



Genuine Cummins Valves

#BadhoBefikar



Valves seal the combustion gases during compression and power stroke, and allow intake gases into or exhaust gases out of the cylinder during intake and exhaust stroke.



Features

- Carefully selected material composition – High Alloy Steel for Valve Head and Low Alloy steel for Valve Stem
- Nitridised surface treatment



Advantages

- High Alloy Steel ensures
 - › Better fatigue strength at higher temperature up to 1073K (800 °C)
 - › Adequate Formability to undergo plastic deformation to a given shape without defect
- Low Alloy Steel provides higher Yield Strength and Creep Strength to withstand material deformation at elevated temperature



Benefits

- Increased life of more than 7 lakhs km

- Chrome plated stem (45 HRC) and Tip (52 HRC)

- Improved hardness of stem and tip
- Prevents corrosion
- Reduces coefficient of friction

- Minimises rusting
- Minimises Stem Scuffing during intake and exhaust cycles

- Optimised clearances maintained between valve and guide (Diametrically 40-70 microns)

- Lesser side load
- Reduces valve guide wear

- Prevent valves and engine failure due to valves getting stuck
- Avoids major overhaul

- Optimised valve seat design Face angles (Exhaust 45° and Intake 30°)

- Efficient sealing
- Precise valve centring
- Uniform heat dissipation

- Improved fuel efficiency
- Less valve heating avoiding thermal cracks



Risks of Non-genuine Parts

- › Valve head failure due to Valve Bent due to improper clearance leading to valve getting stuck



Sticking valve from carbon deposits

Bent valves due to sticking

- › Valve burnt due to improper material selection and surface treatment



- Valve bent due to improper clearance leading to **major overhaul**
- Risk of **valve scuffing** leading to valve train failure leading to **unplanned downtime**
- Risk of **Valve cracks** (Thermal Effect) due to usage of low grade material



Why use Genuine Cummins Parts



Demonstrated life of more than 7 lakhs km

Optimised valve seat design - shape and face angle compatible with Cummins engines leading to better fuel efficiency, power and torque

3500+ hours of cumulative testing done to ensure premium quality of Genuine Cummins Parts



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