

SHRIRAM PISTONS & RINGS LTD.



MD: TS: 03/MAY'25 INTRODUCTION CIRCULAR- TATA ULTRA/ SIGNA 5.0L TURBOTRON - 'CPC' RING SET

USHA is pleased to launch **TATA ULTRA/ SIGNA 5.0L TURBOTRON 'CPC'** ring set in its aftermarket LCV product range.



This ring set is compatible for TATA ULTRA 1518T/3021.S/ T.16 ULTRA/ ULTRA 1918.T/ LPT 1918/ ULTRA 2821.T/ LPT 3521 & SIGNA 1918.K/ SIGNA 2821/ SIGNA 3521.TBS models.

This ring set has following special features:

ITEM	CONFIGURATION	FEATURES	BENEFITS TO CUSTOMER		
	Special Steel Keystone Inside Bevel Semi Inlaid Composite Plating of Chrome {SSKIBCPC(I)}	Special Steel Material	Top ring is manufactured using special steel alloy which has properties similar to steel. This material has good elasticity and excellent resistance to twisting, breakage & wear etc.		
		Keystone Geometry	Special keystone geometry keeps squeezing out excess oil from the groove, thereby minimizing chances of carbon deposition, sludge formation & preventing ring sticking inside the groove.		
Тор		Inside Bevelling	Ring has a bevel cut on upper inside edge due to which facilitated ring to twist positively during its downward movement & provides better sealing.		
Ring		Semi Inlaid CPC Coating	A semi groove is made on the outer periphery of the ring & multi layers of chrome are filled in the groove. CPC is a specialized process of first plating the ring OD with chrome, creating cracks & then filling up hard particles (Al ₂ O ₃) in these cracks. This process is repeated many times building one layer above another. CPC rings have higher wear & scuff resistance under all working conditions.		
		Parkerising	Side faces are parkerised to provide porous surface for oil retention resulting in better lubrication & lesser wear.		

	Taper Reverse Inside Step {TRIS}	Taper face	Ring has a Taper on OD to provide line contact with liner resulting in higher wall pressure, hence better sealing.		
2 nd Ring		Step cut on lower Inside face	Ring has a step cut on its lower inside face due to which ring twists in anti-clockwise direction during suction stroke which locks the groove to avoid blow-by & upward movement of oil towards combustion chamber.		
		Parkerising	Ring is fully parkerised to provide porous surface for oil retention resulting in better lubrication & lesser wear.		
Oil Ring	Spring Loaded Chrome Plated Profile Ground HTCR (PGV)	Highly Conformable	Ring is provided with a variable pitch coil spring making it highly conformable with the bore ensuring perfect sealing & excellent oil scraping at all times.		
		Chrome Plated & Profile Ground Ring Lands	Ring lands are made uniform throughout the periphery for an effective sealing and efficient scraping of oil due to sharper edges. Chrome plating provides excellent wear & scuff resistance.		
		Parkerising	Side faces are parkerised to provide porous surface for oil retention resulting in better lubrication & lesser wear.		

Technical data of TATA ULTRA/ SIGNA 5.0L TURBOTRON 'CPC' ring set is as under:

TECHNICAL DATA- TATA ULTRA/ SIGNA 5.0L TURBOTRON - 'CPC' RING SET (Ø 112.00 mm)

USHA Code → L51

USHA Code → L5 I									
Ring	Ring Configuration	Axial Thickness (mm)	Close (mm)	d Gap (Thou)	Surface Treatment	Cross Section			
Тор	SSKIBCPC(I)	3.00	0.25- 0.40	10-16	Semi Inlaid CPC Coating/ Parkerising				
2 nd	TRIS	2.50	0.55- 0.75	22-30	Parkerising				
Oil	HTCR (PGV)	3.00	0.40- 0.65	16-26	Chrome Plated lands/ Parkerising				

USHA **TATA ULTRA/ SIGNA 5.0L TURBOTRON 'CPC'** ring set is specially designed to reduce oil consumption & blow-by for an excellent performance.







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 Tel: 011-46451100, 23315941, Email: tss@shrirampistons.com, Website: www.shrirampistons.com