



### Frame Driven Lube Oil Pumps

The frame lube oil pump is driven by the chain drive system at the auxiliary end of the frame. The lube oil pump sprocket and the crankshaft sprocket are sized so that the pump is running at the correct speed when the frame is running at rated speed.

Oil pump discharge pressure is held nearly constant by a spring loaded regulating valve within the pump head. Lube system pressure can be raised or lowered by adjusting this valve. Normal pressure on the discharge side of the lube oil filter is set at the factory at 60 PSI when the crankshaft speed is greater than half rated speed. If oil pressure drops below 50 PSI, the reason should be found.

The larger frames, KBU:Z and KBB:V, utilize an external pressure relief valve located downstream of the lube oil filter. The external pressure relief valve is used to set the system pressure. The regulating valve located on the main lube oil pump is to be set fully closed.

If the crankshaft speed is less than 50%, there will not be enough flow through the pump to maintain proper lube oil pressure to the frame - an auxiliary lube oil pump will be needed.

The frame oil pump may require removal due to torsional vibration concerns. Please refer to the [Auxiliary End Pump Removal](#) topic for further information.