



SHRIRAM PISTONS & RINGS LTD.

MD: TS: 29/FEB'24

INTRODUCTION CIRCULAR –

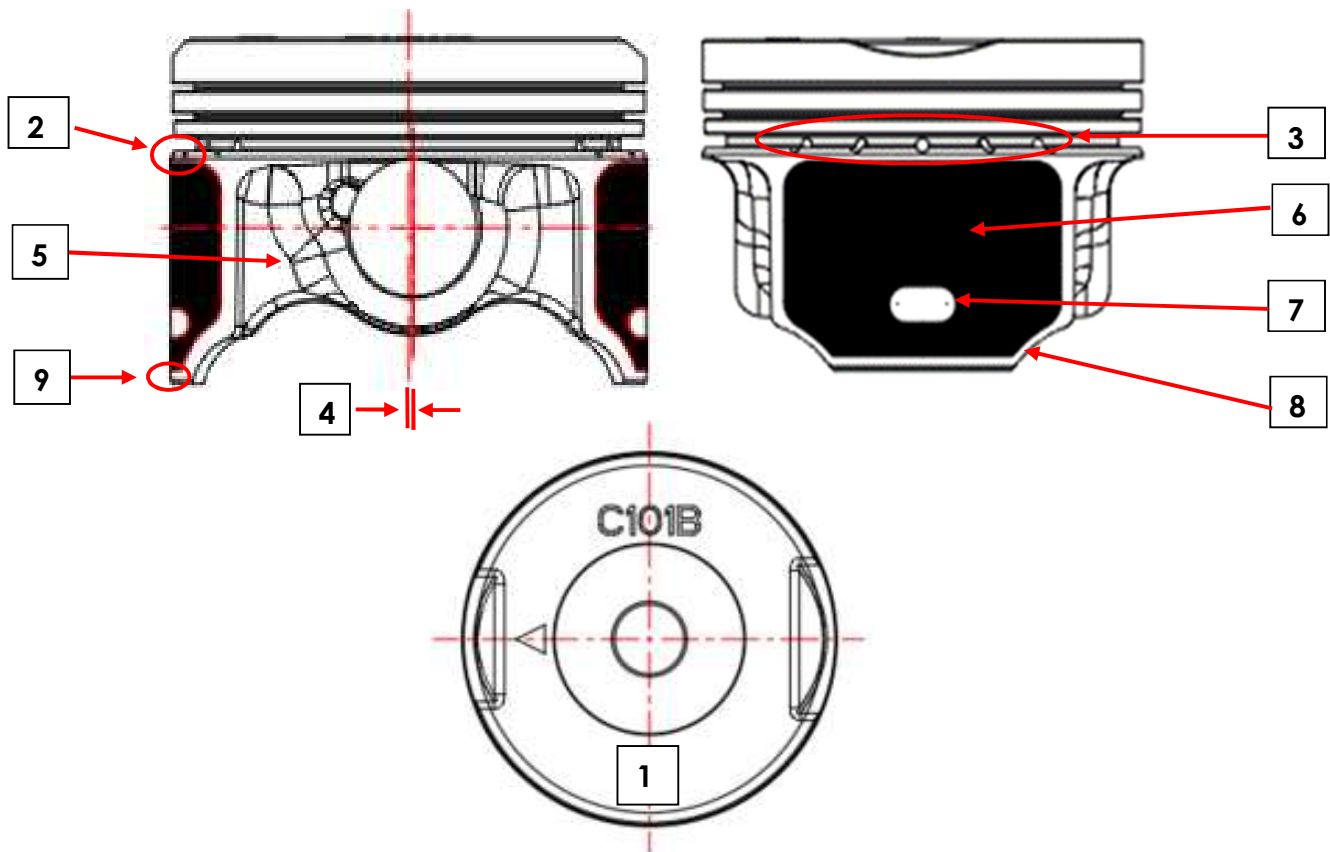
BAJAJ VIKRANT V12/ DISCOVER 125cc LED – PISTON ASSEMBLY

USHA is pleased to launch **Bajaj Vikrant V12/ Discover 125cc LED** piston assembly in its bi-wheeler product range.



This piston assembly has following special features: -

PISTON:-



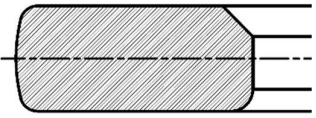

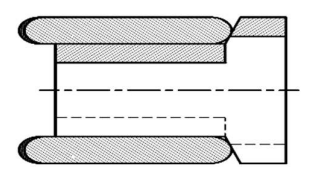
Unique features of USHA 'BAJAJ VIKRANT V12/ DISCOVER 125cc LED' piston are as follows:

SL. NO.	SPECIAL FEATURE	BENEFITS TO CUSTOMER
1)	AS CAST CROWN: This piston has an as cast crown for better grain structure which improves piston strength & heat resistance etc.	<ul style="list-style-type: none"> Improves piston life
2)	CHAMFER AT BOTTOM OF OIL RING GROOVE: An all-round chamfer is provided just below the oil ring groove area.	<ul style="list-style-type: none"> Provides all time lubrication to piston skirt No piston seizure in extreme limits of normal working conditions
3)	HOLES IN OIL RING GROOVE AREA: 05 nos. of holes are provided in the oil ring groove on either side of piston skirt.	<ul style="list-style-type: none"> Faster drainage of excess oil Reduces oil consumption
4)	PISTON - PIN BORE OFFSET: Piston is provided with 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 cylinder surface.	<ul style="list-style-type: none"> Reduces engine noise
5)	AS CAST RELIEF IN PIN BORE AREA: As cast relief in pin bore area helps in faster drainage of oil towards sump & also avoids chances of seizure on minor axis.	<ul style="list-style-type: none"> Low oil consumption Longer life
6)	'D-10 COATING' ON PISTON SKIRT:	<ul style="list-style-type: none"> Helps in initial lubrication & seizure free operation Better wear resistance Reduces engine noise
7)	MEASURING POINTS ON PISTON SKIRT:	<ul style="list-style-type: none"> Provided for easy diameter verification
8)	SLIPPER DESIGN: Slipper design helps in reducing piston weight.	<ul style="list-style-type: none"> Improves fuel efficiency Low noise during engine working
9)	SCRAPPING CHAMFER: A smooth chamfer is provided at the bottom end of the piston skirt.	<ul style="list-style-type: none"> Helps in regulating oil supply, reduces skirt wear & hence longer life

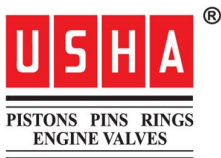
TECHNICAL DATA – 'BAJAJ VIKRANT V12/ DISCOVER 125cc LED' PISTON		
USHA CODE → NCS96		
Nominal Bore Diameter	mm	52.00
Piston Diameter	STD Size mm	51.965
Recommended Piston-Liner Clearance	mm	0.035
Compression Height	mm	19.35
Total Height	mm	35.35
Gudgeon Pin Length X OD	mm	38.0 X 14.0

PISTON RINGS:-

USHA 'Bajaj Vikrant V12/ Discover 125cc LED' piston is supplied with a unique 'HPVENT' ring set for low oil & fuel consumption. The technical details of 'HPVENT' ring set are as under:

TECHNICAL DATA – 'BAJAJ VIKRANT V12/ DISCOVER 125cc LED' – 'HPVENT' RINGS						
Ring	Ring Configuration	Axial Thickness (mm)	Closed Gap		Surface Treatment	Cross Section
			(mm)	(Thou)		
Top	Steel Inside Bevel (HPIBGN)	0.80	0.10-0.25	04-10	Gas Nitriding	
Second	Special Steel Taper (CRTSS)	0.80	0.15-0.30	06-12	Chrome Plating/ Parkerising	
Oil	RIKVENT	1.50	0.20-0.70 (Rails)	08-28	Chrome Plating on Rails/ Parkerising	

Above features make USHA 'BAJAJ VIKRANT V12/ Discover 125cc LED' piston assembly unique, produced to give better performance & longer life.



Technical Product News is an exclusive update of product & information from Shriram Pistons & Rings Ltd., 3rd Floor, Himalaya House, 23, Kasturba Gandhi Marg, New Delhi-110001
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