

INSTALLATION INSTRUCTIONS: PART# 3140
Early Bronco Long Tube Headers, 1966-77 Bronco

CONTENTS:

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| 1 Driver side Header | 1 Package of Anti Seize |
| 1 Passenger side Header | 4 3/8" x 16 - 3" Stainless flanged serrated bolts |
| 1 Remflex Manifold Gasket Set | 4 3/8" x 16 Stainless flanged serrated nuts |
| 2 Stainless o2 bung plugs | 16 3/8" Stainless ARP Header Bolts |

TOOLS NEEDED:

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| O2 Sensor Socket | 3/8 ratchet, extensions, u-joints |
| Floor Jack | 3/8 Torque Wrench |
| Jack Stands | 1/4 ratchet with 5/16" socket and 3" extension |
| 3/8 Drive socket and wrench set 5/16" - 1" Wood Blocks and 3-4' of 4x4 | |

WARNING: THESE HEADERS ARE FOR OFF-ROAD USE ONLY. DO NOT INSTALL CERAMIC COATED HEADERS ON A ENGINE THAT REQUIRES BREAK-IN. Breaking in an engine creates extreme temperatures and will damage the coating. Doing so will void the coating warranty.

Before Starting: Read all instructions. Make sure the vehicle is on flat ground, the parking brake is set and wheels are chocked. Disconnect Battery.

Note: These headers fit the following 1966-77 Bronco equipped with 289, 302, 5.0, 5.8, 351W (With or without P Heads) with C4, 4R70W, AODE, Factory 3-speed manual, AX15, NV3550, ZF5. Loosely install bolts before tightening them all down. Tightening any one bolt down will prevent you from installing some of the other bolts. If you have an AOD/4R70W we strongly recommend you install an aftermarket pan with a drain plug before installing the headers.

If you purchase the raw stainless version we strongly recommend wrapping the headers with heat-shield products lava wrap, #3079, before installing them. Alternatively you can purchase the ceramic/cerakoted version to better manage heat. Your floorpans can get hot enough to melt your shoes, during the summer.

Note: We recommend the use of 3m painters tape when installing coated headers to prevent them from getting scratched during install. It's important that the tape be placed in areas that are easy to removed, leave yourself tabs on the tape that can be reached and peeled off after the headers are installed.

1. Disconnect your battery cables to prevent damage to the electrical system and yourself.
2. Disconnect and remove exhaust pipes from manifolds. Disconnect oxygen sensors if applicable
3. Remove exhaust manifolds and remove dipstick tube. We suggest you unbolt the proportioning valve bracket at this point too.
4. Remove spark plugs - Inspect & replace with new after headers are installed.
5. Unbolt the front driveshaft at the axle. NOTE: Place tape on the u-joint caps so they don't slide off.
6. Remove the brake line hold-down bolt at your axle drop line from the inside of the frame and move the fuel line to the top of frame.
7. Use a floor jack to raise the front of the Bronco and allow the front axle to droop to provide more room above the differential to install the driver side header. **WARNING: Be sure to use jack stands under the frame. DO NOT use a bumper jack while under the vehicle!**
8. For AODs/4R70W, skip to step 13. Feed the driver side header up



865.938.6696 www.dufftuff.com
6609 Bronco Ln.
Knoxville, TN 37921
1/4 6/21

Helper / Extra set of Eyes
3M Painters Tape

SS DOMINATORS



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The following disclaimers are in compliance with California Vehicle Code Sections 27156 & 38391 and the California Business & Professions Code Sections 17200 & 17500:

"Not legal for use or sale in California on any pollution controlled motor vehicles."

"Legal in California *only* for racing vehicles which may *never* be used upon a highway."

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from below. Be prepared to pitch it slightly fore and aft and side to side to clear minor “obstacles” in your path.

On standard transmissions, remove clutch bellcrank assembly from block. Slide driver side header up from beneath. Left rear exhaust tube must be brought up behind clutch fork before the header can be brought forward. See photo to the right showing the driver side clearance after installed.

9. Once the header is in place, slip your provided Remflex manifold gasket in place and start the two outermost header bolts first. Leave them loose, but with enough threads started so that the bolts do not fall out. Leave the remaining bolts out while working on the passenger side, as you may have to shift the driver side header later.

Caution: Every transmission is unique but you may find that there are some castings that need to be ground off near where the bellhousing meets the engine. Carefully check clearance on both headers with 2 bolts tight before proceeding with installing the rest of the bolts.

10. Reinstall clutch bellcrank assembly and drive shaft. You may need to bend the swing arm away from engine to clear the header on 351W.

11. Slide passenger side header from below into position and with provided gasket in place, start header bolts. Your transmission cooling lines may have to be massaged or rerouted of the way for installation.

12. Remove Bronco from frame stands.

13. Tighten the header bolts in sequence then torque to the specs provided by Remflex, 20ftlbs. Begin with the center bolt and work your way outboard, alternating from the bolt at the front to the bolt at the back, until all bolts are torqued. Verify the torque starting at the center bolt. This time, when working outward, start on bolt nearing the back and work your way out again, alternating as you go. Following this method should ensure a tight seal and greatly reduce the potential for leaks.

14. Reinstall any auxiliary parts that you had to remove, check all bolts, etc. Connect battery. Be sure all brake lines, fuel lines and electrical wires have sufficient clearance.

Note: Header bolts should be re-torqued after the engine has been brought up to operating temp for a minimum of 20 minutes.

13. AOD /4R70W: HEADER INSTALLATION skip to step #14 if you do not have this transmission.

IMPORTANT: We strongly recommend you have a helper when attempting these next steps.

The Ford AOD trans family (AOD-E, 4R70W, etc.), Require a little more finesse. Having a body lift will make it easier. These instructions assume no body lift with a 302 or 1” of body lift with a 351w.(Several things won’t be necessary with the room created by the body lift.) Some of our customers have found some or all



of these things necessary depending on which engine, variables in body lift, transmissions and transmission pans.

NOTE: Before following the steps listed below, you may be able to install the passenger side header with no issue using this method. But if they don't go in use the steps below. Brace your transmission/transercase with a trans jack, remove the crossmember bolts using a strap to pull the entire assembly towards the driver side to gain the clearance you need. If this does not work continue the steps below.

13a. Remove the body mount nuts on the passenger side. It is not necessary to remove the bolts. Loosen the ones on the driver side a few turns.

13b. Remove the passenger side valve cover. If you have a body lift, it may not be necessary to remove the driver side. Protect the valve train with lint free towels.

13c. Remove the passenger side lower engine frame mount nut.

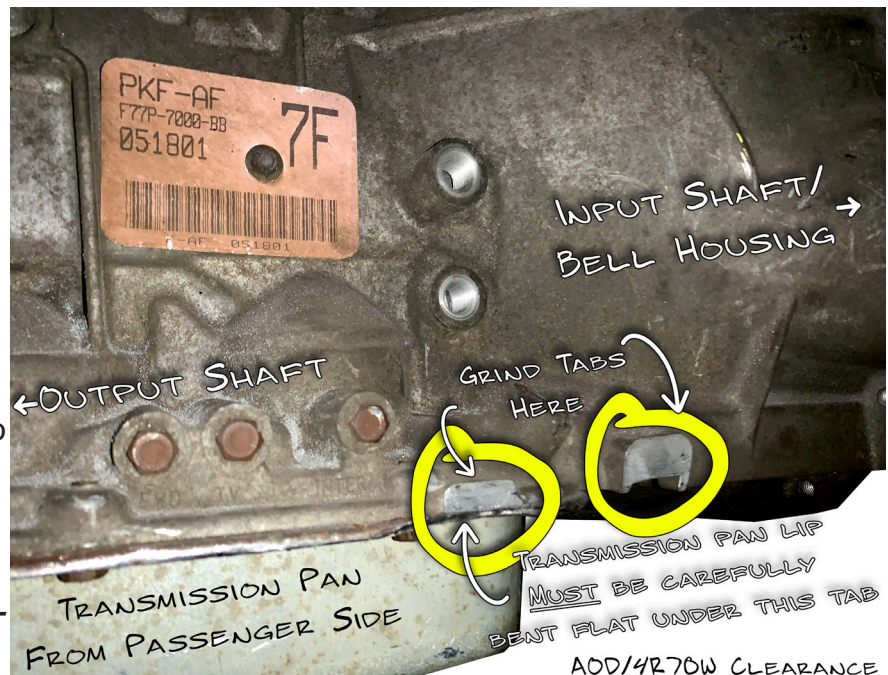
13d. Support for the transfer case/transmission assembly with a jack stand.

13e. Place enough pressure on the jack to fully support the transfer case without actually raising it yet.

13f. Remove the transmission crossmember bolts (four on each inner frame rail). (You do not have to remove the transfer case mounts, although this would be a great time to replace them since you are following most of the same steps #6399 @ dufftuff.com)

In most cases, the passenger side of the transmission pan lip on the AOD must be trimmed or bent. Pay close attention to the way the pan is formed and you will be able to modify it without creating leaks. Refer to photo to right for reference.

Caution: Every transmission is unique but you may find that there are some castings that need to be ground off near where the bellhousing meets the engine. Carefully check clearance on both headers with 2 bolts tight before proceeding with installing the rest of the bolts.



13g. Place a 3-4' long 4x4 under the passenger side rocker panel and use a floor jack to hold it in place.

13h. Using another floor jack under the transfer case, slowly raise the powertrain to create any additional clearance that you need to slide the passenger header up between the frame rail and the transmission. (Leaving the remaining components bolted in place should make the engine "pivot" up and toward the driver side, giving you the small amount of clearance needed.)

IMPORTANT: Use extreme caution during this step! Raise the body slowly a 1/4" at a time until there is enough room to slide the passenger side up between the frame rail and transmission. . Watch for electrical wiring, hoses and plumbing that are showing tension. DAMAGE FROM THE BODY TWISTING COULD ALSO OCCUR!

13i. If your Bronco is equipped with James Duff Extended Radius Arms, you may have to remove the bolt at the frame and move the arm outboard of the frame mount.

Note: Once the passenger header is installed, two transmission pan bolts may become inaccessible. If this appears to be the case in your installation, you may want to install a pan with a drain plug if you do not already have one. This will make “drain and fill” changes much easier anyway, as the pan will not need to be lowered.

13j. As with the driver header, by hand, start the two header bolts on either end of the headers.

13k. Reverse the steps above in the same order for the body and transmission. Check for any wires or hoses that could have come loose or could become pinched when jacking the body and drivetrain up.

Warning: Make sure no electrical or plumbing is laying on or against the headers.

13l. Reinstall the passenger side motor mount nut. Torque to 65-80 ft. lbs.

13m. Being sure to remove the towels from the valvetrain, Reinstall the valve covers, being sure to use new gaskets (or reinstall lifetime gaskets #3367 @ dufftuff.com) begin installing the header bolts by hand, starting with the center most bolts and working your way outward. Repeat on driver side.

13m. Tighten the header bolts in sequence then torque to the specs provided by Remflex, 20ftlbs. Begin with the center bolt and work your way outboard, alternating from the bolt at the front to the bolt at the back, until all bolts are torqued. Verify the torque starting at the center bolt. This time, when working outward, start on bolt nearing the back and work your way out again, alternating as you go. Following this method should ensure a tight seal and greatly reduce the potential for leaks.

14. Now is when you should install your oxygen sensors or bung plugs (You may have to lengthen the wiring to do so) or install the provided plugs. Torque to 26-33 ft. lbs and check for tightness at the same time you are checking your header bolts. **Warning: Make sure the O2 wiring doesn't touch the headers at all, EVER!**

15. Continue with installing the intermediate pipes to the James Duff Mandrel Bent Stainless Exhaust or Aluminized Exhaust using the instructions provided in those systems. (#3141 or #3142 @ dufftuff.com)

IMPORTANT: For optimal performance we highly suggest you have your engine tuned for the added airflow these headers may offer. Not doing so could cause your engine to run lean or worse. Please consult a professional tuner for best run settings and timing/fuel management.

Be sure to re-torque the header & collector bolts after the first test drive to 20 ft. lbs. 20-30 minutes at operating temperature is best. - WAIT UNTIL THE HEADERS ARE COOL ENOUGH TO TOUCH BEFORE RE-TORQUING.

Add-Ons to Consider @ DuffTuff.com:



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 upholstery, 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, re-installation 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, packaged sufficiently to prevent damage in shipment and sent prepaid to JDI, 6609 Bronco Lane, 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.