



# Technical Bulletin

## Replacement and air purge of AdBlue KG40 Meter

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## Scope

This bulletin refers to the replacement of the KG40 meter in AdBlue dispensers.

## Introduction

The KG40 meter fitted to AdBlue dispensers needs to have the air purged from the system to prevent the meter faulting when it encounters air pockets. When replacing the meter an air purge of the system will need to be done.

**⚠ CAUTION** *AdBlue is very corrosive to metals, ensure that only parts specified to be used with AdBlue are used and that any AdBlue splashes are washed off.*

**⚠ CAUTION** *These instructions should be read in conjunction with all site safety procedures. Where information is conflicting, clarification should be sought before work commences.*

## Parts required

- AdBlue KG40 meter replacement kit including dummy encoder plug.

## Suggested tools required

- 3/16" allen key
- 7/8" spanner
- sidecutters

## Safety Precautions

AdBlue is non flammable and generally considered non-toxic but is slightly alkaline so precautions should be taken against skin contact, eye contact or ingestion. Splashes on skin or in eyes should be thoroughly flushed off with water. Spillages should be cleaned up with absorbent material or flushed with water making sure that runoff does not enter waterways.

The above information is for guidelines only. Refer to your specific site safety procedures for handling AdBlue.

## Removal

1. Close all inlet valves to the dispenser.
2. Turn off the power to the dispenser.
3. For a two hose model, work out which meter is the one you want to replace.
4. Locate the KG40 meter cable and snip any cable ties holding it to the dispenser.
5. Unplug the KG40 meter from the C4000 board.
6. Undo the two gland nuts from the pipes entering the KG40 meter
7. Undo the four hex head machine screws holding the KG40 meter to the mounting brackets and remove the meter.

## Replacement

1. Mount the new KG40 Meter making sure the meter is around the right way. Inlet and Outlet are labelled on the meter.
2. Reattach the pipework making sure the pipes are securely fastened. If O rings are supplied as part of the kit, they should replace the existing ones.
3. Feed the cable up to the C4000 board and attach the connector with the green, white and black wires plugs into J9 making sure the clips are at the top.

**⚠ NOTE** *For a two hose dispenser, a splitter board with two sockets is fitted.*

4. For a single hose unit plug the eight pin plug into J3 making sure the clips face out.
5. For a two hose unit make sure side A plugs into J3 and side B plugs into J4.
6. Cable tie the cable neatly.
7. Follow the procedure for air purge.

## Air Purge Procedure

**⚠ NOTE** *The encoder dummy plug is required to purge the air from the system. Failure to purge air will result in the C4000 continually faulting.*

1. Slowly open the AdBlue supply valves to the dispenser, checking for any leaks.
2. Turn on the power supply to the dispenser.
3. Remove the meter encoder lead from J3 on the C4000 processor board and plug in the meter dummy plug supplied with the dispenser.  
( Part number F-CU-ENC-ABL-PT if you need to re-order)

**⚠ NOTE** *If replacing the side B meter on a two hose dispenser, put the dummy encoder into J4.*

4. Lift the nozzle  
The display will show **888888** and the solenoids will energise and start the pump motor. Check that Diodes D8, D10 and D11 turn on, indicating a signal is being sent to the triacs to open the solenoid valves.
5. Check all the dispenser fittings, solenoids and pipework for leaks.
6. Slowly dispense AdBlue from the dispenser, being careful to shield yourself from splashes as there may be air in the fuel causing it to spray from the nozzle. During this time the dispenser will NOT count up as the encoder dummy plug is plugged into the C4000.
7. The solenoids will switch off after four minutes. This is a default time-out setting in the software for situations when there is no fuel flow registered. If there is still air in the system and this happens, hang the nozzle and then lift it to start a new transaction and continue delivering AdBlue.
8. Repeat steps 4 through 6 until the AdBlue flows without any air being present, then hang up the nozzle
9. Remove the dummy encoder plug and re-install the V40 meter encoder plug onto J3 (or J4 for side B). The cable loom will have an unused diagnostic plug.
10. Lift the nozzle and slowly dispense AdBlue from the dispenser. The display and tote should increment as it is flowing.
11. The dispenser can now be calibrated. Refer to the C4000 Master Manual for calibration instructions.

**⚠ NOTE** *A copy of the C4000 Manual can be found on the Compac website.*

Helpdesk assistance

For any further queries regarding the above Service Advisory, contact the Compac Helpdesk on +64 9 579 1877 (Worldwide) or 1800 145 887 (Australia) [helpdesk@compac.co.nz](mailto:helpdesk@compac.co.nz)