



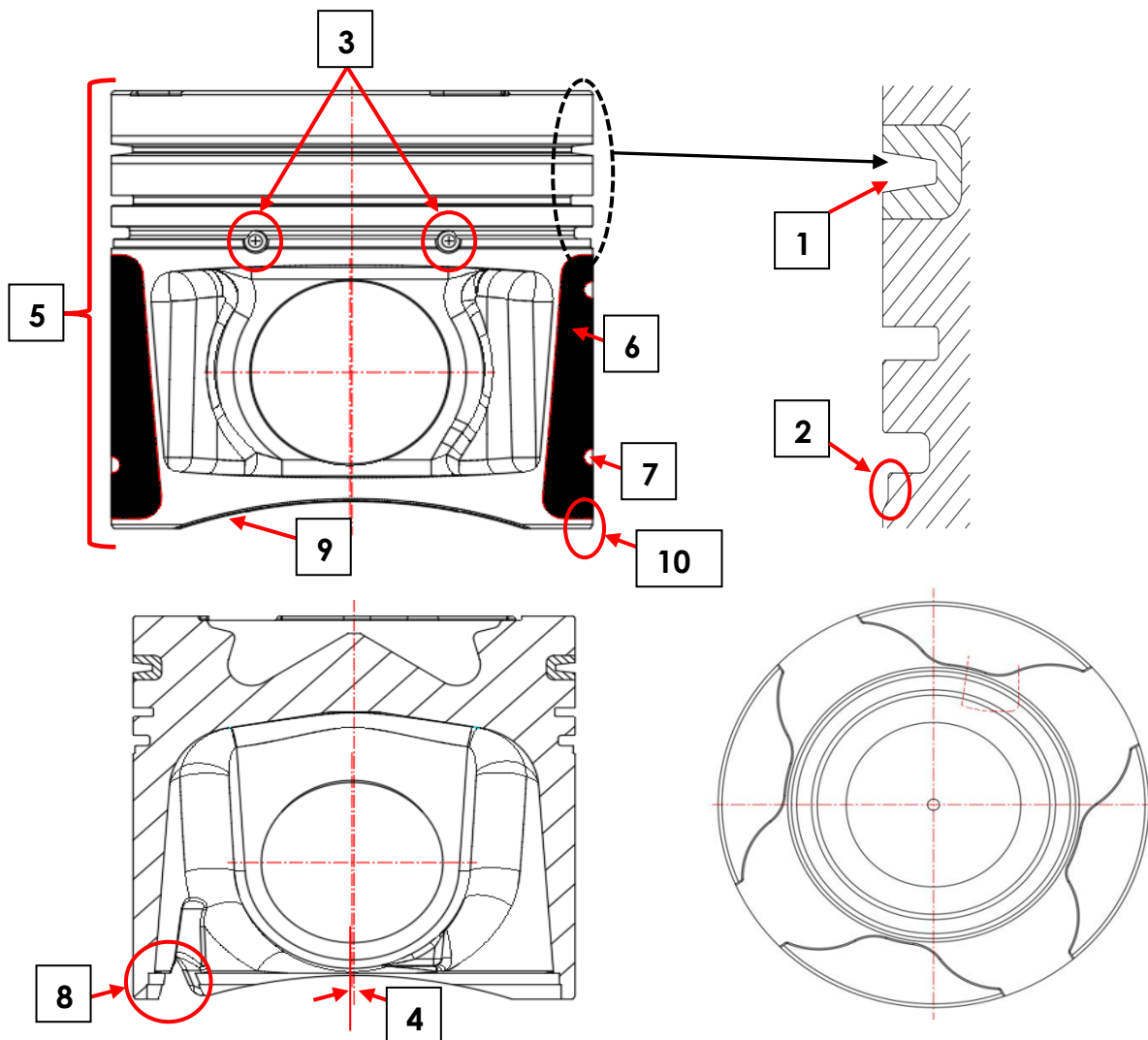
MD: TS: 03/JUN'26 INTRODUCTION CIRCULAR- **TATA ULTRA 5.0L TURBOTRON DIESEL - PISTON SET**

USHA is pleased to launch **TATA ULTRA 5.0L TURBOTRON DIESEL** piston set in its aftermarket LCV product range.

This piston set is common to the models like **TATA ULTRA 1518T/3021.S/ T.16 ULTRA/ ULTRA 1918.T/ LPT 1918/ULTRA 2821.T/ LPT 3521 & SIGNA 1918.K/ SIGNA 2821/ SIGNA 3521.TBS** models.



This piston set has following special features: -



Unique features of USHA **TATA ULTRA 5.0L TURBOTRON 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 inside the groove preventing carbon deposition & sludge formation.	Longer life of piston due to negligible wear of top groove
2)	'J' CUT: Piston has been provided with a unique 'J' cut below the oil ring groove area.	- Provides all time lubrication to piston skirt - No piston seizure in extreme limits of normal working conditions
3)	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.	Faster drainage of excess oil, hence low oil consumption
4)	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.	Reduced engine noise
5)	PISTON SURFACE COMPLETELY BONDERISED:	- Bonderising helps in preventing oxidation of piston - Also provides porous surface for oil retention, thereby reducing wear
6)	'Nano-friKS COATING' ON PISTON SKIRT:	- Helps in initial lubrication & seizure free operation - Better wear resistance - Reduces engine noise
7)	MEASURING POINTS ON PISTON SKIRT:	Provided for easy diameter verification
8)	SLOT FOR PISTON COOLING NOZZLE (PCN) JET: Provides room for oil cooling jet.	Helps in directing oil flow underneath piston combustion cavity results in faster dissipation of engine temperature

9)	SLIPPER DESIGN: Slipper design helps in reducing piston weight.	- Improves fuel efficiency - Low noise during engine working
10)	SCRAPING CHAMFER: A smooth chamfer is provided at the bottom end of the piston skirt.	Helps in regulating oil supply, reduces skirt wear & hence longer life

TECHNICAL DATA – TATA ULTRA 5.0L TURBOTRON DIESEL PISTON (Ø 112.00 mm)	
USHA CODE→ LS0-L51	
Nominal Bore Diameter	112.00
Piston Diameter	111.90
Recommended Piston-Liner Clearance	0.100
Compression Height	70.75
Total Height	110.00
Gudgeon Pin Length X OD	84.00 X 46.00
All dimensions in 'mm'	

Above features make USHA **TATA ULTRA 5.0L TURBOTRON DIESEL** piston set unique, produced to give better performance & longer life especially when fitted with USHA '**CPC**' ring set of subject model.S



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