



SHRIRAM PISTONS & RINGS

MD: TS: 35/MAR'23

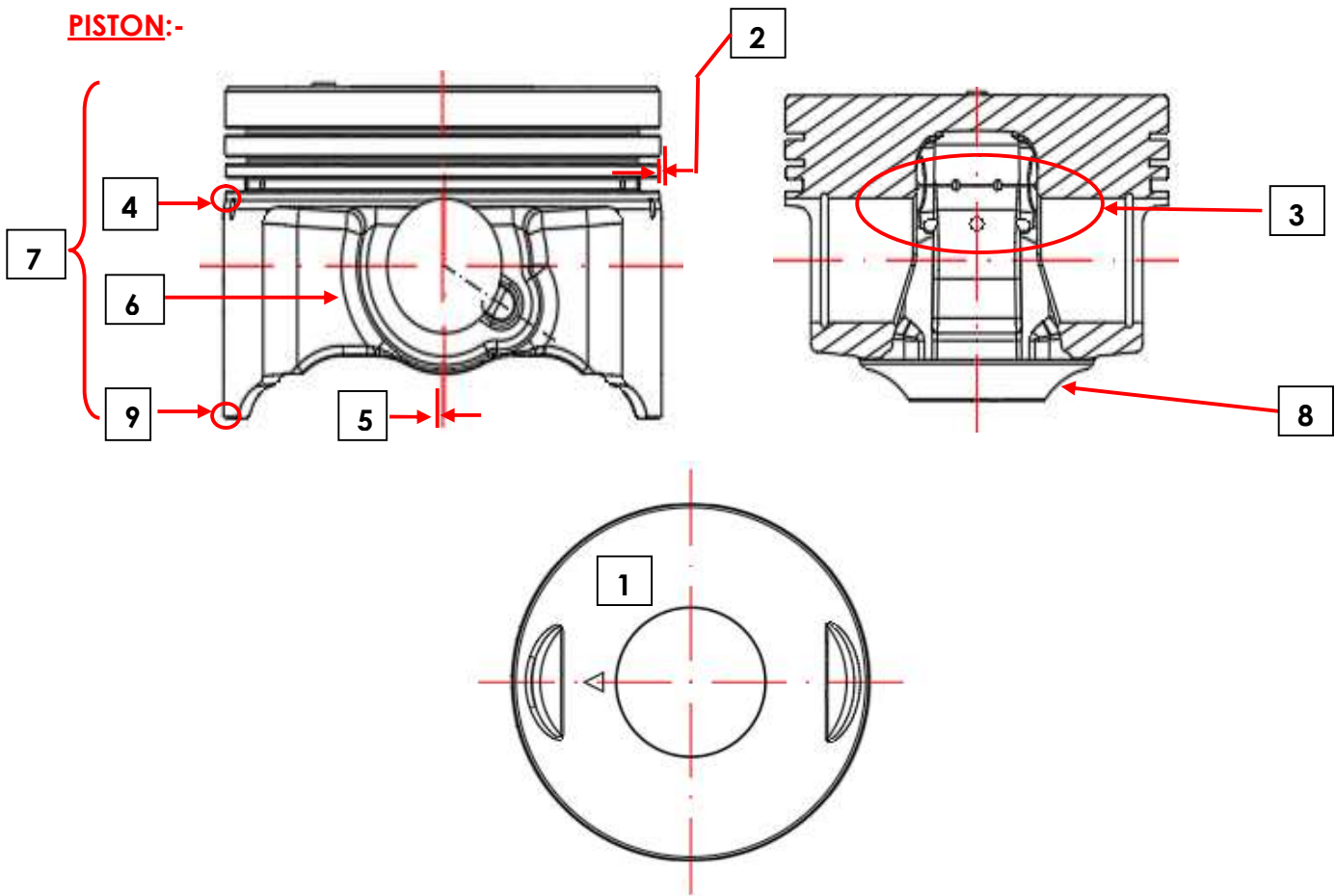
INTRODUCTION CIRCULAR – **YAMAHA FZ V2.0 – PISTON ASSEMBLY**

USHA is pleased to launch **Yamaha FZ V2.0** piston assembly in its bi-wheeler aftermarket product range.



This piston assembly has following special features: -

PISTON:-



Unique features of USHA 'YAMAHA FZ V2.0' piston are as follows: -

SL. NO.	SPECIAL FEATURE	BENEFITS TO CUSTOMER
1)	AS CAST CROWN: 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 2ND 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: 04 nos. of holes in oil ring groove & 03 nos. just below the groove are provided on either side of piston skirt.	<ul style="list-style-type: none"> Faster drainage of excess oil Reduced oil consumption
4)	'J' CUT: A unique 'J' shaped cut 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
5)	PISTON - PIN BORE OFFSET: Piston is 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 & BDC smoothly, that prevents slapping with cylinder surface.	<ul style="list-style-type: none"> Reduced engine noise
6)	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
7)	TIN PLATING: 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: Slipper design helps in reducing piston weight.	<ul style="list-style-type: none"> Improved fuel efficiency Low noise during engine working
9)	SCRAPPING CHAMFER: A smooth chamfer is provided at the bottom end of piston skirt.	<ul style="list-style-type: none"> Helps in regulating oil supply, reduces skirt wear & hence longer life

TECHNICAL DATA – ‘YAMAHA FZ V2.0’ PISTON

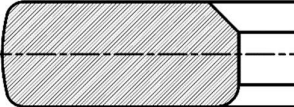

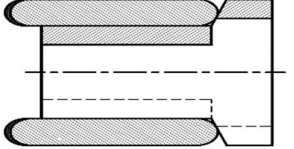
USHA CODE → NCS70

Nominal Bore Diameter	mm	57.30
Piston Diameter	STD Size mm	57.285
Recommended Piston-Liner Clearance	mm	0.015
Compression Height	mm	19.90
Total Height	mm	36.90
Gudgeon Pin Length X OD	mm	45.0 X 15.0

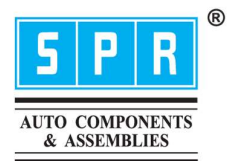
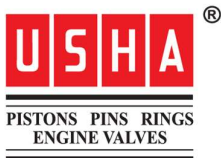
PISTON RINGS: -

USHA ‘**Yamaha FZ V2.0**’ 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 FZ V2.0’ – ‘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	Rails Chrome Plated/ Parkerising	

Above features make USHA ‘**YAMAHA FZ V2.0**’ piston assembly unique, produced to give better performance & longer life.



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 Shriram Pistons & Rings Ltd., 3rd Floor, Himalaya House, 23, Kasturba Gandhi Marg, New Delhi-110001
 Tel: 011-46451100, 23315941, Email: tss@shrirampistons.com, Website: www.shrirampistons.com