

Jenbacher reUp engines:

a Remanufacturing (Reman) offering from the experts who built your engine

ENERGY SOLUTIONS. EVERYWHERE, EVERY TIME.



GIVE YOUR ENGINE A NEW LIFE

RELY ON THE MANY YEARS OF EXPERIENCE FROM THE ORIGINAL MANUFACTURER

INNIO*'s Jenbacher* reUp engine offering - our remanufactured (overhauled) engine solutions are executed by the experts who built your engine. At our Jenbacher* Overhaul Technology Center, extensive reciprocating gas engine expertise, fleet operability knowledge, and advanced manufacturing come together to give your engine a new life. Strict quality control and comprehensive testing at our in-house test bench facilities promote exceptional engine reliability and performance, even as we also work to save valuable resources.

INNIO'S JENBACHER OVERHAUL
TECHNOLOGY CENTER AT A GLANCE:

Established since 1995

5 GW of overhauled engine experience

1.2+ million hours of skilled workers' experience

10,000+ square-meter dedicated Remanufacturing space

>80% overhauls delivered with technology upgrades





More than just an overhaul



Delivering quality and OEM capability

- Overhauled and tested to INNIO's factory-quality standards and specifications
- ✓ Exclusive use of Jenbacher OEM spare parts
- ✓ One-year full factory warranty
- Documentation updates for software, wiring diagram, spare parts list, and maintenance



Reducing the environmental footprint

- Resources saved as you give your engine a new life
- √ Reuse of material through refurbishing parts
- Metal recycling (e.g. reuse of old metal for new parts)



Keeping costs and scope in check

- Contractually fixed overhaul costs with a transparent core engine return policy
- √ Predefined scope of supply
- ✓ Full control of your maintenance investment



Offering optional OEM upgrades

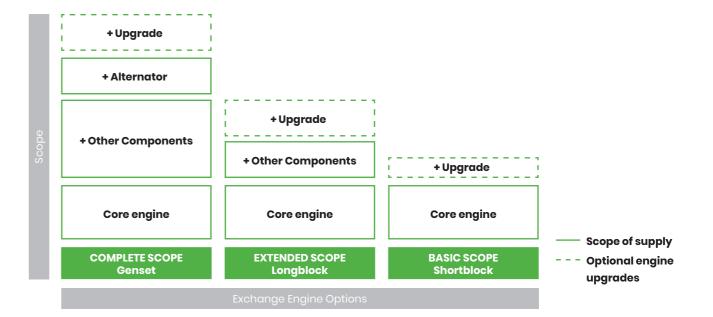
- Increased performance through application of the latest technology
- Optional extended warranty of up to four years for overhauled engines
- ✓ Insurance coverage due to use of Jenbacher OEM parts



Reducing downtime

- √ "Fastest route for a new life" option
- ✓ Upfront delivery of a preassembled exchange engine¹
- √ Cost savings with reduced plant downtime
- √ Faster delivery than a new engine

CHOOSE FROM 3 DIFFERENT OVERHAUL OPTIONS FOR JENBACHER TYPE 2, 3, 4 AND 6 GAS ENGINES





As a leading supplier of gas engine technology, we are constantly improving our products—so we can always offer you the latest technology. And as an OEM, we match components, parameters and component tolerances to each other for high efficiency, reliability and availability.

Combine your Jenbacher unit's overhaul with one or more of our technology upgrades to achieve even greater engine performance and reliability. You can choose from a comprehensive portfolio of conversions, modifications and upgrades directly from your engine manufacturer.





Our exchange program for your Jenbacher engine provides preassembled and overhauled engines for quick on-site replacement. The exchange engine can actually be delivered ahead of schedule to keep your downtime as short as possible. It's the fastest way to achieve a full new life for your Jenbacher engine.

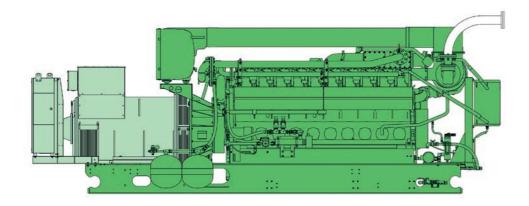


¹Except genset solution

¹ Except genset solution ² On the second to last page, see the details for returning a replaced core

THE COMPLETE SCOPE **GENSET**

INNIO's complete full unit major overhaul solution for your Jenbacher gas engine allows you to plug and play your entire genset with a fully tested, highly functional unit that can be set up quickly at your site.



CORE ENGINE:

- √ Crankcase and crankshaft Overhauled and re-machined to new parts specifications (standard-dimension parts on request)
- √ Cylinder heads Remanufactured reUp heads
- √ Connecting rods New conrods for Type 6 engines only Remanufactured reUp conrods for other engine types (no oversize)
- √ Main/conrod bearings, cylinder liners, piston, camshaft, vibration damper, etc. All new OEM parts

OTHER COMPONENTS:

- ✓ Turbocharger
- ✓ Intercooler
- √ Exhaust gas manifold
- ✓ Ignition system
- √ Starter
- √ Overhauled alternator (optional)
- ✓ Overhauled heat exchanger
- √ New or overhauled interface panel
- √ Air filter and blowby system

LATEST TECHNOLOGY **UPGRADES (OPTIONAL)**

INCLUDED SERVICES:

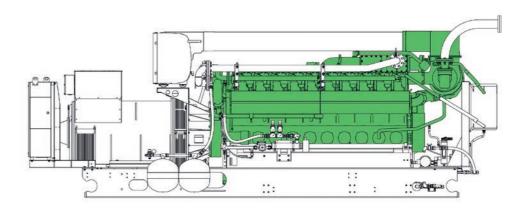
- √ Updated spare parts catalog and wiring diagram
- √ Full unit performance test run with protocol (e.g., efficiency, power)
- √ Updated software
- √ Painting and preservation
- √ Type plate with oversize/undersize dimension information



Overhaul options are available for Jenbacher Type 2, 3, 4 and 6 gas engines.

THE EXTENDED SCOPE LONGBLOCK

Tailored to meet your specific needs, INNIO's extended longblock major overhaul solution for your Jenbacher gas engine offers a comprehensive engine test-run at our Jenbacher test bench facilities.



CORE ENGINE:

- √ Crankcase and crankshaft Overhauled and re-machined to new parts specifications (standard-dimension parts on request)
- √ Cylinder heads Remanufactured reUp heads
- √ Connecting rods New conrods for Type 6 engines only Remanufactured reUp conrods for other engine types (no oversize)
- √ Main/conrod bearings, cylinder liners, piston, camshaft, vibration damper, etc. All new OEM parts

OTHER COMPONENTS:

- ✓ Turbocharger
- ✓ Intercooler
- √ Exhaust gas manifold
- ✓ Ignition system
- √ Starter

LATEST TECHNOLOGY **UPGRADES (OPTIONAL)**

INCLUDED SERVICES:

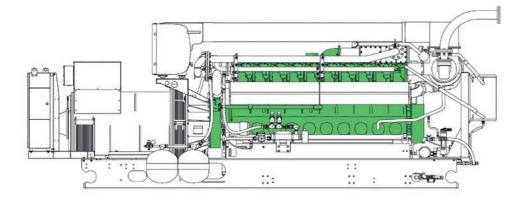
- ✓ Updated spare parts catalog and wiring diagram
- ✓ Full engine test run with protocol (e.g., efficiency, power)
- √ Updated software
- √ Painting and preservation
- √ Type plate with oversize/undersize dimension
- ✓ Packing with transport frame mounting, installed lifting lugs, and shrink foil (if required)



Overhaul options are available for Jenbacher Type 2, 3, 4 and 6 gas engines.

THE BASIC SCOPE SHORTBLOCK

A cost-effective core engine replacement, INNIO's basic shortblock major overhaul solution for your Jenbacher gas engine offers the advantage of fast completion using previously remanufactured parts that are added on site. Additionally, technical upgrades can be implemented as needed.



CORE ENGINE:

- ✓ Crankcase and crankshaft
 Overhauled and re-machined to new parts
 specifications (standard-dimension parts on request)
- ✓ Cylinder heads
 Remanufactured reUp heads
- ✓ Connecting rods

 New conrods for Type 6 engines only

 Remanufactured reUp conrods for other engine types

 (no oversize)
- ✓ Main/conrod bearings, cylinder liners, piston, camshaft, vibration damper, etc.
 All new OEM parts

LATEST TECHNOLOGY UPGRADES (OPTIONAL)

INCLUDED SERVICES:

- √ Leakage test and lubrication turn
- √ Updated spare parts catalog
- \checkmark Painting and preservation
- √ Type plate with oversize/undersize dimension information
- ✓ Packing with transport frame mounting, installed lifting lugs, and shrink foil (if required)





Overhaul options are available for Jenbacher Type 2, 3, 4 and 6 gas engines.

NEED A CUSTOMIZED SOLUTION?

FACING AN UNPLANNED EVENT?
INNIO — THE EXPERT WHO BUILT YOUR ENGINE —
IS HERE FOR YOU...

...supporting your need to quickly bring your site back to full operation with customer-specific repair solutions or a spare engine.



ON-SITE REPAIRS

- √ New core engine with reuse of original engine parts
- Fastest route for core engine repair, with the selected engine version available in stock and ready to ship the next day
- Scope: Core engine (premium shortblock with all new parts; standard dimension only) and reuse of parts from the original unit



- ✓ Disassembling at INNIO's Jenbacher Overhaul Technology Center
- Cost visibility and individual offering after disassembly and investigation
- √ Scope: Replacement of defective parts with mix of reUp and new OEM spare parts





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²OUR POLICY FOR RETURNING YOUR REPLACED CORE ENGINE

The replacement procedure works as deposit system. An exchange engine assembled and delivered by INNIO's Jenbacher Overhaul Technology Center replaces your original unit on-site. Upon the overhauled engine's arrival at your site, your previous engine is disassembled from the module, replaced by the overhauled unit, and then returned to INNIO's Jenbacher Overhaul Technology Center. Each replacement engine carries a deposit that is credited once the former engine is returned.

To receive your exchange program deposit refund, you must return your replaced original core engine to INNIO within three months (for European customers) or four to six months (for non-European customers) after the arrival of your exchange core engine. The original core engine must be shipped fully assembled (in the same state of assembly as the exchange unit you received).

Note: If the returned core engine is incomplete, excessively damaged, cracked, welded, corroded, mechanically machined, or a non-OEM core, your deposit will be retained.

INNIO* is a leading solutions provider of gas engines, power equipment, a digital platform and related services for power generation and gas compression at or near the point of use. With our Jenbacher* and Waukesha* product brands, INNIO pushes beyond the possible and looks boldly toward tomorrow. Our diverse portfolio of reliable, economical and sustainable industrial gas engines generates 200 kW to 10 MW of power for numerous industries globally. We can provide life cycle support to the more than 52,000 delivered gas engines worldwide. And, backed by our service network in more than 100 countries, INNIO connects with you locally for rapid response to your service needs. Headquartered in Jenbach, Austria, the business also has primary operations in Welland, Ontario, Canada, and Waukesha, Wisconsin, US.

For more information, visit: innio.com/jenbacherreupengines



