



SHRIRAM PISTONS & RINGS

MD: TS: 01/MAY'23

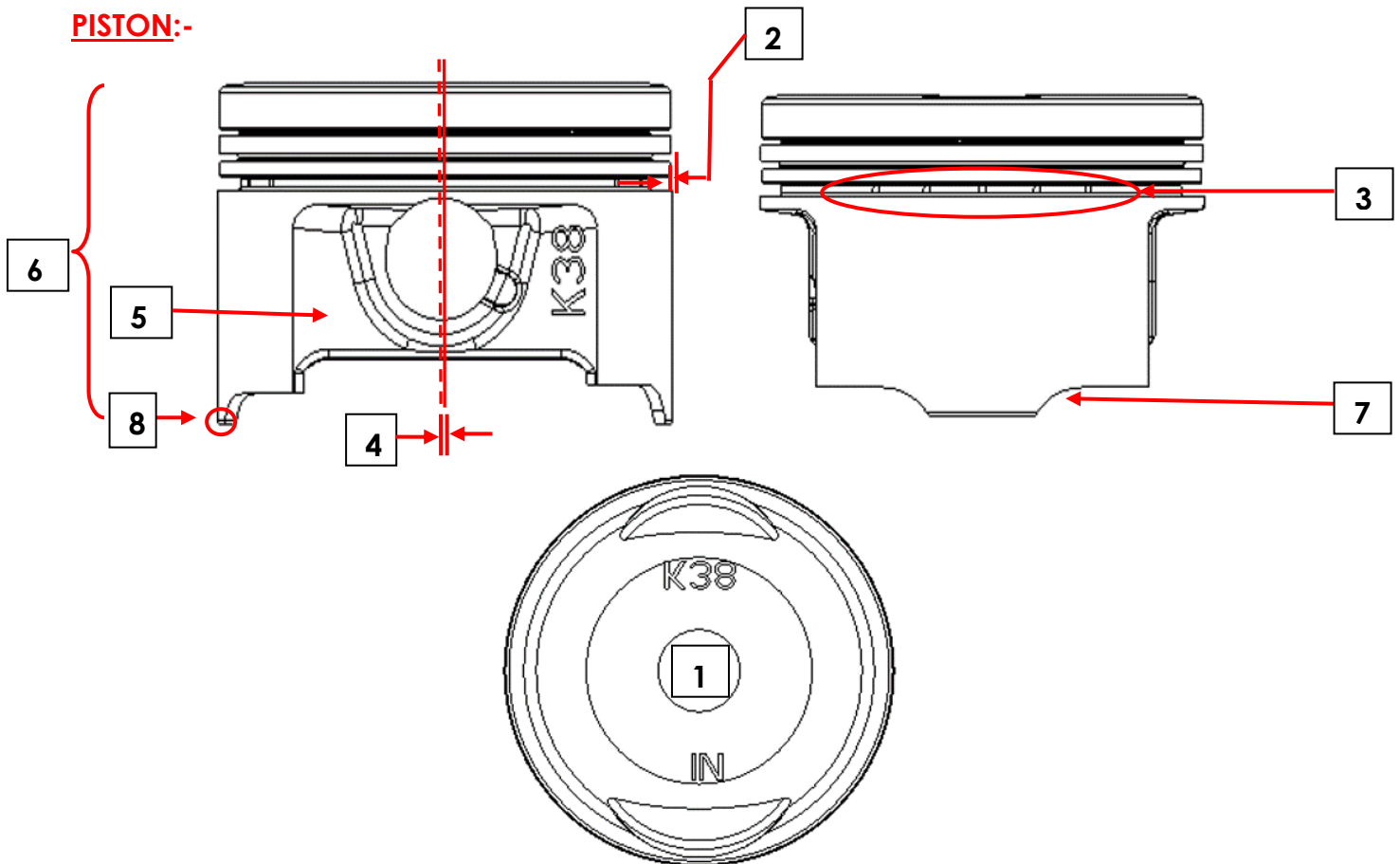
INTRODUCTION CIRCULAR – **HONDA HORNET/ UNICORN 160cc – PISTON ASSEMBLY**

USHA is pleased to launch **Honda Hornet/ Unicorn 160cc** piston assembly in its bi-wheeler product range.



This piston assembly has following special features: -

PISTON:-



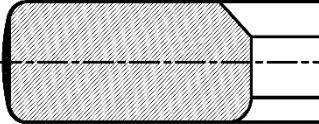

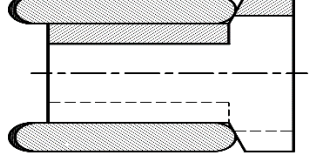
Unique features of USHA 'HONDA HORNET/ UNICORN 160cc' piston are as follows: -

SL. NO.	SPECIAL FEATURE	BENEFITS TO CUSTOMER
1)	AS CAST CROWN: USHA Honda Hornet piston has as cast crown for 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: 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: 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 Reduced 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"> Reduced 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)	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
7)	SLIPPER DESIGN: Slipper design helps in reducing piston weight.	<ul style="list-style-type: none"> Improves fuel efficiency Low noise during engine working
8)	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 – 'HONDA HORNET/ UNICORN 160cc' PISTON		
USHA CODE → NCS73		
Nominal Bore Diameter	mm	57.30
Piston Diameter	STD Size mm	57.295
Recommended Piston-Liner Clearance	mm	0.005
Compression Height	mm	19.70
Total Height	mm	38.70
Gudgeon Pin Length X OD	mm	39.50 X 14.0

PISTON RINGS:-

USHA 'Honda Hornet/ Unicorn 160cc' piston is supplied with a unique '3S3C VENT' ring set for low oil & fuel consumption. The technical details of '3S3C VENT' ring set are as under:

TECHNICAL DATA – 'HONDA HORNET/ UNICORN 160cc' – '3S3C VENT' RINGS						
Ring	Ring Configuration	Axial Thickness (mm)	Closed Gap		Surface Treatment	Cross Section
			(mm)	(Thou)		
Top	Steel Inside Bevel (HPCRIB)	0.80	0.08-0.23	04-10	Chrome Plating	
Second	Steel Taper Inside Bevel (HPCRTIB)	0.80	0.15-0.30	06-12	Chrome Plating	
Oil	RIKVENT	1.50	0.20-0.70 (Rails)	08-28	Chrome Plating on Rails/ Parkerising	

Above features make USHA 'HONDA HORNET/ UNICORN 160cc' piston assembly unique, produced to give better performance & longer life.



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