



advanced FLOW engineering

Instruction Manual P/N: 46-52021

Make: **NISSAN** Model: **PATROL Y61** Year: **2001-2019** Engine: **L6-4.8L**



- Please read the entire instruction manual before proceeding.
- Ensure all components listed are present.
- If you are missing any of the components, call customer support at 951-493-7100.
- Ensure you have all necessary tools before proceeding.
- Do not attempt to work on your vehicle when the engine is hot.
- Disconnect the negative battery terminal before proceeding.
- Retain factory parts for future use.

Label	Qty.	Description
A	1	Radiator, Tube & Fin
B	1	Fitting, Barb
C	1	Plug, 1/16" NPT
D	2	Transmission Cooler Fitting, Straight
E	2	Transmission Cooler Fitting, Elbow
F	2	Washer, M6
G	2	Screw, M6x1x12
H	1	Valve, Drain
J	1	Hose, 3/8in

Tools Needed: Ratchet, extension, 10mm socket, 10mm wrench, 14mm wrench, 4mm allen wrench, thread sealant, pliers.

Warranty Information available at <https://afepower.com/contact#warranty>

Emissions Disclaimer: This product does not require a CARB EO#.





1. Park vehicle on level ground and engage the parking brake.
2. Disconnect negative battery cable.
3. If equipped, remove the bolts securing the skid plate to the vehicle.
4. Open the petcock and begin draining coolant into a drain pan.
5. Remove radiator cap and drain remainder of coolant from the system.
6. Remove the engine cover from the vehicle.



7. Disconnect the lower radiator hose from the radiator.
8. If equipped, disconnect the transmission cooler hoses from the radiator.



9. Disconnect the upper radiator hose from the radiator.
10. Disconnect the radiator over-flow hose from the radiator.
11. Remove the nuts securing the radiator mounts to the core support on both sides, then remove the radiator mounts from the vehicle.
12. If equipped, disconnect the vent hose from radiator filler neck.



13. Remove the nuts securing the fan to the water pump.



14. Disconnect the coolant over-flow hose from the fan shroud.
15. Carefully remove the radiator and fan shroud assembly from the vehicle.



16. Transfer the two (2) side mount grommets from the factory radiator onto the supplied aFe radiator.
17. Transfer the factory fan shroud onto the aFe radiator, then secure it to the radiator with the two (2) supplied M6x1x12 bolts and M6 washers.

Note: If your vehicle did not come equipped with an automatic transmission, install the two (2) 90 deg fittings into the transmission cooler ports so that the point towards each other. Do not tighten at this time and skip to Step 19.

18. Depending on which style transmission cooler fittings your vehicle came equipped with (straight or 90 deg), install the corresponding fittings provided onto the aFe radiator. Do not tighten at this time.
19. Install the supplied drain valve into the drain port on the bottom of the radiator and tighten.



20. Install the aFe radiator into the vehicle, ensuring the side mounts drop into position in the vehicle.
21. Ensure the over-flow hose that runs across the top of the core support is not pinched.
22. Secure the over-flow hose to the fan shroud.
23. Reinstall the fan into the vehicle.
24. Torque the fan nuts to the factory specification.
25. Install the top radiator mounts.
26. Reconnect the upper radiator hose and the over-flow hose to the radiator and secure them with the factory clamps.

Note: Be sure to use thread sealant on the fittings to prevent any leaking.

27. Depending on which factory radiator filler neck your vehicle came equipped with, install either the supplied 1/16" plug or the hose barb fitting into the vent port on the side of the aFe radiator filler neck.



28. Reconnect the lower radiator hose to the radiator and secure with the factory clamp.

Note: If your vehicle is not equipped with an automatic transmission use the supplied 3/8" hose to connect the two (2) fittings together and prevent any dust or debris from entering and skip to Step 30.

29. If equipped, reconnect the transmission cooler hoses to the radiator and secure with the factory clamps.

30. Tighten the transmission cooler fittings in the proper direction.

31. If equipped, reinstall the skid plate onto the vehicle and tighten.



32. Be sure the petcock is closed by turning the t-handle clock-wise.
33. Reconnect the negative battery cable.
34. Use the proper coolant refill procedure to be sure that all the air gets out of the system when refilling the coolant.
35. Top off coolant in the radiator, fill the over-flow bottle to the max line, and install the supplied radiator cap.
36. Reinstall the engine cover.
37. Test drive the vehicle.
38. Let the vehicle cool down then check coolant levels, top off if needed.
Install is now complete!

Note: Be sure to check all connections after 50-100 miles.

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