

ST- R Type-S CAMSHAFT SET SUZUKI GSX-R600K4 Parts No. 210-567-0200

This product is designed for the race track use ONLY. Do not use this product on the public road.

- 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.

- ! DANGER** : Indicates a potential hazard that could result of injury or engine damage.
- ! CAUTION** : Indicates a potential hazard that could result in motorcycle damage.
- REFERENCE** : Indicates points and reference for smooth work.

● Applicable Model

SUZUKI GSX-R600 K4

! DO NOT use it for any other models.

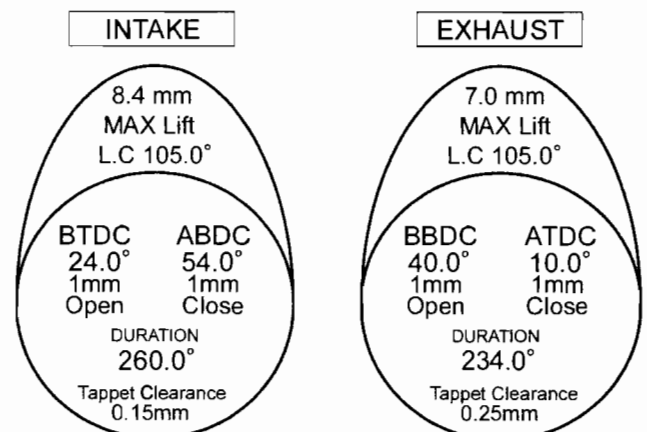
● Kit Contents

No.	Part No.	Description	Q'ty
1	210-567-0210	Camshaft Intake	1
2	210-567-0220	Camshaft Exhaust	1
3	212-567-0100	Sprocket Camshaft	2
4	09103-07003-000	Bolt Cam sprocket	4

● Recommended Parts

Part No.	Description
222-567-0000	SUS Valve Cotter Set for Stock valve retainer
222-567-1000	SUS Valve Cotter Set for Kit valve retainer
223-567-0000	Valve Retainer Set
220-567-0000	Valve Spring & Seat Shim Set
A-D5320-92S	Control Unit ECU, Type-B

● Specification



- NOTE 1:** The amount of cam lifts are the same as stock (IN/EX).
- NOTE 2:** The specifications are ONLY the designed numbers. The actual measured numbers may slightly different from original ones.

● Recommended Tools

Part No.	Description
A-D4120-614	Cam Chain Drive Sprocket Spacer
258-000-5150	Timing Wheel
258-000-0000	Timing Wheel Bracket
258-567-0000	Timing Wheel Indicator
258-567-0030	T.D.C. Stopper
258-567-0040	Valve Lifter Tool

! DANGER The valve timing MUST be measured and adjusted to the specified value when the camshafts are installed.

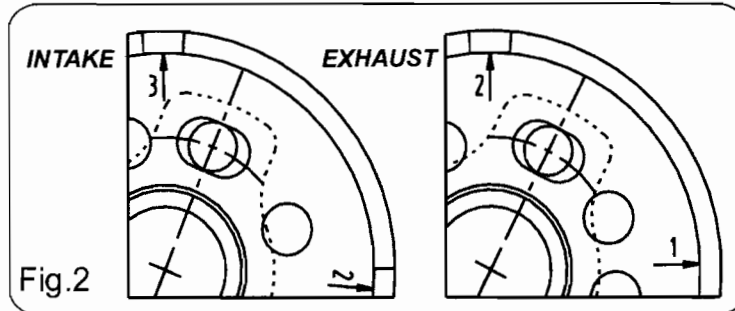
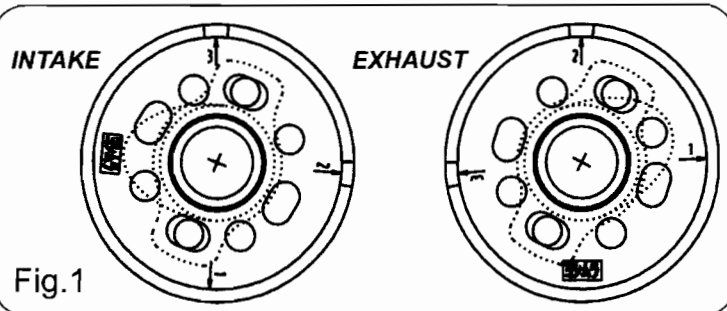
- ! CAUTION**
- Be careful not to drop any parts into the crankcase.
 - Disassembled parts should be cleaned and dried well.

- Installation Steps -

Each parts removal and installation should be done in accordance with the SUZUKI Genuine Service Manual.

● Cam sprocket Installation

1. Refer to the Fig.1, adjust the positions of the camshafts and the arrow marks on the cam sprockets.
2. Refer to the Fig.2, adjust the position of a camshaft's bolt-hole so that it comes to the center of cam sprocket bolt-hole.
3. Hand tighten a cam sprocket bolt.
4. 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 No.2.
5. Tighten the hand tighten cam sprocket bolt further to prevent any slants from the center.
6. Confirm the the center of the opposite cam sprocket bolt-hole once again and then hand tighten the other cam sprocket bolt.
7. Tighten the both bolts to the specified torque. (Cam sprocket bolt : 25N/m)



● Parts Inspection

- Valve retainers, Valve cotters, Valve springs, Valve seats and Tappets for wear or damage.
- Valves and Valve guides for looseness, wear or damage.
- Camshaft journal for wear or damage.

CHECK ITEMS:



Parts checking and consumable replacement **MUST** be done correctly. If neglect, serious engine damage could occur.

NOTE: Items other than mentioned should be checked in accordance with the SUZUKI genuine Service Manual.

● Tappet Clearance Adjustment

STANDARD VALUES (WHEN COLD):



Adjust the tappet clearances within the standard values. Tappet clearances **MUST** be adjusted by each installation.

INTAKE : 0.13mm-0.17mm
EXHAUST : 0.23mm-0.27mm

● Valve Timing Adjustment

VALVE TIMING at 1mm of VALVE LIFT:



After adjusting the valve timings, tighten the cam sprocket bolts in specified torque. (Cam sprocket bolt : 25N/m)
"Thread Lock1303" **MUST** be applied to the cam sprocket bolts.

INTAKE:	EXHAUST:
Open : BTDC 24.0°	Open : BTDC 40.0°
Close : BTDC 54.0°	Close : BTDC 10.0°
Lobe Center :105.0°	Lobe Center :105.0°

● Brake-In

1. Change the engine oil and put in a specified quantity. <Engine Oil Recommendation: Higher than API-SF grade and SAE10W40-15W50S>
2. Remove the spark plugs and spin the engine by the electric starter to lubricate the surroundings of the camshafts well.



Electric starter **MUST** be run intermittently for 2-3 seconds for more than twice. Continual runs may cause of starter motor damage.

3. Let it stand for several minutes, and then check the oil level. Add oil if the level is low.
4. Install the spark plugs and start the engine. Check for engine oil leakage and let it idle until the oil temperature rises sufficiently.
5. For 100km-200km of running, the engine rpm should be kept below 5,000rpm.
6. For 200km-300km of running, the engine rpm should be kept below 6,000rpm.



During the break-in, avoid heavy loadings such as sudden starts and rapid accelerations.

7. When the break-in is completed, adjust the tappet clearances and check that there is no unusual noise. If any unusual noises are heard, disassemble and inspect the engine again.



When the engine is started to run, warm-up **MUST** always be done until the oil temperature rises sufficiently even the break-in is completed.

Quality control is implemented to all the products. If, however, any defect or failure is found, please notify Yoshimura Japan Co., Ltd. through the selling dealer or distributor. Necessary technical service or replacement will be made. Due to improvement, the specifications and price of the product are subjected to change without notice.

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