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Current Language: English Last Modified: 3/15/2022
Other Languages: NONE Author: Anthony Tondola
Viewed: 126

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Coding Information

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Title: MV - Engine Viscous Fan not Disengaging

Applies To: MV with 0012TSY and 6-blade fan

CHANGE LOG

Please refer to the change log text box below for recent changes to this article:

03/10/2022 - Initial Article Release

DESCRIPTION

This document will guide the user through replacing the original 6-blade fan with a 9-blade fan. In some cases, the original fan does not provide enough drag for the viscous fan clutch to warm up and unlock. Installing the 9-blade fan blade increases the drag, allowing the viscous fan clutch to unlock properly.

NOTE:

This repair only applies to MV units built before **9/17/2021** that are equipped with a 6-blade fan. Units built after this date will already have a 9-blade fan installed.

SYMPTOM(s)

Customer Observations or Concerns:

- Engine fan running at all times

SPECIAL TOOL(s) / SOFTWARE

Tool Description	Tool Number	Comments	Instructions
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N/A	N/A		

[Tools Resource Center](#)

SERVICE PARTS INFORMATION

Kit Description	Part Number	Quantity Required	Notes
FAN, ENGINE COOLING, 27 IN DIA	3676303C1	1	9-Blade Fan

WARNING! To prevent property damage, personal injury, and / or death, park vehicle on a hard, flat surface, turn the engine off, set the parking brake, and install wheel chocks to prevent the vehicle from moving in either direction.

WARNING! To prevent property damage, personal injury, and / or death, if the vehicle must be raised, do not work under the vehicle supported only by jacks. Jacks can slip or fall over.

WARNING! To prevent personal injury and / or death, always wear safe eye protection when performing vehicle maintenance.

WARNING! To prevent property damage, personal injury, and / or death, keep flames or sparks away from vehicle and do not smoke while servicing the vehicle's batteries. Batteries expel explosive gases.

WARNING! To prevent property damage, personal injury, and / or death, remove the ground cable from the negative terminal of the battery box before disconnecting any electrical components. Always connect the ground cable last.

DIAGNOSTIC STEP(S)

Step	Action	Decision
1	Verify diagnostic steps are applicable	Yes. Proceed to step 2.
	Is the unit an MV equipped with 0012TSY - (FAN DRIVE {Borg-Warner SA85} Viscous Type, Screw On)?	No. This article does not apply. Refer to the appropriate diagnostic manual and diagnose as necessary.

Step	Action	Decision
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2	<p>Verify build date</p> <p>Was the unit built prior to 9/17/2021 and equipped with a 6-blade fan?</p>	<p>Yes. Remove the 6-blade fan and replace with a 9-blade fan. (Refer the appropriate MV technician manual for removal and installation instructions)</p> <p>Proceed to step 3</p> <p>No. This article does not apply. Refer to the appropriate diagnostic manual and diagnose as necessary.</p>
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Step	Action	Decision
3	<p>Retest for the condition</p> <p>Run the unit long enough to allow the viscous clutch to warm up and disengage.</p> <p>Is the fan still fully engaged at all times?</p>	<p>Yes. Replace the fan clutch and retest.</p> <p>No. Repair complete.</p>

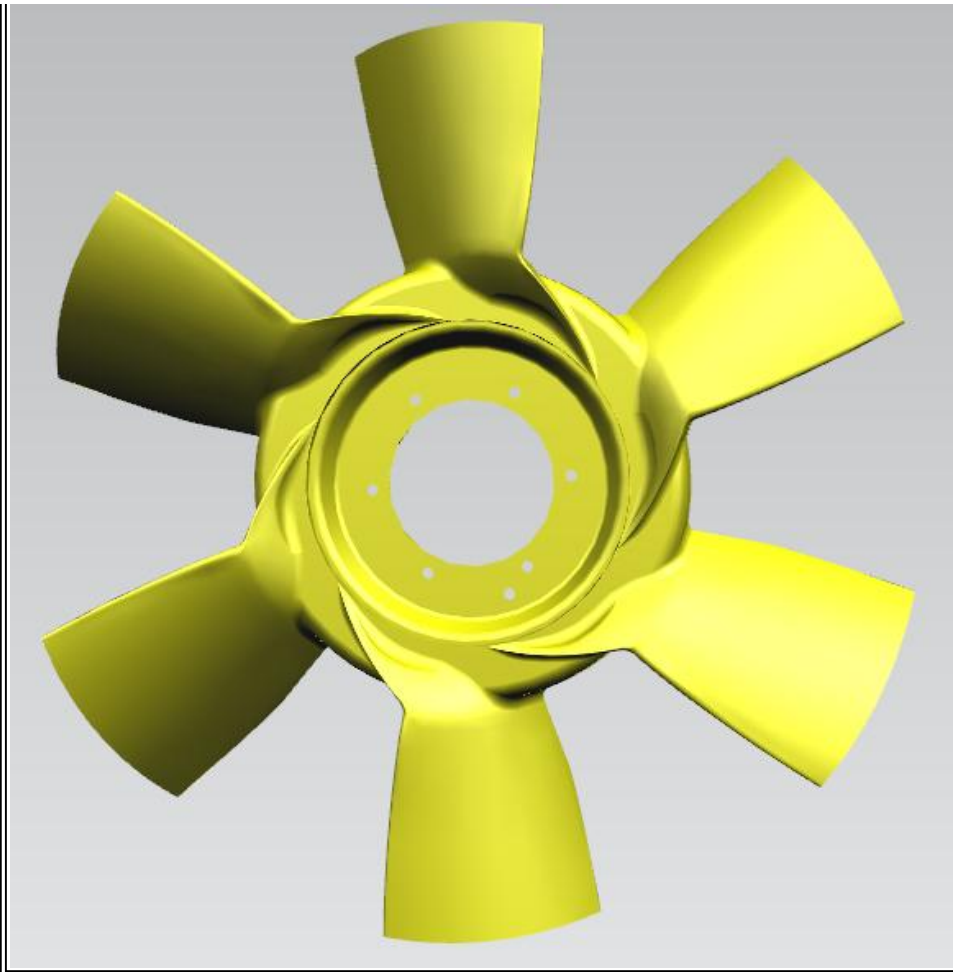


Figure 1: Original 6-blade fan



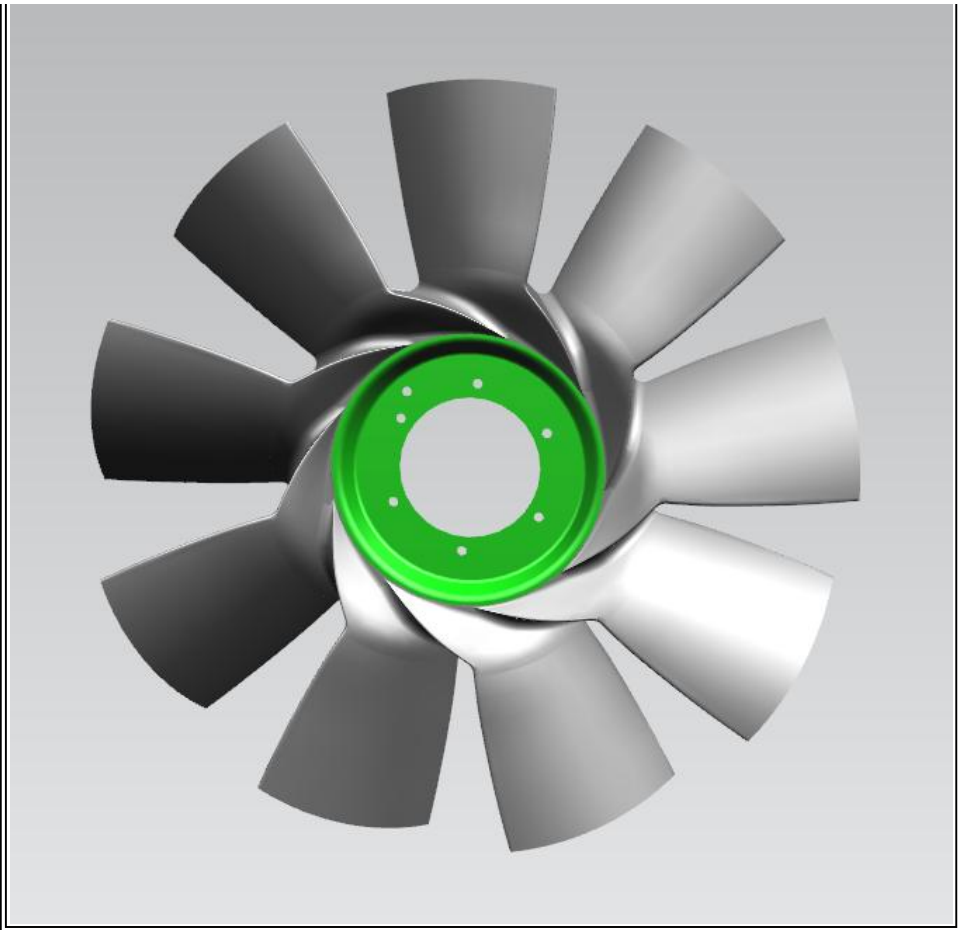


Figure 2: Replacement 9-blade fan

WARRANTY INFORMATION

Warranty Claim Coding:

Refer to the [Warranty Coding Manual](#) for Group and Noun Codes.

Standard Repair Time(s):

Refer to the [SRT Manual](#) for Repair Times

OTHER RESOURCES

[Master Service Information Site](#)

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