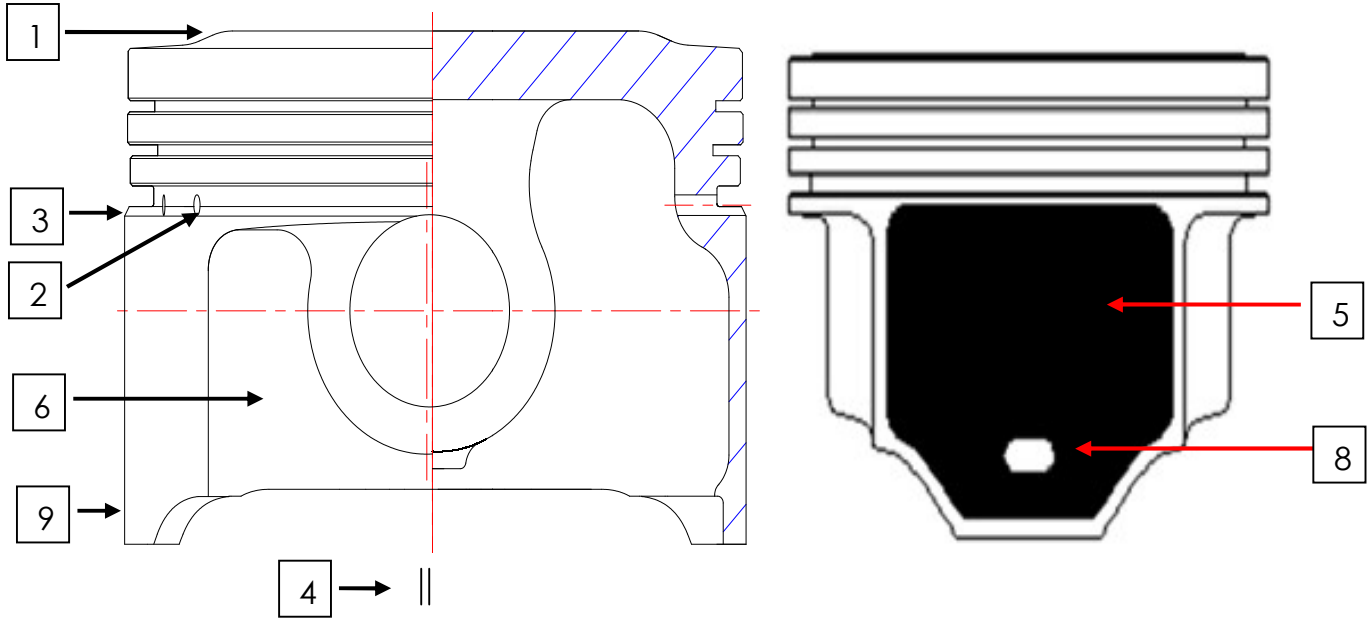


TECHNICAL BULETTIN- BAJAJ DISCOVER 125 ST PISTON ASSEMBLY

USHA is pleased to introduce BAJAJ DISCOVER 125 ST (4 valves) piston assembly in our range of two wheeler assemblies.

This piston assembly has following special features:

PISTON:



Unique features of USHA DISCOVER 125 ST pistons are as follows:

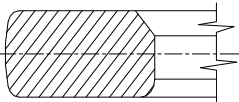
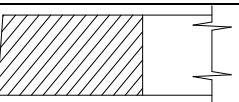
S.No.	SPECIAL FEATURES	BENEFITS TO CUSTOMERS
1)	AS CAST CROWN: USHA Discover 125 ST piston has as cast crown i.e. no machining is done on crown of piston. As cast crown has better grain structure which increases the strength, heat resistance etc. of piston crown.	<ul style="list-style-type: none"> Increased piston life.
2)	OIL HOLES IN RING GROOVE	<ul style="list-style-type: none"> Faster drainage of excess oil. Lesser oil consumption.
3)	CHAMFER AT BOTTOM FLANK OF OIL RING GROOVE	<ul style="list-style-type: none"> Low oil consumption. Reduction in skirt wear.
4)	PISTON- PIN BORE OFFSET: USHA Discover 125 ST 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.
5)	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.

6)	AS CAST RELIEF IN PIN BORE AREA: USHA Discover 125 ST pistons provided with as cast relief in pin bore area which helps in better drainage of oil.	<ul style="list-style-type: none"> • Lesser oil consumption.
7)	HOLES IN PIN BOSS	<ul style="list-style-type: none"> • Improves lubrication of pin.
8)	MEASURING POINTS ON THE SKIRT	<ul style="list-style-type: none"> • Provided for easy diameter verification.
9)	SLIPPER DESIGN: Slipper Design in skirt helps in reducing piston weight & provides better guidance during piston movement.	<ul style="list-style-type: none"> • Improved fuel efficiency. • Better guidance to rings. • Low noise during engine working.

TECHNICAL DATA- BAJAJ DISCOVER 125 ST PISTONS		
		USHA CODE → S40
Nominal Bore Diameter	mm	54.00
Piston Diameter	STD Size mm	53.975
Recommended Piston-Liner Clearance	mm	0.025
Compression Height	mm	20.39
Total Height	mm	37.39
Piston Pin- Pin Bore Clearance	mm	+0.009 to +0.0019 (Clearance Fit)

PISTON RINGS:

USHA BAJAJ DISCOVER 125 ST pistons are provided with unique design HPVENT ring sets for low oil & fuel consumption. The technical details of HPVENT ring set are as under:-

TECHNICAL DATA- BAJAJ DISCOVER 125 ST RINGS						
Ring	Ring Configuration	Axial Thickness (mm)	Closed Gap		Surface Treatment	Cross Section
			(mm)	(Thou)		
Top	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	Chrome Plated/ Parkerised	