



SHRIRAM PISTONS & RINGS LTD.

New
Launch

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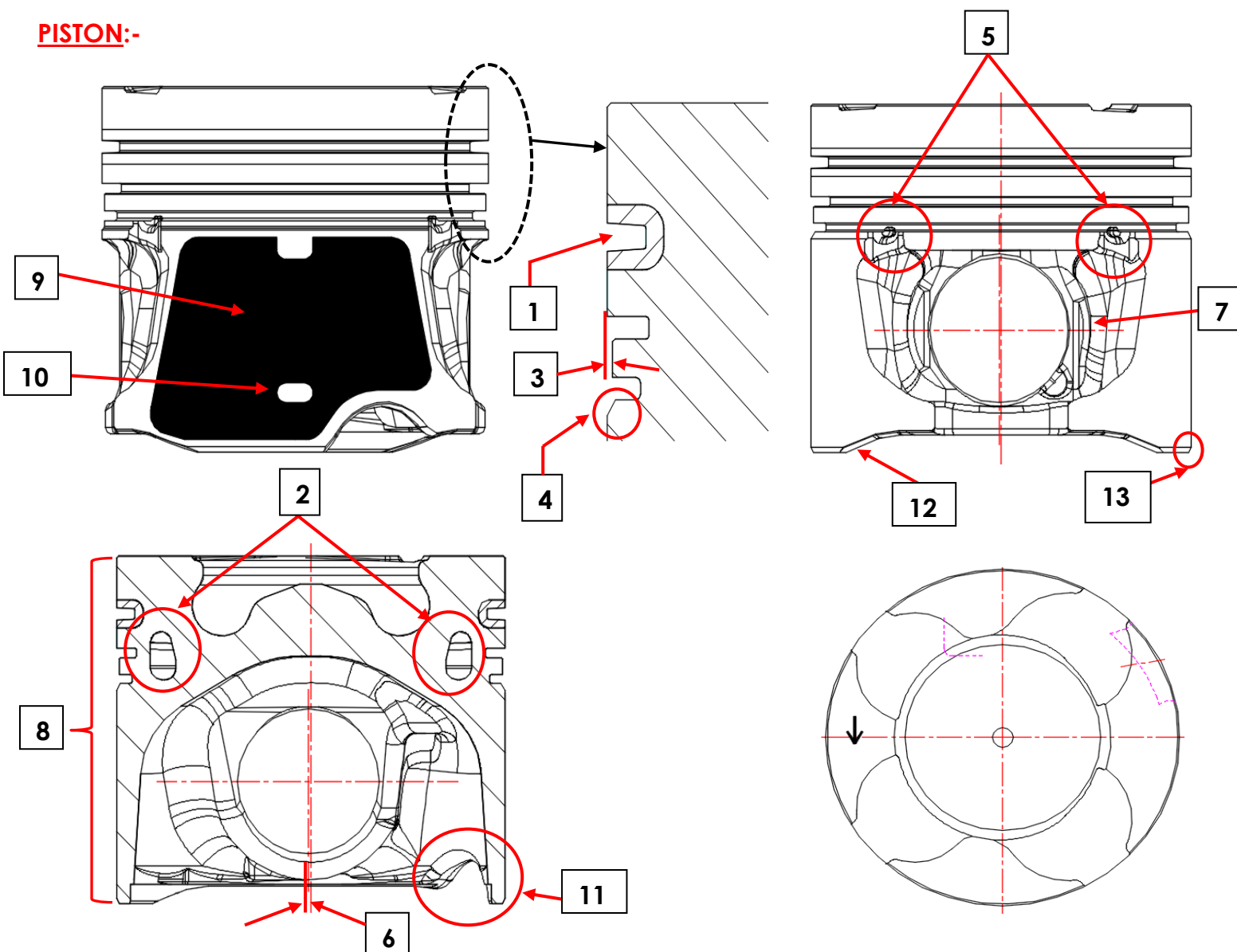
INTRODUCTION CIRCULAR- **M&M XUV500 2.2L mHawk DIESEL - PISTON SET**

USHA is pleased to launch **MAHINDRA XUV500 2.2L mHawk DIESEL** piston set in its aftermarket Car/ PV product range.



This piston set has following special features: -

PISTON:-



Unique features of USHA **MAHINDRA XUV500 2.2L mHawk DIESEL** 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. KEYSTONE RING GROOVE GEOMETRY: Helps in squeezing out excess oil from the groove preventing carbon deposition & sludge formation.	<ul style="list-style-type: none"> Longer life of piston due to negligible wear of top groove
2)	OIL COOLING GALLERY (OCG): 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 its working cycle.	<ul style="list-style-type: none"> Facilitates faster heat dissipation Helps in rapid cooling of combustion bowl & ring groove areas, thereby enhancing piston & engine life
3)	CUT BACK IN 2ND RING LAND: This piston has a step cut in second ring land for better seating, stability & functioning of intermediate ring.	<ul style="list-style-type: none"> Helps in controlling blow-by & reducing oil consumption
4)	CHAMFER AT BOTTOM OF OIL RING GROOVE: An all-round chamfer is provided just below the oil ring groove area.	<ul style="list-style-type: none"> Provides all time lubrication to piston skirt No piston seizure in extreme limits of normal working conditions
5)	QUICK OIL RETURN SLOTS (QORS): 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"> Faster drainage of excess oil, hence low oil consumption
6)	PISTON-PIN BORE OFFSET: 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"> Reduced engine noise
7)	AS CAST HYDRODYNAMIC WINDOW: '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.	<ul style="list-style-type: none"> Reduces chances of seizure at minor axis, hence longer piston life
8)	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
9)	'Nano-friKS COATING' ON PISTON SKIRT:	<ul style="list-style-type: none"> Helps in initial lubrication & seizure free operation Better wear resistance Reduces engine noise

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

TECHNICAL DATA – MAHINDRA XUV500 2.2L mHawk DIESEL PISTON (Ø 85.00 mm)	
USHA CODE→ C40	
Nominal Bore Diameter	85.00
Piston Diameter	84.93
Recommended Piston-Liner Clearance	0.07
Compression Height	48.00
Total Height	73.00
Gudgeon Pin Length X OD	68.90 X 31.00
All dimensions in 'mm'	

Above features make USHA **MAHINDRA XUV500 2.2L mHawk DIESEL** piston set unique, produced to give better performance & longer life especially when fitted with USHA **MAHINDRA SCORPIO 2.2L mHAWK/ XUV500 2.2L mHawk DIESEL 'CPC'** ring set (USHA Code: **C40/ C48**), already in our range.



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