



SHRIRAM PISTONS & RINGS

MD: TS: 26/JAN'23

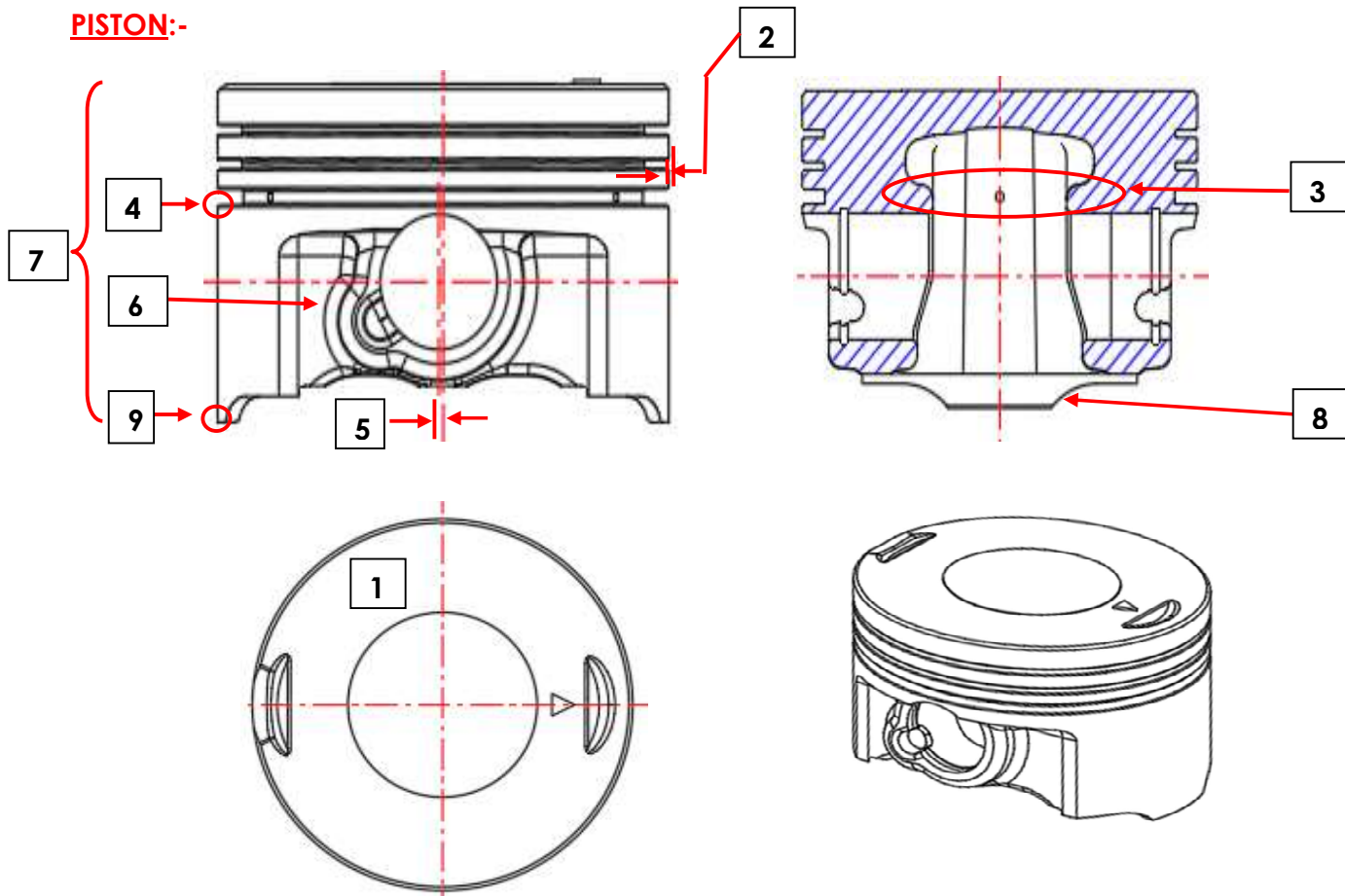
INTRODUCTION CIRCULAR – **YAMAHA RAY/ FASCINO – PISTON ASSEMBLY**

USHA is pleased to launch **Yamaha Ray/ Fascino** piston assembly in its bi-wheeler product range.



This piston assembly has following special features: -

PISTON:-



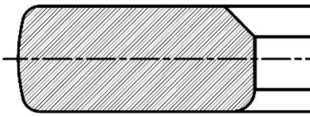

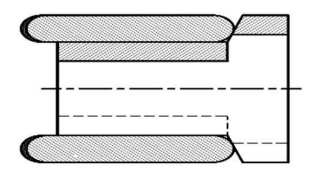
Unique features of USHA 'YAMAHA RAY/ FASCINO' piston are as follows: -

SL. NO.	SPECIAL FEATURE	BENEFITS TO CUSTOMER
1)	AS CAST CROWN: The crown of USHA Yamaha Ray/ Fascino piston is as cast. As cast crown has better grain structure which improves piston strength & heat resistance etc.	<ul style="list-style-type: none"> Improves piston life
2)	CUT BACK IN SECOND RING LAND: This piston is provided with a cut back in second ring land for better seating, stability & functioning of intermediate ring.	<ul style="list-style-type: none"> Helps in controlling blow-by & reducing oil consumption
3)	HOLES IN OIL RING GROOVE AREA: USHA Yamaha Ray/ Fascino piston has been provided with 03 nos. of holes in the oil ring groove on either side of piston skirt.	<ul style="list-style-type: none"> Faster drainage of excess oil Reduced oil consumption
4)	CHAMFER AT BOTTOM OF OIL RING GROOVE: This piston has an all-round chamfer 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
5)	PISTON - PIN BORE OFFSET: USHA Yamaha Ray/ Fascino 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"> Reduced engine noise
6)	AS CAST RELIEF IN PIN BORE AREA: This piston is provided with as cast relief in pin bore area which not only helps in faster drainage of oil towards sump but also in avoiding chances of seizure on minor axis.	<ul style="list-style-type: none"> Low oil consumption Longer life
7)	TIN PLATING: Entire surface of USHA Yamaha Ray/ Fascino piston is tin plated. Tin plating is a slippery coating which helps in avoiding metal to metal contact.	<ul style="list-style-type: none"> Reduces friction during initial running in
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

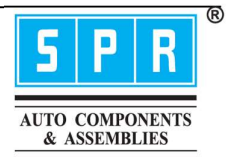
TECHNICAL DATA – ‘YAMAHA RAY/ FASCINO’ PISTON		
USHA CODE → NCS92		
Nominal Bore Diameter	mm	50.0
Piston Diameter	STD Size mm	49.97
Recommended Piston-Liner Clearance	mm	0.03
Compression Height	mm	19.0
Total Height	mm	32.50
Gudgeon Pin Length X OD	mm	39.0 X 13.0

PISTON RINGS: -

USHA ‘Yamaha Ray/ Fascino’ 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 – ‘YAMAHA RAY/ FASCINO’ – ‘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 (TSS)	0.80	0.10-0.25	04-10	Parkerising	
Oil	RIKVENT	1.50	0.20-0.70 (Rails)	08-28	Chrome Plating on Rails/ Parkerising	

Above features make USHA ‘YAMAHA RAY/ FASCINO’ 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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