

INSTALLATION AND OPERATING INSTRUCTIONS

AND PARTS LIST

VARI-SLO SPEED CONTROL ATTACHMENT CAT. NO. 2340, 2481 and 2482

For Use With Craftsman Drill Presses, Cat. Nos. 2313 and 2314

CAT. NOS. 2452 AND 2453

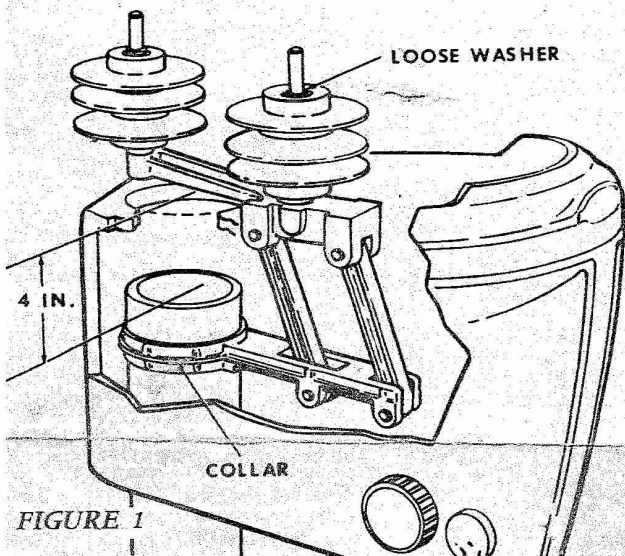
UNPACKING UNIT

Your unit is shipped in one carton containing the following separate parts: 1) Pulley Link (No. SR-130); 2) Pulley Assembly (SEE FIG. 1); 3) Control Assembly (SEE FIG. 4); 4) V-Belt, No. SR-210; and 5) an envelope containing an Allen wrench—to fit all set screws in the unit—together with two spare lock washers and one spare spacer ring. Check to see that you have all these parts, before discarding packing materials.

INSTALLATION

1. Remove the motor and motor mount from your drill press. These can be removed together. Lay the original V-Belt aside for future use; it is not needed with your Vari-Slo unit.

2. Raise the drill press head up until the top of the head is 4 to 4½ ins. above the top of the column (FIG. 1). The head can then be clamped.



3. Holding the Pulley Assembly (FIG. 1) with the pulleys at top and the Collar toward the rear (of the drill press), insert it down inside the drill press head—and install the Collar over the drill press column.

NOTE

A washer is installed on the forward shaft of the Pulley Assembly, on top of the pulley. Do not drop this off when handling the assembly.

4. Lower the drill press head until the top surface (of the head) which fits over the column is exactly flush with the top of the column (FIG. 2)—and lock the head on the column. It is important that you NEVER let the head drop further down on the column than this. In dropping down it would carry the Pulley Assembly with it—would jam the rear of the assembly onto the column top, and might (due to the weight of the head) damage the assembly.

head (FIG. 3). Next, raise or lower the Collar (FIG. 2) on the column until the top surface of the Pulley Mount is EXACTLY flush with the TOP EDGE of the largest groove of the Step-Cone Spindle Pulley. Without changing this, rotate the Collar on the column as necessary to EXACTLY align the two pulleys of the Pulley Assembly with the Step-Cone Spindle Pulley. Now tighten the Set Screw in the Collar.

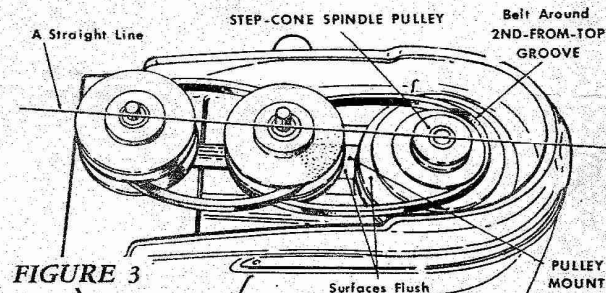


FIGURE 3

6. Place the forward V-Belt (SR-200) around the lower groove of the front pulley in the Pulley Assembly and around the 2nd-From-Top Groove of the Step-Cone Spindle Pulley (FIG. 3). Now check to make certain that this belt will run straight. If your settings in paragraph 5 were correct, it will. Do NOT try to place it around any other sheave of the Step-Cone Spindle Pulley.

7. Place the rear V-Belt (SR-170) around the upper groove of the front pulley and around the lower groove of the rear pulley in the Pulley Assembly (FIG. 3).

8. Take the Control Assembly (FIG. 4) and loosen the Control Knob (turn it counterclockwise), then move it to the extreme left end of the Dial Plate. Lower the assembly in place on top of the front part of the drill press head—simultaneously engaging the free end of the Control Link over the front pulley shaft in the Pulley Assembly. The Dial Plate fits down over the front edge of the drill press head; and the two Flat-Head Screws engage under the rear side of this same edge to hold the Control Assembly down in place. Approximately center the Dial Plate on the drill press head, and tighten the Locking Set Screw.

NOTE

If the Flat-Head Screws will not engage properly (due to varying thickness of the head casting), loosen each one half a turn at a time until they do engage properly.

9. Re-mount your motor, high enough so that the top (smallest) groove of the Step-Cone Motor Pulley is horizontally in line with the top groove of the rear pulley in the Pulley Assembly (FIG. 5). This may require separating the motor from the motor mount, and turning the motor mount around to place the long side on top.

10. Place V-Belt No. SR-210 around the top groove of the rear pulley in the Pulley Assembly. Install the Pulley Link (FIG. 5) over the ends of the two shafts in the Pulley Assembly, seating it firmly down on the shafts. Now engage the belt (SR-210) around the top (smallest) groove of the Step-Cone Motor Pulley.

5. Push the top of the Pulley Assembly to the front (of the drill press) until the Pulley Mount touches the Step-Cone Spindle Pulley mounted in the front of the

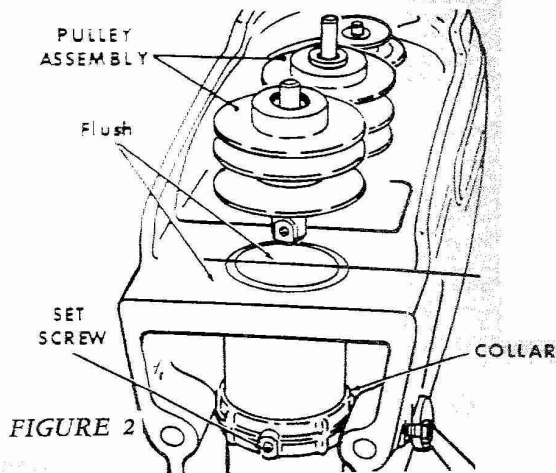


FIGURE 2

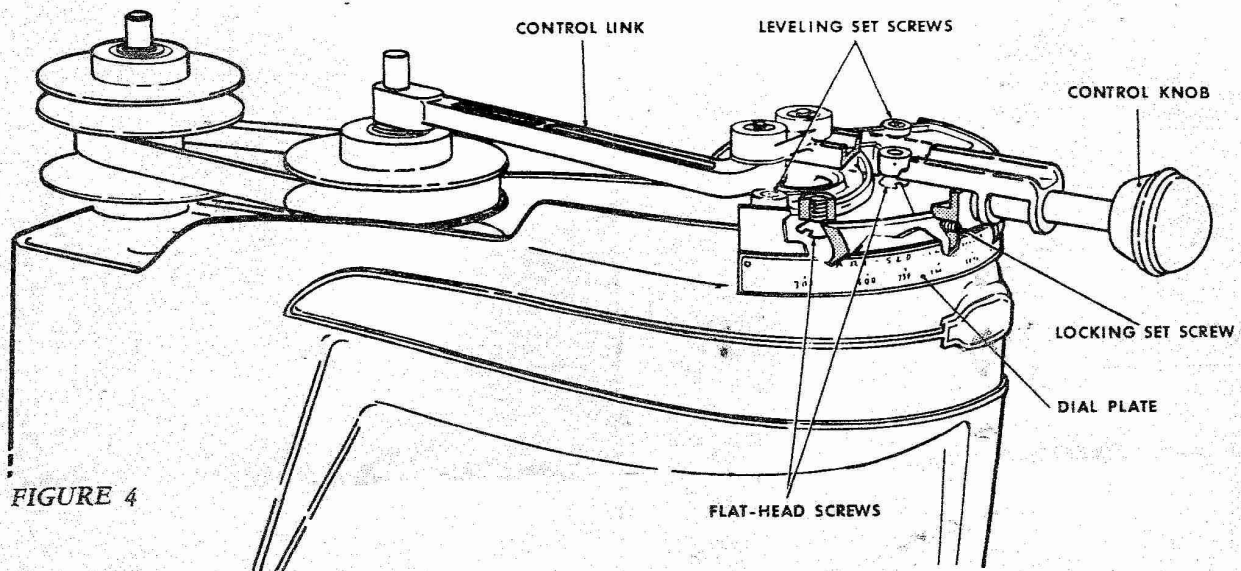


FIGURE 4

12. With the drill press still running, loosen the Control Knob (FIG. 4) and move it all the way to the left. The pointer on the knob should be at "300" on the Dial Plate.

If not, loosen the Locking Set Screw and slide the Dial Plate around to place the pointer at "300"—then tighten this set screw. Also, the Dial Plate should be level. If not, use the two Leveling Set Screws to level it—but do not tighten either screw so much that it pulls the Flat-Head Screws out of their proper engagement (paragraph 8).

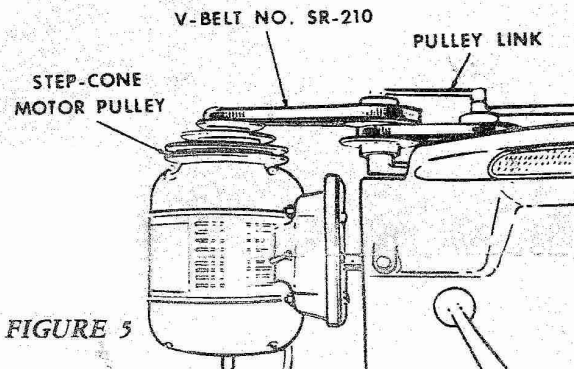


FIGURE 5

NOTE

V-Belt No. SR-210 must run horizontally. After installing it, re-adjust motor or motor pulley, if necessary. Should other than a Craftsman motor be used, it may even be necessary to invert the motor pulley on the motor shaft to obtain proper belt alignment.

11. Start your motor. With the drill press running, move the motor mount outward until the belts are at proper tension. Proper tension can be obtained by placing your thumbs at the respective sides of the motor mount to push it out as far as it will go without using extreme force. Tighten it in this position.

CAUTION

Too tight a belt adjustment will cause damage to belts, pulley bearings and motor bearings. Too loose an adjustment will cause belts to slip and make speed settings unreliable. Re-adjustment of belt tension may become necessary after the belts have become seared and stretched with use.

(FIG. 1) are stationary, the belts cannot squeeze the movable middle flanges upward or downward to vary the settings—and the whole assembly is locked at the last speed setting made while the drill press was running. Any attempt to force it from this locked position will damage the links.

Each time you change the speed setting, loosen the Control Knob sufficiently for it to move freely along the Dial Plate—then retighten it firmly, but without undue force.

OTHER SPEED VARIATIONS

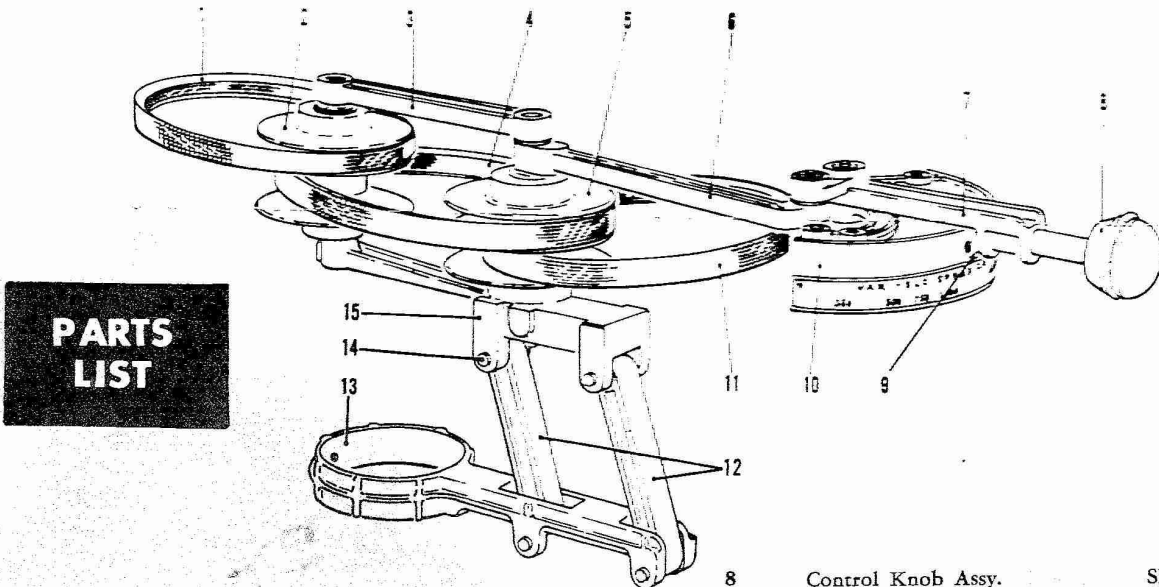
With the installation above, your speed settings are: 300-500-750-1000-2000-2500-3000 and 3750 rpm—and intermediate speeds not indicated by numbers. By raising the motor, motor mount or motor pulley to place a larger groove of the Step-Cone Motor Pulley in line to receive V-Belt No. SR-210, you can obtain a different set of speed settings. For all practical purposes, however, we recommend using only the top (smallest) groove—as done in the installation procedure. We definitely warn against using the bottom (largest) or next-to-bottom (second largest) grooves because use of these would run the drill press spindle at speeds for which it is NOT DESIGNED. This leaves the next-to-top (second smallest) groove as the only other one which may be used. To use this second smallest groove, V-Belt No. SR-210 must be replaced by a longer (24-inch, Cat. No. 9-1624) belt. Using this groove the speed settings become: 480-800-1200-1600-2400-3200-4000-4800 and 6000(rpm).

OPERATION

Your Vari-Slo Speed Control is now ready for use. With it, you can obtain spindle speeds varying from "300" (rpm) up to "3750" (rpm)—as indicated by the numbers on the Dial Plate (FIG. 4). However: NEVER ATTEMPT TO CHANGE THE SPEED SETTING WHEN THE DRILL PRESS IS NOT RUNNING—ALWAYS HAVE THE DRILL PRESS RUNNING. THIS IS VERY IMPORTANT. When the pulleys of the Pulley Assembly

LUBRICATION

The pulleys are packed with grease and have lubricated-for-life ball bearings. No lubrication is required. Do not be alarmed if grease expands out of the pulleys when they are first run. This is normal, and will cease after a short period of operation.



PARTS LIST

1	21-In. V-Belt	SR-210	8	Control Knob Assy.	SR-360
2	Short-Shaft Pulley Assy.	SR-401	9	Clamping Pad	SR-370
3	Pulley Link	SR-130	10	Head Casting Assy.	SR-310
4	17-In. V-Belt	SR-170	11	20-In. V-Belt	SR-200
5	Long-Shaft Pulley Assy.	SR-400	12	Connecting Links (2)	SR-230
6	Control Link Assy.	SR-350	13	Column Bracket	SR-210-C
7	Control Arm	SR-300	14	Groove Pins (4)	SR-225
			15	Pulley Mount	SR-220