

# Technical Bulletin

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## ADA106204 - MLS Head Gasket Set

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### Applications: Chrysler Neon 1.8i & 2.0i 1995>1999 and Chrysler Voyager 2.0i 1996>2001

Blue Print supplies a multi-layer steel (MLS) cylinder head gasket, which has been developed and approved for several Chrysler applications to provide improved sealing and durability over the original composite style gasket. Extra care needs to be taken where a conventional composite gasket is currently in place, and the following procedure is to help in the correct installation of the multi-layer steel head gasket.

**IMPORTANT NOTE:** Aluminium engine components are highly susceptible to surface damage when removing old gasket material. Please exercise great care when cleaning these components as the MLS gasket cannot sufficiently seal if either mating surfaces are scratched or gouged, if aluminium removal has taken place, or if old gasket material remains on either surface.

1. Remove the cylinder head as per manufacturer's procedure.
2. Remove all loose gasket material from the cylinder head and engine block with a plastic or wooden scraper.
3. Before carrying out additional cleaning, inspect the sealing surface of the cylinder head around all waterways/cooling passages. Machining or replacement of the cylinder head may be required if pitting/erosion has taken place that will compromise the sealing performance of the new gasket.
4. Apply solvent or a commercially available gasket cleaner to both gasket mating surfaces (cylinder head and block), taking care to cover coolant and oil passage ways. Allow the solvent to soften the remaining composite gasket residue.
5. Using a plastic or wooden scraper, remove the remaining gasket residue from both surfaces, and repeat the above until both mating surfaces are free of old gasket residue. Any abrasive medium must be used with great care to avoid aluminium removal.
6. Inspect the cylinder head and block for flatness as per manufacturer's procedures and specifications, machining or replacing components as required.

### Fitting:

7. Apply a suitable non-setting jointing compound (e.g. Wellseal) to both sides of the MLS head gasket as per the sealant manufacturer's instructions.
8. Place the MLS head gasket on the block and fit the cylinder head, taking extreme care not to damage either surface.
9. Torque the cylinder head bolts using the following procedure:  
Stage 1: Slacken off the top two transaxle attachment bolts.  
Stage 2: Torque all head bolts (using the manufacturers' specified sequence) to 25 lb/ft ~ 34 Nm.  
Stage 3: Torque all centre bolts to 50 lb/ft ~ 68 Nm, and torque four corner bolts to 35 lb/ft ~ 47 Nm.  
Stage 4: Re-torque all centre bolts to 50 lb/ft ~ 68 Nm, and re-torque four corner bolts to 35 lb/ft ~ 47 Nm.  
Stage 5: Tighten all bolts in the specified sequence an additional 90° (¼ turn).  
Stage 6: Re-torque the top two transaxle attachment bolts to the manufacturers' setting.

### Please note: We strongly recommend the use of new cylinder head bolts.

10. Re-assemble the rest of the engine as per manufacturer's procedure.

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