KLX/DRZ110

Perimeter Frame Kit

Thanks for purchasing this exciting new product from BBR Motorsports! Extensive R&D has gone into this product and we are certain that you will be just as excited about it as we are. If you have any questions please give us a call. Thanks!

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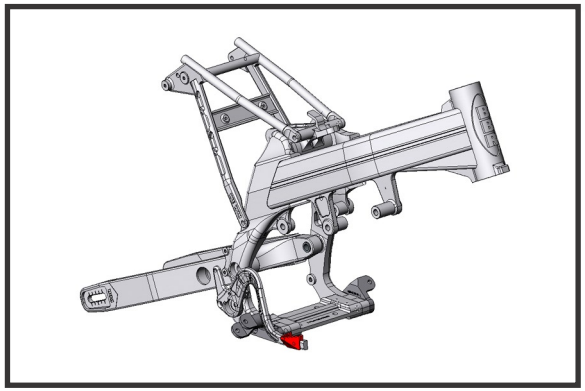
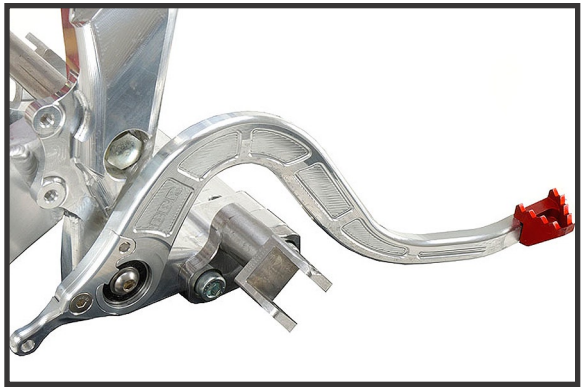


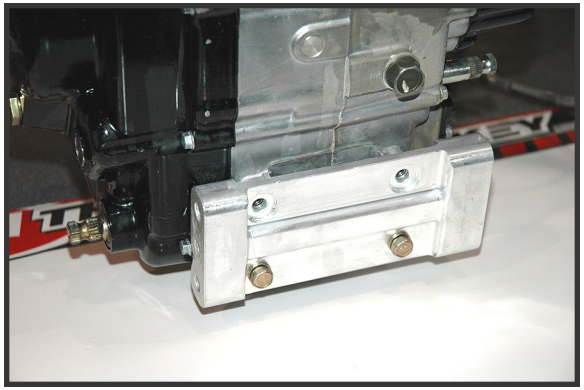


Assembly Instructions:

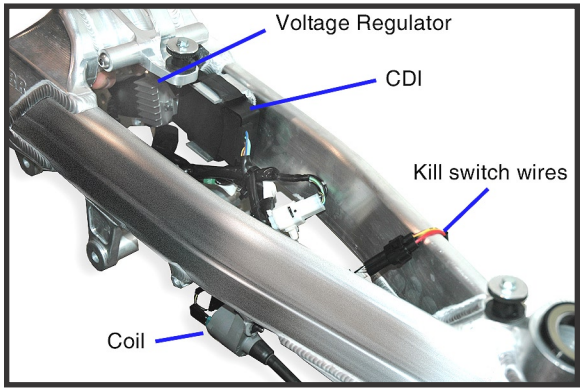
The following instructions are intended to supliment the Kawasaki/Suzuki owners manual. Please refer to that manual for torque specs and disassembly/ assembly details not shown here. Outside of the details shown, the BBR KLX/DRZ110 Perimeter Frame Kit assembles similarly to the production parts. It is assumed that you have already disassembled your stock bike. Note that the swingarm pivot bearings are pre-greased at BBR before shipment.

1. Begin by removing the footpeg mounts, bottom motor plate, and brake pedal from the BBR Perimeter Frame. Loosen the swingarm pivot bolt to ease installation of the motor.

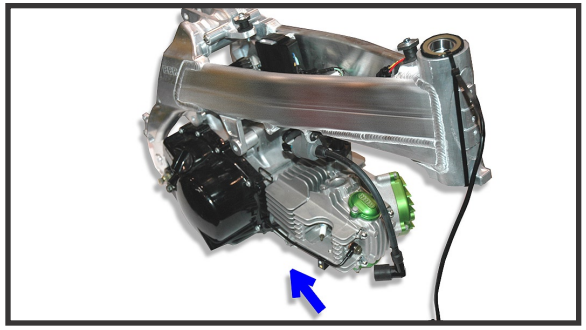
2. Remove the kickstarter from the engine.



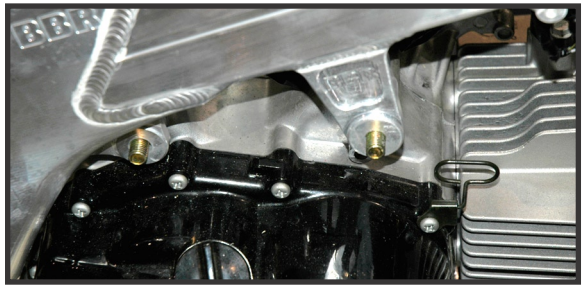
3. Attach the bottom motor mount plate to the engine (2 rear bolts). Note that the printing should face up and forward. Leave bolts loose.



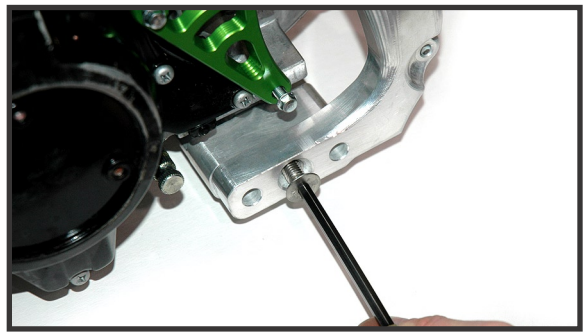
4. Install wire harness onto frame. Start with the voltage regulator. It bolts to a post on the left side under the shock tower with wires facing towards shock. Install CDI box on left side with wires facing forward. Install coil mount (with ground wire) with spark plug wire facing forward. Route the kill switch wire over the top of the left spar tube (just below gas tank mount).



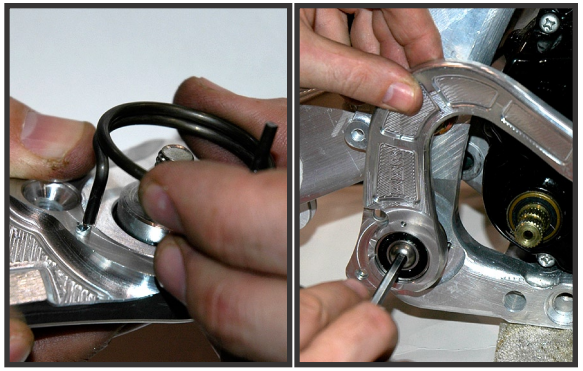
5. Install motor by sliding up into frame centering bottom motor mount plate between the bottom frame spars.



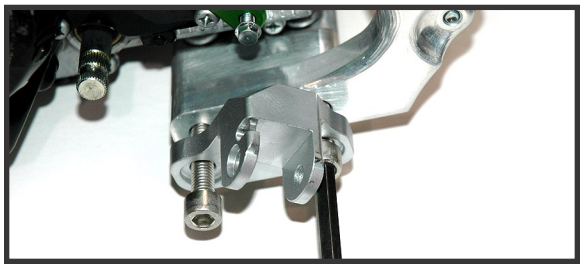
6. Install the top two motor mount bolts from the left side.



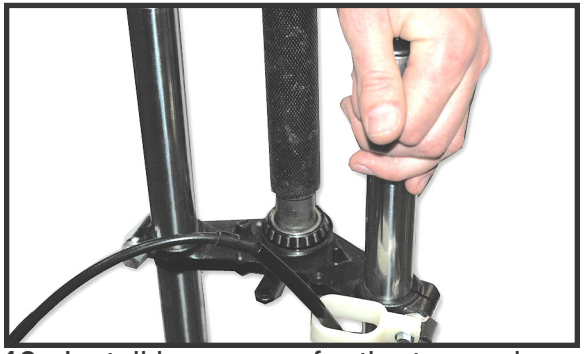
7. Install the 2 bottom motor plate bolts through the frame spars into the motor plate. Once all the bolts are installed, you can tighten all the motormount bolts. Note that these bolts should be loosened or removed when removing the swingarm. Swingarm bearings are pre-greased from BBR.



8. Install the brake pedal by inserting the brake pedal spring into the brake pedal first, then install the assembly onto the frame.

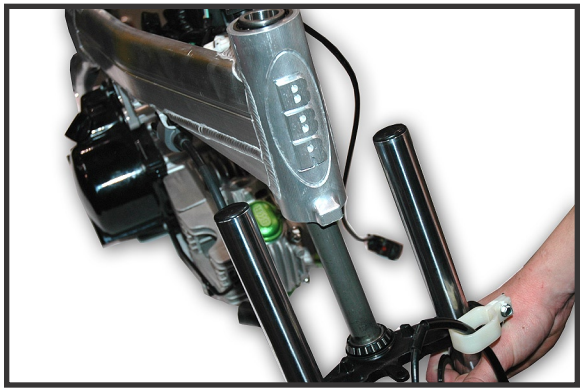


9. Install the footpeg mounts and then install the footpegs onto the mounts. Note that these mounts only fit KLX110 specific footpegs.



10. Install lower race for the tapered roller bearings on your steering stem. Be sure to remove the stock bearing race first.

11. The upper dust seal will require modification to fit the large headtube of the BBR frame.

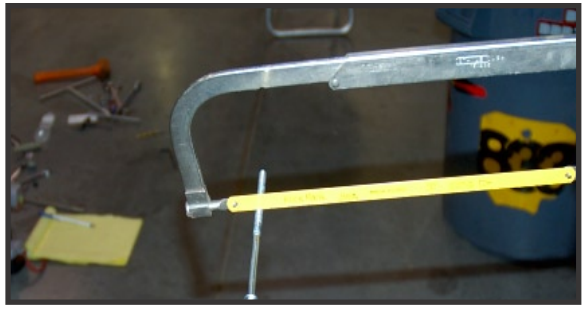


12. Install the triple clamps and fork legs (see last page for diagram).

13. Install front and rear wheels.

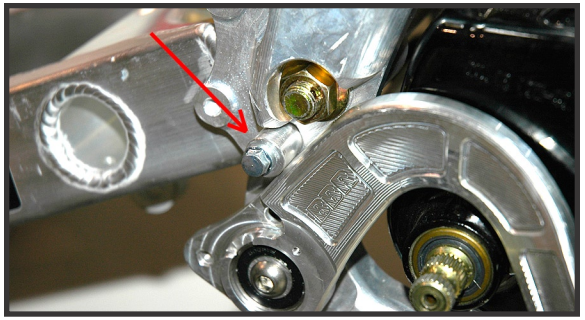
14. Install chain (this will require a 96 link chain when using the stock 33 tooth rear sprocket and a 14T front). BBR recommends a 43T sprocket with the 4-speed transmission (use 106 link chain).

Chain Adjustment: Adjust the chain so that it has about 1.5 inches of play at the end of the chain buffer block.

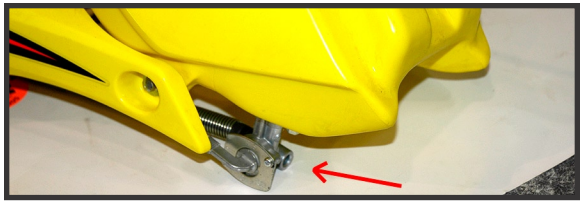


15. Carefully cut brake rod (we recommend using a hack saw) leaving 3/4" of threads then install the brake rod adapter as shown.

16. Connect rear brake rod.



17. Use brake adjuster cam to set the height of the brake pedal when using the drum brake.



18. Install the gas tank using the fuel petcock and fasteners from the stock tank. Note when installing the tank shrouds, the lower wing mount hole will need to be pulled into place. This will put tension on the wing and hold it in place.

19. Continue with installation of all remaining components and check torque for all fasteners.

If you are using the stock carb, install the choke with the supplied mount as shown above. We recommend changing to a #98 main jet (BBR #421-KEH-3098)

Helpful Hints:

Side Panels: Make certain when installing the side panels to insert the rear edge (of the sidepanel) between the rear fender and the subframe (exactly like the OEM KLX110).

Seat: Be certain that the seat hooks the frame (near the shock tower) when installing the seat.

Gas Tank: Use care when installing the front tank bolt to be certain that it is aligned correctly and does not cross thread.

BBR Quiet Core: The BBR exhaust system comes with the spark arrester screen installed and runs best in most situations. Also included is the BBR quiet core which can be installed for quieter performance.

Suspension: Be certain to use correct spring rates and damping adjustments on front and rear suspension. Uncontrolled bottoming will result in component damage.

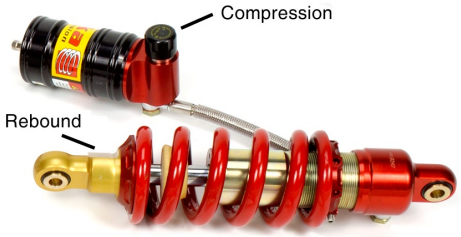
Recommended gearing:

3 speed transmission: 38T - 40T

4 speed transmission: (outdoor) 40T - 42T

(indoor) 42T - 44T

Suspension Setup:



Setting the rear suspension sag:

1. Support your bike on a workstand with the rear wheel off of the ground.
2. Measure from the rear axle to a fixed point on the rear fender. Note this measurement.
3. Remove the workstand. While standing on the footpegs (in full riding gear), have an assistant balance the motorcycle while measuring between the same two points as step 2.
4. The sag is the difference between these two measurements (from steps 2 and 3)

Adjust spring preload to achieve about 2.5" of sag. Decreasing the race sag (example: 2 inches), improves turning ability for tight terrain at the cost of slightly reduced straight line stability. Increasing the sag (example: 3 inches) may improve stability on faster tracks, but will reduce turning performance.

Rebound adjuster is on the bottom of the shock (clockwise is slower rebound). Compression adjuster is on the reservoir (clockwise is stiffer).

Standard spring is 1100 lbs. for 165 lbs rider. Optional softer and stiffer springs are available.

660-HXR-1007 Stiffer Spring for riders over 175 lbs.

660-HXR-1005 Softer Spring for riders under 125 lbs.

Basic Torque for Common Bolt Sizes:

Bolt Diameter	Torque
5	30 - 43 in. lbs.
6	52 - 69 in. lbs.
8	10.0 - 13.5 ft. lbs.
10	19.0 - 25 ft. lbs.
12	33 - 45 ft. lbs.
14	54 - 72 ft. lbs.
16	83 - 115 ft. lbs.
18	125 - 165 ft. lbs.
20	165 - 240 ft. lbs.

Swingarm bolt: 58 lbs.
Top motormount bolts: 40 lbs.
Bottom motormount bolts: 20 lbs.
Footpeg mounts: 25 lbs.
Shock Bolts: 29 lbs.