

## AHC Fluid Change For Dummies (like me), Step by Step

### YOU WILL NEED:

Two cans of AHC fluid (Toyota Part #08886-01805), which you can buy online for about \$30 each plus shipping (<http://www.toyotapartscenter.net>) or locally at dealer for about \$40 each.

Large Oil mixing syringe (WalMart, AutoZone, etc)

10mm box wrench (duh)

3' of 3/16" clear tubing (WalMart, Home Depot, etc)

Gallon Jug, Large Jar, etc (to hold old fluid)

### BEFORE YOU START THE FLUSH, TEST THE SYSTEM FOR PROPER FUNCTIONALITY:

Start your vehicle and set AHC to High setting and wait for the truck to go up.

Shut down the engine, open hood and mark the fluid level on AHC reservoir. It will be low.

Start the car and set the AHC to Low setting. The weight of lowered car will force fluid from actuators and accumulator to go into the AHC reservoir. Shut the engine, open hood and mark the fluid level for the low setting, it will be higher than the previous level.

Compare the high settings mark with low setting mark with marks on the side of the AHC reservoir. Between your H and L marks you should have more than 7 fluid level marks variation on the reservoir. I had about 10, but any number above 7 means your system is in good shape. Number below 7 indicates an AHC suspension system problem, do not proceed with the below.

### PROCEED WITH THE FLUSH:

With engine shut down and AHC in the LOW setting, open the AHC reservoir and use syringe with attached clear tube to empty as much old fluid out as possible. DO NOT START OR DRIVE THE CAR WITH EMPTY AHC RESERVOIR, as you will draw air into the system, triggering AHC suspension low pressure sensors and lower your car flat on 4 wheels. This will require a special reset procedure to get your AHC system working again.

After you empty as much old fluid as possible, pour ONE entire can of fresh fluid into the reservoir. You may top it up and may have some left in the container. That is ok, save it for later.

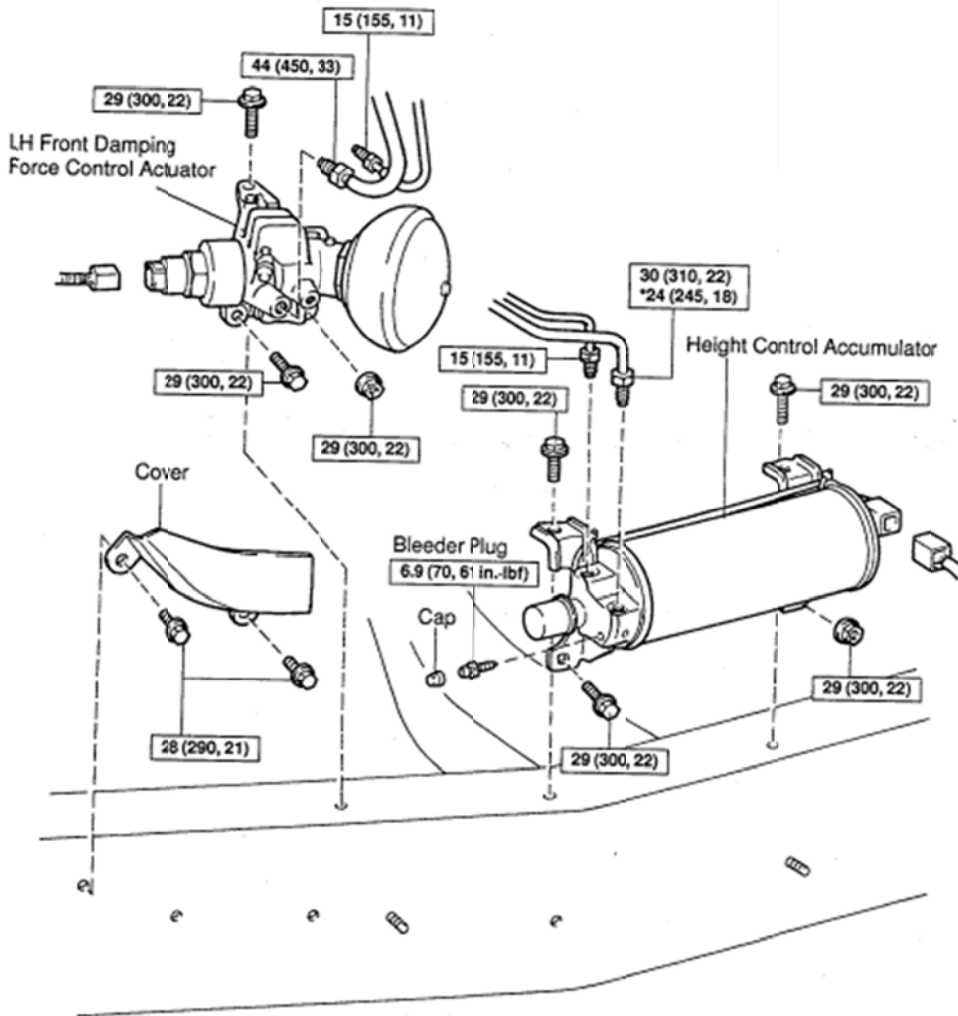
**With full AHC reservoir** you can now start the car and set AHC to Normal position, fluid level will go down and fresh fluid will enter the system. That alone will help as you replaced about half of your fluid but at N your fluid should be between LOW and HIGH lines on the. Bleeding will empty more old fluid at the low points and allow more fresh fluid into the system.

BLEEDING DETAILS:

NOTE: ENGINE MUST BE OFF DURING BLEEDING, NOT TO TRIGGER THE PRESSURE SENSORS AND NOT TO CREATE HIGH PRESSURE MESSY SPILL, ALSO FOR YOUR SAFETY.

There are four actuators - one for each wheel under the vehicle, behind running board, corresponding with the car doors (see below drawing). Front suspension actuators are lined up with front doors, and rear with rear doors. Each actuator has a balloon like globe at the end the size of your fist. Between the driver side actuators you will find thermos like cylinder...that is your accumulator. Treat accumulator like a 5th wheel, same bleeding procedure as actuators. Do it first, it is the easiest. Each has a bleeding plug zerk, which is capped with rubber cap.

AHC DIAGRAM:



**N·m (kgf·cm, ft·lbf) : Specified torque**  
\* For use with SST

## BLEEDING PROCES:

1. I used no jacks. Just a caution, keep your car on 4 wheels, plenty of access, you do not need to get under the car, just lie next to the running board.
2. You will be doing 1 station (4 actuators and 1 accumulator) at the time and no more than 6oz of fluid at the time. Less is safer, because if you empty the actuator (will be hard to do) air can backfire thru the hose.
3. **WATCH YOUR HEAD** If you are only doing 6oz. at the time you will not lower the car much and will be safe, still I've got to warn you, watch your head,
4. Do accumulator first. The plug is pointing towards the front of the vehicle. Remove rubber cap. Attach the end of the clear hose from your jar or bleeding kit onto the plug. Put your 10mm wrench on the plug. **MOVE YOUR HEAD AWAY** and loosen the plug in the unscrew direction slowly, only takes quarter turn before you will see fluid flowing. It will be dark, gray color. As container fills up quickly tighten the plug back and stop the flow. Put rubber cap back on.
5. Get in the car and start the engine, drive 400 feet on level ground, which allows the suspension to level itself using fresh fluid from the reservoir. Stop the engine. Check the fluid level in the reservoir, make sure it's significantly above the LOW line. Since you topped the reservoir you probably have enough to do all the wheels including the accumulator but it is your **RESPONSIBILITY** to check. **DO NOT ALLOW RESERVOIR TO RUN OUT OF FLUID (DRY) as air will enter the system.**
6. Move to the actuators, one wheel at a time. Once you set your 10mm wrench on the bleeding plug and hose is on the end of it all you need to do is slowly open the plug by turning the wrench. Watch the tubing and the jar. Do not keep your head under the running board. Take your time, do it all slow and be safe.
7. I stress again 1 wheel at the time, max 6oz at a time, after each wheel (actuator) you will start the car and drive a bit on a level surface so the self-leveling system will adjust your car to other 3 wheels. It will do it by taking more fresh fluid from the reservoir and pumping it into the actuator to replace the 6 oz you took out. Further, after every actuator and follow-up drive, you **MUST** check the reservoir under the hood to make sure you have enough fluid not to fall below the LOW line.
8. After 5 bleeds if your fluid in the reservoir is still above the high level and you need to empty more fluid, repeat the process on the accumulator cylinder. It holds a lot of fluid. Get your fluid to HIGH level as recommended per manual, **YOU ARE DONE.**

Go ahead drive a bit and change your car from L to H number of times with decent amount of driving in between (helps to cool the pump, per owner's manual). Above will cycle the fresh fluid thru all the components, mix with any leftovers of the old fluid. It will take time so go for a long drive and watch as dampening of your ride improves. Best thing I did on my car.

Good Luck. If you are over 100K miles, do not wait. My suspension started getting very stiff around 85K miles and it drove me nuts. Above fluid change made it like new.

\*\*\* **CREDIT** to multiple posters on [www.ih8mud.com](http://www.ih8mud.com), as well as [www.clubexus.com](http://www.clubexus.com)