

TClinic

DYNAMO PULLEY SALVAGE by Phil Marino, TCMG

The following will salvage an original aluminum dynamo pulley that has worked loose and had the center bore mangled up. Basically we are boring out the damage and inserting a new piece

Fabricate new bushing per _______ – attached sketches. Chuck pulley _______ in lathe, making sure belt groove runs concentric & square prior to boring .8755 (plus .001, minus .000) diameter hole. This will barely skim bottom of old pull keyway in pulley. Press in new bushing from the back of pulley. Use arbor press or suitable instrument. ________ Back inner bore of pulley with suitable ________ BEI block in order not to crack the front ________ FOI flange while pressing. Use lanolin paste or heavy oil on bush and bore to ease the pressing task.

Turn pulley with cooling vanes down on drill press table. Drill ${}^{7/}_{64}$ starting hole by ${}^{9/}_{16}$ deep. For safety, dowel, ream hole to .125 diameter, using a reamer for new drill. Install ${}^{1/}_{8}$ dia. x 1/2" long dowel. If .125 hole is larger than the dowel, stake bore with center punch. (This pin is to ensure that the new bushing will not rotate in the pulley under load.)

You will notice that the new bushing is longer than the pulley. This is because it has been lengthened to incorporate the old thrust sleeve that went in the back of the pulley, pushing against the front bearing inner face. As a result the new assembly is much stronger than the original design.

By following the above procedure, you are now ready to install your pulley back on the dynamo for a long and trouble-free life.

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2002 Update

To repair the V groove see TClinic #34.

CHECK PULLEY LENGTH IT COULD VARY 🗧 STD. KEYWAY 1-202 DIA. 見 STOCK έR. .669 DIA. SLIP FIT TO ARMATURE SHAFT NOTE: THRUST SLEEVE HAS BUSH GEN, PULLEY REPAIR BEEN INCORPORATED IN THE BUSH MATERIAL - STEEL FOR ADDED STRENGTH BORE 875.51801 IN PULLEY CONCENTRIC WITH BELT VEE GROOVE 통 DOWEL PIN X 분 LONG PRESS FIT HALF DIA. IN BUSHING HALF DIA. IN PULLEY 180° FROM KEY FRONT VIEW GENERATOR PULLEY REPAIR

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