

# Automatic Checkout Closer Installation Manual

1. Remove any old checkout closers equipment from checkout counter to allow clear access for the closer installation – keep safely (advise site supervisor/store manager of its location) for potential reuse.
2. Un-pack the kit and ensure all goods are accounted for and fully intact.
3. Disconnect ACC motor wiring harness to allow cable to fit through the backing plate (see DR5).
4. Use the backing plate as a template for checkout positioning marking then carefully drill penetration holes for fixings and cable entry – important: make sure ACC gate arms are installed (**fully aligned**) directly opposite to each other (see Dr3). Note: if two ACC units are fitted opposite each other ACC arms should be mounted to FULLY aligned with each other – this may mean that one ACC body will not be fitted across the checkout counter rib and may have holes to be plugged up afterwards.
5. Bolt checkout body in place:
  - a. where possible, fit new ACC centralised directly over the previous checkout closer position, this acts to hide the penetrations previously drilled for original closer.

By default, this should render the backing plate sitting, approximately centralised, from a longitude perspective, over a natural rib (which is part of the checkout structure) thus offering additional strength for the fixing of the new motorised closer – use 8mm X 100mm bolts (or cut lengths of 8mm booker rod as required) with flat washers and spring washer.

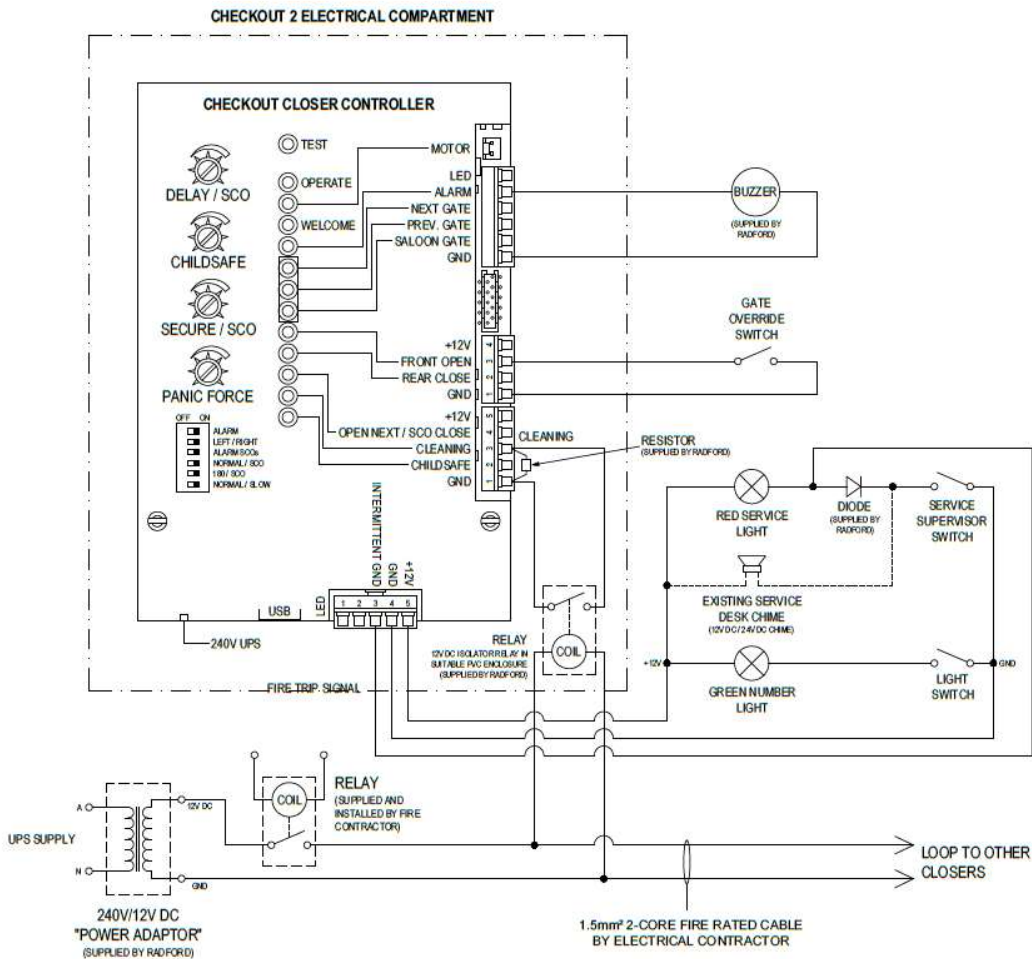
- b. Thread nuts and washers onto the on the bolts before threading the bolts into the back of the ACC body (see DR6)  
***Important: fit bolts into ACC body (BY HAND ONLY) before hand-tightening the fixing nuts up against the checkout frame.***

It is vital that these above-mentioned bolts are threaded into the back of the ACC body **by hand** only, otherwise you can damage the ACC body. The final tightening of the ACC body should be done with the NUTS only – tighten nuts with a spanner, without overtightening (see DR6).

- c. important: use packing between closer body and checkout (only if required) to ensure arm will be able to close a full 90 degrees.
    - d. Re-connect motor wiring harness to closer body – only do so when the ACC body is firmly bolted to checkout body, otherwise you may damage the cabling.
6. Fit controller into checkout cavity and terminate as per steps outlined in a-j as follows:

- a. Connect coulisse (motor position encoder) wiring harness onto ACC control board via plug and play terminals already fitted (marked J100 on controller).  
**Note:** white cover needs to be removed from pcb.
- b. Connect motor wiring harness onto ACC control board – plug and play terminals already fitted (marked motor on controller)
- c. Set up dip switches on ACC controller as follows:
  - Dip switch #1. = right position
  - Dip switch #2. = left or right position as required
  - Dip switch #3. = left position
  - Dip switch #4. = left position
  - Dip switch #5. = left position
  - Dip switch #6. = right position
- d. Set potentiometers on ACC controller as follows:
  - Delay potentiometer to the zero-delay position by twisting to the **fully anti-clockwise**.
  - Remaining potentiometers: wind to approx. mid position.
- e. Remove existing power supply to both existing external red and green checkout pole light switches (leave checkout pole light wiring hanging to pole base for reuse) and rewire both lights as per wiring diagram below (see DRI)

(Note: chime sounders to be permanently disconnected)



### "POWER ADAPTOR" NOTES

1. LOCATE TRANSFORMER AT CHECKOUT NEAREST TO RIP
2. USE EXISTING UPS CIRCUIT FOR POWER
3. HOUSE TRANSFORMER IN SUITABLE PVC ENCLOSURE WITH LABEL "ESSENTIAL SAFETY SERVICE, POWER FOR FIRE TRIP SIGNAL FOR AUTO GATES".

### GENERAL NOTES

1. REMOVE EXISTING POWER SOURCE FROM CHECKOUT POLE RED & GREEN LIGHTS. SOURCE POWER TO LIGHTS FROM CHECKOUT CLOSER CONTROLLER UNIT AS SHOWN.
2. WIRING CONNECTION (DOTTED LINES) AND DIODE ONLY APPLICABLE WHEN STORE HAS EXISTING SERVICE DESK CHIME SYSTEM.
3. INSTALL ISOLATION RELAY AT EACH GATE IN A SUITABLE PVC ENCLOSURE WITHIN THE POWER COMPARTMENT. RELAYS AND ENCLOSURES TO BE SUPPLIED BY RADFORD. LABEL ENCLOSURE WITH WORDING "ESSENTIAL SAFETY SERVICE, FIRE TRIP SIGNAL FOR AUTO GATE".
4. INSTALL MANUAL OVERRIDE SWITCH AT EACH CHECKOUT AT LIGHT / CONVEYOR BELT CONTROL STATION. PROVIDE LABEL "GATE OVERRIDE" ADJACENT TO SWITCH.

- f. check external audible alarm terminations are in place between **Alarm** and **GND** in ACC controller see schematic above.

- g. **Special cases:** only if instructed to do so, audible alarm can be mounted externally by removing sounder unit from ACC controller case and extending the cabling to new fitting position as required.
- h. Terminate FIP cabling to **Cleaning** and **GND** on ACC Controller (see schematic wiring diagram) supplied by others.

**Important note: Radford Retail Solutions and ACC manufacturer recommends each ACC controller have its own independent fire rated emergency FIP-relay for extra safety.**

**The supply and installation of these FIP relays are supplied by other FIB-qualified contractors.**

- i. Ensure ACC controller has a 5.6K resistor still in place between **Cleaning** and **GND** on the PCB, to eliminate unwanted feed-back.
- j. Terminate 230V AC power from UPS to ACC controller.  
**(UPS power already fitted internally to checkout)**

- 7. Fit gate arm to ACC body by tightening grub screws on closer collar (**ensuring the grub screws have thread lock applied - if gate arm type has 90-degree bend couplers, fit same with grub screws ensuring they have had thread lock applied**)

- a. With unit powered up and gate in the closed position, carefully check the alignment of the arm to be 90 degrees to the checkout body position. If an adjustment is required, this can be done by loosening the coulisse (2.5mm Allen-head) adjustment screw and adjusting the inner sleeve to find the centre position (see image below)

**(ACC NEEDS TO BE POWERED AND IN THE CLOSED POSITION WHEN MAKING ADJUSTMENTS)**

**(IMPORTANT: DO NOT TRIGGER THE ACC TO OPEN OR CLOSE WHEN MAKING ADJUSTMENTS TO THE COULISSE AS THIS MAY DISTORT THE DEVICE AND WILL VOID PRODUCT WARRANTY)**

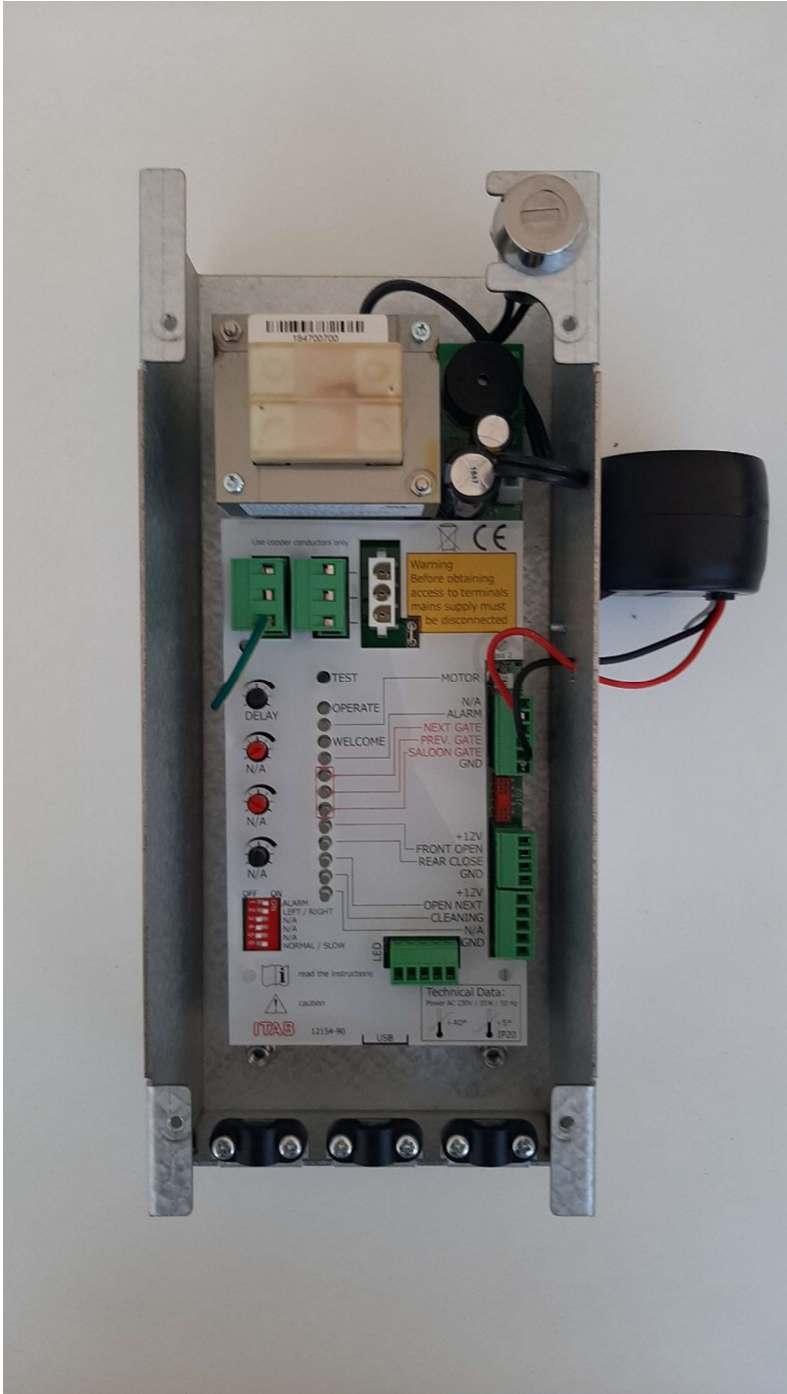
- 8. With power switched on power up unit and check full operations – adjust and align as ACC body and arm as required (see sign off document sheet below)

(DR3) Below: image of basic ACC kit with backing plate.





(DR4) Below: image of Itab ACC controller with external alarm fitted to side of case



**Radford.**

(DR5) Below image showing low voltage motor cable entry point.

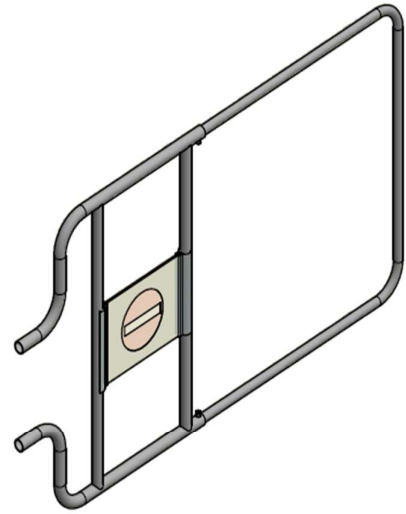
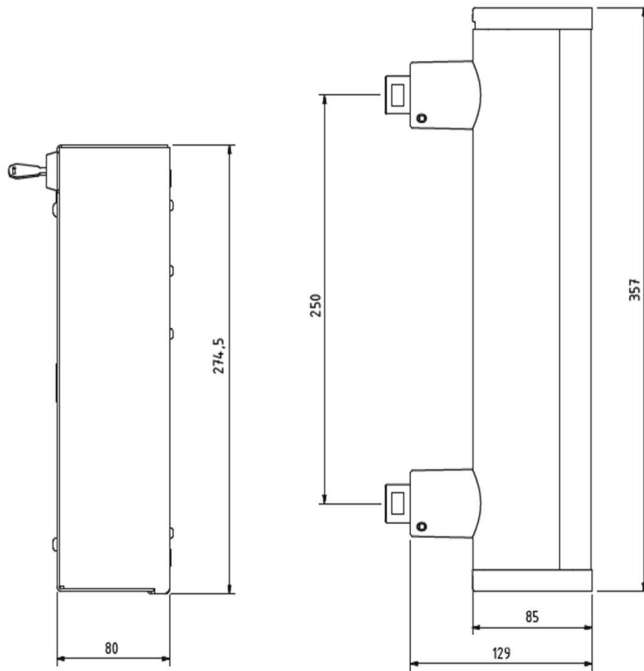


(DR6) Below: image of ACC drive assembly with backing plate and fixings inserted.



(DR7) Below: ACC basic drive assembly outline dimensions.





**Itab ACC checkout closer sign off document – circle yes or no.**

1. Is the closer sitting on checkout aligned and straight: YES NO
2. Does closer fully open: YES NO

3. Does closer external alarm operate if pushed the wrong way: YES NO

4. Does closer external light operate and flash if pushed the wrong way: YES NO

5. Has gate FIP been tested - operates in the direction of store exit (initial test by shorting out Cleaning and GND) real test to be performed by triggering fire panel: YES NO

Store Name and Number: .....  
Technicians company name: .....  
Technicians name: .....  
Technicians signature: .....  
(Date: .....

Site managers name: .....

Site managers signature: .....  
(Date: .....

