

## Tool Instruction Diesel Fuel Quality Tester

4328607R2

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Tool Number: J-38641-D



0000433427

**Figure 1. J-38641-D — Diesel Fuel Quality Tester**

### **Purpose**

Essential tool used to determine the quality of diesel fuel by measuring specific gravity.

### **Application(s)**

All International® and IC Bus® diesel powered vehicles

## Application(s) (cont.)



**GOVERNMENT REGULATION:** Engine fluids (oil, fuel, and coolant) may be a hazard to human health and the environment. Handle all fluids and other contaminated materials (such as filters or rags) in accordance with applicable regulations. Recycle or dispose of engine fluids, filters, and other contaminated materials according to all applicable State and Federal regulations.



**WARNING:** To prevent personal injury and / or death, or damage to property, read all safety instructions in the “Safety Information” section of the *Engine Service Manual* or *Engine Diagnostic Manual*.



**WARNING:** To prevent personal injury and / or death, or damage to property, park vehicle on hard flat surface, turn the engine off, set the parking brake, and install wheel chocks to prevent the vehicle from moving in either direction.





**WARNING:** To prevent personal injury and / or death, always wear safe eye protection when performing vehicle maintenance.



**WARNING:** To prevent personal injury and / or death, or damage to property, inspect tool for wear / damage prior to use. Replace any worn or damaged components as necessary.

## Tool Contents

Table 1

Image	Tool Number	Qty	Description
 <p>0000433429</p>	J-38641-D	1	Diesel Fuel Quality Tester
 <p>0000160075</p>	4328607R2	1	Tool Instruction

## Instructions

**NOTE: Please reference International® Service Portal<sup>SM</sup> regarding any possible revisions to this document.**

**NOTE: The fuel quality hydrometer provides a general indication of fuel quality and should not be considered scientifically accurate.**

1. Fill a 1 liter (0.946 quart) container with a sample of fuel.
2. Obtain diesel fuel quality tester.
3. Fill hydrometer with fuel.
  - a. Squeeze hydrometer bulb.
  - b. Submerge hydrometer tip into sample.
  - c. Release bulb and allow fuel to enter glass tube until fuel completely floats glass bulb inside tube.
4. Gently spin hydrometer to relieve surface tension of fuel sample.
5. Read scale on glass bulb at point where top of fuel sample contacts scale.

**Table 2 Fuel Oil Specific American Petroleum Institute (API) Gravity Requirements Table**

Specification	No. 2 Diesel with up to 20 Percent Bio-Diesel	No. 2 Diesel	No. 1 Diesel
API Gravity	34 to 38	35 to 39	40 to 44

6. Refer to Fuel Oil Specific API Gravity Requirements Table.
  - a. If correct fuel grade for application is being used, and meets fuel oil specific gravity requirements, fuel is acceptable to use.
  - b. If incorrect fuel grade for application is being used and / or does not meet fuel oil specific gravity requirements, fuel is not acceptable to use and must be replaced.

## Care and Maintenance

- Keep tools clean and free of contaminants
- Replace any damaged components

## Contact Information

If you would like to order additional tools or need replacement parts, please refer to the Navistar Service Tool Catalog. If you have questions, concerns, or feedback, please contact Navistar Service Tool Support Center:

- Submit a Service Tool iKNow Case File.
- Phone: 800-365-0088 (toll free).