

- The gauge needle should initially read 28—41 kPa (0.28—0.41 bar) (4—6 psi), then return to “0” very slowly. This indicates that the outlet valve and diaphragm are in good condition. Supply pump is operating properly and should be reinstalled on engine.

Specification

Rotary Fuel Supply Pump (Lucas 28—41 kPa (0.28—0.41 bar)
and Stanadyne) Pressure (4—6 psi)

- If the gauge needle initially reads same value as above and then returns immediately back to “0”, the pump is defective and must be replaced.

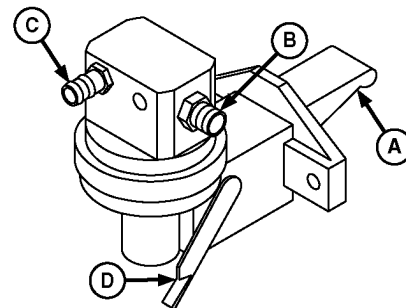
RG,35,JW7620 -19-26OCT99-2/3

Leakage Test

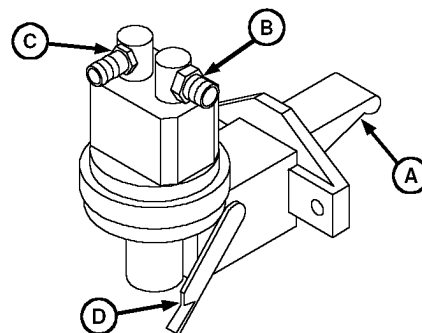
The leakage test should be performed if a supply pump is suspected of leaking fuel externally, or internally into the engine crankcase.

1. Install an air line on inlet side of pump (C) and apply 140 kPa (1.4 bar) (20 psi) pressure.
2. Hold finger over outlet side of pump (B) or install a plug. Submerge pump into a container of clean diesel fuel.
 - If air bubbles occur around banded connection holding the two halves of pump together (indicating leakage), replace pump.
 - If the diaphragm is bad, there will be leakage through vent holes (if equipped) and around the rocker arm. Replace pump as necessary.

A—Lever
B—Outlet Side of Pump
C—Inlet Side of Pump
D—Primer Lever



Fuel Supply Pump with Metal Cover



Fuel Supply Pump with Composite Cover

RG9052 -JUN-16MAR98

RG10546 -JUN-03DEC99

RG,35,JW7620 -19-26OCT99-3/3

Install Lucas and Stanadyne Fuel Supply Pump

IMPORTANT: Apply LOCTITE 242 to threads of supply pump mounting screws (A) and fuel line fittings when reinstalling supply pump. DO NOT allow sealant to get into fuel system.

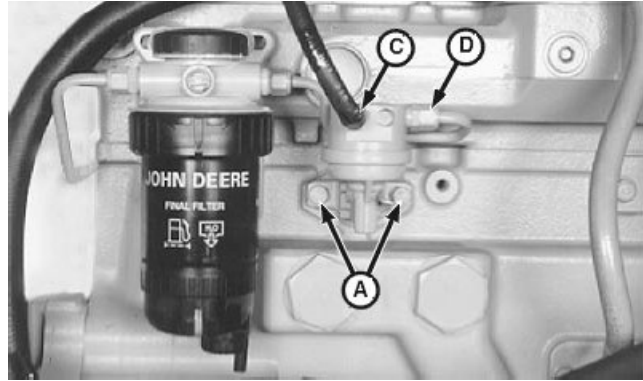
1. Install the fuel supply pump to cylinder block with pumping lever resting on top of push rod, using a new O-ring. Tighten cap screws to specifications.

Specification

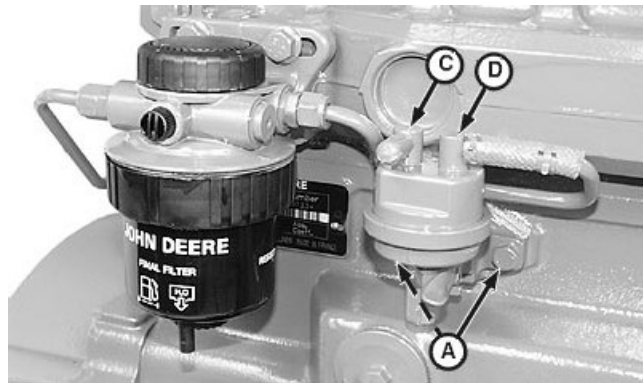
Fuel Supply Pump Cap Screws 30 N•m (22 lb-ft)
(Rotary) Torque

IMPORTANT: ALWAYS use a backup wrench when installing fittings and/or fuel lines onto supply pump to avoid damage to fittings.

2. Connect supply pump inlet line (C) and outlet line (D) and tighten securely.
3. Bleed fuel system. (See BLEED THE FUEL SYSTEM in this group.)



Fuel Supply Pump with Metal Cover



Fuel Supply Pump with Composite Cover

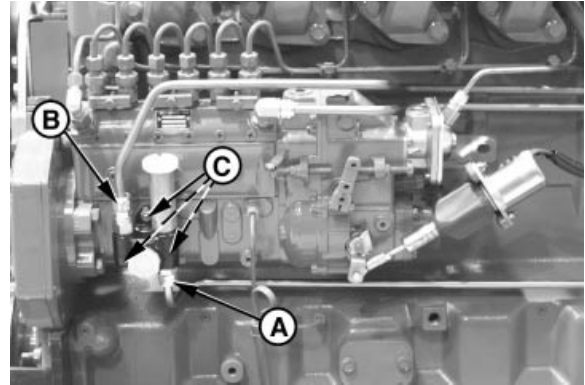
A—Cap Screws
C—Supply Pump Inlet from Fuel Tank
D—Supply Pump Outlet to Final Fuel Filter

RG,35,JW7619 -19-26OCT99-1/1

Remove Denso In-Line Fuel Supply Pump

NOTE: To diagnose fuel supply pump malfunctions, see *F1—FUEL SUPPLY SYSTEM CHECK* in Section 04, Group 150. To test for leaks, see *TEST FUEL SUPPLY PUMP FOR LEAKS—IN-LINE INJECTION PUMP* in Section 04, Group 150.

1. Thoroughly clean exterior of supply pump. Also clean around supply pump mounting area on injection pump housing.
2. Disconnect fuel inlet line (A) and outlet line (B). Cap all line openings so contaminants do not enter fuel system.
3. Remove mounting nuts (C).
4. Pull fuel supply pump straight out from injection pump housing. Cover supply pump mounting bore so debris cannot enter injection pump.



Fuel Supply Pump—In-Line Injection

A—Fuel Inlet Line
B—Fuel Outlet Line
C—Mounting Nuts

RG7748A —UN-07NOV97

02
090
13

RG,35,JW7618 —19-20NOV97-1/1