BRITISH CUSTOMS

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Bonneville T100 Liquid Street Twin **Bonneville T120** Bonneville Bobber

Street Cup

Thruxton 1200 Thruxton R

Competition X-Pipe PART NUMBER: BC901-100-BR



You must know how to remove and replace your stock exhaust in order to install this product otherwise have it installed by a professional mechanic. Keep all stock parts from your existing system as some components may be necessary to install your new British Customs exhaust depending on the application. Read through all instructions before beginning installation. Exhaust system can be extremely hot. Let motorcycle cool down before beginning installation. Always wear hand and eye protection and take precautionary measures to avoid injury.

CAUTION: Exhaust system can be extremely hot. Let motorcycle cool down before beginning installation. Always wear hand and eye protection and take precautionary measures to avoid injury.

WARNING: Always properly support vehicle with a stand and/or lift when servicing or performing any work.

Unstable vehicles may present dangerous conditions and may cause property damage and/or personal injury.

WARNING: Observe the warning advice given in the General Information section on the safe handling of fuel and fuel containers.

A fire, causing personal injury and damage to property could result from spilled fuel or fuel not handled or stored correctly.

NOTE: Read through all instructions before beginning installation.

Removal

- 1. Remove Riders Seat
 - 1. Insert the ignition key into the seat lock and turn it counter-clockwise while pressing down on the rear of the seat.
 - Lift the seat up from the back and slide rearwards for complete removal.

- 2. Disconnect the battery, negative (black) lead first.
- 3. Exhaust Silencer Removal

Left Hand Side Removal

- 1. Loosen the rear end of heat shield by loosing the 5mm allen clamp.
- 2. Loosen the 5mm allen clamp securing the silencer to the head pipe.
- 3. Remove the 12mm lower front mounting bolt.
- 4. Support the silencer, remove the 12mm rear mounting nut holding silencer to passenger foot-peg and carefully slide the silencer toward the rear of the bike to remove.

Right Hand Side Removal

- 1. Loosen the rear end of heat shield by loosening the 5mm allen clamp.
- 2. Loosen the 5mm allen clamp securing the silencer to the head pipe.
- 3. Support the silencer, remove the 12mm rear mounting nut holding silencer to passenger foot-peg and carefully slide the silencer toward the rear of the bike to remove.

4. Fuel Tank

Note: To remove the head pipes, you need to slide the fuel tank rearward to access the oxygen sensor harness under the fuel tank. This also makes it possible to access the cradle headstock bolt when removing the left hand side cradle assembly.

- 1. Remove the 10mm nut and 8mm bolt securing the rear of the fuel tank to the frame.
- Slide fuel tank toward rear of motorcycle approx. 6 inches to access oxygen sensor harness.



Note the routing of the oxygen sensor harness for installation.

The oxygen sensor electrical connections must not be swapped between cylinders.

If the connections are swapped over, engine malfunctions will occur.

The right hand (Cylinder 2) oxygen sensor connector on the main harness has a red connector (main harness side).

The oxygen sensors are NOT marked. Always ensure the right hand oxygen sensor harness is connected to the main harness connector with the red connector.

- Disconnect the oxygen sensors from the main harness.
- 4. Leave fuel tank in rearward position for the remainder of the installation.
- 5. Head Pipe Removal

Right Hand Side Removal

- Loosen the two clamps under the motorcycle securing the right hand side head pipe to the catalytic converter.
- 2. Remove the 12mm bolt securing the rear head pipe mount.
- Remove the two 12mm nuts and the finned clamps securing the head pipe to the cylinder head.
- Support the head pipe, while gently pulling the exhaust off the motorcycle.

Left Hand Side Removal

- Loosen the two clamps under the motorcycle securing the left hand head pipe to the catalytic converter.
- 2. Remove the two 12mm nuts and the finned clamps securing the left hand head pipe to the cylinder head.
- 3. Support the head pipe, while gently pulling the head pipe off the motorcycle.

Note: Make sure the exhaust gaskets in the head pipes stay in place. If the gasket comes out of header pipe, gently remove it from catalytic converter and reinstall the gasket in the head pipe.



- 6. Left Hand Cradle Removal
 - 1. Remove the 10mm bolt from the upper radiator bracket on the back side of the radiator.



2. Remove the left hand side crankcase front mounting hardware using T-55 Torx driver and 17mm wrench on the nut.



3. Remove 8mm allen and 14mm nut securing the left hand cradle to headstock.



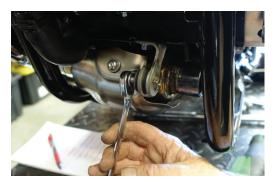
 Remove the two 8mm allen bolts at the rear of the left hand cradle and collect the nut plate.



5. Support the left hand cradle assembly and gently lower the cradle assembly, taking care not to pull on the side stand sensor wire at the rear of the cradle.



- 7. Catalytic Converter Removal
 - 1. Remove 12mm bolt securing the front of the catalytic converter.



- 2. Remove 12mm bolt securing the side of the catalytic converter.
- 3. Wiggle and pull the catalytic converter off the left side of the motorcycle.

Note: The rubber isolator may come off with catalytic converter. If so, it must be installed back in the locating lug bracket before installing British Customs X-Pipe.



Installation

 Install British Customs X-pipe by inserting post into factory rubber mounted locating lug.

Note: The notched ends of the X-pipe should be toward the rear of the motorcycle. The X-pipe will sit higher in the front.



2. Fit 12mm bolt on the side of the x-pipe and torque to **15 Nm. (11 ft-lb)**



3. Position left cradle into place, ensuring radiator lower mounting hole lines up with mounting post on the inside of the cradle.



4. Fit the cradle assembly two rear mounting bolts and nut plate, do not fully tighten at this stage.



5. Fit the 8mm allen bolt and 14mm nut securing the cradle to the headstock. Torque to **40 Nm. (30 ft-lb)**



- Torque cradle assembly rear mounting bolts to 40 Nm. (30 ftlb)
- 7. Fit the T-55 Torx bolt and 17mm nut securing the cradle to the crankcase. Torque to **105 Nm**. **(77 ft-lb)**



8. Fit 10mm bolt to upper radiator bracket and torque to 8 Nm. (5.9 ft-lb)



9. Locate the right exhaust header pipe to the cylinder head. Fit the two 12mm nuts and the finned clamps securing the right hand header pipe to the cylinder head, do not fully tighten at this stage.

- 10. Attach the right hand exhaust header to the x-pipe, do not tighten clamps at this stage.
- 11. Tighten the two 12mm nuts at the right cylinder head to 19 Nm. (14 ft-lb)
- 12. Fit the 12mm bolt securing the rear header pipe mount and torque to **15 Nm. (11 ft-lb)**



13. Tighten clamps securing right header pipe to X-pipe to 10 Nm. (7.38 ft-lb)



14. Locate the left exhaust header pipe to the cylinder head. Fit the two 12mm nuts and the finned clamps securing the left hand header pipe to the cylinder head, do not fully tighten at this stage.

- 15. Attach the left hand exhaust header to the x-pipe, do not tighten clamps at this stage
- Tighten the two 12mm nuts at the left cylinder head to 19 Nm. (14 ft-lb)
- 17. Tighten clamps securing left header pipe to X-pipe to 10 Nm. (7.38 ft-lb)



18. Route the oxygen sensor harness and connect to the main harness as noted for removal.

Note the routing of the oxygen sensor harness for installation.

The oxygen sensor electrical connections must not be swapped between cylinders.

If the connections are swapped over, engine malfunctions will occur.

The right hand (Cylinder 2) oxygen sensor connector on the main harness has a red connector (main harness side).

The oxygen sensors are NOT marked. Always ensure the right hand oxygen sensor harness is connected to the main harness connector with the red connector.

19. Slide fuel tank forward into original position and secure rear of fuel tank to the frame with 8mm bolt and 10mm nut, and torque to 8 Nm. (5.9 ft-lb)



20. Exhaust Silencer Installation

Left Hand Side Installation

- Support the silencer, carefully slide the silencer onto the left header pipe, fit the 12mm rear mounting nut holding silencer to passenger foot-peg. Torque nut to 19 Nm (14.0 ft-lb)
- Fit the 12mm lower front mounting bolt and torque to 19 Nm (14.0 ft-lb)
- Tighten clamp securing exhaust silencer to left hand header pipe to 10 Nm. (7.38 ft-lb)

4. Tighten heat shield 5mm allen clamp firmly.

Right Hand Side Installation

- Support the silencer, carefully slide the silencer onto the right header pipe, fit the 12mm rear mounting nut holding silencer to passenger foot-peg. Torque nut to 19 Nm (14.0 ft-lb)
- Tighten clamp securing exhaust silencer to right hand header pipe to 10 Nm. (7.38 ft-lb)
- 3. Tighten heat shield 5mm allen clamp firmly.
- 21. Reconnect the battery, positive (red) lead first and tighten the terminals to **4.5 Nm.** (**3.3 ft-lb**)
- 22. Refit the Riders Seat.
- 23. Before starting motorcycle, check for proper clearance between x-pipe and factory exhaust system with the frame, wiring, etc.) If any problem is found, please carefully follow through the installation steps again. If problem still persists, please call British Customs Customer Support at (877) 999-2748.

24. The entire exhaust system should be wiped down with rubbing alcohol to remove oil and fingerprints before starting the motorcycle. This will help prevent tarnishing of the finish after the exhaust is heated up.