

Chrysler Grand Voyager 2008-2016 Workshop Manual

ENGINE BLOCK

DESCRIPTION

DESCRIPTION

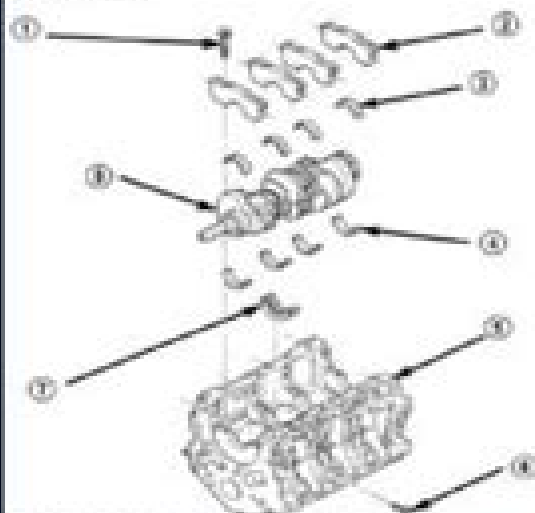


Fig. 185: Cylinder Block & Crankshaft
Courtesy of CHRYSLER LLC

- | | |
|------------------------------|------------------------------|
| 1 - MAIN CAP BOLT - VERTICAL | 5 - CRANKSHAFT |
| 2 - MAIN CAP | 6 - CRANKSHAFT THRUST WASHER |
| 3 - MAIN BEARING - LOWER | |
| 4 - MAIN BEARING - UPPER | |

The cylinder block is made of cast iron with cast-in-place iron liners. The block is a closed design with the right bank three-cylinder high-capacity and improved torque, vibration and hardware (OVS), the block has cast-in-place iron liners, along with powdered metal 6 bolt main caps (4 vertical, 2 horizontal), with a die-cast iron structural frame windings are mounted to the main caps.

CLEANING



Fig. 186: Spark Plug Tube, Rocker Arm Assembly, Camshaft & Seal
Courtesy of CHRYSLER LLC

29. Remove the left cylinder head cover to cylinder head ground strap.
30. Remove the left cylinder head cover. See **Engine/Cylinder Head/COVER(S) Removal**.
31. Remove ten bolts and left rocker arm assembly (2).

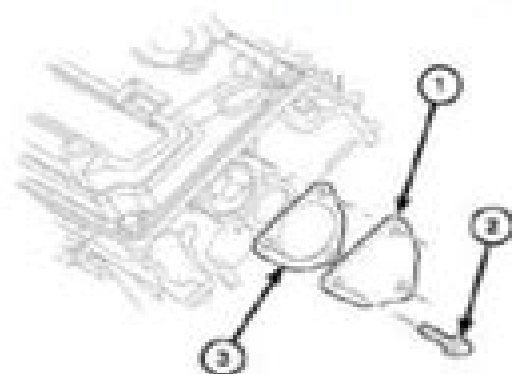


Fig. 187: Camshaft Thrust Plate Gasket
Courtesy of CHRYSLER LLC

32. Remove three bolts (2) and the left camshaft thrust plate (1).

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web these ions are called spectator ions because they do not participate in the actual reaction canceling the spectator ions gives the net ionic equation which shows only those species that participate in the chemical reaction $2\text{Ag}^+ \text{aq} + \text{Cr}_2\text{O}_7^{2-} \text{aq} \rightarrow \text{Ag}_2\text{Cr}_2\text{O}_7 \text{s}$ label 4 2 3

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web chemical equation in which all dissolved ionic reactants and products including spectator ions are explicitly represented by formulas for their dissociated ions molecular equation chemical equation in which all reactants and products are

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web jan 29 2020 the ionic form of this reaction is $2\text{Na}^+ \text{aq} + 2\text{Cl}^- \text{aq} + \text{Cu}^{2+} \text{aq} + \text{SO}_4^{2-} \text{aq} \rightarrow 2\text{Na}^+ \text{aq} + \text{SO}_4^{2-} \text{aq} + \text{CuCl}_2 \text{s}$ the sodium ions

and sulfate ion are the spectator ions in this reaction they appear unchanged in both the product and reactant side of the equation

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web mar 11 2014 solution ionic equation $\text{H}^+ \text{aq} + \text{Cl}^- \text{aq} + \text{Na}^+ \text{aq} + \text{HCO}_3^- \text{aq} \rightarrow \text{H}_2\text{O} \text{l} + \text{CO}_2 \text{g}$ the spectator ions are Cl^- and Na^+
 net ionic equation $\text{H}^+ \text{aq} + \text{HCO}_3^- \text{aq} \rightarrow \text{H}_2\text{O} \text{l} + \text{CO}_2 \text{g}$ here is a video on spectator ions
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web the six $\text{NO}_3^- \text{aq}$ ions and the six $\text{Na}^+ \text{aq}$ ions that appear on both sides of the equation are spectator ions that can be canceled to give the net ionic equation $3\text{Ba}^{2+} \text{aq} + 2\text{PO}_4^{3-} \text{aq} \rightarrow \text{Ba}_3(\text{PO}_4)_2 \text{s}$

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web these spectator ions whose presence is required to maintain charge neutrality are neither chemically nor physically changed by the process and so they may be eliminated from the equation to yield a more succinct representation called a

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 $\text{AgNO}_3 \text{aq} + \text{KCl} \text{aq} \rightarrow \text{AgCl} \text{s} + \text{KNO}_3 \text{aq}$ total ionic $\text{Ag}^+ \text{aq} + \text{NO}_3^- \text{aq} + \text{K}^+ \text{aq} + \text{Cl}^- \text{aq} \rightarrow \text{AgCl} \text{s} + \text{K}^+ \text{aq} + \text{NO}_3^- \text{aq}$ net ionic $\text{Ag}^+ \text{aq} + \text{Cl}^- \text{aq} \rightarrow \text{AgCl} \text{s}$

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web net ionic equations an equation for a reaction in solution showing only those particles that are directly involved in the chemical change spectator ions an ion that is not directly involved in a chemical reaction an ion that does not change oxidation number or composition during a reaction products

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web the equation below is the final net ionic equation after elimination of the spectator ions which yields water $\text{H}^+ \text{aq} + \text{OH}^- \text{aq} \rightarrow \text{H}_2\text{O} \text{l}$ the spectator ions in $\text{KOH} \text{aq}$ and $\text{HNO}_3 \text{aq}$ are $\text{K}^+ \text{aq}$ and $\text{NO}_3^- \text{aq}$ how to identify and list the

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web the ag aq and cl aq ions become agcl s but the na aq ions and the no 3 aq ions stay as na aq ions and no 3 aq ions these two ions are examples of spectator ions ions that do nothing in the overall course of a chemical reaction

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web aug 8 2022 a spectator ion is an ion that does not take part in the chemical reaction and is found in solution both before and after the reaction the net ionic equation is the chemical equation that shows only those elements compounds and ions that are directly involved in the chemical reaction

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