2012-2018 Chrysler 3.6L Cylinder Head Misfire Issues

The AERA Technical Committee offers the following information regarding 2012-2018 Chrysler 3.6L Cylinder heads that have come into a shop for having misfire issues. The left bank is known to have the misfires, the codes for these misfires are listed in the table below.

Code Number	Description
P0300	Multiple Cylinder Misfire
P0302	Cylinder 2 Misfire
P0304	Cylinder 4 Misfire
P0306	Cylinder 6 Misfire

The diagnosis if the misfire occurs is to perform a cylinder leakage test first. If any cylinder exhibits a leakage greater than 25% and it is determined that it is a cylinder head related problem due to the valves not sealing, the head should be replaced according to Chrysler. While some member shops have attempted to repair these heads with valve jobs, these attempts are not always successful and lead to comebacks and unhappy customers. AERA has reports that some members have been reconditioning the heads to salvage them versus replacement. The process requires replacement of all the valves, valve seats and valve guides in the head regardless of which cylinder has the misfire to ensure no future issues. It is believed that the root cause is compatibility issues with those components that they are replacing.

If shops choose to take in these cylinder heads for repair, ensure that the above repair is followed to help avoid comebacks. See table below for models and years affected. Chrysler does not state heads above 2013 have the issue but some members have called to report the issue exists beyond 2013.

Years	Models
2011-2013	(JC) Journey
2012-2013	(JK) Wrangler
2011-2013	(JS) 200/Avenger
2011-2013	(LC) Challenger
2011-2013	(LD) Charger
2011-2013	(LX) 300
2011-2013	(RT) Grand Caravan/Town & Country
2011-2013	(WD) Durango
2011-2013	(WK) Grand Cherokee

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