



How to – GPR Stainless Steel 2-1 High Pipe Off-Road Exhaust System Installation

Instructions detailing the installation of Ural Motorcycles GPR manufactured stainless steel two-into-one high pipe off-road exhaust system.

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INTRODUCTION

Disclaimer: This Ural Motorcycles product is designed and intended for off-road use only. Items designed for off-road use are for vehicles which may never be used on a public roads.

The light weight design of this off-road use ONLY stainless steel exhaust system is susceptible to damage and deformation due to over tightening of clamping and fastening hardware, excessively loose clamping and fastening hardware, and not providing adequate clearance in relation to other motorcycle components.

Ural Motorcycles will not be held responsible for reimbursement or replacement costs, installation costs, loss of time, or any unforeseen expenses accrued prior to, during or after installation of this off-road use exhaust system.

Ural Motorcycles warranties this exhaust system against manufacturers defects ONLY for thirty (30) days from date of purchase.

TOOLS:

- [4mm Hex Key](#) (1)
- [5mm Hex Key](#) (1)
- [6mm Hex Key](#) (1)
- [10mm Wrench](#) (1)
- [13mm Wrench](#) (1)
- [17mm Wrench](#) (2)
- [19mm Wrench](#) (1)
- [22mm Wrench](#) (1)
- [Diagonal Cutting Pliers](#) (1)
- [Hole Alignment Punch](#) (1)
- [Metal Saw](#) (1)

PARTS:

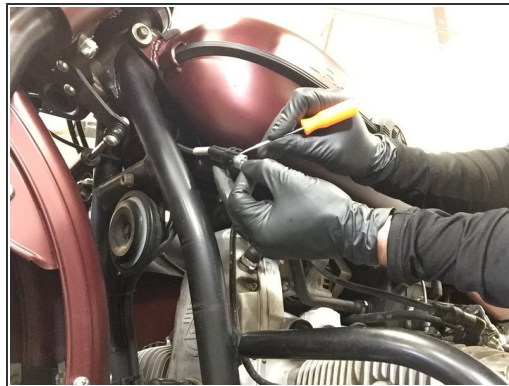
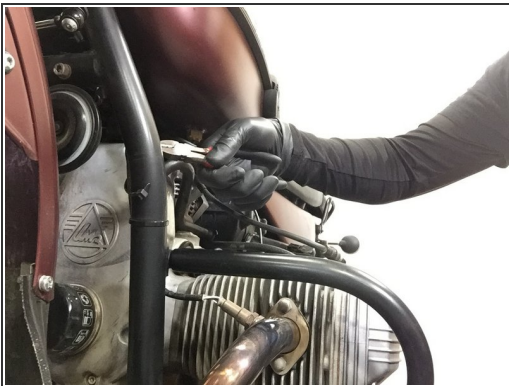
- [GPR Stainless Steel 2-1 High Mount Exhaust System \(OFF ROAD ONLY\)](#) (1)
PN: 12001.001
- [GPR Stainless Steel 2-1 High Mount Exhaust System \(OFF ROAD ONLY\) for 2008-2015 \(Requires OEM stainless steel headers\)](#) (1)
PN: 12001-003

Step 1 — All Models



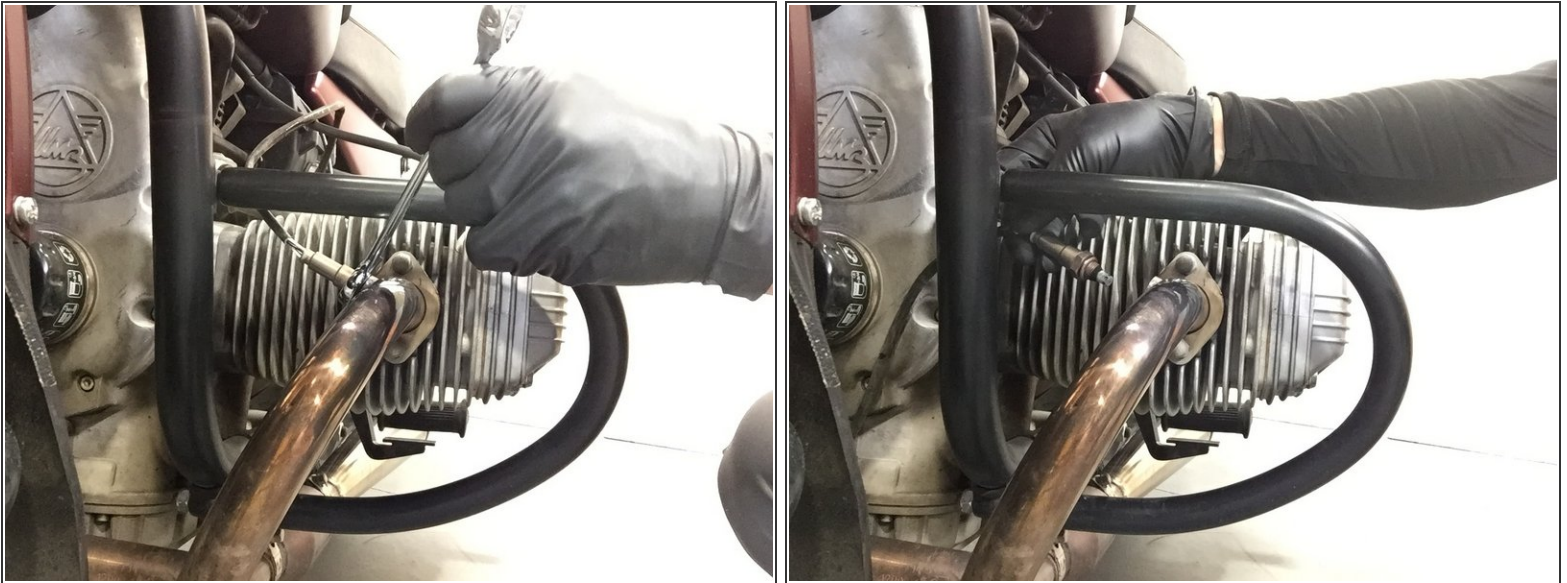
- Remove the left side panel.
- Disconnect the negative battery terminal.

Step 2 — 2014-Up Models



- Cut the cable ties securing left and right O2 sensor leads to the frame.
- Disconnect left and right O2 sensor connectors from the main harness.

Step 3 — 2014-Up Models



- Use a 17mm tool to remove O2 sensors from left and right head pipes.
- Place the O2 sensors in a safe location for reinstallation later.

Step 4 — All Models



- Loosen left and right exhaust clamps behind the catalytic converters.
 - Use a 13mm tool and remove hardware securing left and right head pipe flanges to the cylinder heads.
- i** Depending on year your head pipes and catalytic converter may look different.

Step 5 — All Models



- Remove the head pipes and catalytic converter as an assembly

Step 6 — 2008-2013 Models



i For 2008-2013 models

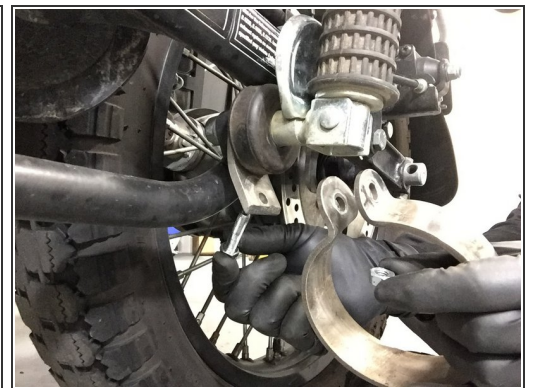
- Remove the catalytic converters from the left and right head pipes
- Separate the left and right head pipes.
- Place the head pipes out of the way. For 2008-2013 model years they will be reused during assembly of the GPR exhaust system.
- If separate save the crossover tube between the left and right head pipes.

Step 7 — All Models



- With a 13mm tool loosen left and right muffer clamps.
- Remove left and right mufflers from clamps and hangers.

Step 8 — All Models



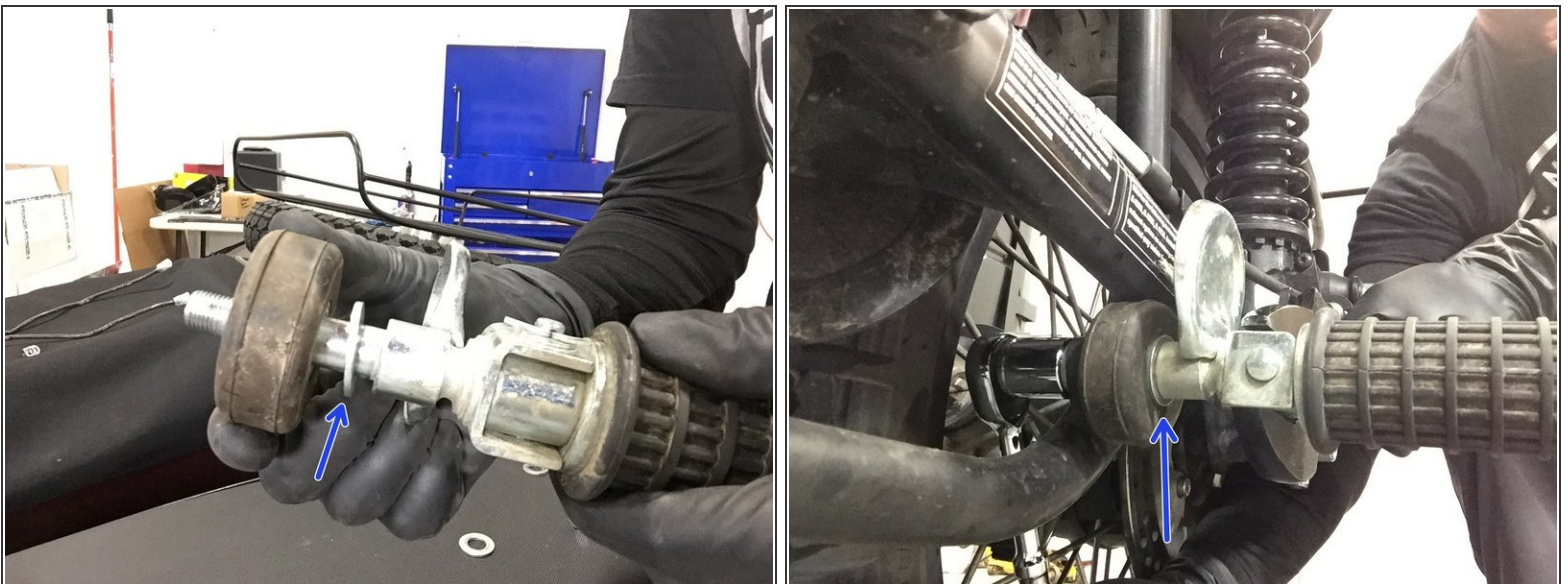
- ⓘ Optional: For a less obstructed work area, lower the center stand or place the motorcycle on the center stand so it is out of the way. Completely remove left and right muffer clamps from the left and right hangers. For more clearance while removing the rear foot pegs in Step 8.

Step 9 — All Models



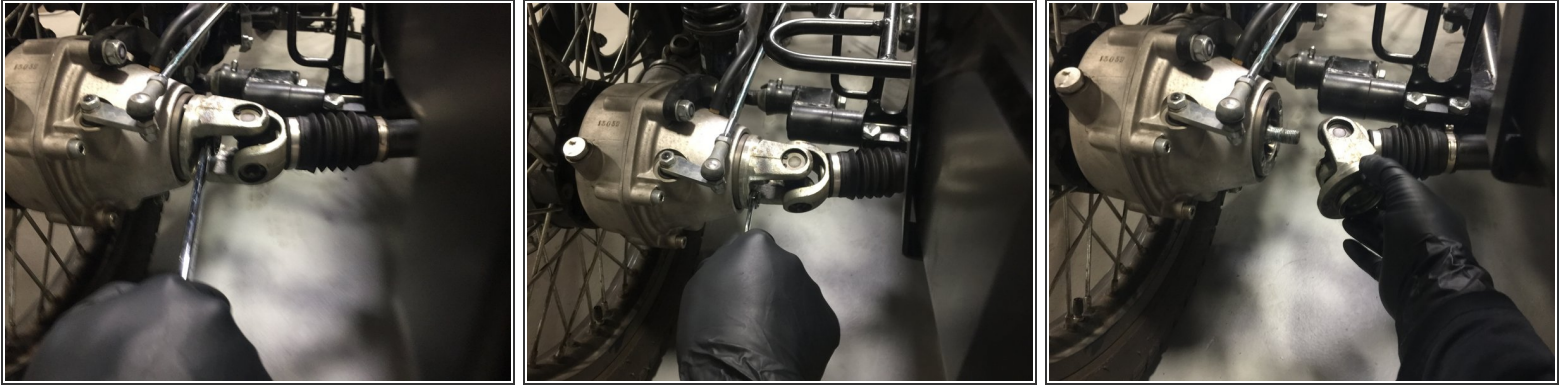
- Use a 19mm tool and adjustable wrench to remove left and right rear foot pegs.

Step 10 — All Models



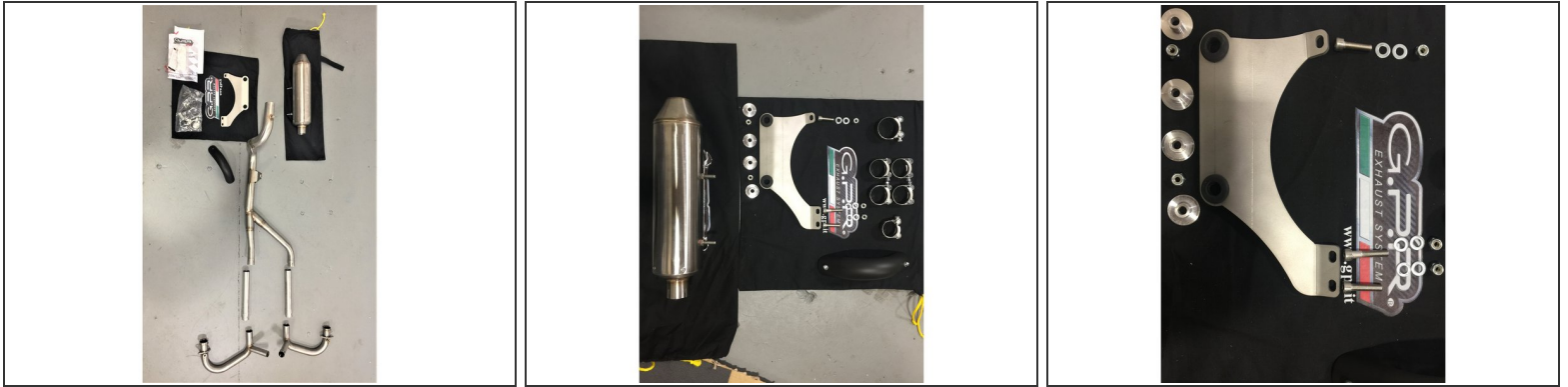
- Place the provided stainless steel distance ring on the left side rear foot peg forward of the swing arm bumper.
- Reuse the stock nyloc nut and flat washer from the backside to reinstall the left rear foot peg using a 19mm tool and adjustable wrench.

Step 11 — All Models



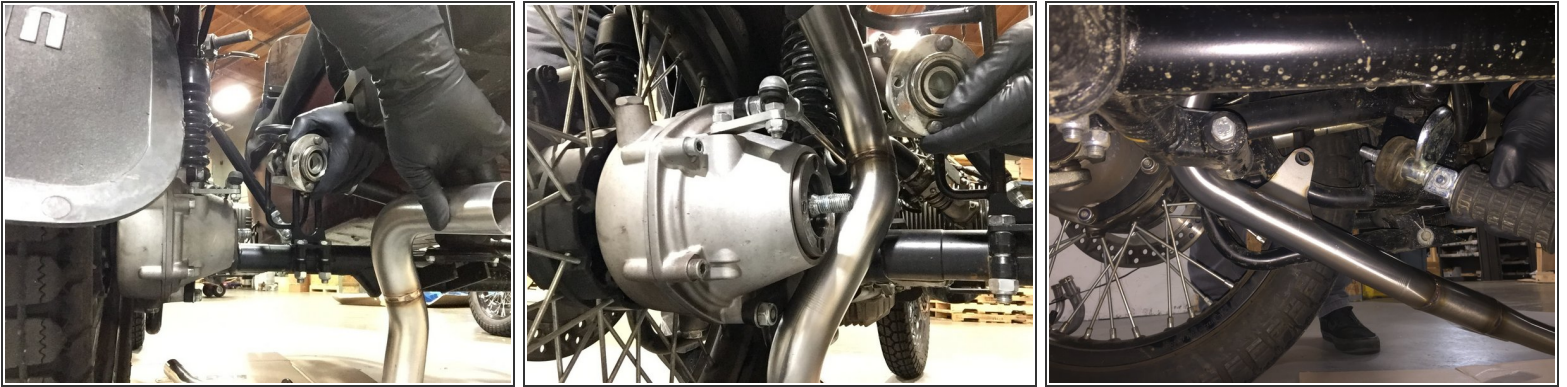
- Using a 22mm tool remove the nyloc nut and flat washer from the center of the drive shaft u-joint coupler on the rear axle.
- Use a 13mm tool and remove the two flange bolts from the drive shaft u-joint coupler.
- Carefully pull away the u-joint coupler and drive shaft from the final drive and allow to rest aside
- ⓘ Be sure the seal and the distance ring in the center of the coupler do not fall out or become dislodged or misplaced.
- ⓘ For very early models, the flange bolts may have safety tie wire that will need to be removed during this step.

Step 12 — 2016-Up Shown - Similar To All Models



- Unbox and layout your new exhaust system on a clean abrasion free surface (2016-up exhaust shown). Familiarize yourself with all components of the system noting clamp size and placement; hardware length, orientation and placement (see 3rd photo).
- ⓘ 2008-2015 fitment does not include head pipes. The stock head pipes will be shortened and reused.
- ★ The exhaust system is provided with six (6) stainless steel clamps. one (1) small, four (4) medium and one (1) large.
- ⓘ From front of exhaust to rear, stainless steel clamp usage is as follows: the smallest single (1) clamp will be used for the front cross over tube, the four (4) medium clamps are used for the intermediate extension pipes and the single (1) large clamp is for the muffler.
- ★ The provided stainless steel 8mm bolts have three (3) lengths and each is supplied with two (2) stainless steel flat washers and one (1) stainless steel nyloc nut.
- ⓘ The shortest bolt is inserted in the rearmost hole on the muffler hanger bracket, the longest bolt is used in the middle hole position, the remaining mid-length bolt is used in the forward hole on the muffler hanger bracket.

Step 13 — All Models



- Hold the drive shaft and coupler away with one hand while moving the Y-pipe into position with the other hand.
- ⓘ Placing cardboard or a blanket under your work area will help prevent unwanted abrasions and surface scratches on your new exhaust system.
- Raise the rear of the Y-pipe into position, aligning the Y-pipe hanger with the mounting hole for the right rear foot peg.

Step 14 — All Models



- Install right rear foot peg using stock nylock nut and flat washer.
- Use a 19mm tool, tighten until the Y-pipe is secure but allows slight rotational movement. This will aid in the assembly of the remaining exhaust components.

Step 15 — All Models



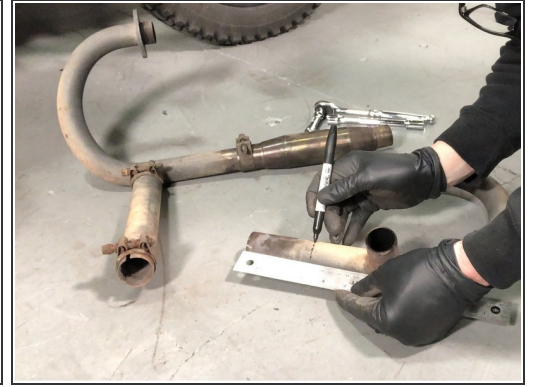
- Place two (2) of the four (4) medium size clamps loosely onto the lower Y-pipe.
- Insert left and right intermediate pipes into the Y-pipe so that they are fully seated into the swedged portion of the Y-pipe.
- Place two (2) remaining medium size clamps loosely onto the left and right intermediate pipes (2016-up shown).
- ⓘ Intermediate pipes for 2008-2015 will have a slight bend to accommodate use of the stock head pipes.

Step 16 — 2016-Up Models



- Place the single (1) small clamp loosely onto the swedged end of the front cross over tube on the left head pipe.
- Slide the right head pipe cross over tube into the swedged end of the left head pipe for installation onto the cylinder heads and intermediate pipes as an assembly.

Step 17 — 2008-2015 models



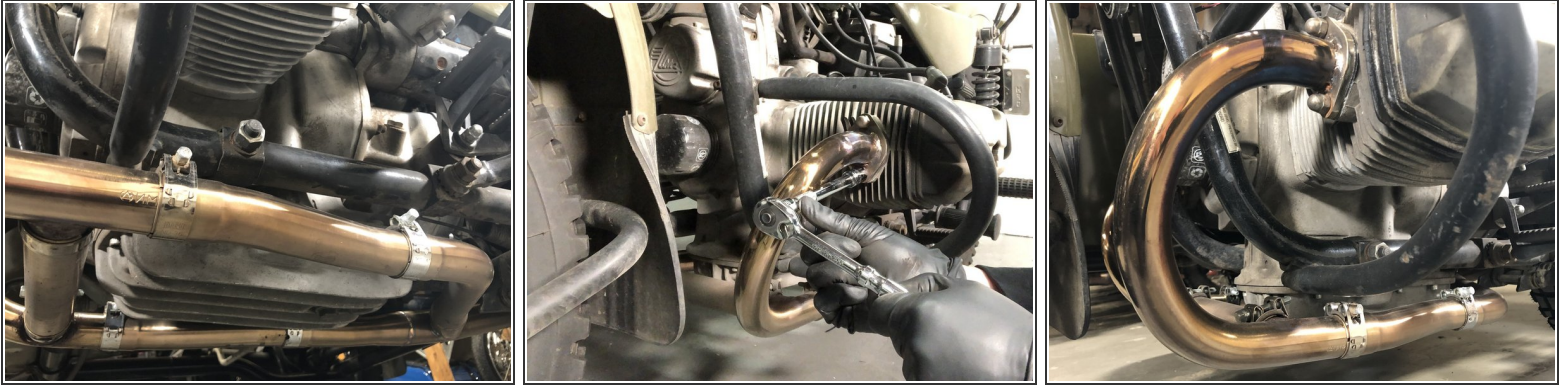
- ① 2008-2013 models prior to 2014 fuel injected models utilized longer head pipes before the catalytic converter. These head pipes must be shortened and reused with the GPR exhaust system.
- ① 2014-2015 model fuel injected bikes can fit the stock head pipe to the GPR exhaust system without modification.
- **FOR 2008-2013 ONLY!** Remove 85mm from the end of both left and right head pipes.

Step 18 — 2016-Up Models



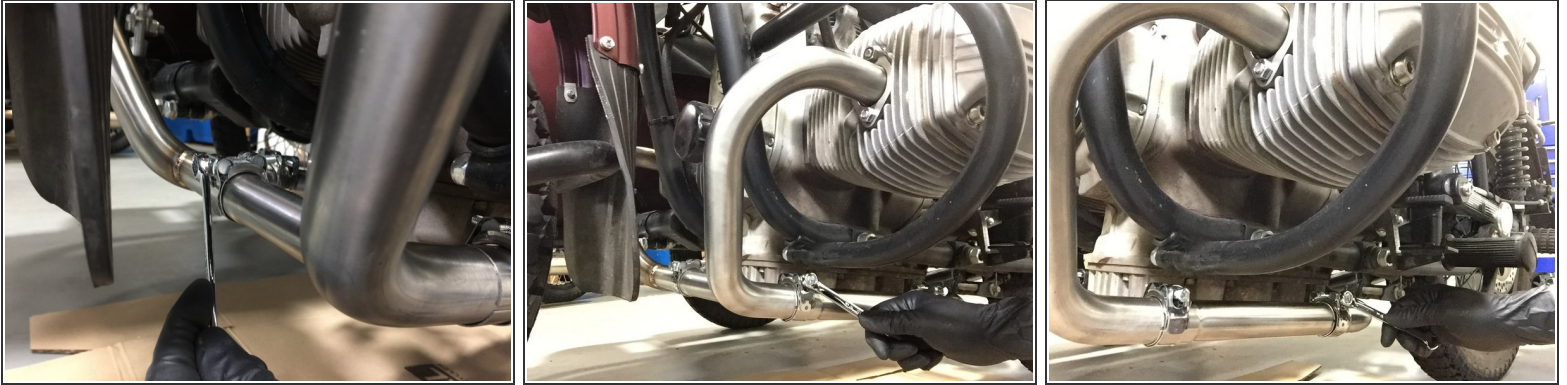
- Seat the head pipe assembly fully into the swedged ends of left and right intermediate pipes.
 - Use the supplied stainless steel hardware to secure both left and right head pipe mounting flanges to left and right cylinder heads.
- ⚠** Torque specification of the head pipe flange mounting hardware is 25 Nm (18.44 in lb). Even with the given specification this procedure should be done by feel with hand tools to prevent bending of the head pipe mounting flange.
- i** Hardware shown may differ from hardware provided.
 - ★** An anti-seize compound is recommended for all stainless steel hardware to aid in the prevention of galling.

Step 19 — 2008-2015 Models



- For 2008-2015 install the special GPR intermediate pipes in place where the catalytic converter resided previously.
- ⓘ The GPR intermediate pipes allow the use of the stock head pipes with the GPR exhaust system. Be sure to clocked/rotated the intermediate pipes correctly so they intersect with the head pipes when installed onto the cylinder heads.
- Install intermediate pipes to Y-pipe.
- Seat the head pipe assembly into the swedged ends of left and right intermediate pipes.
- ☞ On early models don't forget to install the stock crossover tube and clamps from left to right head pipe.
- Tighten the head pipes to the heads. Torque specification of the head pipe flange mounting hardware is 25 Nm (18.44 in lb). Even with the given specification this procedure should be done by feel with hand tools to prevent bending of the head pipe mounting flange.
- ☞ An anti-seize compound is recommended for all stainless steel hardware to aid in the prevention of galling.
- Follow the remaining 2016-up steps to finalize the installation of the GPR exhaust system on 2008-2015 model years.

Step 20 — 2016-Up Models Shown - Similar to All Models



- Position clamp centrally of swaged portion of the front cross over pipe and tighten using a 10mm tool.
- ⚠ Tighten clamps with enough force to securely clamp and seal joint areas without crushing or deforming the tubes. The torque specification range is 6-10 Nm (53-88.5 in lb). Even with the given range this procedure should be done by feel with hand tools only.
- Repeat using the same 10mm tool for the four (4) medium left and right side intermediate pipe clamps.
- ⓘ Ural recommends positioning all lower clamps so the tightening mechanism is facing up. This will not prevent, but will help limit damage due to debris or contact with an obstacle making future maintenance and/or removal difficult.
- ⚠ The thin wall, light weight design of this off-road use ONLY stainless steel exhaust system is susceptible to damage and deformation due to over tightening of clamping and/or fastening hardware, excessively loose clamping and/or fastening hardware in as well as not providing adequate clearance in relation to other motorcycle components.

Step 21 — All Models



- If not already, place motorcycle on center stand.
- Engage two-wheel drive (2WD) using lever.

Step 22 — All Models



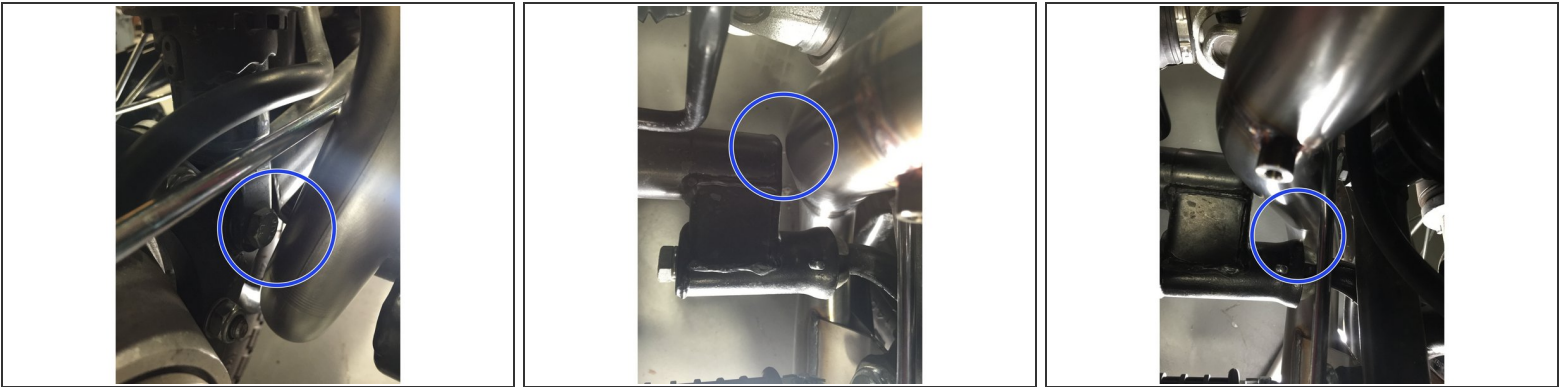
- Using two (2) 15mm tools loosen the rear swing arm axle pinch bolt.
 - Rotate the rear wheel to align the locating pins of the drive shaft coupler onto the final drive.
 - Reinstall the two flange bolts previously removed in Step 11, apply blue thread locker and torque to 25 Nm. (18.44 ft lb).
- (i)** For some older models
- Reinstall the flat washer and nyloc nut removed in Step 11 onto the rear axle.
- (i)** For some older models

Step 23 — All Models



- Insert a tool into the hole on the left side of the rear axle to prevent rotation, simultaneously tighten the nyloc nut on the right side with a 22mm tool until the axle is fully seated.
- Use two (2) 17mm tools and torque the rear swing arm axle pinch bolt to 60 Nm (44.25 ft lb)

Step 24 — All Models



- Check to ensure you have adequate clearance for the Y-pipe around the rear sidecar mount, lower right rear shock bolt, 2WD tie rod assembly.
- ⓘ Typical clearance should be approximately 5mm (13/64 in).

Step 25 — All Models



- Remove three (3) bolts securing the right side rear fender clip using a 13mm tool and 5mm hex key
- ⓘ Older models may have different hardware than shown and will require different tools for removal.

Step 26 — All Models



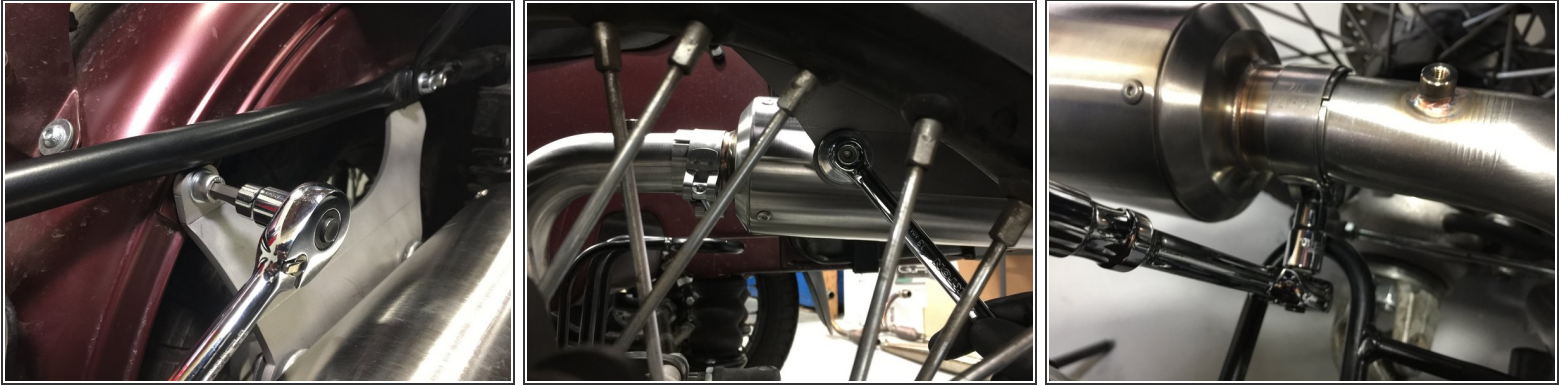
- Install the two (2) rubber grommets onto the muffler hanger bracket.
- Use the provided stainless steel 8mm bolts and flat washers in the appropriate locations outlined in Step 10 to mount the muffler hanger bracket.
- The forward two (2) mounting holes of the muffler hanger bracket should be placed **INSIDE** the rear fender. The single (1) rear mounting hole should be located **OUTSIDE** of the rear fender on top of the rear fender clip mounting tab.
- Install one stainless steel flat washer on the backside of each 8mm bolt. Install the stainless steel nyloc nuts loosely so the bracket can be easily moved side to side allowing adequate room for the muffler to be installed.
- ☒ An anti-seize compound is recommended for all stainless steel hardware to aid in the prevention of galling.

Step 27 — All Models



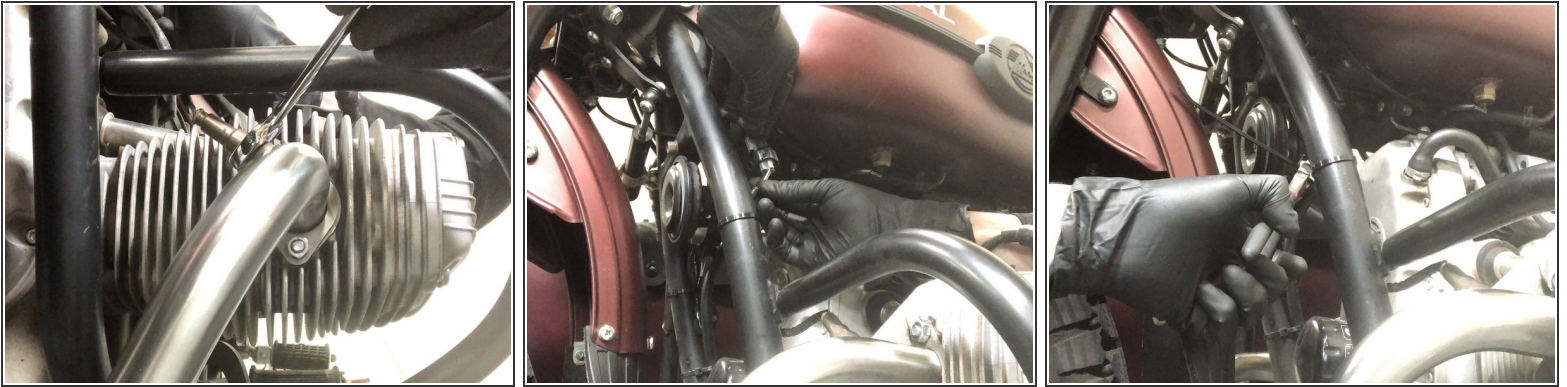
- Place the last single (1) large clamp loosely onto the swaged end at the end of the Y-pipe
- Install two (2) of the four (4) specialty washers into the rubber grommets on the muffler hanger bracket.
- Guide the muffler onto the end of the Y-pipe and swing inward towards the muffler hanger bracket.
- With the muffler supported by the front of the Y-pipe, support the back of the muffler with one hand guiding it towards the muffler hanger bracket that is being pushed out of the way with your other hand, simultaneously aligning the muffler mounting studs with the mounting holes with grommets and specialty washers of the muffler hanger bracket.




Step 28 — All Models



- Install the two (2) remaining specialty washers into the back of the rubber grommets on the muffler hanger bracket.
- Install the last two (2) stainless steel nyloc nuts onto the muffler mounting studs.
- Use a 13mm tool and a 6mm hex key to tighten all the muffler hanger bracket mounting hardware starting with the upper three mounting bolts at the rear fender followed by the two nyloc nuts securing the muffler.
- With the muffler hanger bracket securely mounted the clamp can now be positioned and tightened using a 10mm tool using the same guide lines outlined in Step 17.
- At this time, the right rear foot peg that was tightened to allow "slight rotational movement" during assembly in Step 13 can now be fully tightened using a 19mm tool and adjustable wrench.

Step 29 — 2014-Up Models



-  To prevent cross threading or other damage to the O2 sensor, thread into place as far as possible by hand.
-  A small amount of anti-seize compound can be applied to the threaded portion **ONLY** of the O2 sensor. Avoid over application as this can lead to sensor contamination, damage and failure.
 - Use a 17mm tool to finish tightening the left and right O2 sensors.
 - Connect left and right O2 sensor connectors to the main harness.
-  A very small amount of dielectric grease is recommended during reassembly of the O2 connectors.
 - Use the provided cable ties to secure left and right O2 sensor leads to the frame. Cut off excess cable tie.

Step 30 — All Models



⚠ Finger prints, grease, oil and other contaminants will “Burn-in” to new stainless steel components during the first heat cycles and permanently stain the surface.

- Use denatured alcohol or another suitable cleaner on a microfiber cloth, shop rag or paper shop towel to thoroughly clean and remove finger prints, grease, oil and other contaminants from the exhaust system.
- Install the heat shield using a 4mm hex key with the provided hardware.

Step 31 — All Models



- **OPTIONAL:** Install the provided GPR logo if desired in the location of your choice by simply removing the adhesive backer and applying firm pressure . Remove the protective film from the surface.
- Run the engine to heat cycle the exhaust system. Check for leaks that may occur from expansion and contraction. Tighten clamps or flanges as necessary to illuminate leaks should they arise.
- **Final:** After 50 (fifty) miles (approximately 80 (eighty) kilometers); inspect clamps, head pipe flanges, muffler, hanger bracket, final drive, swing arm, and axle bolts/nuts for tightness.

Additional items you may need:

Anti-seize compound

Blue thread locker

Dielectric grease

Microfiber cloth, shop rag or paper shop towel

Denatured alcohol or other suitable cleaning solution