



PART NO. XD3014HS

## XDP X220 SERIES HEAD STUD KIT

### INSTALLATION MANUAL



CODE	DESCRIPTION	QTY
A	Head stud	26
B	M8 Bolt	6
C	Washer	26
D	Nut	26



**BEFORE REMOVING ANY PARTS FROM YOUR TRUCK, PLEASE COMPARE THE ITEMS YOU HAVE RECEIVED WITH THE PACKING LIST PROVIDED TO VERIFY THAT YOU HAVE EVERYTHING NECESSARY TO INSTALL YOUR NEW XDP X220 SERIES HEAD STUD KIT.**



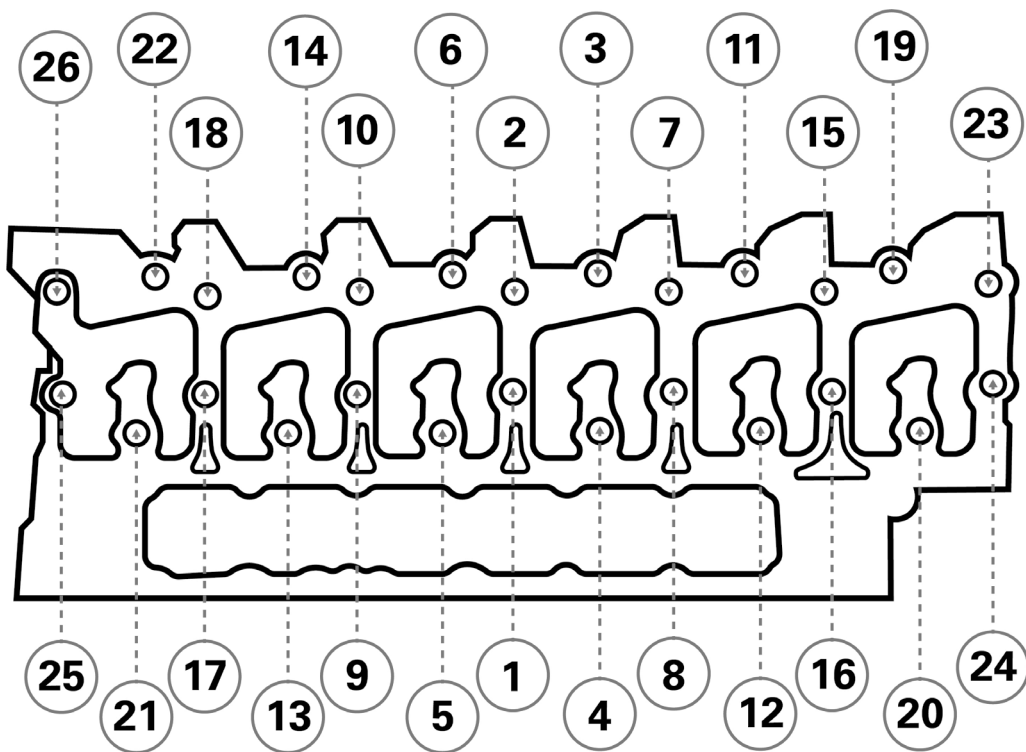
**BEFORE YOU BEGIN!** Ensure that the vehicle has not been in use and that the engine is cool to the touch. Always wear eye protection when working on any vehicle.

- 1 Verify the part number on the box, and the instructions match the part number for your vehicle application.
- 2 Thoroughly inspect all hardware and ensure proper length and fitment.
- 3 Using a thread chaser (Such as XD40125TC & XD40128TC) chase all threads prior to installing your new head studs to ensure you get proper thread engagement and accurate torque readings.
- 4 Ensure that a thread sealer is used on any studs that protrude into a water jacket.
- 5 Using a 5mm allen key, install the studs into the block **HAND TIGHT!**
- 6 Proceed to install the cylinder head and be sure to check for any binding or misalignment, and then install the pushrods.
- 7 Install the rocker arms along with the rocker arm pedestals as an assembly according to OEM procedures. Ensure the dowel on the bottom of each pedestal is aligned properly with the alignment holes in the cylinder head, and the pedestals are sitting flush with the head, and the valve lash adjusters completely backed off.
- 8 Lubricate the threads of the studs, nuts, washers, and 8mm rocker arm pedestal bolts with assembly lubricant.

- 9 Install the washers and nuts onto the head studs and tighten hand tight.
- 10 Install the secondary 8mm rocker arm pedestal bolts into the cylinder head hand tight. NOTE: The secondary rocker arm pedestal bolts MUST be installed in place before tightening the head studs in order to properly align the tips of the rocker arms with the valve stems.
- 11 Following the torque sequence below tighten the nuts in three equal steps 45ft lbs, 90ft lbs, and 125ft lbs, and the M8 bolts to 25ft lbs.  
**Tech Tip:** We recommend doing a second torque at 125ft lbs in sequence to ensure torque accuracy.

### TORQUE SEQUENCE

**1ST PASS**      **2ND PASS**      **3RD PASS**      **FINAL PASS**  
**40FT LBS**      **80FT LBS**      **125FT LBS**      **125FT LBS**



- 12 **NOTE:** Modification to your OEM rocker pedestals is required for installation (See below) or you may purchase XD3015RA machined replacement rocker assemblies which are pre-machined for use with head studs.

