

Technical Tip 138 – Centering pulleys

They say one is never too old to learn - I had this learning lesson last week. I'm busy assembling an oldish engine, which like many engines, doesn't have an oil seal on the timing chain cover. They have a reverse tread which stops the oil from escaping. When one reads the workshop manuals they emphasise that the timing chain cover must be centralised so the gap around the pulley is equal. What they don't tell you is how you do this.

Last week I visited an engineering shop with some machining and showed the pulley and cover to the German (don't mess with me) owner. He pointed out some scrape marks on the pulley because it hadn't been centralised. He also pointed out that if it isn't centralised it will leak oils as it needs the air gap to create a suction to suck in the air to hold the oil back. If the pulley touches the side of the cover it will break the suction allowing the oil to leak.

He then showed me a simple way to centralise it. Wrap some masking tape around the pulley until it's a tight fit. Fit the chain cover to the engine leaving the bolts loose. Fit the pulley with masking tape around it, then tighten the bolts. Remove the pulley and masking tape and refit the pulley without the tape and walla, an equal air gap.

Now why couldn't I think of that?

