

CAUTION / ATTENTION
FAN BLADE CAN START AT ANY TIME.
TO HELP AVOID PERSONAL INJURY KEEP HANDS CLEAR.
LE VENTILATEUR PEUT SE DÉMARRER À TOUT MOMENT.
POUR ÉVITER TOUTE BLESSURE, NE PAS EN APPROCHER LES MANS.

ENGINE BREAK-IN & WARRANTY INFORMATION

AMS PERFORMANCE - TERMS AND CONDITIONS



CONGRATULATIONS ON YOUR BRAND NEW AMS PERFORMANCE BUILT ENGINE!

“We take great pride in each of the thousands of engines we have produced since opening our doors in 2001, and I and the rest of the AMS Performance Team thank you for choosing us as your preferred engine builder. This document will outline the proper steps to take in order to safeguard your investment with the best methods possible.”



Scott Priebe
AMS Engine Program Director

ENGINE BREAK-IN PROCEDURE:

High performance engines are built to handle more power than factory engines but without proper supporting parts, break-in, tuning, and lubrication they can be damaged just as easily as a factory engine.

BREAK-IN GENERAL RECOMMENDATIONS:

- Use Amsoil Break-In Oil (SAE 30) during entire break-in process.
- After break-in use Amsoil Dominator 15W-50 for 200+ horsepower per cylinder and Amsoil 10W-40 for less than 200 horsepower per cylinder.
- During break-in do not run at the same speed for extended periods during break-in, also make certain the engine is operating at proper coolant temperature and oil pressure.
- If your tuning software allows it, datalog the entirety of your break-in mileage. This may be necessary to diagnose potential issues.

VR38 SPECIFIC NOTES:

Proper oil filtration is a must for a new engine. AMS manufactures an adapter kit to use a significantly larger WIX oil filter, which is recommended for all our VR38 engine builds. If this style filter is not used, we will be unable to offer any warranty support for our engine assembly.

1. WIX 51060R for Racing Applications
2. WIX 57202XP for Street Applications
3. WIX 57099XP for all Applications with Alpha Cooling Kit



STEP BY STEP ENGINE BREAK-IN PROCEDURE:

1. Before installing the oil filter fill it completely with Amsoil SAE 30 Break-In oil.
2. Fill engine with Amsoil SAE 30 Break-In oil to the appropriate level.
3. Disable the vehicle's fuel system and crank engine to prime oiling system.
4. If your vehicle requires the clutch to be pressed to crank engine bypass the system so you do not have to press the clutch while priming the oiling system.
5. After the oiling system has been primed and oil pressure has been seen, start the engine and immediately monitor oil pressure. If it is too low either the oiling system is not completely primed or there is a problem that needs to be addressed before continuing.
6. Confirm that the vehicle has a proper base tune in it so it will not run too rich or too lean.
7. Drive car for 20 miles carefully, no full throttle at this point. Vary the RPM.
8. Remove oil filter, cut open and inspect for metal contamination.
9. Drive car for 200-300 miles carefully, still no full throttle. Vary the RPM (do not get on the highway and set the cruise control).
10. Remove oil filter, cut open and inspect for metal contamination.
11. At this point you can also replace the break-in oil with synthetic Amsoil of the appropriate weight.
12. Your new engine should now be ready for final tuning and full throttle operation.



BEST PRACTICES FOR ENGINE LONGEVITY

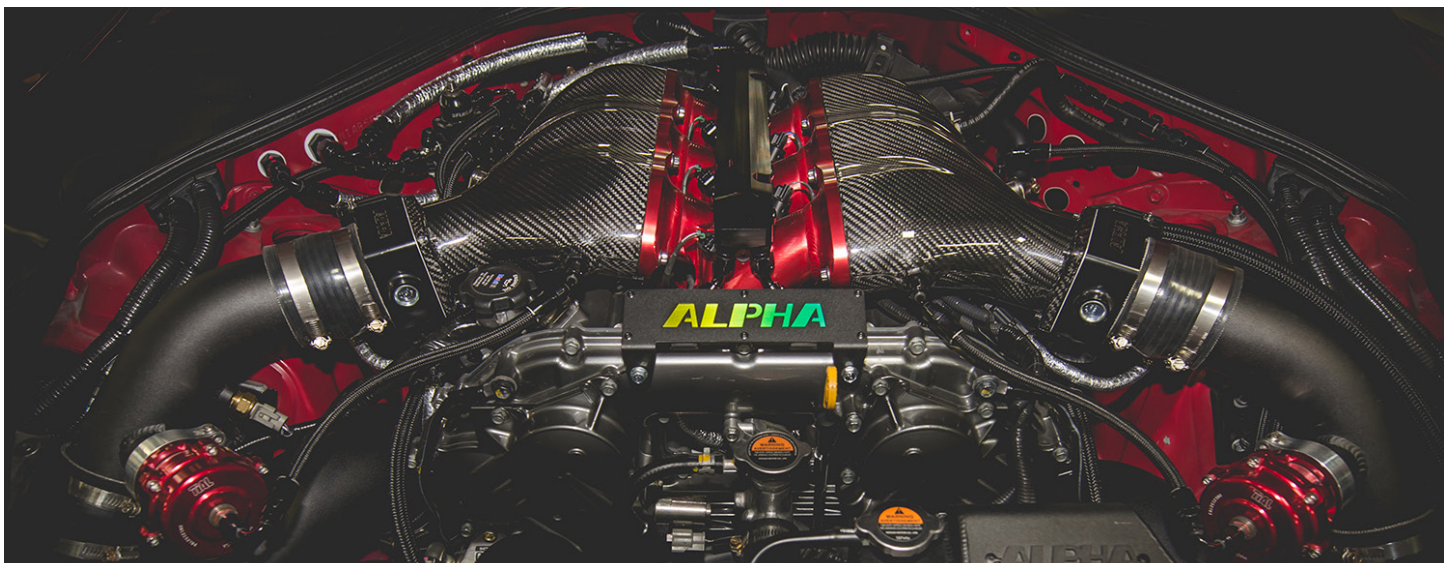
- Ancillary Parts Cleaning and Replacement during New Engine Installation
- If your last engine showed any signs of metal contamination these steps **MUST** be taken!
- Replace the engine oil cooler. Oil coolers **CANNOT** be flushed out completely. AMS/Alpha sells reasonably priced replacement oil coolers for both the Nissan GTR and Mitsubishi EVO.
- If you are re-using your old cylinder head(s) have a reputable machine shop clean them out thoroughly.
- Clean **EVERY** part of the oil system. Everything that comes into contact with oil must be visibly cleaned.
- Flush out the turbo(s) or have them professionally cleaned and inspected by the manufacturer.

POST BREAK-IN OIL CHANGE INTERVALS

- Engine oil changes are an important part of your regular maintenance routine to ensure your investment has the best chance of long-term reliability. It is important to remember, there is no such thing as changing your oil too often. Many of our customers change their oil every 1000 miles or less.
- Once your engine is broken in fully and switched to normal synthetic Amsoil Oil, we recommend changing oil after the first 500 miles, and then every 2500 miles thereafter.
- If your vehicle is used for racing events such as drag racing, half mile racing, or circuit course/track days, we recommend changing the oil after every event.
- For further monitoring of your engine's health, we recommend collecting oil samples after each oil change and having them analyzed by a reputable laboratory such as Blackstone Labs (blackstone-labs.com)

GENERAL PRACTICES

- Always let your engine warm up to normal operating temperatures before allowing the car to enter positive boost pressure, or go to high RPM. If your vehicle does not have an engine oil temperature gauge, please remember that oil temperatures can take much longer than coolant temps to reach normal operating temperature. You will need to use your best judgment on when engine oil is at normal levels.
- Adjust your clutch to factory spec so that it is not always pre-loaded. Also it is a good idea not to disengage the clutch unless the engine is already running with proper oil pressure or accelerated thrust bearing wear can occur.



AMS PERFORMANCE ENGINE WARRANTY INFORMATION, TERMS & CONDITIONS

AMS Performance's engines are the finest built powerplants in the business. We've learned through years of building street and racing engines what works and what doesn't. Your engine is the culmination of this expertise. Because of our experience, we offer a limited warranty against defects in workmanship or materials, covering all AMS parts, for a standard period of 1-Year/12,000-Miles.

No one knows how to install your AMS engine or tune it for maximum, safe power like the team at AMS. We offer economical vehicle transport options and would love to perform all the associated work for your engine installation, break in and tuning here at our headquarters. We understand that this isn't always an option, so we're happy to refer you to for shops across the world that we've worked with and can recommend.

Below you'll find a list of our terms and conditions which are typical to what you'd see from an OEM engine manufacturer. While failures are not at all common, in the instance something doesn't go the way it's supposed to, AMS wants to make sure we're able to determine the exact cause of failure and prevent that from happening in the future. These policies are designed with that in mind and assure you the best possible engine, experience and pricing. We also understand that in the real world, things happen. If there is an issue and something is outside the scope of our limited warranty, we still want to hear from you and will do our best to help on a case by case basis.

AMS PERFORMANCE ENGINE WARRANTY LIMITATIONS ARE AS FOLLOWS:

- Your warranty begins on the day your engine is delivered to the shipping address specified in your order.
- You are responsible for initiating any warranty claims directly with AMS. Make sure you register your new engine with us at <https://www.amsperformance.com/engine-warranty-registration-form/>.
- Your warranty only applies to engine components manufactured and assembled by AMS Performance. OEM or other aftermarket parts used may or may not be covered by that manufacturer's warranty. Our experience allows us to select the best possible components for each build; we only deal with vendors/products that represent the best of their breed. Many parts used in the construction of AMS engines carry the manufacturer's individual component warranties. No warranty is expressed or implied for any customer supplied components.
- Your warranty is only valid if the engine is professionally installed, with receipts provided. AMS is the best possible option to perform this work, but if that isn't a possibility, please contact us so we might recommend a closer facility that is qualified to perform the work.
- Should you experience a potential warranty issue with your engine, it must not be disassembled outside of AMS. Your engine needs to arrive at AMS complete and intact in order for us to inspect for failures. Oil samples and the oil filter are also necessary for diagnosis. Break in oil filters should also be retained until the engine is completely broken in and final tuned. Disassembled engines may not be eligible for warranty coverage.
- AMS may require proof of proper tuning, including data logs of engine during break-in and full power pulls. Reputable tuners will log this information, but it's a good idea to make sure you mention this to your tuner should the work be performed outside of our facility. This data needs to be able to be emailed to us or uploaded to our server.
- Your warranty does not cover any other part of the engine including turbocharger(s), accessories, or vehicle in which the engine is installed. It also does not cover subsequent damage to any component or part of the vehicle in the unlikely event of an engine failure.
- Your warranty does not cover shipping costs incurred to return the engine to our facility. If inspection determines the cause of failure to be outside the scope of AMS' limited warranty, you may be responsible for return shipping costs.
- Your warranty excludes any and all labor expenses needed to remove and reinstall the engine, as well as any components (i.e. gaskets, fluids, etc.) required for reinstallation. Labor to disassemble and reassemble the engine is covered in instances of valid warranty claims.
- Your warranty only extends to you, the original purchaser of the engine and is non-transferable.



- Under the terms of your warranty, you may be held responsible for the cost of engine tear-downs in the event that the claim is determined to be invalid. Additional consideration for goodwill accommodations may be made on a case by case basis.
- Proof of proper maintenance is your responsibility. We provide break in and maintenance instructions with each engine. If you have any questions, please contact us and we'll be happy to provide additional details.
- Your warranty is only valid for the initial 12 month, 12,000 mile period. Warranty claims will not extend the warranty period.

AMS PERFORMANCE'S ENGINE WARRANTY DOES NOT COVER:

Damage caused by:

- Improper engine installation
- Negligence
- Abuse (including over-rev, overheating, lean conditions, detonation, pre-ignition or oil starvation)
- Modification
- Accidents
- Improper or insufficient engine break-in. We will provide you with proper engine break in and maintenance procedures if the installation is not done at AMS. These should be followed precisely. These procedures are the result of countless engine builds and direct experience with your engine platform.
- Improper engine tuning including but not limited to, piston skirt scuffing, damage indicated by head gaskets exhibiting burned or damaged fire ring(s), or damage caused by improper combustion, detonation, pre-ignition or extreme cylinder pressures, as indicated by melted, broken, or eroded pistons, melted or broken spark plugs, or bent wrist pins/ worn wrist pin bushings.
- Improper transmission installation or clutch adjustment.
- Improper or insufficient maintenance, failure to follow scheduled maintenance intervals
- Failure to use or maintain proper type and levels of fluids, fuel, oil, and lubricants, including accelerated wear from contaminated oil or fuel wash.
- Failure of other engine related components, such as fuel injectors or pump, wiring, water pump, oil pump, sensors, or gaskets.
- Failure to replace contaminated oiling components. Oiling components may include oil pump, oil cooler, oil pick up, oil pan, oil-driven adjustable cam gears and tensioners, screened banjo bolts and all other contaminated oiling related components depending on the model year and layout of the vehicle.
- Shipping damage.
- Foreign objects dropped or drawn into cylinders or the crankcase, including water or other fluids.
- Casting flaw(s) or failure
- Engines where mileage cannot be verified due to the odometer being disconnected or vehicles with altered odometers.
- Towing, shipping, rental vehicles, loss of time, inconvenience, loss of use or other economic loss to the extent allowed by law.

STANDARD WARRANTY CLAIM PROCEDURE

All Engine Warranty claims must be initiated directly with AMS Performance for assignment of a return merchandise authorization number (RMA). Once you have an RMA claim number, the engine needs to be returned to our facility for inspection and final determination of claim eligibility. You are responsible for all shipping and handling costs to return the engine back to AMS. Once we receive your engine, we will disassemble it and determine if manufacturing, assembly, parts defect, improper installation, or improper tuning directly or indirectly caused the engine to prematurely fail. After engine teardown is complete AMS will determine whether warranty coverage applies.



ADDRESS FOR ENGINE WARRANTY SHIPPING:

AMS Performance
RMA#
ATTN: Warranty Dept
1760 Metoyer Court
West Chicago, IL 60185

