

INSTALLATION INSTRUCTIONS:

1966-75 Bronco 2.25" to 2.5" Stainless 2-1 Exhaust Kit

PART# 3062 Borla / Magnaflow



865.938.6696 www.dufftuff.com
6609 Bronco Ln.
Knoxville, TN 37921

CONTENTS:

1	Driver side head pipe (A)	4	2 1/4" Stainless Band Clamp (K)
1	Pass side head pipe (B)	3	2 1/2"- Stainless Band Clamp (L)
1	Y pipe (C)	1	5/16" x 1 1/4" NC Bolt
1	Mid pipe (D)	4	5/16" Fender Washers
1	Tail pipe (E)	1	5/16" NC Nut
1	Muffler	1	5/16" Lock Washers
1	Long Rubber Hanger (F)	2	1/4" x 1 1/4" Self-drilling Screw
1	Short L bracket (G)	1	5/16" x 1 1/4" Self tapping Hex Bolt
1	Long L bracket (H)	2	Rubber male grommets
2	2 1/2" Exhaust saddle clamps (J)		

1/4 4.21

MAKE SURE ALL JOINTS SLIDE TOGETHER FREELY AND CAN ROTATE 360° BEFORE INSTALLING THIS KIT. CALL US RIGHT AWAY IF YOU SEE ANY DAMAGE OR PARTS MISSING.

WARNING - THIS KIT WILL NOT WORK WITHOUT A MINIMUM OF 2" of SUSPENSION LIFT. Look at #3095 our dual exhaust if you have less than 2" of suspension lift.

Please read instructions all the way through before beginning.

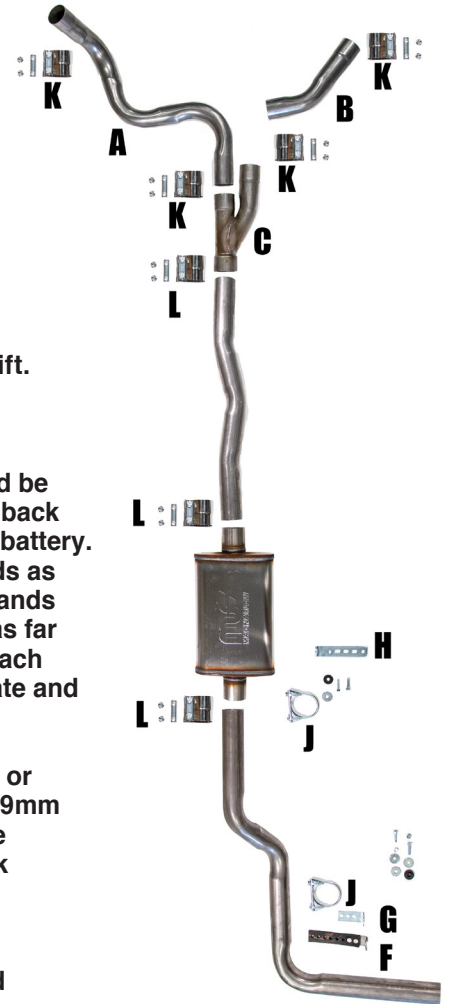
SAFETY FIRST! Make sure your vehicle is secure before starting. Automatics should be in PARK and manuals should be in 1st GEAR. Also be sure to chock both front and back sides of at least 1 tire. Secure the E-brake and disconnect the negative side of your battery. It is always a good idea to wear a pair of safety glasses. Protect your head and hands as well. If you need more room to work underneath your Bronco, you can use 4 jack stands and a floor jack and raise the vehicle up higher. Place jack stands under each axle as far outboard as safely possible. This is a good time to spray any bolts and nuts that attach your original exhaust system to the Bronco with knock'r loose or other rust penetrate and let them soak.

GATHER TOOLS NEEDED: Cordless impact drill, 17/64 drill bit, tape measure, silver or white paint marking pen, 3M green tape, 5/16", 3/8", 1/2", 9/16", 5/8", 11/16", 17mm, 19mm wrench and socket, hack saw, cut off wheel or vertical band saw, rubber mallet, vice with pipe or soft jaws and two jack stands to hold up muffler & tailpipe during mock up.

AOD- One of the more challenging transmissions to install this kit around. Some AOD's have a bellhousing that have a nub on the pass side that needs to be ground down to allow the header to fit. It is even more challenging with a 351W combined with the AOD using the stock EB transmission crossmember. The pass side head pipe collector adapter will have to be twisted down as much as possible and the head pipe itself can only slide into the adapter about 3/4" so it slides down enough to clear the stock EB crossmember.

AX15 & NV3550 - If you are running one of these transmissions, our kit is designed to work with the Advance Adapters crossmember. You may need to modify your x-member if its custom made or a modified OEM x-member. When using the AA x-member you will need to make sure it is slid back as far as possible after it is installed. If your AA x-member is already installed, loosen up all 8 bolts at the frame and the two bolts attaching it to the transmission mount, then tap the x-member with a hammer until it moves back as much as possible, then re-tighten all the bolts and install our 2-1 exhaust kit.

The head pipes connect to the headers/manifolds, then the Y pipe, mid pipe, muffler then tailpipe. The driver side head pipe has 3 bends in it, the passenger side, 1. The flared end of the head pipes point towards the engine. Install the exhaust from front to back and make sure you install the saddle clamps loosely at first to allow yourself to manipulate/seat the pipes and muffler. This will give you the flexibility to position each pipe so they don't make contact with the frame, trans crossmember, or fuel tank. Once the clamps are torqued, they will compress the tubes at the joint and make it difficult to slide the tubes in or out. This is necessary for a good seal, but something you only want to do once. When positioning the muffler, remember the INLET should face the engine or FLOW arrow should point towards the rear of the Bronco. You may need to trim some material off the head pipes for certain motor/trans applications. This step will only be necessary if you need your exhaust system to be raised a little higher to clear your transmission crossmember. It's not likely you will have to do this but it's important to know in case you do.



1. Remove the old exhaust system. This may include the exhaust manifold down pipes.

2. If you bought our shorty headers at the same time you purchased our 2-1 exhaust kit you will notice the headers did not come with their own instructions. For the most part they are pretty straight forward. IF YOU HAVE A 351W PLEASE READ STEP 3 BEFORE INSTALLING HEADERS. If you have purchased lava wrap from us this would be the best time to wrap your headers with it using the supplied instructions. The driver side is shorter and can be installed from above or below depending on how your Bronco is accessorized. The passenger side should be installed from above. Make sure to use the supplied header gaskets and start all the bolts by hand starting with the outer ones first. You will not be able to use a socket on all the bolts but we do recommend you use a torque wrench on the ones you can and torque them to 20 foot pounds starting with the middle 2 then working your way out board. Go back and re torque the bolts in the same sequence to 25 foot pounds. Do your best to torque the other bolts down with a wrench the same amount. Once the exhaust is on and the engine has reached operating temp you will want to re-torque the header bolts. DO NOT GO PAST 25 ft lbs! This will insure the gaskets fully seat. Be careful not to burn yourself, the headers get REALLY HOT!



FIG 3

-If you purchased #3050 Remflex header gaskets. Do not torque past 20 ft. lbs.

-Also consider #3082 premium header bolts that can be torqued in any position on the head.



FIG 4

3. If you have a 289/302 or 5.0 pushrod based motor, skip to step 5. On 351W based motors, this step is very important. The shorty headers were not specifically designed for the 351W block in an EB, so there are a few mods required to make them fit. 1st make sure you remove the PS valve cover. Before attempting to install the headers use green 3M painters tape to protect the 2 rear header pipes where they will make contact with the inner fender. The header will resist going into the correct position. Some shaping/bending of the fender or the tubes may be required if you don't want them touching. You may also notice the collector flange is very close to the frame. See **FIG 3** for how we recommend to trim away some material from the header collector flange AND the adapter flange so they don't contact the frame when the motor twists. If you ignore this step now it will be much harder to clearance the flange after it is installed and if the headers make contact with the frame while the engine is being accelerated your headers could loosen from the head causing exhaust leaks and eventual damage the head.

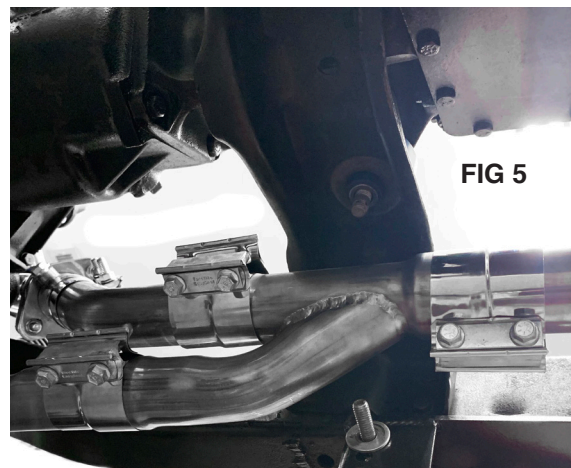


FIG 5

4. If you are installing our head pipes to compatible shorty headers, you will first need to attach the 2 bolt flange adapter (included with headers) to the headers. Be sure to clock the adapter so the O2 sensor bung is facing up and has enough room for the sensor to thread on. It is important that the sensor is not facing down, doesn't have any interference issues and that the wiring coming out isn't kinked or rubbing on anything. Once the adapters are mounted properly, slide Head Pipe **A** inside of it and install Band Clamp **K** around it using the supplied hardware. Do the same with Head Pipe **B**. See **FIG 4**. Be sure not to over tighten any clamps during install. It will take some fiddling and massaging to get all the pipes to slide together. In some applications, pipes **A & B** may need a little trimmed off the front. Trimming may be required for a couple reasons. Sometimes the **A & B** pipes will need to slide deep into the adapter at the header and will not allow the O2 sensor to thread in all the way. Once the head pipe is in position, remove the bolt at the O2 bung & see or feel for clearance issues. Do not cut more than an inch off the front of the **A & B** pipes. If you need to remove more material, do so on the other end. We leave these pipes a little long so they fit many different applications.

5. To install Y Pipe **C**, first see **FIG 5** then slide the flared ends of Y pipe **C** over Head Pipes **A & B** and loosely install two 2 1/4" stainless band clamps. Tighten them just so they are snug and add a little resistance. Don't over-tighten or you will struggle to remove the pipes or move them into their correct position. Position Y-pipe **C** as shown in **FIG 5**. It's very important to do this step so the **A** pipe is in the correct position. Use a rubber mallet to tap the Y pipe so it slides all the way over both head pipes.

6. Next, install Mid Pipe **D**. Keep in mind it is 2.5" in diameter. Technically it can be installed any way you prefer but it is bent a particular way in case you are running our Torque Tamer (part# 5326 or 5327). Broncos using our Torque Tamer will want

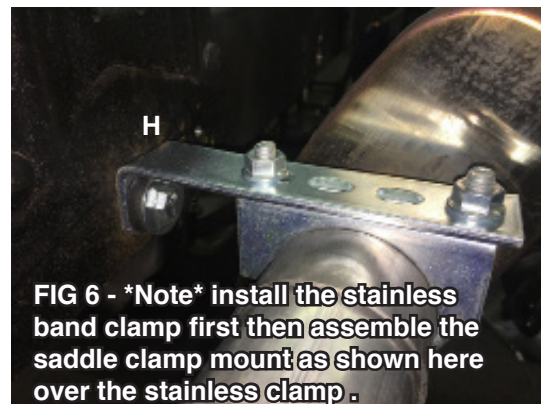
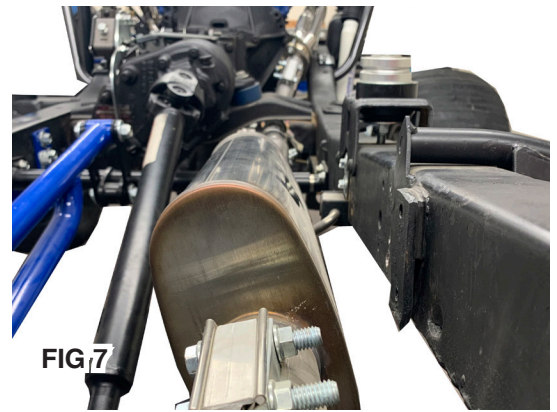


FIG 6 - *Note* install the stainless band clamp first then assemble the saddle clamp mount as shown here over the stainless clamp .

to position the end marked F over C. Use a L to clamp it to C in the same manner as you did with C to A & B.

7. **Before** you drill the hole in your frame to mount H you will want to test fit the tail pipe and make sure there are no clearance issues. From the passenger side rear of the Bronco, snake the tailpipe around the leaf spring and gas tank, over the axle and then slide it into the muffler. Secure it with J but do not tighten it all the way yet! Using another jack stand, slide it under the tail pipe behind the passenger tire and stand back to see if the pipe is parallel with the ground - Once it's parallel you will want to see if it is making contact with the gas tank, bump stop or leaf spring. If you have clearance issues this is where you will have to fiddle with the kit to get everything to fit just right for your Bronco.



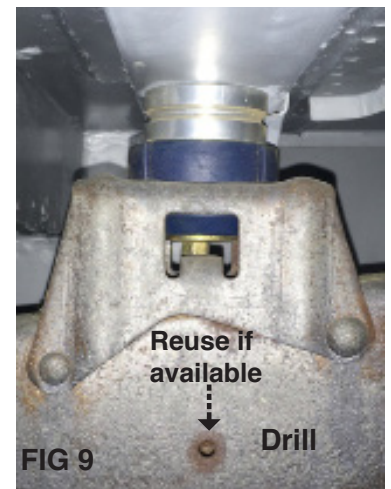
8. ***STOP & LOOK*** IF you have: A Custom transmission crossmember, inboard rear shock mounts, aftermarket rear bump stops and aftermarket gas tanks all can present challenges to fitting. Keep in mind that aftermarket engine mounts, 351W blocks and body lifts (or no body lifts) all change how this kit will fit on your Bronco.

9. This next step will be a lot easier to do using a jack stand. If you don't want your muffler scratched in the process of installing it we suggest using green 3M painters tape and paper to cover it. Before it's installed, this is also the best time to add lava wrap or a heat shield to your muffler to keep excess heat off the floor and out of your Bronco. Both can be purchased at dufftuff.com. Position the muffler so the INLET is facing towards the engine and the FLOW ARROW is pointing towards the rear of the Bronco. With the jack stand close by, slide the muffler over D. Let the jack stand hold the muffler up and see FIG 6 on how to install H & J to the front of the muffler. You have some freedom to move the exhaust kit into position so it best fits your Bronco, you have a couple inches to move it up or down to where you like it. You can flip H up or down or move it to the bottom as well to give you more flexibility. See how the muffler is positioned in FIG 7 Then tighten J to the muffler just enough so the muffler can't twist. Do NOT over tighten it!

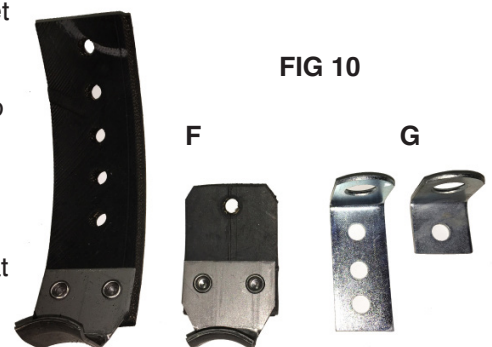


COOL TIP twisting the muffler so it's on an angle like in FIG 7 helps keep heat off the tub of your Bronco which will keep the interior from getting hot. Don't lean it over too far or the bottom of the muffler will make contact with the frame.

10. Now that you have the exhaust kit complete and it is fitted correctly, it's time to go back and secure it to the frame. See FIG 9 before starting. That hole below the PS B pillar body mount can be used to secure Long L Bracket H to the frame using the supplied 5/16" x18 self tapping hex bolt. Or if that hole already has a job or doesn't line up to where your exhaust routes and fits the best you can drill a new hole using the supplied self tapping 5/16" hex bolt. The short end of H has a large hole in it. Place that part against the frame, place the rubber grommet over the large hole (one side will fit in the hole) and mark or drill through the frame. Sometimes the hole you need to drill will be hard to get to and it will require you to mark the bracket and remove the muffler and mid pipe. In this case, use a paint pen or silver marker and mark the outline of the bracket where it contacts the frame. Then once the exhaust pieces are out of the way you can line the bracket back up with the mark you made and drill the hole. First to last, starting with the frame would be, Frame, bracket, grommet, 5/16" fender washer then 5/16" x 1 1/4" self tapping bolt. You will want to use a 17/64 drill bit if you create a new hole **SEE FIG 9**



11. Next you will want to secure the tail pipe. Go to the section of the tail pipe that is next to the gas tank directly below the frame. Here you will secure the tail pipe using J, F, G and a 1/4" self drilling screw. **Please SEE FIG 12 on next page.** Keep in mind Short L Bracket G mounts in the same fashion as H only this time the long portion of the L faces down towards the ground. You most likely will want to trim F and G. **SEE FIG 10** for how we trimmed ours. We trimmed several inches off ours but every Bronco is a little different so measure twice cut once. Long Rubber Hangar F mounts to G using the supplied 5/16" x 1 1/4" bolt, 2 - 5/16" fender washers, a 5/16" lock washer and a 5/16" coarse thread nut. Then F hooks under J and J clamps around Tail Pipe E and is tightened down to secure F. **Remember after you have all this assembled, snug it all together firmly but don't tighten it just yet.** Remove the jack stands and stand back, take a last look at



your tail pipe and make sure it's parallel with the ground and the exhaust pipe isn't making contact with any part of the Bronco. Try to have at least a 1/4" of clearance around every pipe.

13. Once you have the kit exactly where you like it, go back over it and be sure that the exhaust is not touching anything but itself, the brackets, and exhaust clamps. Feel above the pipes for any contact with wires, e-brake and shifter cables. Make sure the Y & mid pipe are not making contact with the frame and that it is not touching the transmission crossmember. Once you have confirmed all is clear, start from the front and tighten all the bolts, nuts, and clamps. As you're tightening things down, double check the pipes aren't moving and creating contact with anything. Once everything is secured, start the vehicle and check for leaks. They should be immediately apparent by sound and/or by running your hand around each joint and feeling for the exhaust gas. If you discover leaks, turn the vehicle off, and tighten the hardware in that area until the leaks have stopped. Sometimes an air impact gun is required to tighten the clamps down enough to seal out the leaks. Just be careful not to over do it and strip the threads. Now is the time to take a test drive. Listen for any leaks, weird sounds, or vibrations. Make sure to get the exhaust up to operating temperature. Then tighten everything down one last time. Of course, be extra careful when working around the hot components!

If you decide to go off-roading, remember that tailpipe is back there and can easily be damaged if the trail gets rough. Please note that if it is ever damaged beyond straightening, you can purchase just that piece for replacement. We also offer Heat shield products & finished weld on tips if you'd like to dress up your exhaust kit and/or keep the heat out of your Bronco. Visit duffuff.com for all our options, or if you need any assistance with the install of our parts and accessories. Thank you for choosing Duff products!

NOTE: On some applications, The 2-1 Exhaust kit might make contact with the front driveshaft if the front end bottoms out too hard. For Broncos that are going to jump or play hard on the sand dunes, we recommend you cycle your suspension and check to see if your front bump stops are working properly and if you need taller ones.

Other Duff parts referenced:

Premium ARP Header Bolts #3082

Lifted Bump Stop Kits #6310 #6312 #6315

Dual Exhaust #3095

Manifold to Dual Exhaust Pipes #3091

Bilt Cool exhaust vents #7110

Shorty Headers #3106BK, #3106SS, #3106CC

Heatshield Products

Muffler Armor # 3076

Lava Wrap # 3077 / #3079

Spark plug boot Insulators # 3078

Remflex Header Gaskets #3050

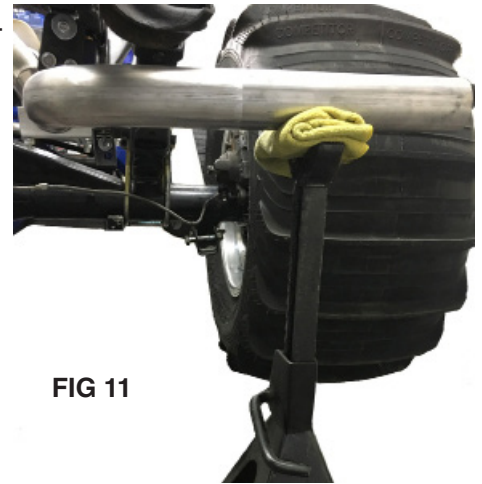


FIG 11

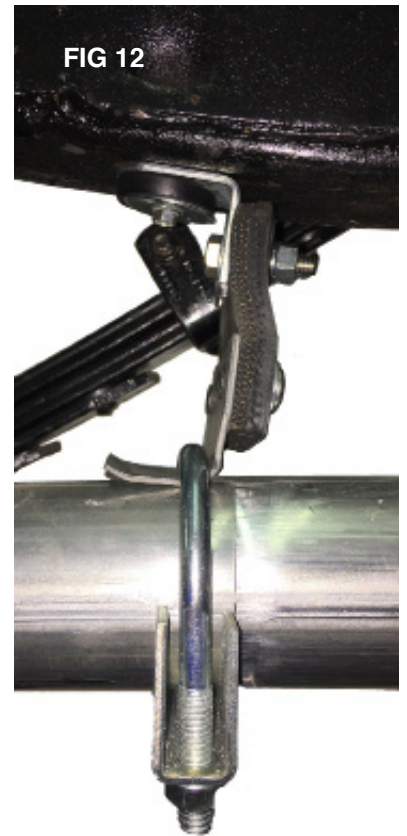


FIG 12

We have a installation video as well, check out youtube.com/brconcgarage



SCAN TO VIEW MONSTER
MIKE INSTALL THIS SYSTEM



#3062 4.21 4/4

LIMITED WARRANTY

James Duff Inc. warrants our products to the original purchaser to be free from defects in materials and workmanship. Warranty periods begin at the date of purchase and varies by product. Shocks have a limited lifetime warranty. Headers, Radiators and Suspension Products, Power Brake Boosters and Master Cylinders have a one year warranty. Adapters and soft goods such as vinyl and rubber products have a 90 day warranty. All warranties are to the original purchaser with proof of purchase only. Such obligations under this warranty shall be limited to the repair or replacement, at JDI's discretion, of any assembly or part which upon examination by JDI proves to be defective. Any costs of removal, installation, reinstallation or freight charges are expressly excluded from this warranty. This warranty covers only manufacturers defects, and does not cover product finish or damage resulting from abuse, misuse, negligence, racing, alteration, accident or damage in transit.

All returns must be pre-authorized by JDI and accompanied with a Return Goods Authorization Number (RGA) and a dated proof of purchase. Returns must be made within 90 days of purchase, shipped prepaid, packaged in sufficiently to prevent damage in shipment and sent to JDI, 6609 Bronco Ln., Knoxville, TN 37921. Returns without an RGA# will be refused.

This warranty is expressly in lieu of all other warranties, expressed or implied, including the implied warranties of merchantability and fitness for use. This warranty gives you specific legal rights including other rights that vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, or do not allow the exclusion of limitation of incidental or consequential damages, so the above limitations and/or exclusions may not apply to you.