Warning

“Dry Start” Chain Driven Engines

Modern timing chains and kits are far more sophisticated than ones from previous decades, in particularly V block applications. Modern engines are now higher revving, light weight construction, including the timing chain set up. Simplex chains with thermo plastic guide facings are now the norm and are subjected to far greater loads and heat than ever before.

Modern timing chain tensioners receive their oil feed via very small inlet port(s), typically between 0.5mm – 1.5mm in diameter. Being that tensioner(s) are now the main source of load on the timing chains it is critical to ensure a clean oil feed and the correct oil pressure feed is provided to ensure the longevity of timing components.

“Dry Start” failures typically present as stretched timing chain(s) and guide(s) that appear burnt with an excessive timing chain track wear marks on the thermo plastic facing.

To avoid “Dry Start” failures it is best practice to follow a few simple rules:

1. Ensuring all oil feed galleries are clean and free of sludge build up within the oil gallery feed.
2. Ensuring the oil pump is not worn and the oil pressure is correct as per the OEM specification
3. Timing chain(s) and componentry are properly lubricated prior to installation. Engine oil is only recommended on the timing chain(s) with all the thermo plastic guide facings installed with a liberally amount of assembly grease
4. Changing of the engine oil and filter
5. Install as per the OEM specifications