



## SHRIRAM PISTONS & RINGS LTD.

MD: TS: 42/JAN'25

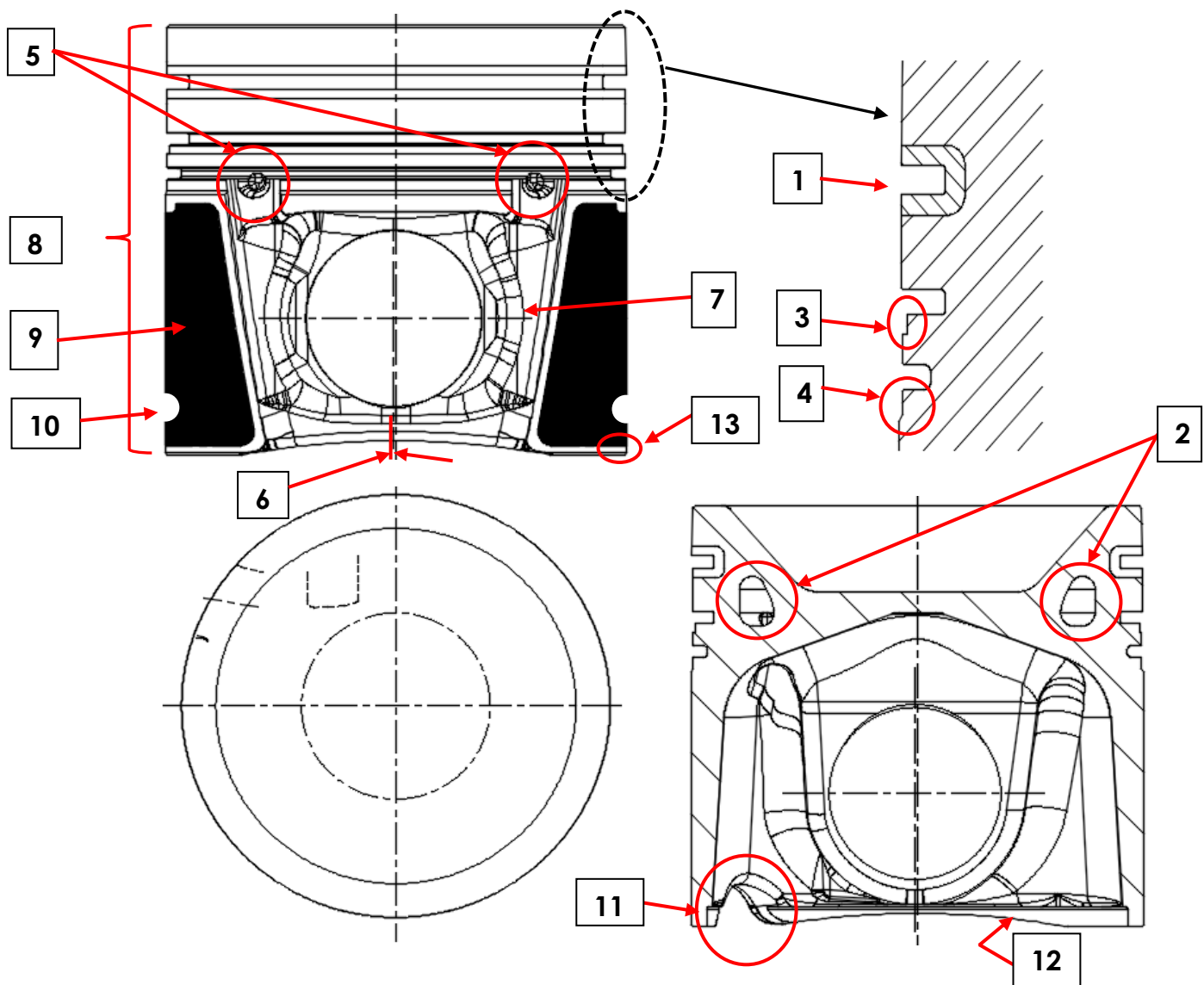
INTRODUCTION CIRCULAR – **EICHER 494 BS VI CNG - PISTON SET**

USHA is pleased to launch **EICHER 494 BS VI CNG** piston set in its aftermarket LCV product range.



This piston set has following special features: -

### PISTON:-



Unique features of USHA **EICHER 494 BS VI CNG** piston are as follows: -

SL. NO.	SPECIAL FEATURE	BENEFITS TO CUSTOMER
1)	<b>HIGH NICKEL WEAR RESISTANT RING CARRIER (RCP):</b> Top groove of this piston is made of high nickel wear resistant ring carrier insert which is manufactured using latest centrifugal casting technology.	<ul style="list-style-type: none"> <li>Longer life of piston due to negligible wear of top groove</li> </ul>
2)	<b>OIL COOLING GALLERY (OCG):</b> A through oil cooling gallery is made around the periphery on under-crown area of the piston beneath ring zone with the help of salt core during casting, through which oil flows continuously during engine working.	<ul style="list-style-type: none"> <li>Helps in rapid cooling of combustion bowl &amp; ring groove areas, thereby enhancing piston &amp; engine life</li> </ul>
3)	<b>STEP CUT IN 2<sup>ND</sup> RING LAND:</b> This piston is provided with a step cut in second ring land for better seating, stability & functioning of intermediate ring.	<ul style="list-style-type: none"> <li>Helps in controlling blow-by &amp; reducing oil consumption</li> </ul>
4)	<b>'J' CUT:</b> Piston is provided with a unique 'J' cut below the oil ring groove area.	<ul style="list-style-type: none"> <li>Provides all time lubrication to piston skirt</li> <li>No piston seizure in extreme limits of normal working conditions</li> </ul>
5)	<b>QUICK OIL RETURN SLOTS (QORS):</b> Two nos. of Quick Oil Return Slots (QORS) are provided on either side of piston above the pin bore, half in groove & half in window.	<ul style="list-style-type: none"> <li>Faster drainage of excess oil, hence low oil consumption</li> </ul>
6)	<b>PISTON-PIN BORE OFFSET:</b> The piston is provided with a 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 & prevents slapping with liner.	<ul style="list-style-type: none"> <li>Reduced engine noise</li> </ul>
7)	<b>AS CAST CONVERGENT WINDOW:</b> This not only gives more space for oil drainage but the unique convergent type design also provides more bearing area to piston skirt, which helps in guiding piston rings' movement.	<ul style="list-style-type: none"> <li>Faster oil drainage, hence low oil consumption</li> <li>Seizure on minor axis is avoided, hence longer piston life</li> </ul>
8)	<b>PISTON SURFACE COMPLETELY BONDERISED:</b>	<ul style="list-style-type: none"> <li>Bonderising helps in preventing oxidation of piston</li> <li>Also provides porous surface for oil retention, thereby reducing wear</li> </ul>

9)	<b>'Nano-friKS COATING' ON PISTON SKIRT:</b>	<ul style="list-style-type: none"> <li>• Helps in initial lubrication &amp; seizure free operation</li> <li>• Better wear resistance</li> <li>• Reduces engine noise</li> </ul>
10)	<b>MEASURING POINTS ON PISTON SKIRT:</b>	<ul style="list-style-type: none"> <li>• Provided for easy diameter verification</li> </ul>
11)	<b>SLOT FOR PISTON COOLING NOZZLE (PCN) JET:</b> Provides room for oil cooling jet.	<ul style="list-style-type: none"> <li>• Helps in directing oil flow underneath piston combustion cavity results in faster dissipation of engine temperature</li> </ul>
12)	<b>SLIPPER DESIGN:</b> Slipper design helps in reducing piston weight.	<ul style="list-style-type: none"> <li>• Improves fuel efficiency</li> <li>• Low noise during engine working</li> </ul>
13)	<b>SCRAPING CHAMFER:</b> A smooth chamfer is provided at the bottom end of the piston skirt.	<ul style="list-style-type: none"> <li>• Helps in regulating oil supply, reduces skirt wear &amp; hence longer life</li> </ul>

TECHNICAL DATA – EICHER 494 BS VI CNG PISTON	
USHA CODE→ <b>L40</b>	
Nominal Bore Diameter	100.00
Piston Diameter	99.87
Recommended Piston-Liner Clearance	0.13
Compression Height	63.65
Total Height	93.15
Gudgeon Pin Length X OD	80.00 X 38.00
All dimensions in 'mm'	

Above features make USHA **EICHER 494 BS VI CNG** piston set unique, produced to give better performance & longer life especially when fitted with USHA '**CPC IPVENT**' ring set of subject model.



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