



# Service Bulletin

File in Section: -

Bulletin No.: PI1041A

Date: October, 2013

## PRELIMINARY INFORMATION

**Subject:** Information on Water Pump Replacement

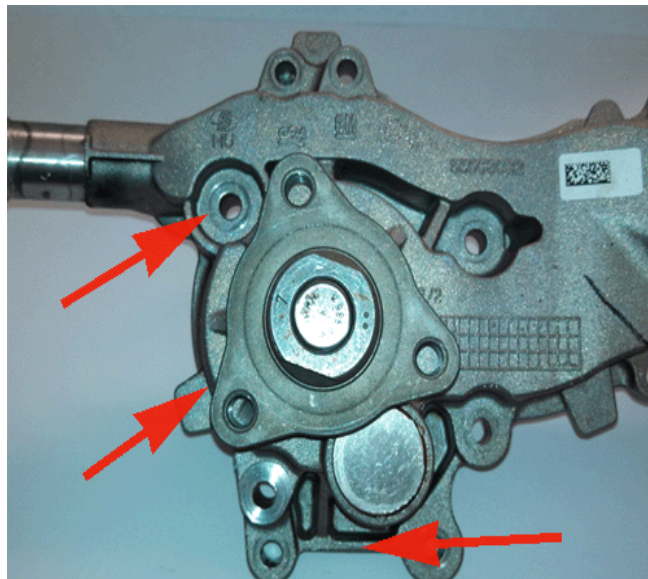
**Models:** 2013-2014 Buick Encore Equipped with Engine RPO LUJ, LUV  
2014 Cadillac ELR Equipped with Engine RPO LUU  
2011-2014 Chevrolet Cruze Equipped with Engine RPO LUJ, LUV  
2011-2014 Chevrolet Volt Equipped with Engine RPO LUU  
2012-2014 Chevrolet Sonic Equipped with Engine RPO LUJ, LUV  
2013-2014 Chevrolet Trax Equipped with Engine RPO LUJ, LUV

This PI has been revised to update the Models section to add the Cadillac ELR and the Chevrolet Volt. Please discard PI1041.

The water pump is one area that is normal to get some seepage at the bearing shaft seal. The water pump has a reservoir that collects the coolant seeping from the front seal and allows it to evaporate off. The reservoir plug may not be sealed, allowing some coolant to seep past the plug giving the appearance of a coolant leak due to the staining of coolant around the plug. If the water pump is not leaving a trail of coolant going down the front of the engine nothing further should be done.

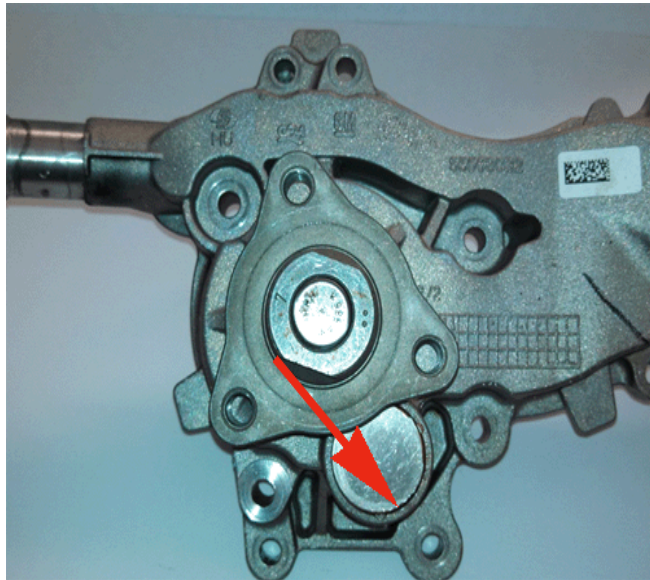
### Normal Water Pump Appearance (Do Not Replace Pump)

If the water pump housing shows minimal coolant deposits as shown below, do not replace the pump. The water pump is functioning as designed.



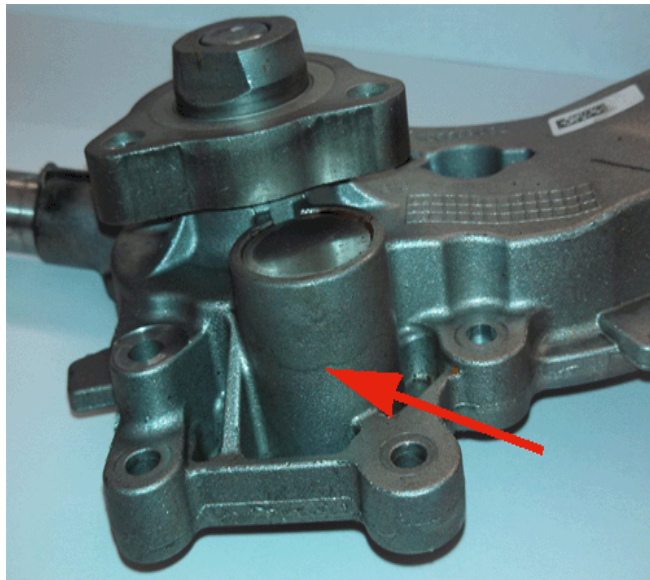
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- No evidence of coolant leakage on the pump body.



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- Slight coolant staining around the perimeter of the cover plate.

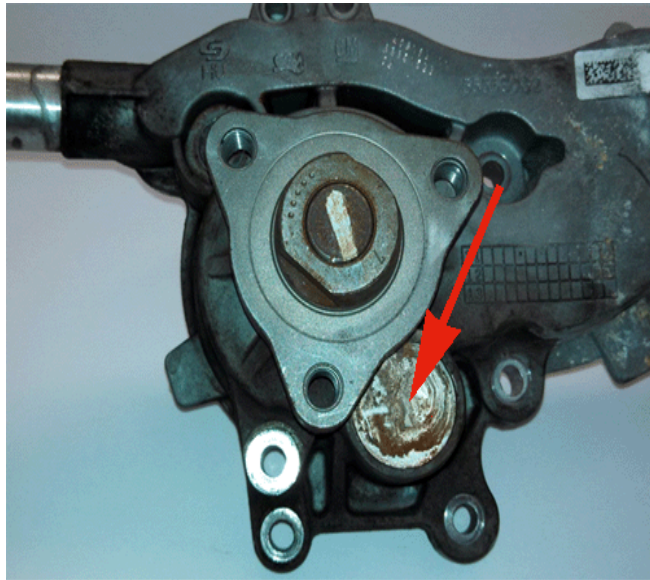


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- Slight coolant staining on the underside of the housing.

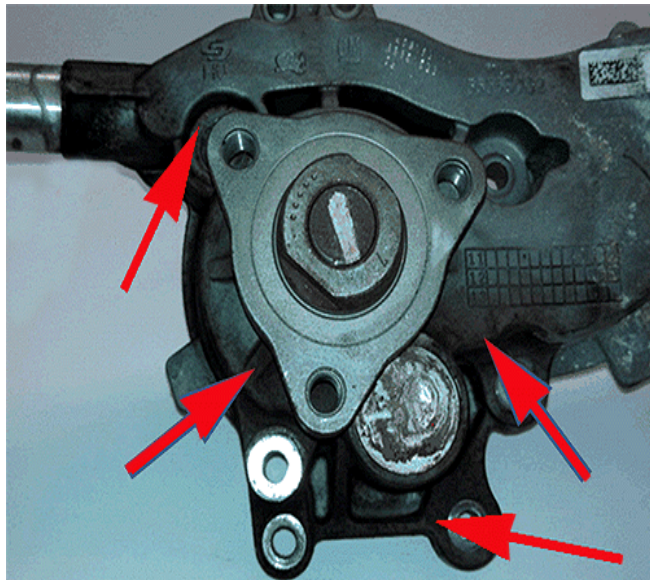
**Excessive Water Pump Coolant Deposits (Replace Pump)**

If the pump housing displays excessive evidence of leaking as shown below, replace the pump. Refer to Water Pump Replacement in SI.



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- Significant coolant residue on the cover plate.



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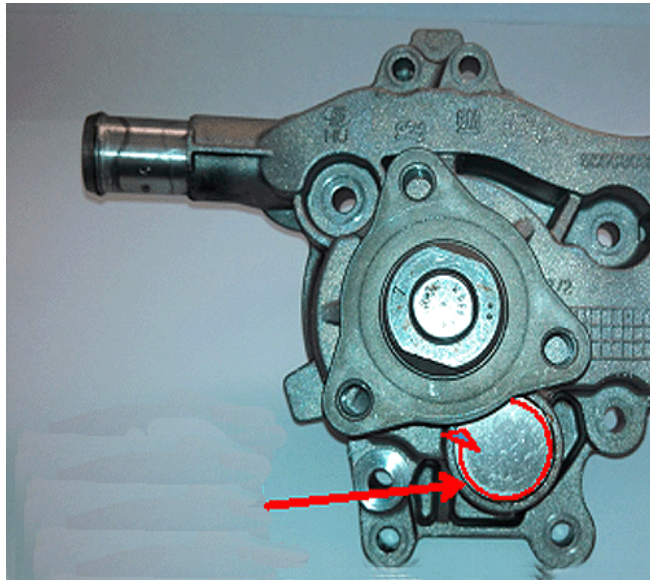
- Evidence of coolant residue on the exterior surfaces of the pump housing.

#### **Additional Steps When Replacing the Water Pump**

When installing a new replacement water pump, the reservoir cover should be sealed before installation using this procedure.

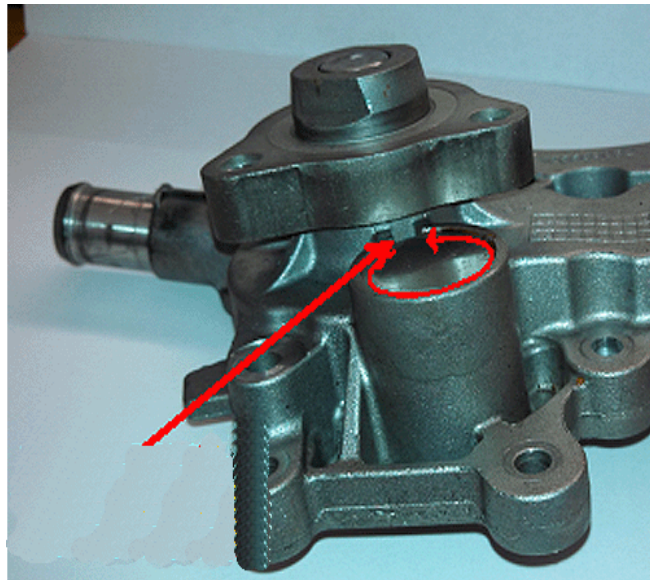
1. Use GM Low VOC Brake Parts Cleaner, P/N♦19287401 (in Canada, P/N 88901247) or an equivalent, to clean the area around the cup plug on the replacement pump assembly.
2. Dry the area with compressed air.





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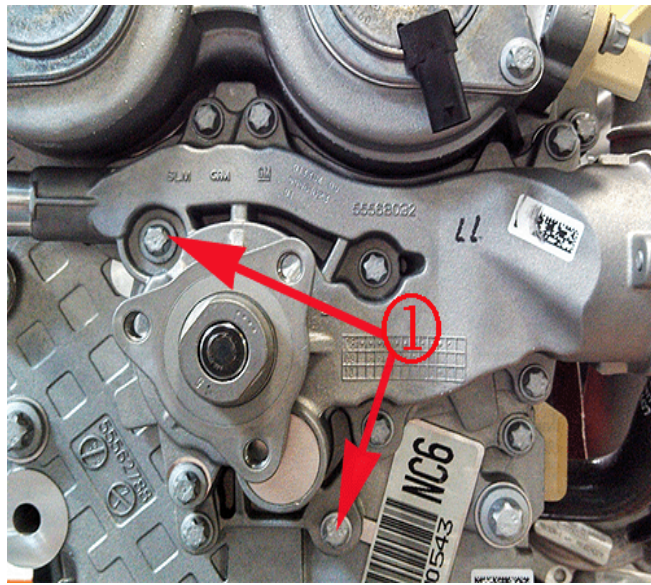
3. Apply a small bead of RTV Engine Sealant, P/N 88861417 (in Canada, P/N 88861418) to the seam around the perimeter of the reservoir cup plug.  
Be careful to avoid plugging the small hole at the top of the reservoir with the sealant. This evaporation hole must be left open.



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4. Use a clean scraper to work the sealer into the cup plug gap and to scrape off any excess leaving a thin layer to seal the cup plug.

When replacing the water pump, install the 5 water pump bolts and the 5 engine front cover bolts and tighten in a cross sequence to 8 N•m (71 lb in) as instructed in SI.



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Tighten these two fasteners an additional 30 degrees (1).