



**OM 616 BS-III PISTON SET** 



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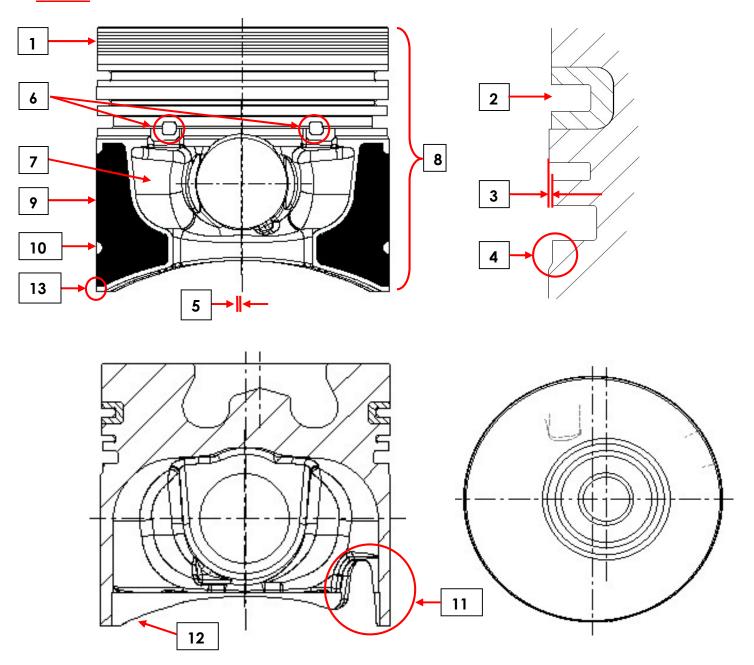
An update from SHRIRAM PISTONS & RINGS LTD.

is pleased to launch 'OM 616 BS-III' piston set in its LCV/MUV product range.

This piston set is applicable for Force Motors Traveller, Trax Cruiser & Toofan models.

This piston set has following special features:-

## **PISTON:-**



Unique features of USHA 'OM 616 BS-III' pistons are as follows:-

SL. NO.	SPECIAL FEATURE	BENEFITS TO CUSTOMER
1)	SERRATIONS IN TOP LAND:- USHA OM 616 BS-III piston has been provided with serrations on its top land which are shallow grooves and act as heat dam to reduce heat at top ring groove.	<ul> <li>Serrations help in preventing blow-by, thereby reducing chances of top land scuffing/ seizure etc.</li> </ul>
2)	HIGH NICKEL WEAR RESISTANT RING CARRIER (RCP): Top groove in this piston is made of high nickel wear resistant ring carrier insert which is manufactured using latest centrifugal casting technology.	Longer life of piston due to negligible wear of top groove
3)	CUT BACK IN SECOND RING LAND: USHA OM 616 BS-III piston is provided with a Cut back in second ring land for better seating, stability & functioning of intermediate ring.	Helps in controlling blow-by & reducing oil consumption
4)	'J' CUT: This piston has been provided with a unique 'J' cut just below the oil ring groove area.	<ul> <li>'J' cut provides all time lubrication to piston skirt</li> <li>No piston seizure in extreme limits of normal working conditions</li> </ul>
5)	PISTON - PIN BORE OFFSET:- USHA OM 616 BS-III piston is provided with a piston pin bore offset to avoid piston slap. Piston pin bore offset means that the centre line of piston is slightly offset from the centre line of pin bore. Due to this offset, piston tilts at TDC & BDC smoothly, that prevents slapping with liner.	Reduced engine noise
6)	QUICK OIL RETURN SLOTS (QORS):- This piston has been provided with two nos. of Quick Oil Return Slots (QORS) on either side of the piston above pin bore, half in groove & half in window.	Quick drainage of oil, hence low oil consumption
7)	AS CAST HYDRODYNAMIC WINDOW:- New hydrodynamic 'As Cast' window designed by our collaborator, not only provides more space for oil drainage, but also provides more skirt area for piston ring guidance.	<ul> <li>Faster oil drainage, hence low oil consumption</li> <li>Better guidance to rings</li> </ul>
8)	PISTON SURFACE COMPLETELY BONDERISED:-	<ul> <li>Bonderising helps in preventing oxidation of piston</li> <li>Also provides porous surface for oil retention, thereby reducing piston wear</li> </ul>
9)	SKIRT COATED WITH 'Nano-friKS' COATING:-	<ul> <li>Helps in initial lubrication &amp; seizure free operation</li> <li>Better wear resistance</li> <li>Reduces engine noise</li> </ul>
10)	MEASURING POINTS ON PISTON SKIRT:- Two points on both sides of piston skirt.	<ul> <li>Provided for easy diameter verification</li> </ul>

11)	SLOT FOR PISTON COOLING NOZZLE (PCN) JET:- Provides room for oil cooling jet.	<ul> <li>Helps in directing oil flow underneath piston combustion cavity</li> <li>Additional reduction in piston weight</li> </ul>
12)	SLIPPER DESIGN:- USHA OM 616 BS-III piston has been provided with Slipper design at piston skirt which helps in reducing piston weight & provides better guidance to piston movement.	<ul> <li>Improved fuel efficiency</li> <li>Better guidance to rings</li> <li>Low noise during engine working</li> </ul>
13)	BOTTOM SCRAPPING CHAMFER:- A smooth chamfer is provided at the bottom end of the piston.	<ul> <li>Helps in regulating oil supply, reduces skirt wear &amp; hence longer life</li> </ul>

Technical data of this piston set is as under:-

TECHNICAL DATA – 'OM 616 BS-III' PISTON				
		USHA CODE→ L35		
Nominal Bore Diameter	mm	90.90		
Piston Diameter	STD Size mm	90.80		
Recommended	mm	00.10		
Piston-Liner Clearance				
Compression Height	mm	48.60		
Total Height	mm	82.10		
Piston Pin Diameter X Length	mm	28.00 X 77.00		
Piston Pin- Pin Bore Clearance		+0.006 to +0.012		
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## **PISTON RINGS:-**

USHA OM 616 BS-III pistons are designed to match with our existing OM 616 'DVM' (USHA Code-232) ring set for low oil consumption & excellent performance.

