

YOSHIMURA®

SPECIAL PARTS TECHNICAL SERVICE MANUAL

ST-R TypeR RACING CAMSHAFT SET

SUZUKI GSX-R1000

【Part No. 210-508-0100】

- Be sure to read this manual carefully before starting to work.
- While in the installation, keep it at hand and proceed by following the procedure.
- This manual must be retained until the product is scrapped.

This product is designed for the racetrack use ONLY. Do not use this product on the public road. When use this product, confirm race regulation before installation.

! DANGER : Indicates a potential hazard that could result in death, injury or engine breakdown.

! CAUTION : Indicates a potential hazard that could result in motorcycle damage.

REFERENCE : Indicates special information for smooth work.

● Applicable Model

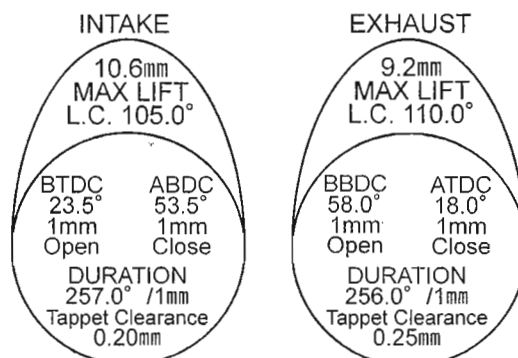
SUZUKI : GSX-R1000 K7/K8

! DO NOT use it for any other models.

● KIT Contents

No.	Part No.	Description	Q'ty
1	210-508-0110	ST-R TypeR Intake camshaft	1
2	210-508-0120	ST-R TypeR Exhaust camshaft	1
3	212-505-0010	Sprocket, camshaft	2
4	09103-07003-000	Bolt, cam sprocket	4
5	220-508-0010	Valve spring (Pink)	8
6	221-567-1030	Valve spring seat shim t=0.3mm	16
7	221-567-1050	Valve spring seat shim t=0.5mm	8

● Specification



* Above data are the designed numbers only. The actual measured numbers may slightly differ from originally design.

● Condition of use

	Valve spring	Valve spring seat shim
INTAKE	220-508-0010 : KIT Valve spring	221-567-1030 : Seat shim t=0.3mm and 221-567-1050 : Seat shim t=0.5mm
EXHAUST	STD	221-567-1030 : Seat shim t=0.3mm

! CAUTION Using kit valve spring and seat shim as the chart shows, engine rev limit can be raised up to 14,000rpm by EM Pro.

● Recommended parts

- SUS Valve cotter set [Part No. 222-567-0002]
- Valve retainer set..... [Part No. 223-506-0000]
- EM Pro..... [Part No. 490-508-0000]

● Recommended tools

- Cam chain drive sprocket spacer [Part No. A-D4120-614]
- Timing wheel [Part No. 258-000-5150]
- Timing wheel bracket..... [Part No. 258-000-0000]
- Timing wheel indicator..... [Part No. 258-567-0000]
- T.D.C. Stopper..... [Part No. 258-567-0030]
- Valve lifter tool [Part No. 258-567-0040]

! DANGER This product is racing camshaft with adjustable cam sprocket. The valve timing must be adjusted to specified lobe center when installing.

! CAUTION Be careful not to drop any parts into the crankcase. Before installation, disassembled parts should be cleaned and dried well.

● Other Necessary Parts

- Tappet shim (Purchase the proper tappet shim from the list when adjusting the tappet clearance.)

Tappet shim (t=2.00).....	[SUZUKI GENUINE Part No. 12892-05C00-200]
Tappet shim (t=2.05).....	[SUZUKI GENUINE Part No. 12892-05C00-205]
Tappet shim (t=2.10).....	[SUZUKI GENUINE Part No. 12892-05C00-210]
Tappet shim (t=2.15).....	[SUZUKI GENUINE Part No. 12892-05C00-215]
Tappet shim (t=2.20).....	[SUZUKI GENUINE Part No. 12892-05C00-220]
Tappet shim (t=2.25).....	[SUZUKI GENUINE Part No. 12892-05C00-225]
Tappet shim (t=2.30).....	[SUZUKI GENUINE Part No. 12892-05C00-230]
Tappet shim (t=2.35).....	[SUZUKI GENUINE Part No. 12892-05C00-235]
Tappet shim (t=2.40).....	[SUZUKI GENUINE Part No. 12892-05C00-240]
Tappet shim (t=2.45).....	[SUZUKI GENUINE Part No. 12892-05C00-245]
Tappet shim (t=2.50).....	[SUZUKI GENUINE Part No. 12892-05C00-250]
Tappet shim (t=2.55).....	[SUZUKI GENUINE Part No. 12892-05C00-255]
Tappet shim (t=2.60).....	[SUZUKI GENUINE Part No. 12892-05C00-260]
Tappet shim (t=2.65).....	[SUZUKI GENUINE Part No. 12892-05C00-265]
Tappet shim (t=2.70).....	[SUZUKI GENUINE Part No. 12892-05C00-270]
Tappet shim (t=2.75).....	[SUZUKI GENUINE Part No. 12892-05C00-275]
Tappet shim (t=2.80).....	[SUZUKI GENUINE Part No. 12892-05C00-280]
Tappet shim (t=2.85).....	[SUZUKI GENUINE Part No. 12892-05C00-285]
Tappet shim (t=2.90).....	[SUZUKI GENUINE Part No. 12892-05C00-290]
Tappet shim (t=2.95).....	[SUZUKI GENUINE Part No. 12892-05C00-295]
Tappet shim (t=3.00).....	[SUZUKI GENUINE Part No. 12892-05C00-300]

Installation Steps

Each parts removal and installation should be done in accordance with the SUZUKI genuine service manual.

● Before installing the camshaft

- Put the camshaft on the camshaft journal holder. Rotate the camshaft slowly to confirm the cam lobe not touching the camshaft journal holder.



Because of the casting mold deviation, the cam lobe and the camshaft journal holder would touch depends on the vehicle. In this case, grind the least part of the camshaft journal holder.



● Camshaft and sprocket installation

- Refer to Fig.1 and adjust the positions of the camshafts and the arrow marks on the cam sprockets.
- Refer to Fig.2 and adjust the position of a camshaft's bolt-hole so that it comes to the center of cam sprocket bolt-hole.
- Preinstall a cam sprocket bolt.
- Confirm that the opposite camshaft bolt-hole is at the center of the another cam sprocket bolt-hole. If it is not at the right position, repeat the procedure.
- Tighten preinstalled cam sprocket bolt to prevent any slants from the center.
- Confirm the center of the opposite cam sprocket bolt-hole again and then preinstall the other cam sprocket bolt.
- Tighten both bolts to the specified torque. [Tightening torque : 25N·m (2.5kgf·m)]

