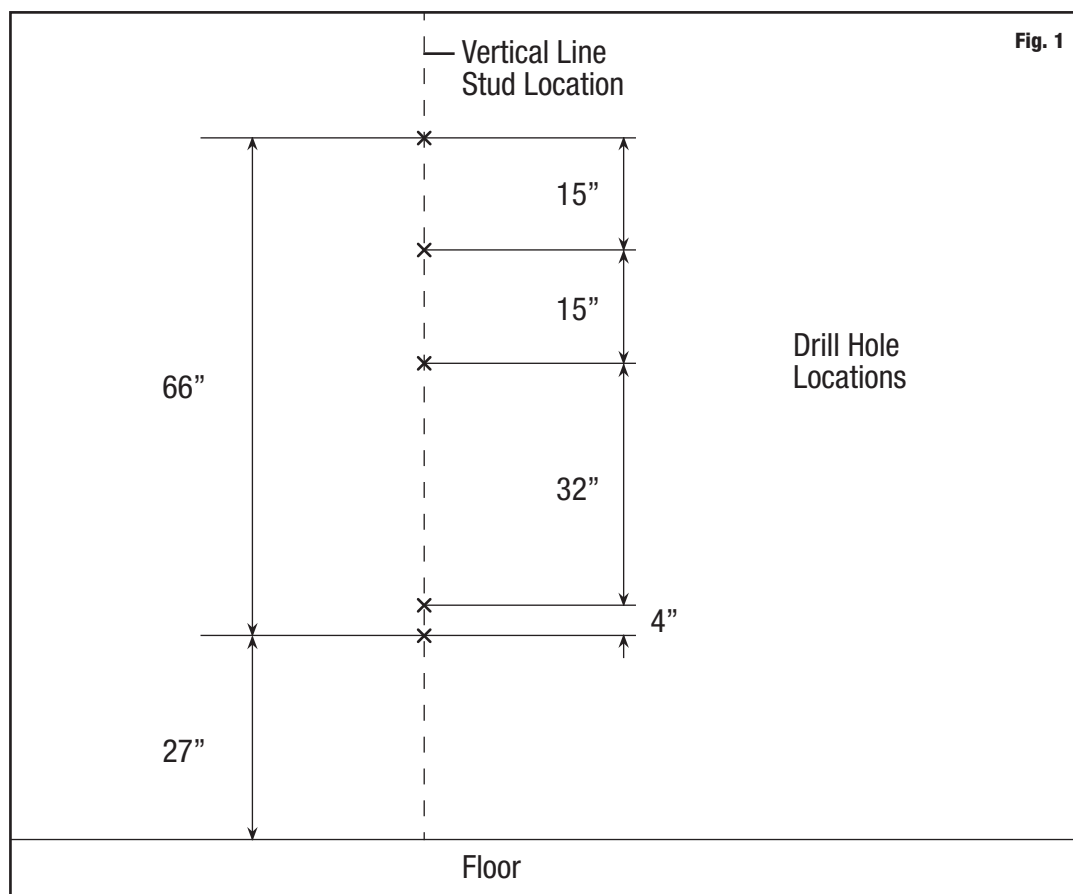
Installation

Tools needed for installation

- Step Ladder
- Level (24"-36")
- Drill
- 1/8" drill bit
- 1/4" drill bit
- 1/4" masonry bit (for masonry wall)
- Hammer
- Phillips head screwdriver
- Tape measure
- Stud finder
- Carpenters square 16" x 24"
- Pencil
- Adjustable wrench or 7/16" wrench

Mounting Top and Bottom Brackets

1. For drywall / wood wall, use a stud finder to locate vertical stud at preferred machine location.
2. Using a level, draw a vertical line at stud location and mark five drill hole locations on vertical line per chart (Fig. 1)



Mounting Top and Bottom Brackets

4. Drill holes using 1/8" drill bit for wood or 1/4" masonry bit for masonry wall (insert wall mollies using hammer).
5. Mount Top Bracket aligning top three holes on wall with holes in bracket and secure using washers and screw (Fig. 2).
6. Mount Bottom Bracket aligning bottom two holes on wall with holes in bracket and secure using washers and screws (Fig. 3).

Mount Cutter Bar

1. Carefully fit top pin in Cutting Bar (Fig. 4) into slot in Top Bracket (Fig. 5) and align bracket edges along bar assembly edge (Fig. 6).
2. Align Bottom Bracket edge along Cutting Bar side (Fig. 7).
3. Tighten five (5) Mount Screws (Fig. 8).

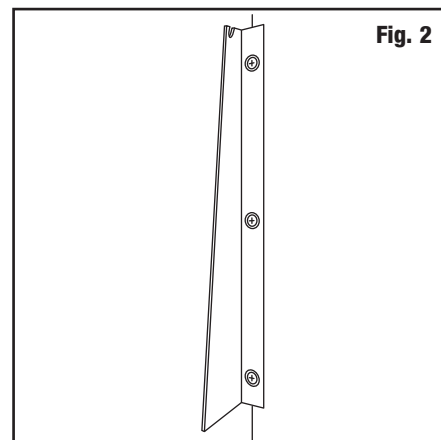


Fig. 2

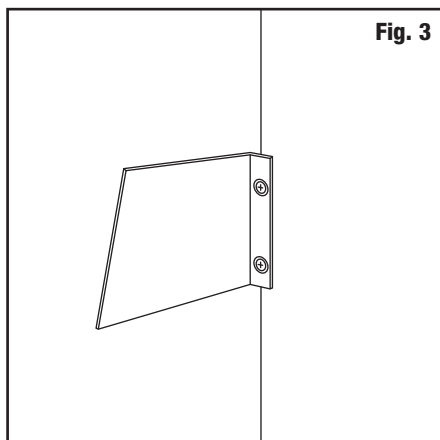


Fig. 3

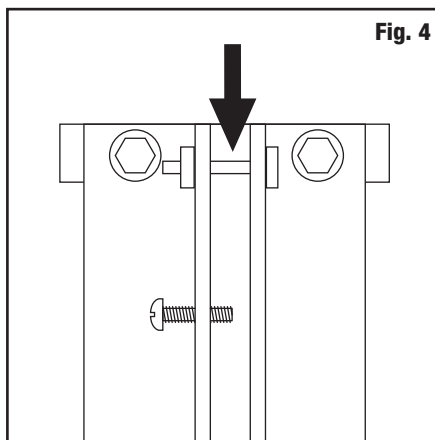


Fig. 4

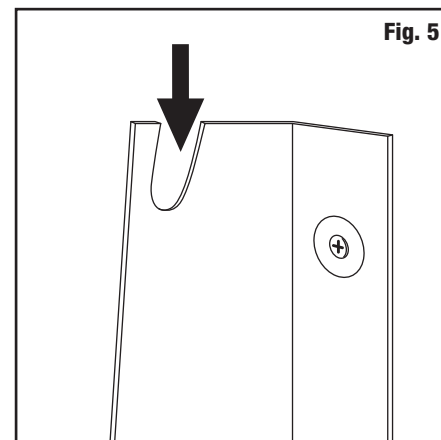


Fig. 5

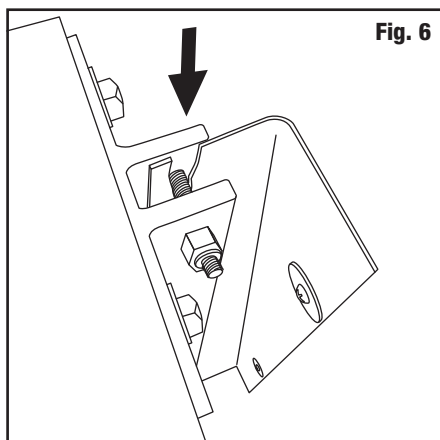


Fig. 6

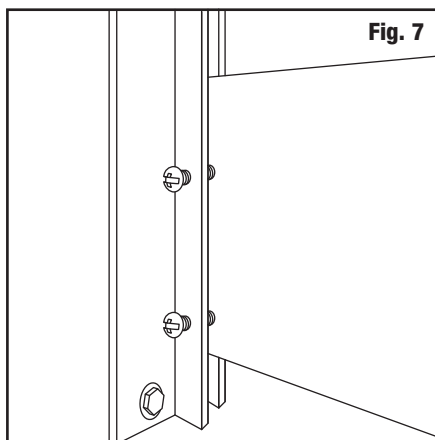


Fig. 7

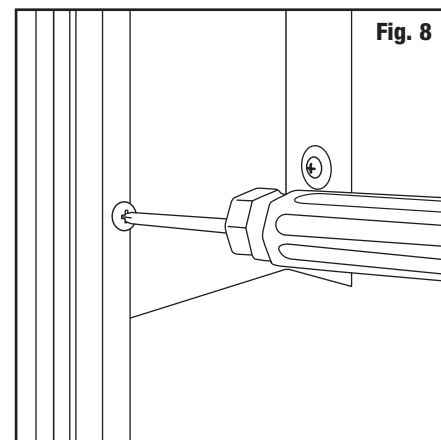
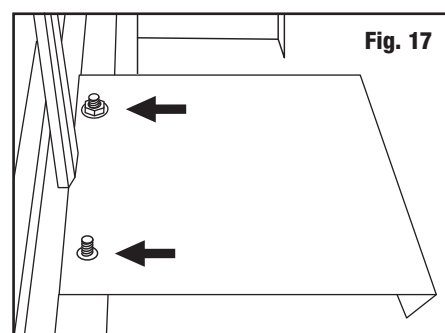
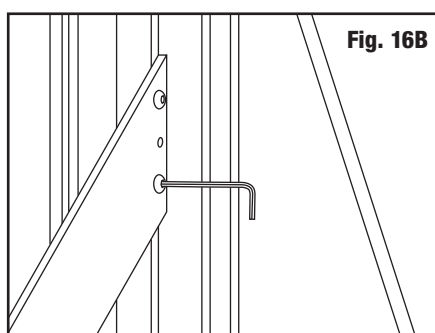
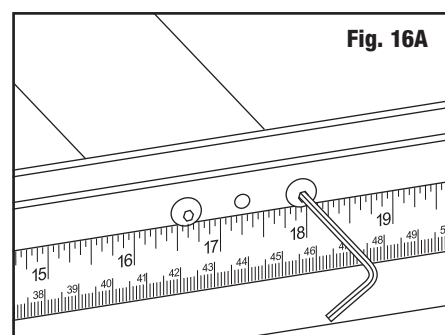
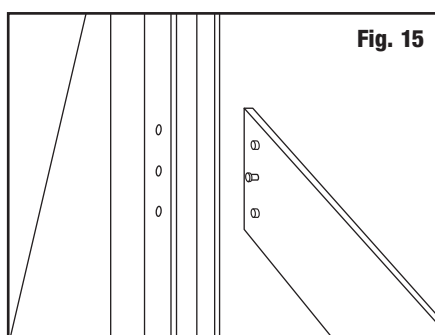
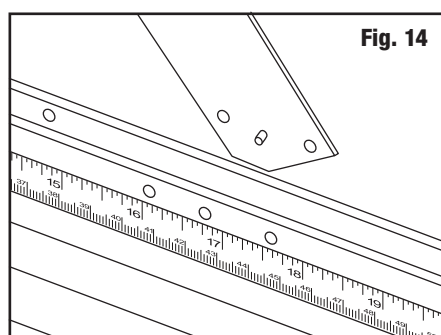
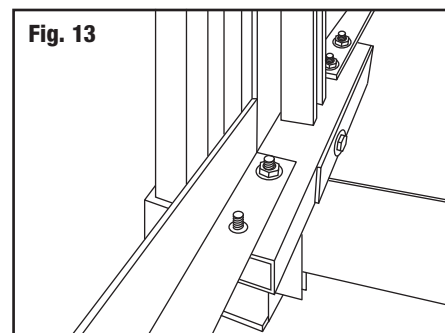
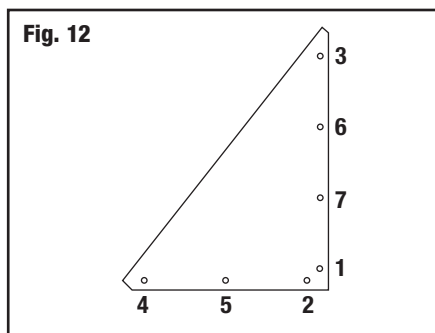
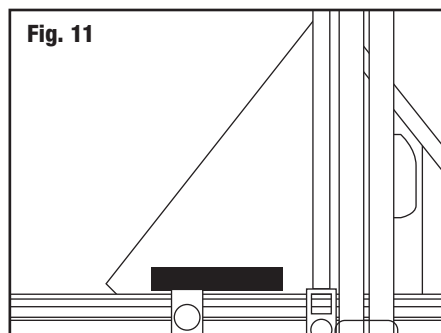
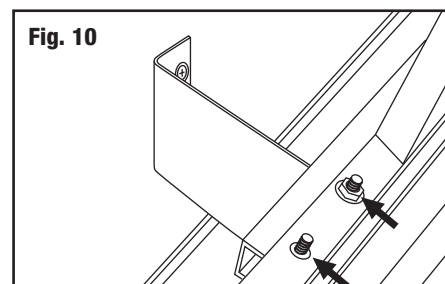
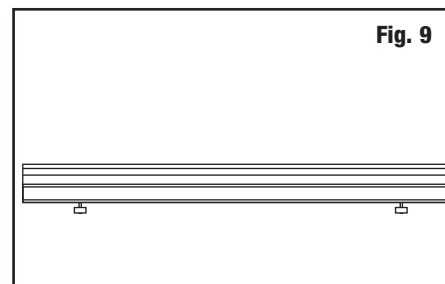


Fig. 8

Mounting Cutting Beds

1. Attach Left Cutting Bed (long 48") (Fig. 9) onto mount bar studs and secure with two (2) mount nuts (Fig. 10).
2. Align Gusset with left cutting bed and cutting bar assembly (Fig. 11).
3. Attach Gusset with seven (7) flat head screws.
**Note* Attach screws in the order shown (Fig. 12).*
4. Attach Right Cutting Bed (shorter 24") onto mount bar studs and secure with two (2) mount nuts (Fig. 13).
5. Attach Support Bar by aligning pins in support bar with holes in Right Cutting Bed and Cutting Bar (Fig. 14 & 15).
6. Secure Support Bar with four (4) screws (Figs. 16A & 16B).
7. Attach Side Brackets onto cutting bed studs with four (4) mount nuts (Fig. 17).
8. Align Side Brackets to wall, and mark holes with a pencil.



Mounting Cutting Beds

9. Drill marked hole centers.
10. Insert four (4) Wall Mollies into wall holes and hammer flush (Fig. 18).
11. Secure Side Brackets to wall with screws and washers.

Install Material Clamp

1. Holding clamp vertically, slide Material Clamp bracket lock nut into Left Cutting Bed (Fig. 19).
2. Slide Material Clamp until top mounting screw aligns with top mount block.
3. Attach top mounting screw (Fig. 20).
4. Adjust clamp to be parallel with guide bars (Fig. 21).
5. Extremely tighten clamp bracket knob.

Attach Counter-Balance Weight Bag

1. Attach Pulley to top mount block (Fig. 22).
2. Hook Counter-Balance Weight Bag onto cable post located on right side of cutting head (Fig. 23).

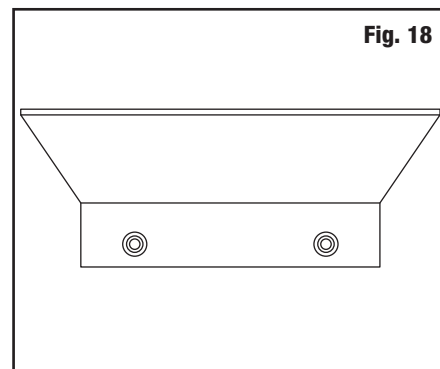


Fig. 18

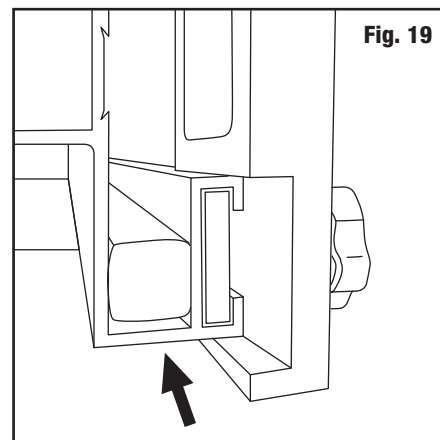


Fig. 19

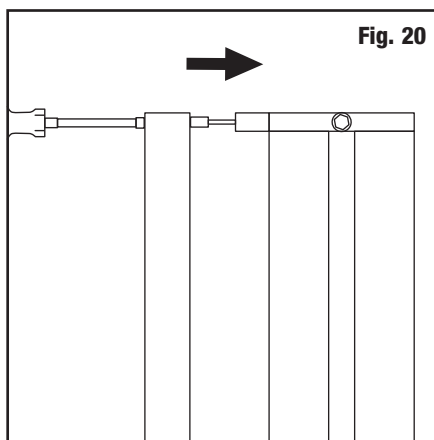


Fig. 20

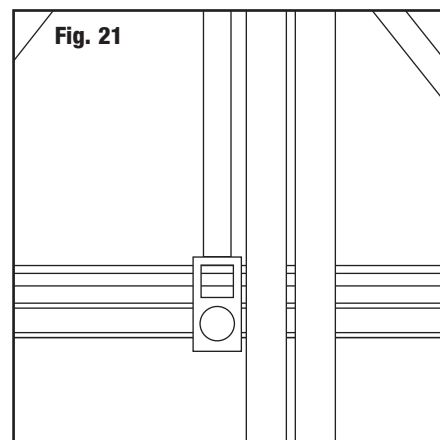


Fig. 21

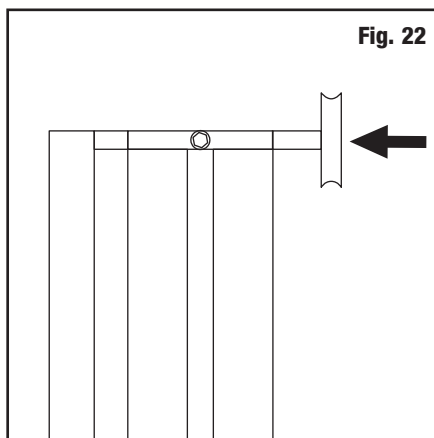


Fig. 22

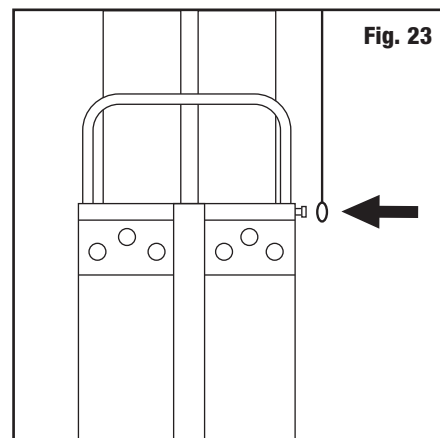


Fig. 23

Attach Counter-Balance Weight Bag

3. Holding the Bag in your right hand and keeping tension on the cable with your left hand, step up on ladder and loop cable over Pulley with left hand (Fig. 24).
4. Slowly lower Bag until cable is taut (Fig. 25).

Install Production Stop

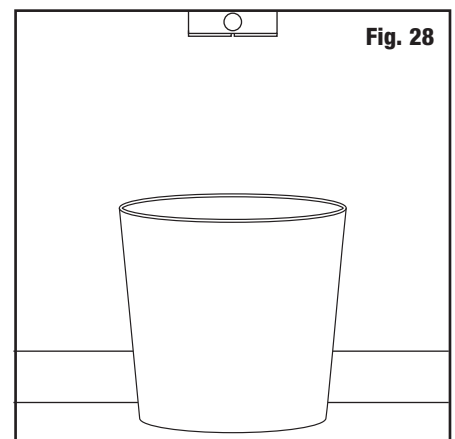
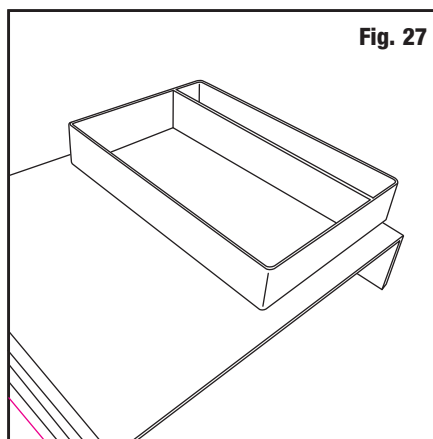
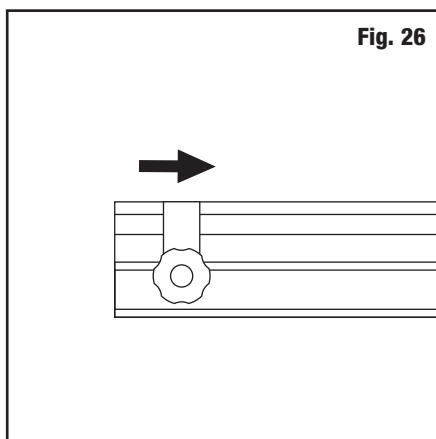
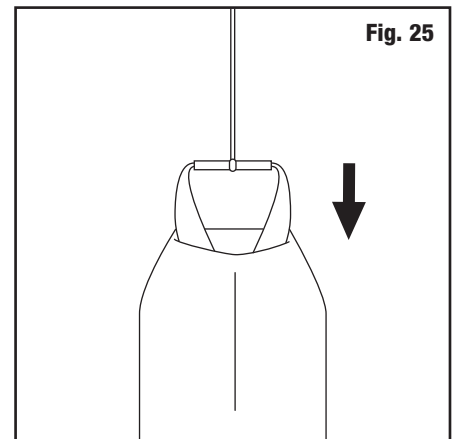
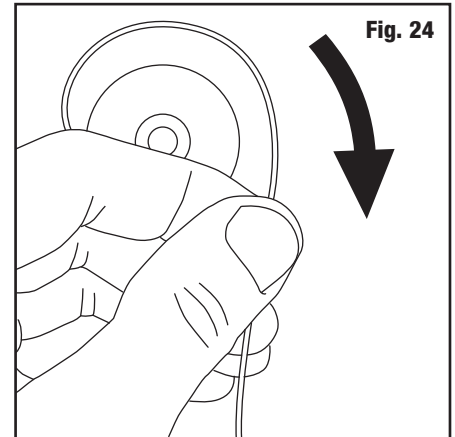
1. Slide Production Stop lockplate into right or left Cutting Bed and slide to desired location (Fig. 26).
2. Tighten stop knob to secure.

Install Parts Tray

1. Remove adhesive backing from bottom of Parts Tray.
2. Stick onto right side bracket (Fig. 27).

Use Trash Can

It is recommended that you place a small trash can under bottom of cutting bar to catch debris (Fig. 28).



Cutting Tool Details

The machine includes three separate interchangeable cutting tools:

- Glass Cutting Tool
- Board Cutting Tool
- Plastic Cutting Tool

Glass Cutting Tool (Red Tip)

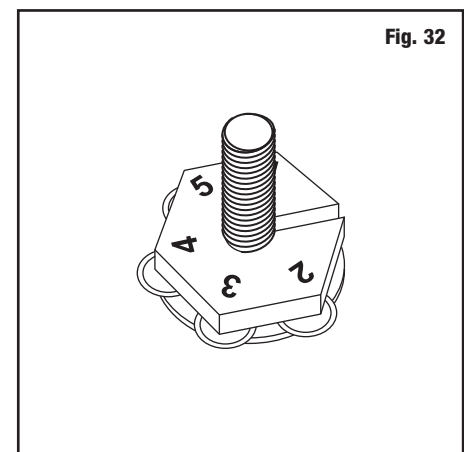
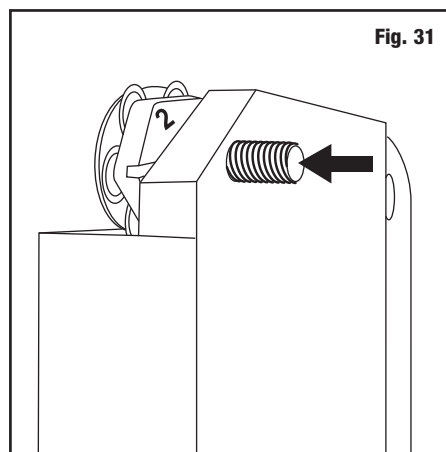
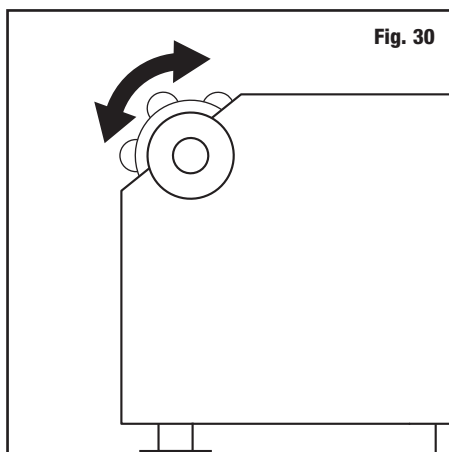
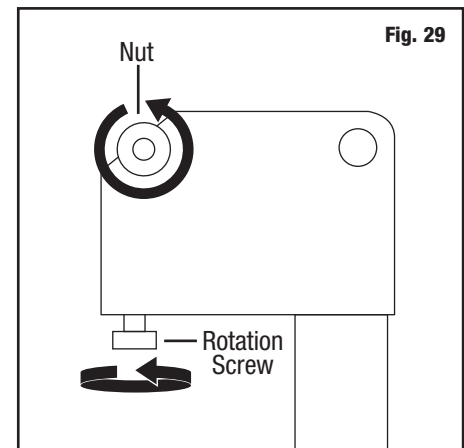
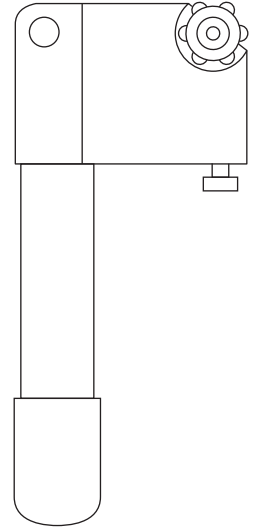
- Cuts glass up to 1/4" thick.
- Features a turret design which carries six (6) carbide wheels. Wheels are numbered 1-6 (Replacement part F57).
- Includes cutting oil for best results.
- Glass wheels "score" glass which is then cracked to separate pieces.

Glass Cutting Tool Wheel Change

1. Loosen turret nut and turret rotation screw (Fig. 29).
2. Rotate turret until next number appears (Fig. 30).
3. Re-tighten both nut and screw.

Glass Cutting Tool Turret Change

1. Loosen turret rotation screw one full turn.
2. Remove turret nut.
3. Push turret screw to remove turret (Fig. 31).
4. Replace new turret (Fig. 32).
5. Rotate turret to setting "1" or "I".
6. Tighten turret rotation screw.
7. Replace and tighten turret nut.



Board Cutting Tool (Yellow Tip)

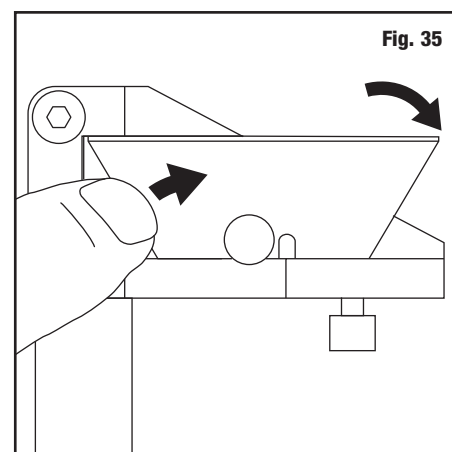
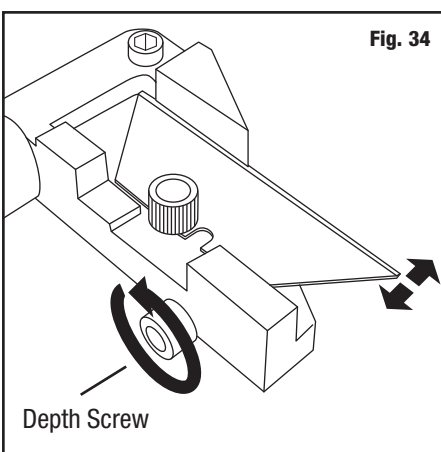
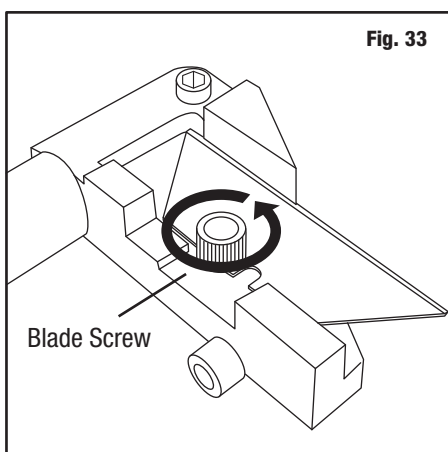
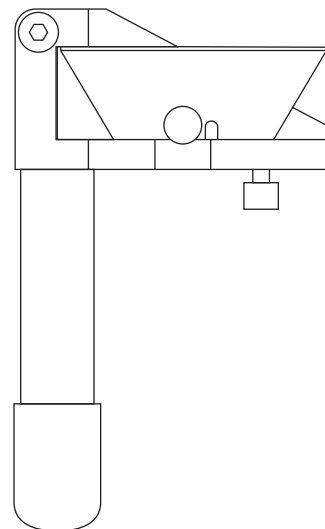
- Cuts up to 1/2" foam board, mat board, gator board, and cardboard.
- Uses standard utility blade (Replacement Number F58).
- Uses both ends of blade.
- Features blade depth adjustment screw.

Board Cutting Tool Blade Change

1. Remove blade screw (Fig. 33).
2. Rotate or replace blade.
3. Replace blade screw but do not tighten.
4. Push back of blade to reposition blade against depth screw.
5. Tighten blade screw.

Board Cutting Depth Adjustment

1. To adjust, loosen blade screw (Fig. 34).
2. Push back of blade to reposition it against depth screw (Fig. 35).
3. Tighten blade screw.

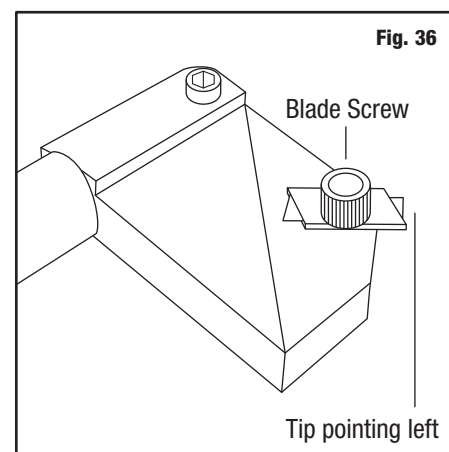
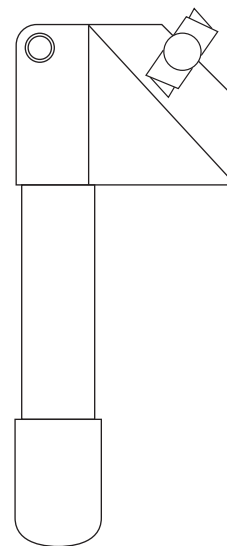


Plastic Cutting Tool (Blue Tip)

- Cuts acrylic, polycarbonate, and plexiglas up to 1/4" thick.
- Tool "scores" or "gouges" a channel into the plastic.
- Uses carbide double tip blade (Replacement No. F59).

Plastic Cutting Tool Blade Change

1. Remove Blade Screw (Fig. 36).
2. Remove blade.
3. Either rotate or replace blade.
4. Insert blade in slot with tip pointing to the left.
5. Replace Blade Screw and tighten.



Operation

Cutting Head Operation

The cutting head slides vertically with cutting capacity of 60". A counter-balance weight is attached which allows head to be positioned anywhere on guides without moving. The handle of the cutting head is spring loaded and pivots down for cutting. The cutting head also allows three cutting tools to interlock into the tool holder on the handle.

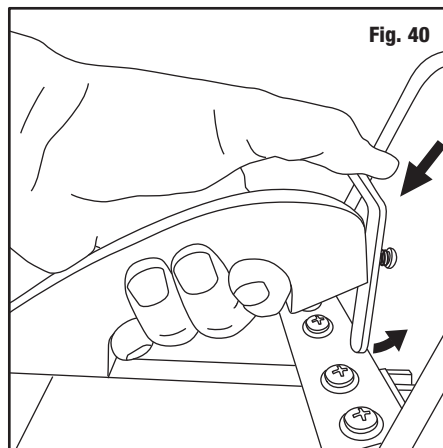
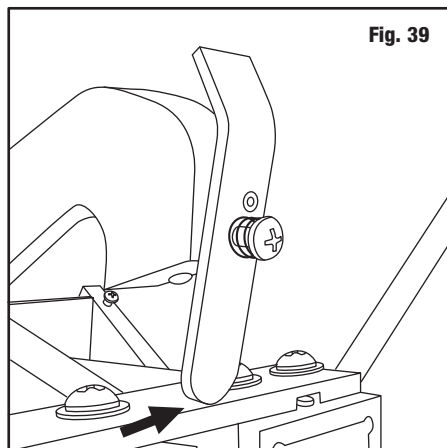
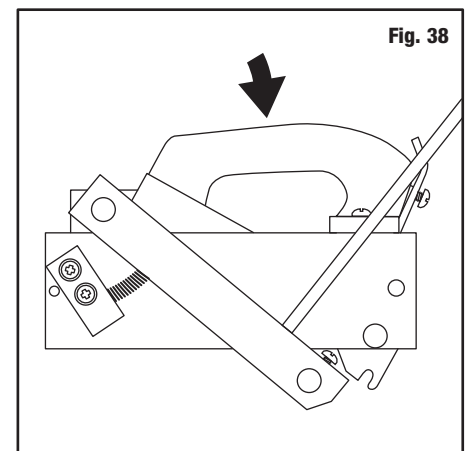
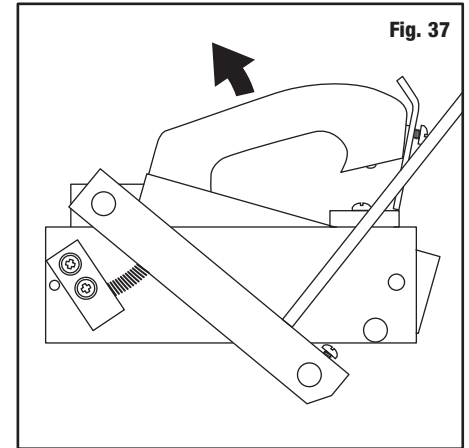
Using Handle

1. The handle has two settings: retracted (raised) (Fig. 37) or engaged (lowered) (Fig. 38).
2. To retract handle, pull handle up until it stops. Trigger will lock handle (Fig. 39).
3. To engage handle, press trigger with thumb but ***be careful*** as handle is spring loaded and will pull down (Fig. 40).

Using Cutting Head

To move cutting head, simply grip handle and pull up or down as needed.

**Note - As a precaution, always make sure handle is retracted when adjusting head as engaged cutting tools can interfere with material.*



Changing Cutting Tools

1. Raise Cutting Head Handle to retracted position.
2. Slide back of cutting tool into pivot bar slot until pin drops over end and into slot (Fig. 41).
3. Pull back and push down on cutting tool handle into seat (Fig. 42).
4. Tool will lock in place.

Using Material Clamp

Use clamp for all materials **EXCEPT GLASS. DO NOT USE ON GLASS.**

1. Lift Clamp Handle up (Fig. 43).
2. Move handle forward and down onto material.
3. When clamp is set, there is a rubber pad which holds material secure.
4. To release, pull up and back.

Using Production Stop

When making several cuts of the same dimension, the production stop can be used. The stop can be used on left or right cutting beds.

1. Lower stop arm to horizontal.
2. Loosen stop knob.
3. Slide stop to desired dimension.
4. Tighten stop knob to lock.

Using Vertical Scale

The vertical cutting bar scale is a reference scale used to help determine material size (Fig. 44).

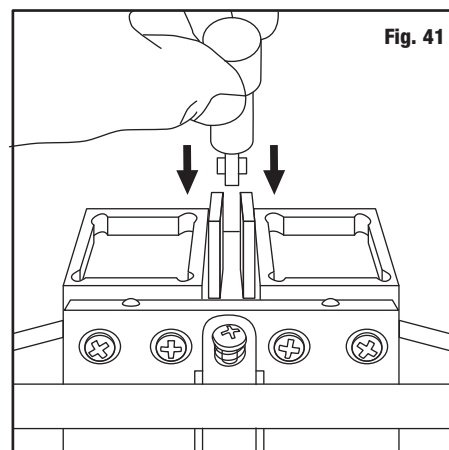


Fig. 41

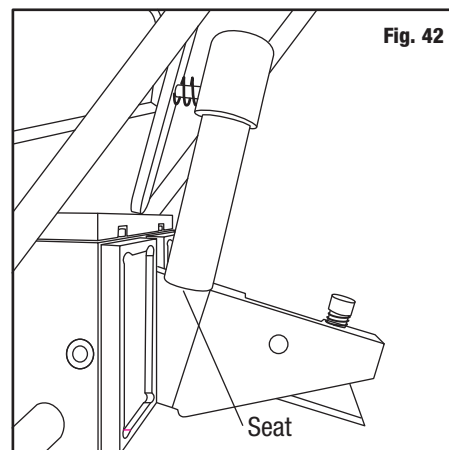


Fig. 42

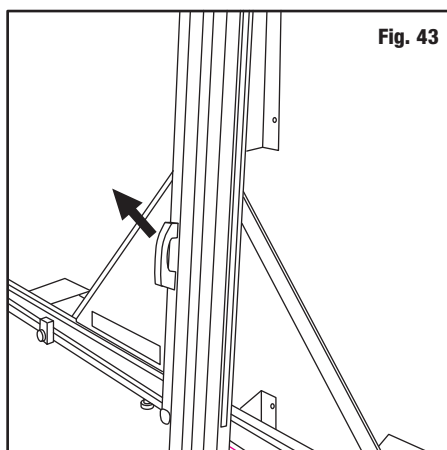


Fig. 43

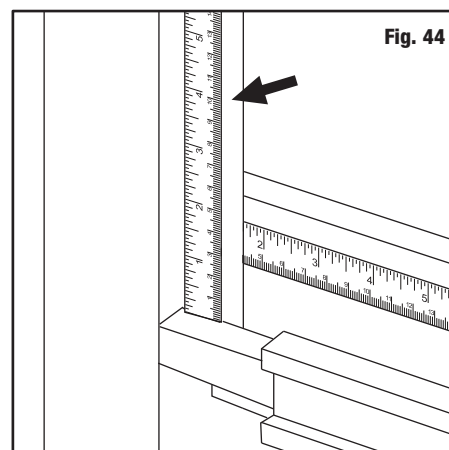


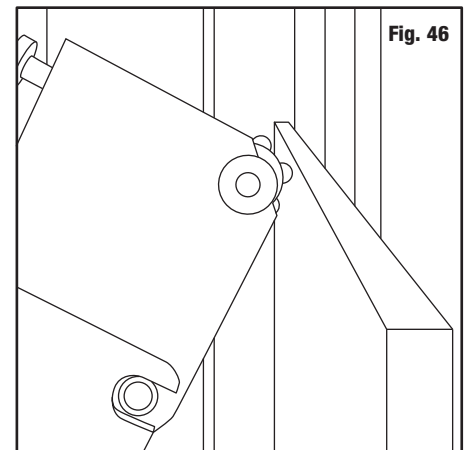
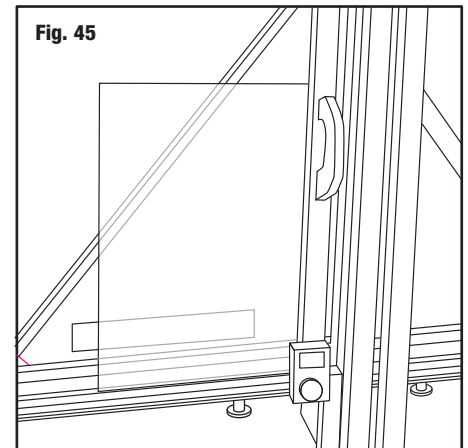
Fig. 44

Cutting Glass



- Always wear eye protection, gloves, and protective clothing when handling glass.
- DO NOT USE MATERIAL CLAMP ON GLASS.
- Always load glass from left side support.
- Only score glass on downstroke.

1. Put a drop of oil on wheel.
2. Raise handle into retracted position and install glass cutting tool (yellow tip).
3. Raise cutting handle above glass.
4. Place glass on left cutting bed (Fig. 45).
5. Slide glass under cutting bars to desired cutting dimension.
6. Lower cutting head handle by pressing trigger. Be careful as handle is spring loaded and will pull down.
7. Lower cutting head until glass wheel touches top edge of glass (Fig. 46).
8. With left hand holding glass against gusset, move cutting handle to top edge of glass.



Cutting Glass

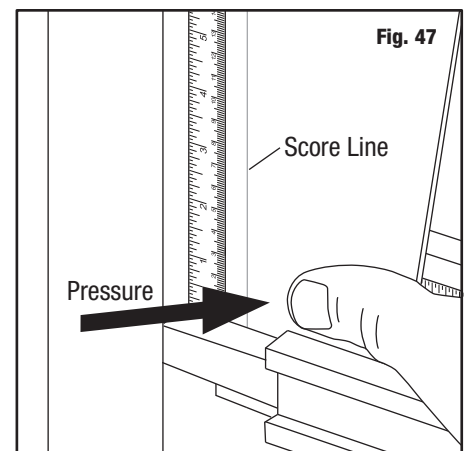
9. With right hand, gently and smoothly pull cutting head handle down (NOT FORWARD).

***Caution** - Do not put forward pressure on cutter as the spring supplies needed pressure.

10. Pull back cutting head handle to retracted position.
11. Only score glass one time.

To Separate Glass

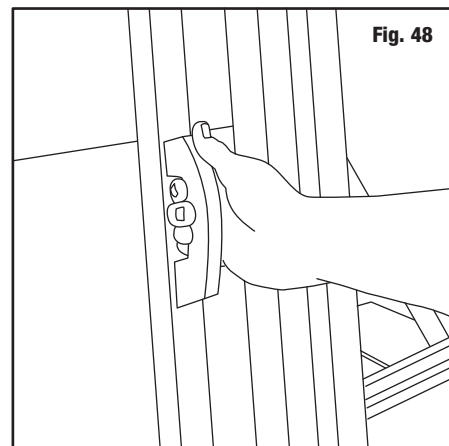
1. Do not move glass after scoring.
 2. Keep left hand on glass holding it in position.
 3. With right thumb, apply increasing pressure on the bottom right edge of glass near score line until the glass separates (Fig. 47).
- * Do not apply pressure at the center of the glass ***
4. Clean cutting beds using cleaning brush.



Cutting Board Material



- Use caution razor blades are sharp.
 - Cut mat board, foam board, gator board, and cardboard
 - Use material clamp.
 - Use slip sheet or scrap mat board under material you are cutting for an extra sharp clean cut.
1. Raise cutting head handle to retracted position and install board cutting tool.
 2. Position cutting head toward top of machine.
 3. Place board on left cutting bed.
 4. Slide material under cutting bars and set to desired cut dimension.
 5. Clamp board using material clamp (Fig. 48).
 6. Lower cutting head carefully.
 7. Lower cutting head until blade just touches board.
 8. With two hands, pull cutting head through material keeping even downward pressure on handle.
 9. Cut with one smooth, continuous motion.
 10. Retract cutting head handle and raise cutting head above top of board.
 11. Check cut - recut if necessary.
 12. Release material clamp.

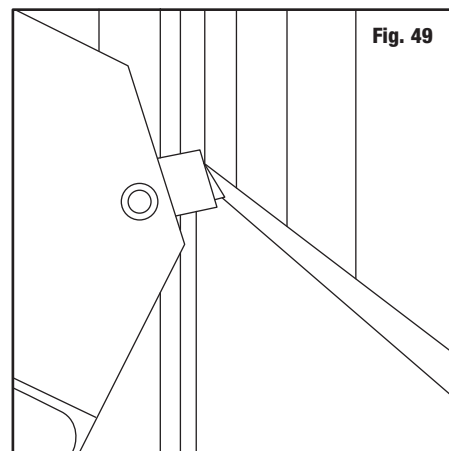


Cutting Plastic

- Cuts acrylic, polycarbonate, and plexiglas up to 3/16" thick.
- Plastic cutter "scores" material several times and fractures to separate.
- Use material clamp.
- It is not necessary to remove protective film from plastic prior to cutting.

To Cut

1. Raise cutting head handle to retracted position and install plastic cutting tool (blue tip).
2. Position cutting head toward top of machine.
3. Place sheet onto left cutting bed.
4. Slide material under cutting bars and set to desired cut dimension.
5. Clamp plastic using material clamp.
6. Lower cutting head carefully.
7. Lower cutting head until blade just touches plastic (Fig. 49).
8. Raise cutting head handle and position tip of blade as close as possible onto top of plastic. With two hands, pull handle down through material applying forward and downward pressure.
9. **Note: Scoring will produce a screechy sound and plastic debris.*
10. Retract cutting handle.
11. Repeat 2 times if material less than 1/8" and 3-4 times for material thicker than 1/8".



To Fracture or Separate the Plastic

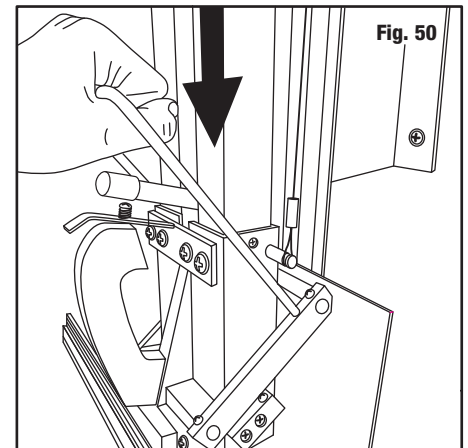
1. Retract cutting handle.
2. Raise cutting head above top of plastic.
3. Align crack roller at top of material by pressing the crack bar (Fig. 50).
4. Keeping even downward pressure, push on crack bar and pull down through length of plastic. You should hear cracking sound. If you do not hear cracking sound, repeat.

**Note - Sometimes you may not hear a cracking sound but material will be separated.*

5. Release clamp.
6. Remove plastic and bend plastic at cut line to separate.

**Note - If material is still not separated, rescore plastic by aligning blade tip into scoring channel and then clamping material. Rescore several times to ensure break.*

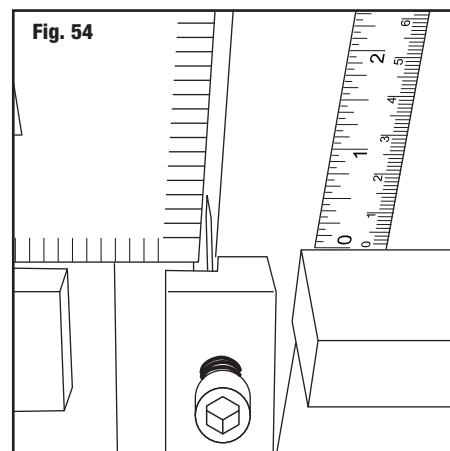
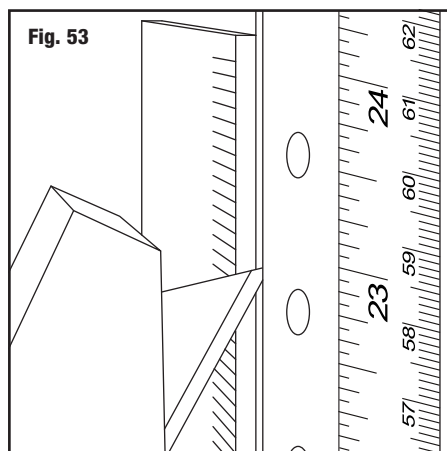
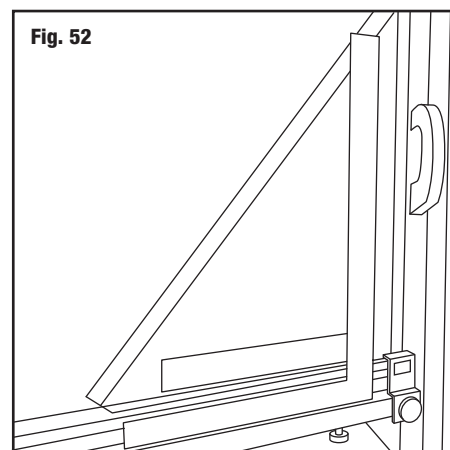
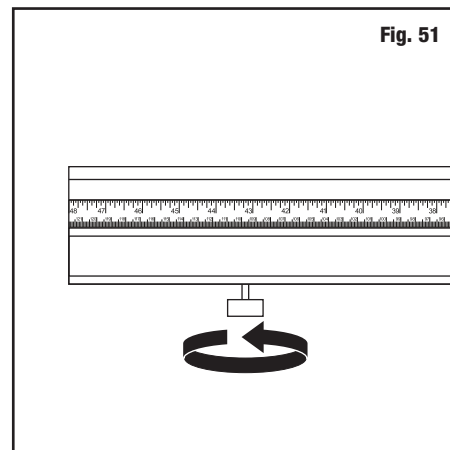
7. Clean cutting bed using cleaning brush.



Adjustments

Squaring Machine

1. Loosen outer cutting bed adjustment lock nut (Fig. 51).
2. Using carpenters square, lay short edge of square on cutting bed (Fig. 52).
3. Insert Board Cutting tool (yellow tip) into cutting head.
4. Engage Board Cutting tool so it is down position.
5. Position blade against top of carpenters square (Fig. 53).
6. Pull cutting head down to bottom of carpenters square and inspect (Fig. 54).
7. If there is a gap, loosen (turn left) adjustment knob and retest until no gap.
9. If there is no gap, slide cutting head up to top of carpenters square. If there is a gap, tighten (turn right) adjustment knob and retest until there is no gap.
10. Cutting bed is square when there is no gap at top or bottom of carpenters square.
11. Tighten lock nut to secure setting.
12. Test both left and right cutting beds.



Glass Cutter Depth Adjustment

1. When handle is retracted, glass wheel should touch top of glass in middle of wheel (Fig. 55).
2. To adjust, tighten (turn right) to reduce depth, loosen (turn left) to increase depth (Fig. 56).
3. Adjust 1/2 turn at a time and recheck.

Glass Cutter Pressure Adjustment

1. Retract handle.
2. Locate pressure adjustment screw (Fig. 57).
3. To adjust, tighten (turn right) screw to increase pressure or loosen (turn left) screw to decrease pressure.
4. Adjust 1/2 turn at a time and retest.

Adjusting Scales

All three scales can be adjusted if they are not accurate. They are not glued but held in place by screws (Fig. 58).

1. To adjust, use gusset wrench and loosen screw one full turn.
2. Adjust scale.
3. Retighten screw.

Adjusting Counter-Weight

If the cutting head is moving up or down when not in use then the counter-weight is out of balance.

1. If cutting head is moving down then more weight needs to be added. If cutting head moves up then weight will have to be removed.
2. Remove counter-weight bag by lowering cutting head to bottom of machine.
3. Using step ladder, lift bag to loosen tension and unhook cable from pulley and cable post on cutting head.
4. Open bag by unclipping and unrolling bag (Fig. 59).
5. Pour out sand to decrease weight or add sand or metal scrap like nails, screws or washers to increase weight.
6. Close bag, replace cable and retest.

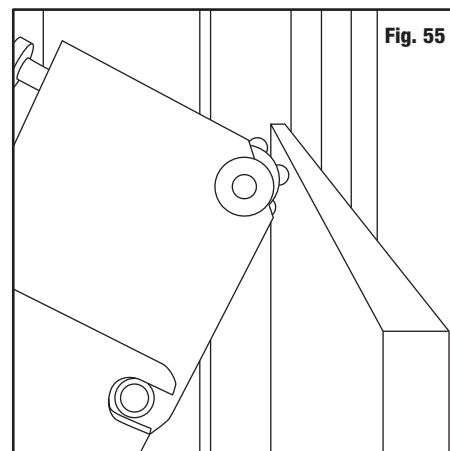


Fig. 55

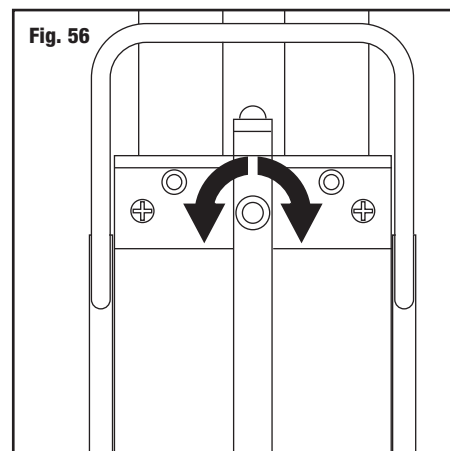


Fig. 56

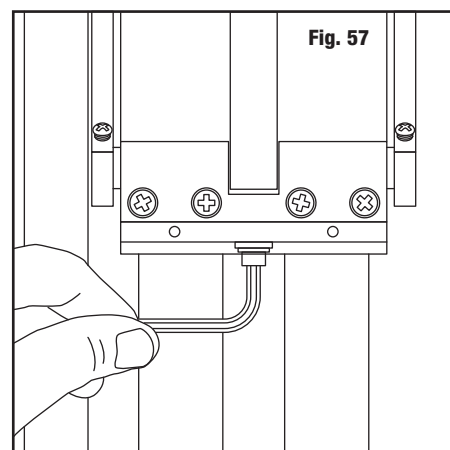


Fig. 57

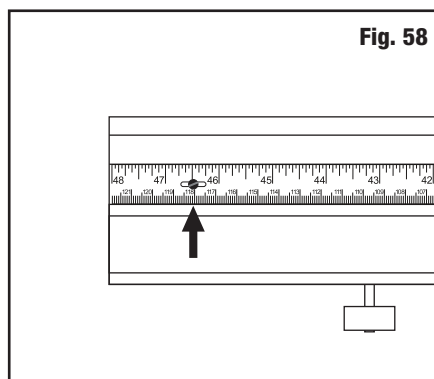


Fig. 58

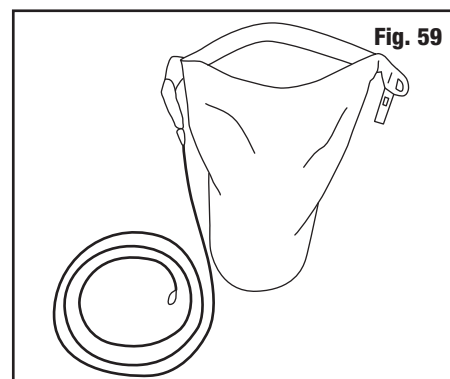


Fig. 59

Troubleshooting

Glass Cutting Problems

Problem: When cutting glass, the glass cutter jumps or skips.

Cause 1: Dirty Glass.

Solution: *Clean glass.*

Cause 2: Worn glass wheel.

Solution: *Rotate to new wheel.*

Cause 3: Too little pressure.

Solution: *Adjust by applying slight pressure with hand.*

Solution: *Oil the active wheel.*

Cause 4: Shards of glass impairing proper rotation of glass wheel.

Solution: *Oil the active wheel.*

Problem: When cutting glass, chipping or flaking occurs.

Cause: Too much pressure

Solution: *You may be applying too much pressure on the handle. Pull back on the handle during cut.*

Too much pressure will shorten wheel life. Never score twice.

Solution: *Oil the active wheel*

Plastic Cutting Problems

Problem: When cutting plastic, it skips and/or chatters.

Cause 1: Scoring too fast

Solution: *Slow down the stroke speed*

Cause 2: Scoring tool broken

Solution: *Rotate cutter if you have not done so previously*

Cause 3: Too much pressure

Solution: *Reduce pressure slightly on handle*

Cause 4: Not using media clamp

Solution: *Use media clamp*

Board Cutting Problems

Problem: When cutting mat board, the mat board buckles.

Cause 1: Mat board not clamped

Solution: *Use media clamp*

Cause 2: Blade too dull

Solution: *Change to new blade*

Problem: The cut edge of mat board is frayed.

Cause 1: Dull mat cutting blade

Solution: *Change to new blade*

Cause 2: No slip sheet under media being cut

Solution: *Use slip sheet*

Machine Problems

Problem: When I make cuts, the dimensions are incorrect.

Cause: The measuring scale is off

Solution: *Recalibrate the measuring scale*

Problem: The cut edge is not square - not a 90 degree cut.

Cause 1: Debris between the media and cutting bed.

Solution: *Remove debris*

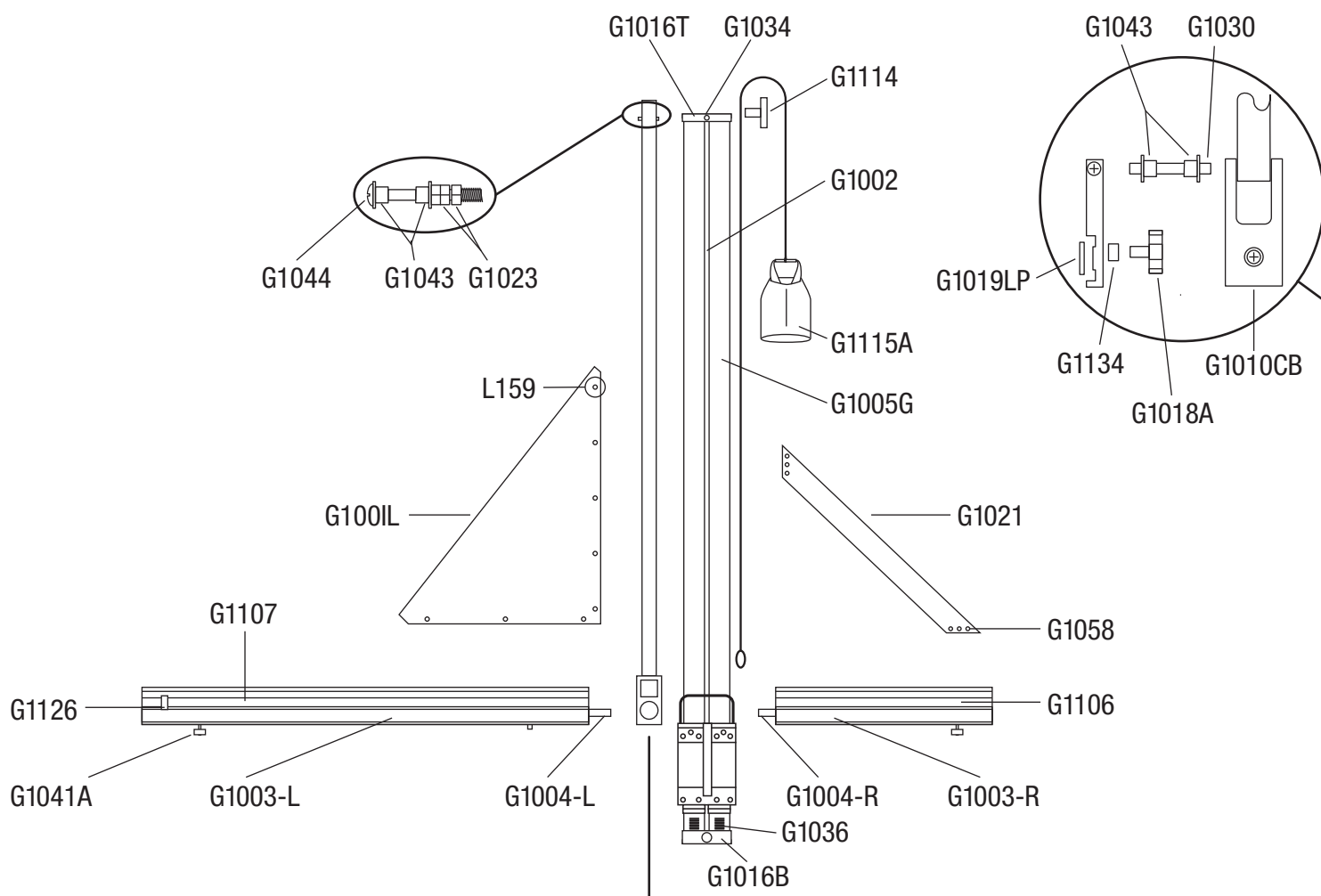
Cause 2: Cutting bed is not perpendicular to vertical extrusion.

Solution: *Square the cutting bed (highly unlikely)*

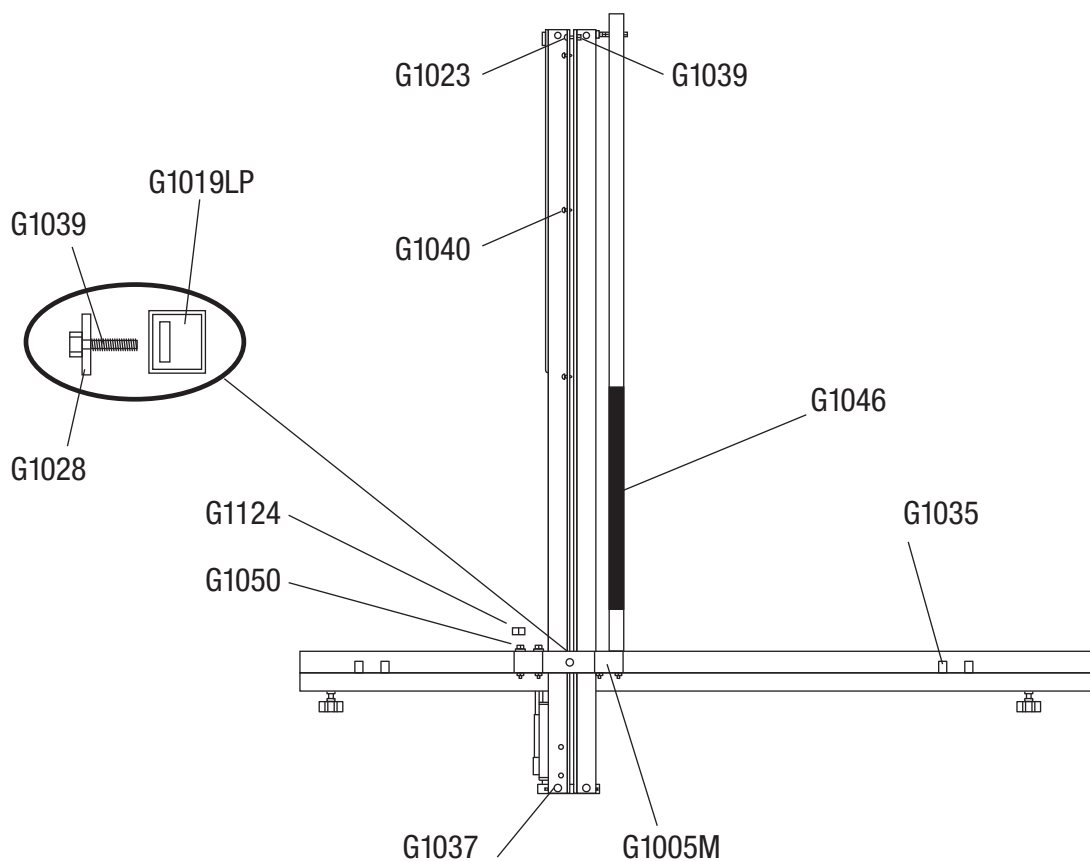
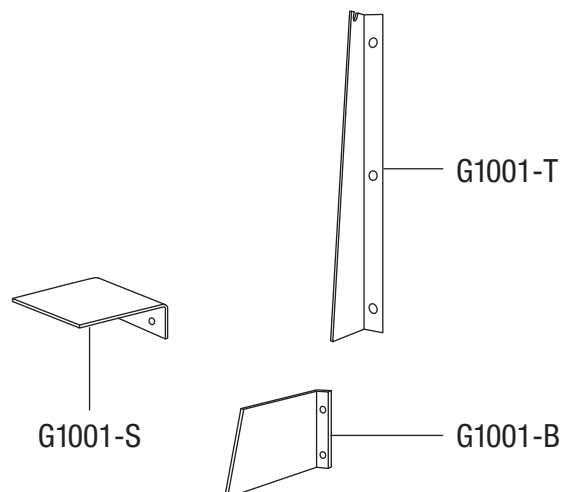
WARRANTY: Logan Graphic Products, Inc. ("Logan") warrants the F700-1 WALL MOUNTED MULTI-MATERIAL CUTTER to be free from defects in parts and workmanship for a period of two years from the date of original purchase. Logan warrants that it will either repair or replace, in its sole discretion, any necessary replacement parts found to be defective. Should the product need to be returned to Logan for repair or replacement parts, authorization for any return must come from Logan in writing. Costs of returning the product to Logan, including insurances, shall be borne by the purchaser. Logan shall not be liable for any damages or losses, incidental or consequential, direct or indirect, arising from the use of this product. This warranty extends only to the original purchaser and is not assignable or transferable. This warranty is in lieu of all other warranties, expressed or implied. Be advised that any Logan products purchased as "new" from an unauthorized dealer, such as an online auction site or similar, may be void of their warranty.

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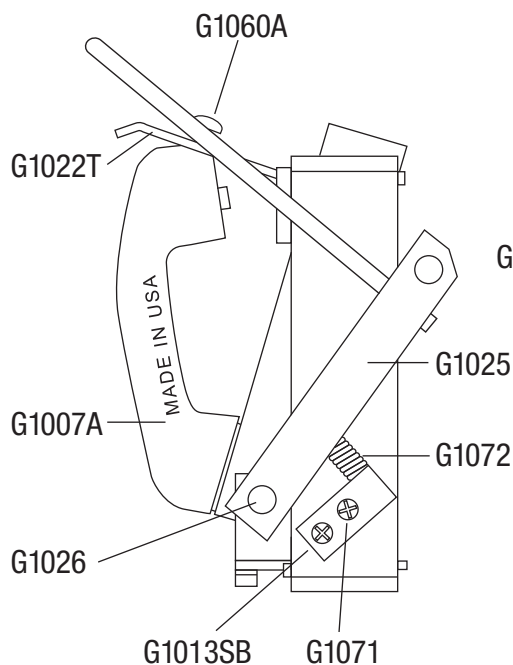
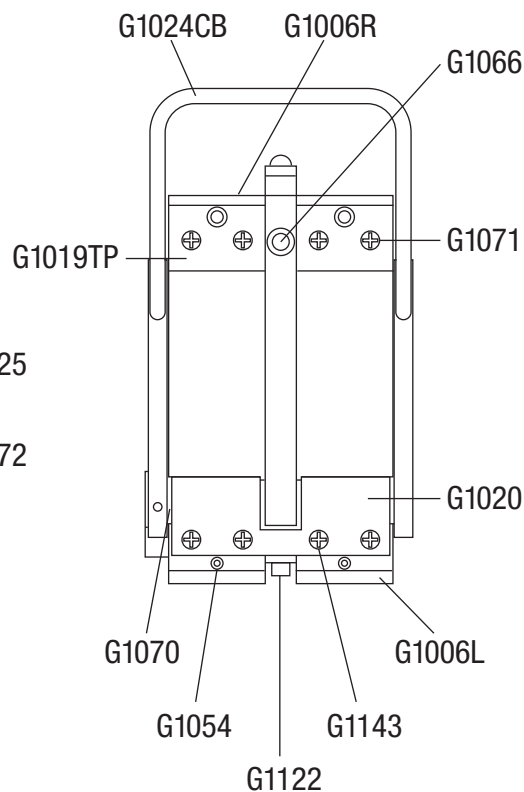
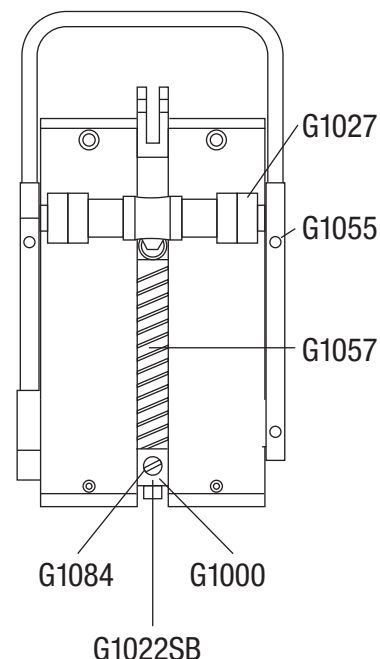
Part No.	Description	Quantity	Part No.	Description	Quantity
G100IL	Gusset	1	G1030	Clamp Pin	1
G1002	Cutting Bar	1	G1034	Guide Clamp Screw	2
G1003R	Cutting Bed - Right	1	G1036	Bumper Spring	2
G1003L	Cutting Bed - Left	1	G1014A	Squaring Bar Adjustment Assembly	2
G1004R	Squaring Bar - Right	1	G1043	Clamp Bushing	4
G1004L	Squaring Bar - Left	1	G1044	Clamp Top Screw	1
G1005G	Guide Bar	2	G1058	Support Arm Screw	1
G1010CB	Clamp Bracket	1	G1106	24" Scale	1
G1016T	Guide Clamp - Top	1	G1107	48" Scale	1
G1016B	Guide Clamp - Bottom	1	G1114A	Pulley Assembly	1
G1018A	Stop Knob Assembly	1	G1115A	Counterweight Assembly	1
G1019LP	Lock Plate	2	G1126	Scale Adjustment Screw	3
G1021	Support Bar	1	G1134	Stop Knob Spacer	1
G1023	Lock Nut	2	L159	Gusset Screw	7



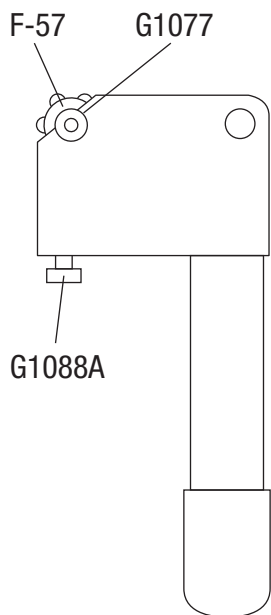
Part No.	Description	Quantity
G100IB	Bottom Mount Bracket	1
G1001-T	Top Mount Bracket	1
G1001-S	Side Mount Bracket	2
G1005M	Mount Tube	1
G1023	Lock Nut	1
G1028	Mount Plate	1
G1035	Side Bracket Screw	4
G1037	Guide Bracket Screw	4
G1039	Mount Bracket / Vertical Bar Screw	2
G1040	Cutting Bar Mount Screw	6
G1046	Clamp Pad	1
G1050	Cutting Bed Mount Screw	4
G1124	Mount Nut	8



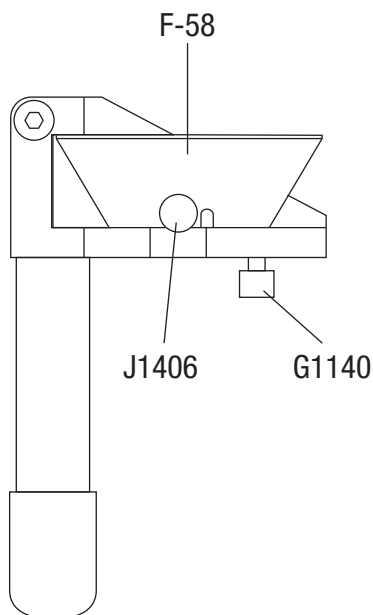
<u>Part No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Part No.</u>	<u>Description</u>	<u>Quantity</u>
1000	Tube Bearing	4	1027	Roller	1
1007A	Cutting Head Handle	1	1054	Tube Bearing Screw	12
1006L	Cutting Head Tube - Left	1	1055	Pivot Rod Set Screw	5
1006R	Cutting Head Tube - Right	1	1057	Extension Spring	1
1013SB	Spring Retainer	1	1060A	Trigger Screw Assembly	1
1019TP	Top Plate	1	1066	Depth Adjustment Screw	1
1020	Pivot Block	1	1070	Pivot Block Bushing	4
1022T	Trigger	1	1071	Stop Plate Screw	6
1022SB	Spring Bar	1	1072	Roller Arm Spring	1
1024CB	Crack Bar	1	1084	Spring Screw	1
1025	Roller Arm	2	1122	Tension Screw	1
1026	Pivot Rod	2	1143	Pivot Block Screw	4

SIDE VIEWTOP VIEWBOTTOM VIEW

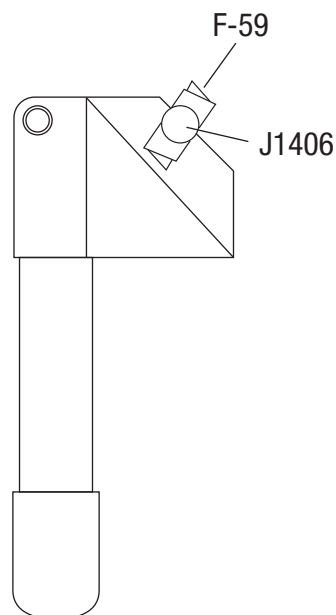
<u>Part No.</u>	<u>Description</u>	<u>Quantity</u>
F57	Six Glass Cutting Wheel Turret	1
F58	Board Cutting Blade	5
F59	Plastic Cutting Blade	1
J1406	Blade Knob	2
G1077	Turret Nut	1
G1088A	Turret Screw Assembly	1
G1140	Depth Adjustment Screw	1



GLASS CUTTING TOOL
F701-G



BOARD CUTTING TOOL
F701-M



PLASTIC CUTTING TOOL
F701-P