



How to bleed Subaru Power Steering systems.

1. Do NOT start the engine until the system is fully bled, doing so may cause damage to the power steering components. Pump internals are metal to metal so any air in the system can cause metal to metal contact and resulting damage.
2. Replace ALL hose clamps with new clamps
3. Raise the front wheels off the ground
4. Turn the steering wheel fully to the RIGHT
5. Fill the reservoir to the “full cold” level & leave the cap off.

*Use only XADO ATF III/IV/V fluid. Do NOT use hydraulic fluid as hydraulic fluid does not contain the same friction inhibitors/additives and tends to breakdown and overheat. The use of hydraulic fluid will VOID the warranty. ***We have the CORRECT fluid in stock so phone us for pricing****

6. With an assistant checking the fluid level, turn the steering wheel slowly and smoothly lock to lock until the level drops in the reservoir. If the fluid level does not drop no fluid has moved through the system, this indicates an air bubble in the reservoir or pump. Until this bubble passes no fluid will circulate through the system.
 - *On systems with coolers you may need to cycle in excess of 40 times*
 - *Do NOT turn the steering wheel fast as this will cause the fluid to overflow the reservoir, trapped air may cause the fluid to overflow. Thoroughly clean any spilled fluid so you can check later for any leaks*
7. Check the fluid constantly to ensure proper level and that no bubbles exist.
 - *If you see any signs of bubbles recheck all hose connections then repeat the steps above.*
 - *The fluid level should be steady*
8. Disable the engine from starting
 - *Crank the engine several revolutions, if the fluid level drops there is compressed air trapped in the system, repeat the above steps until the fluid level remains stable.*
 - *If the fluid foams while cranking wait at least 60 minutes or more until dispersed air has time to accumulate and purge through the reservoir.*

- *In the case of six cylinder Subaru engines you MUST allow the engine to rest for at least 12-hours prior to starting, failure to do so will mean that air is trapped in the system and mechanical damage will occur, this will NOT be covered under warranty*
9. Continue to repeat the steps above until the fluid level remains constant and no air bubbles are visible.
 10. Now start the engine and check that the fluid remains at level and stable
 11. Reinstall the reservoir cap
 12. Return wheels to centre and lower wheels to the ground
 13. Run the engine for two minutes and turn steering wheel in both directions
 14. Do NOT hold the steering wheel against the stops
 15. Verify the following conditions
 - *The steering is smooth*
 - *Noiseless operation*
 - *Proper fluid level*
 - *No leaks*
 - *Proper fluid condition*
 - *No bubbles, foaming or fluid discolouration*
 16. If all of the above conditions are satisfied the bleeding procedure is complete
 17. If any problem exists then turn off the engine and see special conditions below

Special Conditions

If you experience any of the conditions listed below then there is still air in the system.

- *Foam or bubbles in the fluid*
- *Power steering fluid should not rise in the reservoir when the engine is turned off, if this occurs there is air trapped in the system*
- *Be aware of any periodic bubbles that could indicate a loose connection, leaky o-ring or a bad flare seat in either the pressure or return hose*
- *Discoloured fluid (milky, opaque or light tan colour)*

If you have any questions regarding this procedure please contact us before you install the replacement power steering pump that you have purchased from us, we will be happy to help you.

You can contact us by phone on **09 634-0065**

Monday to Friday 8:00am to 5:00pm

Saturday 9:00am to 1:00pm