



# WHY YOU SHOULD MAKE THE SWITCH TO REMAN FINAL DRIVES



TEXAS FINAL DRIVE / FINAL DRIVE PARTS / WOODLAND FLUID POWER



## INTRODUCTION

Final drive motors in machinery are critical to power transmission, making it possible for even the heaviest equipment to move easily. These hydraulic motors are typically found in construction equipment, agricultural machinery, and forestry machines, just to name a few. The main purpose of a final drive is to generate rotational power to drive wheels or tracks.

This conversion provides mobility for even the most massive machines, along with highly controlled movement and precision positioning. Final drive motors play a vital role in ensuring the machinery's overall functionality and productivity, making them essential components in the world of heavy-duty and compact equipment.

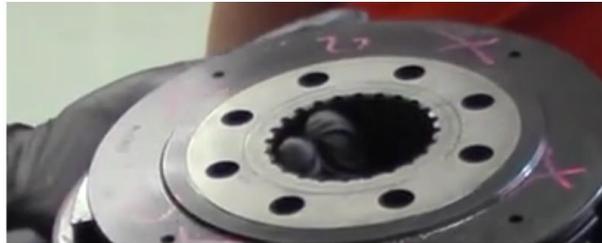
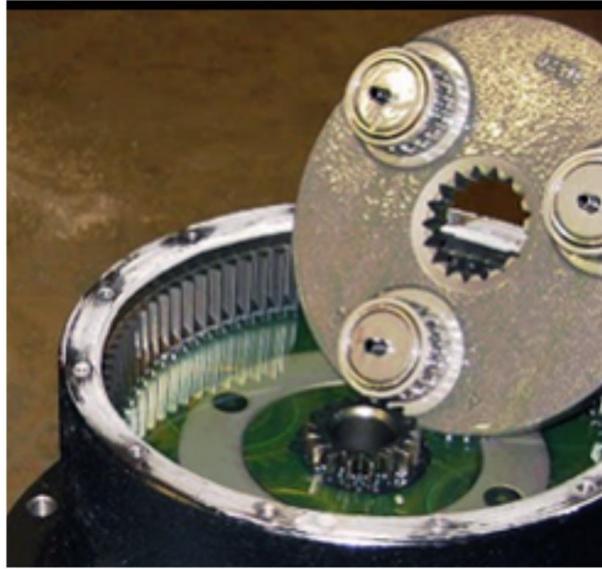
In this eBook, we will present the remanufacturing process then discuss the benefits of reman final drive motors as compared to used or new.

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## WHAT IS A REMAN FINAL DRIVE?

A remanufactured final drive motor is a hydraulic motor that has been disassembled, cleaned, inspected, and rebuilt to meet or exceed original equipment manufacturer (OEM) specifications. It is not a new final drive, although a high quality reman final drive can match the performance and expected life of a new one at a fraction of the cost.

And a reman final drive will last much longer than a used final drive, whose life expectancy may be extremely short. Why is reman better than used? The answer to that lies in the reman process.

## THE REMAN PROCESS

At Texas Final Drive, the reman process is a multi-step procedure followed by our highly skilled, experienced technicians. It is fully documented for each final

drive motor and represents our many years of experience at working with final drive motors.

## RECEIVE THE CORE

The remanufacturing process here at Texas Final Drive begins when we receive a core. Smaller cores are typically shipped in foam-filled boxes or wooden crates, while larger cores are shipped in crates or pallets. Once we receive a core, we log it into our system. That begins a long documentation trail that allows us to trace everything that was done and discovered about a final drive.



## PREPPING THE CORE



Once the core is in our system, we prepare it for disassembly. Final drives are usually covered in hardened material built up over time. This hardened material includes dried mud, clay, and other debris from a typical worksite. We use a needle scaler to remove the bulk of this material.

After the hardened material is removed, the core is placed in a steam wash cabinet to remove any remaining debris, degrease it, and thoroughly clean the exterior. The additional cleaning brings the core closer to disassembly, but there is one more step.



Before opening the final drive core, it will undergo sandblasting as the last cleaning step. The exterior of the final drive motor will be bare metal with no scaling, grease, or paint remaining. Only then is the final drive motor opened up.

## DISASSEMBLY AND INITIAL INSPECTION

Disassembly begins once the core is thoroughly cleaned. All the parts that come from a single final drive are kept together. Initial inspection takes place, and any obvious issues will be documented. Eventually, every part of the final drive is thoroughly evaluated to determine what caused it to fail. In addition, certain parts are automatically discarded to ensure they are replaced with new ones, including seals and bearings.

## PARTS CLEANING

The final drive cleaning is still ongoing! All of the components must be completely cleaned so that their condition can be accurately assessed. Some final drive components are put through a high-powered parts washer, while others are manually cleaned to remove rust or scaling.



## SECOND INSPECTION

After the parts are clean, our technicians inspect each one to see if it is reusable, needs some work to be reusable, or must be discarded. The technicians look for different things depending on the type of part. For a set of planetary gears, they check the condition of the gear teeth for cracks or excessive wear. For a cam ring, they look for signs of abrasion or scarring. Distributors are checked for flatness and surface finish.



Depending on the type and condition, parts will be replaced, others will be remanufactured parts, and still others will be replaced with custom made components from our in-house machine shop. For example, distributors may be placed on a lapping table to restore surface finish and flatness, while lock rings and hubs may be custom manufactured.



## REASSEMBLY

After the parts are evaluated and replaced/remanufactured as needed, the final drive core is reassembled and ready for quality testing. Great care is taken during assembly to ensure proper alignment, torque, etc. Even some critical fasteners are installed with Loctite.

## QUALITY CONTROL



After the reman final drive motors are finished, they go to quality control. There they undergo pneumatic leak detection, calibration inspection, and hydraulic performance testing. The hydraulic performance testing includes RPM performance, brake engage and release pressure, lead test, idle test, case drain flow, and dual-speed performance (for two-speed final

drives).

The results of each test are documented in real-time to ensure traceability. If a final drive fails a test, it is sent back for troubleshooting. Only drive motors that pass all the quality control tests can proceed to the next step.

## PAINTING

After a core has passed all of our quality control tests, we give it one more external wash and then repaint it. This way, the core runs like a new motor and looks like one as well.

## PACKAGING

Once the paint is dry, the core is ready to send out. We package the cores up carefully, so they won't be damaged during shipping, and send them to our customers.

***Now let's look at the benefits of reman final drives!***



## COST-EFFECTIVENESS

The primary benefit of remanufactured final drive motors lies in their cost-effectiveness.

**Reduced Material Costs:** Remanufacturing utilizes existing components, reducing the need for raw materials and minimizing waste. This translates to lower material and lower costs for you.

**Simplified Manufacturing Process:** Remanufacturing involves a streamlined process focused on restoring and refurbishing existing components rather than manufacturing entirely new final drives, simplifying labor and reducing labor costs and manufacturing overhead that are then passed on to you.

**Economies of Scale:** Remanufacturing often involves processing multiple final drive motors simultaneously, allowing for economies of scale that further reduce costs per unit.

**Reduced Lead Times:** Remanufacturing takes less time than manufacturing new final drive motors, reducing lead times and allowing for faster equipment repairs or upgrades. This reduces downtime and increases productivity for your equipment.

**Efficient Energy Usage:** Because of the high performance of reman final drive motors when compared to rebuilt or used, reman final drives will operate more efficiently and require less energy, translating into cost savings for you.

*Due to these factors, remanufactured final drive motors typically cost 30-50% less than new OEM final drive motors while maintaining similar performance and quality. This cost savings can be significant for businesses and individuals operating machinery that relies on final drive motors.*



## RELIABILITY AND PERFORMANCE

Remanufactured final drive motors offer several reliability and performance benefits:

**Quality Assurance:** Reputable remanufacturers such as Texas Final Drive adhere to strict quality control standards. They thoroughly inspect, disassemble, clean, and rebuild each component to meet or exceed original equipment manufacturer (OEM) specifications. This ensures a high level of reliability that keeps your equipment moving and productive.

**OEM Standards:** Many remanufactured final drive motors are brought up to the latest OEM standards, incorporating improvements and updates that may not be present in older models. This can enhance performance and reliability compared to the original motor.

**Reduced Downtime:** Quick availability of remanufactured motors minimizes equipment downtime. This ensures that your machinery remains operational and your projects on schedule.

**Warranty Coverage:** Reputable final drive motor remanufacturers typically offer warranties on their products, providing customers peace of mind regarding the remanufactured motor's reliability. Texas Final Drive has a no-hassle, one-year warranty that covers parts and service.

**Performance Optimization:** During remanufacturing, components are inspected and replaced as necessary while other parts are restored to OEM standards. This leads to improved performance compared to aging or worn-out original and repaired motors.

**Extended Lifespan:** Reman final drive motors can extend the lifespan of machinery as they provide long-term reliability and reducing the how often final drive motors have to be replaced.

*In summary, remanufactured final drive motors offer reliability through quality assurance, cost savings, and warranty coverage. They enhance performance by incorporating updates, reducing downtime, and optimizing component functionality. These benefits make remanufactured motors a practical and dependable choice for heavy machinery owners and operators.*



# ENVIRONMENTAL IMPACT

Remanufactured final drive motors have a positive environmental impact by reducing waste, conserving resources, and minimizing the ecological footprint associated with manufacturing new components. Here are the specific ways in which remanufacturing contributes to environmental sustainability:

**Waste Reduction:** Remanufacturing involves repairing and restoring used components, diverting them from landfills, and reducing the overall volume of waste generated -- which conserves valuable resources and reduces the environmental impact of waste disposal.

**Resource Conservation:** Remanufacturing minimizes the need for raw materials extraction and processing by reusing existing components, reducing energy consumption, water usage, and greenhouse gas emissions associated with resource extraction and manufacturing processes.

**Environmental Footprint Reduction:** The environmental footprint of remanufactured final drive motors is significantly smaller than that of new OEM final drive motors. This benefit is due to the reduced waste generation, resource conservation, and lower energy consumption associated with remanufacturing.

**Extended Product Life Cycle:** Remanufacturing extends the life cycle of final drive motors, delaying their replacement with new components. This further reduces environmental impact by minimizing the need for new manufacturing and the associated resource extraction and processing.

**Energy Efficiency:** Reman final drive motors provide excellent performance and efficiency, which reduces their overall energy consumption.

*Overall, remanufacturing final drive motors aligns with sustainable practices by promoting resource efficiency, waste reduction, and a smaller carbon footprint. This contributes to a greener and more environmentally responsible approach to heavy and compact machinery maintenance and operation.*



# CONCLUSION

Reman final drive motors are significantly less expensive than new final drives while still held to the same high-quality standards as new OEM motors – at a fraction of the price. And using them conserves resources and reduces the amount of waste going to landfills.

Also keep in mind that when most final drive motors are repaired only the source of the issue is replaced or refurbished. When a final drive motor undergoes a complete remanufacturing process, the entire motor undergoes inspection for signs of wear and other problems. And only new parts or parts remanufactured to like-new condition are used in reman final drive motors.



## READY TO MAKE THE SWITCH?

If you are ready to make the switch to reman final drive motors for your equipment, contact us at 281-968-4773 or email us at [sales@texasfinaldrive.com](mailto:sales@texasfinaldrive.com) -- and if you have something specific in mind, fill out a [rapid request for quote form](#).

