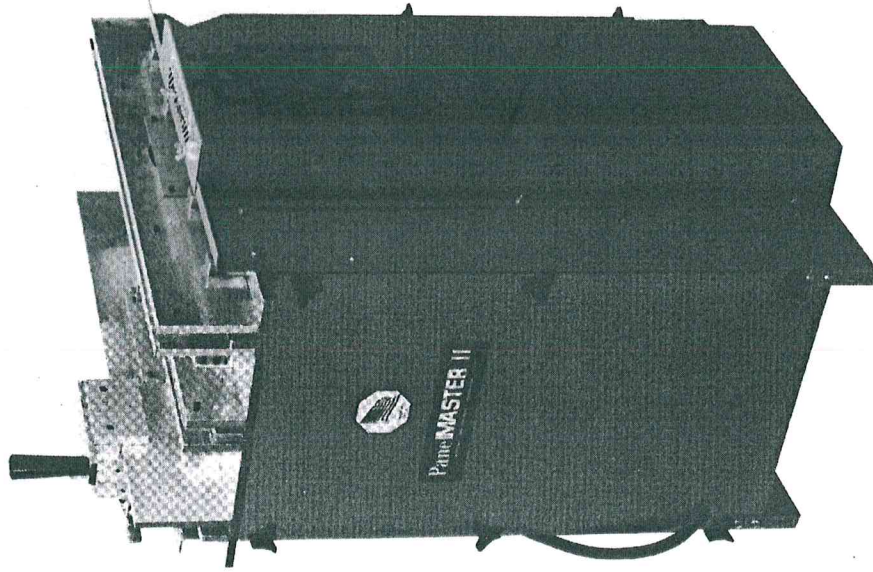




rbi

OPERATORS MANUAL

FOR MODEL RDP35-2 PANELMASTER II



**READ THOROUGHLY BEFORE
OPERATING**



CODE #: 0602

MANUAL #: 703-2035

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SPECIFICATIONS (PANELMASTER II)

Machine Size	Machine Width	27"
	Machine Length	30-1/2"
	Machine Height (to top of fences)	37"
	Machine Weight	325#
	Shipping Weight	350#
	Table Height	32"
Table & Fences	Length of Table & Fences	30-1/2"
	Table Width	17-1/4"
	Fences (all)	Mic 6 AL
	Fences (Rail & Panel)	Spring loaded
Cutters	No. of Cutterheads	3
	Max. Diameter of Cutterheads	6"
	Max. Cutterhead Width	1-3/4"
	Uses Standard Bore Cutters	1-1/4"
	Cutterhead Speed	6,600 RPM
	Cutterhead Shaft Diameter	1"
Motor (Standard)	Horsepower	5 H.P.
	Voltage	220 V
	Amps	26 A
	Phase	Single
	Speed	1,725 RPM
	Starter	Magnetic
Stock Size	Max. Material Thickness (Stile)	1-3/4"
	Max. Material Thickness (Rail)	1-3/4"

Note: All fences are made of Mic 6 aluminum (very accurate) and the Rail and Panel fences are spring loaded to allow for imperfections in thickness of the raw stock.

UNPACKING

Tools required: (1) 3/8" wrench.

1. Remove the shipping carton and check to see that all parts were received without damage. The manufacturer is not responsible for shipping damage. Please report shipping damage directly to the carrier. For best operation, leave PanelMaster II on shipping pallet.

Carton Contents:

	Quantity:
A) Raised Panel Machine (see fig. A-1)	1
B) Stille Jig (see fig. A-2)	1
C) Wing Nut Wrench (see fig. A-3)	1
D) Panelmaster II Operators Manual #703-2035 (see fig. A-4)	1

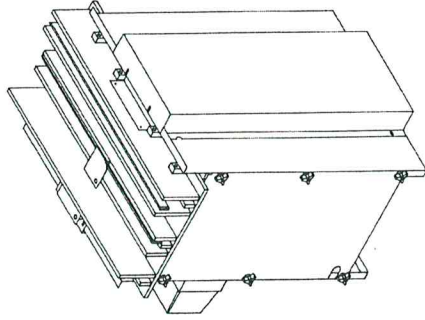


Fig. A-1

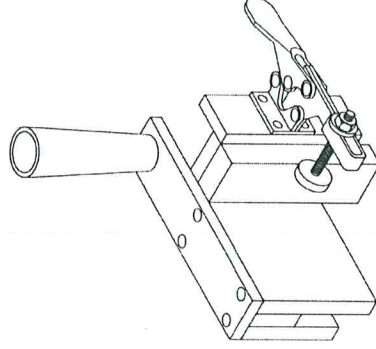


Fig. A-2

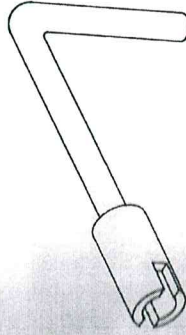


Fig. A-3



Fig. A-4

2. Remove the front inspection panel. Remove the magnetic starter from its shipping box. Mount the magnetic starter on the left side of the machine using the (4) star washers and (4) 10-32 hex nuts provided. This requires a 3/8" wrench, and should not require opening the housing of the magnetic starter.
3. With the standard 5HP, single phase motor this machine requires a 230V, 30A electrical source and breaker. The plug installed on the machine requires a NEMA# 6-30R receptacle.

SAFETY

1. Read the operators manual carefully. Be thoroughly familiar with the operation of the equipment. Know where the controls are and how to operate them.

2. Never allow children to operate equipment. Never allow anyone to operate the equipment without proper instruction.

3. Keep the work area clear of other persons.

4. Maintain a clean uncluttered work area.

5. Never make any adjustments while the machine is running.

6. Keep hands and feet away from rotating parts. Keep clear of infeed and discharge openings.

7. Disconnect the electrical supply before making any adjustments on the machine (unplug the machine).

8. Remove all tools and equipment before starting machine.

9. Wear proper clothing. Avoid loose fitting clothing, long sleeves, long hair, gloves, neck ties, jewelry, watches, rings, etc.

10. Wear safety goggles, ear protection (ear plugs or covers) and a mask in dusty operations.

11. To avoid electrical shock do not operate any electrical powered machine in a damp or wet area.

12. Maintain all safety guards.

13. Do not operate the machine while under the influence of medication, alcohol or drugs.

14. Never leave the machine running unattended.

15. Don't overload the machine.

16. Keep the equipment in proper working order. Follow maintenance procedures recommended in the operators manual.

17. Do not use lumber with loose knots, or splintered surfaces.

CUTTERHEAD REMOVAL AND INSTALLATION

Tools Required: 7/16" wrench, 1/8" allen wrench

1. Unplug the machine.

2. Remove the rear inspection panel (the one with the chip discharge).

3. Loosen (but don't remove) the two wing nuts that hold the shaft guard. Remove the shaft guard, it is the small one on the left side of the machine.

4. Loosen (but don't remove) the two wing nuts at the top of the belt drive guard. The belt drive guard is the large one on the right side of the machine. With the 7/16" wrench remove the (4) nuts that fasten the belt drive guard to the side of the machine and remove it.

5. Walk the drive belt off.

6. Loosen the set screws in the bearings, there are two set screws in each bearing. Loosen the set screw in each of the cutterheads.

7. Slide the shaft out of the far bearing enough that the cutterheads can be slipped on (or off of) the shaft. Slide the shaft out towards the drive side, that way the cutterhead pulley will not need to be removed. To install the cutters on the arbors see CUTTERHEAD ASSEMBLY.

8. Slide the raised panel cutterhead on the shaft first, with the shoulder of the arbor towards the drive pulley (see fig. A-10).

9. Slide the rail (or pattern) cutterhead on the shaft second, with the shoulder of the arbor towards the drive pulley.

10. Slide the stile (or cope) cutterhead on the shaft third, with the shoulder of the arbor towards the drive pulley (see fig. A-10).

Note: Leave the cutterheads loose on the shaft until after the machine has been reassembled.

11. Reassemble the machine, reverse the procedure starting with step 7 and going through step 3. Leave the machine unplugged and the rear inspection panel off until after the fences are adjusted.

WARNING: Make sure the cutters are turning the correct direction before running any stock.



CUTTERHEAD ASSEMBLY

Tools Required: (2) 1-3/8" open end (or crescent) wrenches.

There are three arbors with the PanelMASTER II, one for each cut to be made, the raised panel cut, the rail (also called pattern), and the stile (also called cope). Ball bearing rub collars (rub bearings) are available and are recommended in place of solid rub collars to eliminate burning the stock where it touches the rub collar. Each arbor has two solid steel spacers (key# 29 & key# 30 in the parts breakdown), one or both may need to be removed when running thick material such as entry doors.

Assembling the Raised Panel Cutterhead:

1. First install one of the 1/2" long spacers on one of the arbors. Then install the raised panel cutter on the arbor with the flat side of the cutter towards the shoulder of the arbor.
2. Next install the 3" OD (outside diameter) rub bearing next to the raised panel cutter. On the solid rub collar the counter-sunk side goes next to the raised panel cutter. On the rub bearing it doesn't matter which side goes next to the cutter.
3. Install the 3/4" long spacer, then start the arbor nut by hand (see fig. A-10).
4. Use a 1-3/8" wrench to tighten the arbor nut while holding the arbor in a vise or with another 1-3/8" wrench.

Assembling the Rail (or Pattern) Cutterhead:

1. First install one of the 1/2" long spacers on an arbor, so that it is against the shoulder of the arbor (see fig. A-10).
2. Then install the 3-1/4" OD rub bearing on the arbor.
3. Install the 1/4" groover (cutter no. 2 in fig. A-5), such that it would cut while turning clockwise, when looking at the arbor from the threaded end.
4. Next install the rail (or pattern) detail cutter (cutter no. 3 in fig. A-5) on the arbor, with the radius next to the groover.

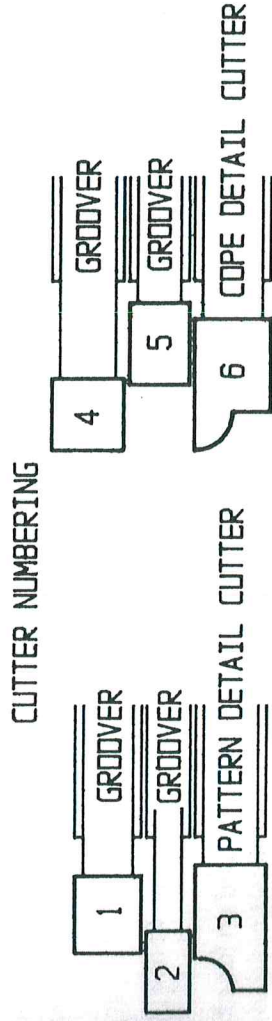


Fig. A-5

Note: When more than one cutter is installed on the same arbor stagger them so the carbide teeth are not lined up, this will help reduce vibration and give a cleaner cut.

5. Install the 3/4" long spacer, then start the arbor nut by hand.
6. Use a 1-3/8" wrench to tighten the arbor nut while holding the arbor in a vise or with another 1-3/8" wrench.

Note: The 33/64" groover (cutter no. 1 in fig. A-5) supplied with the rail (or pattern) set from Freeborn Tool is not used. In our application it is replaced with the 3-1/4" rub bearing.

Fig. A-6

Assembling the Stile (or Cope) Cutterhead:

1. First install one of the 1/2" long spacers on an arbor, so that it is against the shoulder of the arbor.
2. Then install the 1/2" groover (cutter no. 4 in fig. A-6) such that it would cut while turning clockwise, when looking at the arbor from the threaded end.
3. Then install the 17/64" groover (cutter no. 5 in fig. A-6), such that it would cut while turning clockwise, when looking at the arbor from the threaded end (the same way as the first one).

Note: When more than one cutter is installed on the same arbor stagger them so the carbide teeth are not lined up, this will reduce vibration and give a cleaner cut.

4. The third cutter to be installed is the stile (or cope) detail cutter (cutter no. 6 in fig. A-6). Install the stile (or cope) detail cutter on the arbor, with the radius next to the groover (see fig. A-10).
5. Install the 3/4" long spacer, then start the arbor nut by hand.
6. Use a 1-3/8" wrench to tighten the arbor nut while holding the arbor in a vise or with another 1-3/8" wrench.

ADJUSTING THE RAISED PANEL AND RAIL FENCES

First the fences are adjusted to the thickness of your stock, then the cutters are adjusted by sliding them on the shaft to get the cut positioned on the boards correctly. Positioning the cut on the boards is done by trial and error on scrap material.

Tools Required: 7/16" wrench, 1/8" allen wrench, wing nut wrench.

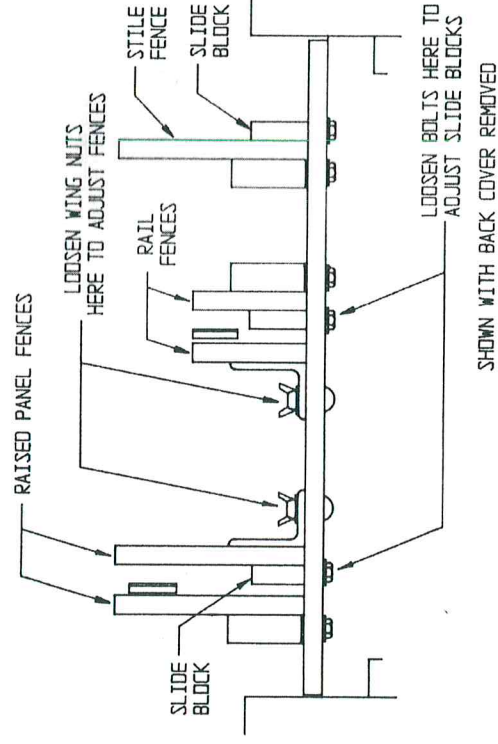


Fig. A-8

1. Unplug the machine. Remove the rear inspection panel.
2. On each pair of fences adjust one side (the side with the wing nuts), and leave the other side tight (see fig. A-8). To adjust the fence loosen the four wing nuts on the fence bracket, there are two wing nuts on each end of the fence.
3. Loosen the slide blocks by loosening the bolts under the table which hold the slide blocks on (see fig. A-8). There are two bolts in each slide block.
4. To set the fence for the thickness of your stock set a piece of the stock between each end of the fences. Slide the loose fence against the board such that there is some tension on the springs in the spring fence. Retighten the wing nuts in the fence brackets.
5. Set the slide blocks and retighten the bolts in them.
6. Slide the stock back and forth to make sure it doesn't bind. If the board binds between the fences, check to see if the board is warped, if so discard it. If the board isn't warped yet binds, repeat procedure with less tension on the springs in the spring fence.

POSITIONING THE RAISED PANEL CUTTERHEAD

Tools Required: 1/8" Allen wrench

RAISED PANEL

RAIL

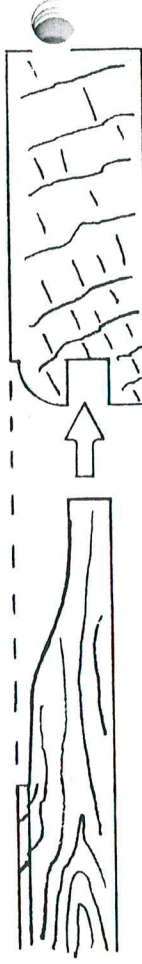


Fig. A-9

The position of the raised panel cutter is critical and will need to be adjusted so the lip on the raised panel will fit in the groove on the rail (see fig A-9), adjusting the raised panel cutter will change the thickness of the lip on the raised panel. You will first need to run a rail from scrap material so you can test the fit of the raised panel lip in the groove of the rail.

1. Unplug the machine.
2. Remove the back inspection panel.
3. Using the Allen wrench loosen the set screw in the cutter arbor and slide the cutter on the shaft to the desired position (see fig A-10).
4. Retighten the set screw in the cutter arbor.
5. Rotate the shaft by hand to make sure the cutters are not hitting on anything.
6. Replace the back cover.
7. Plug the machine in and run a piece of scrap to see if the lip on the raised panel is the right thickness, if not repeat the procedure but remember to unplug the machine first.

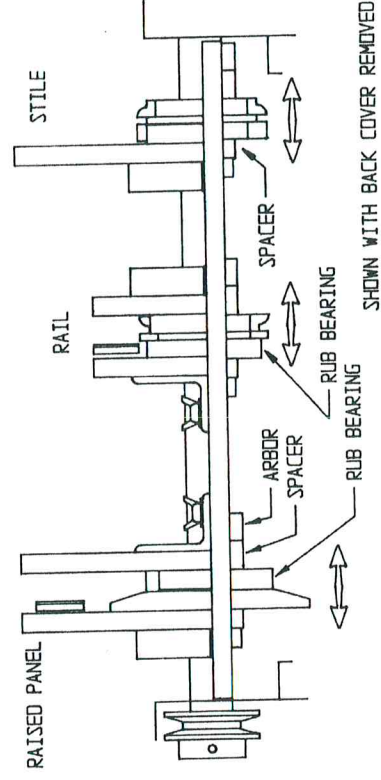


Fig. A-10

POSITIONING THE RAIL CUTTERHEAD

Tools Required: 1/8" Allen wrench, straight edge.

The position of the rail cut on the edge of the board is not critical. There should be enough material on both sides of the groove so it will not break out. Often the rail cut will be positioned so that the front of the raised panel will be flush with the front of the rails (see fig A-9), that way the whole door may be sanded by running it through a drum sander. Some want a true "raised panel" door where the surface of the panel is raised above the surface of the rails. Ultimately though the position of the rail cut on the rail is personal preference.

1. Unplug the machine.
2. Remove the back inspection panel.
3. Using the Allen wrench, loosen the set screw in the rail cutter arbor and slide the cutter on the shaft to the desired place (see fig A-10).
4. Retighten the set screw in the rail cutter arbor.
5. Rotate the shaft by hand to make sure the cutters are not hitting anything.
6. Replace the back cover.
7. Plug the machine in and run a piece of scrap to see if the cut on the rail is in the desired position, if not repeat the procedure but remember to unplug the machine first.

Note: If you want the front of the raised panel flush with the front of the rail, set the raised panel in the groove of the rail and lay a straight edge across the front of the raised panel and the rail to see if it is flush, if not readjust the rail cutter.

POSITIONING THE STILE CUTTERHEAD

Tools Required: 1/8" Allen Wrench.

The position of the stile cut is critical and must be such that the front of the rails are flush (see fig. A-11).

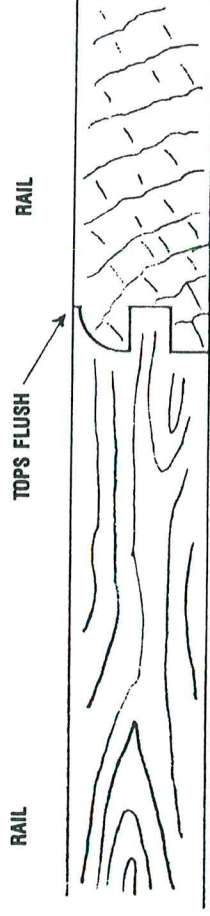


Fig. A-11

1. Unplug the machine.
2. Remove the back inspection panel.
3. Using the Allen wrench, loosen the set screw in the stile cutter arbor and slide the cutter on the shaft to the desired place (see fig A-10).
4. Retighten the set screw in the stile cutter arbor.
5. Rotate the shaft by hand to make sure the cutters are not hitting on anything.
6. Replace the back inspection panel.
7. Plug the machine in and run a piece of scrap to see if the stile cut is in the right position (with the front of the rails flush), if not repeat the procedure but remember to unplug the machine first.

ADJUSTING THE STILE JIG

Tools Required: (2) 9/16" wrenches

Loosen the nuts on the glide, move it in the slide to the center of the rail, and adjust the nuts on the threaded rod so the glide will clamp the rail solidly (see fig. A-12).

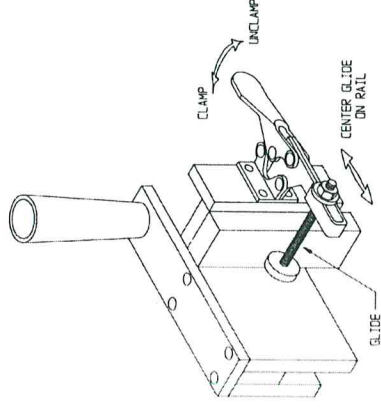


Fig. A-12

OPERATION

Once set up the machine is easy to use. Each cut should require only one pass through the machine. Always feed stock into the rotation of the cutterhead. Don't stand in line with the board, because kickback could occur. Use lumber of uniform thickness, all the rails should be the same thickness and all of the raised panels should be the same thickness.

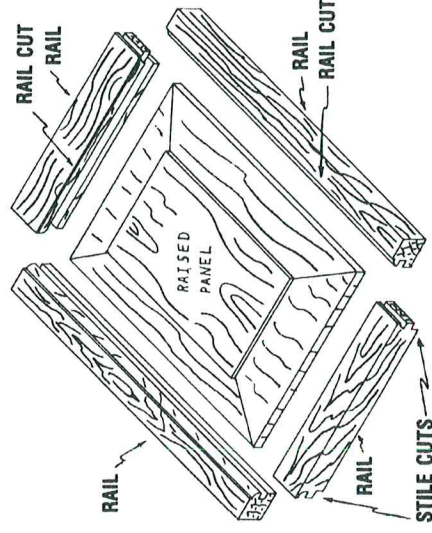


Fig. A-13

Raised Panel: The raised panel will require four passes, one for each side. Make the end cuts first (the cuts across the wood grain), that way if there is some splintering it will most likely be removed by the cut that runs with the grain of the wood.

Rail: Only one side of the rail requires the rail cut therefore the rail will require only one pass through the rail cutter.

Stile: For each door, two of the rails will require two stile cuts (one on each end) and the other two rails will not require any stile cuts. When making a stile cut always use the stile jig. Pulling out on the clamp handle releases it (see fig. A-12) and pushing in engages the clamp (to adjust it see "Adjusting the stile jig"). The rails must be orientated correctly in the jig for the stile cut to match the rail cut. To orientate the rail properly in the stile clamp, always have the rail turned so the clamp foot (glide) is on the front of the rail.

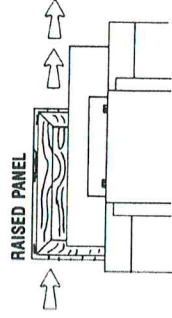


Fig. A-14

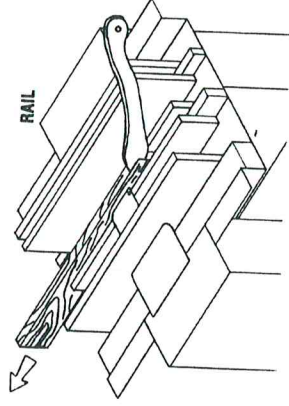


Fig. A-15

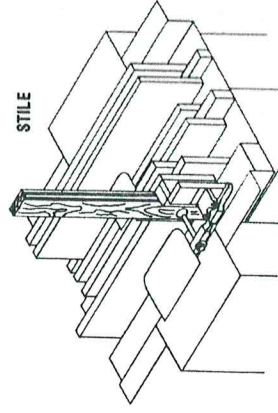


Fig. A-16

1. Remove all wrenches, etc. from machine. Make sure all guards are in place and operating properly.
2. Make sure the electrical switch is in the off position. Connect the electrical supply. Turn the machine on.
3. Feed the stock (with the grain of the board) into the cutter, while maintaining downward pressure on the board and controlling the board to prevent kickback. Use push sticks (for rail cuts) and the stile jig (for stile cuts) as required. Keep hands and clothing away from cutters.

TENSIONING THE DRIVE BELT

CAUTION: A loose drive belt can cause vibration.

1. Unplug the machine.
2. Remove the front inspection panel.
3. Loosen the four belts that mount the motor to the machine.
4. Slide the motor towards one end of the slots to tighten the belt, and retighten the belts that mount the motor to the machine. Replace the front inspection panel.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE AND SOLUTION
Burning on the wood.	Dull cutters, replace cutters.
Excessive chipping or ripples in cut.	Feeding too fast, feed the stock into the cutter slower. Fences not perpendicular with cutterheads, adjust fences.
Burning where the stock touches the rub collar.	Wax the rub collar.
Vibration	Cutterhead shaft bent, or cutterhead bearings going bad. Inspect and replace bad parts. Loose drive belt, readjust. The wings on the individual cutters on a cutterhead are aligned. Stagger so the carbide tips are not lined up.

CROWN RAIL JIG AND PATTERNS

Tools Required: Standard screwdriver, to change the patterns & stops; 5/32" allen wrench, required only if the toggle clamps need moved.

OVERVIEW:

The Crown Rail Jig and Patterns (or Templates) serves two functions. The first is safety, the jig has two strategically placed handles that provide excellent control of the jig and stock. The templates provide the profile to mark and saw the Crown Rail to size.

There are 10 different templates to make crown rails from 9-1/2" to 22-1/2" long. The first 8 come in 1" increments, 9-1/2" to 10 1/2", 10 1/2" to 11 1/2", etc., the 9th template is for 17-1/2" to 19", and the 10th template is for cutting Crown Rails from 19" to 22" long. The stops are included with the templates.

Do not use this jig with solid steel rub collars, use only with rub bearings. The solid steel rub collars will ruin the templates.

The crown rail jig and templates are designed for crown rails 3-5/8" wide and 9-1/2" to 22" long. All of the rails are typically 3/4" thick and Approx. 2-1/4" wide, except for the crown rail, which will be 3-5/8" wide. The raised panel is typically 5/8" thick. The results will be much more pleasing if the stock is of uniform thickness and not warped.

SAFETY TIPS FOR USING THE CROWN RAIL JIG:

1. Be safety conscious, follow the safety rules in your PanelMaster II owner's manual.
2. Always unplug the machine when making adjustments. After making adjustments (and before plugging it back in) roll the motor pulley by hand to make sure the cutters don't hit anything.
3. Be careful when making adjustments, the cutters have sharp edges and corners.
4. When making a cut be sure and keep the jig tight against the back rail fence all of the way through. Even though the wood may be clear of the cutter the jig may not be.
5. Make a dry run (with the motor off) after everything is positioned. Check to see if the rubber pads on the toggle clamps are hitting the rail fence. Make sure you adjusted the correct fence, so the cutters are positioned under the wood, and the jig and template are above the rub bearing. **If the cutters get into the jig it can ruin the cutters, the template, the jig, and above all be a dangerous situation.**

PROCEDURE:

1. Select the proper template and install it in the jig. Select the template for the length of the Crown Rail (not the overall width of the door) you will be making. If the length of Crown Rail falls between two templates, you may use either one. Place the template on the jig, with the countersunk side of the mounting holes up. Fasten the template to the jig with the two flat head screws provided.
2. Select the proper stop and install it. There are 3 different stops provided with the templates. The smallest stop is used with all of the templates from 9-1/2" to 17-1/2". To set the stop for the smallest Crown Rail each template will make, simply slide the stop all of the way left and secure. Use the two round head machine screws provided to secure the stop. For the largest Crown Rail each template will make, slide the stop all of the way right and secure. For Crown Rails between the min. and max. of each template, mark the center of the jig and the center of the Crown Rail, align the center marks. Slide the stop over against the end of the Crown Rail and secure. The middle sized stop is for 17-1/2" to 19" Crown Rails, and the largest stop is for 19" to 22" long Crown Rails.
3. Saw the profile for the Crown Rail in the stock. To do so Clamp the stock in the jig. Turn the jig over and mark the profile on the stock. Remove the stock from the jig and saw out the profile. Saw the profile carefully, the stock will ride on the rub bearing along with the template and any imperfections will show up in the finished Crown Rail.
4. Reclamp the stock in the jig.

5. Adjust the PanelMaster. Remove the slide blocks from between the rail fences (the two fences in the middle). Adjust the right (when standing on the infeed side) rail fence to the right until the Crown Rail jig (with the stock clamped in it) will fit down between the fences snugly (see fig. B-1). Secure the fence. The cutterhead should not need to be adjusted! Check to be sure you adjusted the correct fence, so the cutters are positioned under the wood, the jig and template are above the rub bearing.
6. Make a dry run (with the motor off) after everything is positioned. Check to see if the rubber pads on the toggle clamps are hitting the rail fence. Make sure you adjusted the correct fence, so the cutters are positioned under the wood, the jig and template are above the rub bearing. **If the cutters get into the jig it can ruin the cutters, the template, the jig and above all be a dangerous situation.**
7. Cut the profile. When making a cut be sure and keep the jig tight against the back rail fence all of the way through. Even though the wood may be clear of the cutter the jig may not be.

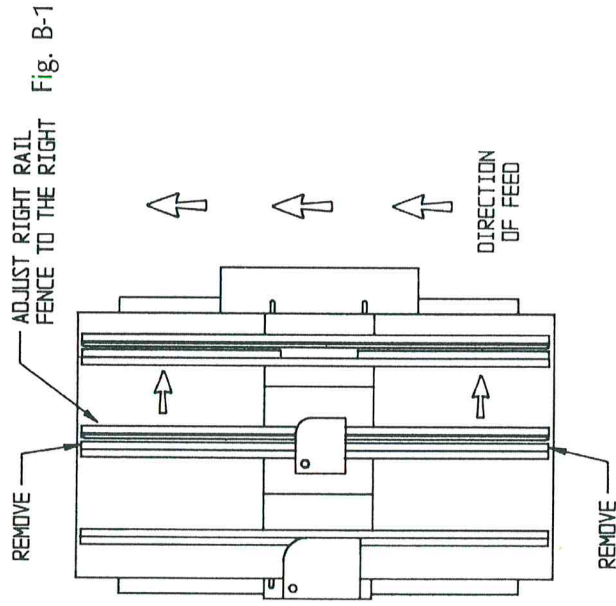


Fig. B-1

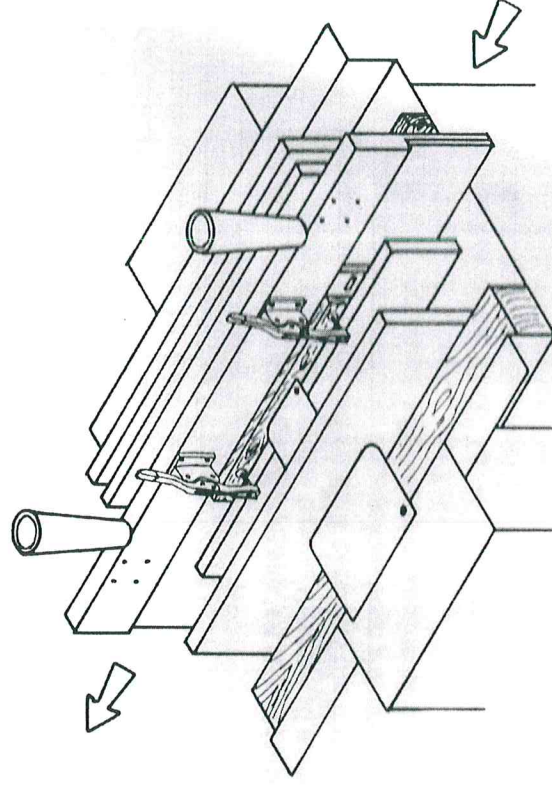
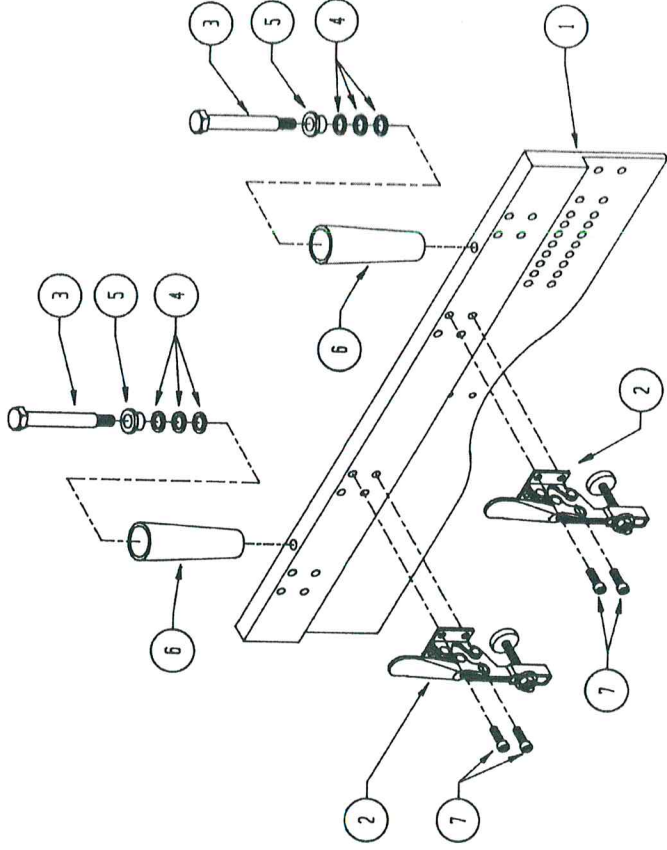


Fig. B-2

PARTS LIST: CROWN RAIL JIG (ITEM #910-0100)

Key #	Part #	Description	Qty.
1	690-0072	Crown Rail Backplate (A1)	1
2	690-0073	Toggle Clamps	2
3	705-0019	1/2 x 3-1/4 Shoulder Bolt	2
4	715-0014	1/2ID x 3/4OD x 18 GA Washer	8
5	740-0369	1/2ID x 5/8OD x 1/2" Flanged Bushing	2
6	745-0149	Handle, Black Plastic	2
7	705-0035	10-32 x 1/2 Socket Hd. Cap Screw	8



PARTS LIST: CROWN RAIL PATTERNS (ITEM #910-0200) NOT PICTURED

Key #	Part #	Description	Qty.
	690-0062	9-1/2" to 10-1/2" Crown Rail Pattern	1
	690-0063	10-1/2" to 11-1/2" Crown Rail Pattern	1
	690-0064	11-1/2" to 12-1/2" Crown Rail Pattern	1
	690-0065	12-1/2" to 13-1/2" Crown Rail Pattern	1
	690-0066	13-1/2" to 14-1/2" Crown Rail Pattern	1
	690-0067	14-1/2" to 15-1/2" Crown Rail Pattern	1
	690-0068	15-1/2" to 16-1/2" Crown Rail Pattern	1
	690-0069	16-1/2" to 17-1/2" Crown Rail Pattern	1
	690-0070	17-1/2" to 19" Crown Rail Pattern	1
	690-0071	19" to 22" Crown Rail Pattern	1
	690-0074	9-1/2" to 17-1/2" Stop	1
	690-0075	17-1/2" to 19" Stop	1
	690-0076	19" to 22" Stop	1
	705-0084	10-32 x 3/4 Round Head Machine Screw	2
	725-0031	8-32 x 1/2 Flat Head Machine Screw	2

PARTS LIST MODEL RDP35-2, PANELMASTER II

To speed delivery and reduce errors when ordering parts always give the name, model number, and serial number in the parts list. Do not use key numbers (the numbers in the circles in the parts breakdown drawing), always use the part number and description as shown in the parts list. Do not use key numbers in the parts list.

Qty	Part #	Description	Qty	Part #	Description	
1	690-1000	PANELMASTER II SIDE R.H.	1	42	690-1013	STYLE JIG BACK
02	690-1001	PANELMASTER II SIDE L.H.	1	43	690-1014	STYLE JIG FRONT
03	690-1002	PANELMASTER II TABLE	2	44	690-1041	STYLE JIG BLOCK
04	690-0003	PANELMASTER II CHIP CHUTE	1	45	690-1058	STYLE JIG SPACER
05	690-1004	FRONT INSPECTION PANEL	1	46	690-2015	STYLE JIG TIE BAR
06	690-1101	REAR INSPECTION PANEL	1	47	790-0078	3 X 5 PSA WEAR STRIP
		WELDMENT	1	48	710-0012	#7 X 5/16 RD HD DRIVE SCREW
07	690-0086	RAISED PANEL FENCE GUARD	1	49	745-0120	3/32 X 1 COTTER PIN
08	690-0087	RAIL FENCE GUARD	2	50	790-0031	10-32 X 3/16 SOCKET SET SCREW
09	690-0088	PANELMASTER II FENCE GUARD	2	51	705-0035	10-32 X 1/2 SOC HEAD CAP
10	690-0089	RAISED PANEL SLIDE BLOCK	2	52	770-0091	10-32 X 3/4 SOC HEAD CAP
11	690-0090	STYLE & RAIL SLIDE BLOCK	4			
12	690-0091	DRIVE-BELT GUARD	1			
13	690-0092	SHAFT GUARD	1	53	705-0084	10-32 X 3/4 RND HD MACH SCREW
14	690-0093	RAISED PANEL FENCE, L.H.	1			
15	690-0094	RAISED PANEL FENCE, R.H.	1	54	745-0107	10-32 HEX NUT
16	690-0095	RAIL FENCE, L.H. 74-255	1	55	715-0191	3/16 INTERNAL LOCK WASHER
17	690-0096	RAIL FENCE, R.H. 77-0000	1	56	745-0071	3/16 X 1-1/4 ROLL PIN
18	690-0097	STYLE FENCE	1	57	770-0083	1/4-20 X 1/4 SSS (CUP POINT)
19	690-0099	CUTTER-GUARD BRACKET	1	58	791-0053	1/4-20 X 1/4 SOC ST SCR,FLT PT
20	690-0100	SPRING FENCE	2	59	745-0099	1/4-20 X 5/8 CARRIAGE BOLT
21	690-0114	MOTOR SUPPORT BRACE	2	60	735-0017	1/4-20 X 3/4 SKT HD CAP SCREW
22	690-0115	MOTOR MOUNT BAR	2	61	750-0206	1/4-20 X 3/4 HEX HEAD BOLT
23	690-0102	BRACES	2	62	707-6286	1/4-20 X 1/2 SKT HD CP SCREW
24	690-0008	STYLE CUTTER GUARD WELDMENT	1	63	715-0072	1/4-20 X 1 FLAT HEAD CAP SCREW
25	690-0104	RAIL CUTTER GUARD WELDMENT	1	64	705-1037	1/4-20 X 1 3-PRONG KNOB
26	690-0105	FENCE BRACKET, ADJUSTABLE	8	65	715-0166	1/4-20 X 1 CARRIAGE BOLT
27	690-0106	FENCE BRACKET, FIXED	12	66	750-0211	1/4-20 X 1-1/4 CARRIAGE BOLT
28	690-0107	ARBOR	3	67	790-0059	1/4-20 X 1-1/4 SOC,HD CAP SCRW
29	690-0108	ARBOR SPACER, 3/4"	3	68	745-0223	1/4-20 FLANGED LOCKWHLZ NUT
30	690-0109	ARBOR SPACER, 1/2"	3	69	745-0176	1/4-20 FORGED WING NUT
31	690-0110	CUTTERHEAD SHAFT, 1" X 21"	1	70	738-1041	1/4-20 U-NUT (FOR 10 GA.)
32	690-0036	ARBOR NUT	3	71	745-0177	1/4 FLAT WASHER
33	690-0112	PULLEY, 2-1/2"OD, 1"ID	1	72	745-0093	1/4 X 3/4 SQUARE KEY
34	690-0117	WING NUT WRENCH WELDMENT	1	73	770-0179	5/16-18 X 3/4 CARRIAGE BOLT
35	690-0111	1/4 X 1 ROUND KEY	3	74	770-0181	5/16-18 X 1 HEX HEAD BOLT
36	690-0011	STUD, STYLE GUARD	1	75	770-0081	5/16-18 HEX NUT
37	690-0042	SPRING ANCHOR	1	76	745-0150	5/16 FLAT WASHER
38	690-0103	STUD, RAIL GUARD	1	77	770-0178	5/16 SPLIT LOCK WASHER
39	690-0016	STYLE JIG CLAMP BAR	1	78	745-0720	5/16ID X 3/4OD NYLON SPACER
40	690-0060	STYLE JIG TOP	1	79	770-0073	3/8-16 HEX JAM NUT
41	690-0079	STYLE JIG WEAR STRIP	1	80	770-0050	3/8 FLAT WASHER

NOTE: RUB BEARINGS AND CUTTERS SOLD SEPARATELY