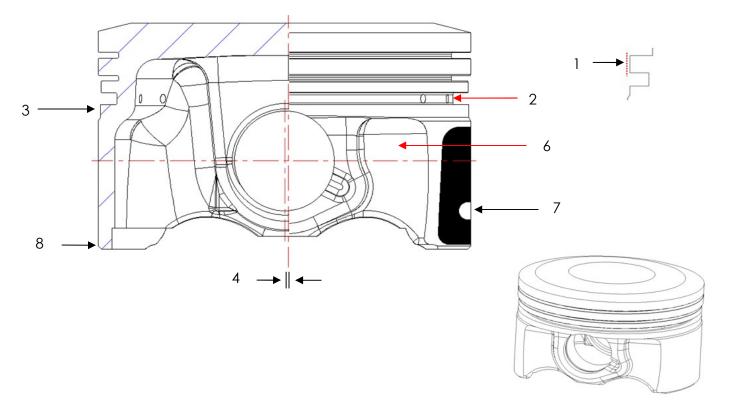
## TECHNICAL BULLETIN- BAJAJ COMPACT BS-III CNG PISTON ASSEMBLY

USHA is pleased to introduce BAJAJ COMPACT BS-III CNG piston assembly in our three wheeler product range.

This piston assembly has following special features:



## **PISTON:**

Unique features of USHA BAJAJ COMAPCT BS-III CNG piston are as follows:

S.No.	SPECIAL FEATURES	BENEFITS TO CUSTOMERS
1)	<b>CUT BACK IN SECOND RING LAND:</b> Provides perfect seating of the first ring on the bottom surface.	<ul><li>Reduced blow-by.</li><li>Lesser oil consumption.</li></ul>
2)	OIL HOLES IN RING GROOVE	<ul><li>Faster drainage of excess oil.</li><li>Lesser oil consumption.</li></ul>
3)	"J" CUT: This piston has been provided with a unique 'J' cut below the oil ring groove area.	<ul> <li>'J' cut provides all time lubrication to skirt.</li> <li>No piston seizure in extreme limits of normal working conditions.</li> </ul>
4)	PISTON- PIN BORE OFFSET: USHA Bajaj Compact BS-III Pistons are 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 & prevents slapping with liner.	Reduced engine noise.

5)	SKIRT COATED WITH NEW "D-10" COATING:	D-10 permanent coating provides better wear resistance & helps in initial lubrication to avoid piston scuffing/seizure etc.		
6)	AS CAST RELIEF IN PIN BORE AREA: USHA Compact BS-III pistons are provided with as cast relief in pin bore area which helps in better drainage of oil.	Less oil consumption.		
7)	MEASURING POINTS ON THE SKIRT	<ul> <li>Provided for easy diameter verification.</li> </ul>		
8)	<b>BOTTOM CHAMFER:</b> A smooth chamfer is provided at the bottom end of piston which provides better hydrodynamic oil film.	<ul> <li>Helps in regulating oil supply, reduced skirt wear and hence longer life.</li> </ul>		

TECHNICAL DATA- BAJAJ COMPACT BS-III CNG PISTON						
	USHA CODE→ S49					
Nominal Bore Diameter	mm	63.50				
Piston Diameter	STD Size mm	63.464				
Recommended Piston-Liner Clearance	mm	0.036				
Compression Height	mm	23.50				
Total Height	mm	38.50				
Piston Pin- Pin Bore Clearance	mm	+0.015 to +0.016				
		(Clearance fit)				

## **PISTON RINGS:**

USHA Bajaj Compact BS-III CNG pistons are provided with HPVENT ring set for low oil consumption & blow-by. The technical details of HPVENT ring set are as under:-

TECHNICAL DATA- BAJAJ COMPACT BS-III CNG RINGS							
Ring	Ring Configuration	Axial Thickness (mm)	Closed (mm)	(Thou)	Surface Treatment	Cross Section	
Top*	HPIBCR	1.0	0.15- 0.30	6-12	O.D Chrome Plated		
Second*	CRTSS	1.0	0.30- 0.45	12-18	O.D Chrome Plated		
Oil Ring	RIKVENT	2.0	0.20- 0.70 (Rails)	8-28	Rails Chrome Plated		

<sup>\*</sup>Both top & second rings are Tough Rik coated which improves the ring performance at elevated temperature & prevents micro-welding.