Palax Power 100S: Changing the drive belt pulley on the main shaft

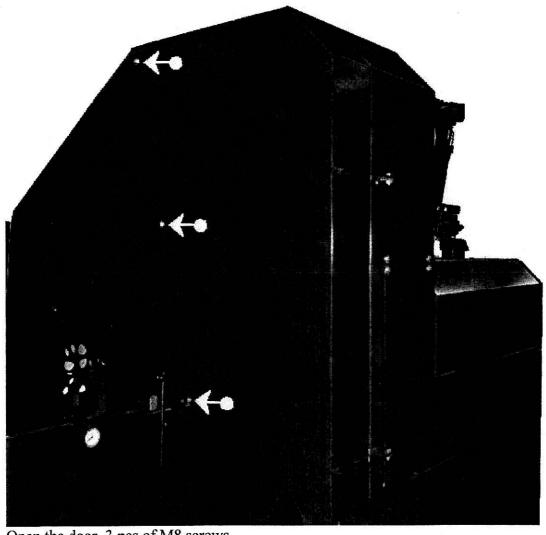
Some problems, to do with the drive belt pulleys staying in position, have been encountered with the Palax Power 100S models.

The original machined drive belt pulleys were attached to the shaft using only one stop screw. To make servicing operations easier, no glue was applied.

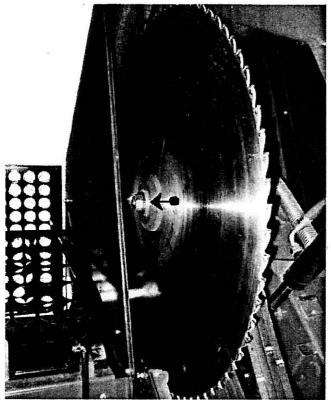
In order to ensure that the pulley stays in position, the factory has started using drive belt pulleys with tapered sleeve attachment (Taperlock®).

In addition we recommend replacing the belts between the intermediate shaft and the saw-blade shaft with belts slightly shorter than the original ones (SPA1800). To make the replacement operation, the factory will provide all buyers of this model with a pack including all parts required.

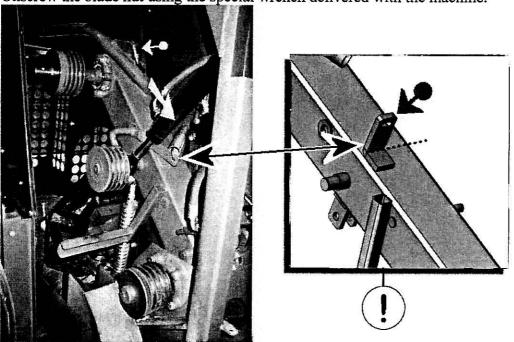
All the work stages related to changing the drive belt pulleys and the drive belts are presented in this document.



Open the door, 3 pcs of M8 screws.

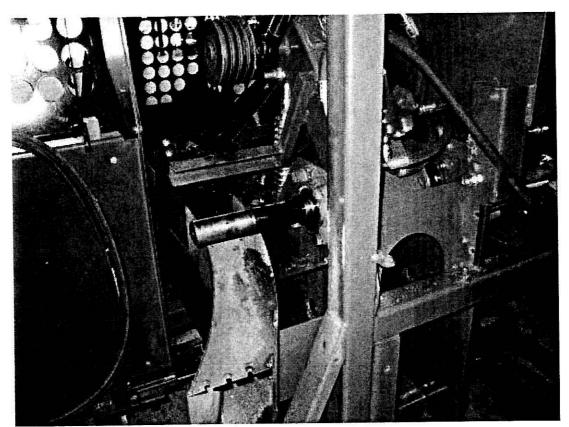


Unscrew the blade nut using the special wrench delivered with the machine.

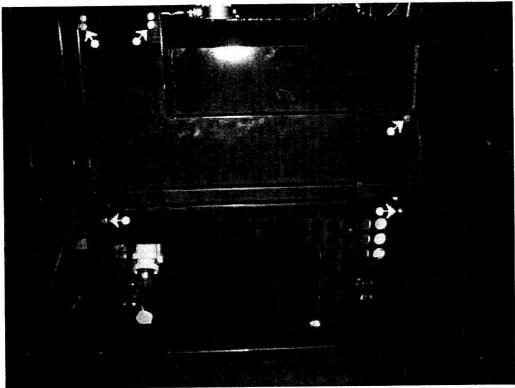


Disconnect the tightening spring. Some of the machines are equipped with an adjustment screw at the top end. Undoing this screw makes release of the spring easier. *Note! During assembly, tighten the belt to its original tightness by means of the spring.* Remove the drive belts and the stop screw for the drive belt pulley. Remove the drive belt pulley. If necessary, use an extraction tool as an aid.

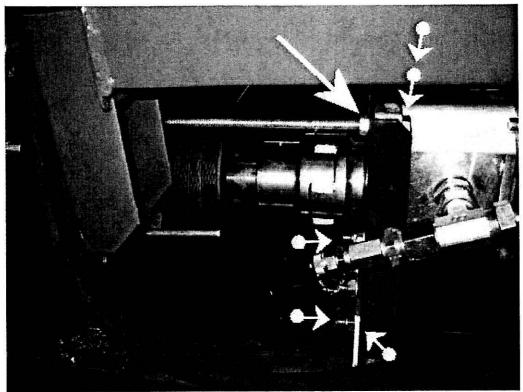
NOTE! The lug marked with a red arrow in the picture above indicated by an exclamation mark, must be cut in order to make space for the shorter drive belts and the tightening device. In the picture on the left-hand side above the lug has already been cut.



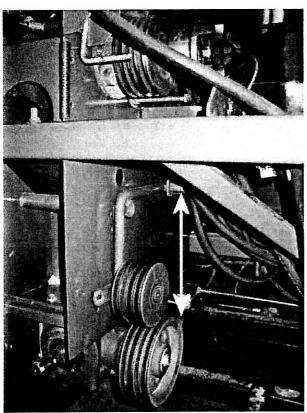
The drive belt pulley after removal.



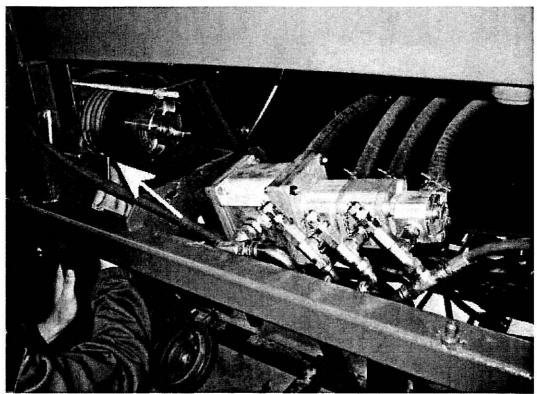
Remove the attachment screws (M8) for the rear covers and remove the cover plates.



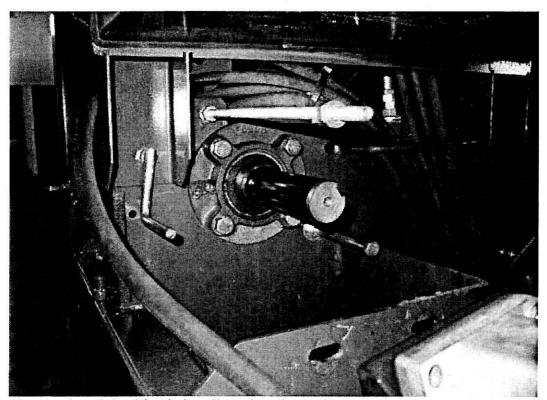
Disconnect the pump group. The hoses do not need be disconnected.



Loosen the drive belts by removing the tightening spring. Remove the drive belts.



Remove the stop screws for the claw-clutch and the drive belt pulley. In the drive belt pulley the screw is located in the bottom of the belt groove. If necessary, use an extraction tool to remove the parts.



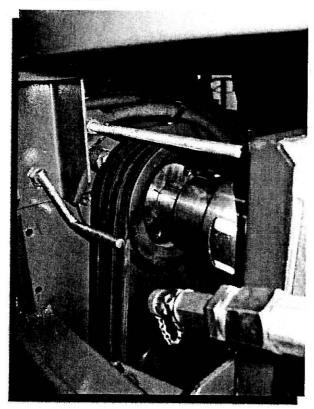
The clutch and the drive belt pulley after dismantling.

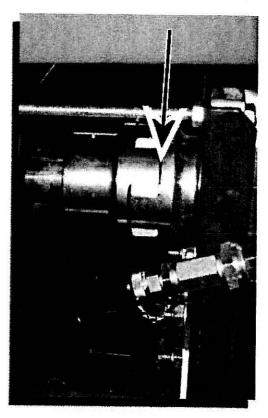
After this, clean the shaft thoroughly using, for example, acetone.

After cleaning up the shaft, put the new Taperlock® drive belt pulleys in place. Place the screws in the holes on opposite sides and tighten them smoothly in turns, until the torque of both screws reaches about 40 Nm.

After this, assemble the unit in reverse order.

Put the original drive belts for the machine between the electric motor/angular gear and the intermediate shaft.



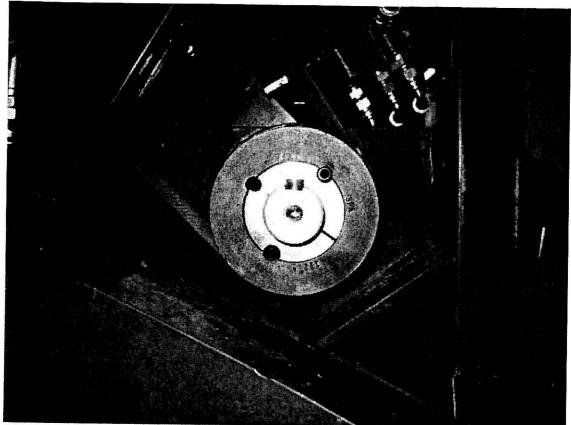


The pump after assembly. Remember to put the drive belts in place before installing the pumps.

During installation of the pump, ensure that the pump shaft and the intermediate shaft of the blade-shaft are positioned absolutely in line. If they are not in line, the claw-clutch of the pump will be subjected to unnecessary strain. This will make the claw-clutch rubber wear out prematurely or may even destroy it. Leave a small gap of at least 1.5 mm between the claw-clutch flanges (arrow).

Finally, put the tightening spring for the drive belts in place.

After installation of the drive belts for the pump, you can put the rear covers back in place.



Also install the other drive belt pulley as instructed above.

After that you can install the slightly shorter drive belts which were included in the parts package. Finally, put the tightening spring in place and tighten the belts using the adjustment screw (if your machine is provided with one).

After this you can attach the blade and shut the door.