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The following documentation shows one method used to tap the dual-mass flywheel holes using a 5/16-24 tap (and the use of a pin for aligning). Though your method and available equipment may vary, the idea here is to ensure the hole in the flywheel is aligned for the tap, and that you have some method to ensure a strait tap. In my case a friend with commercial metal machinery volunteered his equipment and his expertise. As in the process to drill out the original flywheel rivets, the use of a slow (very) drill press is desired unless you have other tapping equipment.

In the picture, below, the flywheel is placed on the drill press bench and two bars are used to raise the flywheel just to ensure the aligning pin and tap have extra travel room. (The bars are obviously exact dimensions to each other to ensure the flywheel is still in perfect alignment – parallel to the bench surface and perpendicular to the drill press)



Next, in the picture below, the flywheel was clamped down. The point being that in your setup that you use some sort of clamp to keep the flywheel from moving while the tapping is performed.



The drill press bench in this case could be moved left/right, forward/back in order to find the exact center of the hole. A pin of the exact existing hole dimension was used to center things up and lock down the bench. So now the bench is lined up and locked, along with the flywheel being clamped down as well. Nothing should move when the tap is made. My friend, being the machinist that he is had numerous sized pins and if I recall the pin that fit the hole was number 281. In the picture below the pin is shown inserted into the hole so the hole is now perfectly aligned for the tap bit. (You may find some other source to use instead of a pin for this aligning process...)



In the picture below the pin has been removed and the tap bit inserted, greased applied to help hold any metal chips. The drilling is performed at a very, very slow revolution. Once the first part of tap grips the material and cuts several threads within the hole it should continue to tap on its own (that is, let loose of the drill press handle and it should continue). Stop and reverse when the tap is made. Clean off the grease and the embedded chips that it may be holding. Repeat for the other holes.



Once the holes are tapped the holes are deburred.



In spite of ones best effort there may still be some metal chips in the holes. Compressed air was used to blow out the holes. The air will blow out some of the grease within as well. A newspaper as placed underneath to keep capture the mess (grease and any chips).



Now the flywheel should be ready to mount on the engine, once all other engine/plate preparations are performed.

The end