

# **Acoustic Door Closer Instructions**

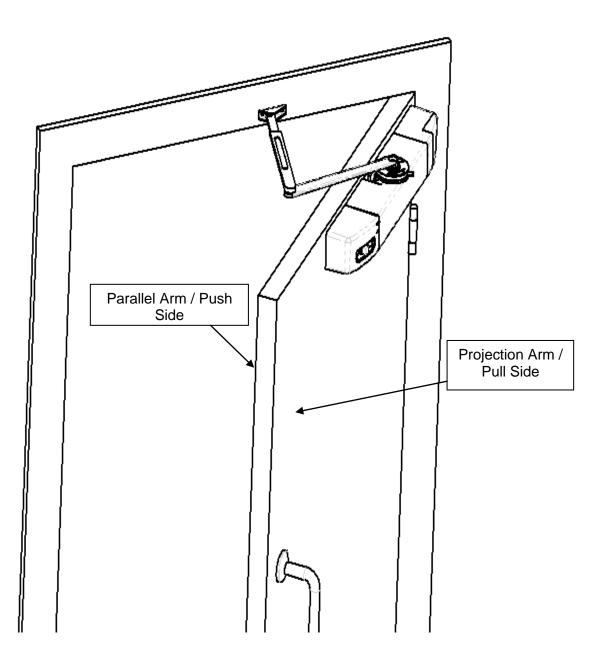
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### Introduction

The Agrippa door closer enables a fire door to be left open at any angle up to the latching angle, but will still close when the fire alarm sounds. Once the door is first opened, the door closer latches leaving the door to open and close freely. The latching angle can be set from 65° to 105°, but 90° is the most common angle. The closer "learns" the sound of the fire alarm to minimise false releases from background noise.

The closer should usually be mounted on the pull-to-open side of the door. This is called the projecting arm position as the closer arm projects into the room. If this is not possible the closer can be mounted on the push-to-open side, the parallel arm position.

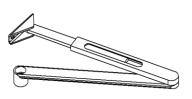


### **Contents of Box**

Check the contents of your box.

- 1 x Agrippa Door Closer Unit
- 1 x Centre Cover
- 1 x User Guide
- 1 x Projection Arm / Pull Face Fitting Template
- 1 x Parallel Arm / Push Face Fitting Template
- 1 x Door Closer Arm Box
- 1 x Door Closer Body
- 1 x Accessories Box

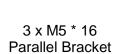
#### **Contents of Door Closer Arm Box**



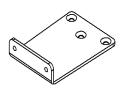
1 x Door Closer Arm



2 x M5 \* 6 Parallel Bracket Foot Screws



Fixing Machined Screws



1 x Parallel Bracket



3 x N°10 \* 1" Parallel Bracket Fixing Wood Screws

#### **Contents of Accessories Box**



1 x Hub



1 x M8\*25 Drive Screw



1 x M6\*30 Door Closer Arm Screw

**Tools Required** 

# 1 x Flanged Bush

1 x Latching Plate

1 x Drive Sleeve



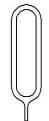
4 x M5 \* 12 Door Closer Screws



1 x M8\*12 Clamping Screw



2 x C Cell Batteries



Setting Pin



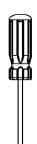
1 x M8 Washer



6 x Nº8 \* 1-1/4"



Drill



Ø 3mm Drill Bit

Ø



Nº2 - Pozi Screw Driver



Flat Head Screw Driver

Marker Pen

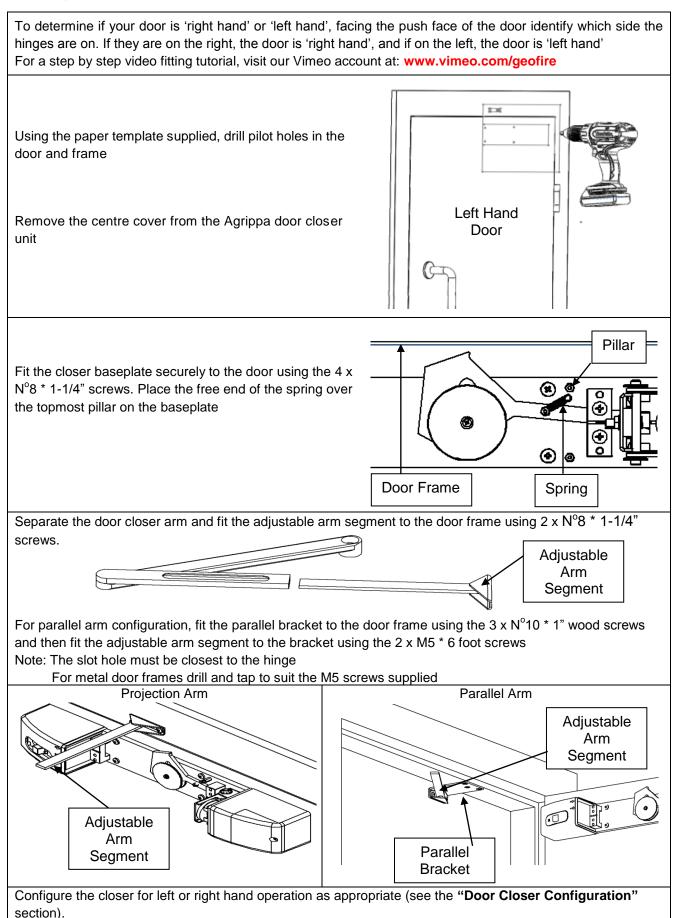


Adjustable Spanner



5.0mm Allen Key

# Fitting the Door Closer – Part 1



# **Door Closer Configuration**

#### Projecting Arm – Pull Side

Check how far you want the door to open. This is the latching angle.

#### Left Hand

- i. Place the latching plate onto the hub with 'L' upmost. As shown below
- ii. Place the drive screw through the drive sleeve and latching plate **Example: Projection Arm** and then screw into hole III loosely. Align the screw hole to the centre of the slot: this is the 90° latching angle position. Refer to the sketches below for other latching angles. Tighten the drive screw.

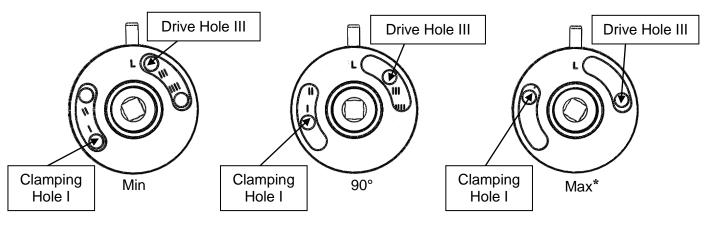
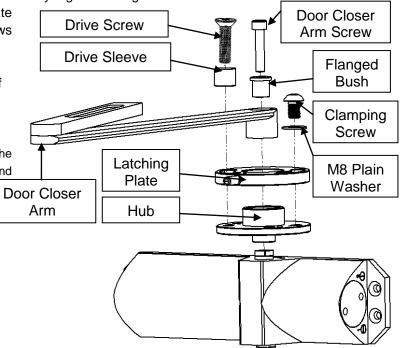
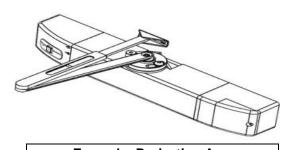


Figure 1: Left Hand Projecting Arm Cam Positions

- iii. Fit the clamping screw and the M8 washer into hole I and tighten
- iv. With the front of the closer body facing you ensure the closing speed screws are to the right. Slot the hub assembly onto the shaft of the closer body with the spring pin facing towards you
- v. Locate the closer arm into the hub assembly so that it projects out over the spring pin. Insert the flanged bush into the arm, and screw the assembly together using the door closer arm screw
- vi. Screw the closer assembly to the baseplate using the four M5x12 door closer screws provided
- vii. Connect the two arm segments together making sure of a 90° angle with the face of the door. Screw the segments together tightly

\* The maximum latch angle is limited by the depth of the architrave around the door, and by any obstruction behind it





#### Right Hand

- i. Place the latching plate onto the hub with 'L' facing down. As shown below
- ii. Place the drive screw through the drive sleeve and latching plate and then screw into hole II loosely. Align the screw hole to the centre of the slot: this is the 90° latching angle position. Refer to the sketches below for other latching angles. Tighten the drive screw.

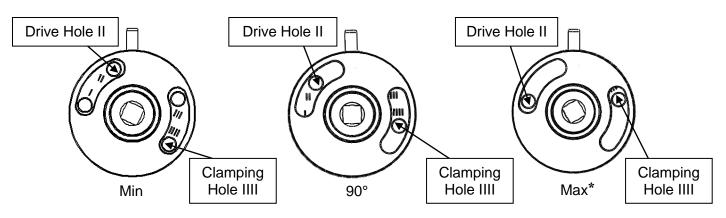
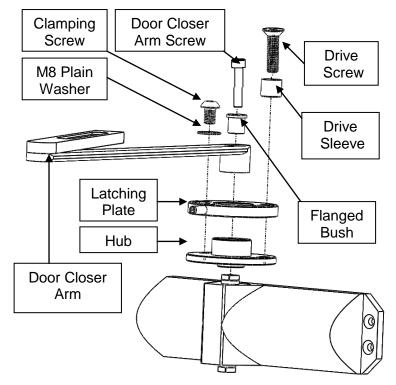


Figure 2: Right Hand Projecting Arm Cam Positions

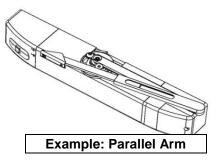
- iii. Fit the clamping screw and the M8 washer into hole IIII and tighten
- iv. With the front of the closer body facing you ensure the closing speed screws are to the left. Slot the hub assembly onto the shaft of the closer body with the spring pin facing towards you
- v. Locate the closer arm into the hub assembly so that it projects out over the spring pin. Insert the flanged bush into the arm, and screw the assembly together using the door closer arm screw
- vi. Screw the closer assembly to the baseplate using the four M5x12 door closer screws provided
- vii. Connect the two arm segments making sure of a 90° angle with the face of the door. Screw the segments together tightly
- \* The maximum latch angle is limited by the depth of the architrave around the door, and by any obstruction behind it

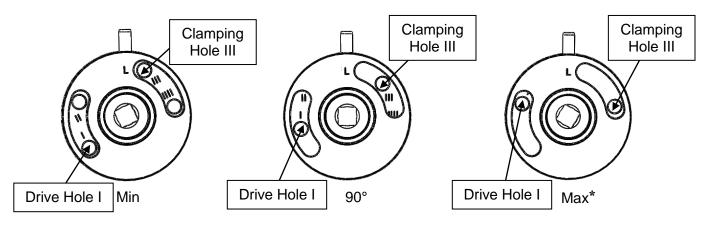


#### Parallel Arm – Push Side

#### Left Hand

- i. Place the latching plate onto the shaft of the hub with 'L' upmost. As shown below
- ii. Place the drive sleeve on the drive screw, but don't fit to the hub yet.
- iii. Fit the clamping screw and the M8 washer into hole III and tighten. Refer to sketches below

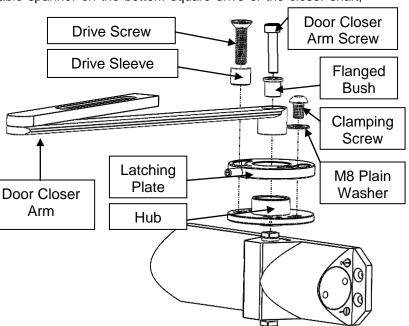






- iv. With the front of the closer body facing you ensure the closing speed screws are to the right. Slot the hub assembly onto the shaft of the closer body with the spring pin facing towards you
- v. Locate the closer arm into the hub assembly so that it projects out over the closing speed screws. Insert the flanged bush into the arm, and screw the assembly together using the door closer screw
- vi. Screw the closer assembly to the baseplate using the four M5x12 door closer screws provided
- vii. Connect the 2 arm segments together, but don't screw them down. With the door closed, move the arm until it is parallel with the face of the door. Mark on the adjustable arm segment the intersection of it with the other arm segment
- viii. Open the door and disconnect the adjustable arm segment
- ix. Pre-tension the closer: Using an adjustable spanner on the bottom square drive of the closer shaft, turning it from right to left.
- x. Place the drive screw through the latching plate and into hole I on the hub and tighten, making sure the arm remains against the face of the door
- xi. Reconnect the two arm segments and screw together, taking note of the mark made in step vi above. Note: You may need to open the door to connect the two arm segments together

\* The maximum latch angle is limited by the depth of the architrave around the door, and by any obstruction behind it



#### Right Hand

- i. Place the latching plate onto the shaft of the hub with 'L' facing down. As shown below
- ii. Place the drive sleeve on the drive screw, but don't fit to the hub yet.
- iii. Fit the clamping screw and the M8 washer into hole II and tighten. Refer to sketches below

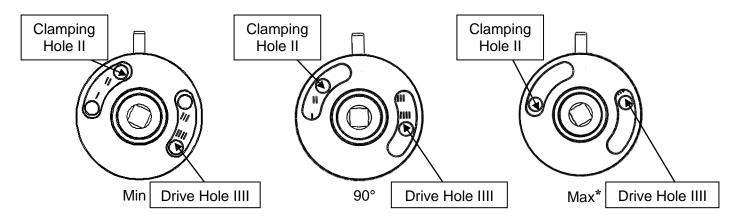
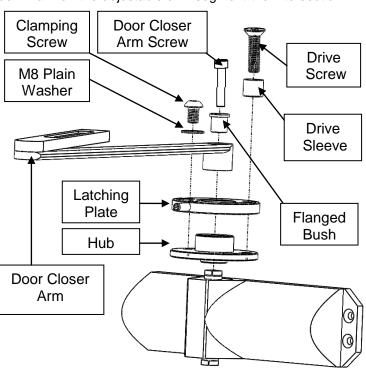


Figure 4: Right Hand Parallel Arm Cam Positions

- iv. With the front of the closer body facing you ensure the closing speed screws are to the left. Slot the hub assembly onto the shaft of the closer body with the spring pin facing towards you
- v. Locate the closer arm into the hub assembly so that it projects out over the closing speed screws. Insert the flanged bush into the arm, and screw the assembly together using the door closer arm screw
- vi. Screw the closer assembly to the baseplate using the four M5x12 door closer screws provided
- vii. Connect the 2 arm segments together, but don't screw them down. With the door closed, move the arm until it is parallel with the face of the door. Mark on the adjustable arm segment the intersection of it with the other arm segment
- viii. Open the door and disconnect the adjustable arm segment
- ix. Pre-tension the closer: Using an adjustable spanner on the bottom square drive of the closer shaft, turning it from left to right.
- Place the drive screw through the latching plate into hole IIII on the hub and tighten, making sure the arm remains against the face of the door
- xi. Reconnect the two arm segments and screw together, taking note of the mark made in step vi above. Note: You may need to open the door to connect the two arm segments together

\* The maximum latch angle is limited by the depth of the architrave around the door, and by any obstruction behind it



#### **Testing and Adjusting**

Check that the latching angle is correct. If it is not, please follow these instructions to adjust it. CAUTION: DO NOT TRAP FINGERS IN THE MECHANISM WHILST ADJUSTING

#### Projection arm configuration

The mechanism can only be adjusted with the closer arms disconnected so estimate the angle of adjustment required before starting

- Push the red button to release the door
- Disconnect the adjustable arm from the closer arm
- Slacken both the clamp and drive screws. Rotate the spring pin by the angle required, then retighten both screws
- Connect the two arms and fit the retaining screws
- Check that the latching angle is correct and if not repeat the steps above

#### Parallel arm configuration

The mechanism can only be adjusted with the closer arms disconnected first and then by removing the drive screw disconnected, so estimate the angle of adjustment required before starting

- Push the red button to release the closer
- Tension the closer shaft with a spanner and remove the drive screw
- Slacken the clamp screw. Rotate the latching plate by the angle required. Retighten the clamp screw
- Tension the closer shaft with a spanner and replace and tighten the drive screw
- Check that the latching angle is correct and if not repeat the steps above

### Fitting the Door Closer – Part 2

Fit the supplied batteries (2 x "C" cells). Note the correct orientation marked on the battery compartment label inside

The motor will turn for about 5 seconds. Fit the lid. The red dot will illuminate and after 10 seconds the magnet will turn on (unless the background noise level is too high). The door may now be latched open

Adjust the closing speed using a flat head screw driver to adjust the two screw valves at the end of the closer body.

- The valve marked 1 controls the speed over most of the closing cycle
- The valve marked 2 controls the speed for the final closing speed

Screw in (clockwise) to slow down, screw out (anti-clockwise) to speed up. Make sure the speed is sufficient to fully close the door

Place the centre cover over the closer unit body and click it home

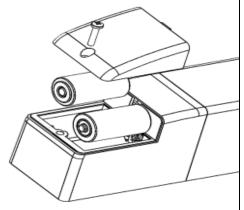
Note: To assist removal of the centre cover press the red release button and wait for the door to fully close before pulling the centre cover off

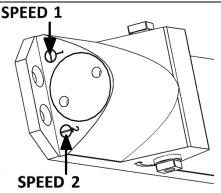
# You must now teach the closer the alarm sound as explained in the "Learning the Alarm Sound" section.

Do not put the door closer to use without performing a fire test to check that the door releases. Refer to the **"Commissioning"** section.

### **Sounder Locations**

When fitting an Agrippa door closer, take note of where the nearest sounder is. If there is a door between this unit and the nearest sounder, before following the "Learning the Alarm Sound" section make sure the door between the unit and the sounder is closed so that the unit is learnt in the 'worst case' ensuring it releases in a fire.



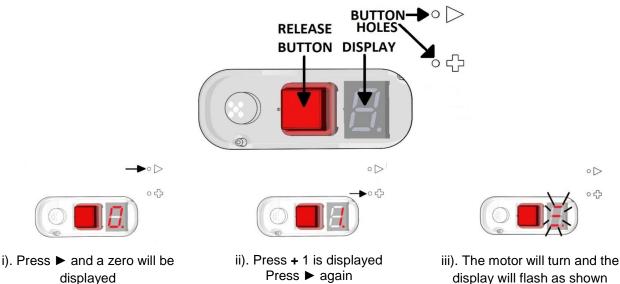


# Learning the Alarm Sound

NOTE: The batteries must be in good condition for the learn function to work.

Use the Setting Pin inserted through the button holes to operate the > and + buttons.

There must be no background noise while the alarm is recording



iv). Open the door until it latches

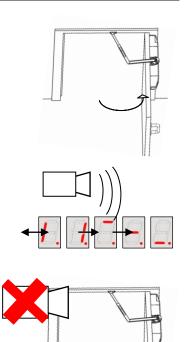
The unit is ready to learn

v). Sound the alarm and push the red RELEASE button. There must be no background noise while the alarm is recording

The display changes to show that it is recording. This takes about 15 seconds

vi). The door will release once recording has finished. You can now switch off the alarm

The closer will take up to 2 minutes to process the sound, then the red dot will illuminate for about 10 seconds. Once the red dot has disappeared the door closer is ready to use



N.B. If the unit is left for more than 20 minutes in option 1 without starting the learn cycle, the learn mode will time out.

### **Bells as Alarms**

If the alarm sound is generated by a bell you may find that the Agrippa is sensitive to general background noise after the learning process. The red dot will often stay lit and the door may not hold or release. This can be improved by selecting command option 9 (see the "**Command Options**" section) any time **after** completing the learning process as long as the Agrippa has not been returned to default settings. Once selected, the display will show a rotating pattern for around 10 seconds. If the closer has already been returned to default settings you will have to repeat the learning process before selecting option 9.

# **Noisy Doors**

When doors are near to each other, note whether any of them closes noisily whether due to the closing mechanism, the door slamming shut, or a chain keeper knocking against the door surface. If this is the case, doors need to be put through the learn cycle separately to stop a unit hearing this noise and having the noise skew its sound processing.

# **Daily Timed Release**

You may set a daily time when the door will close. It will then stay released until another set time when it will reactivate.

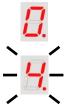
- Times are entered in 24 hour format
- The current time, release time and a resume-hold time must be set before this function will work
- If the batteries are removed, the current time must be reset

To use the timed release, first select command option 4 to enter the current time.

BUTTON HOLES

Press the ► 0 is displayed

Press + until 4 is displayed Press ► and 4 will flash



5

This example shows how to enter a time of 3:20pm or 15:20

Press + until 1 is displayed Press ► The tens of hours is now set Press + until 5 is displayed Press ► The hour is now set Press + until 2 is displayed Press ► The tens of minutes is now set Press + until 0 is displayed

Press ►

The time is now set and the display is blank.

Now set the release time using command option 5 and the resume-hold time using command option 6. Enter the time in the same way as shown above.

Command option 7 can be used to check the times that have been set. Select this option to display the current time, the close time and the resume-hold time. The 12 digits are displayed sequentially.

### **Release/Reset Button**

If the door is latched and open, pressing the red button will close the door. The display shows the battery level. If the door closer will not latch, press the red button to reset. The display will show why the door is closed. If, after 10 seconds listening, no alarm is detected (and the closer is not in timed close and has not detected a low battery) the magnet will turn on and the door may be latched.

# **Command Options**



Press ► to enter command mode. Press + until the number for the required option is displayed then press ► to select that option.

- 1. Learn, see the "Learning the Alarm Sound" section
- 2. Flip 7 segment display. This option inverts the 7 segment display for upside down mounting
- 3. Restore default settings with a level of approximately 70dB. These will replace any learnt settings
- 4. Set time. Enter the current time in 24 hour format. N.B. must be re-set if the batteries are removed
- 5. Release time. Enter the time at which the door should close. Enter 0000 to cancel
- 6. Resume-hold time. Enter the time at which the closer will latch
- 7. Display time. Display the current time, the close time and the resume-latch time
- 8. Set acoustic settings with a level of approximately 65dB. These will replace any learnt settings. *N.B. at this low sound level the unit is susceptible to false releases and the alarm sound could be masked by background noise*
- 9. Alarm bell setting. Use if the alarm sound is produced by a bell and the closer is too sensitive to background noise. Only select after the learning process has been completed (see the "Learning the Alarm Sound" section)

### Commissioning

- 1. Open the door so that the door closer latches
- 2. Check that any doors between the closer and the nearest fire sounder are closed
- 3. Sound the fire alarm
- 4. The closer should close the door within 30 seconds
- 5. Check that the door closes fully
- 6. Press the red button to reset the unit. If the red button is not pressed the closer will turn on after 30 minutes assuming the alarm is not sounding
- 7. If the door does not release, follow the instructions in the learning process section

### Maintenance

Check all fire doors release and close as part of a weekly fire test routine. Under normal operation the closer will release within 20 seconds of the alarm sounding.

If, when performing the weekly test, it is not possible to sound the alarms for 20 seconds, the closer can be put into a test mode by holding the red button down for approximately 4 seconds. In this mode the closer will respond to a typical alarm sound within 4 seconds. After 10 seconds, the red dot will flash every second, rather than every 13 seconds. The closer will return to normal operation after it has detected an alarm sound or 5 minutes after the red button is pressed.

Replace the batteries annually or when indicated by a low battery warning. The unit will hold automatically when the cover is replaced and the unit has detected a quiet state. There is no need to put the unit through the learn cycle again. If a release time has been programmed, the current time will need to be entered as per the **"Daily Timed Release"** section.

### Messages

This list explains the messages shown when the red button is pressed:

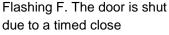
New batteries will display b9

If b0 is shown you should fit new batteries

A flashing bL indicates that the batteries are critically low. The door will not latch until the batteries are replaced

Flashing A. The door was closed because of an alarm





Flashing E followed by 1. The batteries are too low to learn the alarm sound

Flashing E followed by 2. The battery compartment lid has not been fitted for recording the alarm sound

Flashing E followed by 3. The red button has not been pressed to start the learning process within 20 minutes

Flashing E followed by 4. The sound level detected during the learn process is below 65dB; the default parameters for 70dB have instead been used

Flashing E followed by 5. The sound detected during the learn process was found to be intermittent, but its timing could not be identified. The sound levels detected are set, but the closer may be slow in waking up. It is recommended a different sound pattern is used on the sounder

Flashing E followed by 6. The intermittent sound level detected during the learn process is below 65dB; the default parameters of 70dB have instead been used

Flashing E followed by 7. The unit has not been put through the learn cycle or has been set back to default settings. Perform a learn process before choosing option 9 – see "**Learning the Alarm Sound**" section

# Specification

Batteries	2 x C size Alkaline Cells		
Rated Voltage	3.3V		
Typical Battery Life	12 Months +		
Default Release Volume	70dB		
Latching Angle	65°-105°		
EN Power Size	4 (80kg door mass)		
Action	Free Swing Only		

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CE	Stephenson Gobin Ltd Bishop Auckland DL14 6XB England			16			
1121-CPR-AE5008	EN1155:1997 + A1:2002	3	8	4	1	1	0
	EN1154:1997 + A1:2002	3	8	4	1	1	0

