



SURFACE VEHICLE RECOMMENDED PRACTICE

J635™

JUN2018

Issued 1951-01
Revised 2014-03
Stabilized 2018-06

Superseding J635 MAR2014

Fan Hub Bolt Circles and Pilot Holes

RATIONALE

Technology is mature and no further revision needed.

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1. SCOPE

This Recommended Practice applies to engine cooling fans up to 2000 mm in diameter with a mounting interface consisting of a pilot hole and a circular bolt pattern. Most of these fans are belt, gear, clutch, hydraulically, or electrically driven.

1.1 Purpose

The purpose of this SAE document is to encourage the standardization of mounting patterns for engine cooling fans. A secondary purpose is to encourage adoption of SI metric units, although a listing of existing common English unit mounting patterns (legacy patterns) is provided. It is specifically not the objective of the specification to address the soft metric conversion of existing mounting patterns on engines designed in English units. Adherence to this specification should result in cost savings through reduction of part numbers and inventory, and more robust fan design. Failure to comply with this specification will result in the need to release and carry in inventory parts of identical blade geometry and construction, but with different mounting patterns.

2. REFERENCES

There are no referenced publications specified herein.

3. APPLICATION

3.1 Fixed Drive Mounting Patterns

Table 1 lists several bolt circle patterns for each pilot (refer to Figure 1 for definitions). Since large, flat center sections of fans with small pilots and bolt circle diameters are prone to fatigue-related failures from first-mode flexure, it is recommended that the largest diameter bolt circle be chosen, consistent with available space or hub size, to ameliorate such problems.