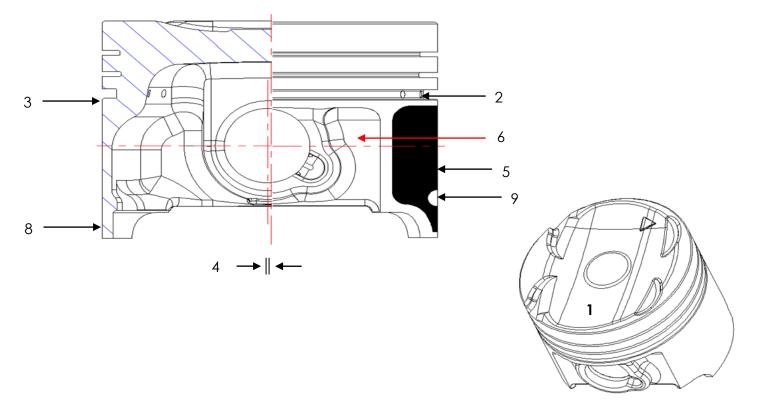
## TECHNICAL PRODUCT NEWS- BAJAJ DISCOVER 100 M/T PISTON ASSEMBLY

USHA is pleased to introduce BAJAJ DISCOVER 100 M/T (4 valves) piston assembly in our Bi-wheeler product range.

This piston assembly has following special features:



## **PISTON:**

Unique features of USHA BAJAJ DISCOVER 100 M/T piston are as follows:

S.No.	SPECIAL FEATURES	BENEFITS TO CUSTOMERS
1)	AS CAST CROWN: USHA Discover 100 M/T piston has as cast crown i.e. no machining is done on crown of piston. As cast crown has better grain structure which increases the strength, heat resistance etc. of the piston.	Increased piston life.
2)	OIL HOLES IN RING GROOVE:	<ul><li>Faster drainage of excess oil.</li><li>Lesser oil consumption.</li></ul>
3)	CHAMFER AT BOTTOM FLANK OF OIL RING GROOVE:	<ul><li>Better drainage of oil.</li><li>Reduction in skirt wear.</li></ul>
4)	<b>PISTON- PIN BORE OFFSET</b> : USHA Discover 100 M/T 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 & prevents slapping with liner.	Reduced engine noise.

5)	SKIRT COATED WITH NEW "D-10" COATING:	<ul> <li>D-10 coating provides better wear resistance &amp; helps in initial lubrication to avoid piston scuffing/seizure etc.</li> </ul>
6)	AS CAST RELIEF IN PIN BORE AREA: USHA Discover 100 M/T piston is provided with as cast relief in pin bore area which helps in better drainage of oil.	Less oil consumption.
7)	<b>HOLES IN PIN BOSS:</b> Oil holes are provided for better lubrication of piston pin.	<ul><li>Less pin-pin bore wear.</li><li>Longer life of piston.</li></ul>
8)	<b>SLIPPER DESIGN</b> : Slipper Design in 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>
9)	MEASURING POINTS ON THE SKIRT:	<ul> <li>Provided for easy diameter verification.</li> </ul>

TECHNICAL DATA- BAJAJ DISCOVER 100 M/T PISTON							
		USHA CODE→ S50					
Nominal Bore Diameter	mm	47.00					
Piston Diameter	STD Size mm	46.975					
Recommended Piston-Liner Clearance	mm	0.025					
Compression Height	mm	20.10					
Total Height	mm	35.10					
Piston Pin- Pin Bore Clearance	mm	+0.007 to +0.018					
		(Clearance fit)					

## **PISTON RINGS**:

USHA BAJAJ DISCOVER 100 M/T piston is provided with a unique design HPVENT ring set for low oil & fuel consumption. The technical details of HPVENT ring set are as under:-

TECHNICAL DATA- BAJAJ DISCOVER 100 M/T – 'HPVENT' RINGS								
Ring	Ring	Axial	Closed Gap		Surface	Cross Section		
	Configuration	Thickness (mm)	(mm)	(Thou)	Treatment			
Тор	Inside Bevel Steel	0.8	0.10-0.25	4-10	Gas Nitrided			
Second	Taper Special Steel (RIK 20A)	0.8	0.30-0.45	12-18	Parkerised			
Oil Ring	RIKVENT	1.5	0.20-0.70 (Rails)	8-28	Rails Chrome Plated			