



## SHRIRAM PISTONS & RINGS LTD.

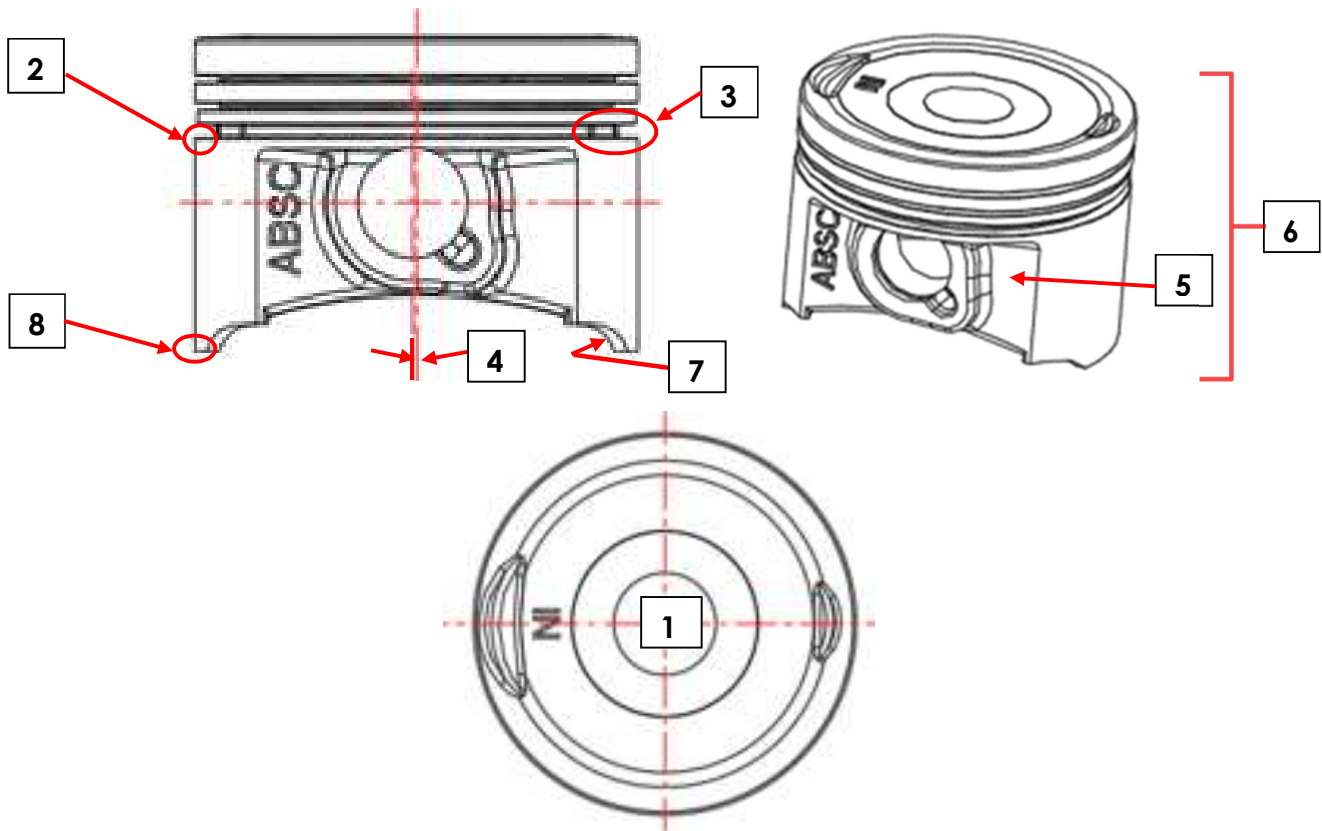
MD: TS: 28/ NOV'24 INTRODUCTION CIRCULAR – **HERO DESTINI 125cc BS VI - PISTON ASSEMBLY**

USHA is pleased to launch '**HERO DESTINI 125cc BS VI**' piston assembly in its aftermarket bi-wheeler product range.



This piston assembly has following special features: -

### PISTON:-



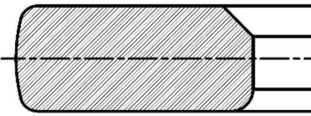
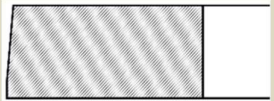
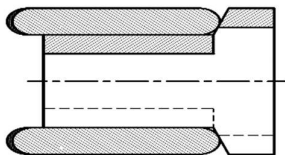
Unique features of USHA 'HERO DESTINI 125cc BS VI' piston are as follows: -

SL. NO.	SPECIAL FEATURE	BENEFITS TO CUSTOMER
1)	<b>AS CAST CROWN:</b> Crown is 'As Cast' having better grain structure, which facilitates better piston strength, heat resistance etc.	<ul style="list-style-type: none"> <li>Improves piston life</li> </ul>
2)	<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>
3)	<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.	<ul style="list-style-type: none"> <li>Faster drainage of excess oil</li> <li>Reduces oil consumption</li> </ul>
4)	<b>PISTON - PIN BORE OFFSET:</b> Piston is provided with 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 cylinder surface.	<ul style="list-style-type: none"> <li>Reduced engine noise</li> </ul>
5)	<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>
6)	<b>TIN PLATING:</b> Entire piston surface is Tin plated. Tin plating is a slippery coating which helps in avoiding metal to metal contact during initial run-in period.	<ul style="list-style-type: none"> <li>Reduces friction</li> <li>Avoids piston scuffing</li> </ul>
7)	<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>
8)	<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 – 'HERO DESTINI 125cc BS VI' PISTON	
USHA Code → <b>NCS99</b>	
Nominal Bore Diameter	52.40
Piston Diameter	52.38
Recommended Piston-Liner Clearance	0.02
Compression Height	19.60
Total Height	37.10
Gudgeon Pin Length X OD	38.0 X 13.0
All dimensions in 'mm'	

## **PISTON RINGS:-**

USHA **'HERO DESTINI 125cc BS VI'** piston is supplied with a unique **'HPVENT'** ring set for low oil & fuel consumption. The technical details of 'HPVENT' ring set are as under:

<b>TECHNICAL DATA – 'HERO DESTINI 125cc BS VI' – 'HPVENT' RINGS</b>						
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	Special Steel Taper (TSS)	0.80	0.10-0.25	04-10	Parkerising	
Oil	RIKVENT	1.50	0.20-0.70 (Rails)	08-28	Chrome Plated Rails/ Parkerising	

Above features make USHA **'HERO DESTINI 125cc BS-VI'** piston assembly unique, produced to give better performance & longer life.



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