

Super head 4-Valve

SPECIAL PARTS
TAKEGAWA



The "Super Head 4-valve", top of the line cylinder head of KAWASAKI minimoto single, is NEW released, which features 4 valves installed to increase the efficiency of intake and exhaust on "TAKEGAWA Super Head+R" which has an extreme engine performance.

Super head 4-valve : The aluminum forged rocker arms with roller bearings and the steel valve spring retainers are standard for this TAKEGAWA original cylinder head. The valve angles, the combustion chamber shape and the port figures are designed considering a good balance with the 4-valve system. It provides the high output power and stabilize supply in the higher rev range. Also, to equiped autodecompression camshaft allows you to start an engine with a lightweight kick without burdening to the transmission or the kick shaft even under the high compression and high displacement condition.
Four optional camshafts (10/15D · 15/20D · 20/25D · 25/30D) Please replace with your desired camshaft and enjoy the riding performance.



Roller rocker arm

SCUT Piston



4-Valve (EX / IN)

Autodecompression Camshaft

■ **Roller rocker arm**

: This is our original ALUMINUM forged rocker arm equipped with built-in roller bearings which has very good reputation with TAKEGAWA's Super Head. The friction is decreased and they act along with the cam profile smoothly from the low to high rpm.

■ **Steel valve spring retainers** ■ **Optional Titanium-alloy valve spring retainer is available.**

■ **Autodecompression Optional camshaft** Four optional camshafts (10/15D · 15/20D · 20/25D · 25/30D) Please replace with your desired camshaft and enjoy the riding performance.

■ **Bore up Piston**

: The lightweight piston is designed to be well balanced with the shape of combustion chamber and the compression ratio to provide the high combustion efficiency.

Molybdenum coating is applied on the piston skirt in order to better initial brake in process.

■ **4-Valve**

: The larger dimensions of 4-valve-head than those of the 2-valve-head increase the more efficiency of the intake and the exhaust.

Intake valve diameter : 23mm×2 Exhaust valve diameter : 19.5mm×2

■ **Bore up Cylinder**

: All-aluminum ceramic-coated cylinders which are super in durability, gas-tightness and great heat transfer are applied for all displacements. The stick thermometer is installable on all cylinders, so you can measure the temperature of the cylinder with our optional compact LCD thermometer.



01-05-8023

■ **Super head 4-Valve Bore up Kit 125cc/138cc/SCUT178cc**

The Super Head 4-valve Bore Up Kit includes the Super Head 4-valve head, bore up cylinder, piston, decompression camshaft, stud bolt, oil hose and M8 spark plug. ■ **KSR110 (KL110A-000001~)**

Compression ratio 12.0 : 1 (125cc : φ56mm 138cc : φ59mm SCUT178cc : φ67mm)

Displacement	Included camshaft	Item number
125cc	10/15D	01-05-8021
138cc	15/20D	01-05-8022
SCUT178cc	20/25D	01-05-8023

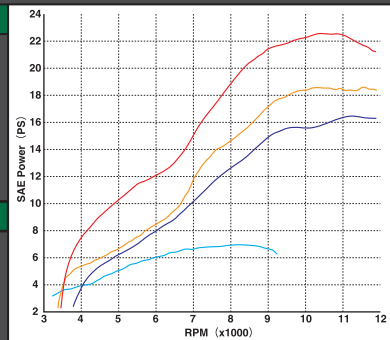


01-05-8812

■ **Super head 4-Valve Combo Kit 125cc/138cc/SCUT178cc**

The Combo Kit combines the Super Head 4-valve Kit and the MIKUNI VM26 Carburetor Kit with the racing throttle and the air filter. ■ **KSR110 (KL110A-000001~)** ※For vehicles equipped with our Super Head 4-valve ONLY

Displacement	Included camshaft	Item number
125cc	10/15D	01-05-8812
138cc	15/20D	01-05-8813
SCUT178cc	20/25D	01-05-8814



■ Super head 4-Valve Bore up Kit
 • Carburetor : KEIHIN PE28
 ■ SCUT178cc (Camshaft : 20/25D) + Racing muffler
 ■ 138cc (Camshaft : 15/20D) + Basic muffler
 ■ 125cc (Camshaft : 10/15D) + Air filter + Basic muffler
 ■ Stock Engine 110cc
 ※To prevent the engine from getting damaged, keep specified rpm range.
 ※Tested at the condition of our test facility actual power may vary.

For KLX110 customer
 KLX110 series "engine" are compatible with KSR110 series, However, stock KLX "chassis" can NOT be used this Super Head 4-valve kit without some modifications such as Front fork and intake pipe. Please ask your local Takegawa dealer for more information.



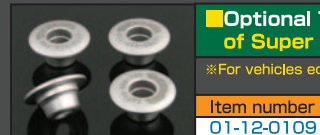
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■ **Carburetor Kit for Super head 4-Valve (The High Throttle Kit and Air filter are included.)**

The special 3D manifold is included, which allows the air to go through smoothly from the carburetor to the intake port.

■ **KSR110 (KL110A-000001~)**
 ※For vehicles equipped with our Super Head 4-valve ONLY

Carburetors	Item number
MIKUNI VM26	03-05-0021
KEIHIN PE28	03-05-0022



■ **Optional Titanium-alloy valve spring retainer of Super head 4-Valve**

※For vehicles equipped with our Super Head 4-valve ONLY

Item number
01-12-0109

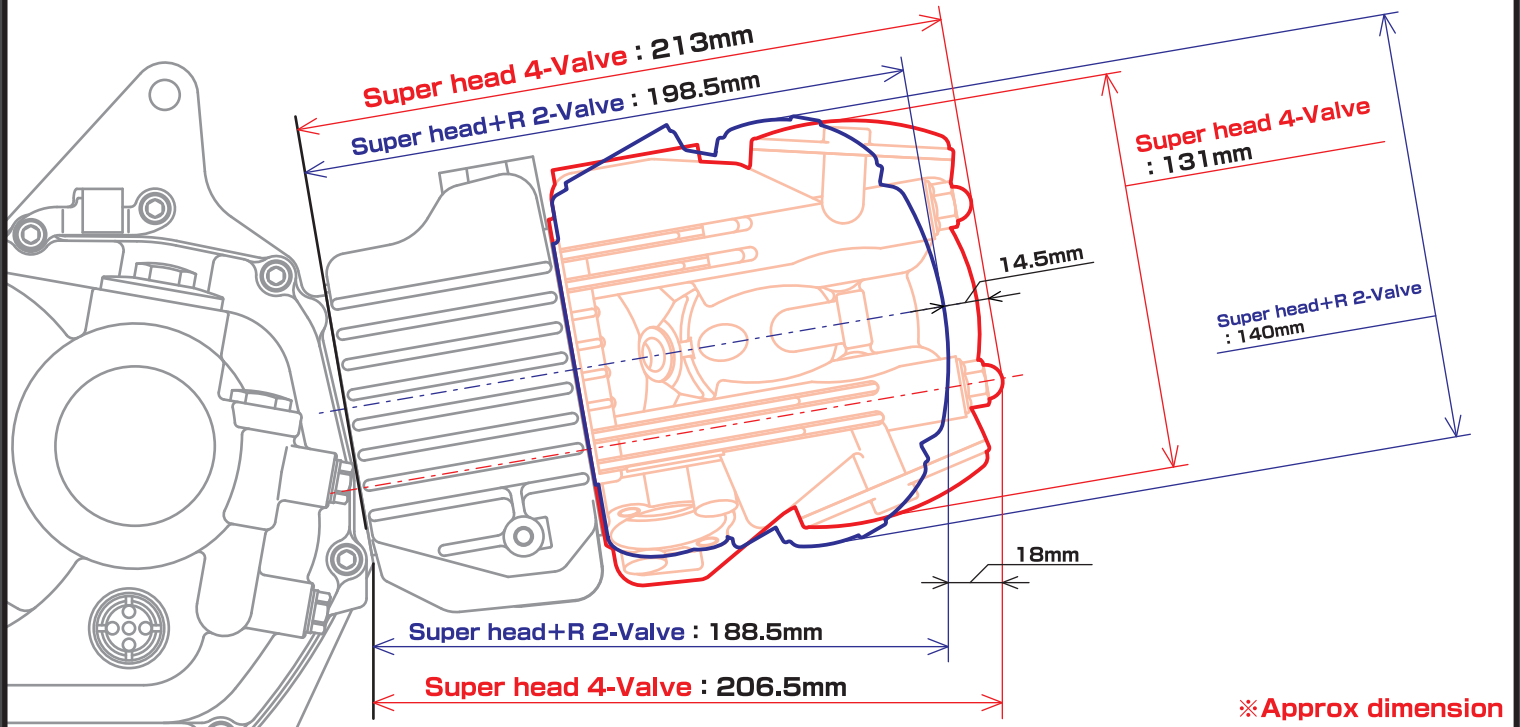
■ **Autodecompression Optional camshaft of Super head 4-Valve**

Optional Camshaft	Item number	Optional Camshaft	Item number
10/15D	01-08-0128	20/25D	01-08-0130
15/20D	01-08-0129	25/30D	01-08-0131

Super head 4-Valve Kit for KLX110 customer

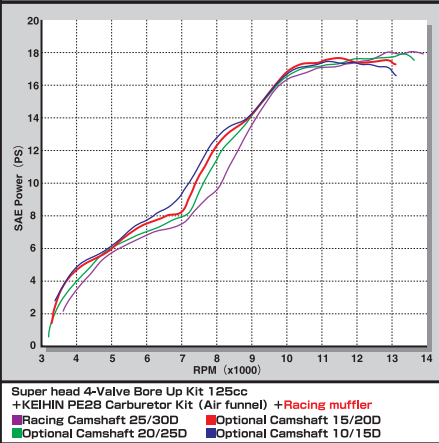
KLX110 series "engine" are compatible with KSR110 series, However, stock KLX "chassis" can NOT be used this Super Head 4-valve kit without some modifications such as Front fork and intake pipe. Please ask your local Takegawa dealer for more information.

Drawing of 4V/2V Super head & Cylinder

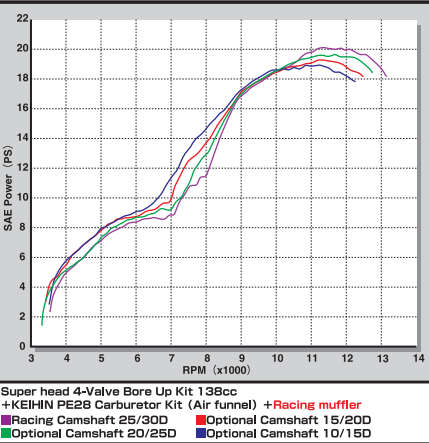


Super head 4-Valve Optional Camshaft Graph of power output

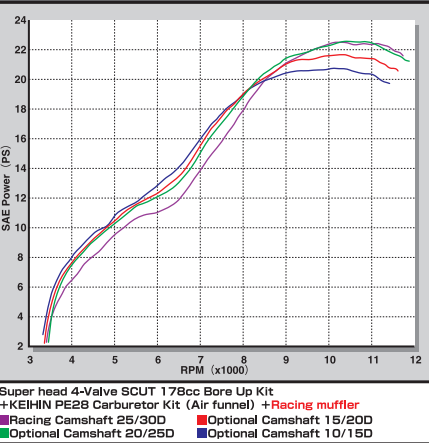
The included camshaft for 125cc kit



The included camshaft for 138cc kit



The included camshaft for 178cc kit



New released the original "Complete Engine" with the Super Head 4-valve!! This complete engine includes a crankcase which is modified for oil jet hole, TAKEGAWA die cast manual clutch cover, 6 discs heavy duty clutch and close ratio transmission.



Super head 4-Valve Complete Engine

Complete Engine for KSR110 (KL110A-000001~)

- The factory modified crankcase for exclusive use with TAKEGAWA complete engine is equipped. This crankcase is modified for oil jet hole at our factory in JAPAN, which the stock case does not have. Oil jet hole allows the piston and the piston pin to lubricate smoothly with the direct oil shower.
- Please choose your engine type from the wide selection. Two close ratio transmissions (4-speed/6-speed) Two die cast manual clutch cover (wire/hydraulic) Three different displacements (125cc, 138cc or 178cc SCUT) are available. These all line up can be installed with heavy duty 6 discs clutch.
- ※ Sorry, ignition-related parts, kick starter arm, generator cover and gaskets are NOT included.
- ※ Engine oil is NOT included. ※ Our optional carburetor and exhaust system for exclusive use with the Super Head 4-valve are required to use this complete engine.