## **Chain Lubrication**

In order to obtain the maximum service life of a roller chain, which consist of a series of connected rolling metallic bearings, you will have to properly lubricate the chain with a good grade of clean petroleum oil that does not contain any additives.

Oils that contain additives will leave a varnish or gum deposit which will prevents the oil from entering the joints of the chain. Do not use heavy oils or greases as they are generally too thick to enter the joints of the chain and will prevent proper lubrication.

With proper lubrication a layer of oil will be formed between the pins and bushings in the joints of the chain, similar to a layer of oil that is formed between journal bearings. The viscosity of the lubricant will greatly affect its ability to properly lubricated each joint, pin and bushing in the chain.

The use of a high viscosity oil will allow a more efficient flow of oil between the chains link plates and will also result in better lubrication of the fill pin-bushing area. The use of a high viscosity oil will also help minimize metal to metal contact. The lubricant will also help provide a more sufficient form of cooling and impact dampening at higher speeds. This will also prevent premature wearing of the chain.

Do not apply oil to the rollers only as this will not lubricate the pin bushing joints and can cause chain elongation due to wear. The elongation of the chain is usually a result from wear on the pin and bushing surfaces of the chain and not the rollers.