



**2007-2016 Toyota Tundra & 2008-2014 Toyota Sequoia  
1-5/8" Shorty Header with 5.7L V8 engines**

**11146FLT (natural finish)  
11147FLT (polished finish)  
31147FLT (black ceramic finish)**

Thank you for making FLOWTECH HEADERS your choice in a high-performance exhaust system. Extensive dyno/track testing has enabled FLOWTECH to offer the most advanced design in exhaust systems. The installation, while not complex, will take a certain amount of time. However, the improved drivability will more than justify your efforts. Proper installation and maintenance will ensure long life and maximum performance from your FLOWTECH headers.

**WARNING! Breaking in an engine with ceramic-coated headers WILL result in damage to the coating and will VOID all warranties. Ceramic-coated headers require several heat cycles to fully cure before they will withstand extreme heat. FLOWTECH recommends using a cast-iron exhaust manifold or an old header to break in new engines to avoid coating damage.**

**PARTS INCLUDED:**

Qty.	Description
1	Driver's Side (LH) Header Assembly
1	Passenger's Side (RH) Header Assembly
6	3/8" x 2-1/2" Collector Mounting Bolts

Qty.	Description
6	Collector Bolt Washers
6	Collector Bolt Nuts
2	Header Flange Gaskets

**RECOMMENDED TOOLS:**

Flat Head Screwdriver	12mm, 15mm, & 16mm Socket	Oxygen Sensor Wrench
1/2" & 9/16" Wrench	3/8" or 1/2" Ratchet	3/8" or 1/2" Swivel Socket Adapter
Jack	15mm & 18mm Wrench	Jack Stands

**BEFORE STARTING:**

Your vehicle should be raised a minimum of 36 inches. A floor hoist is ideal. If no hoist is available, we strongly urge the use of axle stands as a safety measure.

**INSTALLATION PROCEDURE – PLEASE READ CAREFULLY**

**PASSENGER'S SIDE (RH):**

1. Place vehicle in a location where the floor is solid and flat, with adequate lighting.

**NOTE:** Do not attempt to work on a hot engine. Heat can cause metal to expand making removal of fasteners more difficult.

2. Disconnect the battery cables from the battery.
3. Raise the front of the vehicle to gain access to the bottom exhaust manifold flanges.

**NOTE:** Use large-base jack stands to support the vehicle. Do not rely on the jack! Chock the rear tires to prevent the vehicle from rolling off the jack stands.

4. Spray penetrating oil (WD-40® or equivalent) on all fasteners and fittings related to the exhaust manifolds before attempting to remove them.
5. From underneath the vehicle, disconnect the exhaust system from the exhaust manifolds by unbolting the (x3) collector bolts.
6. Unbolt the driver's side (LH) catalytic converter from the exhaust assembly and temporarily remove it from the vehicle.
7. Remove the (x4) bolts attaching the heat shields to the factory manifold from the passenger's side (RH).
8. Carefully unplug the passenger's side (RH) O2 sensor from its harness.
9. Remove the (x2) nuts attaching the air tube to the passenger's side (RH) factory manifold. Loosen the air tube on the other end to allow some movement. Remove the nuts attaching the factory manifold to the cylinder head.
10. Remove the passenger's side (RH) factory manifold. Keep the air tube gasket and nuts. Both the gasket and nuts will be re-used.
11. Using a small wire brush or steel wool, clean any deposits on the passenger's side (RH) cylinder head surface.

**NOTE:** Be careful not to scratch/gouge the cylinder head surface. Also, be careful to clean any loosened debris from the cylinder head ports.

12. Thread (x1) supplied collector bolt into hole below the passenger's side (RH) O2 sensor. Transfer the O2 sensor from the factory manifold to the new passenger's side header. Apply a small amount of anti-seize to the threads of the O2 sensor before installing into the new header. Use caution when handling the O2 sensors, as they are fragile.
13. Install the new passenger's side (RH) Flowtech header using the supplied header gasket and fasteners. Torque bolts to 33 ft./lbs.
14. Re-install air tube gasket mentioned in step (10). Re-connect the air tube and tighten the other end. Tighten and torque bolts to 33 ft./lbs.

#### **DRIVER'S SIDE (LH):**

1. Remove the (x4) bolts attaching the heat shields to the factory manifold from the driver's side (LH).
2. Carefully unplug the driver's side (LH) O2 sensor from its harness.
3. Carefully unplug the O2 sensor from its harness. Unbolt the dipstick bracket from the driver's side (LH) cylinder head and remove the dipstick tube.
4. Remove the nuts attaching the air tube to the manifold. Loosen the air tube on the other end to allow some movement. Remove the nuts attaching the factory manifold to the cylinder head.
5. Remove the driver's side (LH) factory manifold. Keep the air tube gasket and nuts. Retain the factory gasket for re-use.
6. Using a small wire brush or steel wool, clean any deposits on the driver's side (LH) cylinder head surface.

**NOTE:** Be careful not to scratch/gouge the cylinder head surface. Also, be careful to clean any loosened debris from the cylinder head ports.

7. Install a collector bolt into the hole below the O2 sensor.
8. Transfer the O2 sensor from the driver's side (LH) factory manifold to the new driver's side (LH) header. Apply a small amount of anti-seize to the threads of the O2 sensor before installing into the new header. Use caution when handling the O2 sensors, as they are fragile.
9. Install the new driver's side (LH) Flowtech header using supplied gasket and fasteners. Torque the bolts to 33 ft./lbs.
10. Re-Install air tube gasket mentioned in Step (4). Re-connect the air tube. Tighten and torque the bolts to 33 ft./lbs.
11. Re-install the dipstick tube.
12. Re-Install the driver's side (LH) catalytic converter.
13. Re-Connect the exhaust system to the new Flowtech headers using hardware and gaskets supplied.
14. Re-Connect O2 sensors.
15. Check to ensure there is adequate clearance between the headers and the shifter cable (this cable runs from firewall, to brace on fender well, to transmission). More clearance can be gained by adjusting (bending) the brace on fender well.
16. Re-check that all connections have been tightened.
17. Start the engine and allow the vehicle to warm up to operating temperature. Check for leaks. Shut engine off and let it cool down.
18. Once vehicle has cooled down, verify all bolts are tight.
19. All headers will require periodic maintenance, checking that bolts are torqued to spec. Inspect every 4-6 months, retightening the header bolts as needed.

**Any questions?**

Please contact Technical Service: **1-866-464-6553** or **270-781-9741**.  
For online help, please refer to the website: **www.holley.com**.

**LIMITATION OF LIABILITY – DISCLAIMER:**

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In this connection, the retail purchaser, the buyer, the ultimate consumer assumes the burden of the entire cost of any and all necessary service, alterations, or repair.

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