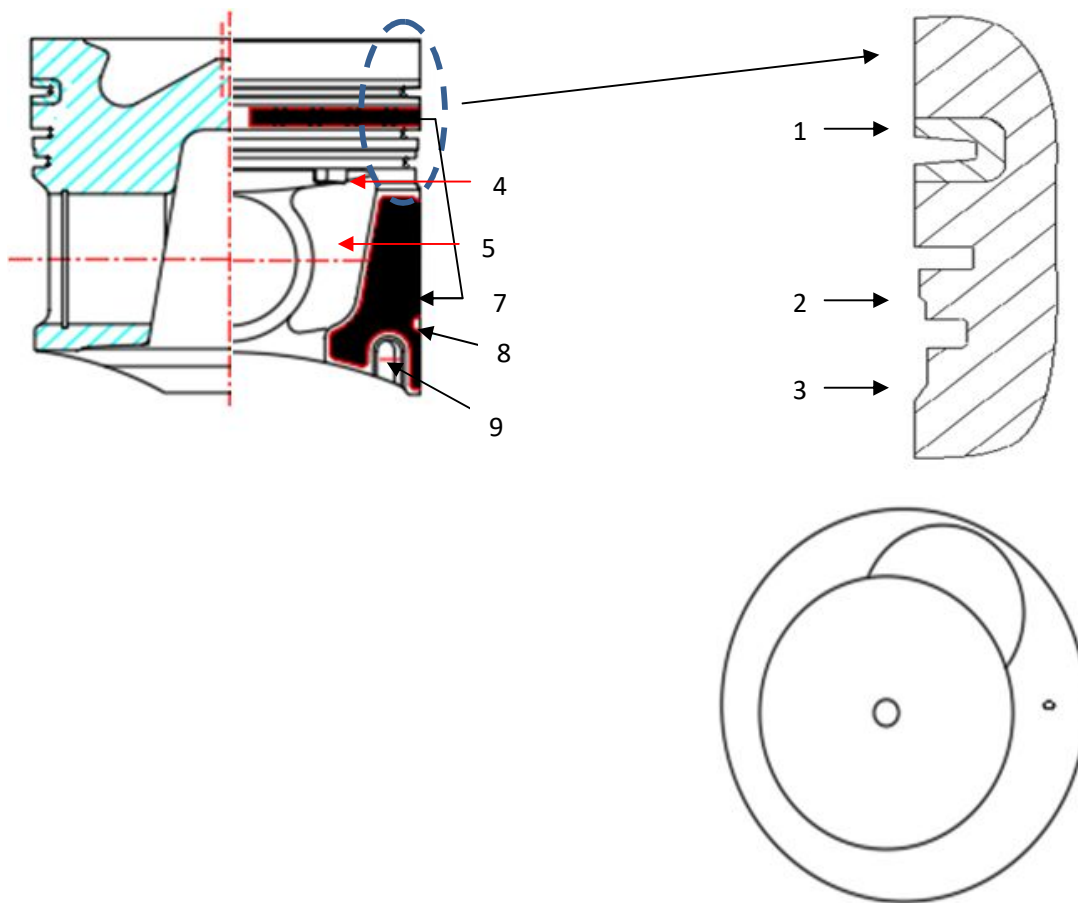


TECHNICAL BULLETIN – LEYLAND HINO 160 KVA PISTON SET

USHA is pleased to introduce **Leyland Hino 160 KVA BS-III/ IV** piston set in our HCV range of Leyland segment. This piston is suitable for various Leyland BS-III/ IV vehicles & genset engines.

Unique features of the piston are as follows:-



Sl. no.	Special Features	Benefits to Customer
1	HIGH NICKEL WEAR RESISTANT RING CARRIER (RCP): Top groove of this piston is made of high wear resistant ring carrier insert, which is manufactured as per latest centrifugal casting process.	<ul style="list-style-type: none"> • Longer life of piston due to negligible wear of top groove.

2	STEP CUT IN SECOND RING LAND: Provides perfect seating to top ring on the bottom surface.	<ul style="list-style-type: none"> • Helps in reducing blow-by. • Helps in reducing oil consumption.
3	“J” CUT: This piston has been provided with a unique ‘J’ cut below the oil ring groove area.	<ul style="list-style-type: none"> • ‘J’ cut provides all time lubrication to skirt. • No piston seizure in extreme limits of normal working conditions.
4	QUICK OIL RETURN SLOTS (QORS): Two nos. of Quick Oil Return Slots (QORS) are provided on each side of the piston above the pin bore, half in groove & half in window.	<ul style="list-style-type: none"> • Quick drainage of oil and hence lower oil consumption.
5	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 style="list-style-type: none"> • Faster drainage of oil due to more space helps in reducing oil consumption. • Better guidance to rings.
6	PISTON SURFACE COMPLETELY BONDERISED	<ul style="list-style-type: none"> • Bonderising helps in preventing oxidation of piston. • Also provides porous surface for oil retention & reduced wear.
7	1st RING LAND & SKIRT COATED WITH NEW “D-10” COATING	<ul style="list-style-type: none"> • D-10 permanent coating provides better wear resistance & helps in initial lubrication to avoid piston scuffing/seizure etc.
8	MEASURING POINTS ON THE SKIRT: Two points on both sides of the skirt.	<ul style="list-style-type: none"> • Provided for easy diameter verification.
9	SLOTS FOR OIL COOLING JET: Provide room for cooling jet nozzles.	<ul style="list-style-type: none"> • Help in directing oil flow towards under crown of the piston. • Additional reduction in piston weight.

TECHNICAL DATA- LEYLAND HINO 160 KVA BS-III/ IV PISTON		
		USHA CODE→ H23
Nominal Bore Diameter	mm	104.008, 104.016, 104.024
Piston Diameter	STD Size mm	103.920, 103.928, 103.936
Recommended Piston-Liner Clearance	mm	0.088
Compression Height	mm	62.65
Total Height	mm	100.65
Piston Pin- Pin Bore Clearance	mm	+0.004 to +0.014 (Clearance fit)

PISTON RINGS:

The piston is designed to match with our existing **Leyland Hino 6ETi Moly Gold SSM & CPC DVM** USHA ring sets for low oil consumption and superior performance.