

## Aux End Pump Removal

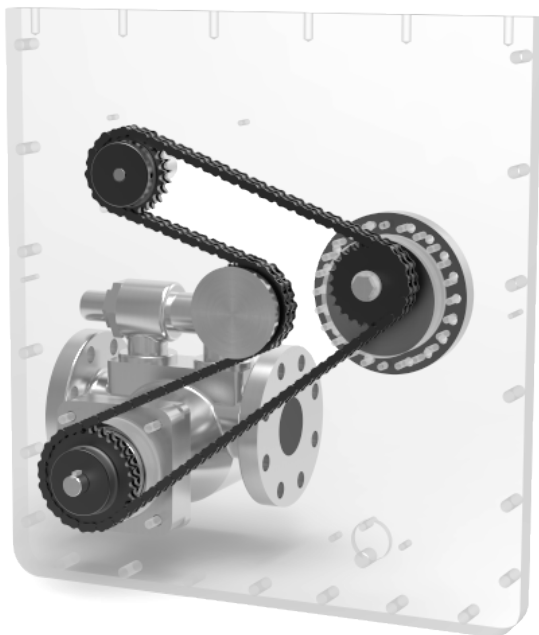
Both the frame oil pump and the cylinder force feed lubricator pump(s) are located on the auxiliary end of the compressor frame. These may be removed, and electric motor driven, for various reasons.

Ariel offers an electric motor driven cylinder force feed lubricator pumps in place of the chain driven cylinder force feed lubricator pumps. This option is for two purposes; for customer preference and for torsional considerations at the auxiliary end of the compressor.

If this is for a torsional consideration, both the cylinder force feed lubricator pump and the frame oil pump must be removed from the auxiliary end.

Some frames utilize a single chain for both the cylinder force feed lubricator pumps and the frame oil pump. Larger frames utilize a dual chain, one for each pump system. When the electric motor drive cylinder force feed lubricator pump option is purchased and the frame uses a single chain system, a fully functional lube box, without lubricator pumps, will remain as a chain idler where the cylinder force feed lubricator pumps were located.

**Figure: Single Chain Drive**



**Figure: Dual Chain Drive**



Frame	Throws	Chain Configuration
JG, JGM:N:P:Q:A:R:J	All	Single
JGH:E:K:T	2,4	Single
JGE:K:T	6	Dual
JGC:D:F	2,4	Single
JGC:D:F	6	Dual
KBZ:U:B:V, JGZ:U:B:V	All	Dual

Ariel offers an option for Pumps Removed, No Chain Drive System. This option is for both customer preference and for torsional considerations. If the chain drive system is removed from the auxiliary end of the compressor, the electric motor driven cylinder force feed lubricator pump option must be purchased. The frame oil pump will be removed along with the chain system and will not be provided (packager must provide electric driven frame oil pump assembly).

Operation below half of the frame max rated speed does not require a separately driven cylinder force feed lubricator pump. When the compressor speed is reduced, the cylinder lubrication demand reduces and matches the cylinder force feed lubricator pump supply at the reduced speeds. Operation below half of the frame max rated speed does require additional frame oil supply flow, through a separate auxiliary frame oil pump, provided by the Packager.

When the cylinder force feed lubricator pumps are electric motor driven and the compressor is driven by a VFD motor, consideration should be given to operating the electric motor driven cylinder force feed lubricator with a VFD. The cylinder lubrication demand varies directly with the operating speed of the compressor.

Pumps can be removed during packaging or after field installation if necessary. Ariel offers blind cover plates for the different pump locations. For a single chain system, both the cylinder force feed lubricator pump and frame oil pump must be removed as idler sprockets are not available.