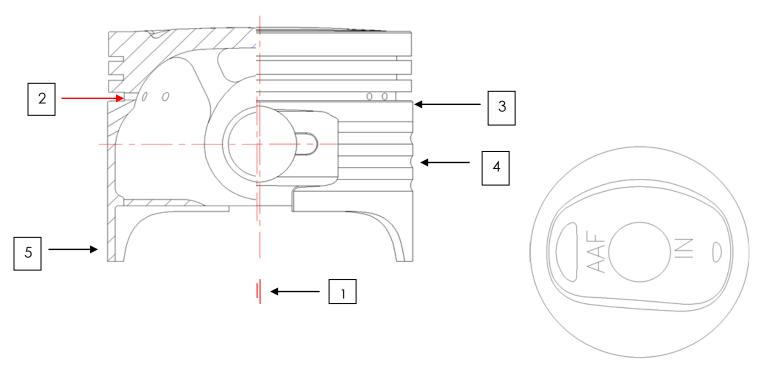
## TECHNICAL PRODUCT NEWS- HF DELUXE/ SPLENDOR i3S PISTON ASSEMBLY

USHA is pleased to introduce HF DELUXE/ SPLENDOR i3S piston assembly in our Bi-wheeler product range.

This piston assembly has following special features:



## PISTON:

Unique features of USHA HF DELUXE/ SPLENDOR i3S piston are as follows:

S.No.	SPECIAL FEATURES		BENEFITS TO CUSTOMERS
1.	PISTON- PIN BORE OFFSET: USHA HF DELUXE/	•	Reduced engine noise.
	SPLENDOR i3S 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.		
2.	OIL HOLES IN OIL RING GROOVE	•	Faster drainage of excess
			oil.
		•	Lesser oil consumption.
3.	CHAMFER AT BOTTOM FLANK OF OIL RING	•	Better drainage of oil.
	GROOVE	•	Reduction in skirt wear.

4.	SHALLOW GROOVES ON PISTON SKIRT	<ul> <li>Helps in retaining oil on skirt.</li> <li>Reduced friction/skirt wear during piston movement.</li> </ul>
5.	<b>SLIPPER DESIGN</b> : Slipper design in piston skirt helps in reducing piston weight & provides better guidance to the piston movement.	<ul> <li>Improved fuel efficiency.</li> <li>Better guidance to rings.</li> <li>Low noise during engine working.</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><li> Reduced friction.</li><li> Avoid piston scuffing.</li></ul>

TECHNICAL DATA- HF DELUXE/ SPLENDOR i3S PISTON								
		USHA CODE→ S51						
Nominal Bore Diameter	mm	50.00						
Piston Diameter	STD Size mm	49.9875						
Recommended	mm	0.0125						
Piston-Liner Clearance								
Compression Height	mm	19.20						
Total Height	mm	39.20						
Piston Pin- Pin Bore Clearance	mm	+0.002 to +0.014						
		(Clearance Fit)						

## PISTON RINGS:

USHA HF DELUXE/ SPLENDOR i3S pistons are supplied with specially designed **HPVENT** ring set for low oil & fuel consumption. The technical details of HPVENT ring set are as under:-

TECHNICAL DATA- HF DELUXE/ SPLENDOR i3S RINGS								
Ring	Ring	Axial	Closed Gap		Surface	Cross Section		
	Configuration	Thickness (mm)	(mm)	(Thou)	Treatment			
Тор	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	1.50	0.20- 0.70 (Rails)	8-28	Chrome Plated/ Parkerised			