



# SHRIRAM PISTONS & RINGS LTD.

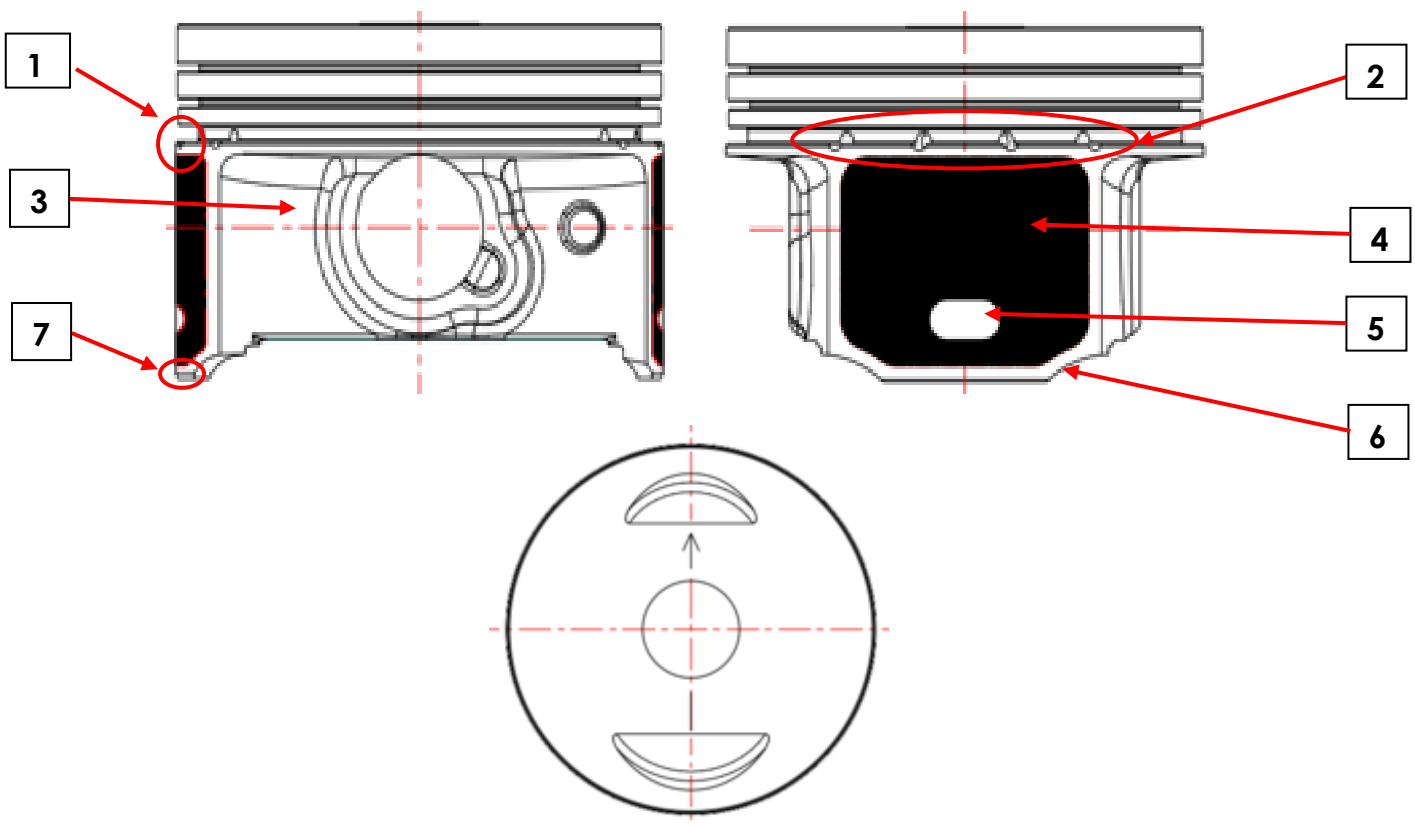
MD: TS: 01/APR'24 INTRODUCTION CIRCULAR – TVS STAR CITY+/ SPORT/ RADEON BS VI-PISTON ASSEMBLY

USHA is pleased to launch 'TVS STAR CITY+/ SPORT/ RADEON 110cc BS VI' piston assembly in its aftermarket bi-wheeler product range.



This piston assembly has following special features: -

### PISTON:-



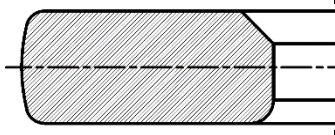
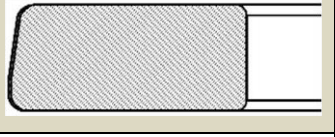
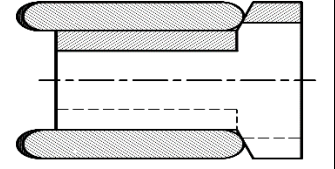
Unique features of USHA 'TVS STAR CITY+/ SPORT/ RADEON BS VI' piston are as follows: -

SL. NO.	SPECIAL FEATURE	BENEFITS TO CUSTOMER
1)	<b>CHAMFER AT BOTTOM OF OIL RING GROOVE:</b> An all-round chamfer is provided just below the oil ring groove area.	<ul style="list-style-type: none"> <li>Provides all time lubrication to piston skirt</li> <li>No piston seizure in extreme limits of normal working conditions</li> </ul>
2)	<b>HOLES IN OIL RING GROOVE AREA:</b> 04 nos. of holes are provided in the oil ring groove on either side of piston skirt, half in groove & half in skirt.	<ul style="list-style-type: none"> <li>Faster drainage of excess oil</li> <li>Reduces oil consumption</li> </ul>
3)	<b>AS CAST RELIEF IN PIN BORE AREA:</b> As cast relief in pin bore area helps in faster drainage of oil towards sump & also avoids chances of seizure on minor axis.	<ul style="list-style-type: none"> <li>Low oil consumption</li> <li>Longer life</li> </ul>
4)	<b>'Nano-friKS COATING' ON PISTON SKIRT:</b>	<ul style="list-style-type: none"> <li>Helps in initial lubrication &amp; seizure free operation</li> <li>Better wear resistance</li> <li>Reduces engine noise</li> </ul>
5)	<b>MEASURING POINTS ON PISTON SKIRT:</b>	<ul style="list-style-type: none"> <li>Provided for easy diameter verification</li> </ul>
6)	<b>SLIPPER DESIGN:</b> Slipper design helps in reducing piston weight.	<ul style="list-style-type: none"> <li>Improves fuel efficiency</li> <li>Low noise during engine working</li> </ul>
7)	<b>SCRAPPING CHAMFER:</b> A smooth chamfer is provided at the bottom end of the piston skirt.	<ul style="list-style-type: none"> <li>Helps in regulating oil supply, reduces skirt wear &amp; hence longer life</li> </ul>

TECHNICAL DATA – 'TVS STAR CITY+/ SPORT/ RADEON BS VI' PISTON		
		USHA CODE → <b>NCS91</b>
Nominal Bore Diameter	mm	53.50
Piston Diameter	STD Size mm	53.457
Recommended Piston-Liner Clearance	mm	0.043
Compression Height	mm	19.50
Total Height	mm	34.00
Gudgeon Pin Length X OD	mm	33.20 X 14.0

**PISTON RINGS:-**

USHA 'TVS STAR CITY+/ SPORT/ RADEON BS VI' piston is supplied with a unique '3S VENT' ring set for low oil & fuel consumption. The technical details of '3S VENT' ring set are as under:

TECHNICAL DATA – 'TVS STAR CITY+/ SPORT/ RADEON BS VI' – '3S VENT' RINGS						
Ring	Ring Configuration	Axial Thickness (mm)	Closed Gap		Surface Treatment	Cross Section
			(mm)	(Thou)		
Top	Steel Inside Bevel (HPIBGN)	0.80	0.10-0.25	04-10	Gas Nitriding	
Second	Steel Taper (HPCRT)	0.80	0.20-0.35	08-14	Chrome Plating/ Parkerising	
Oil	RIKVENT	1.50	0.10-0.60 (Rails)	04-24	Chrome Plating on Rails/ Parkerising	

Above features make USHA 'TVS STAR CITY+/ SPORT/ RADEON 110cc BS VI' piston assembly unique, produced to give better performance & longer life.



Technical Product News is an exclusive update of product & information from Shriram Pistons & Rings Ltd., 3rd Floor, Himalaya House, 23, Kasturba Gandhi Marg, New Delhi-110001  
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