

## **SHRIRAM PISTONS & RINGS**

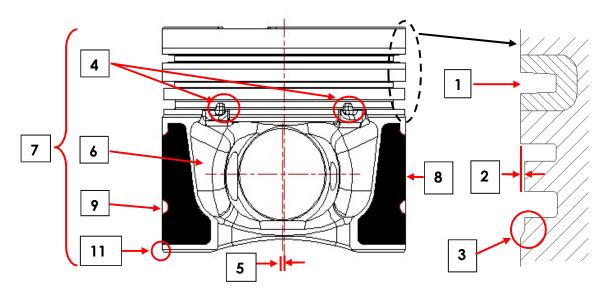
MD: TS: 16/NOV'22 INTRODUCTION CIRCULAR - LEYLAND DOST BS-IV/ VI DIESEL - PISTON SET

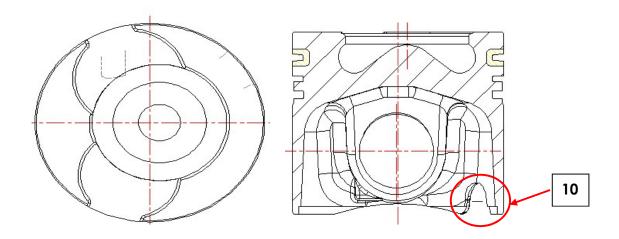
USHA is pleased to launch Leyland Dost BS-IV/ VI diesel engine piston set in its SCV product range in aftermarket.



This piston set has following special features:

## PISTON:





Unique features of USHA 'Leyland Dost BS-IV/ VI Diesel' piston are as follows:

SL. NO.	SPECIAL FEATURE	BENEFITS TO CUSTOMER	
1)	HIGH NICKEL WEAR RESISTANT RING CARRIER (RCP): Top groove of USHA Leyland Dost BS-IV/ VI piston is made of high nickel wear resistant ring carrier insert which is manufactured using latest centrifugal casting technology.	<ul> <li>Longer life of piston due to negligible wear of top groove</li> </ul>	
2)	<b>CUT BACK IN SECOND RING LAND:</b> This piston is provided with a Cut back in second ring land for better seating, stability & functioning of intermediate ring.	<ul> <li>Helps in controlling blow-by &amp; reduces oil consumption</li> </ul>	
3)	<b>'J' CUT:</b> USHA Leyland Dost BS-IV/ VI 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>	
4)	<b>QUICK OIL RETURN SLOTS (QORS):</b> 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.	<ul> <li>Quick drainage of oil, hence low oil consumption</li> </ul>	
5)	<b>PISTON - PIN BORE OFFSET:</b> USHA Leyland Dost BS-IV/ VI 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.	<ul> <li>Reduced engine noise</li> </ul>	
6)	AS CAST HYDRODYNAMIC WINDOW: New hydrodynamic 'As Cast' window designed by our collaborator, not only provides more space for oil drainage, but more skirt area for piston ring guidance as well.	<ul> <li>Faster oil drainage</li> <li>Seizure on minor axis is avoided, longer piston life</li> </ul>	

7)	PISTON SURFACE COMPLETELY BONDERISED:	<ul> <li>Bonderising helps in preventing oxidation of piston</li> <li>Provides porous surface for oil retention, thereby reducing piston wear</li> </ul>	
8)	<b>'Nano-friKS' COATING ON PISTON SKIRT:</b> USHA Leyland Dost BS-IV/ VI piston is provided with 'Nano-friKS' coating on its skirt.	<ul> <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> Two points on both sides of piston skirt.	<ul> <li>Provided for easy diameter verification</li> </ul>	
10)	<b>SLOTS FOR OIL COOLING JET (PCN SLOT):</b> Provides room for oil cooling jet.	<ul> <li>Helps in directing oil flow towards underneath of piston combustion chamber</li> </ul>	
11)	<b>SCRAPPING CHAMFER:</b> A smooth chamfer is provided at the bottom end of the piston skirt.	<ul> <li>Helps in regulating oil supply, reduces skirt wear &amp; hence longer life</li> </ul>	

TECHNICAL DATA – 'LEYLAND DOST BS-IV/ VI DIESEL' PISTON				
		USHA CODE → C28		
Nominal Bore Diameter	mm	80.00		
Piston Diameter	STD Size mm	79.90		
Recommended Piston-Liner Clearance	mm	00.10		
Compression Height	mm	45.25		
Total Height	mm	69.25		
Piston Pin diameter X length	mm	28.00 X 65.00		
Piston Pin- Pin Bore Clearance	mm	+0.012 to +0.018		
		(Clearance fit)		

Above features make USHA 'Leyland Dost BS-IV/ VI' diesel engine piston set unique, produced to give better performance & longer life especially when fitted with USHA 'CPC' ring set launched in 'Aug'2022'.



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