

NC 2855491

Common Rail Fuel Injector 2855491 User Manual

Model: 2855491 | Brand: NC

1. PRODUCT OVERVIEW

This manual provides essential information for the Common Rail Fuel Injector, Part Number 2855491. This component is designed for use in various New Holland machinery models, including B110B, B100B, B100BLR, B115B, B100BTC, and D95B. It is a critical part of the engine's fuel delivery system, ensuring precise fuel atomization and combustion efficiency.

Key features of this fuel injector include:

- **Part Number:** 2855491
- **Application:** Specifically designed for New Holland B110B, B100B, B100BLR, B115B, B100BTC, D95B models.



Figure 1: The Common Rail Fuel Injector, model 2855491. This image displays the full injector unit, highlighting its metallic construction and precise design, essential for its function in the fuel system.

2. SETUP AND INSTALLATION

Installation of a common rail fuel injector requires specialized tools and technical expertise. It is highly recommended that installation be performed by a qualified and certified mechanic or technician to ensure proper function and prevent damage to the engine or the injector itself.

General Installation Guidelines (for qualified personnel):

1. **Safety First:** Disconnect the vehicle's battery and ensure the fuel system is depressurized before beginning any work. Wear appropriate personal protective equipment (PPE).
2. **Preparation:** Clean the area around the old injector to prevent contaminants from entering the fuel system.
3. **Removal:** Carefully remove the old fuel injector, noting the position of all seals and clamps.

4. **Inspection:** Inspect the injector bore for any debris or damage. Clean as necessary.
5. **New Injector Installation:** Install the new injector (Part Number 2855491) with new seals and washers as required. Ensure it is seated correctly and torqued to manufacturer specifications.
6. **Reconnect:** Reconnect fuel lines, electrical connectors, and any other components removed during the process.
7. **System Priming:** Prime the fuel system according to the vehicle manufacturer's instructions to remove any air.
8. **Leak Check:** Start the engine and carefully check for any fuel leaks around the newly installed injector.

Refer to the specific service manual for your New Holland equipment model for detailed, step-by-step installation procedures and torque specifications.

3. OPERATING PRINCIPLES

The Common Rail Fuel Injector (Part Number 2855491) is a precision component in a diesel engine's common rail direct injection (CRDI) system. Unlike older systems, CRDI maintains high fuel pressure in a common rail, which is then delivered to individual injectors.

How it Works:

- **High Pressure:** Fuel is supplied to the injector at extremely high pressure from the common rail.
- **Electronic Control:** The Engine Control Unit (ECU) sends an electrical signal to the injector's solenoid or piezoelectric actuator.
- **Precise Injection:** This signal opens a valve within the injector, allowing a precisely metered amount of fuel to be sprayed into the combustion chamber at the optimal time and pressure.
- **Atomization:** The high pressure ensures fine atomization of the fuel, leading to more efficient combustion, reduced emissions, and improved fuel economy.

The injector's operation is fully automated and controlled by the vehicle's engine management system. No manual operation is required or possible by the end-user.

4. MAINTENANCE

Proper maintenance of the fuel system is crucial for the longevity and performance of your Common Rail Fuel Injector. While the injector itself is not typically a user-serviceable part, adhering to general fuel system maintenance practices can significantly extend its lifespan.

- **Fuel Quality:** Always use high-quality, clean diesel fuel. Contaminated or low-quality fuel is a primary cause of injector failure.
- **Fuel Filter Replacement:** Regularly replace the fuel filter according to the manufacturer's recommended service intervals. A clogged fuel filter can restrict fuel flow and put undue strain on the fuel system components, including the injectors.
- **Avoid Running on Low Fuel:** Running the fuel tank consistently low can lead to the fuel pump picking up sediment from the bottom of the tank, which can then clog filters and injectors.
- **Professional Inspection:** If you suspect issues with your fuel injectors (e.g., rough idling, decreased fuel economy, black smoke), have the system inspected by a professional.

Do not attempt to clean or repair the injector yourself unless you are a trained professional with the correct equipment.

5. TROUBLESHOOTING

Issues with fuel injectors can manifest in various ways. Below are common symptoms and potential causes. For accurate diagnosis and repair, professional assistance is strongly recommended.

Symptom	Possible Cause	Action
Engine Misfires or Rough Idling	Clogged, dirty, or faulty injector; air in fuel system.	Check fuel filter; professional diagnostic scan for injector performance.
Decreased Fuel Economy	Leaking or improperly spraying injector.	Professional inspection of injector spray pattern and leakage.
Black Smoke from Exhaust	Injector over-fueling or poor atomization.	Professional diagnostic to identify over-fueling injector.
Difficulty Starting Engine	Insufficient fuel pressure due to injector issues or fuel pump problems.	Check fuel pressure; professional system diagnosis.
Fuel Leakage Around Injector	Improperly seated injector, damaged seals, or cracked injector body.	Immediately address; professional re-installation or replacement.

Warning: Do not attempt to repair fuel system components without proper training and safety equipment. High-pressure fuel systems can be extremely dangerous.

6. SPECIFICATIONS

Part Number	2855491
Application	New Holland B110B, B100B, B100BLR, B115B, B100BTC, D95B
Brand	NC
Manufacturer	NC
ASIN	B08PVC4SB6
Date First Available	December 7, 2020

7. WARRANTY AND SUPPORT

Specific warranty terms for the Common Rail Fuel Injector (Part Number 2855491) are typically provided by the seller or manufacturer at the time of purchase. Please retain your proof of purchase for any warranty claims.

For technical support, detailed product information, or warranty inquiries, please contact the seller directly or refer to the official documentation provided with your purchase.

You may also visit the [NC Store on Amazon](#) for more information regarding NC products.

