

# **Crawford Z Car Headers** **Installation Manual**

Revised as of 25 November 2003

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Word from Crawford's –

This installation WILL require a lift, as supporting the engine is necessary during this project. Also note many tools are needed, from deep sockets, wobble-sockets, and short gear wrenches... while none are required, they will lessen any possible headaches!



## Disassembly

1. Disconnect the negative battery terminal.
2. Remove intake system – Intake tubing, air box, etc.



3. Disconnect both o2 sensor plugs

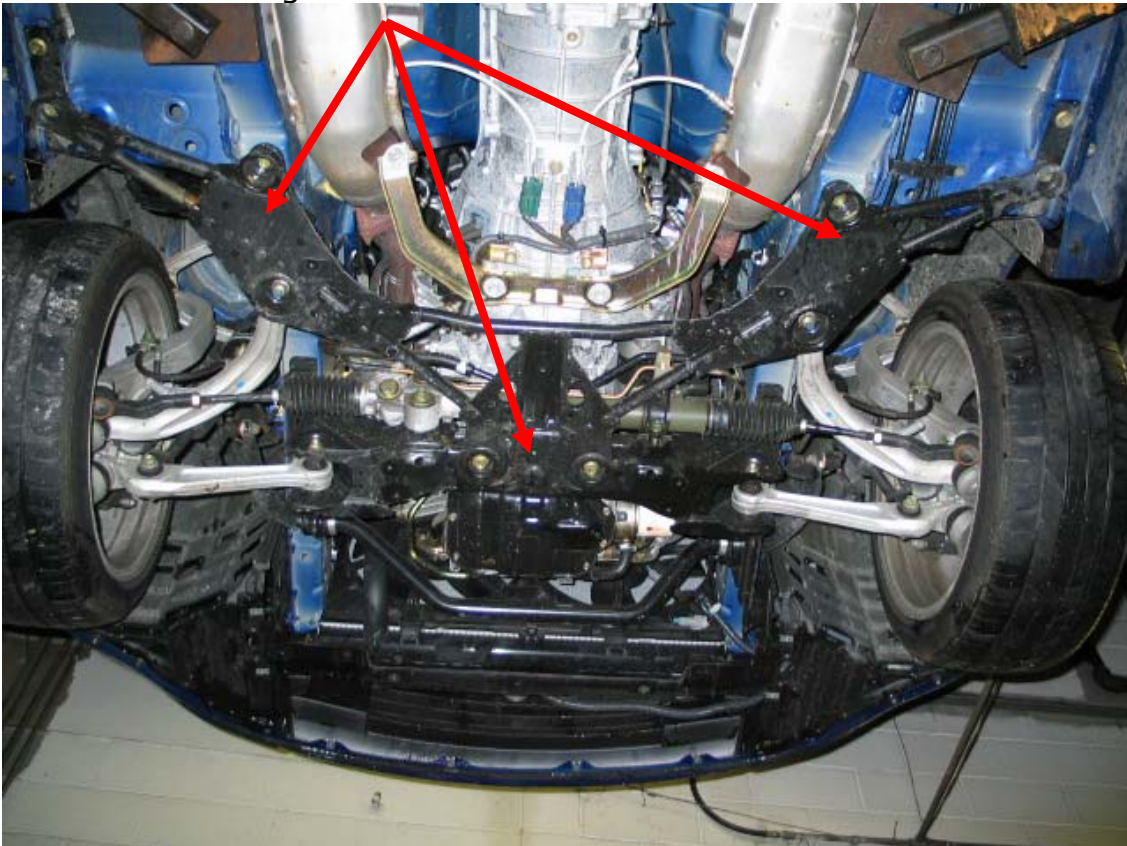


4. Using a long extension & deep 14mm socket, remove top stud from both cats. (If you wait until you lift the car you will find yourself lowering it back down to hit this bolt.)
5. Lift car
6. Remove all necessary plastic under-panels.

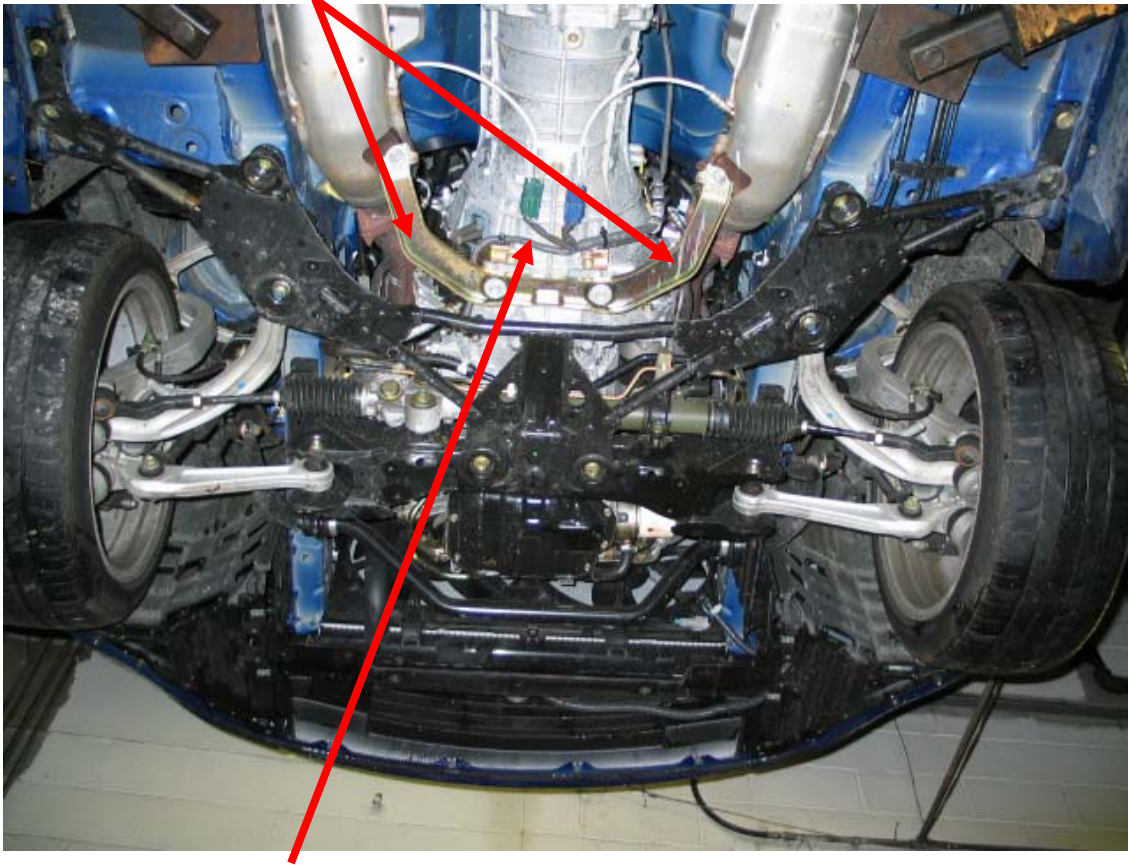
7. Drain coolant



8. Remove large steel chassis brace



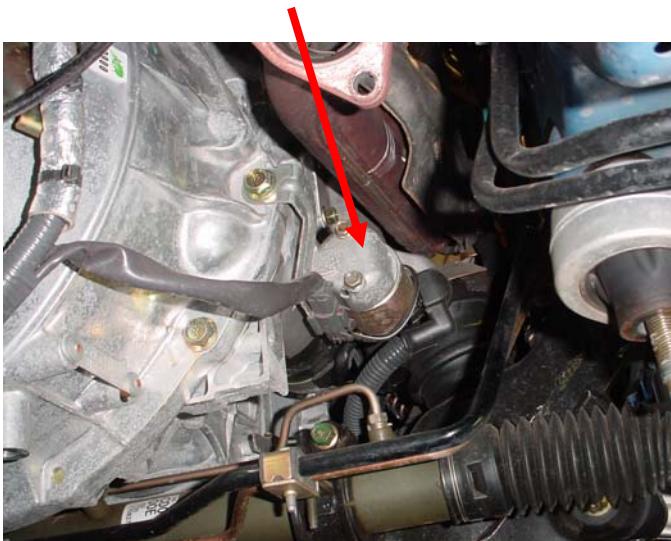
9. Remove cat brace



10. Disconnect o2 sensors attached to transmission

11. Remove cats (Fully unbolt both cats before trying to pull either out. This will make removal FAR easier.)

12. Remove starter.

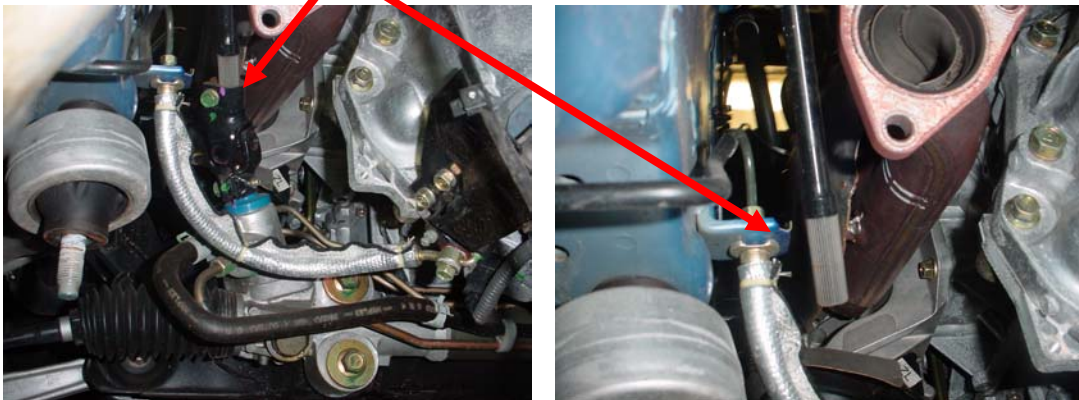


13. Unbolt steering rack

14. Unbolt power steering line from cross-member.



15. Remove steering shaft knuckle. (Make sure NOT to turn the steering wheel at ALL, due to the airbag wiring cable)



16. Unbolt steering rack and let hang.

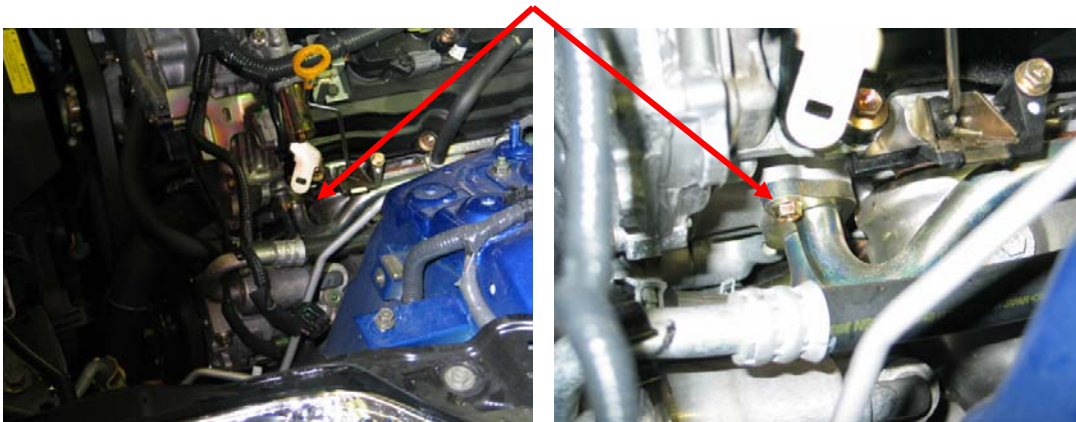
17. Remove manifold heat shields.

18. Remove top radiator hose and large water pipe after unattaching all hoses and the wiring, which is attached with it.

19. Remove A/C compressor belt and compressor mounting bolts. Disconnect compressor-wiring harness. (This will allow the compressor to hang down farther; no worries about letting it hang freely... no damage will be done.)



20. Remove water tube above the a/c compressor.

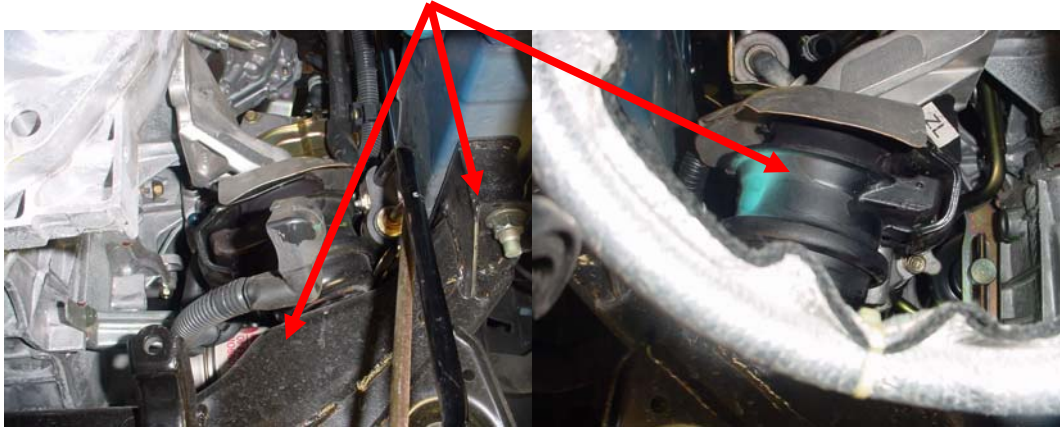


21. Remove both exhaust manifolds

22. Support engine with a jack.



23. Completely remove motor mounts.

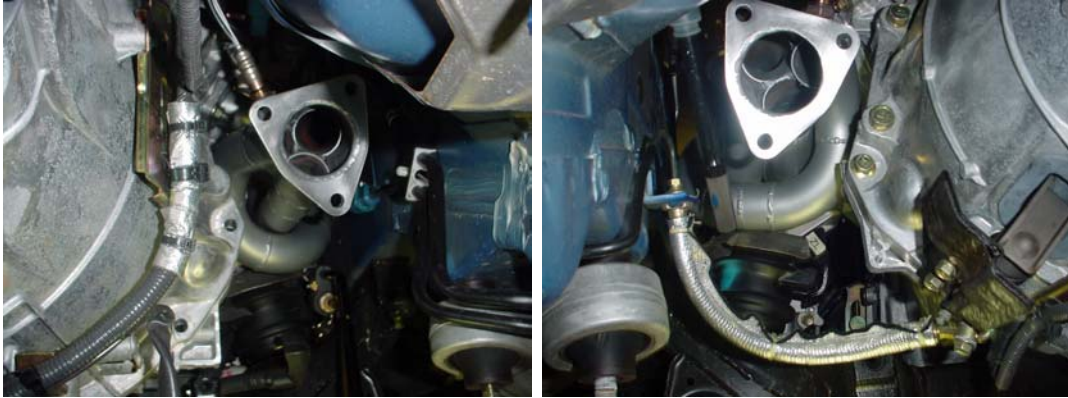


24. Make sure to remove this extra clip, it will not be re-used.

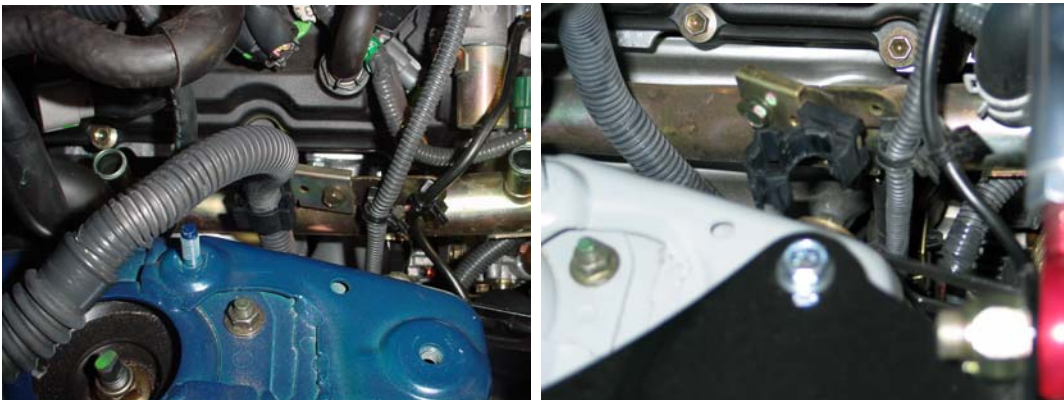


## Assembly

1. Install passenger side header first, then driver side. It **WILL BE NECESSARY** to have a 2<sup>nd</sup> person to rock the motor slightly over to install. **NOTE** - It makes installation of the left side easier if the slave cylinder line is disconnected. If this is done it will need to be bled after re-installing.



2. Re-install motor mounts.
3. Install driver side water pipe
4. The clamp and bracket that is shown in this picture has to be reversed to hold away from header.

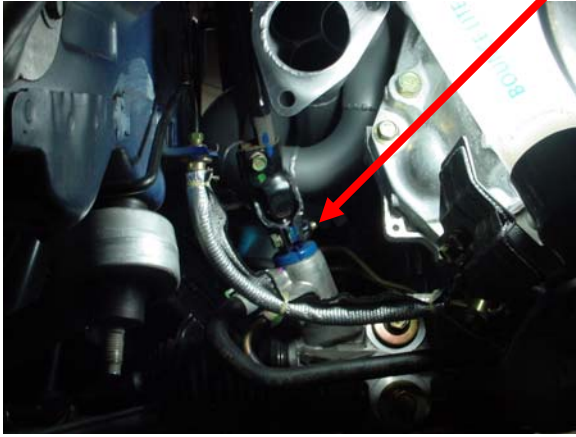


Reversed Complete

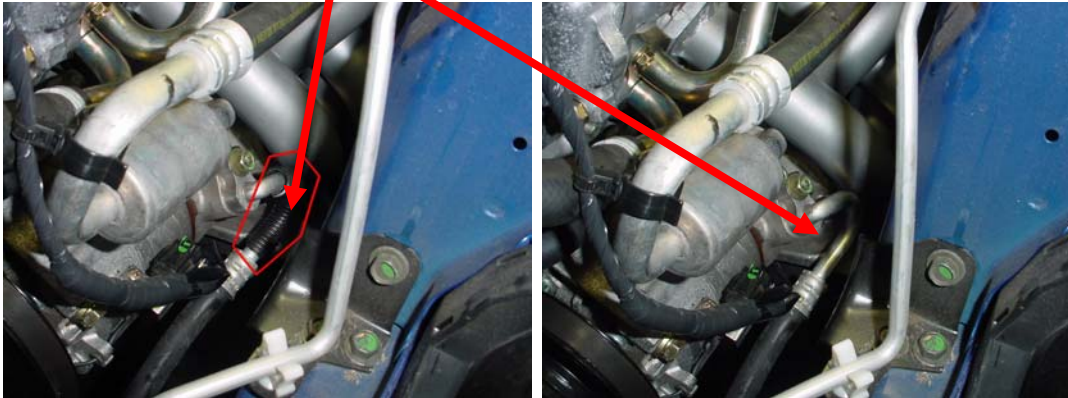


5. Install passenger side water pipe with wiring installed as shown in picture. You can start the bottom bolt in the rear of the pipe by hand underneath.
6. Reinstall starter

7. Reinstall steering rack, mounting lines, and steering knuckle. (Make everything is lined up upon reassembly.)



8. Install A/C compressor & belt. Remove plastic sheathing from high-pressure line at compressor. (We recommend removing this because of the close proximity to the header, losing this will not affect the AC, though could be melted from the header.)



9. Install cats and all underside braces.
10. Fill coolant.
11. Reinstall airbox, intake piping, and strut bar.

12. Stand back, smile, and pop open your drink.

