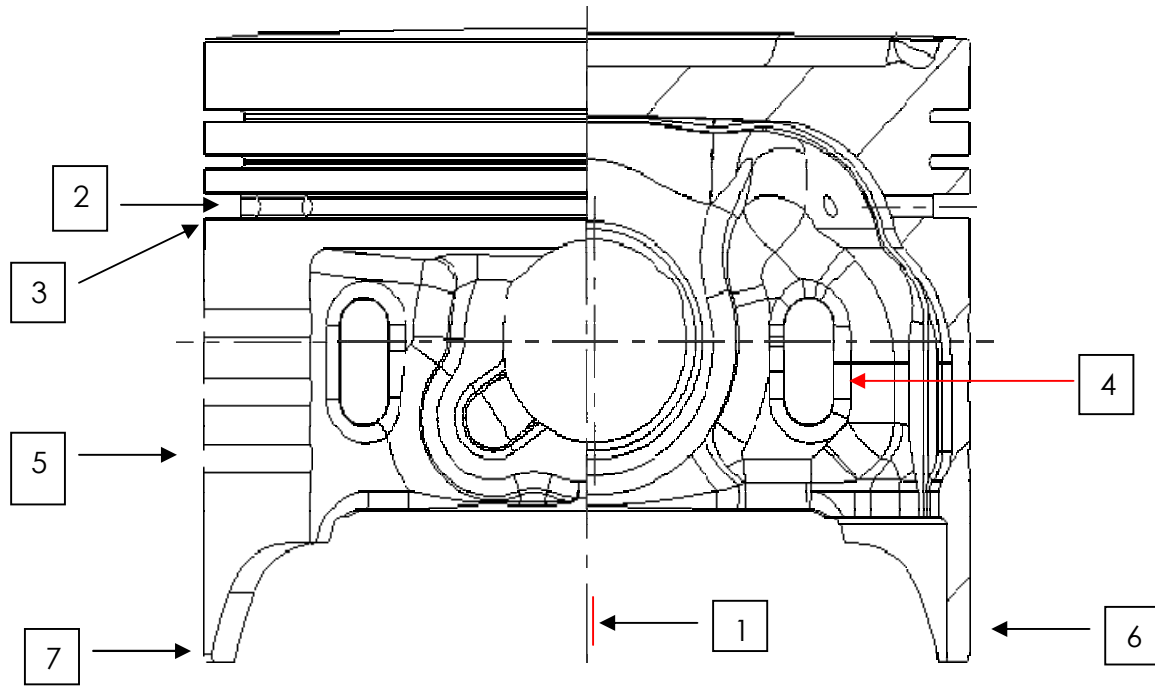


TECHNICAL BULLETIN- HERO PASSION X-PRO PISTON ASSEMBLY

USHA is pleased to introduce HERO PASSION X-PRO piston assembly in our range of two wheeler assemblies.

This piston assembly has following special features:

PISTON:



Unique features of USHA HERO PASSION X-RPO Piston are as follows:

S.No.	SPECIAL FEATURES	BENEFITS TO CUSTOMERS
1)	PISTON- PIN BORE OFFSET: This 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 smoothly & prevents slapping with liner.	<ul style="list-style-type: none"> • Reduced engine noise.
2)	OIL HOLES IN OIL RING GROOVE	<ul style="list-style-type: none"> • Faster drainage of excess oil. • Lesser oil consumption.
3)	CHAMFER AT BOTTOM FLANK OF OIL RING GROOVE	<ul style="list-style-type: none"> • Low oil consumption. • Reduction in skirt wear.
4)	AS CAST WINDOW SLOTS	<ul style="list-style-type: none"> • Weight reduction. • Improved fuel efficiency.
5)	SHALLOW GROOVES ON PISTON SKIRT	<ul style="list-style-type: none"> • Helps in retaining oil on skirt. • Reduced friction.

6)	SLIPPER DESIGN: Slipper design in skirt helps in reducing piston weight & provides better guidance during piston movement.	<ul style="list-style-type: none"> Improved fuel efficiency. Better guidance to rings. Low noise during engine working.
7)	SCRAPER NOTCH: A scraper notch is provided at the open end of skirt which helps in better scraping of excess oil from cylinder walls.	<ul style="list-style-type: none"> Lesser oil consumption.

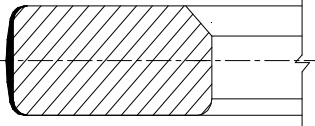
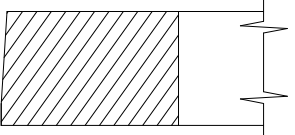
TECHNICAL DATA- HERO PASSION X-PRO PISTON

USHA CODE → S31		
Nominal Bore Diameter	mm	50.00
Piston Diameter	STD Size mm	49.9875
Recommended Piston-Liner Clearance	mm	0.0125
Compression Height	mm	17.70
Total Height	mm	36.70
Piston Pin- Pin Bore Clearance	mm	+0.00 to +0.008 (Clearance Fit)

PISTON RINGS:

USHA HERO PASSION X-PRO pistons are provided with unique design HPVENT ring sets for low oil & fuel consumption. The technical details of HPVENT ring set are as under:-

TECHNICAL DATA- HERO PASSION X-PRO RINGS

Ring	Ring Configuration	Axial Thickness (mm)	Closed Gap		Surface Treatment	Cross Section
			(mm)	(Thou)		
Top	HPCRIB	0.8	0.10-0.25	4-10	Chrome Plated/ Parkerised	
Second	TSS	0.8	0.10-0.25	4-10	Parkerised	
Oil Ring	RIKVENT	1.5	0.20-0.70 (Rails)	8-28	Chrome Plated/ Parkerised	