



SHRIRAM PISTONS & RINGS

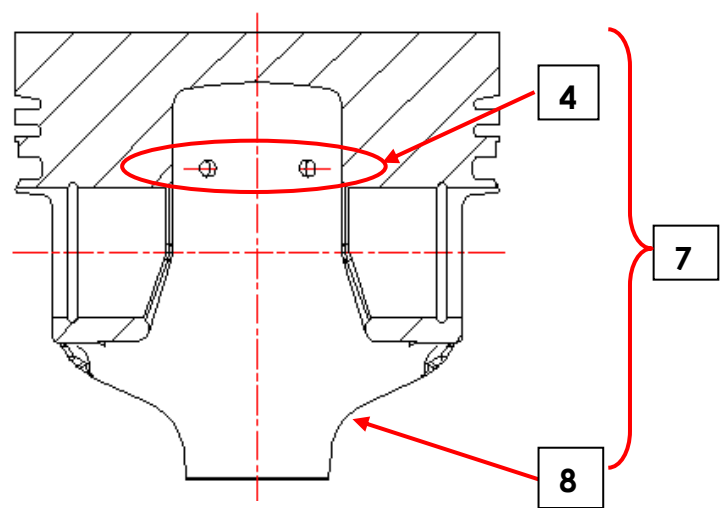
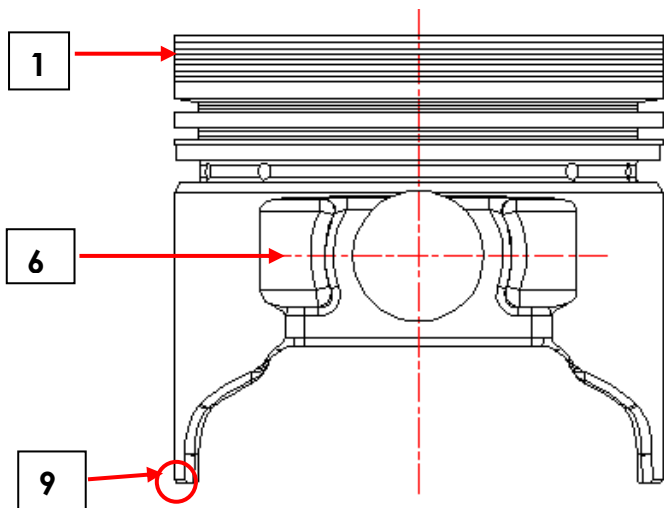
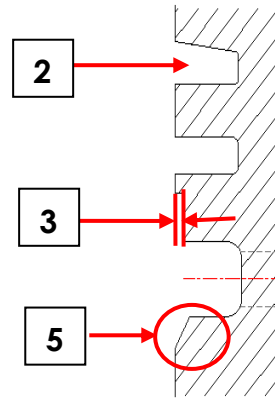
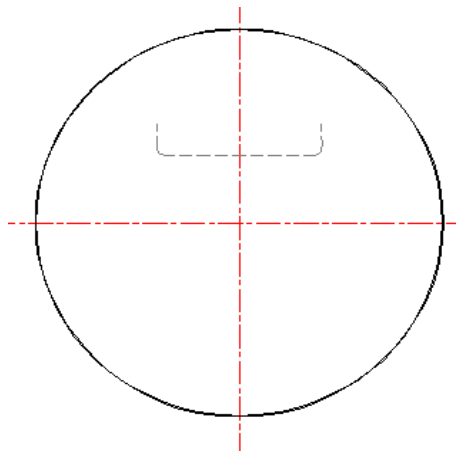
MD: TS: 22/JAN'23 INTRODUCTION CIRCULAR – **BAJAJ KUBOTA 'RE' DIESEL BS-III – PISTON ASSEMBLY**

USHA is pleased to launch **Bajaj Kubota 'RE' Diesel BS-III** piston assembly in its 3 wheeler/ Auto rickshaw product range.



This piston assembly has following special features:-

PISTON:-



Unique features of USHA **Bajaj Kubota 'RE' Diesel BS-III** piston are as follows:-

SL. NO.	SPECIAL FEATURE	BENEFITS TO CUSTOMER
1)	SERRATIONS IN TOP LAND: Top land of Bajaj Kubota 'RE' Diesel BS-III piston is provided with shallow grooves around entire periphery which acts as heat dam to reduce temperature in top groove.	<ul style="list-style-type: none"> • Serrations help in preventing Blow-by & heat, thereby reducing chances of top ring scuffing
2)	HALF KEYSTONE TOP GROOVE GEOMETRY: Top groove of this piston has half keystone geometry which facilitates in squeezing out excess oil from the groove during its working cycle preventing carbon deposition & sludge formation.	<ul style="list-style-type: none"> • Reduced groove wear • Improves piston life
3)	STEP CUT IN SECOND RING LAND: Bajaj Kubota 'RE' Diesel BS-III is provided with a step cut in 2nd ring land for better seating & stability of intermediate ring.	<ul style="list-style-type: none"> • Helps in controlling blow-by and reducing oil consumption
4)	OIL HOLES IN RING GROOVE AREA: This piston has been provided with 04 nos. of holes in the oil ring groove on each side of piston skirt.	<ul style="list-style-type: none"> • Faster drainage of excess oil • Reduced oil consumption
5)	CHAMFER AT BOTTOM OF OIL RING GROOVE: Bajaj Kubota 'RE' Diesel BS-III piston has been provided with a chamfer just below the oil ring groove area.	<ul style="list-style-type: none"> • It provides all time lubrication to piston skirt • No piston seizure in extreme limits of normal working conditions
6)	AS CAST WINDOW: This piston has 'as cast' window design which provides better grain structure & more bearing area to the piston skirt.	<ul style="list-style-type: none"> • Longer life of piston (Seizure on minor axis is avoided) • More bearing area of piston skirt helps in well guided movement of rings
7)	TIN PLATING: Entire surface of Bajaj Kubota 'RE' Diesel BS-III piston is tin plated. Tin plating is a slippery coating which helps in avoiding metal to metal contact during initial running-in period.	<ul style="list-style-type: none"> • Reduces friction • Avoids piston scuffing
8)	SLIPPER DESIGN: This piston is provided with Slipper design which 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 KUBOTA 'RE' DIESEL BS-III' PISTON

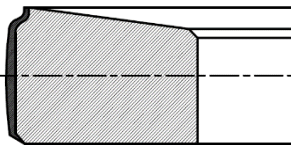
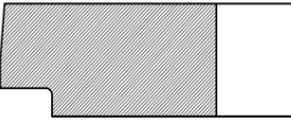
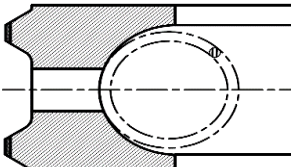
USHA CODE → S74

Nominal Bore Diameter	mm	86.00
Piston Diameter	STD Size mm	85.96
Recommended Piston - Liner Clearance	mm	00.04
Compression Height	mm	39.00
Total Height	mm	79.00
Gudgeon Pin OD X Length	mm	23.00 X 64.00
Gudgeon Pin - Pin Bore Clearance	mm	+0.008 to +0.013 (Clearance fit)

PISTON RINGS:-

USHA Bajaj Kubota 'RE' Diesel BS-III piston is supplied with a unique 'SSTR' ring set for low oil & fuel consumption. The technical details of 'SSTR' ring set are as under:

TECHNICAL DATA – BAJAJ KUBOTA 'RE' DIESEL BS-III/ IV – 'SSTR' RINGS

Ring	Ring Configuration	Axial Thickness (mm)	Closed Gap		Surface Treatment	Cross Section
			(mm)	(Thou)		
Top	Special Steel Half Keystone (CRKHSS)	2.064	0.15-0.30	06-12	Chrome Plating/ Parkerising	
2 nd	Taper Outside Step (TOS)	2.00	0.35-0.55	14-22	Parkerising	
Oil	High Tension Conformable Profile Ground (HTCR-PGV)	4.00	0.25-0.50	10-20	Chrome Plated lands/ Parkerising	



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