

## 2004–2009 Mazda 3 2.0/2.3L and 2006–2010 Mazda 5 2.3L Piston Replacement Compressor for OE Rotary Vane Style: 6511699

Based on commonly reported issues in the automotive market, gpd has redesigned the 2004–2009 Mazda 3 2.0/2.3 L and 2006–2010 Mazda 5 2.3L compressors.

## THE PROBLEM

The OE compressors in these Mazda models mount on the oil pan at the bottom of the motor. When the vehicle is not moving, oil often drains to the compressor. Even when the system in proper working condition, the compressor is under a lot of stress due to the excess oil and reflective heat from the road.

A key reason, these compressors often fail is because of the rotary vane design in the OE

Oil Drain plug

Compressor

Compressor mounts on the bottom of the engine on the oil pan.

compressor. In rotary vane compressors, the shaft turns the vanes around the wall to create pressure. As shown in the image to the left, the vanes have locked in the housing system, stopping the rotating vanes from creating pressure. This will cause the entire air conditioning system to fail.



Rotary Vane Style Compressor



Piston Style Compressor

## gpd SOLUTION gpd has redesigned the internal workings of the OE compressor to a 10-piston style compressor designed to reduce the risk of premature failure.



6511699 • gpd Piston Replacement Compressor

#42

gpdtechtips.com

Manufacturer names, logos and part numbers are for reference only. All prices, taxes and availability are subject to change without notice. This document and any files transmitted with it are confidential and intended solely for the use of the individual or entity to which they are addressed. If you have received this document in error, please delete it immediately. Note that any views or opinions presented in this document are solely those of the author. Any unauthorized review, use, disclosure, or distribution is prohibited. Global Parts Distributors, LLC (gpd) accepts no liability for any damage caused by any virus or other means transmitted by this document. © Global Parts Distributors, LLC (gpd)