



**11133FLT & 11133-1FLT Instruction Sheet**  
To Complete (Off Highway) System  
**Use Part # 11133YFLT or 11133Y-1FLT Y-Pipe**

**1998-99 Camaro & Firebird (LS1 engine)**

**NOTE:** Header is equipped with an oxygen sensor fitting.

**NOTE:** Aluminized "Y" pipes that bolt to factory & aftermarket cat-backs are available under P/N 11133YFLT or 11133Y-1FLT.

**NOTE:** Includes oxygen sensor extension harness(s).

**BEFORE STARTING**

Your vehicle must 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.

**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 cast iron exhaust manifolds or old headers to break in new engines to avoid coating damage. Please call tech service at 270-781-9741 for additional information regarding ceramic-coated exhaust products.

**CAUTION!** Your car should not be supported on a bumper jack prior to installing headers, take the time to make a careful and complete inspection of both engine and transmission mounts. Replace them if they look worn or damaged, otherwise this may affect the header fitting into your vehicle properly.

**HELPFUL HINTS FOR HEADER INSTALLATION AND MAINTENANCE**

1. Verify the header part number with the part number on the box and invoice.
2. Unless otherwise noted, Flowtech™ Headers are designed to fit without modifying the header (denting, cutting). **DO NOT** modify the header. **Call the Technical Department at 270-781-9741.**
3. Unless otherwise noted, Flowtech™ Headers are designed to fit with original equipment (i.e. Oil pan, cylinder heads, mounts, bell housings, starters, etc.).
4. When using Flowtech™ Headers, it is recommended to use Flowtech™ gaskets for correct port match. When using other than the recommended Flowtech™ gaskets, match the gaskets to the head ports for a good seal.
5. Heat wrapping is not recommended, because it will prematurely fatigue the header.
6. Headers that are subject to extreme conditions (mud, road salt, etc.) should be cleaned on a regular basis to help prevent corrosion.
7. When installing headers, use anti-seize on header bolts and Y-pipe bolts.

**HEADER INSTALLATION PROCEDURE/ DISASSEMBLY & ASSEMBLY INSTRUCTIONS**  
**PLEASE READ THOROUGHLY & CAREFULLY**

**SPECIAL COMPONENTS NEEDED FOR ASSEMBLY**

1. Oxygen Sensor Simulator: May be purchased from the following: SLP/ Part # 31036/ Phone # 732-349-2109  
Mid-America Designs Inc./ Part # 609132/ Phone # 217-347-5591
2. Oxygen Sensor Wire Extension(s) 2 each ----- 28" Long (Included with Header)

**NOTE:** These Oxygen Sensor Wire Extensions are made long enough to use either the Oxygen Sensor with the 8" wire length or the Oxygen Sensor with the 12" wire length. Any excess wire length after installation should be looped and secured into a non-used and non-heated cavity or pocket.

**DISASSEMBLY**

1. Disconnect the battery. Raise the car and support it with jack stands
2. Disconnect and remove the four (4) oxygen sensors. Mark them for their location, so they may be reinstalled in their proper location accordingly. Remove the drive-shaft safety brace. Remove the Y-pipe from the vehicle.

**IMPORTANT! DO NOT DISMOUNT THE MOTOR AND DO NOT REMOVE THE STARTER.**  
**THE HEADERS WILL INSTALL WITH THESE TWO (2) ITEMS BOLTED IN LOCATION.**

## **DISASSEMBLY OF THE LEFT SIDE**

1. From below, remove the left-side catalytic converter.
2. Remove the oil passage diverter plate that is located just above the oil filter. Approximately ½ pint of oil will drain. This plate may now be removed or just prior to the actual installation of the left-side header. Take care not to let any dirt or foreign matter enter the open oil passages.
3. Disconnect and remove the left-side A.I.R. tube assembly. Disconnect and remove the spark plug wires.
4. Remove the spark plugs. Remove the left-side exhaust manifold.
5. Point the steering wheel straightforward and turn the key to the lock position and remove the key. Remove the steering shaft. **Please take note of G.M. Pt. Notice # 26068010 which states:** To help avoid damage and possible malfunction of the air bag, do not rotate the steering shaft with the steering shaft disconnected. See the G.M. service manual before disconnecting.
6. Remove the small left-side heat shield / deflector.

## **DISASSEMBLY OF THE RIGHT SIDE**

1. Disconnect and remove the right-side A.I.R. tube assembly. Unbolt and remove the oil dipstick. Disconnect and remove the spark plug wires. Disconnect the EGR tube by removing the (2) two 8mm bolts. ***DO NOT try to remove the tube.***
2. Remove the spark plugs. Remove the right-side exhaust manifold.

## **ASSEMBLY OF THE LEFT SIDE WITH HEADER**

**NOTE: Use anti-seize on all header bolts and oxygen sensor threads.**

1. Insert the left-side header through the chassis from below. While inserting the header in the vehicle, reinstall the oil passage diverter plate and tighten. Take caution not to strip threads. DO NOT overtighten.
2. From above, install the gasket.
3. Using the supplied 8mm lock washers over the factory exhaust bolts, start all the header bolts prior to tightening, then evenly tighten all the header bolts to 20-25 ft./lbs.
4. Reinstall the steering shaft and tighten the bolt to factory specifications.
5. Reinstall the spark plugs and tighten.
6. Reinstall the spark plug wires. Check to ensure that they do not contact the header.
7. Reinstall the left-side A.I.R. tube assembly.
8. Install the left-side pre-catalytic converter oxygen sensor into the left-side header collector. **NOTE:** The oxygen sensor simulator needs to be installed according to directions supplied by the simulator manufacturer. Use the 28" supplied extension to complete the simulator install.

**NOTE:** These Oxygen Sensor Wire Extensions are made long enough to use either the Oxygen Sensor with the 8" wire length or the Oxygen Sensor with 12" wire length. Any excess wire length after installation should be looped and secured into a non-used and non-heated cavity or pocket.

9. Reinstall the small left-side heat shield/ deflector.

## **ASSEMBLY OF THE RIGHT SIDE WITH HEADER**

1. Insert the right-side header through chassis from below.
2. From above, install the gasket. Using the supplied 8mm lock washers over the factory exhaust bolts, start all the header bolts prior to tightening, then evenly tighten all the header bolts to 20-25 ft./lbs.
3. Reinstall the spark plugs and tighten. Reinstall the spark plug wires. Check to ensure that they do not contact the header.
4. Reattach the EGR tube by reinstalling the (2) two 8mm bolts through the EGR plate.
5. Reinstall the dipstick and tighten the retainer bolt. Reinstall the right-side A.I.R. tube assembly.
6. Install the right-side pre-catalytic converter oxygen sensor into the right-side header collector. **NOTE:** The oxygen sensor simulator needs to be installed according to directions supplied by the simulator manufacture. Use the 28" supplied extension to complete the simulator install.

**NOTE:** These Oxygen Sensor Wire Extensions are made long enough to use either the Oxygen Sensor with the 8" wire length or the Oxygen Sensor with 12" wire length. Any excess wire length after installation should be looped and secured into a non-used and non-heated cavity or pocket.

## **PRIOR TO FINISHING CHECK LIST**

1. Inspect the steering shaft for proper installation.
2. Check to ensure that no wires will come in contact with the headers. Check to ensure that no (l/s and r/s) heat shields come in contact with the headers.
3. Check to ensure that all emission A.I.R. hoses are clamped properly.
4. Check to ensure that any and all electrical connections that were disconnected are properly reconnected.
5. Check to ensure that all oxygen sensor wires are looped and secured in a non-used and non-heated cavity or pocket.
6. **NOTE: Y-PIPE PART NUMBER 11133YFLT OR 11133Y-1FLT IS RECOMMENDED TO BE USED AND INSTALLED WITH HEADER P/N 11133FLT OR 11133-1FLT.**
7. Reconnect the battery. Start the car and check for leaks.