



YOSHIMURA

RESEARCH&DEVELOPMENT OF AMERICA, INC.

SUZUKI 00-03 DR-Z400Y/EY KAWASAKI 2003 KLX400

ST-R CAMSHAFT

[PARTS No. SUXR245]

This product is for racing only. Not for use on public road and highways.

- Be sure to carefully read the instruction manual before starting installation.
- While working, keep these instructions at hand and proceed with the work in accordance with the instructions.
- These instructions should be retained until the product is scrapped.

⚠ Danger : Precautions which may lead to injury, if neglected.

⚠ Caution : Precautions which may lead to part damage, etc., if neglected.

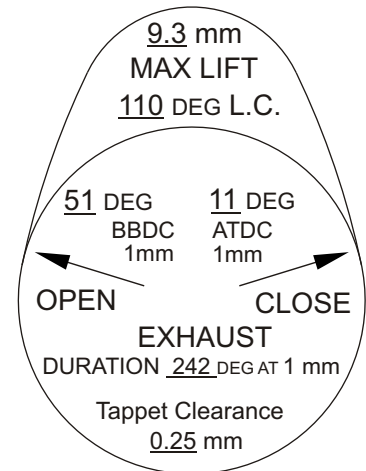
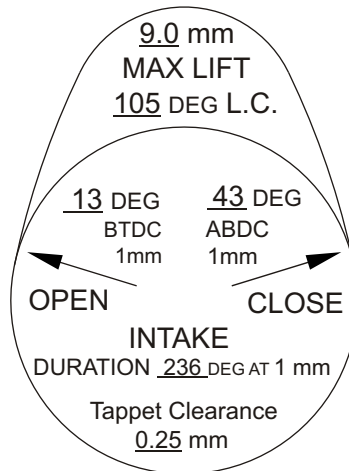
(Reference) : Points and reference items for smooth work

● KIT contents

- Intake camshaft X 1
- Exhaust camshaft X 1
(IN/EX with cam sprocket)
- Valve Cotter X 8 (IN/EX)
- Shim (Seat) X 2 (IN)
- Retainer X 2 (IN)

● Applicable model

SUZUKI DR-Z400Y/EY (2000-2003)
KAWASAKI KLX 400 (2003)



Do not use this product for other models than listed above.

Camshaft removal and installation should be done in accordance with the DR-Z400 Service Manual.

Caution When Assembling ST-R Camshaft

⚠ Danger

The camshaft installation position at the time of shipping is adjusted to the valve timing of the specified value. Do not change the valve timing unnecessarily. Engine could be damaged. However, engines with non-standard specification such as replacement piston, resurfaced cylinder head, etc., it may be necessary to change the valve timing. Timing can only be changed ONE time only. Sprocket cannot be pressed off and on more than ONCE.

Caution When Working

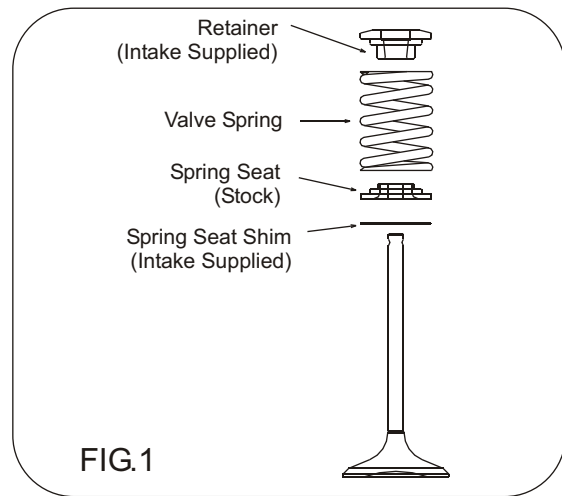
- When disassembling, be careful not to drop parts into the crankcase.
- After disassembling, removed parts should be well cleaned and dried.

Checking Portions

- Check items
 - Valve retainers (EX), valve spring and spring seat for wear or damage

Caution

New valve retainers (IN) and new spring seat shims must be used. See FIG.1 for shim location.



- Valve and valve guide for looseness, wear, or damage.
- Valve seat surface contact position, contact width.
- Camshaft journal surface for wear or damage.
- Cam chain tensioner and cam chain guide for wear or damage.

Caution

If engine had been used for racing, cam chain tensioner and cam chain guide must be replaced.

Danger

Parts checking and consumable replacement must be done correctly. If neglected, engine damage could occur.

✘ In addition, check in accordance with the Service Manual, and correct or replace if necessary

Adjustment of Tappet Clearance

- Standard values (cold)
 - IN : 0.23 to 0.27 mm
 - EX : 0.23 to 0.27 mm

Caution

When the camshaft is replaced, the tappet clearance must be adjusted.

Break-In

1. Change the engine oil and put in a specified quantity.
(Reference) Always use new engine oil with at least API-SF rating and 10W-40 to 15W-50.
2. Before firing engine, use electric starter to spin the engine to lubricate the top-end of the engine with spark plug removed.



Caution

Electric starter must be run intermittently.
If continuously ran, the motor could fail.

3. Let it stand for several minutes, and then check oil level. Add oil if low.
4. Install spark plug.
5. Start the engine, check for oil leakage, and idle until the oil temperature rises.
6. For first 1/2 hour of running, the throttle should be kept under 1/4 turn.
7. For next 1/2 hour of running, the throttle should be kept under 1/2 turn.



Caution

During break-in, avoid heavy loading such as sudden starting and rapid acceleration.

8. After break-in is completed, adjust the tappet clearance and check for any abnormal noise. If abnormal noise is heard, disassemble and check the engine again.

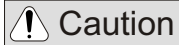


Caution

When the engine is started after break-in is completed, be sure to warm-up engine until oil temperature is sufficiently raised before use or riding.

✘ This product is for racing use only and must be replaced after 30-50 hours of use.

SUZUKI 00-03 DR-Z400Y/EY KAWASAKI 2003 KLX400 YSPCR3 KIT

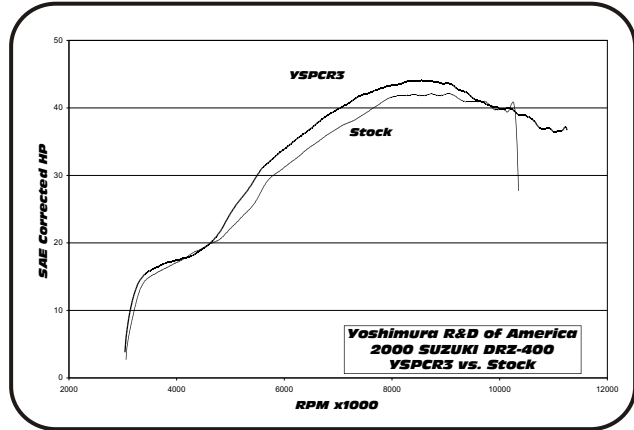


Caution

Do not use race ignition (2165-11k) without installing ST-R Camshaft Kit. Serious engine damage can occur.

KIT contents

- ST-R IN/EX camshafts (SUXR245-B) X 1
- Race ignition (2165-11k) X 1
- Valve spring retainers (12931-02F10) X 2
- Instruction kit X 1
- Yoshimura Vinyl Stickers X 2



Recommend Carburetor Setting

Recommend setting is based on YSPCR3 kit with Yoshimura PRO Titanium System using at least 92 octane unleaded gasoline. Remove rubber inlet tube (air snorkel) from air cleaner box.

	Stock Setting				Recommend Setting YSPCR3 Kit with RS-3 Ti System
Needle Jet	OBDXP - 4th clip position				OBDXP - 4th clip position with spark arrestor: OBDXP - 3rd clip position
Main Jet	E-01	#165	E-03	#142	#165
	E-24		E-28		
Slow Jet (S.J.)	#45				Stock Setting
Slow Air Jet (S.A.J.)	#60				Stock Setting
Air Jet (A.J.)	#90				Stock Setting
Pilot Screw	1-1/2 turns back				2 turns back

DR-Z 400Y/EY

E-01 model General
E-03 model U.S.A.
E-28 model Canada

DR-Z 400EY

E-24 model

For more information, see Suzuki DR-Z400 service manual or contact Yoshimura R&D of America, Inc.