

Title (en)
CYLINDER HEAD ARRANGEMENT FOR VARIABLE VALVE ACTUATION ROCKER ARM ASSEMBLIES

Title (de)
ZYLINDERKOPFANORDNUNG FÜR KIPPEBELANORDNUNGEN ZUR VARIABLEN VENTILBETÄTIGUNG

Title (fr)
AGENCEMENT DE CULASSES POUR RAMPES DE CULBUTEURS À ACTIONNEMENT DE SOUPAPE VARIABLE

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Abstract (en)
[origin: WO2014168988A1] A novel cylinder head arrangement is described for an in-line four cylinder or eight cylinder engine with each head having two end cylinders and two middle cylinders. A modified arrangement allows additional space for the installation of wider rocker arm assemblies used for variable valve lift (VVL), cylinder deactivation (CDA) and other types of variable valve actuation (VVA) in these existing cylinder head designs. In the first embodiment, cam towers of conventional designs adjacent the end two cylinders are not used. At least one end support is used which may be an outboard bearing on a camshaft for each end. The wider rocker assemblies may then be installed. In an alternative embodiment, the cam towers adjacent the inner two cylinders are eliminated and a single camshaft support piece with a support bearing is installed between the inner cylinders to provide support for the camshafts. The wider rocker assemblies may then be installed on at least one of the middle cylinders. The system also includes a novel oil control valve that operates latches in switching rocker arm assemblies.

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