

# NEW HOLLAND 24 Valve, 8.3 Liter Engine

# REPAIR MANUAL

SERVICE

87025503

11/02

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# 24 Valve, 8.3 Liter Engine
# Repair Manual
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# Introduction

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# Engine Identification

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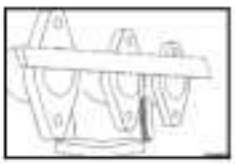
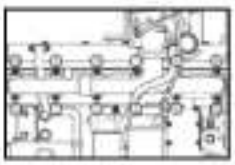
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| Component or Assembly (Procedure) Ref.No./Steps | Metric | | U.S. | |
|---|---|---|---|---|
| **Exhaust System - Specifications** | | | | |
| **Exhaust Restriction (011-009)** | | | | |
| **Exhaust Restriction** | | | | |
| Maximum Exhaust Restriction | 76 mm Hg | MAX | 3 in Hg |  |
| **Exhaust Manifold, Dry (011-007)** | | | | |
| **Exhaust manifold Flatness** | 0.20 mm | MAX | 0.008 in |  |
| **Exhaust System - Torque Values** | | | | |
| **Exhaust Manifold Dry (011-007)** | | | | |
| **Exhaust Manifold Capscrew Torque** | 43 N·m | | 32 ft-lb |  |



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# TROUBLESHOOTING SUMMARY

| STEPS | SPECIFICATIONS | SRT CODE |
|---|---|---|
| STEP 1: Check for fault codes. | | |
| STEP 1A: Read the fault codes. | Fault Code 329 inactive | |
| STEP 2: Clear the fault codes. | | |
| STEP 2A: Disable fault codes. | Fault Code 329 inactive | |
| STEP 2B: Clear the inactive fault codes. | All faults cleared | |

# TROUBLESHOOTING STEP

## STEP 1: Check for fault codes.

### STEP 1A: Read the fault codes.

**Condition:**
- Key switch in the "ON" position.

| Action | Specifications/Repair | Next Step |
|---|---|---|
| Read the fault codes.<br>• Read the fault codes using an electronic service tool. | **OK**<br>**Fault Codes 268, 277, or 328 are inactive**<br>Replace the fuel injection pump<br>Refer to Procedure 005-016 in the Troubleshooting & Repair Manual for CDC 24 Valve 8.3 Liter Engine. | 2A |
| | **NOT OK**<br>Fault Code 268, 277, or 328 are active | Appropriate fault tree. |

## STEP 2: Clear fault codes.

### STEP 2A: Disable fault codes.

**Condition:**
- Connect all the components.
- Key switch in the "ON" position.

| Action | Specifications/Repair | Next Step |
|---|---|---|
| Disable fault codes.<br>• Start the engine and let it idle for one minute.<br>• Using an electronic service tool, verify that Fault Code 329 is inactive. | **OK**<br>**Fault Code 329 is inactive** | 2B |
| | **NOT OK**<br>Return to troubleshooting steps or contact the Technical Services Group (if all steps have been completed and checked again). | 1A |



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## STEP 2C-2: Check for an open circuit in the vehicle harness.

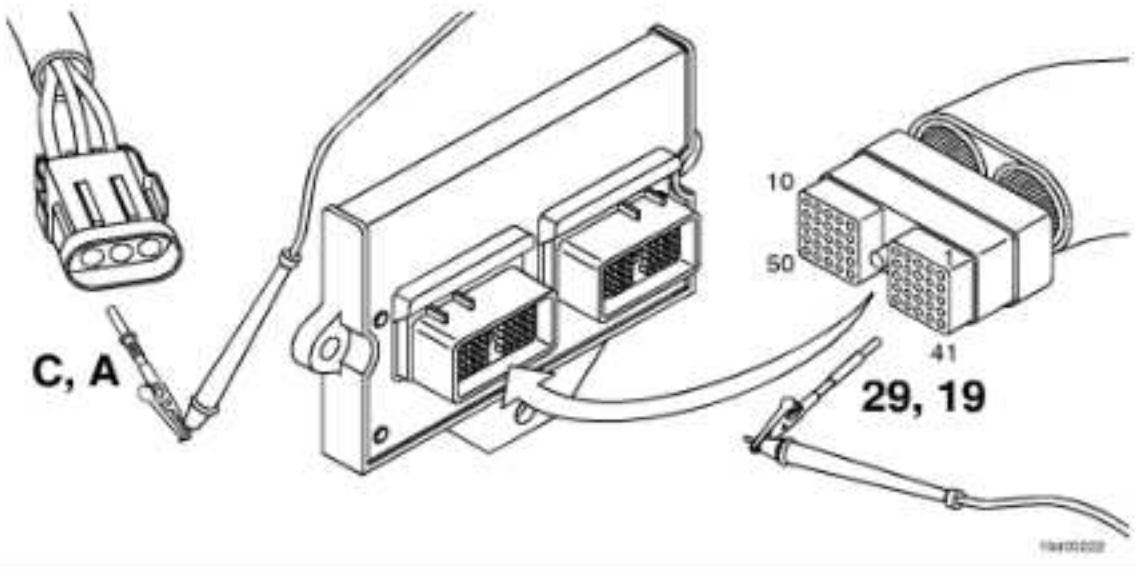
**△ CAUTION △**

**To avoid pin and harness damage, use the following test leads when taking a measurement:**
**Tool No. 3822758 - male Deutsch/AMP/Metri-Pack test lead**
**Part No 3823995 - male Weather-Pack test lead.**

**Condition:**

- Key switch in the "OFF" position.
- Disconnect the vehicle harness from the accelerator position sensor.
- Disconnect the vehicle harness from the ECM.

| Action | Specifications/Repair | Next Step |
|---|---|---|
| Check the resistance in the vehicle harness from the ECM.<br>• Measure the resistance from pin 29 of the vehicle harness connector to pin C on the harness side of the accelerator position sensor connector.<br>• Measure the resistance from pin 19 of the vehicle harness connector to pin A on the harness side of the accelerator position sensor connector. | **OK**<br>**Less than 10 ohms** | 2D |
| | **NOT OK**<br>**Repair or replace the vehicle harness**<br>Refer to the Troubleshooting and Repair Manual for CDC 24 Valve 8.3 Liter Engine. | 3A |






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# NEW HOLLAND 24 Valve, 8.3 Liter Engine Fuel System

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## Section 10 - Chapter 25 - 28

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# NEW HOLLAND 24 Valve, 8.3 Liter Engine Fuel System

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## Section 10 - Chapter 21 - 24

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