

instructions for installation

# MOUNTING KIT

for MAGNA 4" JOINTER



The MOUNTING KIT has been designed to permit the MAGNA 4" JOINTER and SHOPSMITH to be set up like any saw-jointer combination. Once mounted, the Jointer swings up or down on a heavy, hinged casting. Change-over, so SHOPSMITH may be raised to vertical position, requires a simple belt change—accomplished in seconds. Unlike conventional mounting practices, the MAGNA JOINTER when combined with SHOPSMITH requires no additional motor, bench, or space. Thus you have maximum capacity, accuracy, flexibility, and space utilization combined with minimum cost.



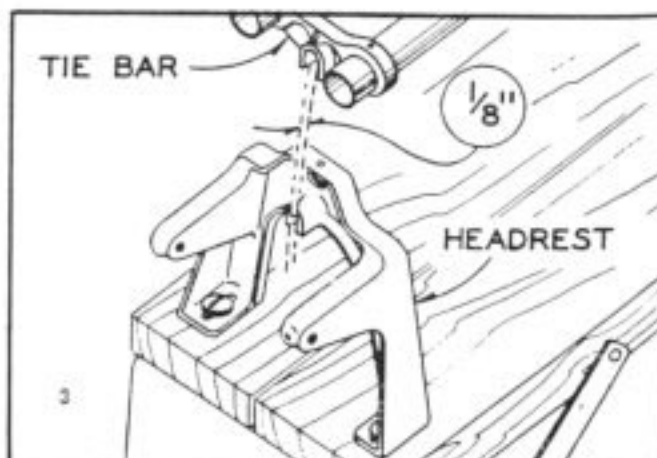
**JOINTER, set up for use . . . . . in non-operative position**

## HOW TO MOUNT THE MAGNA 4" JOINTER ON SHOPSMITH

### Mounting the new headrest

The following pages contain instructions for mounting the MAGNA 4" JOINTER on SHOPSMITH. The JOINTER OWNER'S GUIDE, which is in the Jointer carton, contains instructions for basic operational techniques and maintenance. READ THE INSTRUCTIONS CAREFULLY. They will enable you to mount and utilize your JOINTER immediately, and keep it functioning accurately for a long time.

Place SHOPSMITH in vertical position and remove the bolts which hold the headrest to the bench. Position the Mounting Kit headrest with the extending hinge arms pointing away from the base plate end of the bench. After replacing the mounting bolts (two are required), finger-tighten the nuts on the underside of the bench. Lower SHOPSMITH to horizontal



position and adjust the headrest to obtain the correct  $\frac{1}{8}$ " clearance between it and the tie bar (Fig. 3). This adjustment is possible because of the slotted holes in the base of the new headrest. Tighten the mounting bolts securely with a wrench.

As packaged, the hinge casting to which the Jointer is attached is already mounted on the headrest. The leveling screw ( $\frac{3}{8}$ -16,  $2\frac{1}{2}$ " long) and the jam nut are contained in the pulley package. Before continuing, place the jam nut on the screw and thread the screw in the tapped hole at the top of the headrest until it is about  $1\frac{1}{2}$ " higher than the headrest (Fig. 4). Turn down the jam nut and finger-tighten to hold this setting temporarily.

If SHOPSMTIH is equipped with a Speed Changer (accessory number 11 300), the leveling screw should be about  $\frac{3}{4}$ " higher than the headrest. In either case, the screw height given here is merely approximate to facilitate leveling the Jointer. The final adjustment must be made after the drive belts are attached.

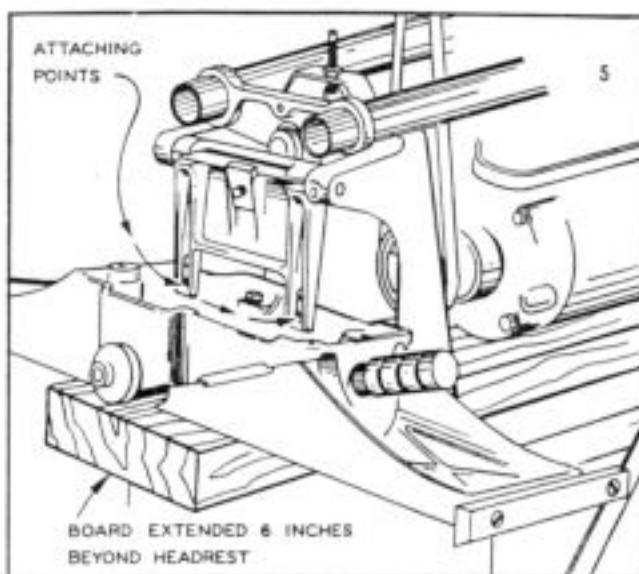


### Mounting the JOINTER

To unpack the Jointer first use a screw driver to remove the staples which seal one end. Pull out the wooden frame on which the Jointer is mounted in the carton and remove the bolts which hold the frame to the Jointer base. Set the Jointer on the floor, base down, at the headrest end of SHOPSMTIH. Select a length of scrap wood narrow enough to pass between the legs of the headrest and long enough to hook under the motor. The board should extend about 6" beyond the headrest end of the bench. This will make a convenient temporary platform (Fig. 5) on which the Jointer can rest while you attach the two hinge bolts ( $\frac{1}{4}$ "x20,  $\frac{3}{4}$ " long).

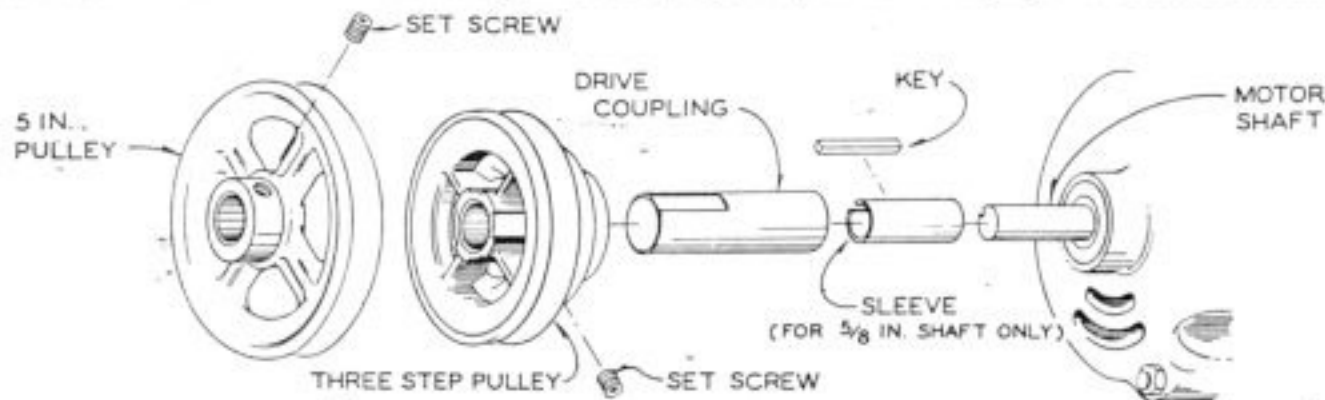
Set the Jointer upside down on the platform with the rabbeting ledge next to the headrest. Swing the hinge casting down so that the flat side rests against the inside surface of the Jointer base and align the two slots in the hinge casting with the two holes in the Jointer. Place a lock washer over each bolt and slip one bolt through each hole. The head of the bolt with the lock washer under it should be on the outside of the Jointer. Thread a nut over each bolt and then turn the bolt head until the nut is seated between the beads of the hinge casting.

At this time, and with the parts in this position, the bolts should be at the bottom of the slots in the hinge casting. Tighten the bolts just enough to keep the Jointer from sliding down. Final adjustment will have to be made after the Jointer drive belt is attached. Now you can swing the Jointer up so that it will be supported by the hinge casting and the leveling bolt. Remove the length of wood you used for a platform.



### Mounting the Pulley Assembly

Position of the pulley assembly on the motor shaft is affected by two things—size of the motor shaft and whether or not SHOPSMTIH is equipped with a Speed Changer. If the motor has a  $\frac{5}{8}$ " shaft follow this procedure. Place the sleeve over the shaft with the shaft key in the slot (Fig. 6). Slip the drive coupling over the sleeve in a similar

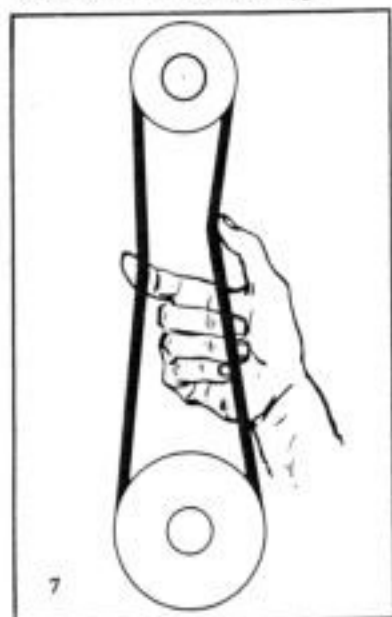


manner. Add the three-step pulley. (If SHOPSMITH is equipped with a Speed Changer, place the large step of the pulley toward the motor; otherwise place the small step of the pulley toward the motor.) The pulley set screw should seat on the motor shaft key. Add the five-inch pulley with its hub facing away from the motor and with its set screw seating on the drive coupling flat. Be sure that the three-step pulley is in line with the headstock pulley.

If the motor shaft is  $\frac{3}{4}$ " the procedure is exactly the same except that the sleeve is not needed.

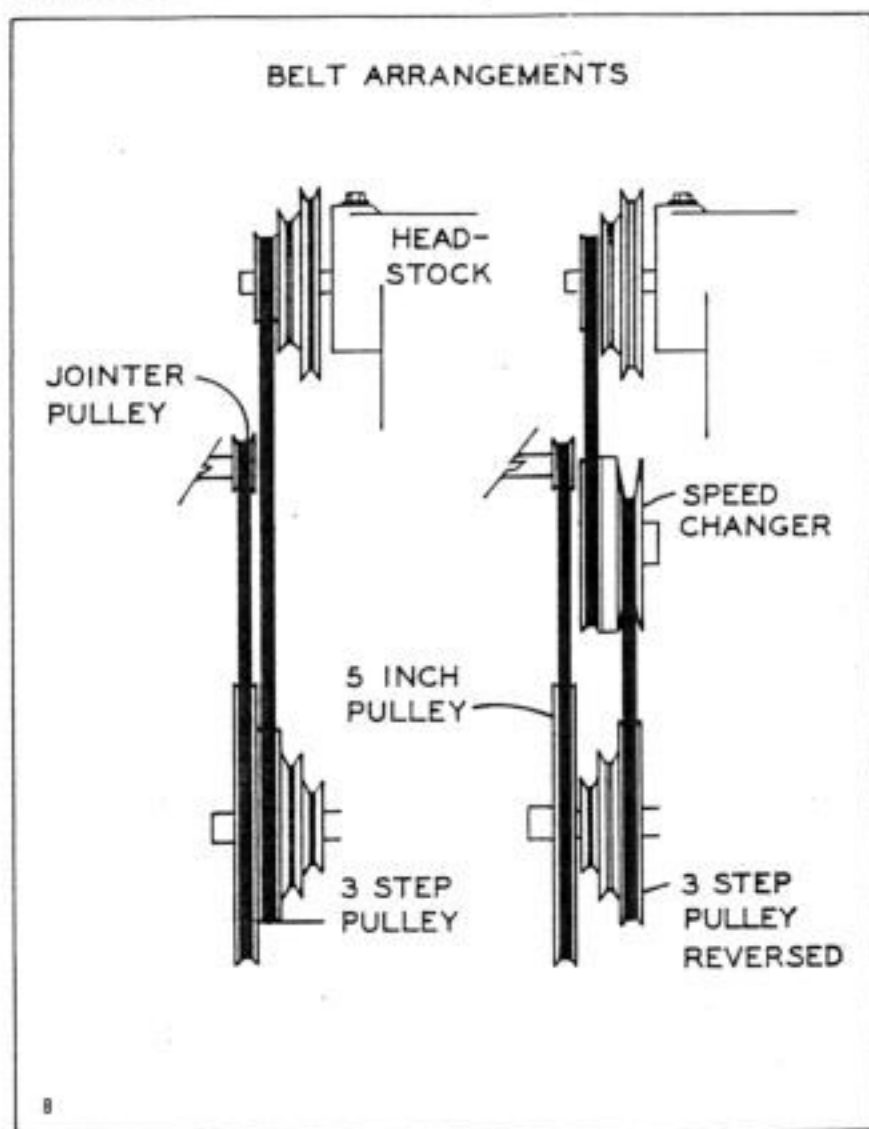
At this point it would be wise to check the SHOPSMITH belt for correct tension. Two points should be remembered—if the belt is too tight, you get excessive wear on the motor shaft and spindle bearings; if the belt is too loose (if it should vibrate excessively and rub against the tubular ways), slippage will cause power loss.

Most operators find that this simple check for belt tension is sufficient. At a point midway between the pulleys, place thumb and forefinger on the belt as shown in Fig. 7. Using very light finger pressure you should be able to deflect each side of the belt about  $\frac{1}{2}$ ".



For correct arrangement of Speed Changer belts, consult the Speed Changer instruction sheet.

Final step is to bring the headstock toward the jointer so as to line up the five-inch motor pulley with the jointer pulley (Fig. 8). Slip on the jointer drive belt and check for correct tension. Now is the time to make the final height adjustment on the jointer. If the belt is too tight, lower the jointer by loosening the two hinge bolts and adjusting the leveling screw. If the jointer is too low, the leveling screw is, of course, raised. When the height is correct and the jointer is level, wrench-tighten the two hinge bolts and secure the leveling screw jam nut.

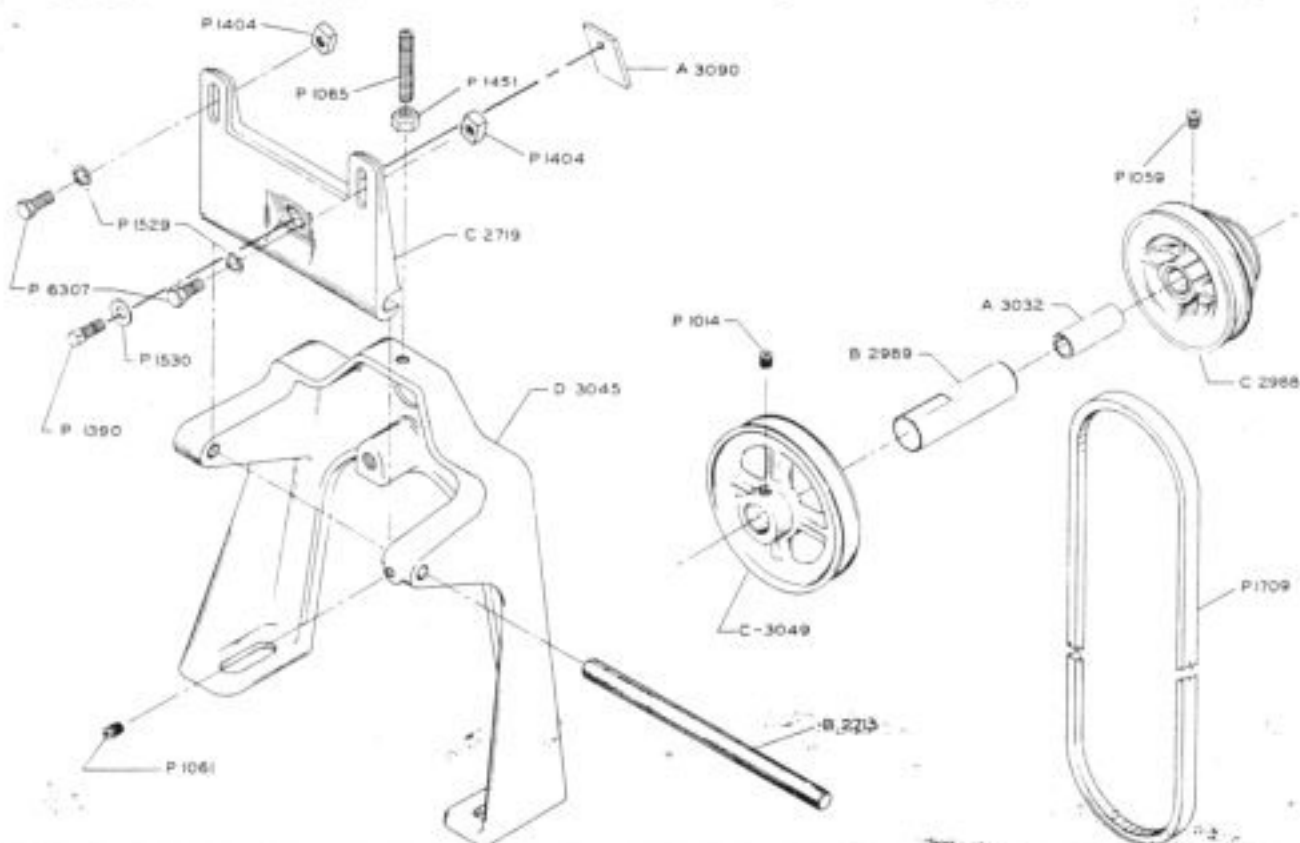


SHOPSMITH is now ready to operate as a saw-jointer combination. When it is necessary to raise SHOPSMITH, merely remove the jointer drive belt and lower the jointer to a non-operative position. When needed—raise the jointer and replace the drive belt.

To remove the jointer entirely from SHOPSMITH follow this procedure: Remove the jointer drive belt. Loosen the screw on the front of the hinge casting. Raise the screw as far as it will go and finger-tighten it at that point. Place one hand at each end of the jointer and tilt it up to clear the leveling screw—then pull it forward. Be sure that you hold the jointer securely as you remove it. To remount it merely set the jointer back in position, loosen the screw and lower it in the slot. Then tighten it.

## Mounting Kit Parts List

part no.	description	number required	list price (ea.)	shpg. wt. (ea.)	
				lbs.	oz.
D 3045	Headrest-Jointer	1	\$6.50	5	1
C 2719	Hinge	1	1.75	2	8
P 6307	Screw—Hex Cap	2	.05		4
P 1404	Nut—Square	2	.05		3
P 1451	Nut	1	.05		3
P 1529	Lock Washer	2	.05		2
P 1065	Screw—Set	1	.25		3
B 2713	Pin—Hinge	1	.25	1	1
P 1061	Screw—Socket Set	1	.10		3
C 2988	Pulley—3 Step	1	1.50	2	1
P 1059	Screw—Socket Set	1	.10		3
C 3049	Pulley—Driver 5"	1	1.25	1	1
P 1014	Screw—Socket Set	1	.10		3
B 2989	Coupling—Drive	1	.75		10
A 3032	Sleeve— $\frac{3}{4}$ " Bore	1	.50		6
P 1709	Belt—"V"	1	1.50		8
A 3090	Plate—Hinge Pin	1	.30		8
P 1390	Screw—Hex. Cap	1	.20		5
P 1530	Washer	1	.05		3



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