# John Deere X940, X948, X949 Compact Utility Tractors (SN. 060001-) Technical Manual (TM147919)

X940, X948, X949 Tractors (S.N. 060001-)



JOHN HARE



**TECHNICAL MANUAL X940, X948, X949 Tractors (S.N. 060001-)** 

TM147919 01DEC18 (ENGLISH)



**John Deere Horicon Works** 

**Covers:** 060001-):,X940,X948,X949

**Type:** Service Manual **Language:** English

Pages: 584
Format: PDF

**Features:** Bookmarked, searchable, printable **Compatibility:** Windows/Mac/Tablet/Mobile

This service manual contains important information for the maintenance, troubleshooting and servicing of

the John Deere X940, X948, X949 Compact Utility Tractors (SN. 060001-) Technical Manual (TM147919)

In this manual you will find detailed specifications, illustrations, schematics, diagrams and step-by-step procedures to properly service and diagnose the machine to the manufacturer's standards.

#### **Contents:**

- General Information
- Specifications
- Serial Number Location
- Engine Specifications
- Engine Diagnostics
- · Engine Tests and Adjustments
- · Engine Repair
- · Power Train
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- Axles
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- · Ignition and Charging
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- · and much more...

Please note this manual is in <b>downloadable PDF format only.</b> If you have any questions about this product or would like to request sample pages, please contact us and reference the product name or SKU.	

### Adjust Fuel Injection Timing



LVT001206-UN: Injection Pump Timing Gear Cover

 Remove five cap screws from injection pump timing gear cover and remove cover.

#### 2. NOTE:

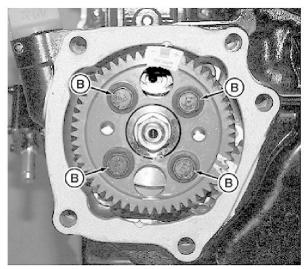
A new injection pump comes with a timing grid sticker. Each line represents one degree.



LVT001207-UN: Fuel Injection Pump Timing Gear Sticker

#### A-Timing Sticker

Clean off the oil from the timing gear under the pointer in the timing gear cover. Install the sticker (A) on the gear with the center of the grid under the pointer.



 LVT001208-UN: Fuel Injection Pump Timing Gear Cap Screws LEGEND:

#### **B-Cap Screws**

Loosen the four cap screws (B) securing the injection pump drive gear to the hub. Make sure that the cap screws are loose enough that there is no drag on the injection pump hub. The object is to have the gear move while turning the engine and the injection pump hub remain stationary.

 If the injection pump timing was a lower number than the timing specification, the injection timing is retarded and needs to be advanced.

The following references to direction of rotation are made facing the front of the engine (timing gear end) and turning the crankshaft.

- To Advance timing rotate the crankshaft counterclockwise.
- If the injection pump timing was a higher number than the timing specification, the injection timing is advanced and will need to be retarded.
- c. To Retard timing rotate the crankshaft clockwise.
- Slowly rotate the crankshaft while watching the pointer on the timing cover and the timing grid sticker on the injection pump gear. Turn it the number of degrees and the direction determined earlier when observing the flywheel grid.
- 6. Tighten the drive gear mounting cap screws to specification.

Item	Measurement	Specification
Drive Gear Cap Screws	Torque	32—36 N·m (24—27 lbft.)

- 7. Recheck the fuel injection timing. Repeat the check and adjustment procedures until the timing is correct.
- 8. Remove the sticker from the injection pump gear.
- Clean old sealant from injection pump gear cover and timing gear cover.
- Apply small bead of Form-in-Place gasket to injection pump gear cover. Install cover and tighten cap screws to specification.

Item	Measurement	Specification
Gear Cover Cap Screws	Torque	23—29 N·m (17—22 lbft.)

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## **Test Fuel Supply Pressure and Flow**

1. Park machine safely.

- 2. Allow engine to cool.
- 3. Raise hood and remove right side panel.

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Thank you very much for your reading.

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