



HOW TO INSTALL A GILMER BELT

TOOLS REQUIRED

Screw driver, two crescent wrenches, or wrench to fit 5/16" cap screw, mallet, Phillips screw driver, tape or string.

- (1) Lock your SHOPS MITH* in vertical position and remove eight screws which hold the Belt Guard to the headstock. Secure Belt Guard to Tie Bar with tape or string.
- (2) With motor running, turn Speed-Dial to 'slow'. Stop motor and wind Speed-Dial to 'fast'. This will loosen V-belt.
- (3) Remove Cap Screw and Keepers (See note at the bottom of the back of this page.) Use screw driver to turn Eccentric Bushing (504190) so wide slot is in line with slot in casting. On SHOPS MITH Mark V above serial number 267305, loosen Set Screw in Bushing. With Gilmer Belt now slackened, remove Bushing (504546) by prying with screw driver. Jointer Drive Shaft will drop down.

- (4) Remove Spiral Snap Ring (501299) which retains the Drive Sleeve Assembly. To remove Snap Ring, pry it free and clear of groove and "pull" it out.

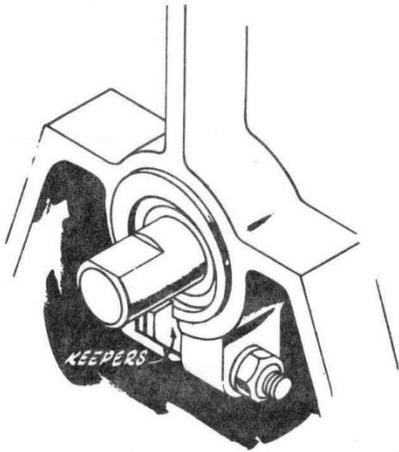


- (5) Loosen the Set Screw on top of headstock and extend Quill until spindle splines disengage from Drive Sleeve. Hold Quill extended and turn Spindle about 1/6 revolution so that splines will mismatch by one tooth width. Retracting Quill will then press out Drive Sleeve Assembly. If old Gilmer Belt is still on Pulley, work it off with screw driver as you press out Drive Assembly.

- (6) Thread new Gilmer Belt through space left by removing Eccentric Bushing and situate around small Gilmer Pulley (see drawing). Do not attempt to push double thickness of Belt through slot in casting.

- (7) Be sure to loop new Belt over Gilmer Pulley as you replace Drive Sleeve Assembly. Turn Spindle to match splines. To replace the Retaining Ring, set one free end in groove and "wind" it into position.

- (8) Insert the Eccentric Bushing and push the Jointer Drive Shaft back into Eccentric Bushing. The end of the Shaft should project about 1-1/16" from headstock casting. Be sure Gilmer Belt is properly seated on Pulleys. On Mark V above serial number 267305, tighten Set Screw in Bushing so it will seat in groove around Jointer Drive Shaft Bearing.



- (9) With screw driver, turn Eccentric Bushing clockwise to tension Belt. Belt must properly mesh with teeth on Pulleys. Tighten Belt sufficiently to remove slack, but do not make it so tight that Belt will be stretched. With proper tension, slot will be approximately horizontal.
- (10) Replace Keepers and Cap Screw, etc. (See note below). Long ears of Keepers must be on outside of casting. Do not overtighten nut, or bearing may be damaged. Tighten only enough to prevent bearing from rotating during operation.
- (11) With Quill Assembly fully retracted, retighten Set Screw in top of headstock. (This Set Screw should not be locked, but merely adjusted to engage key way in Quill. Over-tightening will bind the quill.)
- (12) To test, rotate Pulleys by hand first to see that they spin freely. Then turn on machine and run through speed range. Gilmer Belt should maintain its tension at all speeds.
- (13) Replace Belt Guard.

IMPORTANT

If Mark V is jam-stalled (stopped instantaneously) while operating at very low speed, it is possible for the V-belt to be pulled up and become wedged between the motor sheaves. If this should happen, merely pull away outer sheave on motor shaft and pry out V-belt.

NOTE:

If your serial number is above 298476 your SHOPS MITH will not have keepers but will be equipped with a screw and washer which positions eccentric bushing. Remove these before removing eccentric bushing.

Shopsmith Inc.



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320 North Second Street • P.O. Box 32 • Tipp City, Ohio 45371 • 513/667-8402

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