

**URD Equal Length Racing Headers  
2012-2015 Tacoma V6 Installation Guide**



# **UNDERDOG RACING DEVELOPMENT**

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## ***Introduction:***

Thank you for purchasing the URD Tuned Equal Length Racing Headers for your truck. You have the best performing and best sounding headers available.

The tubing is made from 304 grade stainless steel which is also ceramic coated. The flanges are made from mild steel for strength.

These headers are marketed as a racing product and is not legal for use on public highways. They cannot be CARB approved because installation removes the front catalytic converters. You will get a check engine light unless you also purchased the URD Rear O2 Sensor Simulator.

You should keep and store away the stock manifolds and studs that are removed from the truck. Someday you may want to reinstall them if you decide to sell/trade the truck.

## ***Removal:***

Removal of the stock system is very simple, but a few tips will make things a little easier for you.

Place the truck on a lift or jack stands and remove the front tires and the rubber inner fender flaps will give you a good bit of working room. Many of the fasteners are easily accessed through the wheel wells.

From underneath the truck:



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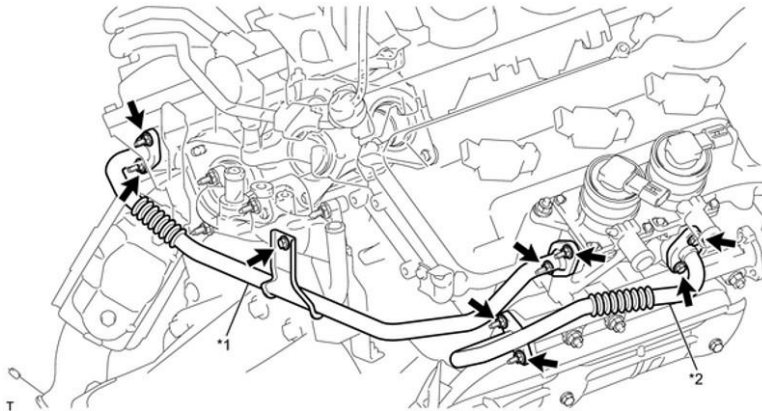
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1. **DO NOT USE AN IMPACT DRIVER.** Rattling the exhaust system with an impact driver can damage the O2 sensors.
2. Remove the negative battery terminal.
3. Remove the support brackets from the manifolds and bell housing.
4. Unplug the front O2 sensors.
5. Remove the nuts that connect the manifolds to the Y pipe.

From the engine compartment:



1. Remove the ducting and lid to the air filter box.
2. Start on the passenger side.



3. Remove the air control valve assembly located on the passenger side cam cover. It is easiest to remove the studs from the cam cover before removing the valve so you can slide it out and away from the air pipe studs.
4. Remove the nuts from both the small air pipe flanges.

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5. Remove the nuts from the six nuts from each of the studs that holds the manifold to the cylinder head.
6. Now you can wiggle the manifold assembly away from the engine and down along the transmission. Be very careful not to bang the O2 sensor as it is very brittle and can be easily damaged.
7. Do the same for the driver's side. It will be easier to get the manifold out if you remove the studs from the air pipe connection so you do not have to force/bend the air pipe over the studs. If you do this it will give you alignment problems on reinstallation.
8. Remove the upper exhaust studs from each side of the engine. These will be replaced with new shorter ones that are included. You will notice that the end of the studs are formed in a small hex. You can use a 6mm 6 point socket on the end of them with a small ratchet to get them out very easily.
9. Remove the O2 sensors from the manifolds.

## ***Installation:***

1. Install the new studs in the upper ports. You should leave the ones out of the rear ports until the header is in place.
2. Inspect the stock cylinder head manifold gaskets for damage. If they are damaged you will need to replace them with new Toyota gaskets.
3. It is recommended that you put a very thin coat of Permatex High Temp Copper Silicone on each side of the stock cylinder head gaskets around the exhaust ports.
4. Due to the unique design of the URD headers, it can be more difficult to install the header than the stock ones. In most cases you may need to remove the studs from the rear exhaust ports to give you more working room. In some cases you may need to unbolt the engine mount on the side you are working on and slightly lift the engine to give you enough room to get the new header over the studs and into place. You can put a block of wood under the oil pan and lift the engine with a floor jack. Do not press on the drain plug or you will bend the pan.
5. Start all the nuts on the studs. Install the bell housing brackets and the collector flange connection bolts. Leave it all loose for now.

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6. Install the air control valve assembly and bolt together the small air pipe flanges with the stock gaskets. It is easier if the studs in the cam cover are removed until after the valve assembly is in position, then screw the studs in through the valve assembly into the cam covers.
7. Once you have the whole side together then tighten up the studs at the cylinder head first and then the air pipe flanges and finally the collector bolts and then the bell housing support bracket.



8. Now move to the driver's side. You will have to spit the steering shaft to make room to install the new URD header. Mark it and tie the steering wheel in place so it cannot turn on its own a damage the clock spring in the column. Remove the locking bolt and spray it with penetrating oil and you should be able to wiggle joint up and off of the lower part.

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9. Put the driver's side header into position and make sure the steering shaft stays toward the frame and do not let it fall toward the engine or it will get trapped behind the header.
10. You may need to remove the rear exhaust port studs and lift the engine slightly to make it easy to get the header into position.
11. Once in position loosely start all the stud nuts, air pipe flange connection, collector bolts, and support bracket. Once everything is started go back and tighten everything starting with the exhaust port studs.
12. Reconnect the steering shaft. You may need to readjust it after a short test drive. It is easy to get it one spline off.
13. Carefully inspect the area around the header and make sure all hoses and electrical wires are moved away from the headers. Pay particular attention to the start wires and the main harness for the inverter on the passenger side.
14. Reconnect the negative battery terminal.

## ***Torque Specs:***

1. Exhaust manifold studs 21 Nm
2. Bell housing support bracket 40 Nm
3. Small air injection tube flanges 10 Nm
4. Steering shaft 35 Nm

## ***Options:***

1. There are two ports to install the front O2 sensors. The stock location will be the port on the center tube. Use the supplied plugs to plug the O2 ports in the collector.
2. If you purchased the URD O2 extension harnesses, then place the front O2 sensors in the ports in the collectors and tie the wiring back away from the headers.

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3. If you purchased the URD Rear O2 Sensor Simulator, you can install this by starting on the passenger side and unplug the rear O2 sensor. Then take the short harness from the sim and plug it into the rear O2 sensor and the harness connector. Then throw the long harness over the transmission and do the same on the driver's side. Use a wire tie to secure the control box to the plug bracket on the passenger side of the transmission. **DO NOT ATTEMPT TO PLUG THE URD REAR O2 SENSOR SIMULATOR INTO THE FRONT O2 SENSORS.**