

COMPRESSORS

Genuine Bendix Remanufactured
AHEAD OF THE CURVE

valves

compressors

air dryers

electronics

foundation
brakes

wheel end

vision systems

Bendix®

BENDIX REMANUFACTURED COMPRESSORS

QUALITY. COMMITMENT. HIGH PERFORMANCE.

When you're looking for cost-effective solutions that can add value to your bottom line, remanufactured compressor parts can be the answer.

But not every remanufactured compressor is created equal.

With rebuilt compressors, it may build air now, but for how long?

That can mean downtime and significant expense for you. You can't take each one apart and see what's inside, but that's what we do at Bendix.

Bendix Reman Compressors: Premium Performance and Engineering

Our commitment to remanufacturing quality begins with ongoing research to develop the most advanced technologies, and continues by integrating that technology with our manufacturing expertise, state-of-the-art equipment and processes at a dedicated compressor remanufacturing center of excellence in Huntington, Indiana. **Our facility is the only authorized remanufacturer of Bendix compressors ... no one else is authorized or approved to remanufacture genuine Bendix compressors.**

The result is an economically priced remanufactured genuine Bendix compressor that incorporates critical engineering updates to give you superior design and top-notch performance.

Plus every genuine Bendix remanufactured compressor features our comprehensive Bendix warranty protection from one of the best programs in the industry.

To really appreciate the level of quality and value built into every genuine Bendix remanufactured compressor, it's important to understand the difference between remanufactured and rebuilt.

GENUINE BENDIX. REMANUFACTURED TO A HIGHER STANDARD.

Why Others Simply Don't Measure Up

Many shops have the ability to rebuild, usually one compressor at a time, using ordinary shop tools and equipment. Although a non-genuine compressor builder may provide a product which is "good enough" to drive away, these compressors do not meet the Bendix functional manufacturing specifications that have long been held as the industry standard.

Since the components and manufacturing methods from others may not be based on Bendix and OEM requirements, the durability and reliability of the product may be compromised. Genuine Bendix remanufactured compressors are supported by technologically-savvy and proven engineering knowledge that identifies the compressor's critical design characteristics, engine application, and vehicle brake system operation. This ensures that no changes are made that will compromise performance or durability.

Driven to Higher Standards

Bendix remanufacturing takes place in a controlled production environment. Each compressor is put through a rigorous process that begins the moment it enters our door. If it doesn't measure up to Bendix standards and continuous testing for tolerance, performance or dependability at any time along the process, it's discarded.

Bendix is the only remanufacturer of Bendix compressors that has access to genuine, new components to supplement for core shortages and wear component replacement. And, if technology advances have been made since the part was originally produced, we automatically build them into the remanufactured part. So it's not only as good as the original – it may be even better.

Bendix relies on the same types of sophisticated testing equipment used to check new components. This ensures that the most exacting standards are met and maintained. The result is consistent quality in not only every remanufactured Bendix compressor, but in our complete line of remanufactured products.



Manufacturing

"The Bendix Express" is a highly unique, ergonomically-focused, state-of-the-art, high-volume assembly line designed with lean manufacturing concepts. This design supports increased mistake-proofing as well as continuous improvement objectives. It also practices 100% final assembly testing and has flexible painting and packaging options.



^ This advanced computer interlock system will stop the process immediately if a critical step is missed at any stage of assembly. This ensures that out-of-spec compressors will never leave our plant.

< Our lean assembly line concept allows workers to be an integral part of the process, constantly seeking ways to build a better compressor.

WHAT MAKES BENDIX REMANUFACTURED COMPRESSORS THE BEST?

The Bendix compressor remanufacturing Center of Excellence in Huntington, Indiana, is an ISO14001, QS9000 and TS16949 certified facility. This certification requires well-documented processes, sophisticated Six Sigma quality standards and adherence to an established set of quality processes, ensuring that each compressor is remanufactured under consistent, high-quality methods. Many rebuilders are simply unable to achieve or maintain the rigorous quality assurance and management standards necessary for this quality certification.

Quality all the way



< Used compressors are disassembled and inspected for damage. Any component that doesn't measure up will not make it beyond this point.



The Cylinder Head gasket surface is put through a fine grinding process to remove minor imperfections, ensuring that it meets our high standards.

Every step of the remanufacturing process means careful,

 **Remanufacturing** All components are inspected and then replaced or remanufactured to the highest Bendix OEM manufacturing and product specifications, long the industry standard. Since Bendix manufacturing methods and product engineering records are proprietary, it is virtually impossible for any other rebuilder to meet these standards.

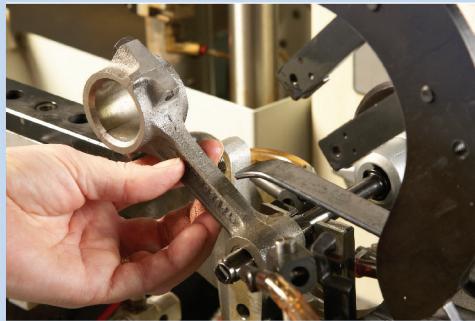
 **Testing** All Bendix remanufactured compressors meet or exceed OE manufacturing functional, end-of-line test specifications. Bendix does not share its manufacturing test specifications. Therefore, even if other rebuilders could test their products, they would be unable to guarantee testing to these extremely stringent requirements.

 **Replacement** Bendix discards and replaces all wear components – o-rings, gaskets, piston rings, bearing inserts, sleeve bearings, unloader springs, seals, studs, lock washers, pipe fittings, inlet and discharge valves, inlet and discharge springs, wrist pin plugs and safety valves – with new components in all remanufactured compressors. As noted above, other rebuilders do not have access to the Bendix components, manufacturing standards or product specifications to guarantee they can meet original equipment specifications.

 **Upgrades** During the remanufacturing process, genuine Bendix compressors are upgraded with the latest manufacturing methods, technologies and product enhancements, often making our remanufactured product better than the original. These upgrades are done even if the replaced compressor did not have the enhancement when new. Many times these upgrades are made in the remanufactured product in conjunction with the change in the original equipment products. Only Bendix can implement these enhancements in the remanufactured products because, once again, the proprietary nature of the product manufacturing and engineering specifications does not allow other rebuilders access to this information or these components.

 **Substitutions** Finally, if there are insufficient remanufactured components to produce a complete compressor assembly, Bendix can, and does, substitute new assemblies as remanufactured.

down the line...



Bendix® Tu-Flo® 550/750 compressor components are carefully machined to our precise specs.

> All Bendix remanufactured compressors are put through a battery of final tests to ensure they meet our high standards. If a compressor fails here, it will never have a chance to fail you, because it will be scrapped.



special attention to detail plus adherence to blueprints and product specifications.

DO YOU KNOW WHAT'S INSIDE YOUR COMPRESSOR?

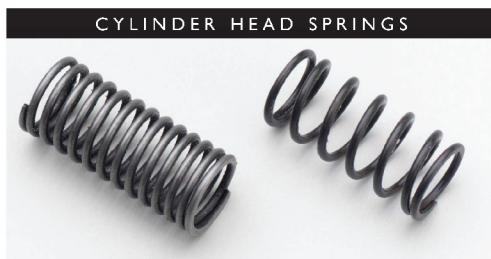
The components shown here are from actual products bought right off the shelf, and these are just a small sample of what we find every day. Because pictures can tell a thousand words, we'll let these point out the end result of compromising on anything other than a genuine Bendix remanufactured compressor.



Non-Genuine

Genuine

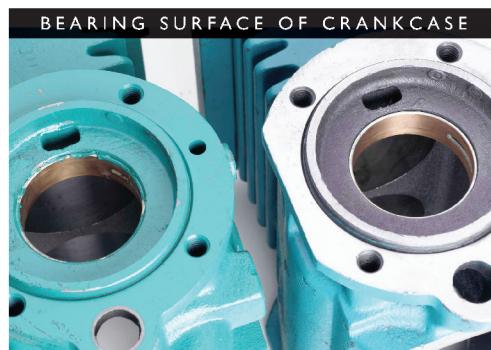
Reusing discharge valves is a bad way to cut corners – but that's just what this rebuilder did. The worn discharge valves found in this “new” rebuilt compressor can shorten the life of the compressor and can result in catastrophic compressor damage. If the discharge valves fatigue and break apart, the valve material can damage the crankcase bore and pistons. We never reuse the discharge valves in a genuine Bendix remanufactured compressor.



Non-Genuine

Genuine

The spring this competitor chose does not meet the genuine Bendix requirements. Improper spring rates and coatings can lead to slower buildup time, higher oil passing, and long-term durability/reliability concerns. At Bendix, only components engineered to meet our stringent design requirements are used in remanufacturing.



Non-Genuine

Genuine

Take a close look at the competitor's crankcase surface versus Bendix. The poor paint masking evident in the competitive rebuilt unit contaminates the bearing surface and sealing surface, which can lead to bearing fatigue and seal leakage. Furthermore, the paint allowed to enter the oil feed hole can cut off the compressor's oil supply, seizing the compressor. Bendix carefully masks all the critical surfaces.



Non-Genuine

Careful inspection and measurements revealed that this rebuilder did not properly grind the crankshaft, which exhibits a stress riser. This concentrated stress can result in fatigue, ultimately leading to a broken crankshaft.

At Bendix, all crankshafts are inspected for size and damage and, if accepted, ground and polished to Bendix standards.



Non-Genuine

Genuine

It's obvious by the shape that this non-genuine snap ring and thrust washer aren't equivalent; even more, the material coatings aren't adequate either. There's no assurance without extensive testing that this rebuilt compressor can perform as intended. Premature wear and crankshaft lockup can result.



Non-Genuine

The ring groove on this piston is clearly damaged, but was good enough for this independent rebuilder to use in its rebuilt compressor! This defect can lead to excessive ring wear and oil passing and can compromise compressor buildup time. In addition to the obvious defect, the use of aluminum piston and rings in this rebuilt compressor may lead to piston galling because of material incompatibility.

DON'T GET BURNED BY
INFERIOR REBUILT PARTS.
A TRUE STORY.

This unfortunate, yet familiar, scenario happens all too often. But Carl Dreyer says it's the last time he'll fall victim to bait-and-switch tactics.

Dreyer, owner of Carl E. Dreyer & Company, a small dump truck and excavating fleet based in Sellersburg, Indiana, called his local distributor to order a new air compressor for his 1997 International. "I said I had an International single-axle 4700 series with a Bendix compressor, and I gave him the part number I needed."

The distributor gave him the compressor in packaging identical to the type used by Bendix. Though torn open at the top, the box carried the Bendix part number he ordered in addition to the distributor's label, and the compressor inside was the distinct Bendix blue color he was expecting.

Dreyer paid for his purchase – including the standard core charge, confident he'd get at least partial credit back once he removed and returned the old unit – and went back to his shop to install it.

"I've been driving trucks since 1965 with Bendix parts," Dreyer said. "When it says Bendix, it's as good as it gets. That's what I've always thought about it, and that's why I wanted a Bendix compressor."

After installing the new compressor and returning the old core, Dreyer was denied any value because it was slightly damaged. The distributor told him that the manufacturer of the compressor he purchased does not give credit for damaged cores. An authorized Bendix distributor, carrying genuine Bendix components, would have given him partial core credit, at minimum, and Dreyer knew that. That's when he realized the compressor he purchased was not a genuine Bendix.

"I was mad at myself for getting misled like that, and I've learned a valuable lesson," Dreyer said. "From the packaging, to the part number, to the actual color of the compressor, it looked just like the real thing."

With the presence of rebuilt compressors on the rise, consumers like Carl Dreyer and others can no

longer feel confident that the part number and a familiar coat of paint are enough to guarantee they are getting what they intended.

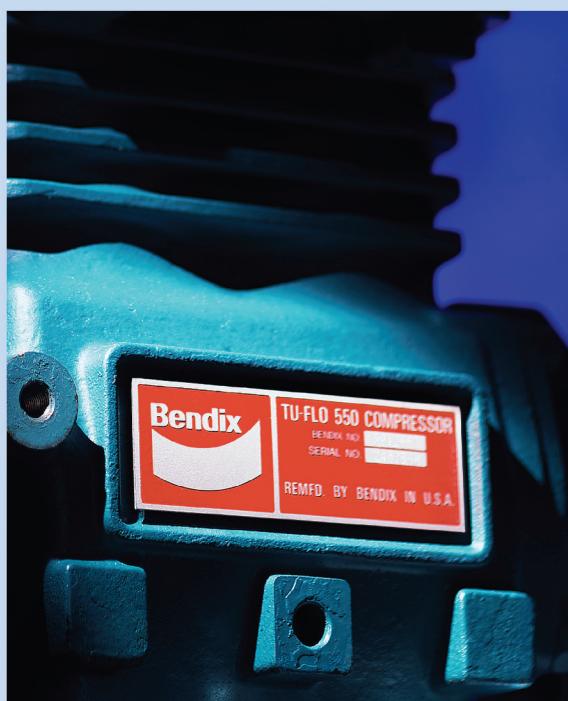
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– CARL DREYER,
OWNER, CARL E.
DREYER & COMPANY

< Check to make sure you see the distinctive metal nametag with the words "remfd. by Bendix in U.S.A."



Dreyer now knows that one of the easiest ways to verify the compressor you are buying is a genuine Bendix is to check the distinctive metal nametag for the words "remfd. by Bendix in U.S.A." Only Bendix can make that claim. "Next time, I'll be sure I'm dealing with an authorized Bendix distributor and clearly ask for, and receive, a genuine Bendix," says Dreyer.

At Bendix, our commitment to quality doesn't end when the compressor leaves our location. We stand behind every genuine Bendix remanufactured compressor with ...

- *complete warranty protection from one of the best programs in the industry*
- *a comprehensive core return and allowance program*
- *our dedicated, 100% ASE-certified sales and service teams*
- *a veteran field technical support team to troubleshoot and resolve your air brake system challenges*
- *a technical support phone line – representing over 80 years of comprehensive collective experience – to supply answers to your technical questions*

In addition to the sales and service professionals you deal with face-to-face, there is an entire team working behind the scenes to produce the top quality Bendix products on which you can depend. From research and development to engineering, from production to quality control and marketing, rest assured, you have over 75 years of practical experience hard at work for you.

Genuine Bendix compressors are only available through authorized Bendix distributors. Look for the distinctive tag that says "remfd. by Bendix in U.S.A." to ensure your product will live up to the rigorous Bendix standards.

To learn more about Bendix remanufactured compressors or to find the authorized distributor nearest you, talk to your Bendix account manager, call 1-800-AIR-BRAKE (1-800-247-2725) or visit www.bendix.com.

