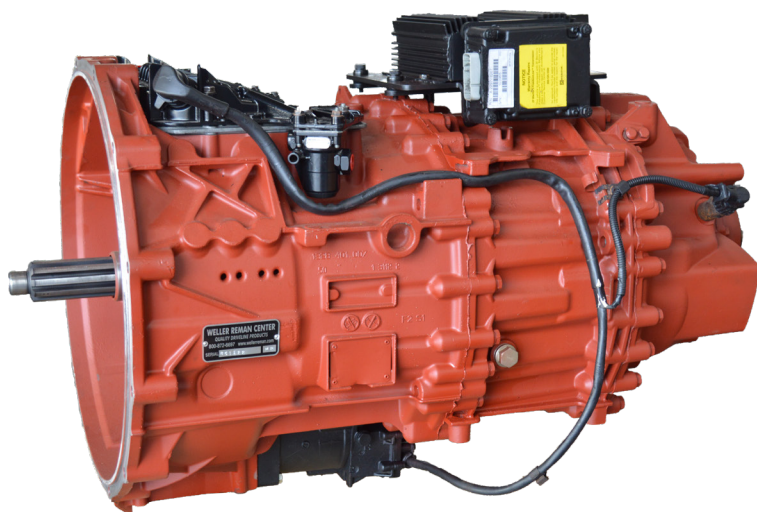


# WELLER

*100% Associate Owned*



## **OWNER'S MANUAL: ZF AS-TRONIC AUTOMATED MANUAL TRANSMISSION**

Tag # \_\_\_\_\_

Mileage In: \_\_\_\_\_

Date Installed: \_\_\_\_\_

# QUALITY REMANUFACTURED

## TRANSMISSIONS AND TRANSFER CASES

Quality Remanufactured Products by WELLER for the Following Applications

*Medium to Heavy Duty*

Eaton/Fuller • Meritor • Volvo (Volvo Truck Compatible Part) • Mack • TTC Spicer • ZF • Clark • IHC • Isuzu • GMC

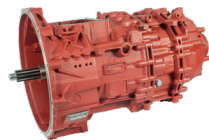
*A complete line of Auxiliaries and Transfer Cases*



## AUTOMATED MANUAL TRANSMISSIONS

Quality Remanufactured Products by WELLER for the Following Applications

Eaton Cummins Endurant • Eaton UltraShift PLUS • Detroit DT12 • Volvo I-Shift\* (Volvo Truck Compatible Part) • Mack mDRIVE\* • Meritor Freedomline\* • ZF AS-Tronic\*



## AUTOMATIC TRANSMISSIONS

Quality Remanufactured Products by WELLER for the Following Applications

Allison Transmissions\* • Clark • Funk • CAT • ZF



## DIFFERENTIALS

Quality Remanufactured Products by WELLER for the Following Applications

*Complete Stock for quick exchange*

Meritor/Rockwell • Dana • Spicer • Eaton • Volvo (Volvo Truck Compatible Part) • Mack • Freightliner/Alliance • Clark • GMC • Industrial/Off Road • Terex

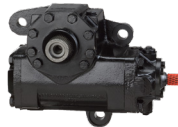


## STEERING GEAR BOXES AND PUMPS

Quality Remanufactured Products by WELLER for the Following Applications

*Tested on a State-of-the-Art XLT3 Road Simulator*

TRW-Ross • Saginaw • Sheppard • Vickers Pumps ZF • Eaton • Luk



## ELECTRONICS

Quality Remanufactured Electronics by WELLER for the Following Applications

*All units are tested for performance and quality.*

Cummins • Eaton • ZF • Allison\* • Volvo/Mack (Volvo Truck Compatible Part) • Detroit • PACCAR



# PROGRAM DESCRIPTION

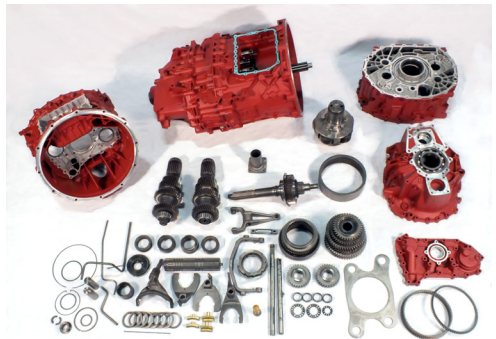
As your company focuses on quality repairs and parts, put Weller on your team! Together we can eliminate downtime with complete coverage of all your drivetrain needs. That's the Weller Way – partnering in select relationships that successfully provide the customer with the best product and service. No hype! Just a true competitive advantage through quality and availability.

With 600,000 square feet of remanufacturing facilities and 37 nationwide company-owned distribution locations, we are committed to our customers. Weller's Unit Exchange program maximizes uptime with a 20,000+ unit stock plan of remanufactured transmissions, differentials, steering gears, PTOs, and hydraulic pumps ready to ship.

Consider becoming a partner in the industry's leading drivetrain program. Contact us today! With no commitments and no minimums, we are the Drivetrain Partner for you!

## **Our reman program includes:**

- 100% disassembled, cleaned, and inspected
- Remanufactured with only the highest quality parts available.
- Gearsets are replaced in sets only
- All NEW bearings, gaskets, seals and washers
- Our reman program includes:
- All Makes Coverage – One Call
- Same Day/Next Day Delivery
- Obsolete and Discontinued Specialists
- Nationwide One-Year, unlimited mileage, parts and labor warranty



# WELLER APP



Designed with our customers in mind, we wanted to bring a user-friendly way for you to access the information you need when you need it most.

## Features

**Schedule a Core Return:** Easily schedule core returns from your phone!

**View Warranty Status:** Have a warranty you want to know the status of? View all of your warranties with the Warranty Tracker.

**Quickly Locate a Store:** We are always adding new locations to better serve you.

**Weller Literature:** Find our Owner's Manuals and other sales literature like our Core Return Program and sales catalogs

**Training Videos:** Visit our growing collection of videos designed to educate and prevent common issues across a wide range of our products.

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## How to Download

The new Weller Truck Parts app can be downloaded for free from the Apple App Store and Google Play.

Supported devices include iPhone (iOS 11.0 or later) and Android smartphones (5.0 Lollipop and up).

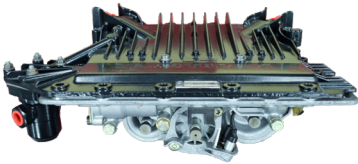




# AS-TRONIC ELECTRONICS

As we move to the future, the landscape of our industry is changing. Electric trucks and components are becoming more of a reality every day. We root our business in service before and after the sale, providing you with the units you need when you need them. Due to the increasing demand for electronic products, we are growing to a dedicated Electronics building! The new building boasts 10,000+ square feet of space, solely dedicated to the production of electronics and mechatronics.

This is a vast expansion from our current production area and allows us to meet demand to the Weller standard for years to come.



*Reman GS3 - GS3.3*



*ZMTEC*

**Quality Parts  
Offered  
Individually by  
Weller**

# INSTALLATION GUIDE

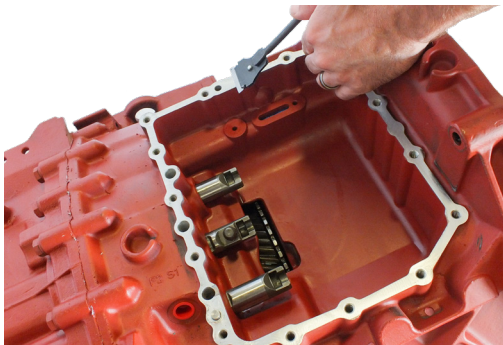
VEHICLE MAKE AND MODEL \_\_\_\_\_ TRANSMISSION ASSEMBLY NO. \_\_\_\_\_

MECHANIC'S NAME \_\_\_\_\_ VEHICLE ID NO. \_\_\_\_\_

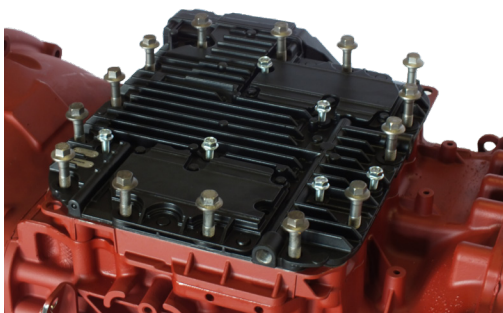
- I. **Transmission contains NO lubricants. Recommend using ZF-Ecofluid M. See ZF lubricants manual TE-ML 02 for complete list.**
- II. **This transmission contains NO speed sensors. Be sure to remove speed sensors from your exchange unit.**
- III. **This transmission contains NO GS3 or GS3.3. Be sure to remove GS3 or GS3.3 from your exchange unit.**
- IV. **This transmission contains NO clutch actuator. Be sure to remove and test from your exchange unit.**
- V. **Check engine mounts for wear.**
- VI. **Check clutch and related components**
  - ☐ Inspect all clutch related parts for wear. (Forks, pins, hydraulics, etc.)
  - ☐ Did the flywheel get resurfaced?
  - ☐ Inspect the dowel pins for wear
  - ☐ Ensure no grease or oil is on any friction surface!
  - ☐ Reference pg. 12 for correct throw out fork grease procedure
  - ☐ Install a high temperature pilot bearing
- VII. **Check driveline for worn or failed components**
  - ☐ U-Joints
  - ☐ Carrier bearings
  - ☐ Yoke seal surface and splines
  - ☐ Ride height
  - ☐ Driveline phasing
  - ☐ Driveshaft balance
  - ☐ Torque transmission output flange bolts to 89 lb-ft
- VIII. **PTO (if equipped)**
  - ☐ Is the PTO leaking?
  - ☐ Is your PTO properly shimmed? (Backlash of .06-.029 inch or as specified by PTO Manufacturer)
  - ☐ Shim PTO with proper selective gaskets. PTO cover gaskets or cork gaskets should NOT be used
  - ☐ Flush PTO out. PTO's are a great catch-all for failed transmission parts
- IX. **Transmission heat exchanger(if equipped)**
  - ☐ Clean and flush cooler system
- X. **Air system**
  - ☐ Check air dryer
  - ☐ Check truck pressure & inspect for leaks
  - ☐ Check air filter screen on GS3

# INSTALLATION OF THE GS3

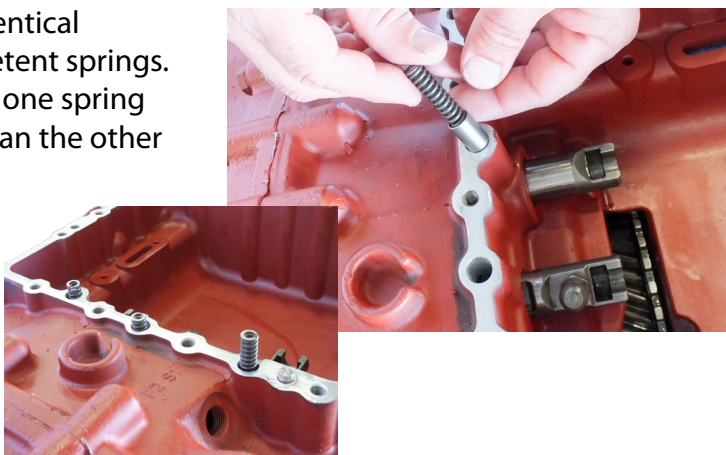
1. Inspect the gasket surfaces of the GS3 and transmission to ensure a clean surface.



2. Identify the position of all 3 shift rails with the center shift rail finger straight up.

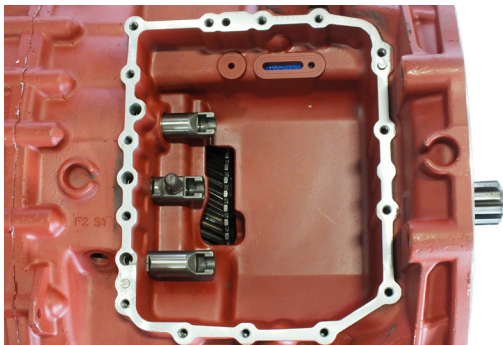


3. Install the 3 identical detents and detent springs. It is normal for one spring to sit higher than the other two.

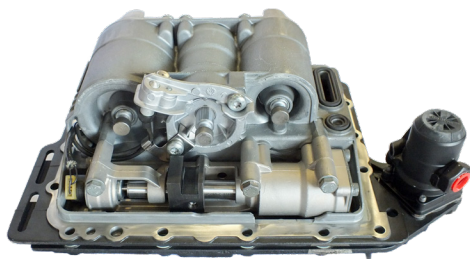


# INSTALLATION OF THE GS3

4. Install a new gasket.



5. Align the piston rods of the GS3 to match the shift rails of the transmission. Center the selector gate with the center piston rod. Measuring each shift rail and piston rod will limit the possibility of error.



6. Carefully install the GS3 on to the transmission ensuring that the piston rods and shift gate are seated correctly with the shift rails. GS3 should be fully seated.

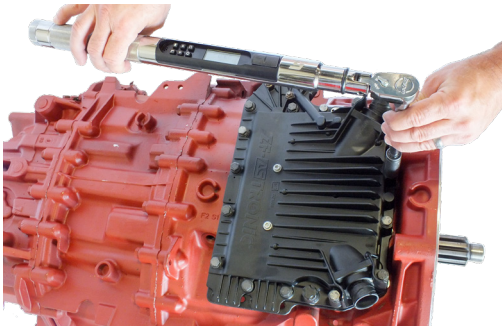


# INSTALLATION OF THE GS3

7. Secure the 15 bolts while keeping light pressure on the top of the GS3.



8. Torque the 15 bolts (13 mm) in a star pattern to 17 ft lbs.





# LUBRICATION

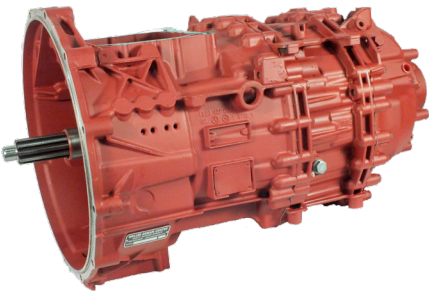
## FILLING THE UNIT WITH APPROVED FLUID



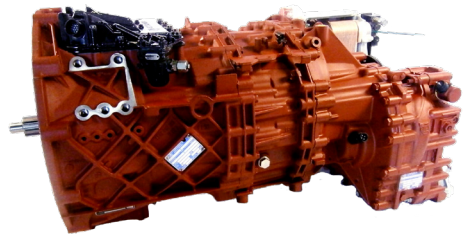
Remove the fill plug (22 mm) from the transmission and add the approved fluid until the level is even with the low part of the fill hole. Reinstall fill plug by hand and torque to 44 ft lbs.

Start the vehicle and let it run for 30 seconds. Remove the fill plug to verify proper level and add if necessary.

## APPROPRIATE FLUID CAPACITY

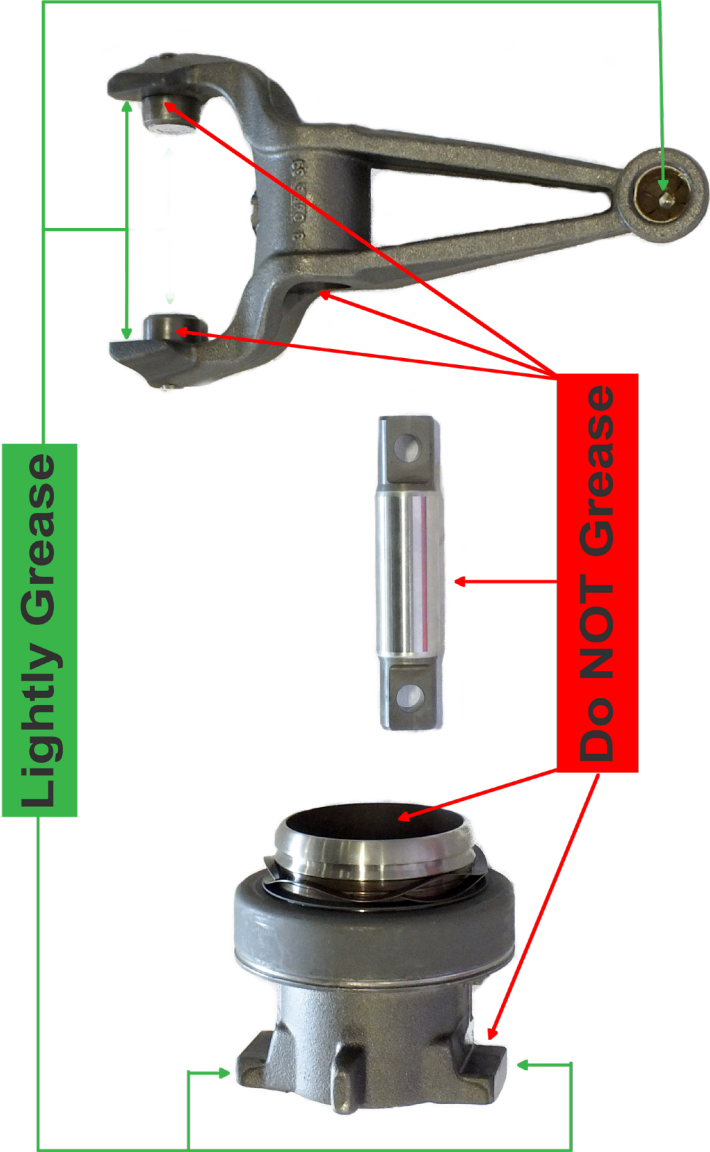


11.5 Quarts



22 Quarts

# INSTALLATION OF THE ROLLER FORK

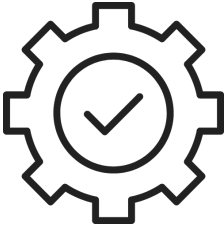


# SERVICE RECORDS

DATE	MILEAGE	SERVICE PROVIDER	NOTES

# DYNO TESTING

Our transmissions are rigorously tested under realistic load simulations on state-of-the-art dynamometers. This approach guarantees proper torque, leak-free performance, accurate shifting, and optimized oil flow.



## Ensuring Functionality

The test replicates the demands placed on a transmission during operation, checking if it shifts gears smoothly, delivers the expected power output, and operates within normal temperature ranges.



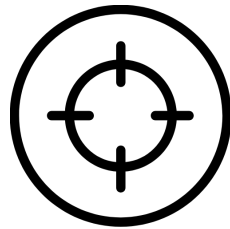
## Quality Control

Rebuilt transmissions in particular undergo dyno testing to verify the quality of the rebuild process. This ensures they meet or exceed factory specifications for pressure, performance, and minimize the risk of leaks or malfunctions after installation.



## Diagnostics

Dyno testing can pinpoint issues with a transmission, such as abnormal noises, vibrations, or problems with the hydraulic system or clutch packs.



## Calibration

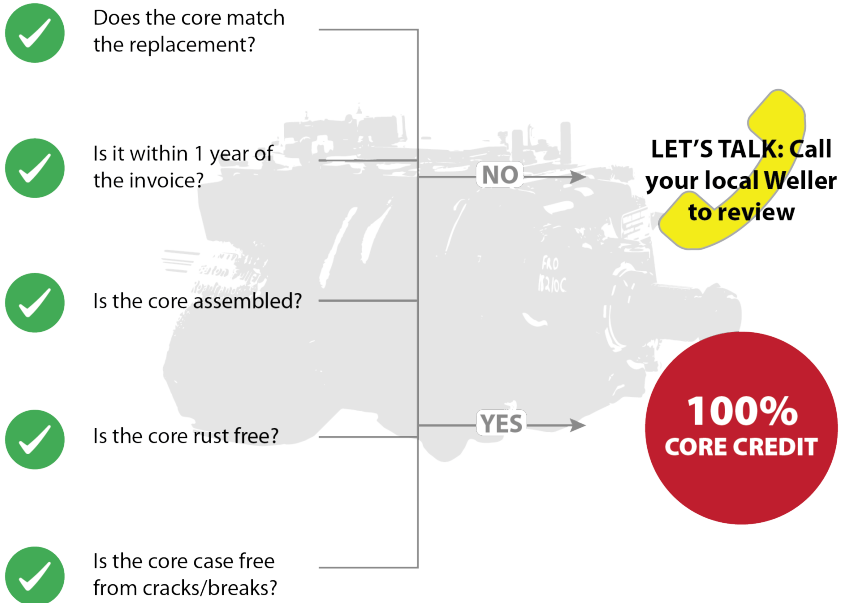
The test allows technicians to fine-tune the transmission's operation, including setting optimal shift points and pressures for improved performance and efficiency.

# CORE RETURNS

## Fair. Flexible. Fast.

At Weller, we value your business and strive to make the core return process as smooth as possible. Our core return policy is built on **trust and partnership**, ensuring that doing business with Weller is not only easy but also beneficial for our customers. We pride ourselves on having the most flexible core return policy in the industry, including a return window up to a full year.

This generous policy underscores our commitment to you and highlights our dedication to accommodating customer needs. While we do expect a fair rebuildable core, our primary goal is to ensure that you have a **positive and efficient** experience with us.



Don't just take our word for it.  
See why Weller is the unmatched industry  
leader, before and after the sale.

**Our policy reveals all.**





# WELLER WARRANTY

*At Weller, we prioritize not only the quality of our products but also the peace of mind for our valued customers. We understand that purchasing decisions are significant investments, and to underscore our commitment to your satisfaction, we proudly offer a comprehensive warranty on our products.*



*This warranty is a testament to our confidence in the durability and reliability of our offerings. While we take pride in crafting products of the highest standards, we recognize that unforeseen circumstances may arise. When they do, we have made the process as easy for you as possible, down to choosing the most convenient way for you to start a claim.*

*To learn more about our warranty and how to file a claim, scan the QR code below or visit our website.*

***Don't Buy the Paper. Buy the Performance.***



***Learn more about the  
Weller Warranty***

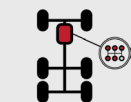
[wellertruck.com/weller-warranty](https://wellertruck.com/weller-warranty)

***When You Choose  
Weller, You Stop  
Playing the  
Warranty Game.***

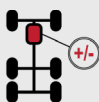
# Max Uptime In Your Drivetrain When You Partner with Weller.

We are dedicated to providing best-in-class quality with unmatched value and rapid delivery. Our focus is to keep our customers and America moving.

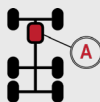
**View Our Complete Drivetrain Offerings at [wellertruck.com](http://wellertruck.com)**



TRANSMISSIONS  
AND TRANSFER  
CASES



AUTOMATED MANUAL  
TRANSMISSIONS



AUTOMATIC  
TRANSMISSIONS



DIFFERENTIALS



DRIVESHAFTS &  
END YOKES



STEERING GEAR  
BOXES AND  
PUMPS



ELECTRONICS &  
MECHATRONICS



**Experience  
The Weller Way**



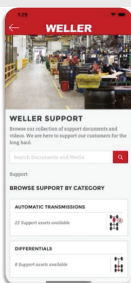
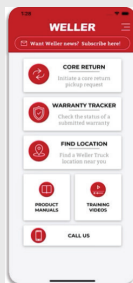
**View the Weller  
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