Install Ideal 1000 V-Support Upgrade



1. Tools needed: Roller shaft, electric drill, tape measure, mag base dial indicator with flat tip, tap handle, oil, 3/16 allen wrench, 9/16 wrench and socket, hammer. 60471-01 Install Kit which includes a 25/64 transfer punch, 5/16 drill. 3/8-16 tap. 15/64 drill. 249 reamer. H7 (251)



2. Place the bar on the bed knife supports and center the bar. The machined surfaces face to the back and up with the v-block extended off the front.



3. Position the bar so that is is 6-1/2 inches from the back wall of the grinder.



4. Clamp bar in place. Double check your measurements before drilling.



5. Place a shaft like a roller shaft in the v supports so that the v supports are equally spaced from the ends.



6. Place dial indicator on grinding head and position bar so that the ends are within .010 inches.



7. Transfer punch and center punch the hole location of the two large holes in the bar.



10. Replace the bar and bolt in place with the 3/8-16 x 2 bolts provided.



8. Remove the bar and drill the holes with a 5/16 drill at least 3/4 deep.



11. Place the roller shaft in the v supports



9. Tap the holes with a 3/8-16 tap.



12. Place a dial indicator on a magnetic base on to a grinding head so that the tip of the indicator rests on the front of the shaft. Use a flat tip.



13. With the dial indicator just inside the v-support on one end, move the head up or down to find the high point of the shaft.



14. Set the dial indicator to zero.



16. Again move the head up or down to find the high point of the shaft.



17. Loosen the bolt on that end of the bar until it is just snug.



15. Pull back the dial indicator stem and move the grinding head to the other end of the roller shaft, just inside the v-support.



18. Tap the bar lightly on that end and move the bar half of the difference. If it reads .030, move the bar until it reads .015.



19. Move the grinding head back to the first end and repeat steps 13 through 17 until the difference is less than .003.



22. Set the dial indicator to zero.



20. Reposition the dial indicator so that the tip of the indicator rests on top of the shaft.



23. Pull back the dial indicator stem and move the grinding head to the right end of the roller shaft, just inside the v-support.



21. With the dial indicator over the main support on the left end, move the head in or out to find the high point of the shaft.



24. Loosen the bolt on the right end of the bar.



25. Loosen jam nut then adjust the bar up or down using the set screw until it is zero. Retighten jam nut.



26. Move the grinding head back to the first end and repeat steps 22 through 25 until the difference is less than .003.



28. Drill through the dowel pin hole of the bar into the bed knife support with a 15/64 drill (provided in optional drill kit) at least 5/8 deep.



29. Ream the holes in the bar with the .249 reamer.



27. Tighten the bolts which hold the bar to the bed knife support, Then recheck both the top and front measurement to make sure they are within .003.



30. Unbolt and remove the bar.



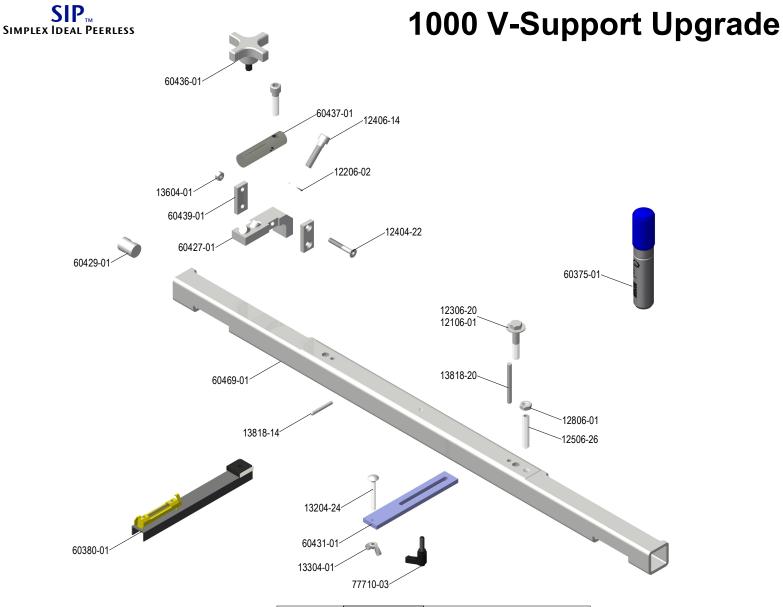
31. Ream the holes in the bed knife support with the .251 reamer.



32. Press the dowel pins provided from the bottom of the bar into the .249 holes until they are flush with the top.



33. Remount the bar on to the bed knife support and double check its position.



Part Number	Qty	Description
12106-01	2 each	3/8 Washer
12206-02	2 each	Hard Washer
12306-20	2 each	3/8-16 x Bolt
12404-22	4 each	1/4-20 x 2-1/4 Socket Head Bolt
12406-14	4 each	3/8-16 x 1-1/2 Socket Head Bolt
12506-26	1 each	3/8-16x 2-3/4 Set Screw
12806-01	1 each	3/8-16 Hex Jam Nut
13204-24	1 each	1/4-20 x 2-1/2 Carriage Bolt
13304-01	1 each	1/4-20 Wing Nut
13604-01	4 each	1/4-20 Lock Nut
13818-14	1 each	3/16 x 1-1/2 Dowel Pin
13818-20	2 each	1/4 x 2 Dowel Pin
60375-01	1 each	Sharpie
60380-01	1 each	Level
60427-01	1 set	Sliding Bracket Set
60429-01	2 each	Sliding Bracket Nut
60431-01	1 each	Center Support
60436-01	1 each	Knob Wrench
60437-01	2 each	Clamp Bar
60439-01	2 set	Clamp Bar Bracket Set
60469-01	1 each	V-Support Bar
77710-03	1 each	Locking Handle