

INSTALLATION INSTRUCTIONS

BRITON 998

ELECTRO MAGNETIC FREE SWING DOOR CLOSER

24v DC

TRANSOM FIXED TO 'PULL' (HINGE) SIDE OF DOOR

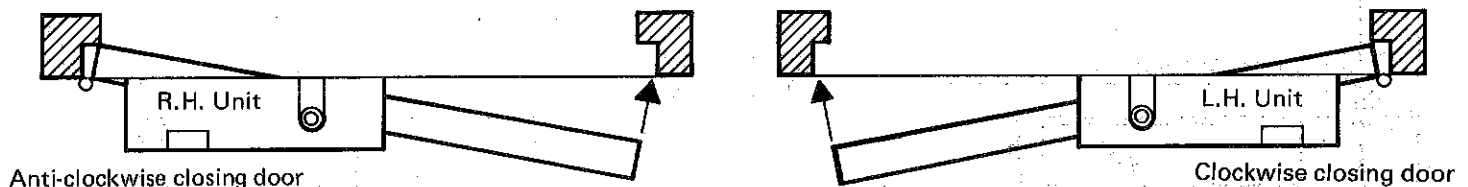
Ref. No. 0998/024



SUITABLE FOR INTERNAL DOORS UP TO 2280mm x 990mm WIDE
MINIMUM DOOR WIDTH 610mm

This closer unit incorporates an electro magnet which is normally interfaced with a detector/alarm system. De-energising the electro magnetic unit, or a power failure, will facilitate automatic closing of the free swinging door in the event of an emergency. When the door is re-opened to an angle beyond 85° the closer will be held by the magnetically controlled release catch, leaving the door to swing free.

THIS CLOSER IS SUITABLE FOR ONE HAND OF DOOR ONLY
 (Electro magnetic unit and hexagon recessed end of closer always being nearest to hinges when fixed.)



No responsibility can be accepted by the manufacturers if these installation instructions are disregarded.

IMPORTANT

Door must swing freely and close firm into its rebate to enable the closer to operate efficiently. This is particularly important for fire/smoke doors and we recommend that doors be hung on ball bearing butt hinges to BS7352 and that latches and smoke seals be of a type that offer minimum resistance to closing.

Failure to address these requirements may result in an ineffective fire/smoke door installation.

ELECTRICAL INFORMATION

SPECIFICATION

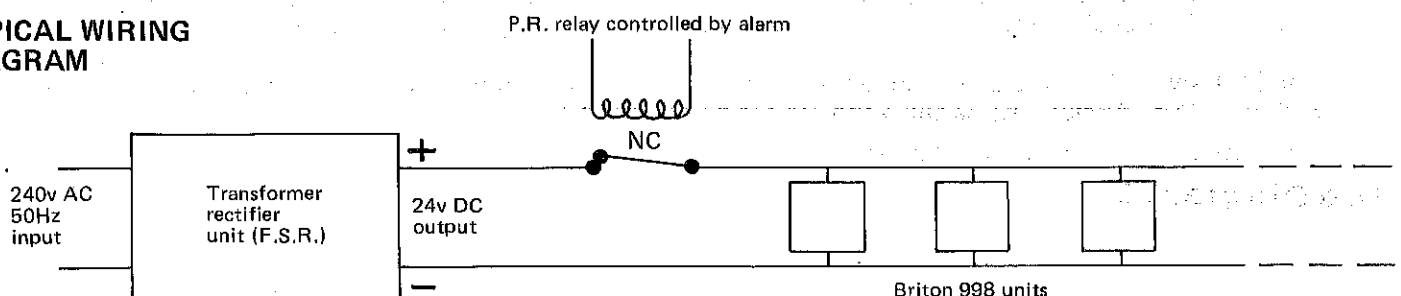
Electro-magnet continuous rating: 2.7 watts max at 26v DC.
 Power Requirements: 24vDC – 100mA nominal.

TESTING

Check that voltage is within specified range at each unit after installation.
 It is recommended that the equipment is tested at weekly intervals for correct function.

NOTE: Power for ancillary devices must not be drawn from the alarm system except under alarm conditions and then must not reduce the reliability of the supply. (BS5839 Pt.1).

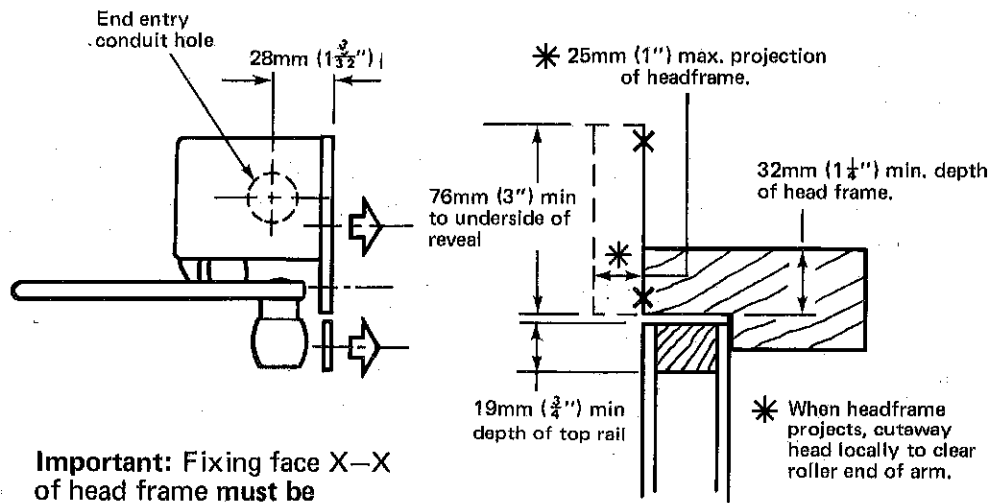
TYPICAL WIRING DIAGRAM



APPLICATION

Free swing unit fixed to transom on 'pull' side of door.
Runner plate fixed to top rail of door.

See Diagram 1



Important: Fixing face X-X of head frame must be vertical and flat.

Diagram 1

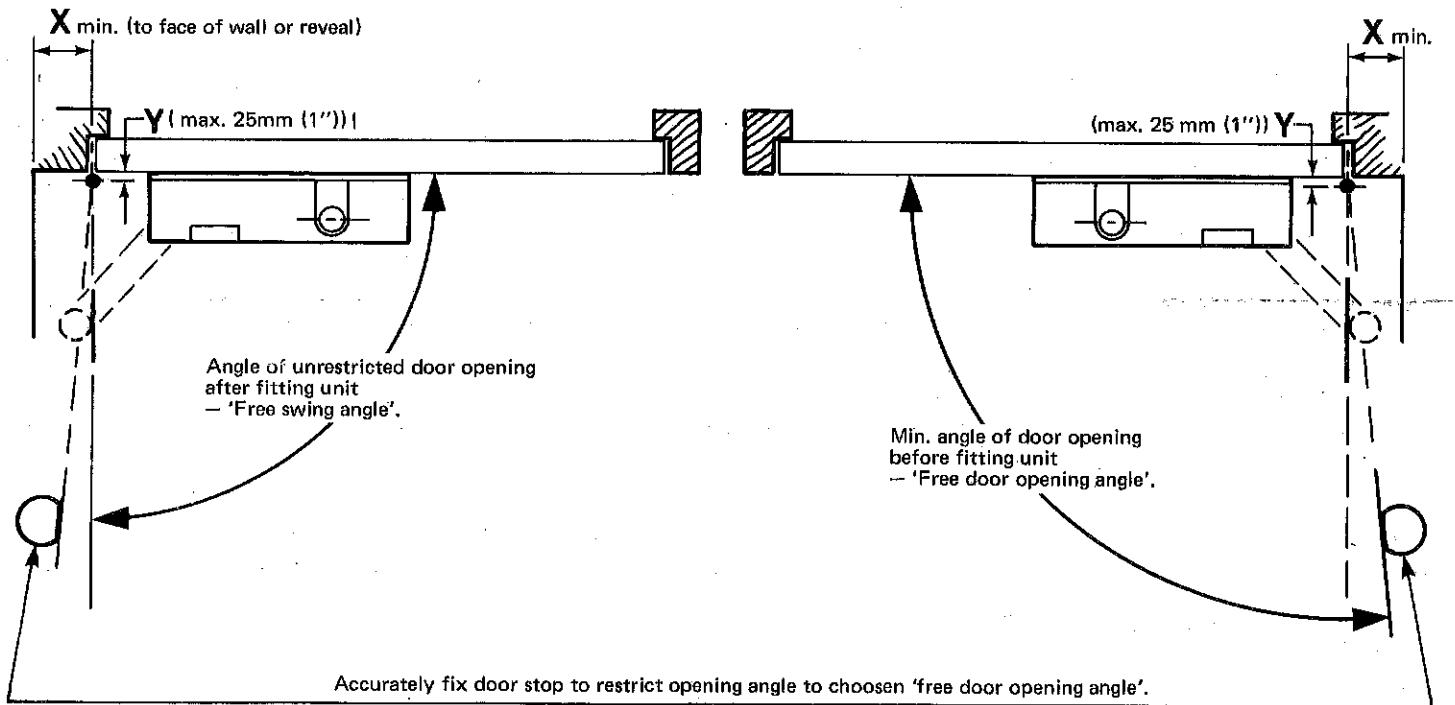


Diagram 2

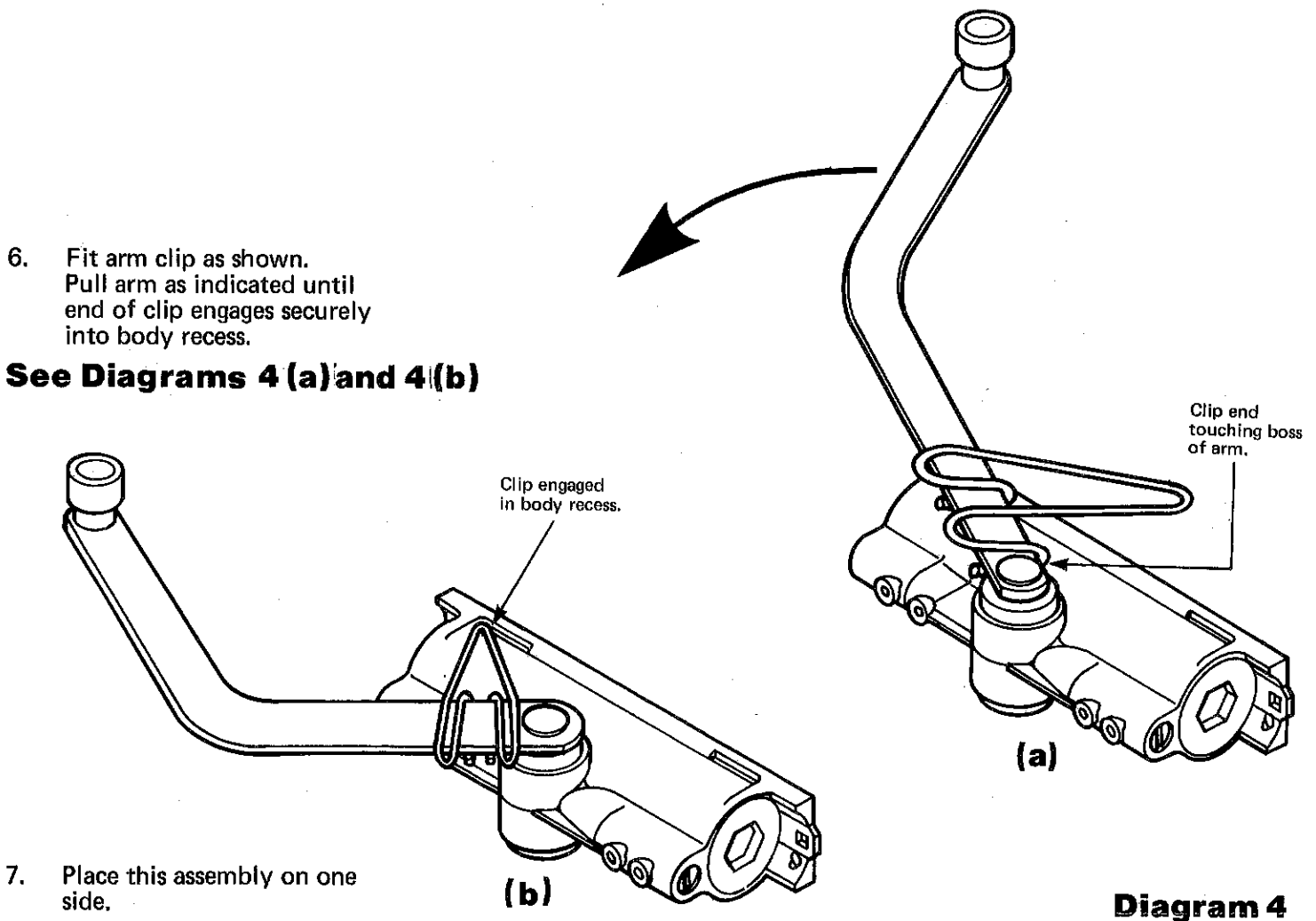
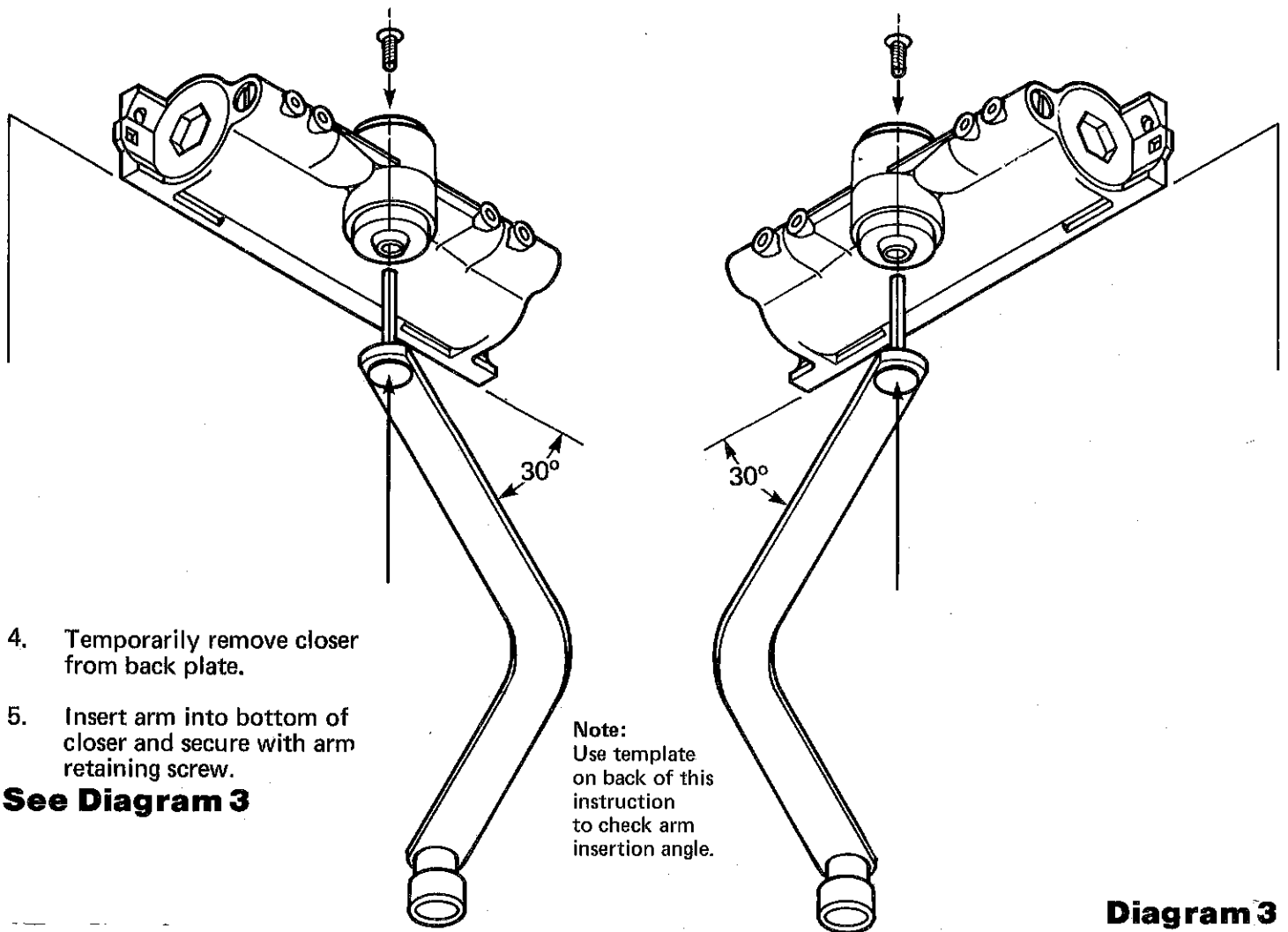
INSTALLATION INSTRUCTIONS

1. Check hand of unit is correct for door.
2. Using template on back of this instruction determine/decide angle to which door can/will be opened and mark off. This angle is known as the 'Free door opening angle' and should be noted.

IMPORTANT: The unit is only suitable for closing doors where the 'Free door opening angle' is between 85° and 120°. Angles outside this zone cannot be accommodated.

3. Accurately fix door stop. See diagram 2.

See Diagram 2



8. Make any necessary preparation for electrical wiring, particularly if it is rear entry. Position obtained from diagram 6.

Reverse cable gland bracket if rear entry is required.

See Diagram 5

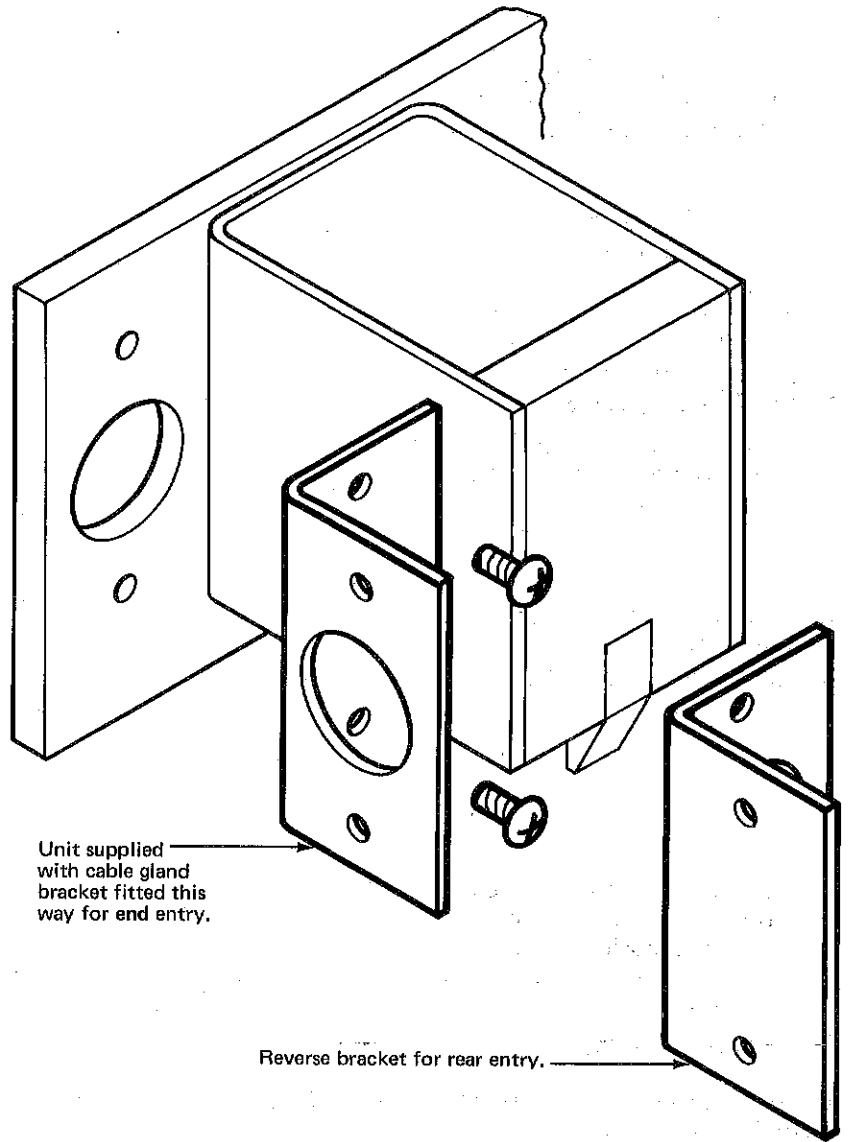
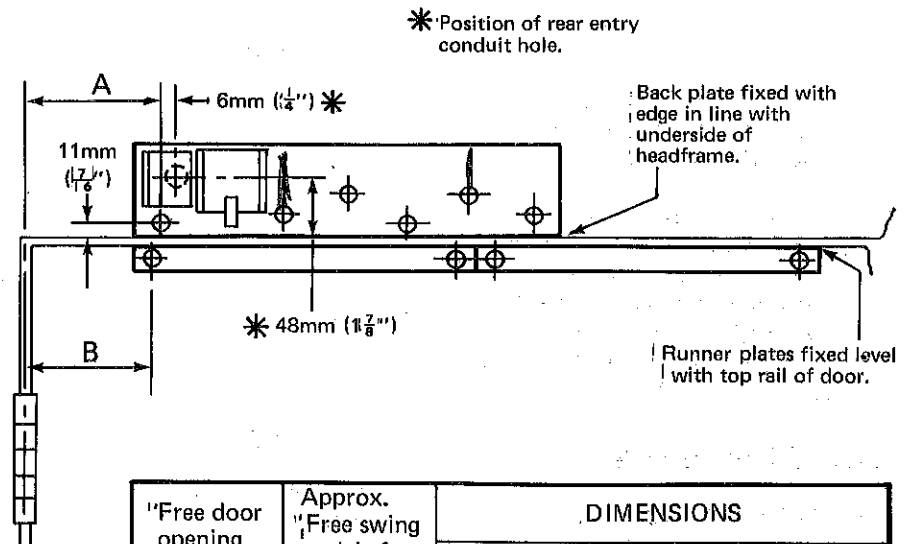


Diagram 5

9. Based on noted 'Free door opening angle', fix back plate with magnetic catch to head frame and runner plates to door top rail with screws provided. (Ensure runner plates butt up and line up to each other.)

See Diagram 6

Note: Where 'Free door opening angle' is between specific chart angles, fixing positions to be based on the lesser angle.



'Free door opening angle'	Approx. 'Free swing angle' after fixing unit	DIMENSIONS		
		A	B	X min.
85°	80°	70mm + 'Y'	70mm + 'Y'	25mm - 'Y'
90°	85°	55mm + 'Y'	55mm + 'Y'	40mm - 'Y'
95°	90°	40mm + 'Y'	40mm + 'Y'	55mm - 'Y'
100°	95°	25mm + 'Y'	25mm + 'Y'	70mm - 'Y'
110°	100°	10mm + 'Y'	20mm	85mm - 'Y'
120°	110°	'Y' - 25mm	20mm	120mm - 'Y'

'Dimension 'Y' = Projection of hinge pin from door face.

Diagram 6

10. With door closed, re-fix closer to back plate, with four screws, ensuring hexagon recessed end of closer is nearest electro-magnet.

11. Open door slightly and remove arm clip.

12. Whilst pressing gently on gravity flap, open door to its maximum angle.

See Diagram 7

Arm should pass under gravity pawl and be retained.

If arm does not turn sufficiently to be held back by gravity pawl, re-check fixing positions.

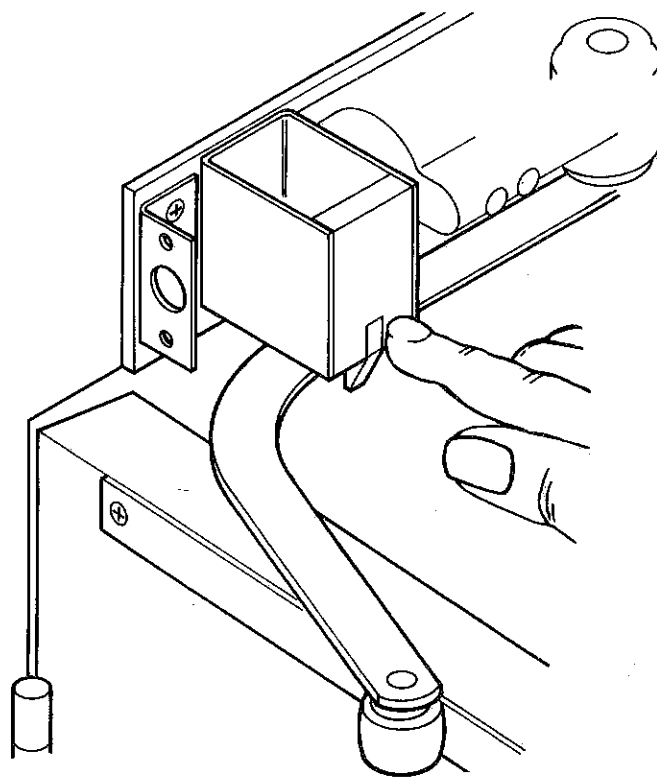
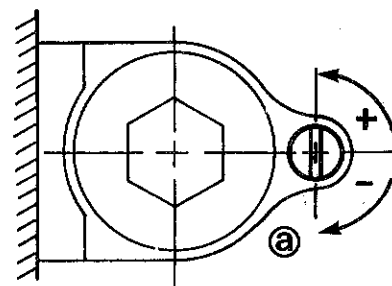
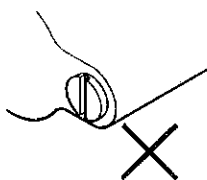


Diagram 7

13. If satisfied with retained arm position, carry on and regulate closing speed and latch action of closer using cranked key provided.

See Diagram 8

WARNING: REGULATORS MUST NOT BE UNSCREWED BEYOND SURFACE OF BODY.



Ⓐ Closing Speed and Latch Action

Turn regulator for suitable closing speed, + faster or - slower. Turn slot towards vertical for latch action.

With slot horizontal, closing speed is set with NO ACTION LATCH.

14. Complete wiring installation, refer to diagram on first page of this instruction.

15. Lift gravity flap to the horizontal position against resistance of buffer stop. Fit cover and return gravity flap to the free hanging position. Finally secure cover with the two small screws provided.

See Diagram 9

16. TESTING UNIT

Switch on power supply to apply 24v DC to unit.

Open door and check that closer arm is held by gravity pawl.

Switch off supply and observe that electro-magnet releases the gravity flap and allows the closer arm, (under spring tension) to return, making contact with the runner plate and closing the door.

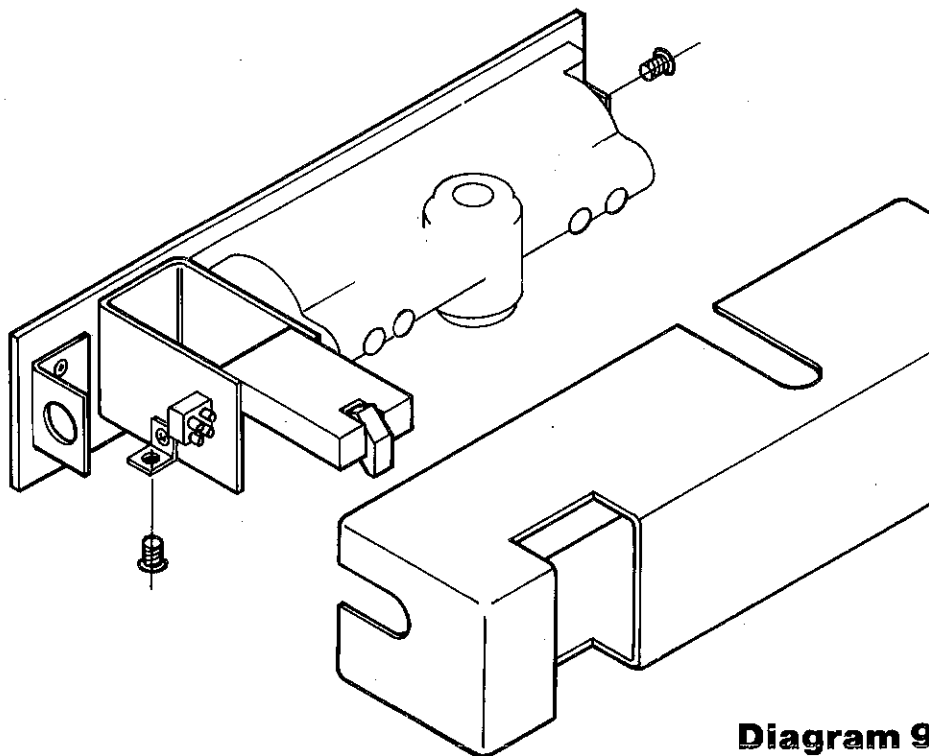


Diagram 9

