



# Card King Installation Sheet

## Version 1.0.4

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## Product Identification

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Application	Compac Card King - All applications	
	Power supply	230 - 240 VAC; 50 Hz; 10 Amp +/- 10%
Related Manuals	Card King Installation and Service Manual	
	C4000 Master Manual	
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# Document Control Information

## Document Information and Revision History

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1.0.0	05/10/2011	R Lacey	New manual
1.0.1	12/12/2011	R Lacey	Added L80S, L160P and L160S footprints
1.0.2	28/05/2013	R Lacey	Amended L160S footprint
1.0.3	29/08/2014	R Lacey	Added sump info in accordance with NZ EPA. File ref. COM 09 29 Added flexi coupling info
1.0.4	17/11/2014	R Lacey	Added pump outlet sizes, updated front page footer.

## Distribution

Name	Indicator	Location

# Symbols and Units of Measure

## Symbols

Symbols are used in this manual to highlight information that is critical to the safety of people and equipment, and for the safe and correct operation of the Compac equipment

**⚠ DANGER** *An extreme hazard that may result in death or injury if proper precautions are not taken.*

**⚠ DANGER** *A reminder of safety practices or unsafe practices that could result in personal injury or damage to associated equipment.*

**⚠ CAUTION** *A reminder of safety practices or unsafe practices that could result in damage to associated equipment and/or voids the warranty.*

**⚠ NOTE** *Important information essential to the installation and operation of the Compac equipment*

## Units of Measure

The following units of measure are used in this manual:

Unit	Measure
Pressure	Bar (bar)
Temperature	Degrees Celsius (°C)
Volume	Litres (L) Cubic Metres (m <sup>3</sup> )
Mass	Kilograms (kg)
Length	Metres (m) Millimetres (mm) Microns, Micrometres (µm) Inches (")
Torque	Newton Metres (Nm)
Voltage	Volts (V)
Current	Amps (A)
Frequency	Frequency (Hz)

# Safety

You must adhere to the following safety precautions at all times when working on this unit. Failure to observe these safety precautions could result in electrical or mechanical damage to the unit or injury or death to yourself or bystanders.

Make sure that you read and understand all safety precautions before installing, servicing or operating this unit.

**⚠ NOTE** *Failure to follow safety instructions may invalidate any warranty.*

## Mechanical Safety

Observe the following mechanical precautions:

**⚠ CAUTION** *During installation, take care that the unit is well supported and cannot fall over.*

**⚠ CAUTION** *Take care with handling sharp edges, wear gloves where required.*

**⚠ CAUTION** *Make sure that the service area is thoroughly clean when servicing. Dust and dirt entering the components may reduce the life span of the components and can affect operation.*

## Electrical Safety

Observe the following electrical precautions:

**⚠ CAUTION** *Always turn off the power to the unit before commencing work on any wiring. Never touch wiring or components inside the high voltage area with the power on. Be aware that capacitors and back up batteries may power the unit even after mains power is removed.*

**⚠ CAUTION** *Always turn off the power to the unit at the mains switch before removing or replacing software or memory ICs.*

**⚠ CAUTION** *Always take basic anti-static precautions when working on the electronics, i.e., wearing a wristband with an earth strap.*

## Environmental Safety

Observe the following environmental precautions:

*Take care that you clean up after working on the unit.*

*Remove and carefully dispose of any waste.*

*Any spills must be cleaned up and disposed of in an approved manner.*

**⚠ CAUTION** *Any spillage of fuel must be handled to minimise the risk of fire or explosion. Major spills must be reported to the local environmental authorities.*

## Site Safety

Observe the following precautions when on site:

*Personal safety is the responsibility of the site manager and technician. Personal protective equipment appropriate to the situation is to be worn and if required, the working area appropriately cordoned off with cones, tape and/or barriers.*

**⚠ CAUTION** *When working on or near flammable goods areas take all precautions to avoid sources of ignition.*

**⚠ NOTE** *These instructions are intended as a guide only. It is the responsibility of the technician and the site manager to manage safety in accordance with local regulations and best safe site practice.*

# Pre-installation Checks

## Transit Damage

Once the unit is received on site, inspect the cabinet for the following:

- Shipping damage to cabinet, display or any other equipment.
- Water damage to components

Report any damage to the transport company and to the help desk.

Take photographs if required.

## Tampering

Inspect for:

- Evidence of tampering with the unit especially card reader or unauthorised wiring.

Report any concerns to the help desk.

Take photographs if required.

## Vibration

Inspect terminals, plugs and IC chips to check they are securely in place and have not loosened due to vibration.

## Site Issues

Check that all wiring and pipework has been installed correctly and is undamaged.

Report issues to site manager.

**⚠ NOTE** *Inappropriate installation may void the warranty. If uncertain, contact your Compac agent for advice.*



# Tools Required

## Tools

It is expected that installers will carry a comprehensive tool kit including:

- Metric and imperial spanners
- Metric and imperial socket set
- Metric and imperial allen keys
- Torx and security torx keys
- Phillips, pozidriv and flat blade screwdrivers

## Power Tools

- Electric impact drill with conventional and masonry drill bits

## Electrical Tools

- Wire cutters
- Wire stripper
- Crimping tool
- EPROM extractor
- Multimeter
- Earthing wrist strap

## Diagnostic Equipment

- Laptop with fully charged battery and wireless modem
- LAN cable
- Fully charged cell phone
- Test cards and/or authorisation keys

## Safety Equipment

- High visibility vest or jacket
- Personal protective equipment (PPE) Boots, gloves, goggles, hearing protection, hard hat etc.
- Cones, barriers, tape to secure your working area

## Other Equipment

- Step ladder
- Torch
- Cable ties
- Dynabolts or suitable fasteners to suit the base material
- Cleaning spray and clean cloths

The above list is a suggested minimum. It is recommended that you read the manual thoroughly and include any other equipment that may assist you in completing the job safely and quickly.

# Site Preparation

Refer to the Site Audit document if supplied.

To ensure maximum operating life, care should be taken when siting the dispenser. Considerations should include:

- The unit is not designed to be constantly exposed to the elements. A canopy or shelter should be installed to protect it.
- The card reader and PIN pad should face away from the prevailing wind especially in dusty or wet areas.
- In areas experiencing extremes of weather (heat, cold, wind, rain, salt spray etc.) consideration should be given to installing additional shelter.
- On heavy vehicle sites, mounting the unit on a raised pad and/or installing bollards to help protect from damage.
- The base needs to be attached to a smooth, level surface of sufficient strength to securely hold the retaining bolts or fasteners.

## Electrical Preparation

Power and communication cables must meet or exceed local regulation requirements.

If no local regulations exist, we recommend as a minimum:

Power: 3 core 2.5 mm<sup>2</sup> Steel Wire Armour (SWA) cable

Comms: 2 core 1.5 mm<sup>2</sup> Steel Wire Armour (SWA) cable

There should be a minimum of a 2 metre tail for all wiring

**NOTE** *The length of the communications cable must not exceed 100 metres.*

## Pipework Preparation

Pipework should be laid in accordance with local regulations.

To obtain maximum flow on a self contained pump, observe the following guidelines:

- Total length of horizontal piping between tank and pump should be no longer than 18 metres.
- Piping specifications: For 40 l/min pumps, use 1½" galvanized or approved non-metallic pipe. For 80 l/min pumps use 2" galvanized or approved non-metallic pipe.
- Only one pumping unit is permitted for each underground pipe. Do not use tee joints to connect two pumps into one pipe.
- Pipe must slope up from the tank to the pump (approximately 15 mm per metre). Pipe should be straight and supported along its length.
- All horizontal piping must be buried at least 450mm below ground level.
- The area under the pumping unit(s) must be filled with sand or dirt as far up the suction line as possible. Use water to pack the sand or dirt when put in place.
- Avoid asphalt drive surfaces covering the piping. Asphalt increases heat absorption causing vapour lock.
- Static lift must not exceed 3 metres (vertical distance from the product level in the tank to the centre of the pump unit).
- To absorb ground movement from settling of the tank, frost heaving of the

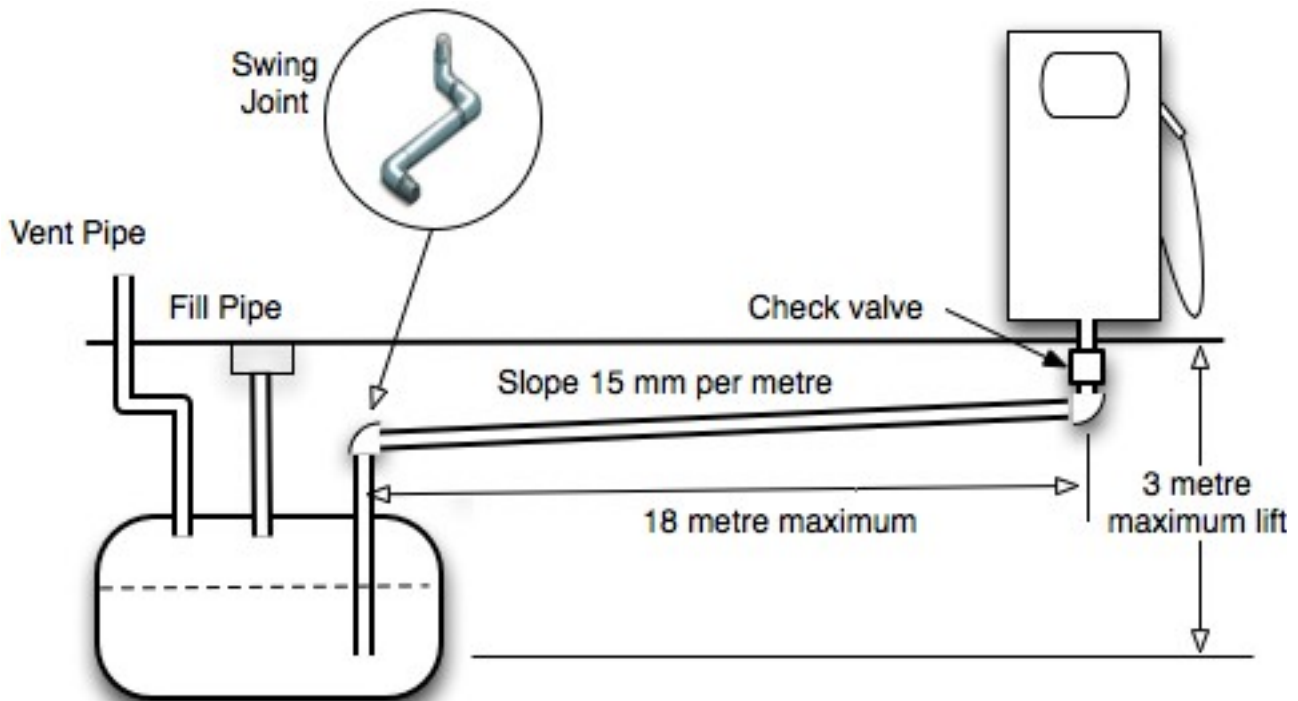
ground or pump island settling, a swing joint must be used in the supply line at the tank and directly underneath the dispenser. Three additional directional changes using elbows are permitted.

- Piping must hold a 3.4 Bar (50PSI) pressure test for a minimum of 10 minutes.

Refer to the footprint drawings for pump installation details.

### Check Valve

A Check Valve must be installed at the tank end of the suction pipe on the top of the tank in a serviceable location. Many clients install an extra check valve at the inlet to the pump. It is important neither of the check valves interfere with the flow of fuel. They must be adequately sized



Where local regulations for flammable substances require a sump to be fitted:

- Sumps must be provided at all dispenser installations with secondary containment pipework and at all new installations; and
- at all sites with sumps, dispensers should be installed with a liquid level detection device fitted in the sump that will raise an alarm if liquid is detected in the base of the sump.

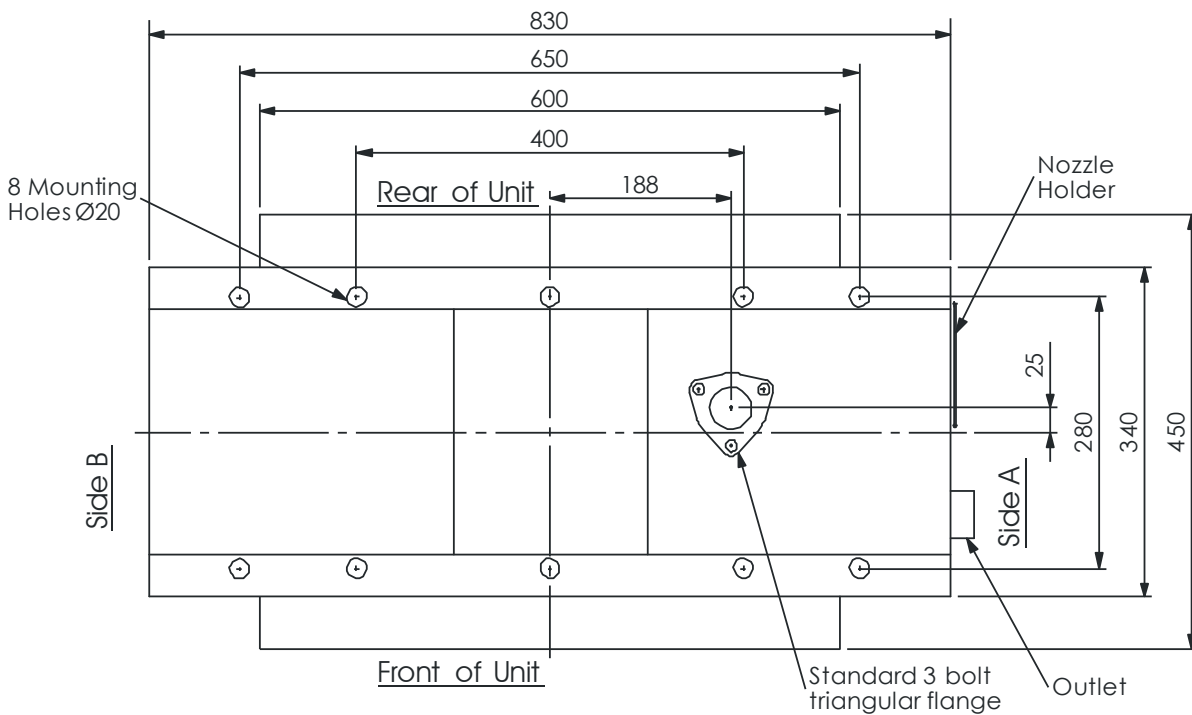
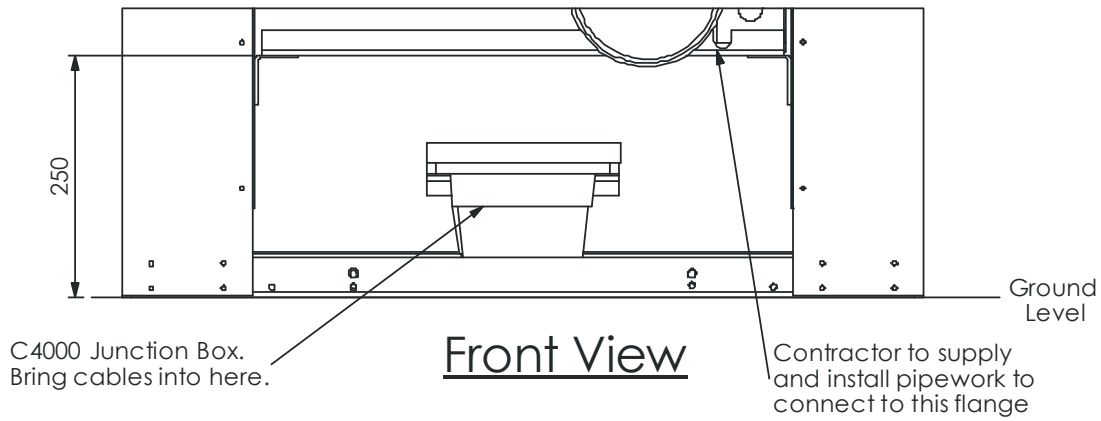
**⚠ DANGER** The pump inlet must not be pressurised at any time. This will cause fuel to flow from the air eliminator. Unregulated connection to an above ground tank will cause pressurisation.

**⚠ DANGER** For above ground tanks a regulator valve such as a Tokheim valve or similar device **MUST** be used so that the inlet of the pump cannot become pressurised at any time.

**⚠ CAUTION** The air switch is not to be disconnected. Disconnection will void NSC and TMU approvals.

**⚠ CAUTION** The air eliminator chamber is not to be piped back to the tank. This will prevent it from working and may damage the pump.

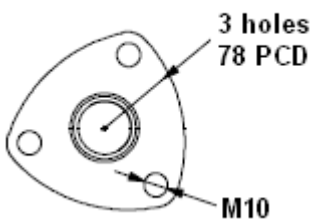
# Footprints



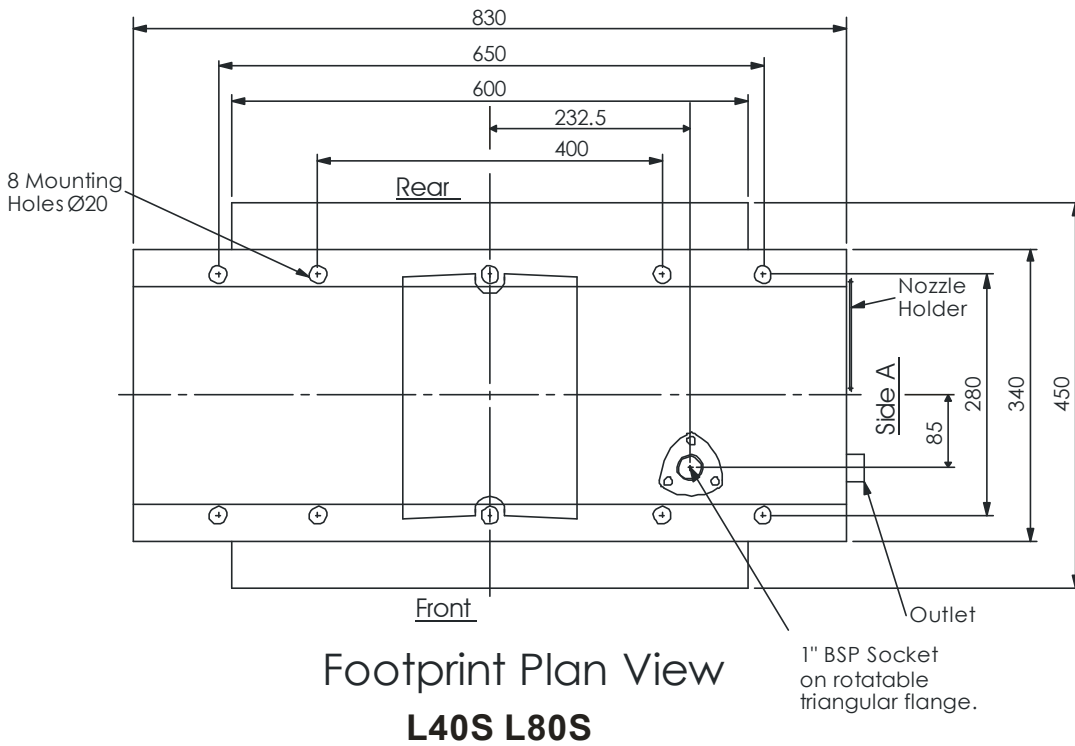
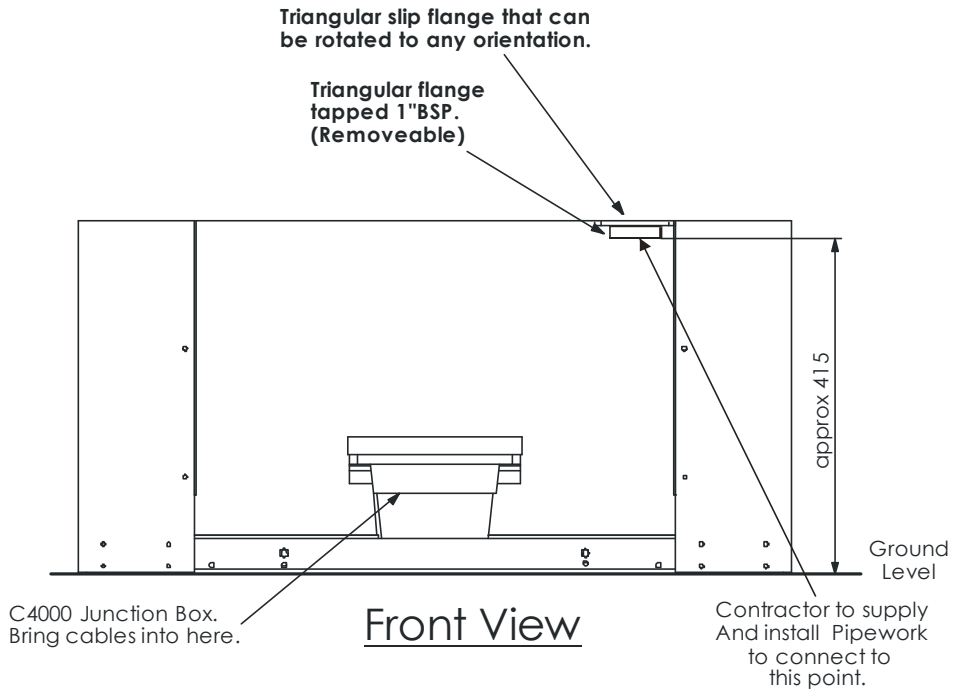
## Footprint Plan View

L40P L80P

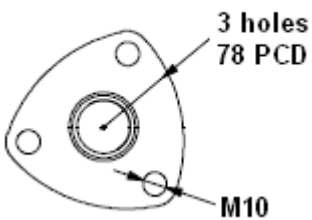
### Pump Flange



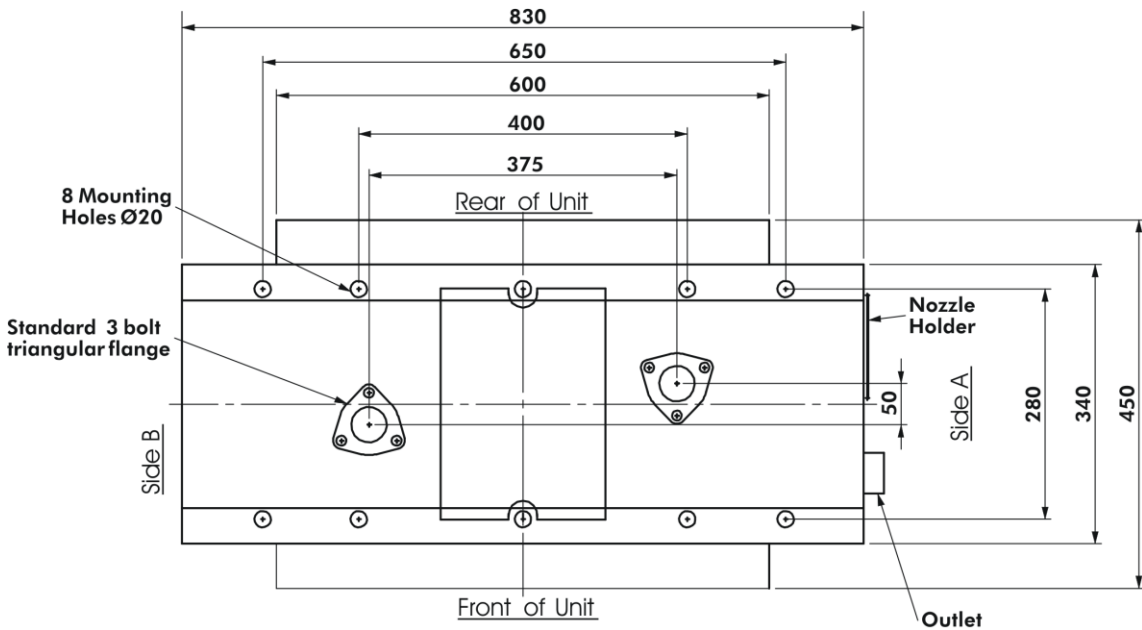
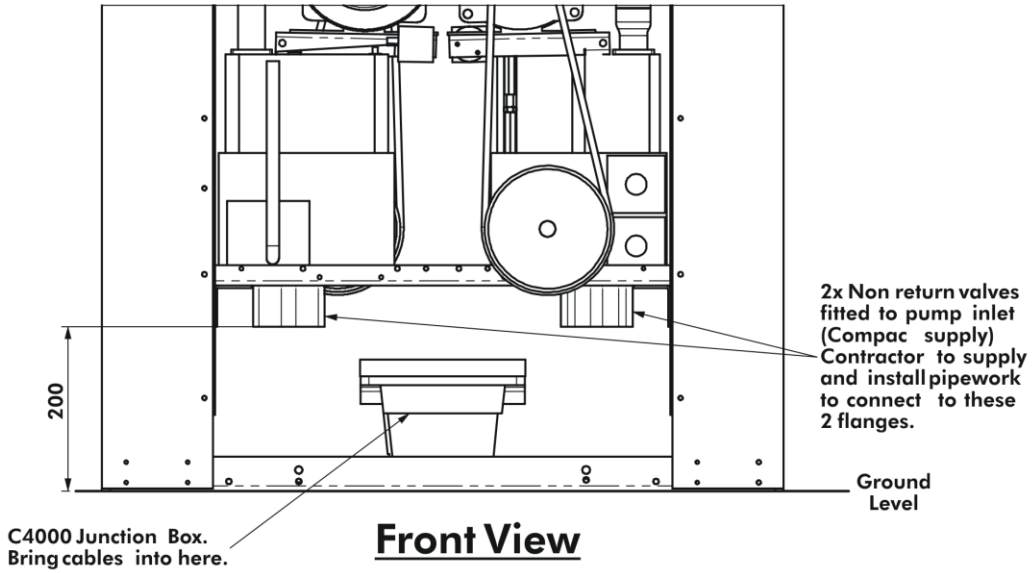
Outlet size: 40 l/min 3/4" BSP female socket, 80 l/min 1" BSP female socket.



**Pump Flange**



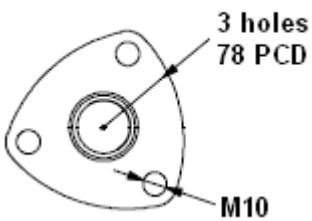
Outlet size: 40 l/min 3/4" BSP female socket, 80 l/min 1" BSP female socket.



**Footprint Plan View**

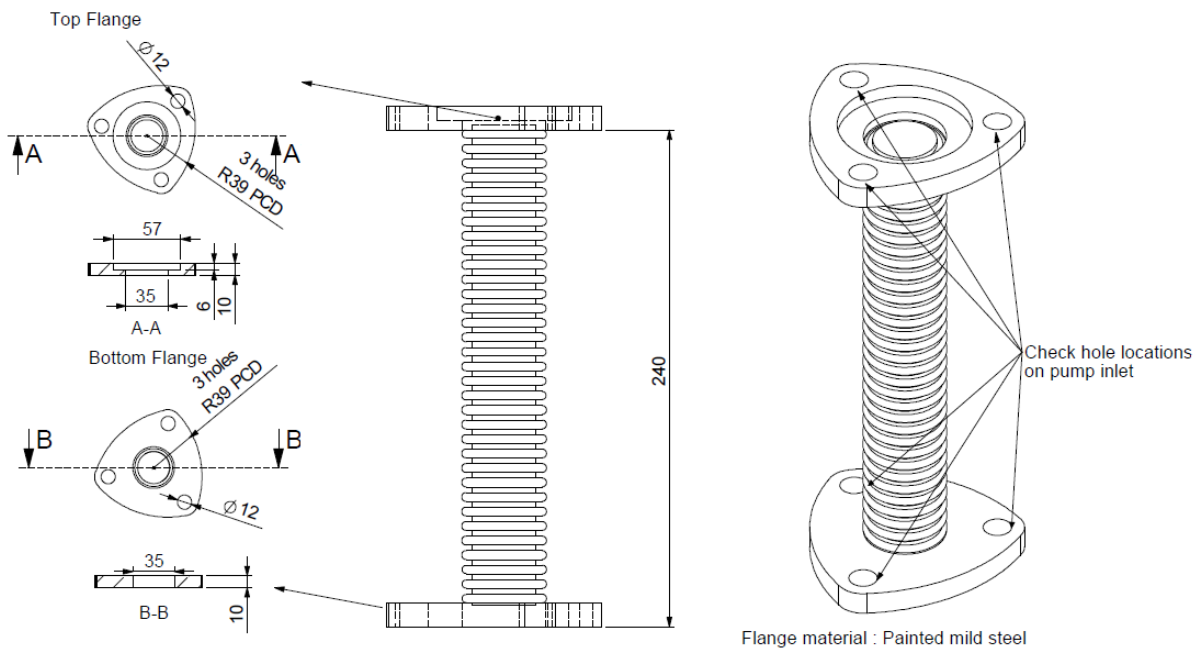
**L160P**

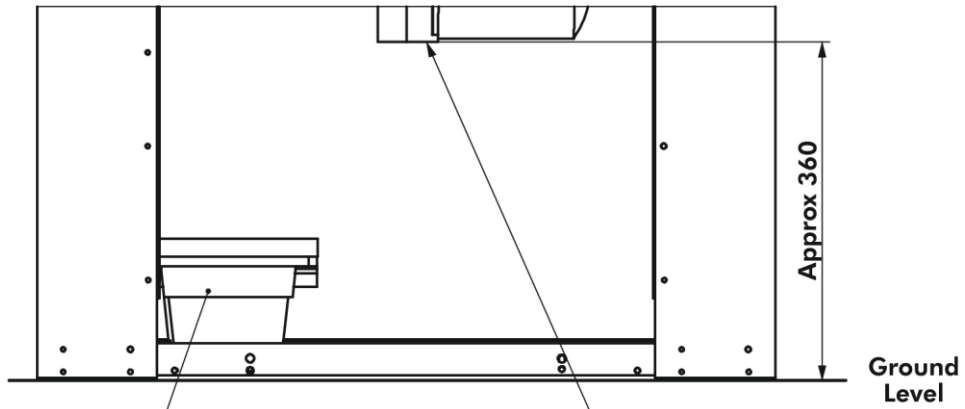
**Pump Flange**



Outlet size: 160 l/min 1 1/4" BSP female socket.

# Optional Flexi Coupling

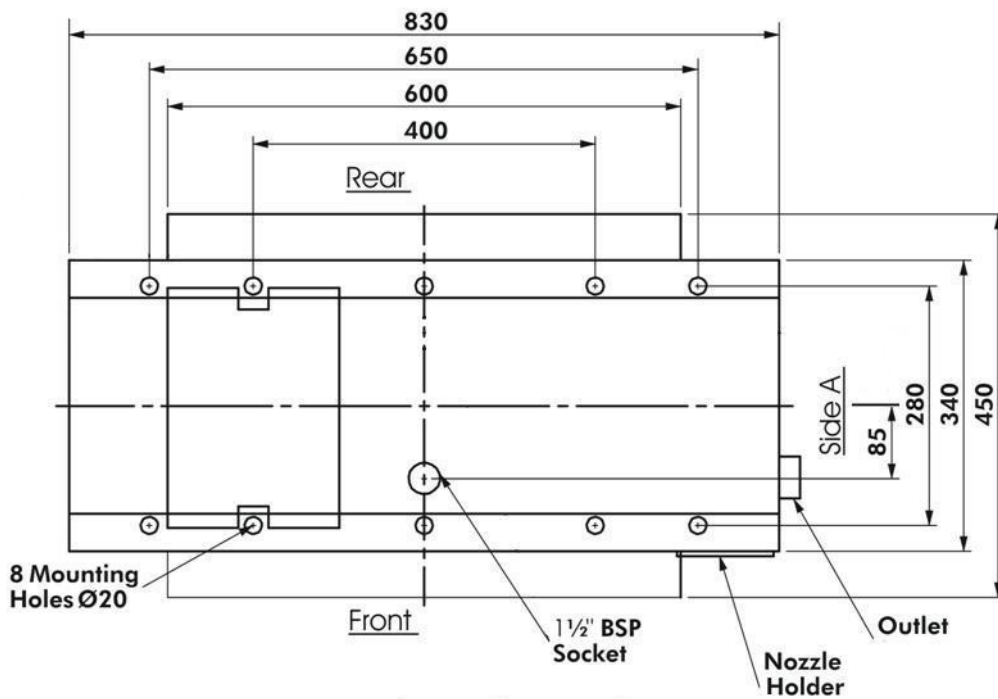




C4000 Junction Box.  
Bring cables into here.

**Front View**

Contractor to supply  
and install pipework  
to connect to this  
1 1/2" BSP Socket.



**Footprint Plan View**

**L160S**



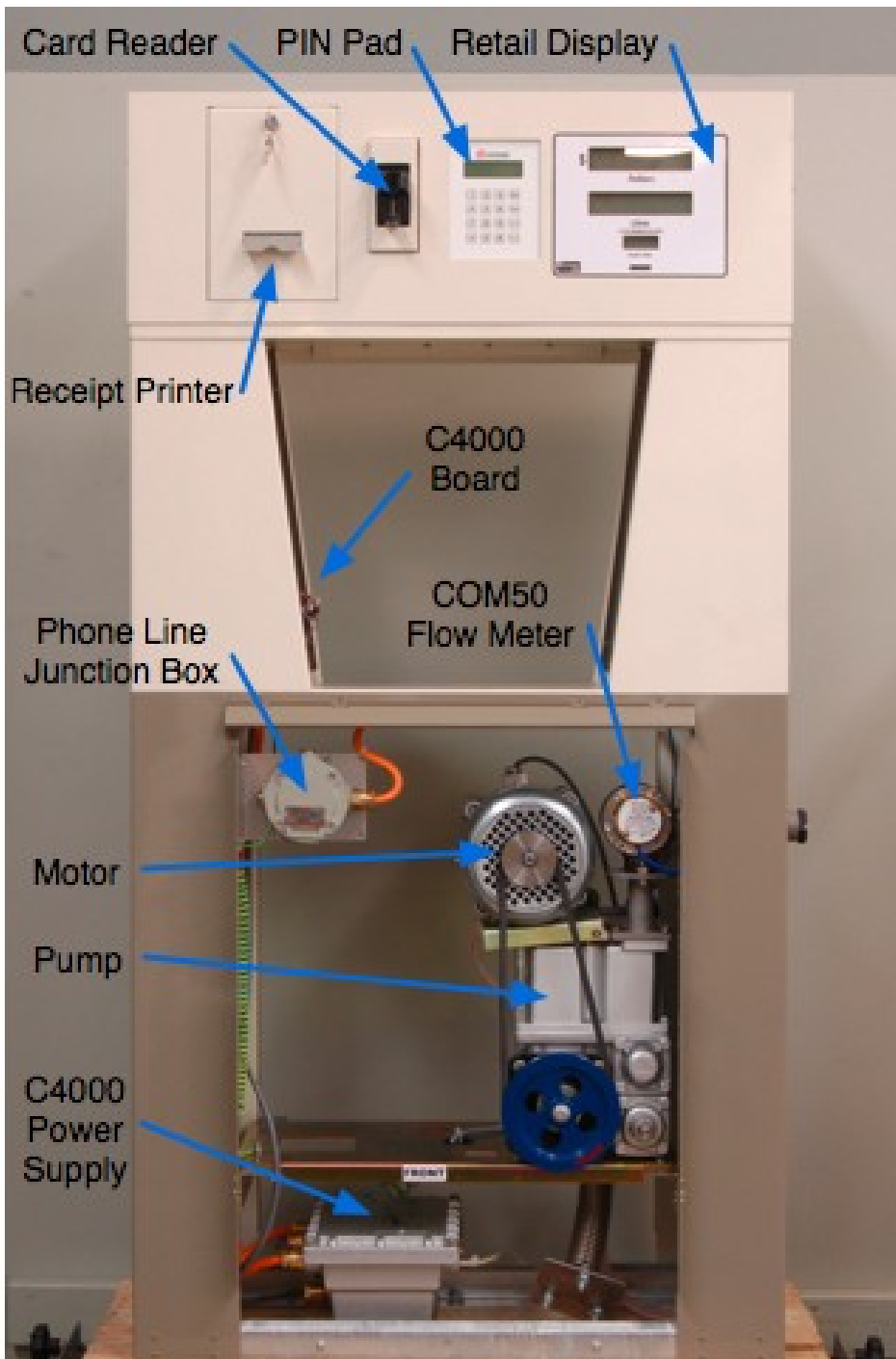


Figure 1: L80P Card King

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# Installation

## Pump installation

The pump should be bolted securely to the base using a minimum of four M8 fasteners with at least two or more fasteners in each of the bottom rails.

Due to the varied application and siting of the unit, it is up to the installer in consultation with the site management to ensure the unit is secure and conforms with local regulations, fuel company policy and site requirements.

Consideration should be given to the following points:

- The material of the base
- The evenness of the base surface
- Height of the base to ensure the keypad is easy to reach and screen visible
- The stress on the fasteners due to accidental drive away without removing hose
- Hoses should not touch the ground. Refer to Dispensing Hose and Nozzles (see page 18)

## Attaching fuel lines

Remove the cover plate and bolt the fuel pipe flange(s) to the installed pipework.

Take into consideration:

- Pipes and flanges should be clean and free from any debris or contamination
- Use the supplied new gasket
- Tighten the bolts evenly
- Check for any leakage when pump is in operation

# Dispensing Hose and Nozzles

The unit may or may not be supplied with dispensing hose and nozzle assemblies.

The dispensing equipment shall be installed to prevent the delivery hose from contacting the ground when not in use.

If customer supplied hose assemblies, pylons, reels, safe breaks and nozzles are used they must comply with the requirements outlined in AS/NZS 2229

## **Electrical and Communication Wiring**

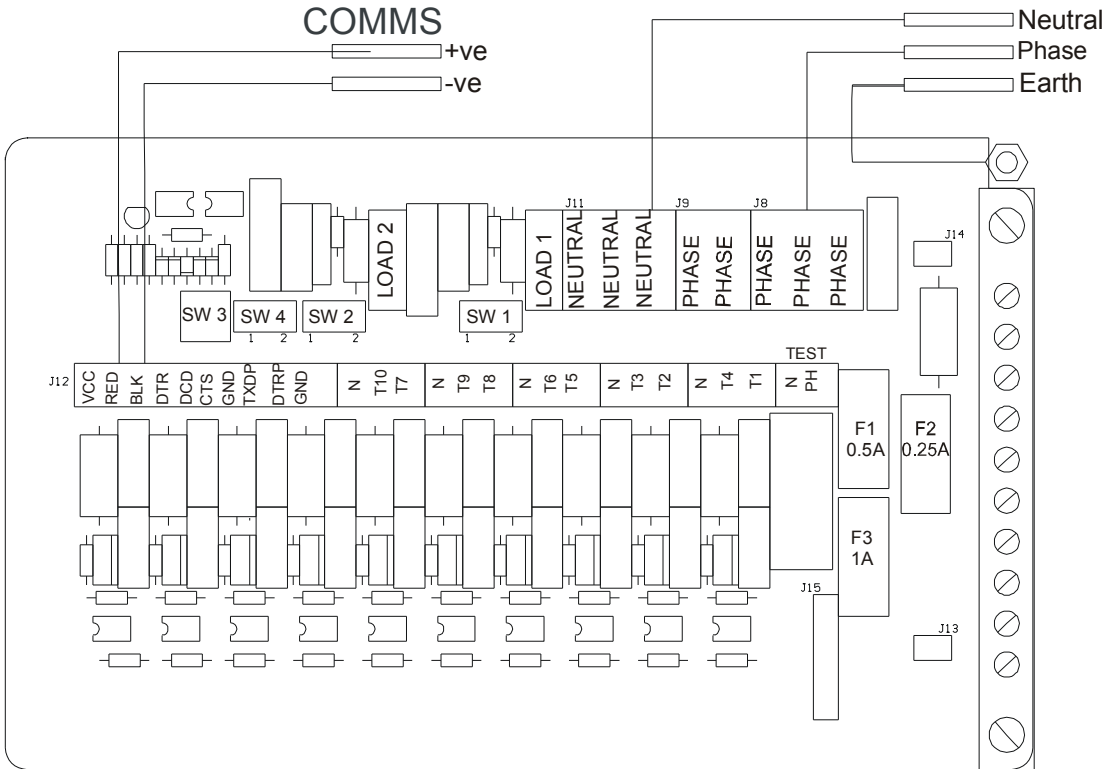
Prior to pump installation ensure that there is at least a two-metre tail on both the incoming underground 230 volt cable and any comms cables.

The power cable is terminated at the C4000 Power Supply, which is housed in the C4000 flameproof box located in the bottom of the pump, behind the front panel. Ensure the cable is properly glanded into the box.

The phone cable is terminated in the flameproof junction box located behind the front panel. Ensure the cable is properly glanded into the box.

Refer to AS/NZS 2381.1 for appropriate cabling.

# C4000 Wiring



## Fuses

In the event of a fuse blowing on the C4000 Power supply, a bag of 3 is included in the flameproof box. Any fuses used from this bag should be replaced.

**NOTE** There are three different ratings used. If replacing a fuse, ensure that the correct value is used.

## Triac Dip-switches

**CAUTION** Great care should be taken not to accidentally change the setting of these switches while working in the Flame-proof box. Operating the unit with these incorrectly set can result in damage to the C4000 Power Supply or incorrect operation of the triacs.

These switches are set in the factory and should not be changed.

If they are accidentally changed these are the correct settings for Master / Premier / Laser / Card King pump applications.

	Pump (Motor triac fitted)
SW1	1
SW2	1
SW4	Centre

## Submersible Pump Wiring

### Single Dispensers

Connect the feed to the Submersible Pump Relay / Contactor to the terminal marked T1 on the C4000 Power Supply

### Dual Dispensers

Connect the feeds to the Submersible Pump Relays / Contactors to the C4000 Power Supply as follows:

Side A to terminal marked T1

Side B to terminal marked T4

If both sides are required to switch the same submersible pump, T1 and T4 should be linked together

**⚠ CAUTION** *Ensure cables are properly glanded and the lid replaced and fastened before powering up.*

**⚠ NOTE** *Comms wiring is only required for dispensers with remote pumps or if controlling other dispensers.*

## Comms Wiring

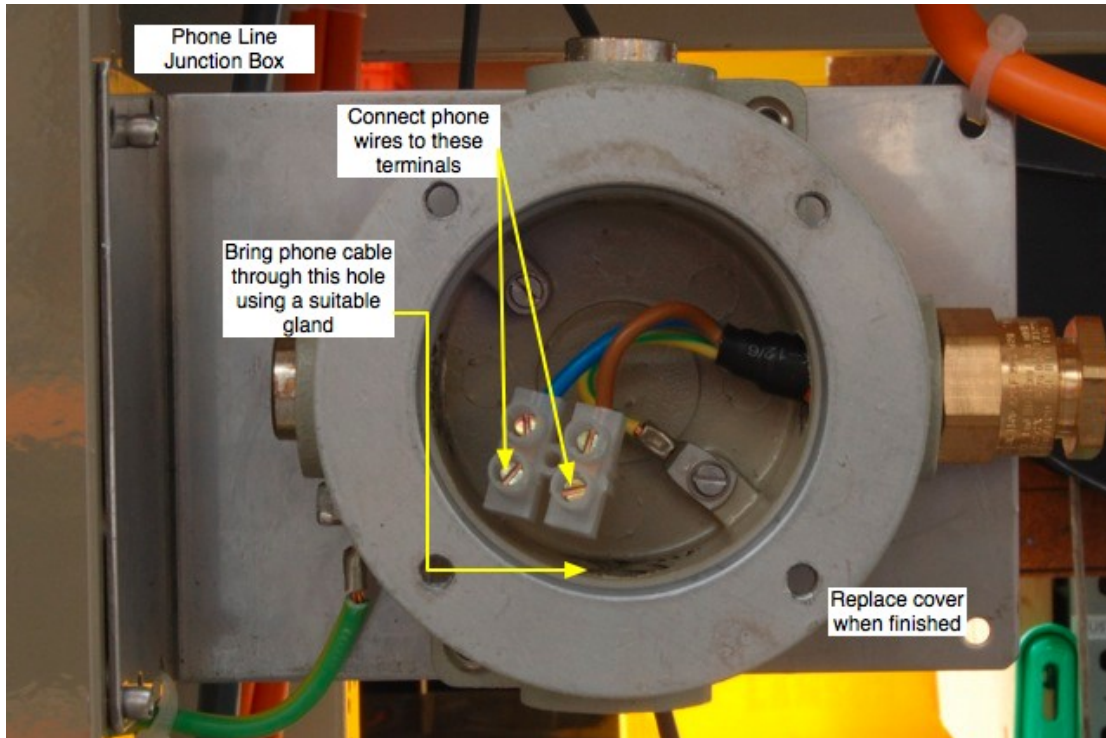
Comms wiring may vary depending on whether the dispenser has an integrated or remote pump and whether dial-up / ADSL or wireless communication is used.

Type of pump	Pump comms wiring	External comms wiring
Internal pump - standalone	No	No
Internal pump - dial up	No	Yes
Internal pump - ADSL	No	Yes
Internal pump - wireless	No	No
Remote pump standalone	Yes	No
Remote pump - dial up	Yes	Yes
Remote pump - ADSL	Yes	Yes
Remote pump - wireless	Yes	No

## Card King Comms Wiring

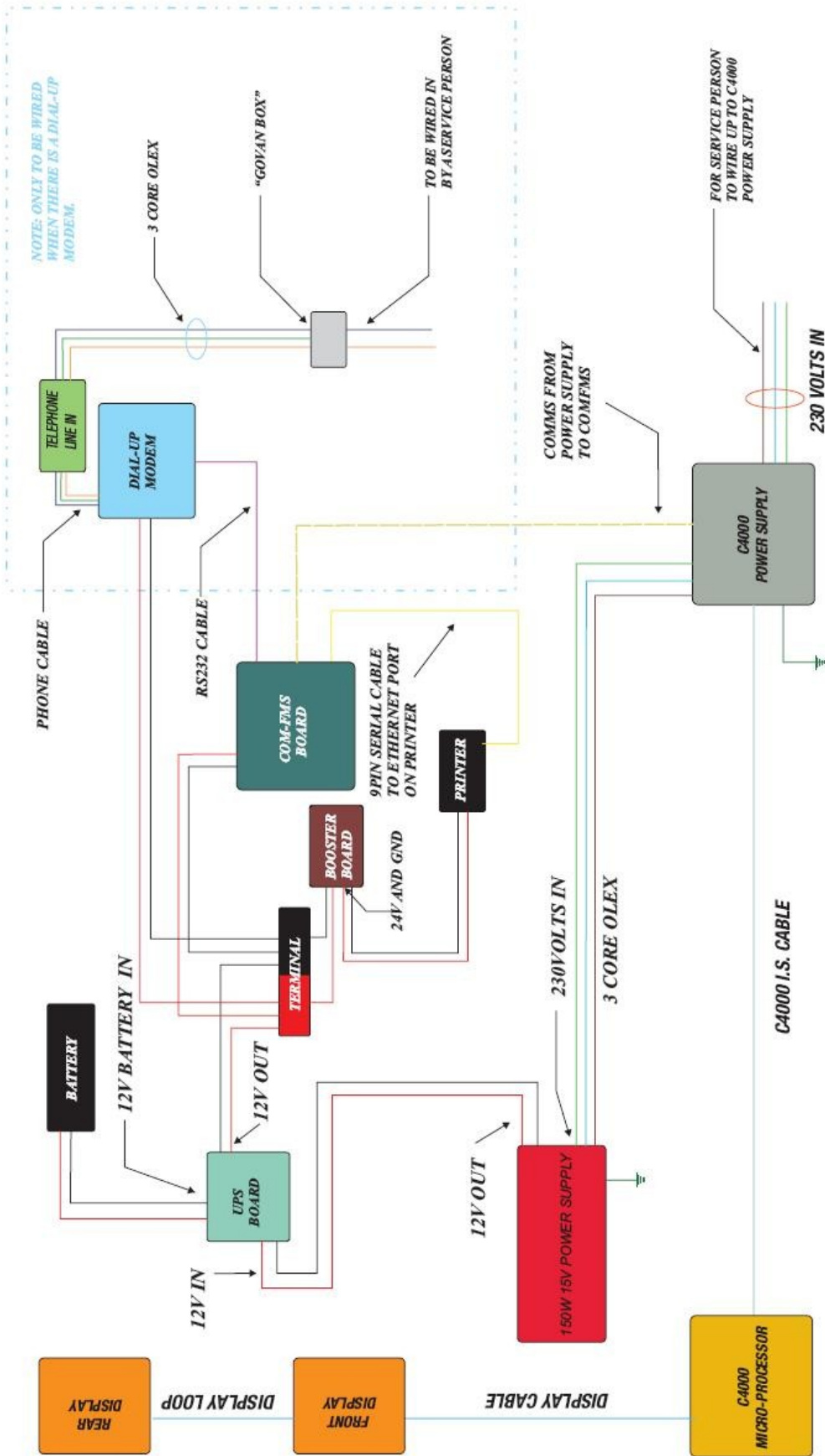
Card King pumps using dial-up or ADSL are connected to the phone line via the flameproof junction box inside the main cabinet.

**⚠ NOTE** The lid of the junction box is secured with 4 x 3/16" in-hex cap screws. Ensure you have a set of Imperial allen keys with you.



**⚠ NOTE** Ensure cables are properly glanded and the lid of the box replaced. Appropriate SWA cable is recommended.

# Wiring Layout



**Powering Up**

When all wiring and fuel connections have been made and checked, the power can be switched on to the unit.

**⚠ CAUTION** *Where regulations require, a registered electrician must check and approve connections.*

**Start Up Check**

The retail displays should illuminate and the quantity and price displays should read zero. The \$ per litre display will display the factory setting.

Remove the lid of the Card King and turn on the UPS switch. The keypad display will illuminate and after boot-up should display the message: Pass Card.

If the back-up battery has discharged during transit, the UPS board will beep and the keypad screen will display the message: Pass Card - Low Battery. You will need to wait until the battery has charged before the unit can be used.

## Checking Communication

**External Comms**

When the pump is on, contact your Netbase administrator and check that they can dial in and communicate with the pump.

**Pump Comms**

Use the diagnostic LEDs on the C4000 board to determine if the pump comm's are working correctly.



## Diagnostic LEDs in a system with Compac comms only

In a typical system (with Compac pumps only) this is how the diagnostic LEDs will appear.

LED	Comms working correctly	Comms wiring reversed	Short on comms
To Pumps / 5	Flashes	Flashes	Flashes (very fast)
From Pumps / 5	Flashes	Flashes	Flashes (very fast)
Comm Short / 5	OFF	ON	Flashes (very fast)
TX / 5	Flashes	Flashes	Flashes
RX / 5	Flashes (faster than TX / 5)	Stuck ON	Stuck ON
WDOG	OFF	OFF	OFF
POWER	ON	ON	ON
To Pumps / 4	n/a	n/a	n/a
From Pumps / 4	n/a	n/a	n/a
Comm Short / 4	n/a	n/a	n/a
D6 (on C4000)	Flashes	Stuck ON	OFF
D7 (on C4000)	Flashes	OFF	OFF

# Set Pricing

Pricing can be set in a number of ways depending on the setup.

- Via Netbase or CompacOnline - requires internet connection
- Via USB key - USB module equipped units
- Via keypad - for stand alone units

## Set Pricing via Internet

For units administered by Netbase or CompacOnline, pricing is set by the administrator and uploaded to the unit. This will override any pricing set in the unit. To check, contact the administrator to confirm that the price they have loaded matches the price at the pump.

## Set pricing via USB

For units administered by the USB module, pricing is set by editing the price on the USB key and uploading it to the unit. This will override any pricing set in the unit. To check, confirm that the price loaded on the USB key matches the price at the pump.

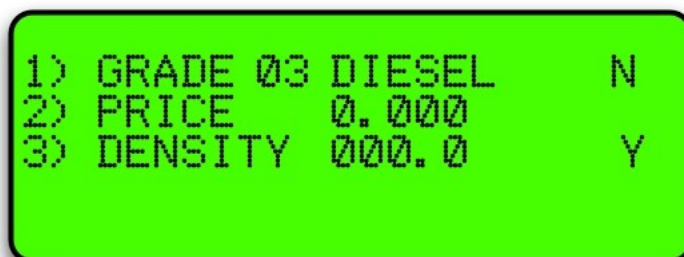
## To Set Pricing using keypad

On the keypad press No. You will be prompted for the password. Enter the password. Select Option #3 Fuels

# Option #3 FUELS

Selecting Fuels will bring up the following screen:

**NOTE** Depending on your software, the Density line may not show.



Use the Yes and No buttons to scroll through the fuel types.

To change the price for the fuel grade, press 2 and the price will start flashing

Enter the new price in a four digit format and press Enter.

The following table describes the process.

Keyboard Entry	Result on Display	Operation
Enter Passcode		
<ENTER>	Main Menu is displayed	
<3>	Fuel Menu is displayed	
	1) GRADE XX 2) PRICE 0.000	Change Price

<2>	1) GRADE XX 2) PRICE 0.000 (flashes)	Use the N and Y keys to scroll up and down the Grades
Type in new price	1) GRADE XX 2) PRICE 0.000 (still flashes)	
<ENTER>	1) GRADE XX 2) PRICE 0.000 (stops flashing)	
<N> or <Y> to change another grade Repeat as for last grade		Change another price
<CLEAR>	Returns to Main Menu	Escape

**Pump Grade Maps**

Grade Number	Standard Setup	BP Fuelcard Setup (NZ)	Mobil Fuelcard Setup (NZ)
1	Super	Diesel	Super
2	Unleaded	Super	Unleaded
3	Diesel	Oil 1	Diesel
4	PULP	Oil 2	CNG
5	LPG	T/Wash	LPG
6	Oil	C/Park	Oil
7	Kerosene	LPG	Kerosene
8	Avgas	Unleaded	Avgas
9	Jet A1	W/Bridge	Jet A1
10	Water	Oil 3	Water
11	CNG	Avgas	(not used)
12	MPD (Multi-product)	Jet A1	Multi-product
13	Oil 1	Multi-product	Oil 1
14	Oil 2	Oil 4	Avgas
15	Oil 3	Oil 5	Jet A1
16	Oil 4	N/A	N/A
21	Receipt	Receipt	Receipt
22	Auth.	Auth.	Auth.

A **receipt station** (grade 21) has a cardreader with which the holder of a validated card may request a receipt for a transaction carried out on any pump.

An **authorisation station** (grade 22) has a cardreader that enables the holder of a validated card to select and use a pump. This is typically used when non-Compac pumps are installed. An optional receipt printer may be attached to the authorisation station.

## Setting up the C4000

Once the pump is connected on site, calibration and the final setup checks must be carried out using the Calibration (K-Factor) Switch.

The switch is found on the C4000 Microprocessor Board which is housed in a metal enclosure located behind the column panel. Refer Layout. (see page 17)

The plastic cover will need to be removed to access the switch. The cover must be replaced and lock wired in place when finished.

## Configuration Code

The configuration code and "b" setting have been factory set by Compac and should not be changed.

In the event of it being lost and having to be re-entered the configuration is written on the yellow label on the C4000 processor board cover.

## C4000 Set-up - K Factor

The 'K' Factor switch is located on the C4000 PCB as shown in Figure 1. The 'K' Factor switch is used to access and change various set-up options of the C4000 head. The following charts detail the operation of setting up the C4000 head:

Any change of set-up made by the 'K' Factor switch takes effect as soon as the C4000 resets. The power supply does not have to be interrupted.

Set up of the C4000 must be done in the following sequence:

'K' Factor Switch Settings - starting with configuration setting and moving back through the options to the K Factor setting:

### K Factor Switch Settings

Setting	Price Display	Litres Display	Reference
Configuration Code	'C'	'XXXXX'	Refer Configurations C4000
Display Resolution	'Sr'	'Sr X.XX'	Refer Display (Litres) Resolution
Temperature	'E'	'E XXX.X'	Refer Temperature Calibration LPG and Bulk-metering only
ACV Flow rate	'FLO'	'r XXXX'	Refer ACV Valve Flow Rate
Density Calibration	'LP6'	'00000'	Refer Calibrating Specific Density LPG only.
No-flow cut-off	'n'	'n XXX'	Refer No Flow Cut-Off Timer C4000
Solenoid delay	'Sd'	'd XXX'	Refer Solenoid Delay
Preset Cut-Off	'PCut'	'PC X.XX'	Refer Pre-Set Cut-Off
'b' settings	'b'	'b XXXX'	Refer 'b' Settings
'K' Factor	'F', 'Fb', 'F1', 'F2', or 'F3'	'X.XXXX'	Refer Setting the 'K'Factor (see page 33)
H-Cut	'HCut'	'HXXXX'	Refer H-Cut Bulk-metering only
L-Cut	'LCut'	'LXXXX'	Refer L-Cut Bulk-metering only
F-Cut	'FCut'	'FXXXX'	Refer F-Cut Bulk-metering only
Density Factor	'dSF'	'X.XXXX'	Refer Product Density Factor CNG only

**NOTE** The K Factor setting should be done last of all (i.e. until parameter switch settings are made, the pump/dispenser may not be operational, and so a calibration fill may not be possible).

## 'K'Factor Switch

### Using the 'K' Factor Switch

#### Using the 'K' Factor Switch to Change a Setting

Step	ACTION	RESULT
1	Ensure that the nozzles are hung up	Dispenser in idle state
2	Press and release the 'K' Factor switch, in quick succession, until the desired setting is displayed.	The price display and volume display indicates the desired setting. See following paragraphs.
3	Press and hold the 'K' factor switch.	A digit, of the displayed setting, will begin to increment.
4	When the digit is correct, release the 'K' Factor switch.	
5	Repeat steps 3 and 4 for each digit of the setting	<b>NOTE</b> The C4000 will reset itself if the 'K' factor switch is left for more than 10 seconds.
Continue for multiple hose units, if appropriate.		
6	Press and release the 'K' factor switch 8 or more times in quick succession	The setting for side "B" (or hose 2, 3, or 4) is displayed.
7	Repeat steps 3 to 5 above.	

**NOTE** The C4000 will reset at any stage during the 'K' Factor operation if the switch is not pressed for ten (10) seconds. If the C4000 resets out of any field before the numbers have been set correctly, then that field must be entered again to ensure the details are correct.

**NOTE** The K-Factor switch must be sealed with a lead or paper seal after commissioning.

## Calibration ('K') Factor

The 'K' Factor is a ratio of litres dispensed per revolution of the meter.

Below is the method of calibration, including how to calculate the new 'K' Factor and how to enter it in the C4000 memory.

(See also Encoder for more information on the encoder/pulser)

## Calibration

To calibrate the dispenser/pump, dispense fuel into a certified measuring container, and compare the display value with the amount dispensed.

Example:

Display shows 10.00

True volume 20.00

To calculate the correct 'K' Factor from the information above; firstly record the existing 'K' Factor.

$$\begin{aligned} \text{New 'K' Factor} &= \text{Existing 'K' Factor} \times \frac{\text{Dispensed Amount}}{\text{Displayed Amount}} \\ &= \text{Existing 'K' Factor} \times \frac{20.00}{10.00} \\ &= \text{Existing 'K' Factor} \times 2 \end{aligned}$$

Change the existing "K" factor to this value



## Setting the Calibration 'K' Factor

Refer to C4000 Set-Up K Factor Switch Settings (see page 30). The displays will indicate as below:

Type		Price Display indication	Volume Display Indication
<b>Single Hose</b>		'F'	'X.XXXX'
<b>Dual Hose</b>	Side "A"	'F'	'X.XXXX'
	Side "B"	'Fb'	
<b>Quad or Multi-product</b>	Hose 1	'F1'	'X.XXXX'
	Hose 2	'F2'	
	Hose 3	'F3'	
	Hose 4	'F4'	

**NOTE** Once the dispenser/pump resets with the correct 'K' factor entered, the display will show the new volume unless the 'head' is in "Compensation Mode", in which case the display volume will not change.

**NOTE** Be careful when calibrating dual or multi-hose dispensers to ensure that the correct 'K' factor is being changed.

When finished, perform another calibration to check that it is correct.

## Checking Card Reader

Check the card reader to see if it reads approved cards.

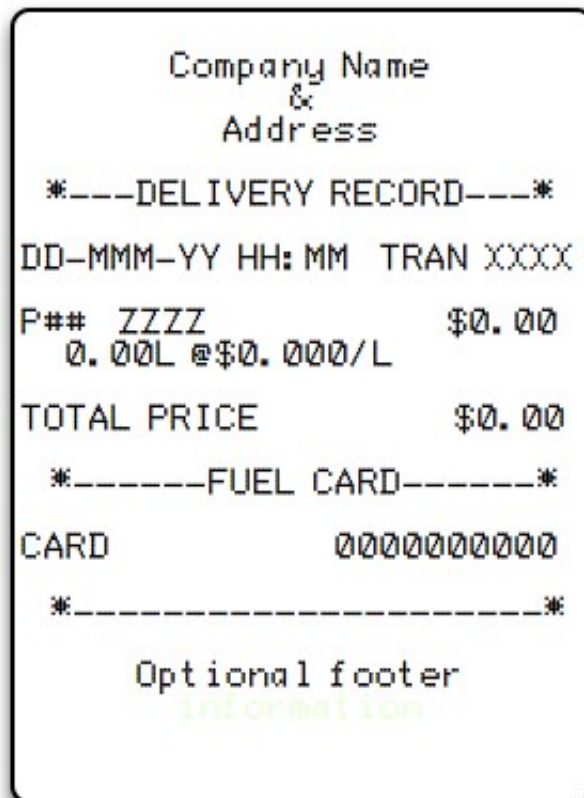
Swipe a test card and check that a transaction can be made. The card is inserted with the stripe to the top and on the right hand side.

Do this for all types of approved cards.

## Checking the Printer

Perform a test transaction and print a receipt. Check the receipt for the following:

- Does the header contain the correct information about the site?
- Are the date and time correct.?
- Is the fuel type correct?
- Does the transaction on the receipt match the transaction on the pump?



TRAN XXXX is the transaction number

P## is the pump (hose) number. P01 for single hose units

ZZZZ is the fuel grade eg. Diesel, JET A1 etc.

\$0.00 is the dollar amount of fuel dispensed

0.00L @\$0.000/L is number of litres dispensed and price per litre

CARD 0000000000 is the fuel card number

If any of the information is not correct, contact the help desk.

## **Checking Transactions are Uploaded**

Contact the your Netbase or CompacOnline administrator and check that your test transactions and any customer transactions that have taken place have been recorded correctly on Netbase or CompacOnline.

For USB equipped units, download your test transactions and check that the information recorded matches the information on the receipts.

## **Finishing Up**

When you are confident the site is trading correctly, complete the installation checklist.

If you do not have one, a copy is attached at the end of these instructions.

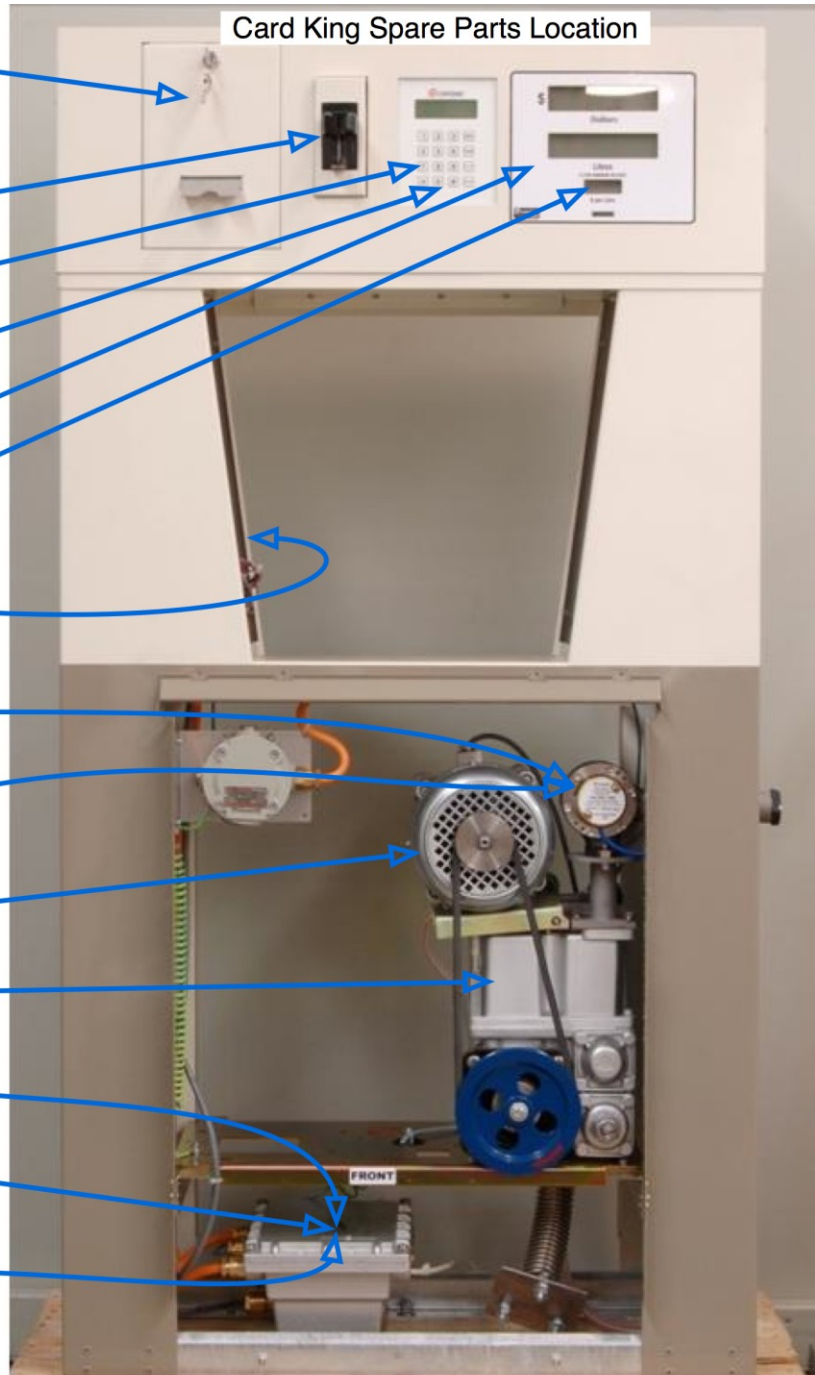
Fax the installation sheet to Compac as soon as you can.

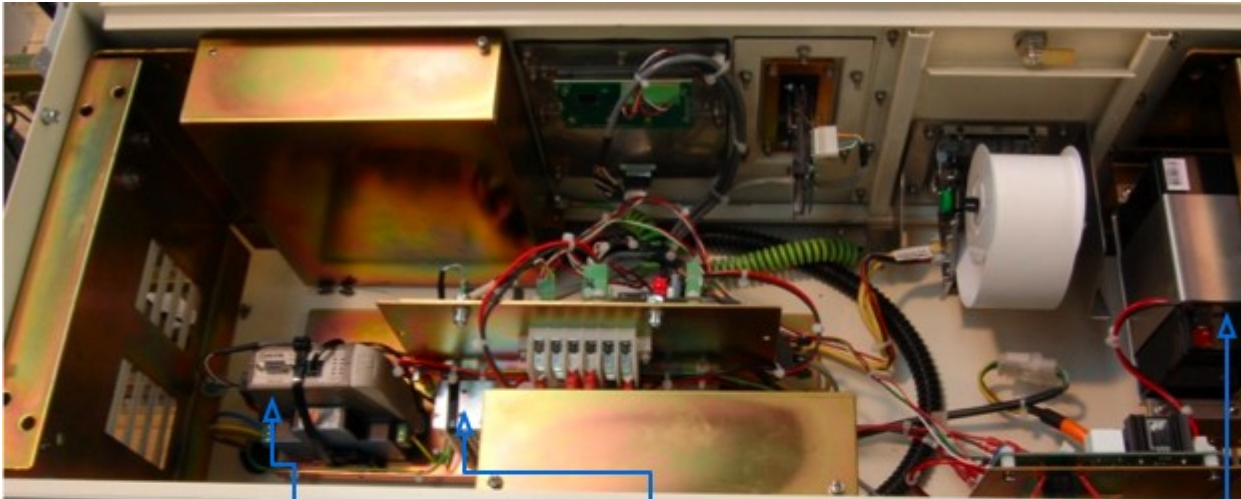
Remove all tools, clean the unit, pick up all debris and tidy the surrounding area. Remove any barriers or cones.

Contact help desk and tell them that you are about to leave the site.

# Spare Parts

- Printer  
F-BA-PRT-TG2460T
- Paper Roll  
F-BA-PRTR-CK-RL
- Card Reader  
F-BA-CDRD-MT-TTL
- Membrane Keypad  
FC-CP-PINPAD-WS
- Complete PIN Pad  
F-BL-20X4LCD-LCD
- Retail Display  
F-CP-DISPLAY-GD1
- Tote  
F-BA-TOTE-A-K
- C4000 Board (obscured)  
F-CP-C4PROCES-A
- COM50 Flowmeter  
(complete)  
F-METER-COM50
- COM50 Flowmeter  
(electronics only)  
F-METER-COM-E
- Electric Motor 3/4 Hp  
F-MOTOR-230-750W
- Pump Unit  
F-PUMP-ZYB-50
- Motor Triac  
F-AT-BTA40-RD91
- C4000 Power Supply  
Electronics only  
F-CP-C4PWR-ASSEM
- RS232 I/F PCB  
F-CP-RS232-CI157T
- Card Cleaning Kit  
F-BA-CARDCLN

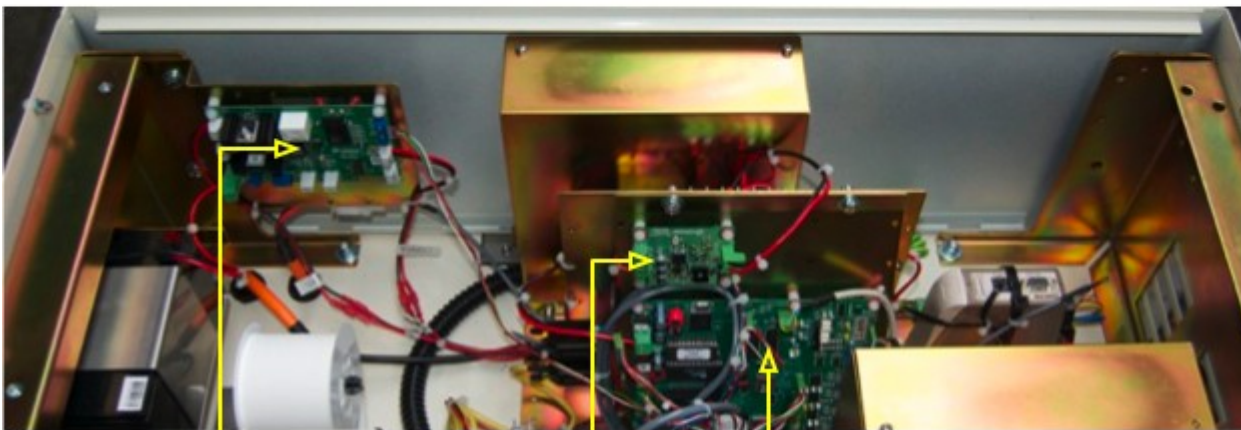




Dial-up Modem  
F-BA-MDM-WTDW33T

Power Supply for Cabinet  
F-PWR-RS15015T

Backup Battery  
FO-BATT-0001



UPS Board  
FO-BRD-0004

12v to 24v Converter Board  
F-CI221A-BOOSTT

COM FMS Board  
F-CP-CI202-FTCK

# Installation Checklist

Version 1.0.0.

Covers Compac DCA, Comfutra, Card King and Controller units.

Site number and name:	
Date:	
Installer name and phone number:	
Terminal ID number:	

When a new unit is being installed use the following checklist to make sure the unit is fully operational. Check each box or write N/A where not applicable. Refer to the relevant installation manual for procedures.

## Mechanical Checks

Yes No

Check unit is undamaged and has not been tampered with.	<input type="checkbox"/>	<input type="checkbox"/>
Is the unit in a sheltered position and facing away from the prevailing wind and rain?	<input type="checkbox"/>	<input type="checkbox"/>
Check all panels are securely fastened using tamper-proof fastenings where supplied.	<input type="checkbox"/>	<input type="checkbox"/>
Check that all cable entries to unit are through glands.	<input type="checkbox"/>	<input type="checkbox"/>

## Power on Checks

Yes No

Check that the CE board, FMS board, pinpad, printer, cardreader, router and modem all power up.	<input type="checkbox"/>	<input type="checkbox"/>
Check pumps are re-priced to the current fuel price.	<input type="checkbox"/>	<input type="checkbox"/>
Check that different fuels are correctly priced on all hoses.	<input type="checkbox"/>	<input type="checkbox"/>

## Transaction Checks

Yes No

Complete transaction using white card.	<input type="checkbox"/>	<input type="checkbox"/>
Complete transaction using credit card (credit card DCA only).	<input type="checkbox"/>	<input type="checkbox"/>
Check that all hoses can be selected and authorised by the unit.	<input type="checkbox"/>	<input type="checkbox"/>
Check all hoses stop on or before the pre-authorised value (credit card DCA only).	<input type="checkbox"/>	<input type="checkbox"/>

## Receipt Checks (where fitted)

Yes No

Check that the correct \$, L and fuel grade are printed on the receipt.	<input type="checkbox"/>	<input type="checkbox"/>
Check the date, time and header information is correct.	<input type="checkbox"/>	<input type="checkbox"/>

## USB Module Checks (where fitted)

Yes No

Check the supplied USB key is recognised by the unit.	<input type="checkbox"/>	<input type="checkbox"/>
Select "Get Transactions" and check that transactions are uploaded to the USB key.	<input type="checkbox"/>	<input type="checkbox"/>

**CompacOnline Checks (when connected)**

Yes No

Check the site appears on CompacOnline.	<input type="checkbox"/>	<input type="checkbox"/>
Check that transactions have been recorded on CompacOnline.	<input type="checkbox"/>	<input type="checkbox"/>

**Tank Gauging Checks (where fitted)**

Yes No

Check that tanks are set up in CompacOnline and that correct levels are being reported.	<input type="checkbox"/>	<input type="checkbox"/>
Check that the correct products are assigned to the correct tanks.	<input type="checkbox"/>	<input type="checkbox"/>

**Customer Training**

Yes No

Check site attendants understand refuelling procedures.	<input type="checkbox"/>	<input type="checkbox"/>
Check that site administrators understand how to obtain transactions and administer cards.	<input type="checkbox"/>	<input type="checkbox"/>

**Final Checks**

Yes No

Ensure all cables are plugged back in after remote accessing.	<input type="checkbox"/>	<input type="checkbox"/>
Tidy up all rubbish and clean the exterior of the unit before leaving.	<input type="checkbox"/>	<input type="checkbox"/>

If one or more of these tests fail, contact the Compac help desk or your service centre so the problem can be logged and parts issued if required.

**Notes**

To validate warranty and receive future help desk assistance please fax both sides of this form to: +64 9 579 0635 or post to: Compac Industries Ltd, PO Box 12 417 Penrose, Auckland 1642, New Zealand.	Report any damage immediately to Compac Industries on: +64 9 579 2094. Any site safety issues should be reported immediately to the site manager.
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