

System	Date of Issue	Type of Service Information
<b>Odyne Systems G2V1 &amp; G2V2</b>	<b>9/18/15</b>	<input type="checkbox"/> Troubleshooting <input checked="" type="checkbox"/> Procedure

## **Title: Water Pump Replacement on Cooling Pack Sub Assembly 70171-04**

### **Special Tools or Software Required:**

<b>Tools and Supplies</b>	<b>Description</b>
Drain Pan	
Spring Clamp Pliers	
13mm Socket and Ratchet	
Blue Medium Strength Loctite	
Torque Wrench In. Lbs.	
50/50 Extended Life Antifreeze Coolant (Green)	

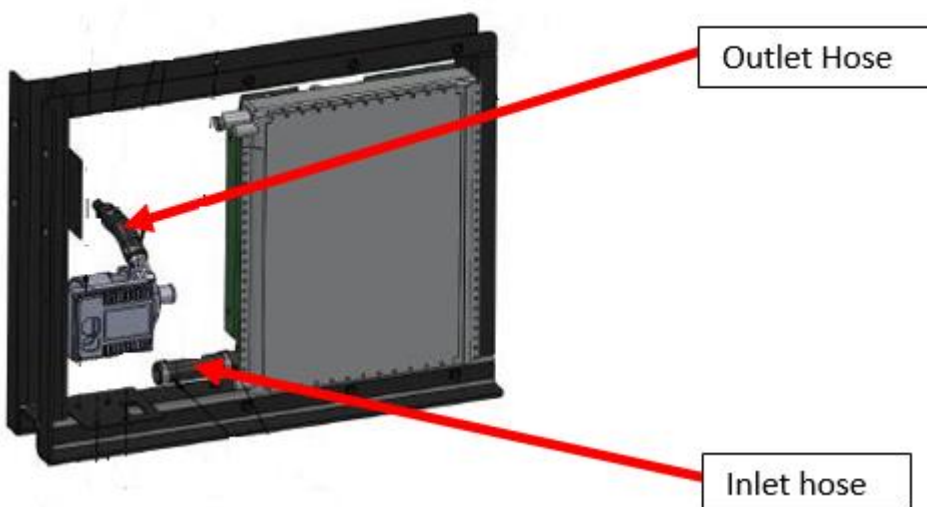
The information in Service Information is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. Warranty Policy documentation determines Warranty coverage unless stated otherwise. The information in this Service Information was current at the time of printing. Odyne Systems, LLC reserves the right to supersede this information with updates. The most recent information is available through Odyne on-line technical resources.



## Instruction:

**Before Starting Procedure:** Remove key from ignition and store in a safe place.

1. Remove both electrical connections, J21c and 21b (CAN 2-wire, twisted green and yellow).
2. Pinch off the 5/8" hose to the water pump outlet.
3. Pinch off the 1.0" hose to the water pump inlet at the radiator bottom, or at the top of the radiator from the Remy motor, as applicable.
4. Remove the 2-spring clamps on the 1.0" hose at the water pump outlet, and the 1-spring clamp on the inlet of the water pump.
5. Using a 13mm socket and ratchet assembly, remove the 4 mounting bolts in the bottom of the cooling bracket, and then remove the water pump.



*Torque Value: 169 In-Lb*  
*Apply Blue Loctite to Bolt Threads*

*Water Pump Hose Locations*

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Install the new water pump following the same steps as removal, however in the reverse order.

1. Install the water pump on the hose from the radiator and position it on the cooling bracket.
2. Apply blue medium strength Loctite to the 4 mounting bolts and install the 4 mounting bolts to the pump assembly. Then torque to 169 In-Lbs.
3. Install the outlet hose (1.0" to 5/8" adaptor) on the new water pump.
4. Re-position the spring clamps on the water pump inlet and outlet of pump, and remove the pinch clamps.
5. Remove the radiator cap and fill the reservoir with 50/50 mixed extended life green antifreeze.
6. Reinstall the radiator cap loose on the reservoir, to purge air out from the cooling loop/system.
7. Install electrical connector J21C to the pump. Leave the J21b (CAN 2-wire, twisted green and yellow) unplugged as this will allow the pump to run/operate at full/high speed.
8. Turn ignition key "On". Water pump and cooling fan will come on and coolant/antifreeze will begin to circulate.
9. After the pump runs for few minutes at high speed, partially install the J21b (CAN 2-wire, twisted green and yellow) connector to the pump. This will slow the pump down to lower operating speed. The change in speed of the water pump should be audible. Do this two to three times to allow the air to purge from cooling system/loop.
10. Check the coolant/antifreeze level and install the radiator cap full seated.

## Odyne Service Support Resources:

To request technical assistance, contact [ServiceSupport@Odyne.com](mailto:ServiceSupport@Odyne.com).  
To request parts, contact [Parts@Odyne.com](mailto:Parts@Odyne.com).

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