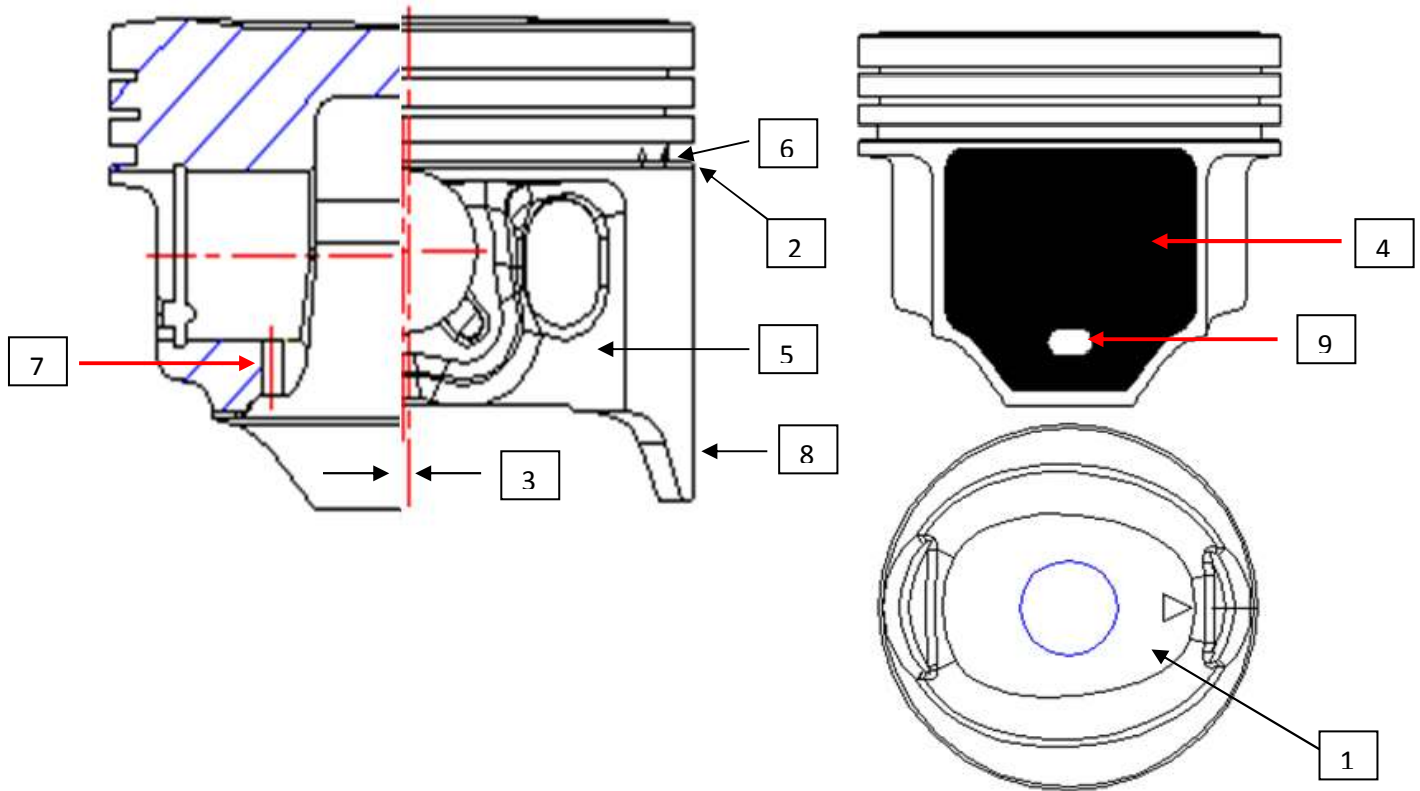


TECHNICAL BULLETIN- BAJAJ DISCOVER 125cc (New) PISTON ASSEMBLY

USHA is pleased to introduce BAJAJ DISCOVER 125 cc (ø54) piston assembly in our range of two wheeler assemblies.

This piston assembly has following special features:

PISTON:



Unique features of USHA DISCOVER 125cc (New) piston are as follows:

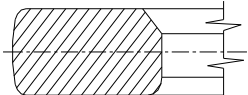
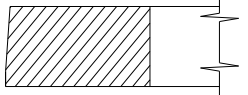
S.No.	SPECIAL FEATURES	BENEFITS TO CUSTOMERS
1)	AS CAST CROWN: This piston has as cast crown i.e. no machining is done on crown of piston. As cast crown has better grain structure which increases the strength, heat resistance etc. of piston crown.	<ul style="list-style-type: none"> • Increased piston life
2)	CHAMFER AT BOTTOM FLANK OF OIL RING GROOVE	<ul style="list-style-type: none"> • Low oil consumption • Helps in reducing skirt wear
3)	PISTON- PIN BORE OFFSET: USHA Discover 125cc 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 smoothly & prevents slapping with liner.	<ul style="list-style-type: none"> • Reduced engine noise

4)	SKIRT COATED WITH NEW "D-10" COATING	<ul style="list-style-type: none"> D-10 coating provides better wear resistance & initial lubrication to avoid piston scuffing/seizure etc.
5)	AS CAST RELIEF IN PIN BORE AREA: These pistons are provided with as cast relief in pin bore area which helps in better drainage of oil.	<ul style="list-style-type: none"> Less oil consumption
6)	OIL HOLES IN RING GROOVE	<ul style="list-style-type: none"> Quick drainage of excess oil Lesser oil consumption
7)	HOLES IN PIN BOSS	<ul style="list-style-type: none"> To improve lubrication of pin
8)	SLIPPER DESIGN: Slipper Design in 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 operation
9)	MEASURING POINTS ON THE SKIRT	<ul style="list-style-type: none"> Provided for easy diameter verification

TECHNICAL DATA- BAJAJ DISCOVER 125cc (New) PISTON		
USHA CODE→ S32		
Nominal Bore Diameter	mm	54.00
Piston Diameter	STD Size mm	53.975
Recommended Piston-Liner Clearance	mm	0.025
Compression Height	mm	19.66
Total Height	mm	40.66
Piston Pin- Pin Bore Clearance	mm	+0.007 to +0.0018 (Clearance Fit)

PISTON RINGS:

BAJAJ DISCOVER 125cc (New) pistons are supplied with unique design HPVENT ring set for low oil & fuel consumption. The technical details of HPVENT ring set are as under :-

TECHNICAL DATA- BAJAJ DISCOVER 125cc (New) RINGS						
Ring	Ring Configuration	Axial Thickness (mm)	Closed Gap		Surface Treatment	Cross Section
			(mm)	(Thou)		
Top	HPIBGN	0.8	0.10-0.25	4-10	Gas Nitrided	
Second	TSS	0.8	0.30-0.45	12-18	Parkerised	
Oil Ring	RIKVENT	1.5	0.20-0.70 (Rails)	8-28	Chrome Plated/ Parkerised	