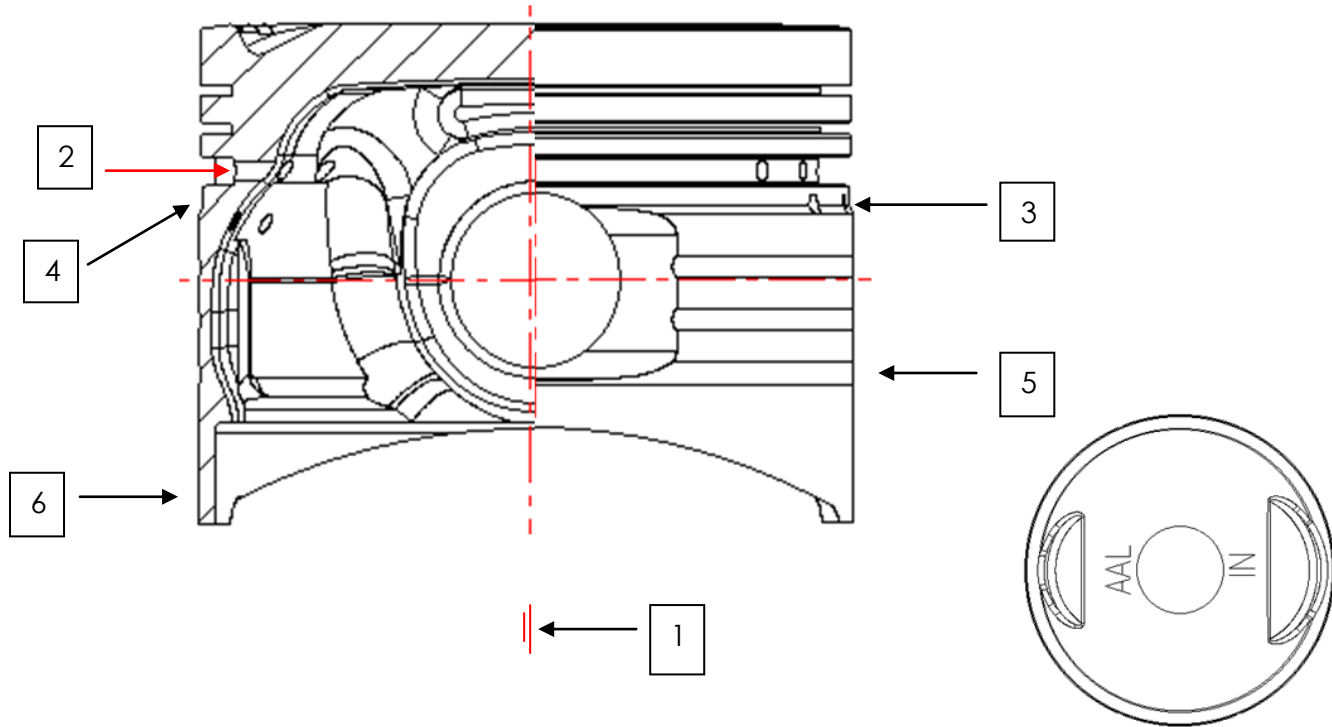


TECHNICAL BULLETIN - HERO PLEASURE 'NEW' PISTON ASSEMBLY

USHA is pleased to introduce HERO PLEASURE 'NEW' piston assembly in our range of Bi-wheeler assemblies.

This piston assembly has following special features:-



PISTON:

Unique features of USHA HERO PLEASURE 'NEW' piston are as under:-

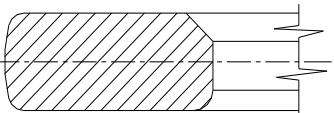
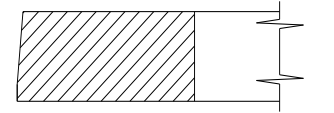
S.No.	SPECIAL FEATURES	BENEFITS TO CUSTOMERS
1)	PISTON- PIN BORE OFFSET: This Piston is provided with a piston pin bore offset to avoid piston slap. Piston pin bore offset means that the centre line of piston is slightly offset from the centre line of pin bore. Due to this offset, piston tilts at TDC & BDC smoothly and prevents slapping with liner.	<ul style="list-style-type: none"> • Reduced engine noise.
2)	OIL HOLES IN OIL RING GROOVE	<ul style="list-style-type: none"> • Faster drainage of excess oil. • Lesser oil consumption.
3)	OIL HOLES BELOW OIL RING GROOVE	<ul style="list-style-type: none"> • Faster drainage of excess oil. • Reduced oil consumption.
4)	"J"- CUT: This piston has been provided with a unique "J" cut below the oil ring groove.	<ul style="list-style-type: none"> • "J" cut provides all time lubrication of piston skirt. • No piston seizure in extreme limits of normal working conditions.

5)	SHALLOW GROOVES ON PISTON SKIRT	<ul style="list-style-type: none"> Helps in retaining oil. Reduced friction/skirt wear during piston movement.
6)	SLIPPER DESIGN: Slipper design in piston skirt helps in reducing piston weight & provides better guidance to the piston movement.	<ul style="list-style-type: none"> Improved fuel efficiency. Better guidance to rings. Low noise during engine working.

TECHNICAL DATA- HERO PLEASURE 'NEW' PISTON		
		USHA CODE → S54
Nominal Bore Diameter	mm	50.00
Piston Diameter	STD Size mm	49.9875
Recommended Piston-Liner Clearance	mm	0.0125
Compression Height	mm	19.07
Total Height	mm	37.07
Piston Pin- Pin Bore Clearance	mm	+0.002 to +0.014 (Clearance Fit)

PISTON RINGS:

HERO PLEASURE 'NEW' piston is supplied with specially designed **HPVENT** ring set for low oil & fuel consumption. The technical details of HPVENT ring set are as under:-

TECHNICAL DATA- HERO PLEASURE 'NEW' RINGS						
Ring	Ring Configuration	Axial Thickness (mm)	Closed Gap		Surface Treatment	Cross Section
			(mm)	(Thou)		
Top	Steel Inside Bevelled	0.8	0.10-0.25	4-10	Gas Nitrided	
Second	Special Steel Taper	0.8	0.10-0.25	4-10	Parkerised	
Oil Ring	RIKVENT	2.0	0.20-0.70 (Rails)	8-28	Chrome Plated/ Parkerised	