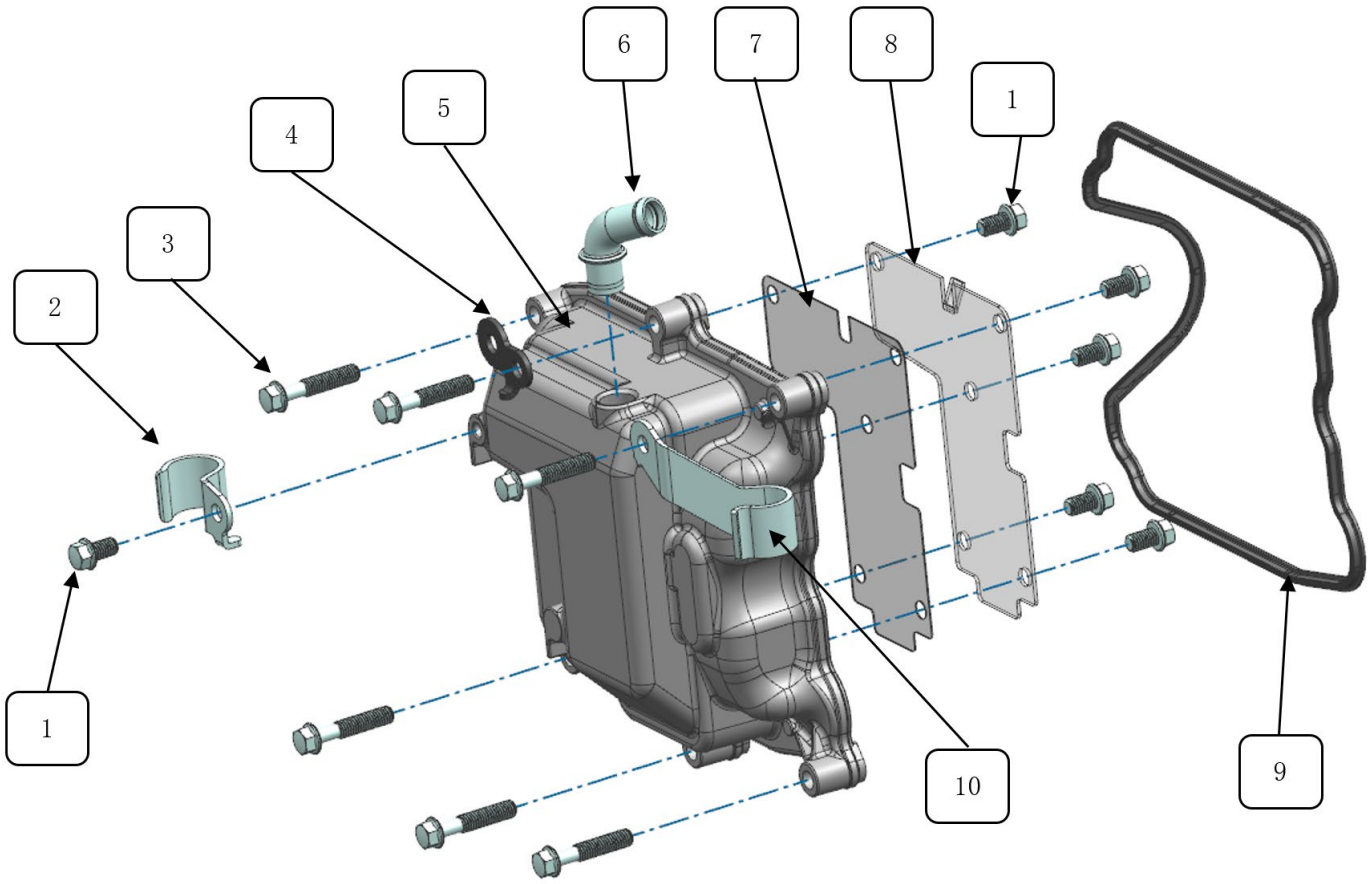
Cylinder head cover

1. System components



Serial number	Name	Quantity	Serial number	Name	Quantity
1	M6×10 top pin bolt	6	6	ZT1P77MP cylinder head cover air balance tube	1
2	ZT1P77MP high-pressure fuel pipe bracket (short wheelbase)	1	7	ZT1P77MP Cylinder head cover labyrinth cover plate gasket	1
3	M6×30 hexagonal flange bolts (environmental protection color zinc)	6	8	ZT1P77MP Cylinder Head Cover Labyrinth Cover	1
4	ZT1P77MP cylinder head cover harness bracket	1	9	ZT1P72MN cylinder head cover rubber washer	1
5	ZT1P77MP cylinder head cover-B	1	10	ZT1P77MP high-pressure fuel pipe bracket (long wheelbase)	1

Torque value

Bolt model	Quantity	Torque (N.m)
M6×30 hex flange bolts	6	12 ± 1.5
M6×10 top pin bolt	6	10 ± 1

2. Maintenance information

General information

1. The engine must be removed from the frame for maintenance and maintenance of the cylinder head cover.
2. Disassemble the cylinder head cover, the oil does not need to be released, and the engine can be placed upright and stable by using the rear wheel and the main support.
3. Before disassembly, it is necessary to remove foreign objects and dust from the cylinder head head cover and cylinder head joint surface.
4. When disassembling, the decomposed parts need to be packed in a clean box and marked to prevent misassembly during assembly.

Tool

1. T-shaped sleeve-8#
2. Torque wrench + 8# socket

3. Common fault phenomena/troubleshooting

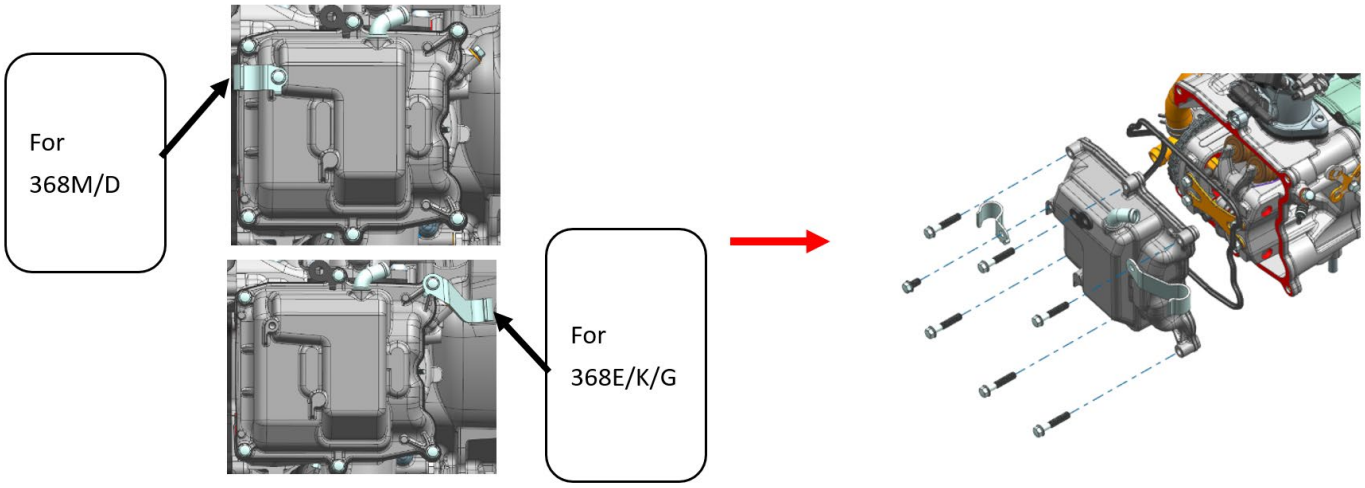
Oil leakage at the joint surface of the cylinder head cover and the cylinder head.

·The rubber gasket of the cylinder head cover is damaged or not installed in place.

4. Cylinder head cover

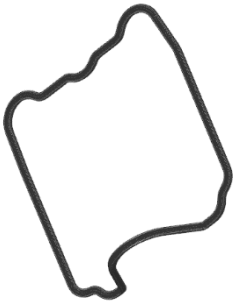
Disassembly

As shown, remove the cylinder head cover locking bolt with T rod-8#, and remove the cylinder head harness bracket, cylinder head head, and cylinder head cover rubber gasket.



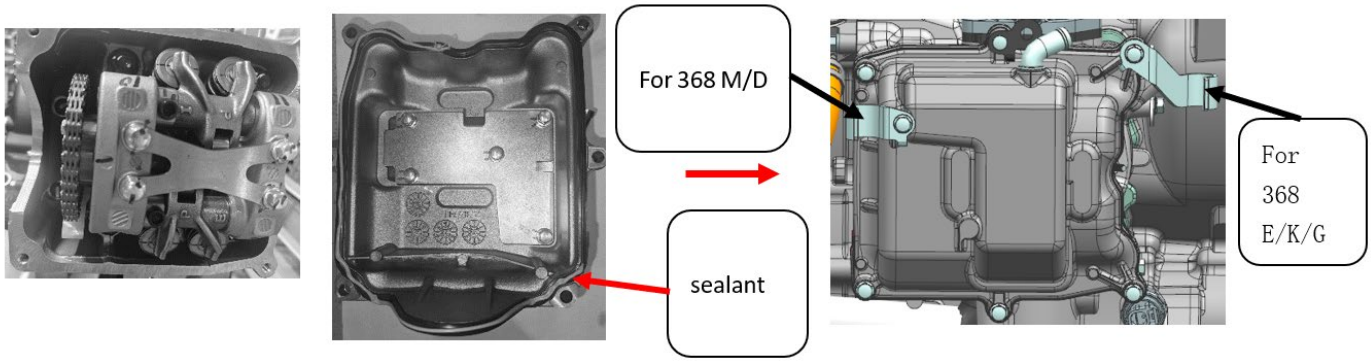
Check

Carefully check whether the surface of the rubber gasket of the cylinder head cover is damaged, if there is damage, replace the new rubber gasket of the cylinder head cover to prevent oil leakage caused by poor sealing.



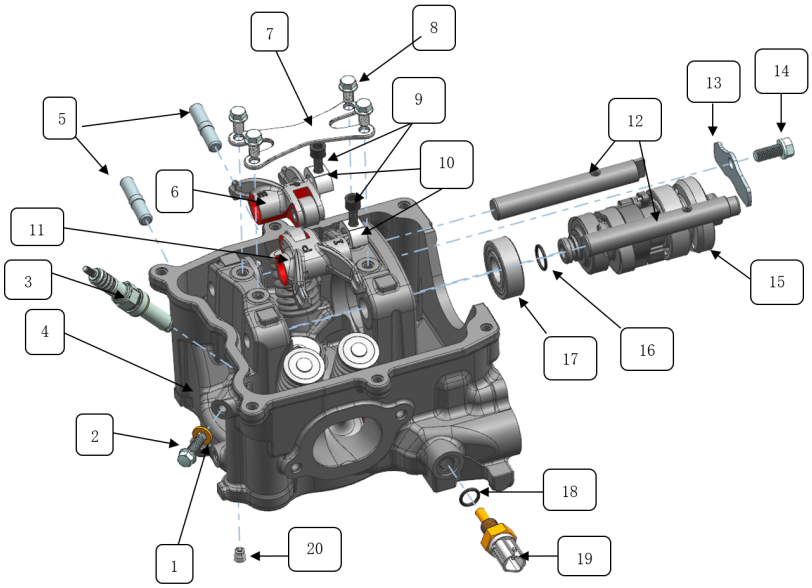
Installation

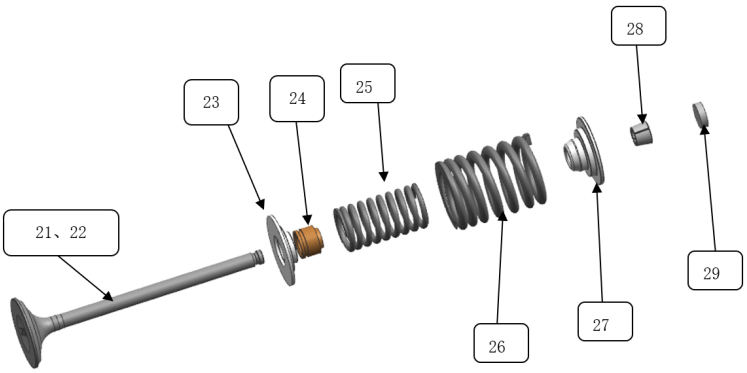
After removing the flat sealant, oil stains and dust on the joint surface of the cylinder head and cylinder head cover, apply an appropriate amount of flat sealant at the position shown in the figure. Check the cylinder head cover seal ring on the cylinder head cover, confirm that it is installed in place, install the cylinder head cover assembly to the corresponding position of the cylinder head, and use M6×30 bolts to pre-tighten the cylinder head harness bracket and cylinder head cover and tighten it to 12±1.5N?m. And check and install the high-pressure tubing bracket, pre-tighten the bracket with M6×10 bolts and tighten it to 10±1N.m.



Cylinder head

1. System components





Parts information

Serial number	Name	Quantity	Serial number	Name	Quantity
1	6.3×12×1.6 copper gasket	1	16	ϕ11.11×ϕ1.78 fluorine rubber O-ring	1
2	M6×16 hex flange bolts	1	17	GB276 - 6002-RS/P5C3 deep groove ball bearings	1
3	LMAR8A - 9 spark plug	1	18	9 x 2 EPDM O-rings	1
4	ZT1P79MP cylinder head	1	19	Water and oil shared sensor	1
5	AYM8 - M8×38 double head 10.9 grade stud	2	20	1.2×6×7 over-oil pin	1
6	ZT1P79MP exhaust rocker arm parts	1	21	ZT1P79MP intake valve	2
7	ZT1P72MN cylinder head pressure plate	1	22	ZT1P79MP outer valve	2
8	M6×10 top pin bolt	4	23	ϕ17.2×ϕ25×1 valve spring base	4
9	M5×15 - 5# hexagon socket head screw (10.9 grade)	2	24	ϕ5.0 valve rod diameter oil seal	4
10	ZT1P77MP rocker limit block	2	25	ZT1P79MP valve inner spring	4
11	ZT1P79MP intake rocker arm parts	1	26	ZT1P79MP valve outer spring	4
12	ZT1P77MP intake and exhaust rocker shaft	2	27	ZT1P77MP valve spring retainer	4
13	ZT1P79MP camshaft bearing pressure plate	1	28	ZT1P58MJ valve lock clip	8
14	M7×16 fully threaded pivot bolt (10.9 grade/environmentally friendly zinc)	1	29	Φ8.85 valve clearance adjustment pad	4
15	ZT1P77MP intake and exhaust rocker shaft	1			

2. Maintenance information

General information

1. For the maintenance of the cylinder head cover and cylinder head, the engine must be removed from the frame.
2. Disassemble the cylinder head cover and cylinder head. The engine oil does not need to be released. The rear wheel and the main bracket can be used to stand the engine stably.
3. Before disassembly, the foreign matter and dust on the cylinder head cover and the joint surface of the cylinder head need to be removed.
4. After removing the cylinder head cover and before removing the cylinder head, check the timing and turn the piston to the top dead center.
5. When disassembling, the disassembled parts must be packed in a clean box and marked to prevent wrong assembly during assembly.
6. When removing the cylinder head, first remove the 2 M8×117 hexagonal flange bolts on the side, and finally remove the 4 M10×1.25 hexagonal flange nuts from the cylinder head.
7. When disassembling the cylinder head, it is forbidden to bump or scratch the joint surface of the cylinder head.
8. When disassembling and assembling the cylinder head, the cylinder head gasket cannot be reused to prevent blow-by and air leakage.

Bolt torque value

Bolt model	Assembly position	quantity	Torque (N.m)	Remark
M6×30 hex flange bolts	Cylinder head cover bolts	6	12±1.5	-
M8×1×117 hex flange bolts	cylinder head bolts	2	20±2	-
M10×1.25 hexagon flange nut	cylinder head nut	4	55±5	-
M6×10 top pin bolt	-	10	10±1	-
M6×22 hexagon flange full thread bolts	Thermostat lock bolt	2	12±1.5	-
M6×16 hex flange bolts	-	3	12±1.5	-
M5×15‐5# hexagon socket head screw (10.9 grade)	rocker limit block	2	9±1	Need to apply thread glue
LMAR8A‐9 spark plug	-	1	14±1	-
M7×16 fully threaded pivot bolt	camshaft bearing pressure plate		20±1	Need to apply thread glue

Specification

Project		Standard value	Maintenance Limit Value
Diameter	12.973-12.988 mm (0.5107-0.5113 in)	12.942 mm (0.5095 in)	Diameter
Inner diameter	13-13.018 mm (0.5118-0.5125 in)	13.033 mm (0.5131 in)	Inner diameter
Inner diameter	13-13.018 mm (0.5118-0.5125 in)	13.033 mm (0.5131 in)	Inner diameter
Fit clearance	0.012-0.045 mm (0.0005-0.0018 in)	0.08 mm (0.0032 in)	Fit clearance
Free length	35.5-36.5 mm (1.3976-1.4370 in)	33.7 mm (1.3268 in)	Free length
The height of the air intake tip	39.996-40.116 mm (1.5746-1.5794 in)	39.896 mm (1.5707 in)	The height of the air intake tip
Exhaust tip height	39.946-40.066 mm (1.5727-1.5774 in)	39.846 mm (1.5687 in)	Exhaust tip height
Camshaft runout	-	0.03mm (0.0012 in)	Camshaft runout
Intake	0.01-0.037 mm (0.0004-0.0015 in)	0.08 mm (0.0032 in)	Intake
exhaust	0.025-0.052 mm (0.0010-0.0020 in)	0.1 mm (0.0039 in)	exhaust
Beating	-	0.01 mm (0.0004 in)	Beating

ZT1P79MP standard value of engine valve clearance

The cylinder head is mounted on the upper valve clearance of the engine	Intake valves	Exhaust valves
	0.05 ~ 0.08mm(0.002 ~ 0.003 in)	0.15 ~ 0.18mm(0.006 ~ 0.007 in)

Tool

1. Pliers.
2. T-shaped sleeve -8#.
3. T-shaped socket-10# / torque wrench+10# socket.
4. T-shaped socket-14# / torque wrench+14# socket.
5. 5# inner hexagon.
6. 6# inner hexagon.
7. Valve spring top clamp.
8. 22# open-end wrench.
9. 17# plum wrench
10. Spark plug sleeve.
11, 10# inner hexagon.

3. Fault phenomenon/fault analysis

When the cylinder head of the engine fails, it will affect the performance of the engine at least, and it will make the engine difficult to start. Troubleshooting can be done by detecting cylinder pressure, endoscope and other methods.

3.1. When the engine starts, the idling speed is unstable, or it is difficult to start

• The valve clearance is incorrect.
·Wrong timing, wrong teeth.
·The valve spring is broken.
·The air valve is not closed tightly and leaks air.
·The spark plug has serious on deposits, and the ignition energy is not enough.
·The spark plug is loose and leaks air.
·Cylinder head gasket gas blowing.

3.2. After the engine is running, there is abnormal sound

· The valve clearance is incorrect.
·The valve spring is broken.
· Valve seat ring wear.
· The camshaft throwing block is broken.
• Camshaft bearings are worn or damaged.
·The tensioner is damaged.
·Intake and exhaust valve rocker arm bearings are worn or damaged.
·The limit block of the rocker arm is broken.
·Excessive motorcycle carbon deposits in the engine, resulting in deflagration.

3.3. After the engine heats up, the exhaust gas is abnormal

·The oil seal of the valve stem diameter is worn or damaged.
• Valve guides are worn or damaged.
·The cylinder head gasket is damaged.

3.4. The crankshaft rotates without cylinder pressure or with very little cylinder pressure

·The valve spring is broken.
·The valve is broken.
·Cylinder head gasket gas blowing.
·The spark plug is loose and leaks air.
· Excessive motorcycle carbon deposits on the valves cause the valves to not close tightly.

4. Cylinder compression test

1. Preheat the engine to the normal operating temperature, stop the engine, pull out the spark plug cap and remove the spark plug.
2. Install the cylinder pressure gauge connector into the spark plug hole.
3. Fully open the throttle, press the start switch, and use the starter motor to drive the crankshaft and piston to run until the cylinder pressure gauge reading stops rising (starter motor running time ≤ 15s).

Engine speed: 380-525r/min

Compression pressure: 628-1079kPa (6.4-11 kgf/cm ^{2} , 91.2-156.5 psi)

① If the measured cylinder pressure is larger than the normal value, it means that there is motorcycle carbon deposit on the top of the piston or the wall of the cylinder.

②If the measured cylinder pressure is lower than the normal value , pour a small amount of clean engine oil from the spark plug, turn the crankshaft a few times, so that the piston ring and cylinder wall are evenly covered with oil film, and retest the cylinder pressure. If the cylinder pressure measured after pouring oil is greater than the last cylinder pressure value, please dismantle the machine and check the piston and piston ring.

Failure analysis:

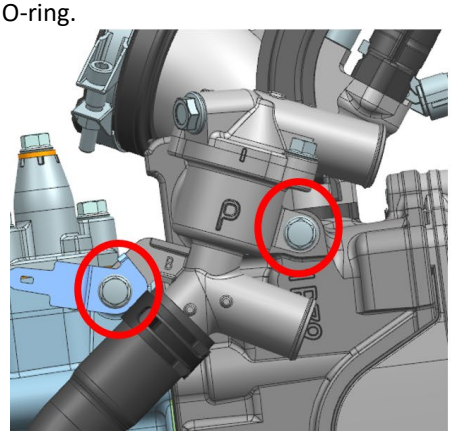
a. Piston ring wear.
b. Cylinder wear.

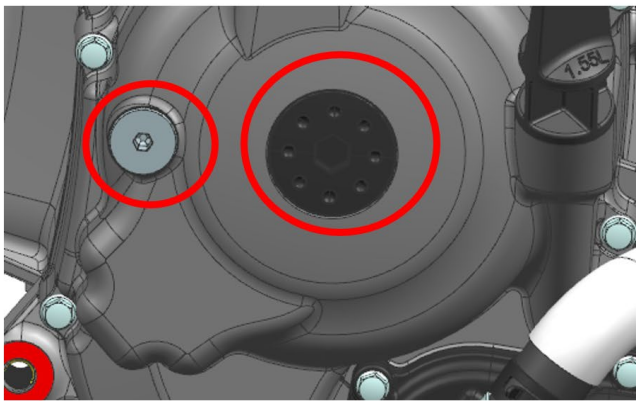
③If the cylinder pressure measured by pouring in the engine oil is the same as the last time (the cylinder pressure is too small), first measure whether there is any abnormality in the valve clearance of the intake and exhaust valves, and then disassemble the machine to check whether there is leakage of the intake and exhaust valves, the cylinder block and cylinder pressure. Check whether the coating of the head gasket is damaged or blown by gas.

5. Cylinder head

Cylinder head removal

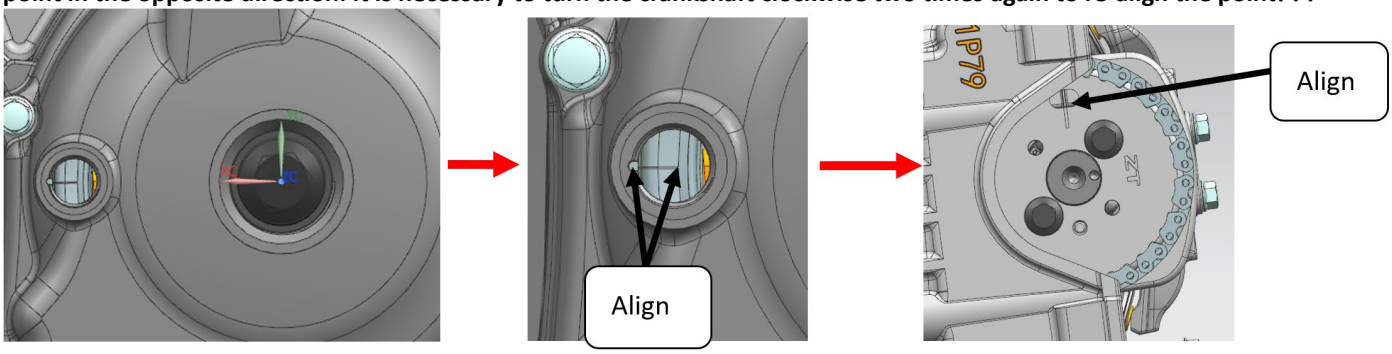
1. Use a T-shaped sleeve -8# to remove the thermostat bolt and take off the thermostat, and use the 5# and 10# inner hexagonal wrench to remove the M14×1.5 screw plug and M30×1.5 screw plug on the right crankcase cover respectively. Aluminum plug, and remove the O-ring.



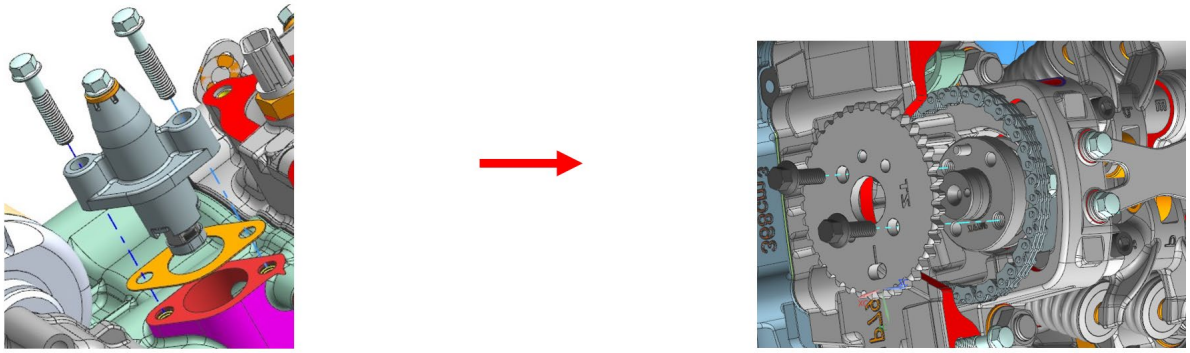


2. Insert a 15#-T-type socket wrench from the M30×1.5 aluminum screw plug hole and set it on the magneto rotor locking bolt, then turn the crankshaft clockwise to align the T point mark on the flywheel with the M14×1.5 screw. The plug hole marks the gap. At the same time, the top dead center marking line on the timing driven sprocket should also be aligned with the raised marking line on the cylinder head.

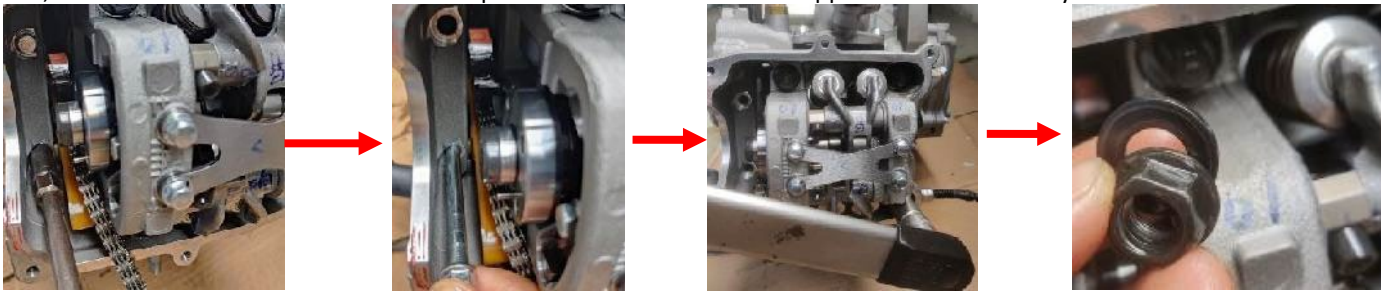
Note: Once the marking line at point T turns over the marking line when turning the flywheel, it cannot be turned back to the point in the opposite direction. It is necessary to turn the crankshaft clockwise two times again to re-align the point! ! !



3. As shown in the picture, use T bar -8# to remove the tensioner, timing driven sprocket fixing bolts, and timing driven sprocket **(refer to ZT1P79MP engine maintenance manual for disassembly and assembly - cylinder head - tensioner)** .



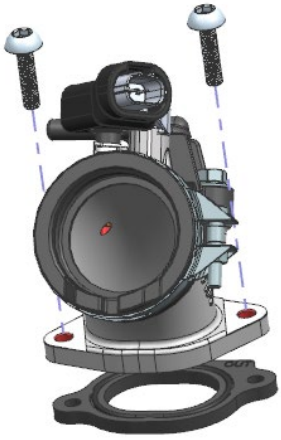
4. As shown in the picture, first remove 2 pieces of M8×117 hexagonal flange bolts on the side of the cylinder head with T rod -10#, and then use wrench -14# to remove 4 pieces of M10×1.25 from the opposite corner of the cylinder head and lock the nuts.



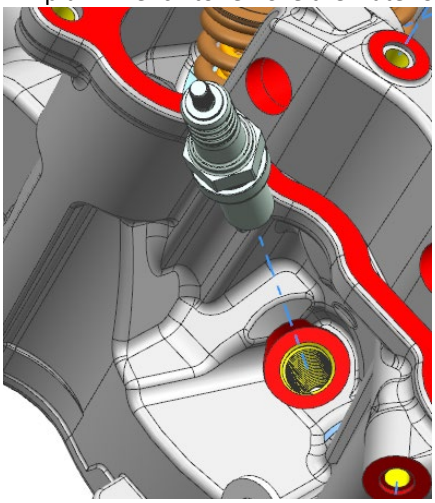
5. As shown in the figure, remove the cylinder head, cylinder head gasket and positioning pin.

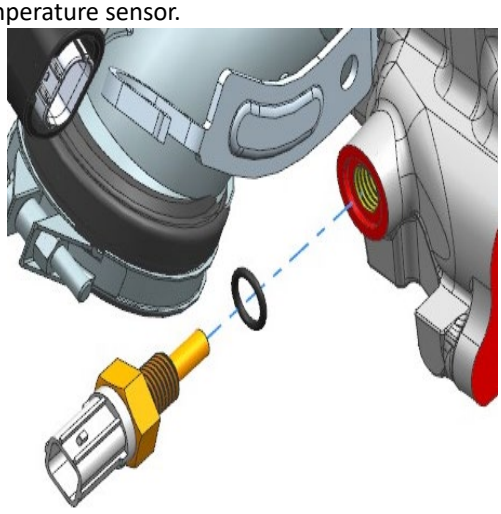
Cylinder Head Disassembly

1. Use a 6#-hexagon socket to remove the intake manifold subassembly and heat insulation pad (Note: the O-ring of the heat insulation pad must not be damaged or broken).

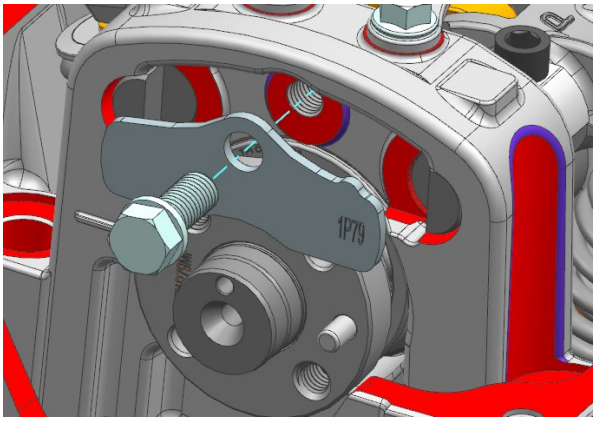


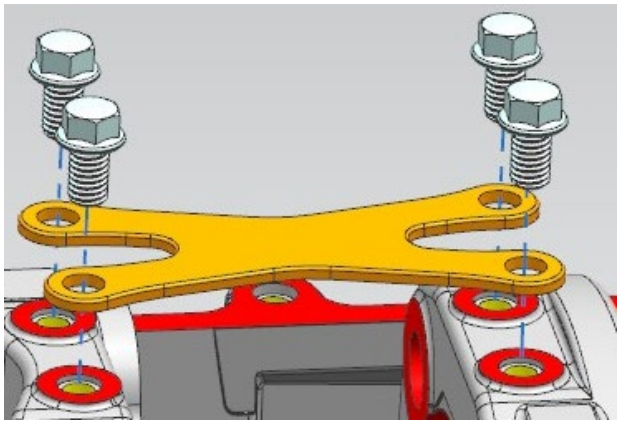
2. As shown in the figure below, use a T-bar-8# to remove the cylinder head clamp bracket. Remove the spark plug with a spark plug socket. Use a 17# plum wrench to remove the water oil temperature sensor.





3. As shown in the figure below, loosen the cylinder head pressure plate and camshaft pressure plate bolts with a -bar-8#, and remove the cylinder head pressure plate and camshaft pressure plate.





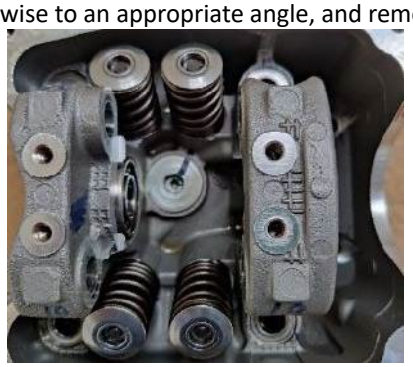
4. As shown in the figure below, use a 5# inner hexagon to remove the rocker arm limit block bolt, and remove the rocker arm limit block, rocker shaft, and intake and exhaust rocker arms, and valve adjustment gaskets.



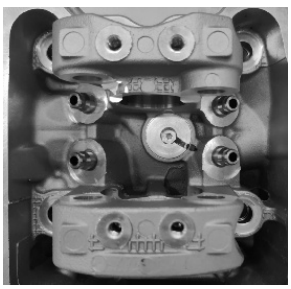


5. As shown in the picture, screw two M6 bolts into the threaded holes of the camshaft, keep the camshaft angle consistent with the T point of the alignment timing or slightly rotate counterclockwise to an appropriate angle, and remove the camshaft.





6. Use valve spring overhead pliers to remove the valve lock clip (do not compress the valve spring excessively). After taking out the valve lock clip, remove the valve spring retainer, valve inner and outer springs, valve stem diameter oil seal (**The removed valve stem diameter oil seal cannot be used again**), valve spring base, and valve in sequence.

7. As shown in the figure, remove the carbon deposits in the combustion chamber. Do not scratch the joint surface of the cylinder head and the surface of the valve seat ring.

Inspection of cylinder head parts:

1. Inlet and exhaust rocker shaft

a. There is no abnormal wear on the intake and exhaust rocker shafts.

Project		Standard value	Repair limit values
Intake and exhaust rocker arm shafts	Diameter (a)	11.973-11.988 mm (0.4714-0.4720 in)	Intake and exhaust rocker arm shafts

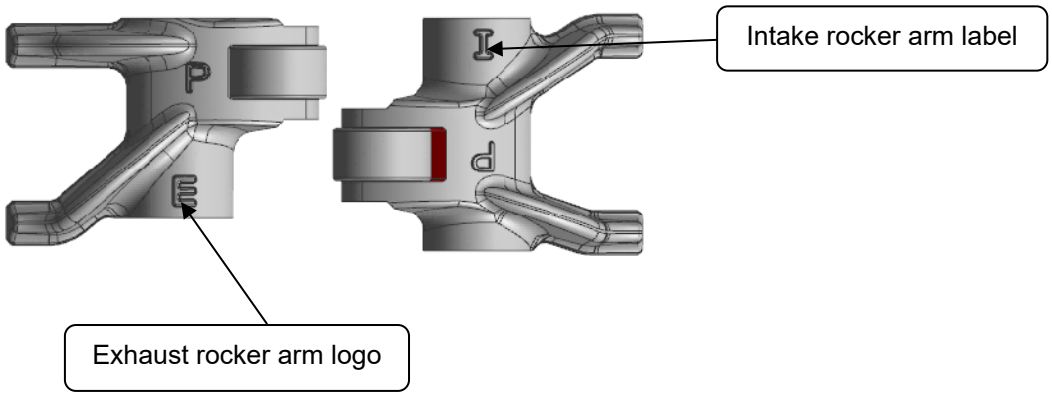
2. Intake rocker arm, exhaust rocker arm

a. The intake rocker arm (mark I) and the exhaust rocker arm (mark E) have no abnormal wear.

b. The intake and exhaust rocker rollers rotate smoothly without abnormal noise.

Project		Standard value	Repair limit values
The intake rocker arm is divided into parts	Inner Diameter (a)	12-12.018 mm (0.4724-0.4731 in)	The intake rocker arm is divided into parts
The exhaust rocker arm is divided into parts	Inner Diameter (B)	12-12.018 mm (0.4724-0.4731 in)	The exhaust rocker arm is divided into parts
The intake and exhaust rocker arm is matched with the intake and exhaust rocker shaft clearance	Fit clearance	0.012-0.045 mm (0.0005-0.0018 in)	The intake and exhaust rocker arm is matched with the intake and exhaust rocker shaft clearance

(Note: The matching clearance between the intake and exhaust rocker arm sub-components and the intake and exhaust rocker arm shafts is the value obtained by subtracting the outer diameter of the intake and exhaust rocker arm shafts.)



3. Intake and exhaust valve springs

a. The intake and exhaust springs have no cracks and abnormal wear.

Project		Standard value	Repair limit values
Intake and exhaust valve springs	Free Length (a)	35.5-36.5 mm (1.3976-1.4370 in)	Intake and exhaust valve springs

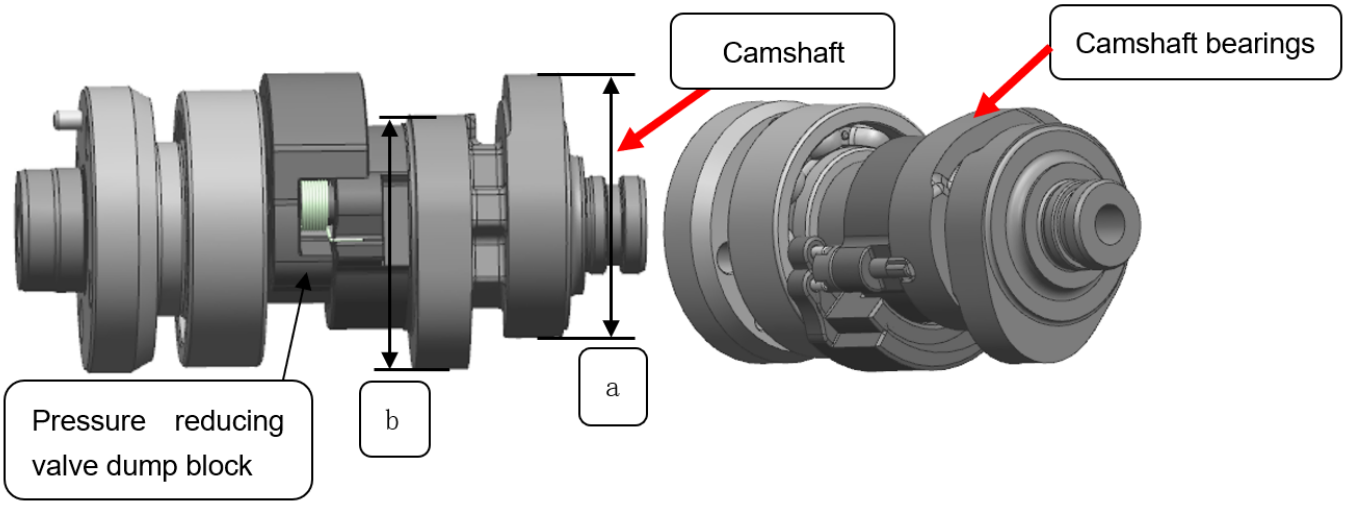
4. Camshaft

a. Check whether the throwing block of the camshaft pressure reducing valve returns normally.

b. Check whether the camshaft pick is abnormally worn.

c. Turn the camshaft bearing by hand, it should turn smoothly without abnormal noise.

Project		Standard value	Repair limit values
Camshaft tip height	Inlet tip height (a)	39.996-40.116 mm (1.5746-1.5794 in)	Camshaft tip height
	Exhaust tip height (b)	39.946-40.066 mm (1.5727-1.5774 in)	39.846 mm (1.5687 in)
camshaft	Camshaft runout	-	camshaft



5. Intake valve, exhaust valve, cylinder head seat ring

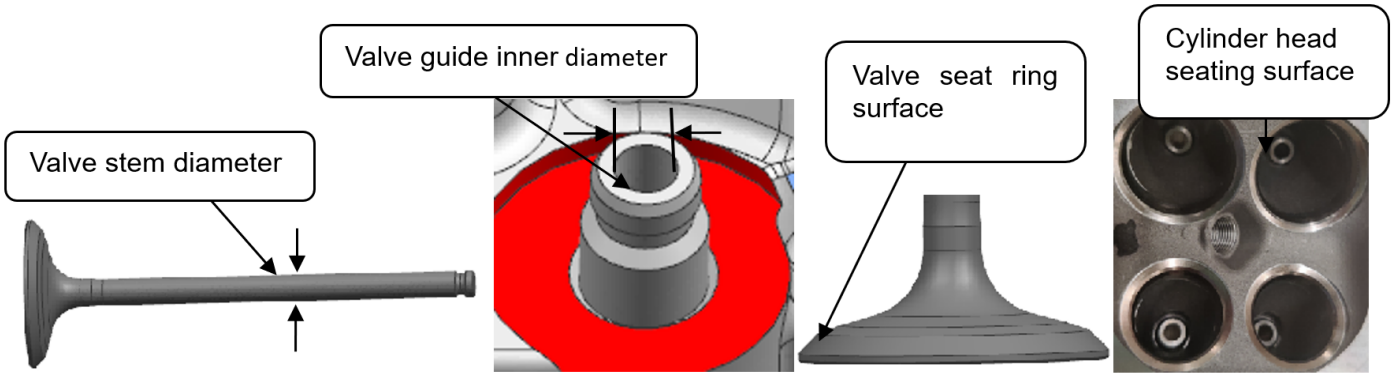
a. Check whether the diameter of the valve stem is abnormally worn, bent or ablated, and check whether the valve can move smoothly in the valve guide.

b. Check the valve seat surface for abnormal wear and erosion.

C. Check the seat surface of the cylinder head, no abnormal wear and ablation.

Project		Standard value	Repair limit values
Valve stem diameter and valve guide Fit clearance	Intake	0.01-0.037 mm (0.0004-0.0015 in)	Valve stem diameter and valve guide Fit clearance
	exhaust	0.025-0.052 mm (0.0010-0.0020 in)	0.1 mm (0.0039 in)
Valve stem diameter	Beating	-	Valve stem diameter

(Note: The matching gap between the valve stem diameter and the valve guide is the value obtained by subtracting the outer diameter of the valve stem diameter from the inner diameter of the valve stem, when the fitting clearance exceeds the maintenance limit value, please judge the wear of the valve guide and valve stem diameter, and whether the new parts with large wear are within the matching standard value, if yes, then replace, if no, replace the cylinder head and valve.**)**

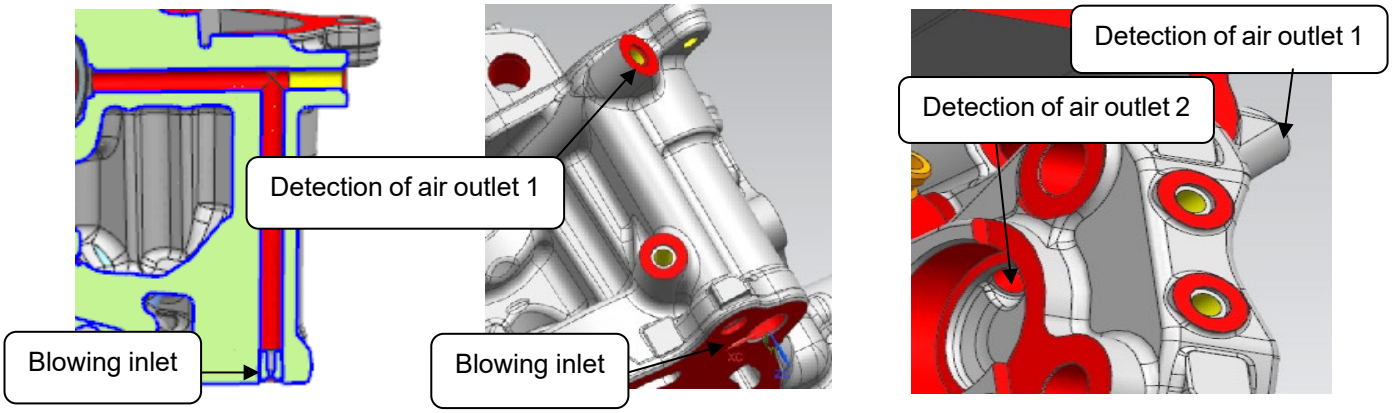


6. Cylinder head bearing

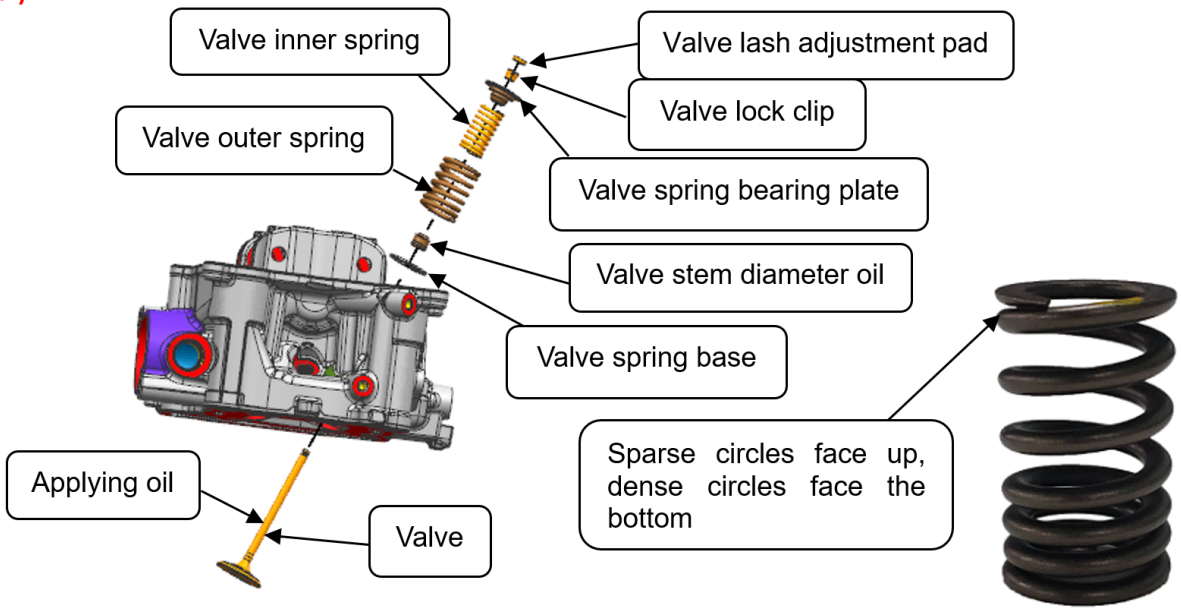
a. Check the cylinder head bearing. The inner ring of the bearing should rotate smoothly without stagnation. If the inner ring of the bearing is stuck, please replace the cylinder head bearing.

Cylinder head

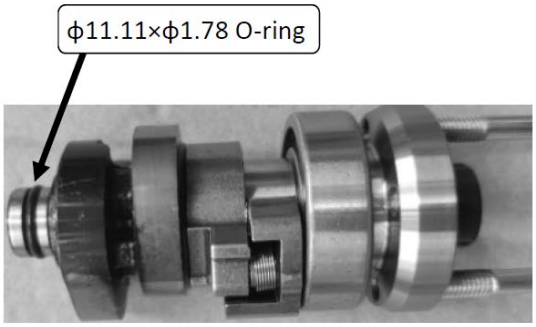
1. As shown in the figure, use an air gun to blow the oil passage of the cylinder head to ensure that the oil passage of the cylinder head is unblocked.

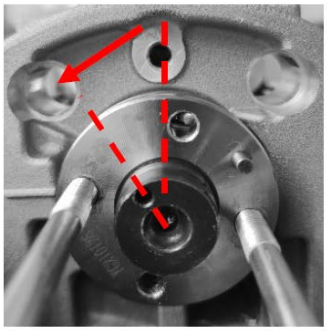


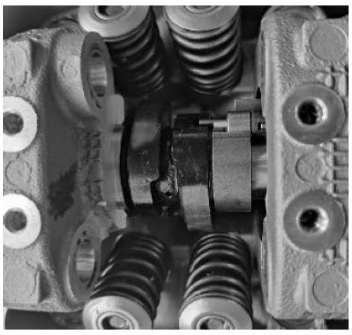
2. As shown in the figure, install the valve (apply engine oil), valve spring base, valve stem diameter oil seal (press in place after installation), valve inner and outer springs, valve spring retainer, and valve lock clip (install with valve installation tool) in sequence. **(Note: When installing the inner and outer springs of the valve, the sparse circle faces upwards and the dense circle faces downward.)**

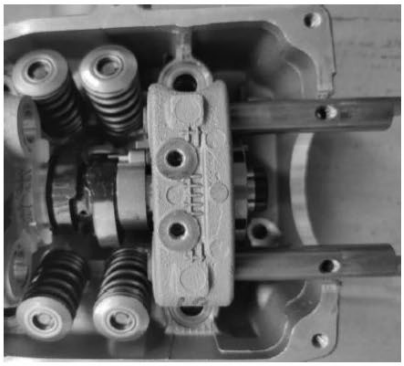


3. As shown in the figure, install the camshaft (O-rings need to be installed), the intake rocker arm sub-assembly, the exhaust rocker arm sub-assembly, and the intake and exhaust rocker arm shaft in sequence. **(Note: O-rings cannot be missed on the camshaft. When the camshaft is installed, the normal T-point position needs to be inserted at an appropriate angle in the counterclockwise direction to install it in place.**)

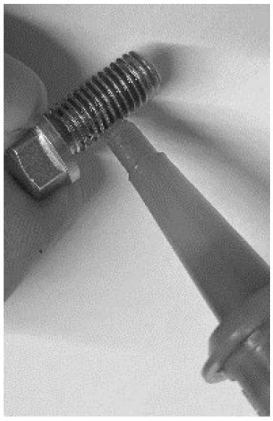


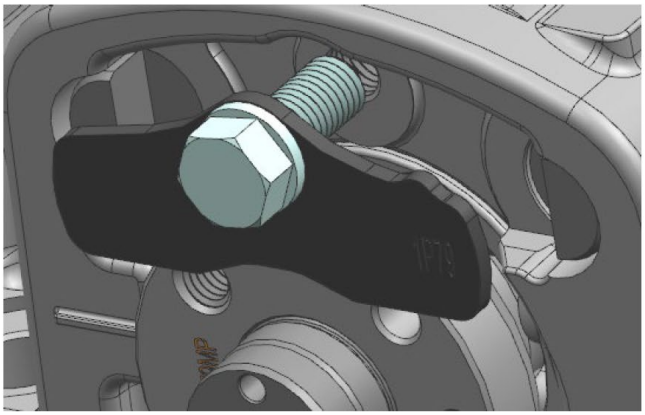




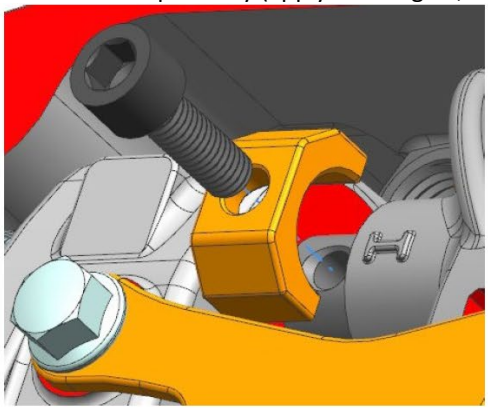


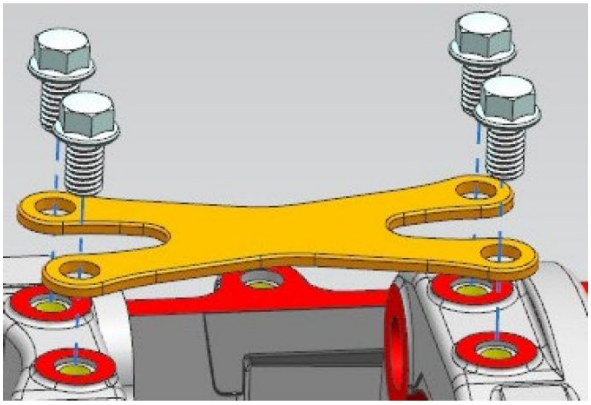
4. Install the camshaft bearing pressure plate, and the M7×16 bolts need to be threaded and glued. Install the valve clearance adjustment pad to adjust the valve clearance.



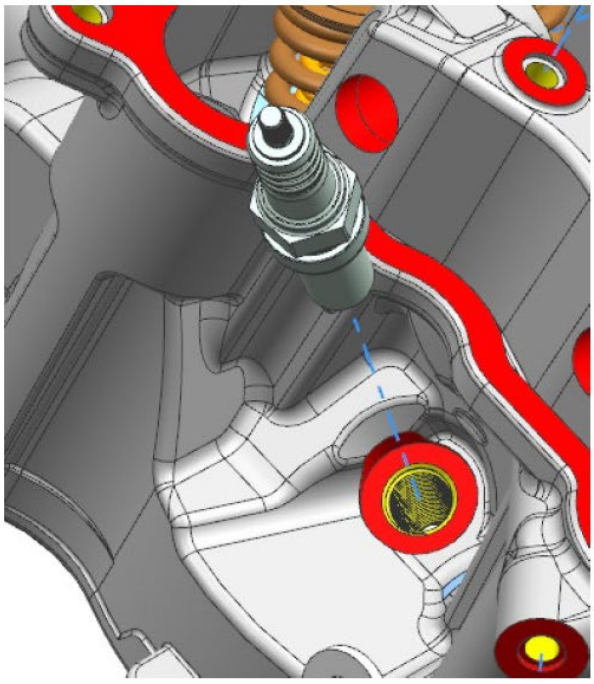


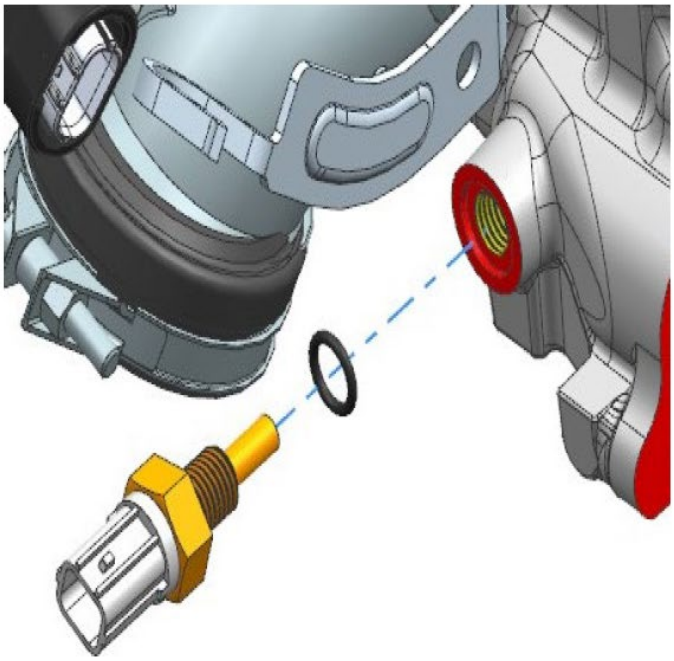
5. As shown in the figure, after the valve clearance is adjusted, install the rocker arm limit block and the limit block locking bolt (the bolt needs to be coated with thread glue, and the torque is 9 ± 1 N.m) . Install the cylinder head pressure plate and lock it with 4 M6×10 bolts respectively (apply thread glue, torque 10 ± 1 N.m).



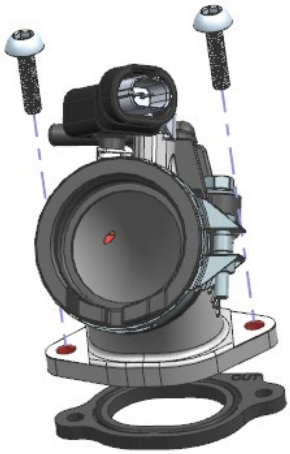


6. As shown in the figure, install the spark plug (torque 14 ± 1N.m), water and oil temperature sensor (do not omit the O-ring, torque 14 ± 1.5N.m).



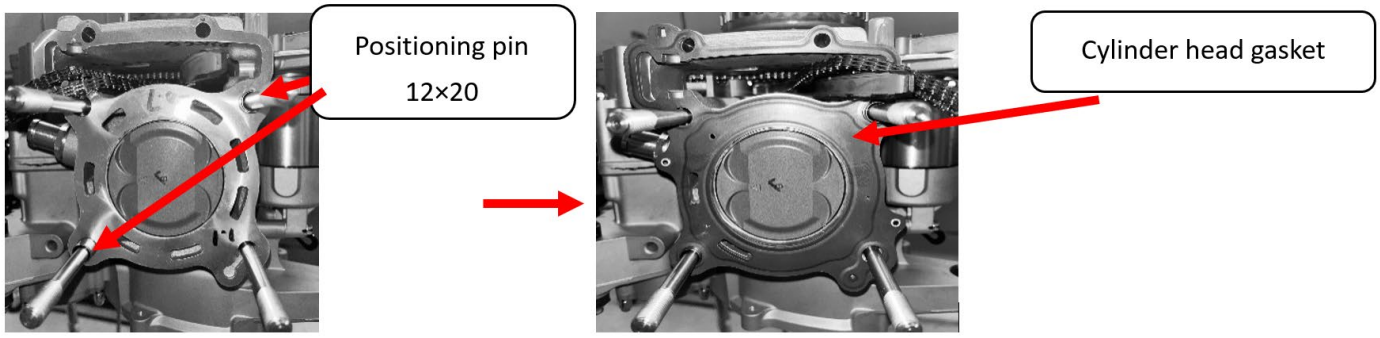


7. Install the insulation pad (do not miss out the 2 O-rings), and the intake manifold subassembly.

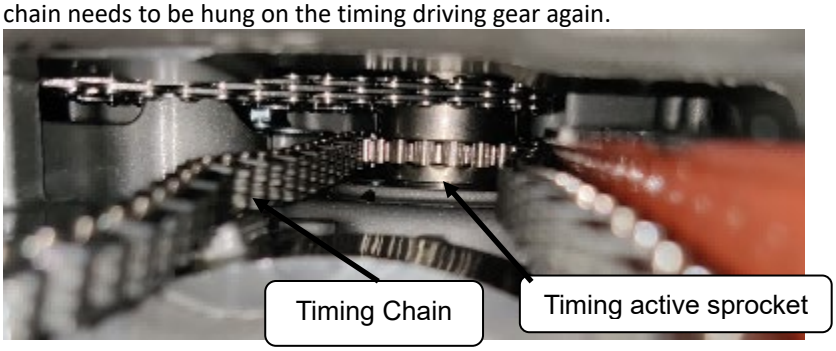


Cylinder head installation

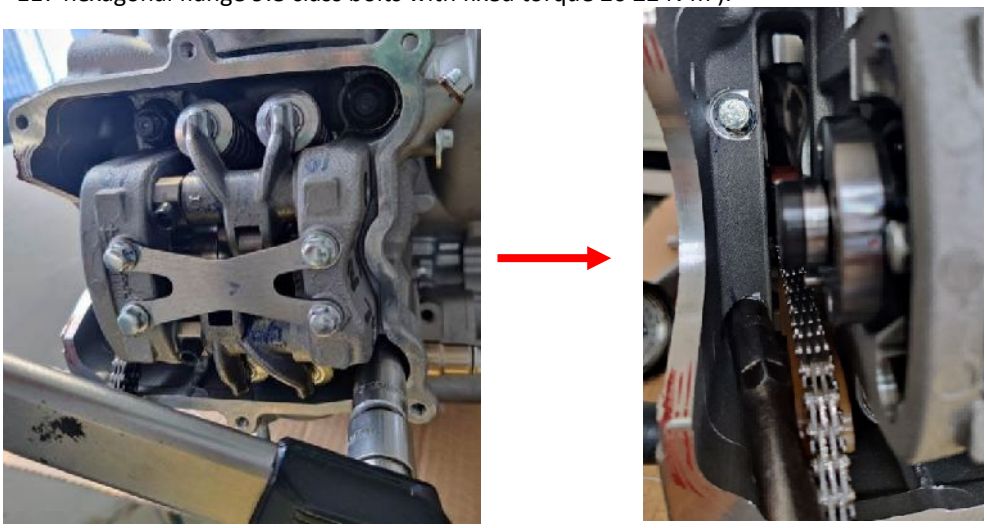
1. Remove the oil stains, water stains and dust on the joint surface of the cylinder and the cylinder head. After checking that there is no foreign matter on the surface of the cylinder and piston, install two ϕ12 positioning pins and cylinder head gaskets (Note: cylinder head gaskets cannot be reused**. After dismantling the cylinder head, the gasket of the cylinder body box needs to be replaced, and the joint surface needs to be sealed with flat sealant. For the installation of the cylinder piston, refer to the ZT1P77MP Engine Maintenance Manual--Cylinder, Piston)** .



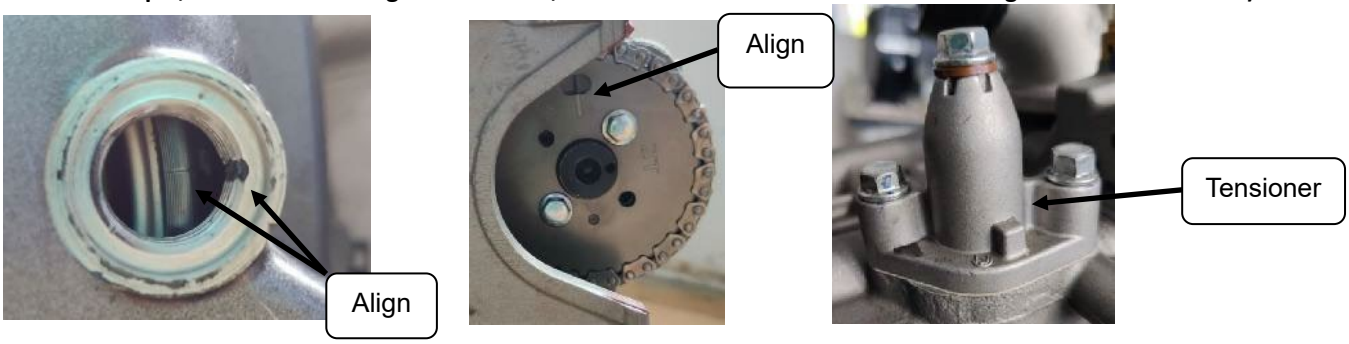
2. As shown in the figure, check whether the timing chain is detached from the timing driving sprocket. If it is detached, the timing chain needs to be hung on the timing driving gear again.



3. As shown in the figure, after confirming that there is no missing or wrong installation, install the cylinder head into the corresponding position of the engine. After evenly diagonally pre-tightening the cylinder head nut and the two locking bolts on the side, use a fixed torque wrench to tighten them respectively (M10×1.25 hexagonal flange nut fixed torque 55 ± 5N.m , M8 × 1 ×117 hexagonal flange 9.8 class bolts with fixed torque 20 ±2 N·m).



4. As shown in the figure, check the marking line at point T of the flywheel, and after confirming that it is aligned with the scale of the M14×1.5 screw plug hole on the right cover, turn the camshaft so that the dot is aligned with the camshaft pressure plate bolt, and insert the timing driven sprocket into the timing chain and assemble on the camshaft, meanwhile, the timing scale of the timing driven sprocket is aligned with the timing scale mark of the cylinder head. Apply thread glue to the M6×16 bolts, and tighten the timing sprocket with a fixed torque (torque is 12 ± 1.5N.m). After confirming that it is in place, install the tensioner. **(For tensioner installation, refer to ZT1P77MP Engine Maintenance Manual - Cylinder Head Cover, Cylinder Head - Tensioner)**.
(Note: After confirming that the timing chain has not fallen off from the timing drive gear, tighten the timing sprocket at a constant torque, and after installing the tensioner, turn the crankshaft to recheck the timing for the second time.)



6. Guide bar

Guide bar removal

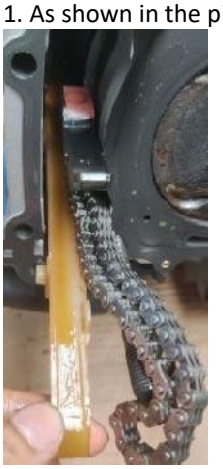
Before removing the guide bar, the following parts need to be removed.

· Tensioner. **(Refer to ZT1P79MP engine maintenance manual for disassembly and assembly--cylinder head cover, cylinder head-tensioner)**

·Cylinder head cover parts. **(Refer to ZT1P79MP engine maintenance manual for disassembly and assembly--cylinder head cover, cylinder head-cylinder head cover)**

·Cylinder head assembly. **(Refer to ZT1P79MP engine maintenance manual for disassembly and assembly--cylinder head cover, cylinder head-cylinder head)**

1. As shown in the picture, remove the guide bar.

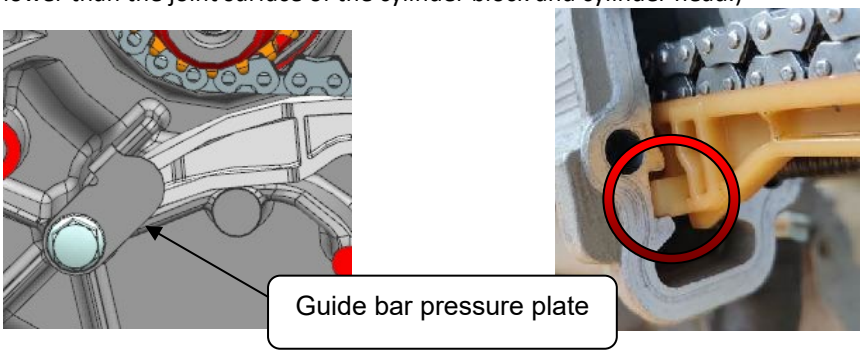


Examine

1. Check the guide bar for excessive wear or damage.

Guide bar installation

1. As shown in the figure, install the guide bar. (Note: After the guide bar is installed in place, the convex point of the guide bar is lower than the joint surface of the cylinder block and cylinder head.)



7. Tension strip

Before removing the tension bar, the following parts need to be removed.

·Tensioner. **(Refer to ZT1P77MP engine maintenance manual for disassembly and assembly--cylinder head cover, cylinder head-tensioner)**

·Cylinder head cover parts. **(Refer to ZT1P77MP engine maintenance manual for disassembly and assembly--cylinder head cover, cylinder head-cylinder head cover)**

·Cylinder head sub-assembly. **(Refer to ZT1P79MP engine maintenance manual for disassembly and assembly--cylinder head cover, cylinder head-cylinder head)**

·Cylinder piston sub-assembly. **(Refer to ZT1P79MP engine maintenance manual for disassembly and assembly - cylinder, piston)**

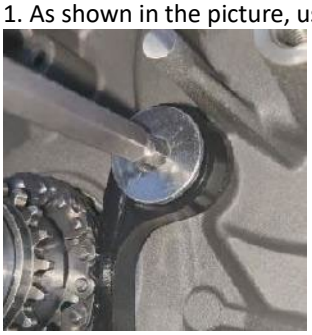
·Right crankcase cover sub-assembly. **(Refer to ZT1P79MP engine maintenance manual for disassembly and assembly--right crankcase cover, magneto-right crankcase cover, magneto stator)**

·Magneto rotor sub-components. **(Refer to ZT1P79MP engine maintenance manual for disassembly and assembly - right crankcase cover, magneto - magneto rotor)**

·Electric starter big gear. **(Refer to ZT1P79MP engine maintenance manual for disassembly and assembly - right crankcase cover, magneto - magneto rotor)**

Tension strip removal

1. As shown in the picture, use a 5# inner hexagon to remove the fixing bolt of the tensioner, and remove the tensioning strip.

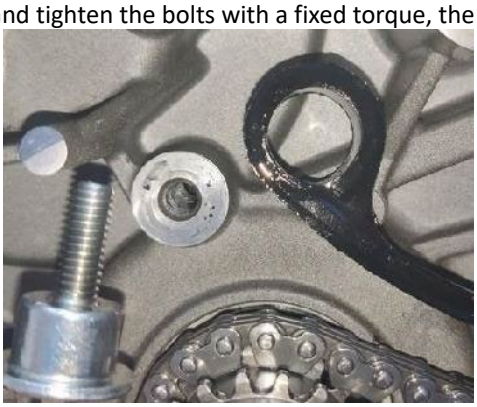


Examine

1. Check the tensioning strip for excessive wear or damage.

Tension bar installation

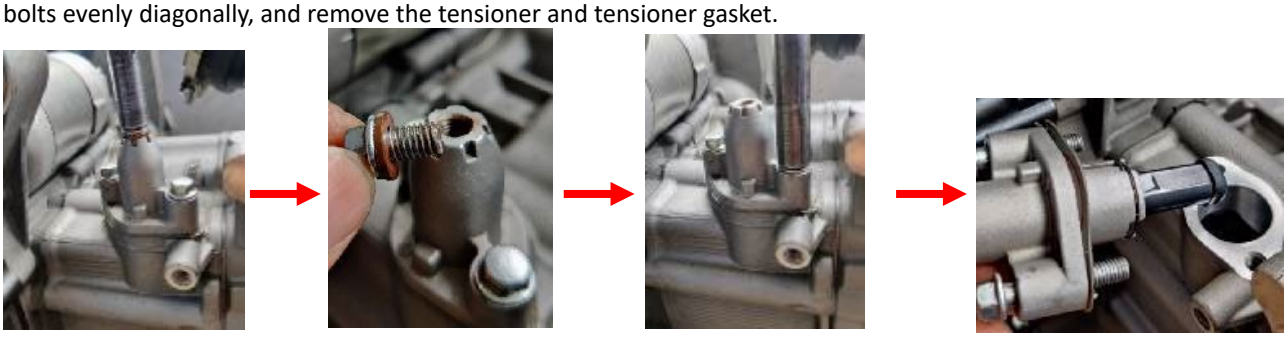
1. As shown in the figure, apply thread glue to the fixing bolts of the tensioning strips, install the tensioning strips to the corresponding position of the box, and tighten the bolts with a fixed torque, the torque is 12±1.5N·m.



8. Tensioner

Tensioner Removal

1. As shown in the picture, use T bar -8# to remove the top bolts and copper pads of the tensioner, then loosen the tensioner fixing bolts evenly diagonally, and remove the tensioner and tensioner gasket.

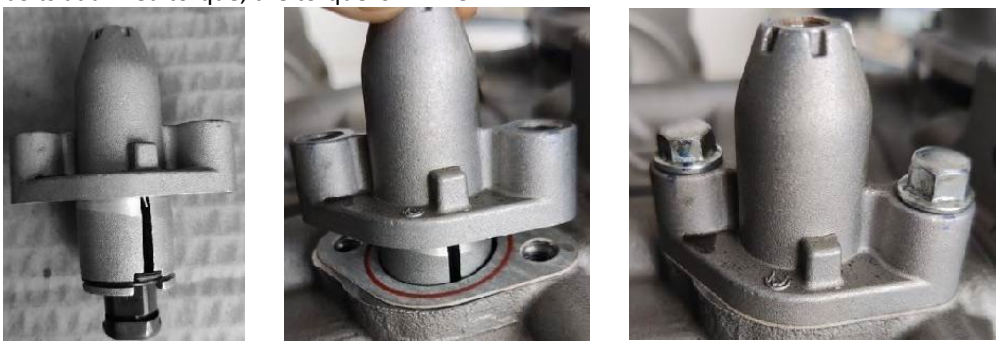


Examine

1. As shown in the figure, when the tensioner ejector rod is normally extended, press the tensioner fixed rod by hand, if the ejector rod cannot rebound, it is qualified.

Tensioner installation

1. As shown in the picture, tighten the tensioner ejector rod with a flat screw **(rotate the flat screw clockwise while holding the tensioner ejector rod with your hands)**, and tighten it when it reaches the highest point, and the ejector rod can automatically lock, put the tensioner gasket into the tensioner and put it in the corresponding position of the cylinder, and tighten it with M6×30 bolts at a fixed torque, the torque is 12±1.5N.m .



2. As shown in the figure, use a flat batch to rotate the ejector bolt counterclockwise. After confirming that the tensioner ejector rod pops up, put in the copper gasket and the M6×10 bolt, and tighten it with a fixed torque. The torque is 10±1N·m.