

Rockford® Clutch



Rockford® Fan Clutches



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Rockford® introduced its first on-highway Class 8 truck fan clutch over 40 years ago and has continued to apply and refine the technology for off-highway applications ever since.

Today, our line of high-performance fan clutches continues to set the standard for reduction of fuel consumption and fan-generated noise, prolonged engine life, fast warm up and improved productivity.

Rockford's unique variable speed technology enables our fan clutches to respond to changes in the engine cooling demands by varying the fan speed. This is accomplished by using a stand-alone control system or through today's high-tech engines' ECMs. This allows the fan to slow down or speed up as necessary, utilizing less working horsepower from the engine and lowering fuel consumption.

Our patented fan clutch is offered in various sizes. Each fan clutch series number relates to its relative size within the product family.

We currently offer fan clutches for engines from 400 to 4,000 horsepower which use cooling fans from 10 to 300 horsepower.



Series 125 (10 – 40HP)



Series 170 – 200 (20 – 90HP)



Series 270 (80 – 150HP)



Series 370 (150 – 300HP)

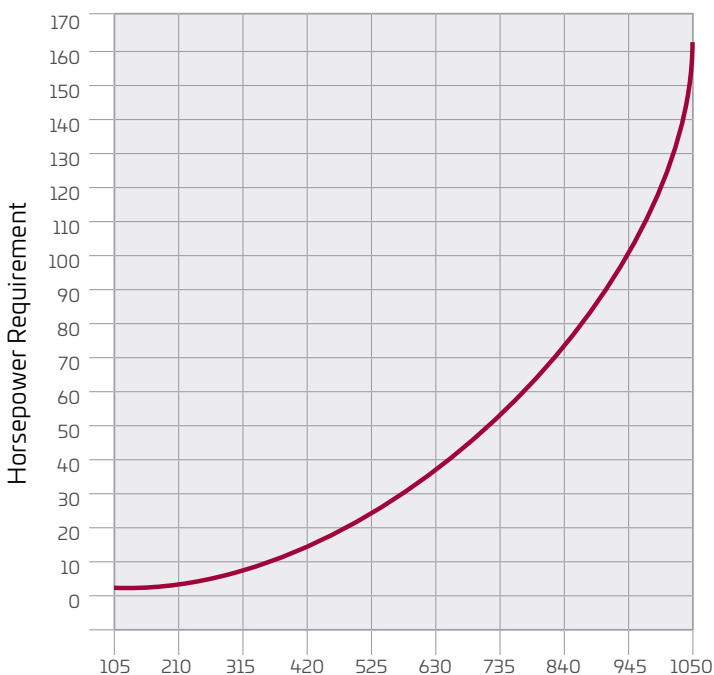
BENEFITS

- ▶ Increases fuel economy and usable horsepower
- ▶ Reduces decibel rating for noise regulation
- ▶ Reduces radiator sandblasting
- ▶ Increases productivity
- ▶ Permits programmed fan speed clipping at high engine speeds
- ▶ Reduces fan blade erosion
- ▶ Eliminates shock load on engine components
- ▶ Reduces noise for enhanced operator comfort
- ▶ Increases fan belt life
- ▶ Speeds up engine warm-up in cold temperatures

Typical sizing data

| Series | Description/Application | Cooling Fan HP | RPM |
|-------------------|--|----------------------|-------------------|
| Series 125 | The Series 125 is a variable Rockford fan clutch. It is designed for industrial and off-highway applications. It is used where space limitations are critical, and is intended to interface with current or future electronics control technology. | 10 – 40 Horsepower | 1,000 – 2,600 RPM |
| Series 170 | The Series 170 Rockford fan clutch is designed for medium to lighter duty off-highway and industrial applications. This oil-actuated fan clutch enables vehicle efficiency gains and aids in noise reduction applications. | 20 – 60 Horsepower | 600 – 2,100 RPM |
| Series 200 | The Series 200 Rockford fan clutch is designed for medium duty off-highway applications and industrial applications. This fan clutch enables vehicle efficiency by minimizing parasitic load on the engine and reduced warm up time. | 40 – 90 Horsepower | 600 – 2,100 RPM |
| Series 270 | The Series 270 Rockford fan clutch is designed for heavy-duty off-highway applications. This fan clutch provides efficiency through on demand cooling in large applications. The effects of over cooling are reduced in cold weather applications. | 80 – 150 Horsepower | 900 – 1,200 RPM |
| Series 370 | The Series 370 Rockford fan clutch is designed for the largest applications. This is the newest addition to the Rockford product line. This fan clutch was developed to meet the cooling demands of the largest off-highway applications. | 150 – 300 Horsepower | 100 – 900 RPM |

Fan blade rpm vs. horsepower



This graph, taken from actual test data, is intended to be used only for the expressed purpose of illustrating the rapid rise in fan horsepower requirements as related to fan speed.

Actual fan horsepower requirements in any given application are dependent upon many variables not duplicated during the test, such as use of a shroud, shroud design and configuration, radiator proximity, etc.

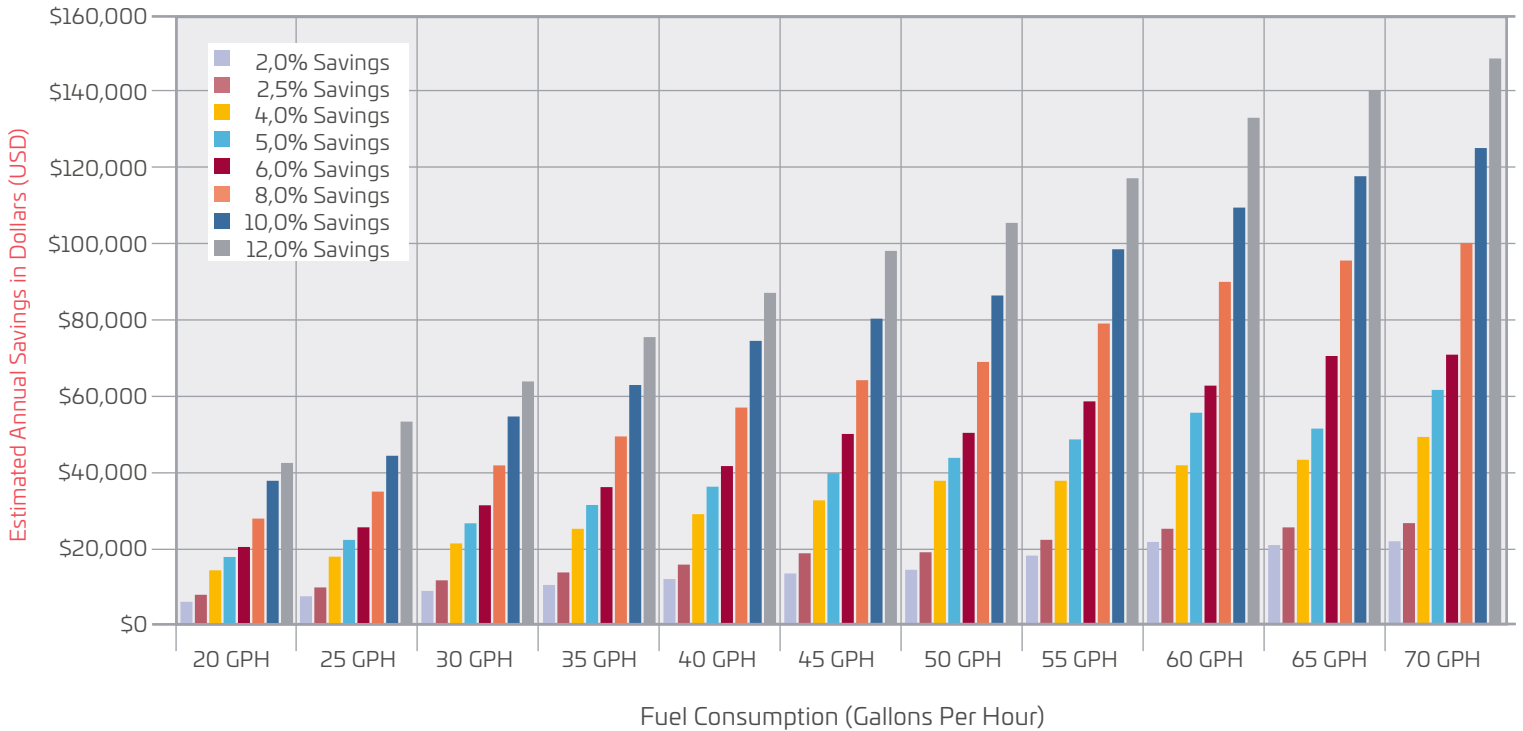
Intended for illustrative purposes only.

Fan Speed (RPM)
(Data furnished by fan manufacturer)

TYPICAL FUEL COST SAVINGS

BASED ON 6,000 HOURS/YEAR AT \$3.00/GALLON

An ISO 9001 Registered Firm



EXAMPLE:

An engine uses 40 GPH of fuel and the Rockford Fan Clutch gives an 8% fuel savings which yields 3.2 GPH fuel saved. (40 gal/hr * 8% = 3.2 gal/hr). If the cost of fuel is \$3.00/ gal then the saving per hour is \$9.6/hour. (3.2 gal/hr * \$3/gal)

NOTE

Reading the Chart shows the orange bar sits where 40 GPH & 8 % intersect. The bar height reads at your dollar savings at 6000 hours of operation. This savings is \$57,600.

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