



advanced FLOW engineering

Instruction Manual P/N: 46-20378-B/R

BladeRunner – 2-1/2" Hot Side Intercooler Tube

Make: SUBARU Model: WRX Year: 2015-2020 Engine: H4 – 2.0L(t)



- Please read the instructions manual before proceeding.
- Ensure all components 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.

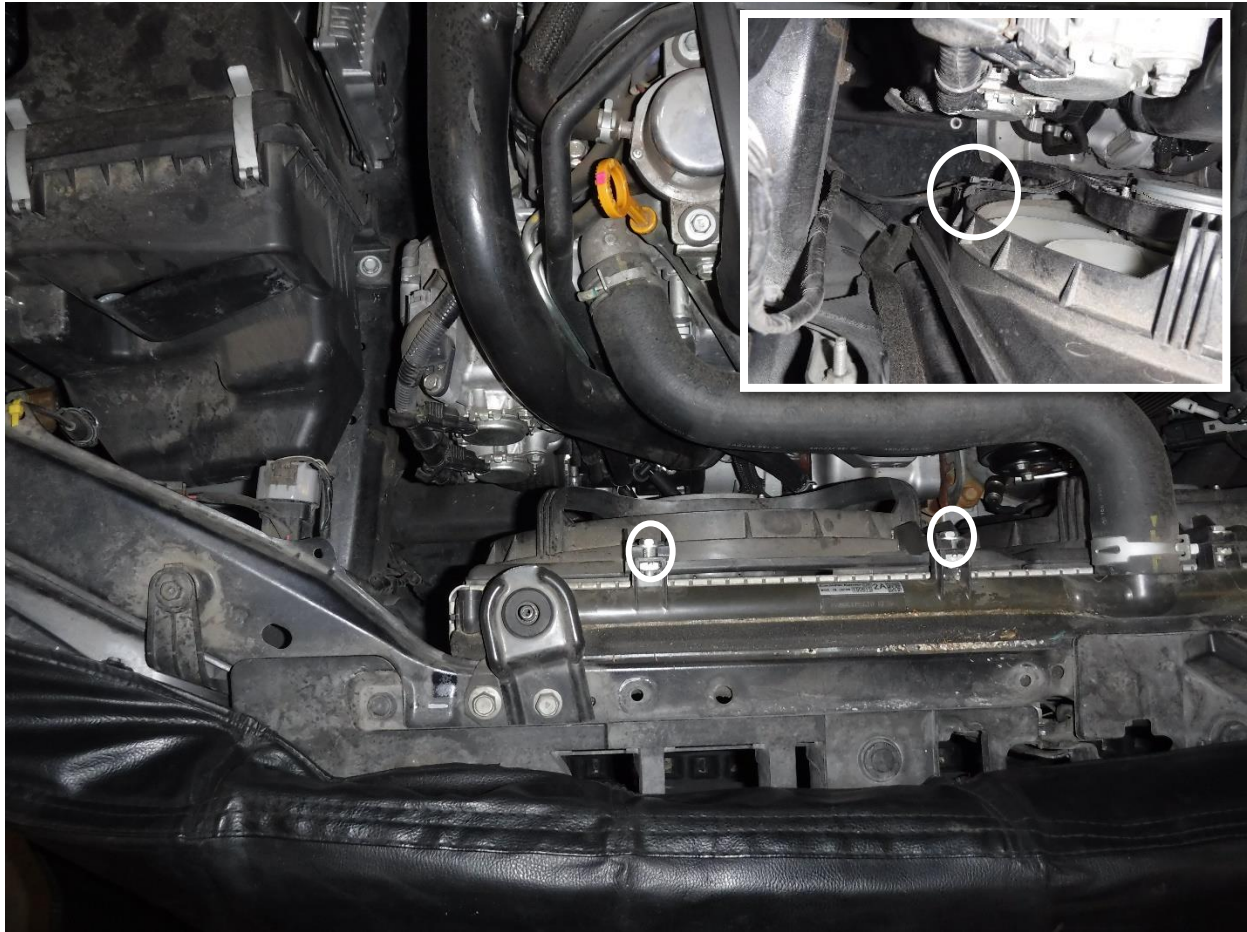
Label	Qty.	Description
A	1	Hot Side Intercooler Tube
B	1	Coupling, Silicone Reducer Elbow 2-3/4" x 2-1/2" x 52°.
C	1	Coupling, Turbo Adaptor
D	1	Clamp, Spring Loaded T-Bolt: 2"
E	2	Clamp, Spring Loaded T-Bolt: 2-3/4"
F	1	Clamp, Spring Loaded T-Bolt: 3"
G	1	Flange, Turbo Outlet
H	2	Screw, M8 x 1.25 x 16mm
I	2	Washer, M8
J	1	Plug, 1/8" NPT
K	1	O-Ring, -226

Note: Legal in California for use on race vehicles only. The use of this device on vehicles used on public streets or highways is strictly prohibited in California and others states that have adopted California emission regulations

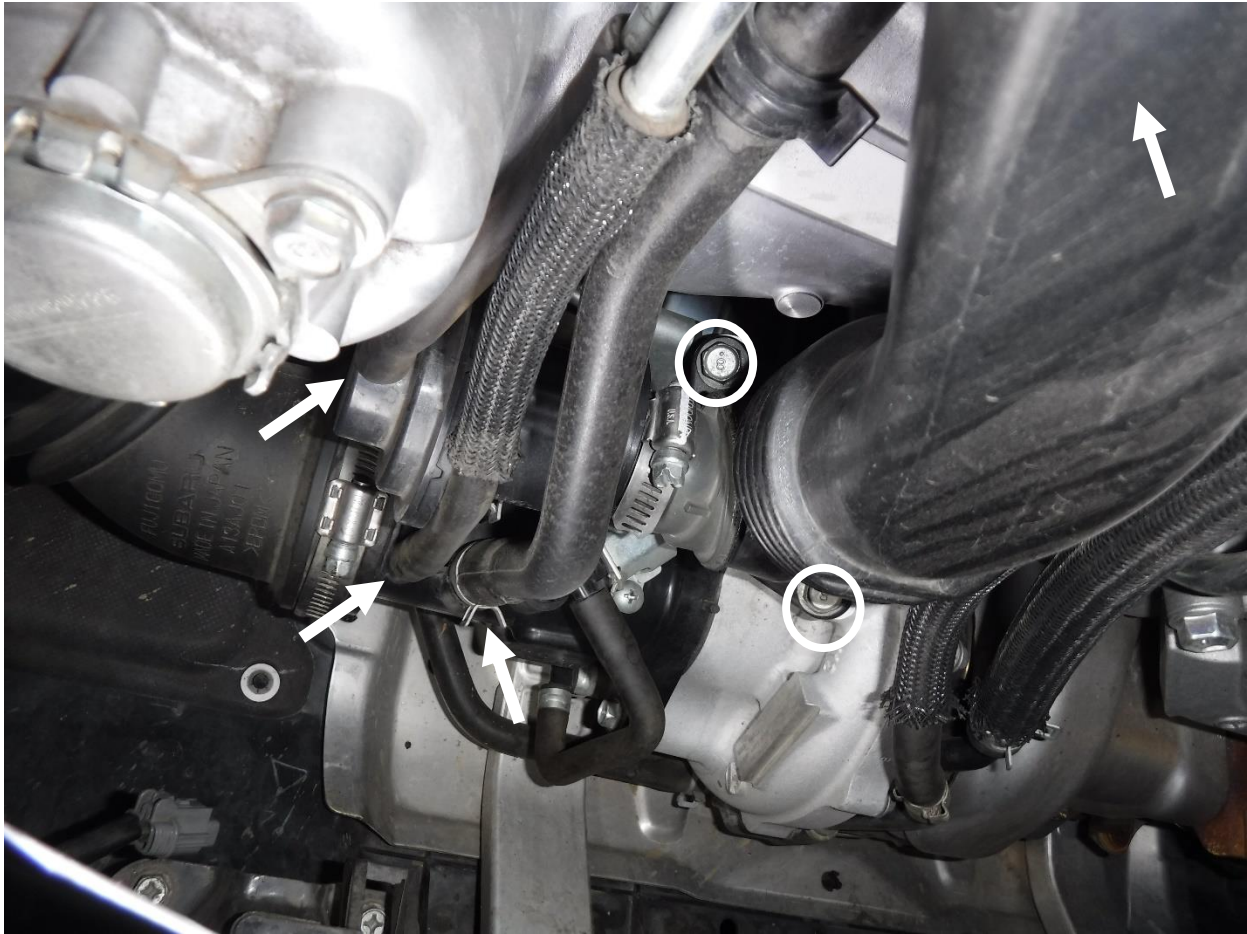




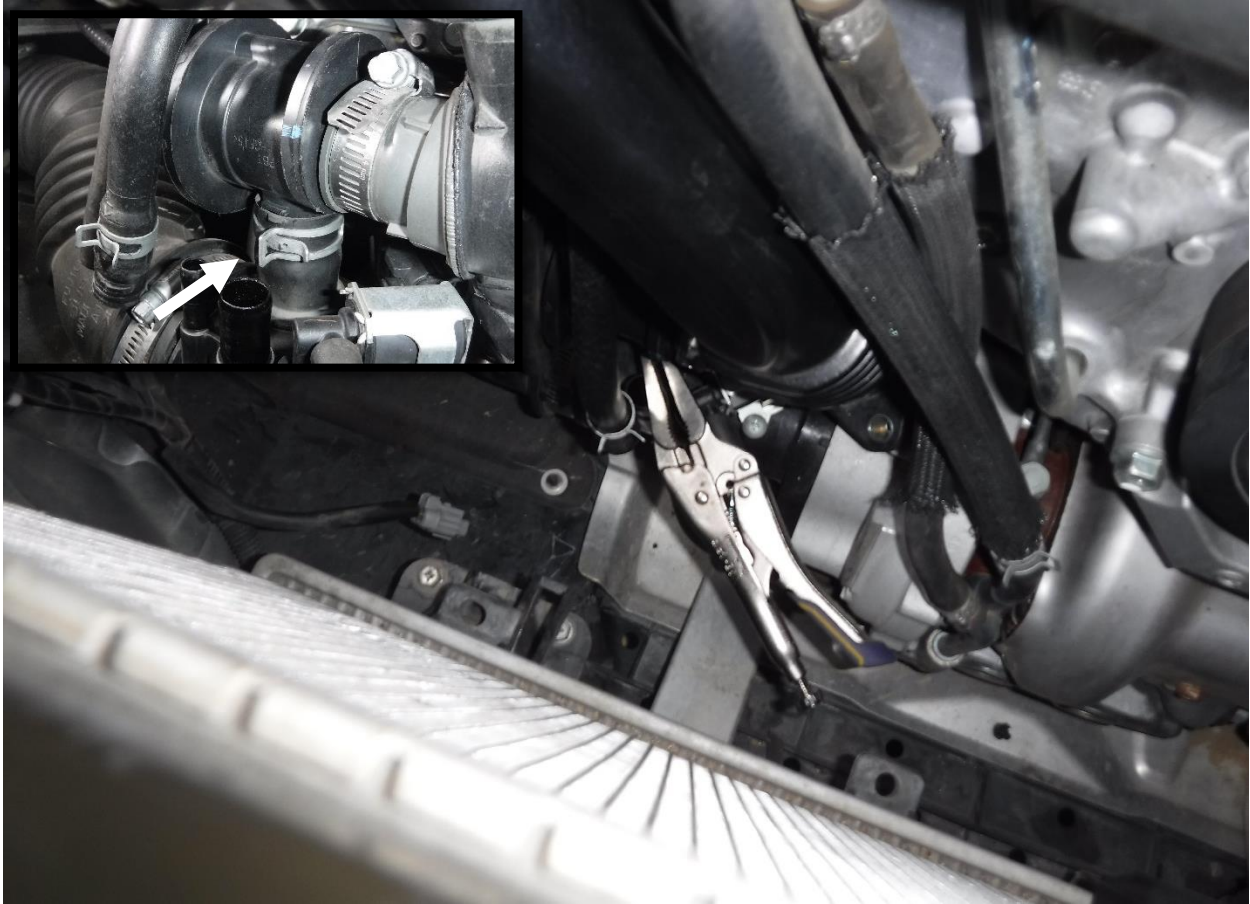
1. Park vehicle on level ground and engage the parking brake.
2. Disconnect the negative battery cable.
3. Remove the clips securing the air intake scoop to the vehicle, then remove the air scoop from the vehicle.



4. Disconnect the electrical connection from the radiator fan assembly, located near the bottom of the fan assembly.
5. Remove the two (2) screws securing the radiator fan assembly to the vehicle on the passenger side.
6. Remove the fan assembly from the vehicle.



7. Disconnect the two (2) vacuum hoses from the air inlet tube and push to the side.
8. Disconnect the vacuum hose from the bypass valve and push it to the side.
9. Loosen the two (2) screws securing the factory hot side intercooler tube to the turbo.



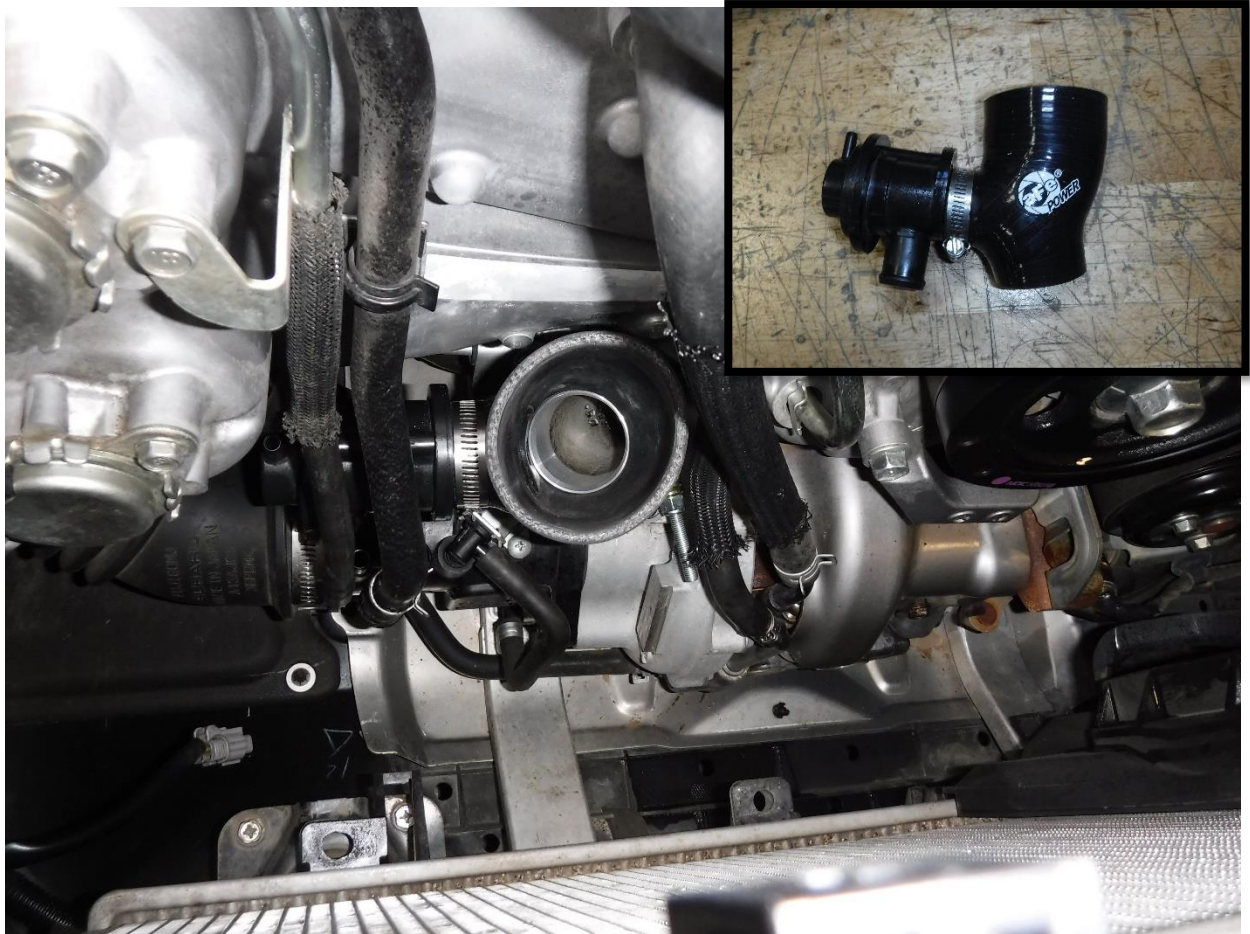
10. Loosen the clamp securing the hot side intercooler tube to the intercooler.
11. While squeeze the spring clamp securing the bypass to the air intake tube, pull up on the bypass valve firmly to disconnect it from the air inlet tube.
12. Disconnect the factory hot side intercooler tube from the intercooler.
13. Remove the factory hot side intercooler tube from the vehicle.



14. Loosen the clamp securing the bypass valve to the factory hot side intercooler tube.
15. Remove the bypass valve and the clamp from the factory hot side intercooler tube and set aside for reuse.



16. Install the supplied -226 O-ring into the groove on the bottom of the supplied turbo outlet flange.
17. Install the turbo outlet flange with O-ring onto the turbo and secure it using the two (2) supplied M8 x 1.0 x 16mm screws and two (2) supplied M8 washers.
18. Place the supplied 2" spring loaded T-bolt clamp onto the turbo outlet flange, as shown above.

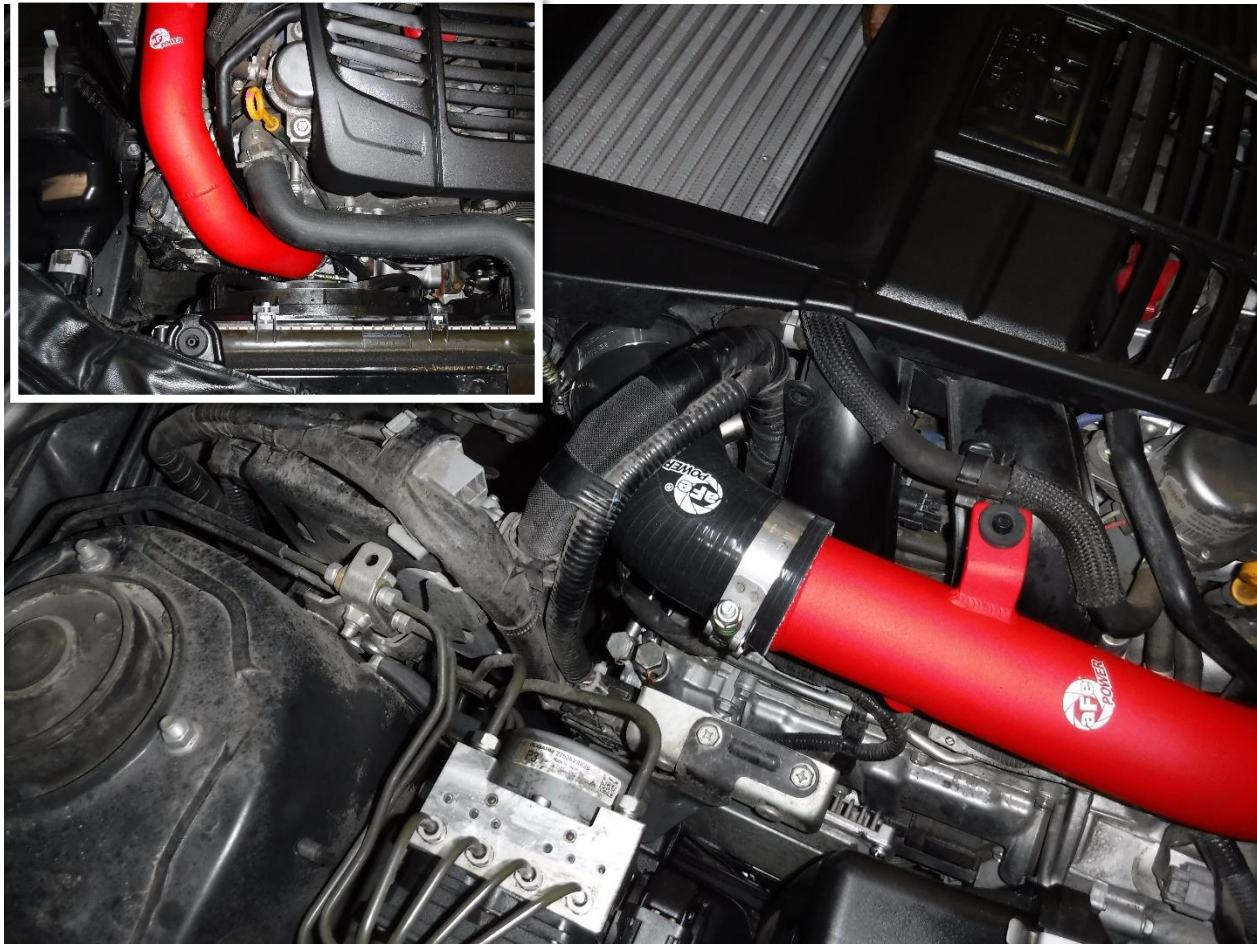


19. Install the factory clamp along with the bypass valve into the smaller port on the supplied turbo coupling adaptor but do not tighten the clamp yet.
20. Install the turbo coupling adaptor onto the turbo outlet flange with the 2" spring loaded T-bolt clamp while simultaneously connecting the bypass valve to the turbo air inlet port and tighten both clamps.
21. Reconnect the vacuum line to the bypass valve.
22. Reconnect the two (2) remaining vacuum lines to the turbo air inlet tube.



Note: Be sure to use thread sealant on the plug or sensor to prevent any leaking

23. If you are not using any aftermarket sensors, install the supplied 1/8" NPT plug into the threaded fitting on the supplied aFe hot side intercooler tube.
24. Transfer the mounting grommet from the factory intercooler tube to the aFe hot side intercooler tube.
25. Install the supplied 2-3/4" x 2-1/2" x 52° silicone reducer elbow coupling along with the supplied 2-3/4" spring loaded T-bolt clamp onto the aFe hot side intercooler tube, closer to the bracket but do not tighten the clamp yet.



26. Place the remaining 2-3/4" clamp onto the turbo coupling adaptor.
27. Place the supplied 3" spring loaded T-bolt clamp onto the coupling from Step 25.
28. Install the aFe hot side intercooler tube into the vehicle by first connecting the aFe hot side intercooler tube to the turbo coupling adaptor, then aligning the bracket with its mount, and finally connecting the top coupling to the intercooler.
29. Ensure the tube is not touching anything and tighten all the clamps.
30. Reinstall the fan assembly into the vehicle.
31. Reconnect the electrical connection for the fan.



32. Reinstall the air intake scoop into the vehicle.

33. Reconnect the negative battery cable.

34. Install is now complete

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

Warranty

General Terms:

- aFe warrants their products to be free from manufacturer's defects due to workmanship and material.
- This warranty applies only to the original purchaser of the product and is non-transferrable.
- Proof of purchase of the aFe product is required for all warranty claims.
- Warranty is valid provided aFe instructions for installation and/or cleaning were properly followed.
- Proper maintenance with regular inspections of product is required to insure warranty coverage.
- Damage due to improper installation, abuse, unauthorized repair or alteration is not warranted.
- Incidental or consequential damages or cost, including installation and removal of part, incurred due to failure of aFe product is not covered under this warranty.
- All warranty is limited to the repair and/or replacement of the aFe part. To request Return Goods Authorization ("RGA"), email RGA@afepower.com or call (951)493-7100. Upon receipt of the RGA, you must return the product to the address provided in the RGA, freight prepaid and accompanied with a dated proof of purchase and the RGA. Upon receipt of the defective product and upon verification of proof of purchase, aFe will either repair or replace the defective product within a reasonable time, not to exceed thirty days.

<u>Product Category</u>	<u>P/N Prefix</u>	<u>Warranty duration</u>
Direct OE Replacement Filters	10, 11, 30, 31, 71, 73	Life of the vehicle
Racing Filters	18	1 year
Universal	21, 24, 72	2 years
Air Intake Systems	50, 51, 54, 55, 75	2 years
Exhaust Systems	49	2 years
Intercoolers & Intercooler Tubes	46-2	2 years
Intake Manifolds	46-1	2 years
Differential Cover	46-7	Life of the vehicle
Transmission Pans / Oil Pans	46-7	Life of the vehicle
Turbochargers	46-6	2 years
Exhaust Manifolds	46	2 years
Throttle Body Spacers	46-3	2 years
Fluid Filters	44	90 days
Pre-Filters	28	2 years
Heavy Duty OE Replacement	70	2 years
PowerSports OE Replacement	81,87	2 years
PowerSports Intake Systems	85	2 years

No other warranty expressed or implied applies nor is any person or advanced FLOW engineering authorized to assume

any other warranty. Some States do not allow the exclusion or limitation of incidental or consequential damages or do not allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

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advanced FLOW engineering, inc.

252 Granite Street Corona, CA 92879

TEL: 951.493.7100 • TECH: 951.493.7100 x23

E-Mail: Tech@aFepower.com