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# Tech Tip

## Mazda 3 (2004–2009) 2.0L–2.3L engines Mazda 5 (2006–2010) 2.3L engine

gpd has redesigned the internal workings of the compressor fitted to the Mazda 3 (2004–2009) and Mazda 5 (2006–2010) to overcome some of the issues that have arisen with it.



The OE compressor for the Mazda 3 (2004–2009) and Mazda 5 (2006–2010) mounts on the bottom of the engine on the oil pan.



This compressor also is the lowest point of the air conditioning system. When the vehicle is not moving, all the oil drains to it. Factor in the reflective heat for the road, this compressor is under a lot of stress when the system is working properly.



The OE compressor is a rotary vane type compressor, when the shaft turns the vanes move around the wall to create pressure. As you can see by this example, the vanes have locked into the housing so it will not generate pressure, causing the air conditioning system not to work.

gpd has redesigned the internal workings of the compressor to a 10 piston style to help reduce the risk of premature failure.





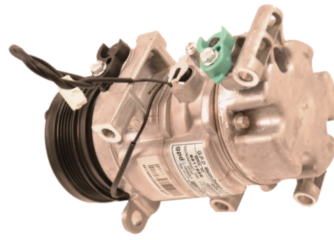
## gpd Piston Replacement Compressors

*"Your Simple A/C Solution" to problem compressors!*



**6512653**

Piston replacement for  
2002-2006 Honda CR-V  
Scroll



**6511699**

Piston replacement for  
2004-2010 Mazda 3 and 5  
Rotary Vane



**6512296**

Piston replacement for  
2007-2009 Mazda CX-7  
Rotary Vane



**6512986**

Piston replacement for  
2002-2006 Ford E-Series  
Scroll



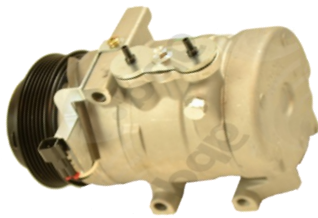
**6512987**

Piston replacement for  
2002-2005 Explorer



**6512652**

Piston replacement for  
2003-2005 Ford Crown  
Victoria Scroll



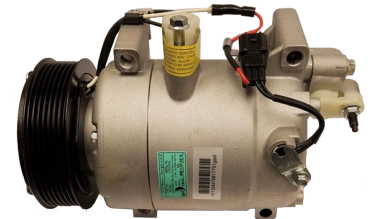
**6512988**

Piston replacement for  
2003-2006 Ford  
Expedition Scroll



**6513243**

Piston replacement for  
2007-2014 Honda CRV  
Scroll



**6513244**

Piston replacement for  
2009-2014 Acura TSX  
Scroll

Scroll compressors have always had issues with low RPM performance and contaminants in the A/C system. gpd's piston design is more tolerable of debris left in the A/C system. It also performs well at lower RPMs. gpd offers piston direct fit replacements for the scroll compressors as well as Piston Replacement Compressor Kits.

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# Piston Replacement Compressor Kits



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#36

Part Number	Application	Year(s)
9645490	Acura TSX 2.4 L4	2009–2010
9645491	Acura TSX 2.4 L4	2011–2014
9632852	Ford E-350 5.4	2002–2005
9632853	Ford E-550 6.8	2003
9633434	Ford E-350 6.0 with Rear A/C	2004–2006
9633435	Ford E-350 6.0 without Rear A/C	2004–2006
9633442	Ford Expedition 4.6 & 5.4 without Rear A/C	2003
9633443	Ford Expedition 5.4 without Rear A/C	2005–2006
9633444	Ford Expedition 4.6 & 5.4 with Rear A/C	2003
9633445	Ford Expedition 4.6 with Rear A/C	2003–2004
9633446	Ford Expedition 4.6 & 5.4 with Rear A/C	2004
9633438	Ford Expedition 4.6 & 5.4 without Rear A/C	2003
9632857	Ford Explorer 4.6	2002–2005
9633436	Ford Explorer 4.0	2002–2005
9633472	Ford Explorer 4.6 with Rear A/C P-nut Rear Expansion Valve	2002–2005
9633473	Ford Explorer 4.6 with Rear A/C; Block Rear Expansion Valve	2002–2005
9633474	Ford Explorer 4.0 with Rear A/C; without Sport Trac; P-nut Expansion Valve	2002–2005
9633475	Ford Explorer 4.0 with Rear A/C; without Sport Trac; Block Rear Expansion Valve	2002–2005
9642410	Honda CR-V 2.4 L4	2002–2006
9648410	Honda CR-V 2.4 L4	2011
9648411	Honda CR-V 2.4 L4	2012–2014
9648412	Honda CR-V 2.4 L4	2007–2008
9648413	Honda CR-V 2.4 L4	2009–2010
9633437	Lincoln Aviator 4.6	2003–2005
9632854	Lincoln Navigator 5.4 with Rear A/C	2003
9633346	Lincoln Navigator 5.4 without Rear A/C	2003
9633439	Lincoln Navigator 5.4 with Rear A/C	2004
9633440	Lincoln Navigator 5.4 with Rear A/C	2005–2006
9633441	Lincoln Navigator 5.4 without Rear A/C	2005–2006
9632855	Lincoln Town Car 4.6	2003
9632856	Lincoln Town Car 4.6	2004–2005

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