



# SHRIRAM PISTONS & RINGS LTD.

MD: TS: 21/SEP'24

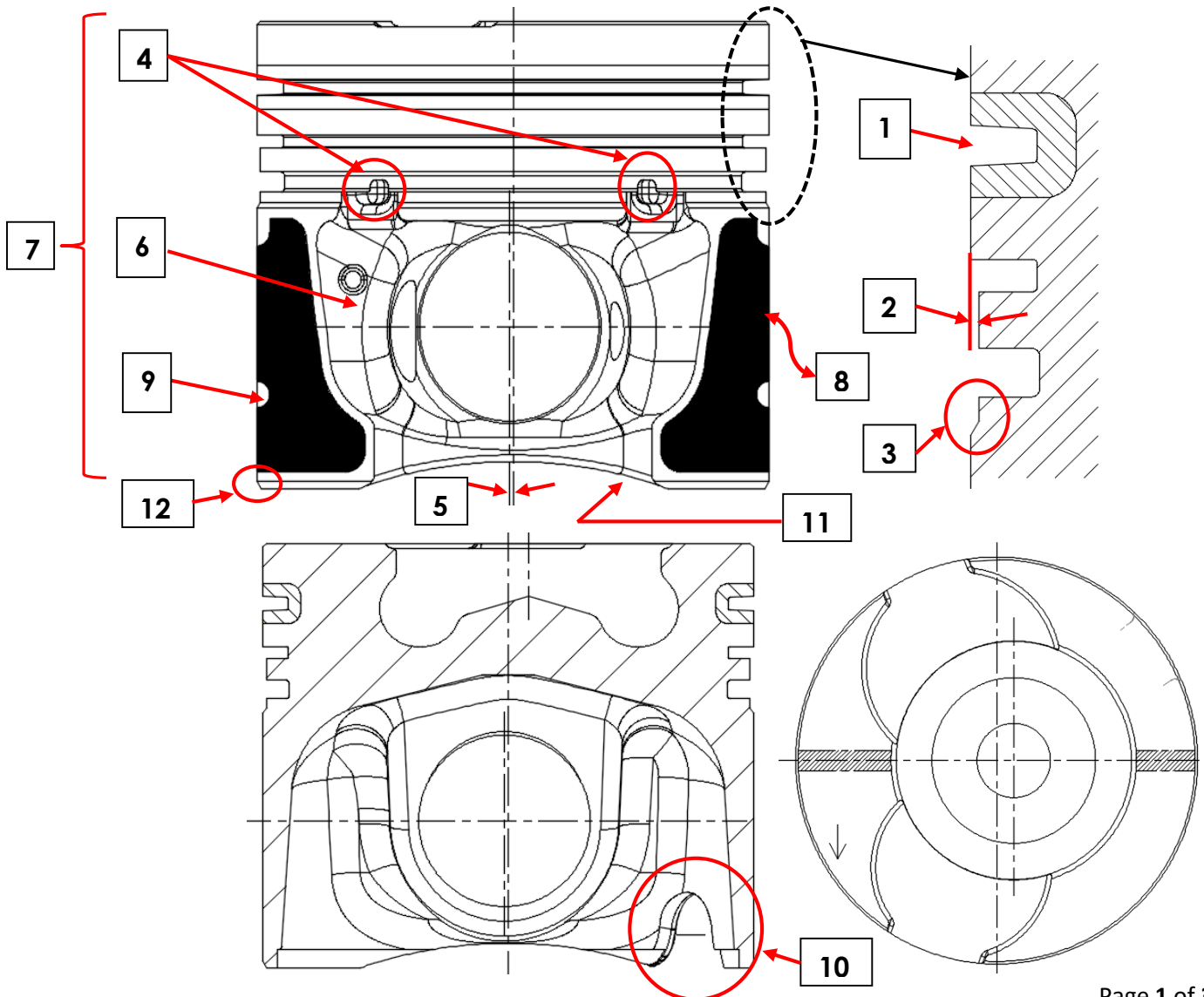
INTRODUCTION CIRCULAR – **LEYLAND DOST BS III (D) - PISTON SET**

USHA is pleased to launch **LEYLAND DOST BS III DIESEL** piston set in its aftermarket SCV product range.



This piston set has following special features: -

## PISTON:-



Unique features of USHA **LEYLAND DOST BS III DIESEL** piston are as follows: -

SL. NO.	SPECIAL FEATURE	BENEFITS TO CUSTOMER
1)	<p><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.</p> <p><b>KEystone RING GROOVE GEOMETRY:</b> Helps in squeezing out excess oil from the groove preventing carbon deposition &amp; sludge formation.</p>	<ul style="list-style-type: none"> <li>• Longer life of piston due to negligible wear of top groove</li> </ul>
2)	<p><b>CUT BACK IN 2<sup>nd</sup> RING LAND:</b> This piston is provided with a cut back in second ring land for better seating, stability &amp; functioning of intermediate ring.</p>	<ul style="list-style-type: none"> <li>• Helps in controlling blow-by &amp; reducing oil consumption</li> </ul>
3)	<p><b>'J' CUT:</b> A unique 'J' shaped cut is provided just below the oil ring groove area.</p>	<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>
4)	<p><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 &amp; half in window.</p>	<ul style="list-style-type: none"> <li>• Quick drainage of oil, hence low oil consumption</li> </ul>
5)	<p><b>PISTON - PIN BORE OFFSET:</b> Piston is provided with 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 &amp; BDC smoothly &amp; prevents slapping with cylinder surface.</p>	<ul style="list-style-type: none"> <li>• Reduces engine noise</li> </ul>
6)	<p><b>AS CAST HYDRODYNAMIC WINDOW:</b> 'As Cast' hydrodynamic window not only provides more space for oil drainage, but also provides more bearing area to piston skirt which helps in guiding ring's movement.</p>	<ul style="list-style-type: none"> <li>• Reduces chances of seizure at minor axis, hence longer piston life</li> </ul>
7)	<p><b>PISTON SURFACE COMPLETELY BONDERISED:</b></p>	<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>
8)	<p><b>'Nano-friKS COATING' ON PISTON SKIRT:</b></p>	<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>

9)	<b>MEASURING POINTS ON PISTON SKIRT:</b>	<ul style="list-style-type: none"> <li>• Provided for easy diameter verification</li> </ul>
10)	<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 heat</li> <li>• Additional reduction in piston weight improves fuel efficiency</li> </ul>
11)	<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>
12)	<b>SCRAPPING 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>

<b>TECHNICAL DATA – LEYLAND DOST BS III DIESEL PISTON</b>	
<b>USHA CODE → C45</b>	
Nominal Bore Diameter	80.00
Piston Diameter	79.90
Recommended Piston-Liner Clearance	0.10
Compression Height	45.25
Total Height	69.25
Gudgeon Pin Length X OD	65.00 X 28.00
All dimensions in 'mm'	

Above features make USHA **LEYLAND DOST BS III DIESEL** piston set unique, produced to give better performance & longer life especially when fitted with USHA '**CPC**' ring set (**Code: C28**), which is common for BS III/ IV/ VI diesel variants.



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