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2004 Cadillac CTS

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## 4.8 5.3 5.7 6.0 GENIII Engine Cylinder Head Cup Plug Coolant Leak - kw coolant cup head L59 LM4 LM7 LQ4 LQ9 LR4 LS1 LS6 plug #PIP3018 - (Jun 17, 2004)

4.8 5.3 5.7 6.0 GEN III Engine Cylinder Head Cup Plug Coolant Leak

The following diagnosis might be helpful if the vehicle exhibits the described symptoms in the PI.

### Condition/Concern:

A customer may notice a coolant leak from the cylinder head cup plugs of a GEN III Engine.

### Recommendation/Instructions:

If there is evidence of a coolant leak at the cylinder head cup plugs, the area should be cleaned and inspected to determine if an actual leak is present or if it was only a coolant stain. Some engines are built with cooling system sealing tabs. If only a stain is present, it may be the result of the cup plug seeping during the first 15 minutes of operation when the engine was new. The seepage may have occurred before the factory installed coolant tabs dissolved and sealed the plug to cylinder head area. If an actual leak is present, the cooling system should be drained, refilled with a 50/50 Dex-Cool mixture and 4 small sealer tabs. Small coolant tabs are available in packages of 5 (4 oz. each) and the part number is 12378254 [in Canada, use P/N 10953473 and add 1 1/2 pellets]. After filling the cooling system, the vehicle should be operated for at least 15 minutes so the area can be inspected for leaks again. If the cup plugs continue to leak after installing the sealer tabs, new cup plugs should be installed as follows:

1. Lower the coolant level so there is no coolant in the cylinder heads.
2. Remove the cup plugs and clean the bores.
3. Apply Primer N (Loctite product number 7649) to the new cup plug.
4. Apply Loctite 620 adhesive to the cup plug bore in the cylinder head. By applying to the separate substrates, you avoid any cross contamination of adhesive and accelerator. This will also prevent

any potential precuring of adhesive that is applied to an activated surface. The vehicle should be allowed to sit for a minimum of 1 hour prior to refilling and testing vehicle.

Please follow this diagnosis process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed. If these steps do not resolve the condition, please contact GM TAC for further diagnostic assistance.

**Models:**

(03-04 Chevrolet Silverado Truck C1, K1, C2, K2, C3, K3 ) and (03-04 Chevrolet Tahoe C1, K1) and (03-04 Chevrolet Suburban C1, K1, C2, K2, C3, K3) and (03-04 GMC Sierra Truck C1, K1, C2, K2, C3, K3 ) and (03-04 GMC Yukon C1, K1) and (03-04 GMC Yukon XL C1, K1, C2, K2, C3, K3) and (03-04 Cadillac Escalade C1, C6, K1, K6) and (03-04 Chevrolet Avalanche C1, K1, C2, K2) and (04 Cadillac CTSV) and (03-04 Chevrolet Corvette) and (04 Pontiac GTO) and (03-04 GMC Envoy S1, T1) and (03-04 Chevrolet Trail Blazer S1, T1) and (04 Buick Rainier S1, T1) and (03 - 04 Chevrolet Express G1, G2, G3, H1, H2) and (03 - 04 GMC Savana G1, G2, G3, H1, H2) and 03 - 04 Hummer H2)

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