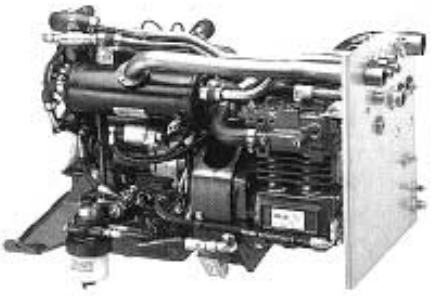
Ogura Clutches Allow Multiple Components To Run On Auxiliary Power Systems

Simple control switch

The rising cost of diesel fuel has caused most trucking companies to add a fuel surcharge to basic freight costs. Some operators have had problems being profitable because of the high cost of fuel. Many long haul drivers with sleeper cabs, keep their trucks idling when parked, for heating and cooling of their cabs, for brake air pressure, and to power conveniences like microwaves, televisions, personal computers and radios.



Complete packaged system

Companies are now making auxiliary climate control and power systems. Those replace the truck's main engine when supplying low power requirements. The system literally replaces the four 12-volt batteries that are located in a battery box, mounted on the side of the truck cab. It has a small 19 HP, efficient (uses only a quart of fuel per hour), water-cooled diesel engine, which powers the following:

1. An air compressor (with an Ogura clutch) maintains air brakes and air suspension. The truck's electric starters are also replaced with an air motor to start the main engine.

2. A generator for instruments, lighting, and other accessories. There is another advantage with eliminating the truck's main batteries...battery replacement cost. This is because the large batteries may only last six months because the lead plates inside are shaken apart by the shock and vibration over the road.

3. An air conditioning compressor (with an Ogura clutch) takes the place of the one on the main engine when the main engine is shut down.

4. An oil pump (with an Ogura clutch) is used to pre-lube the main engine before starting to reduce the wear from dry starts (and we all know how painful that can be).

5. For cooling, a small DC motor drives the truck's radiator fan when the main engine is not running. An Ogura clutch is used to uncouple this motor from the fan drive when the main engine is running.

By using Ogura clutches, the gas engine powers the component (compressor, pump, fan) only when needed. This reduces the power required from the engine and greatly increases the life of the components. There is a side benefit to the water-cooled, auxiliary engine. Its coolant is circulated through the truck's main engine to keep it warm to make starting easier, and to provide heat for the truck cab.

This auxiliary power system provides an 80% fuel savings over the cost of "non-operational" idling. It also reduces engine wear, air and noise pollution caused by the idling main engine. Ogura clutches help to save fuel, maintenance expense and the environment, while providing reliable comfort and convenience.

Truck with system built in