



Installation Instructions

18SP562—Installation of Series 50[®] EGR Cylinder Head P/N R23529994 or P/N 23529994

Introduction

This cylinder head assembly, part number R23529994 or 23529994, is equipped with Pyromet material high-temperature exhaust valves, powder metal valve guides, and special intake valves to accommodate the special operating conditions of EGR (exhaust gas recirculation)-equipped engines.

Common Cylinder Head

To commonize Series 50 diesels to a single cylinder head, all engines built after serial number 04R39213 were equipped with this head. This head should be used to service all Series 50 EGR engines (model 6047MK2E), irrespective of build date.

NOTE:

The R23529994 head may also be used to service non-EGR equipped diesel engines built prior to serial number 4R39213. If used on an engine built prior to unit 4R39213, the attached label (P/N 23530710) *must* be affixed to the rocker cover adjacent to the emissions label to advise of the change in exhaust valve lash. See Figure 1.

Valve Lash

Engines built prior to 4R39213 were not equipped with the EGR-compatible exhaust valves. These valves were lashed at 0.026" (.660 mm), which is reflected on their unit options labels. The Pyromet high-temperature exhaust valve cold clearance setting is 0.020" (.508 mm). The valve lash label (P/N 23530710) is provided to advise of this change.

Service

DDC will continue to offer the current cylinder head (R23525568 or 23525568) as a lower cost option for engines that are not equipped with EGR.

The core charges for these cylinder heads are the same. For core credit purposes, the cores are interchangeable for one another.

Installation Instructions

Install the cylinder head as follows:



CAUTION:

To avoid injury from hot surfaces, allow engine to cool before removing any component. Wear protective gloves.



CAUTION:

To avoid injury from accidental engine startup while servicing the engine, disconnect/disable the starting system.

1. With the engine at ambient temperature and cool to the touch, refer to the current *Series 50 Service Manual* (6SE50 0006 dated June 2000) and remove the cylinder head and gasket.
2. Follow all steps to prepare the head mounting surface block for installation of the new head, then install the cylinder head.
3. Determine the cold exhaust valve lash setting indicated on the unit options label (top of rocker cover).
 - A. If it is .020"(.508 mm), STOP. Disregard the instructions below and complete the installation.
 - B. If this head will be used on a Series 50 diesel engine built prior to serial # 4R39213, the unit option label lists the incorrect lash, 0.026" (.660 mm), for this new head. You must affix the enclosed label P/N 23530710 (Figure 1) adjacent to the unit options label (Figure 2) after the head is installed. It will alert future repair facilities to the changed cold lash setting.

4. Clean the area with non-petroleum base solvent to remove dirt, which could prevent the label from adhering.
5. Apply the label adjacent to the original unit option label. See Figure 2.
6. Clean the options label, then line out the previous lash setting with a black permanent marker. *Do not remove the unit options label.*



Figure 1. .020" Cold Lash Setting Label P/N 23530710

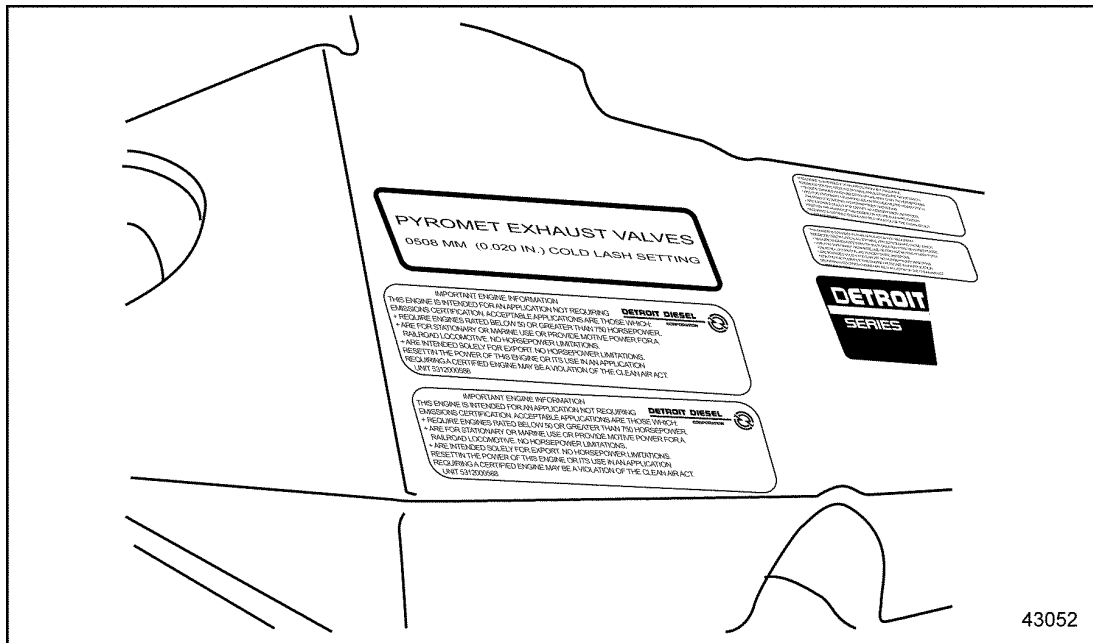


Figure 2. Recommended Location for Cold Lash Modification Label

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