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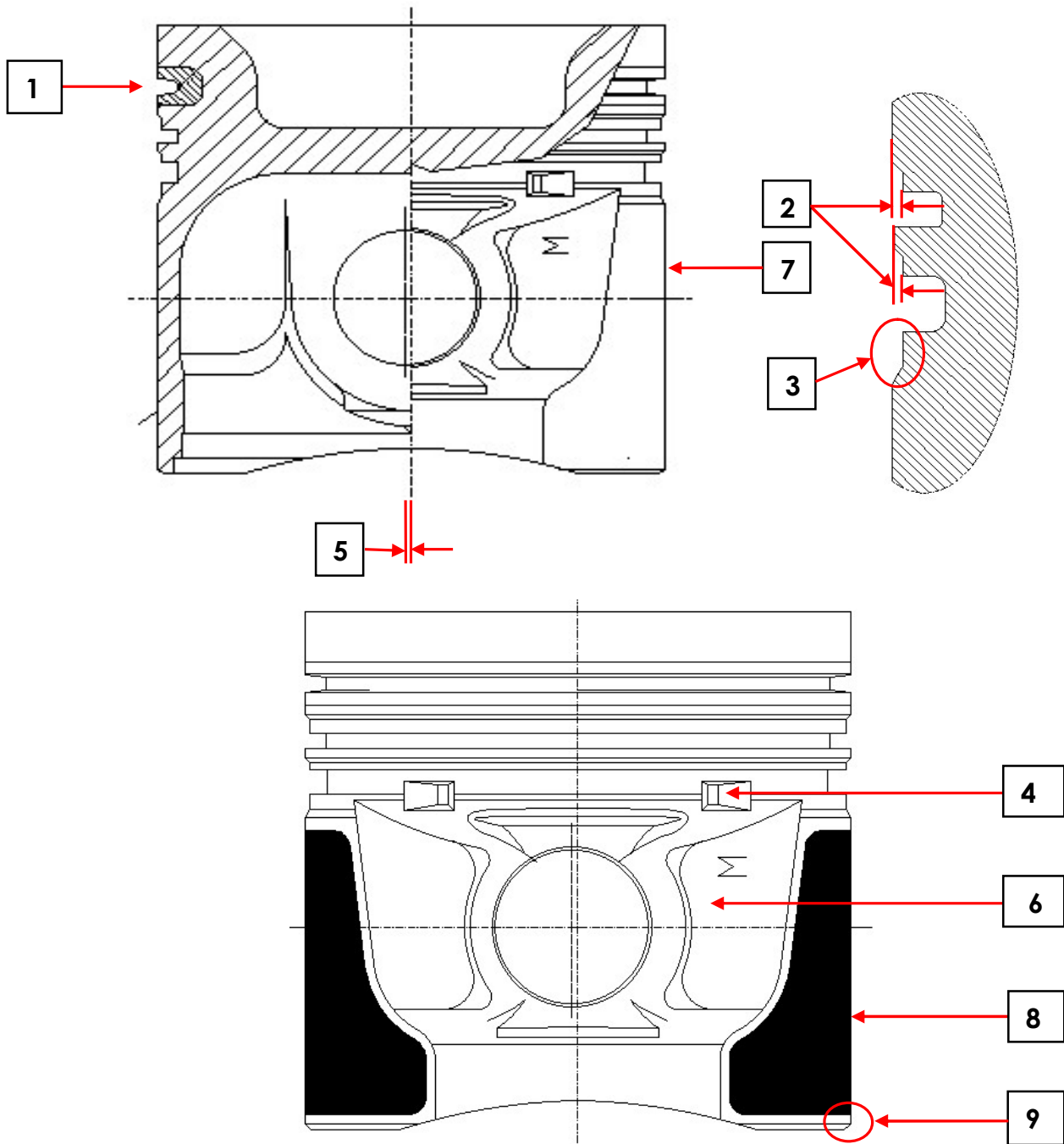
SEP'2020

An update from SHRIRAM PISTONS & RINGS LTD.

USHA[®] is pleased to introduce Mahindra Bolero CNG piston set in our LCV/MUV product range.

This piston set has following special features:-

PISTON:-



Unique features of USHA MAHINDRA BOLERO CNG piston are as follows:-

Sl. No	SPECIAL FEATURE	BENEFITS TO CUSTOMER
1)	HIGH NICKEL WEAR RESISTANT RING CARRIER (RCP):- 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"> • Longer life of piston due to negligible wear of top groove
2)	CUT BACK RING GROOVES:- Cut backs are provided in second & oil ring grooves for better seating & stability of rings.	<ul style="list-style-type: none"> • Helps in controlling blow-by & 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 piston 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 & hence lower oil consumption
5)	PISTON-PIN BORE OFFSET:- This 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 & prevents slapping with liner.	<ul style="list-style-type: none"> • Reduces engine noise
6)	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
7)	PISTON SURFACE COMPLETELY BONDERISED:-	<ul style="list-style-type: none"> • Bonderising helps in preventing oxidation of piston • Also provides porous surface for oil retention, thereby reducing wear
8)	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
9)	BOTTOM CHAMFER:- A smooth chamfer is provided at the bottom end of the piston which provides better hydrodynamic oil film.	<ul style="list-style-type: none"> • Helps in regulating oil supply, reduces skirt wear & hence longer life

TECHNICAL DATA – MAHINDRA BOLERO CNG PISTON**USHA CODE → L32**

Nominal Bore Diameter	mm	88.90
Piston Diameter	STD Size mm	88.81
Recommended Piston-Liner Clearance	mm	0.09
Compression Height	mm	51.35
Total Height	mm	84.35
Piston Pin Bore Diameter	mm	28.00
Piston Pin- Pin Bore Clearance	mm	+0.009 to +0.015 (Clearance Fit)

PISTON RINGS:-

USHA Mahindra Bolero CNG piston is designed to match with our existing ring sets compatible for Mahindra DI & Bolero LTC models with axial thickness of 3.0, 2.5, 4.0 mm (1st, 2nd & oil) as per the details hereunder :-

- Mahindra DI model- DVM, SSTR, HPCR & CPC combinations (USHA Code- 419/T13)
- Mahindra Bolero LTC/ LCCR models- SSTR combination (USHA Code- L08/L18)

for low oil consumption & blow-by.



Technical Product News is an exclusive update of product & information from
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