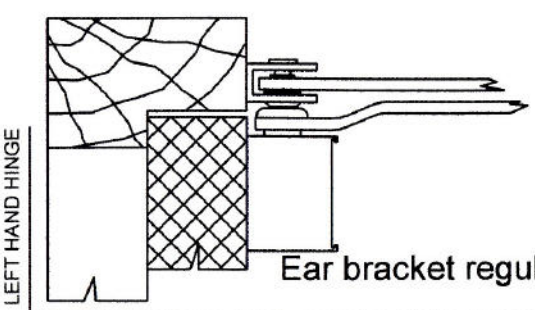
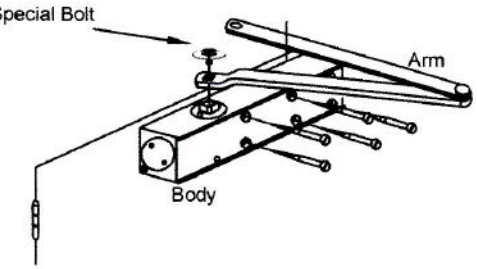
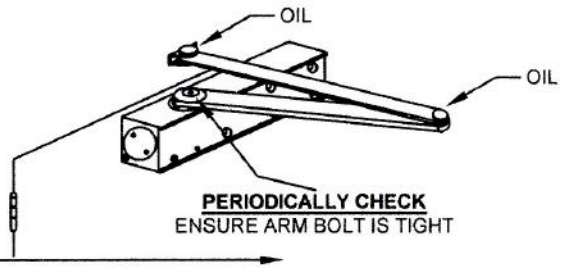
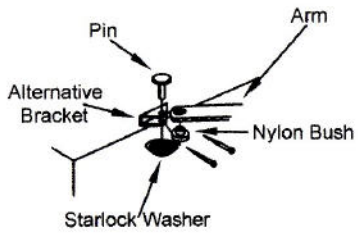
ISSUE 1

REGULAR/STANDARD ARM APPLICATION (FIG.1)





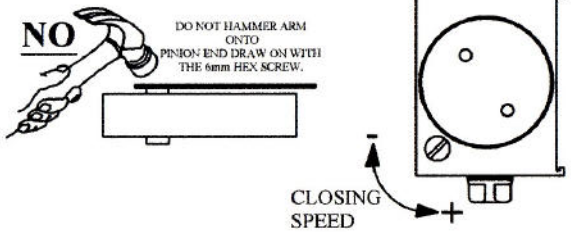


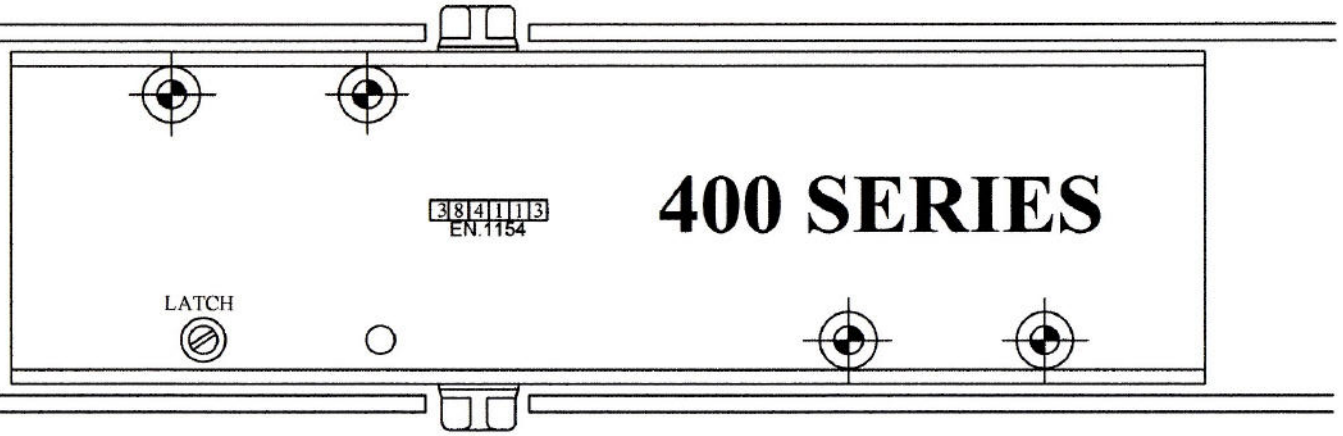


LEFT HAND HINGE

255 mm Hinge C/L to bracket C/L

205 mm Hinge C/L to pinion C/L





RIGHT HAND HINGE

FITTING INSTRUCTIONS

PLEASE READ CAREFULLY BEFORE ASSEMBLY & FIXING

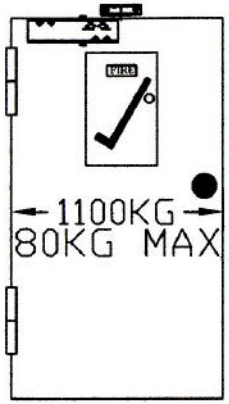
1.Using the template to position the arm bracket, drill 2 pilot holes ✥. Using the 2 1" wood screws secure the arm bracket.
Centre line of the bracket to hinge should be 255mm.

2. Still using the template, drill pilot holes ◎ and screw on the door closer body.Centre line of pinion should be 205mm from door hinge

3 Fit arm to closer using the Special M6 bolt, fit arm to bracket using nylon bush,arm pin and starlock washer.

4.Set door and latching speed, do not unscrew door speed and latching adjusters from fully closed more than 1 1/2 turns.

5. Periodic maintenance is very important, making sure body and arm are secure, and oiling the arm joints regular.



CE

ARROW ARCHITECTURAL
Tything Road
Alcester
B496ES

1121-CPD-AD0088 | EN1154:1997+A1.2002

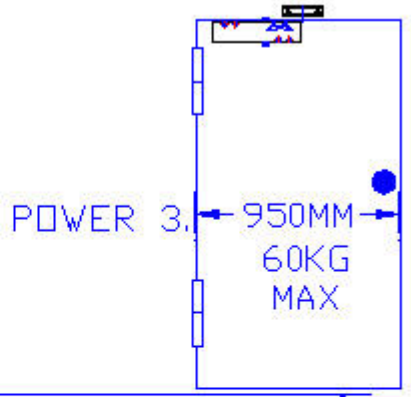
3 8 4 1 1 3

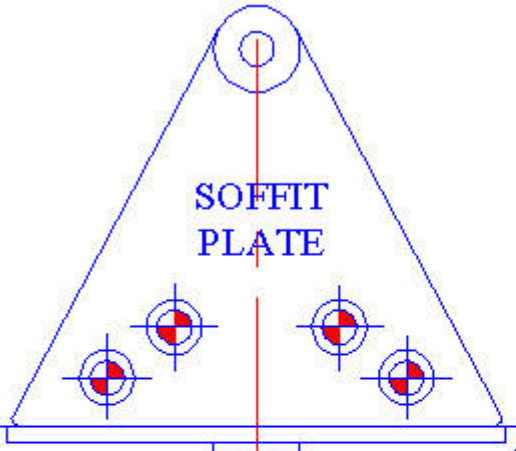
ISSUE | 1

OPEN OUT (FIG.6)

LEFT HAND HINGE

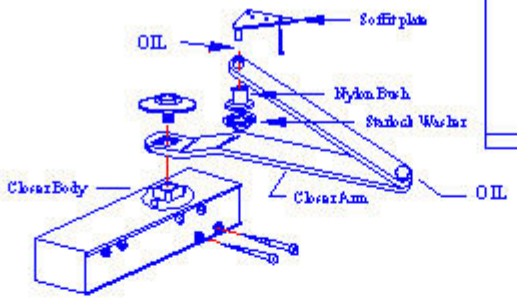
Use this side of the template for parallel arm application. The door closer pinion and the centre line of the soffit plate will be positioned 230mm from the door hinge. This position gives optimum opening/closing efficiency as well as 105` angle of door opening.
Door closers fitted in fig.6 parallel do not, due to arm geometry, trasmit power to the door as effectively as closers fitted in fig.1 regular application.
For parallel arm application on external doors opening out, door closers with backcheck facility and door stops should be used to protect against possible damage from high winds.

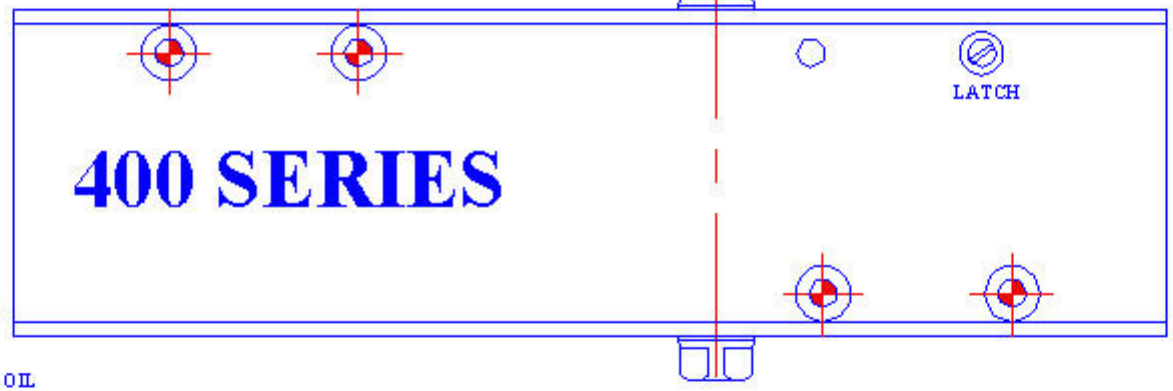




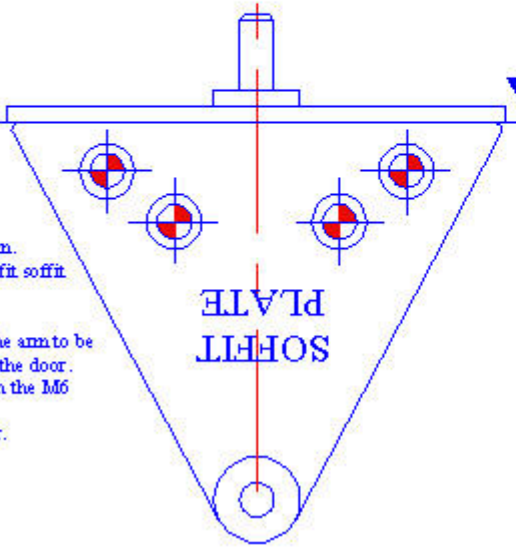
▲ FOLD UP 90` ▲

230MM





▼ FOLD UP 90` ▼



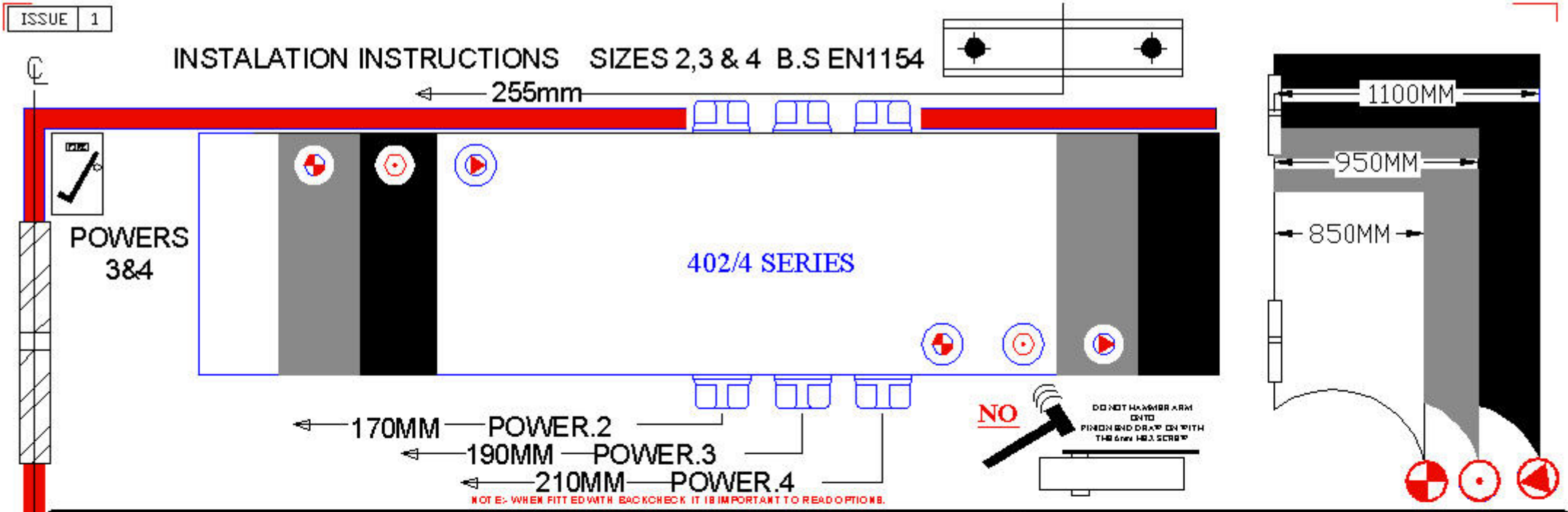
RIGHT HAND HINGE

FITTING INSTRUCTIONS-PARALLEL ARM (FIG.6)

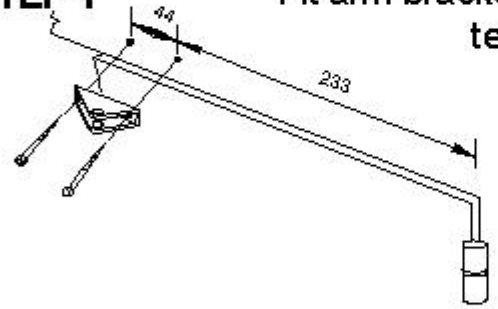
1. First fold the template 90` up along the transom line shown and mark hole positions in the door underside of transom.
2. Drill 3mm pilot holes and screw the closer body to the door with the 2 1/2"Posidrive screws. use 1"C`sk screws to fit soffit plate to soffit.
3. Secure closer arm to the pinion with the M6 hex screw.
4. Attach arm to soffit plate and secure with the domed starlock washer. If fitting an adjustable arm, set the length of the arm to be 255mm between the centre of the elbow joint and centre of the nylon bush in order that the closer arm lies parallel to the door.
5. Adjust closing speed and latching controls before sliding on the optional facia plate. Fit pinion cover and secure with the M6 C`sk screw or fit all over cover with two M4 domed headed screws.
6. Periodic maintenance is very important making sure body and arms are secure and and oiling the arm joints regular.

ISSUE 1

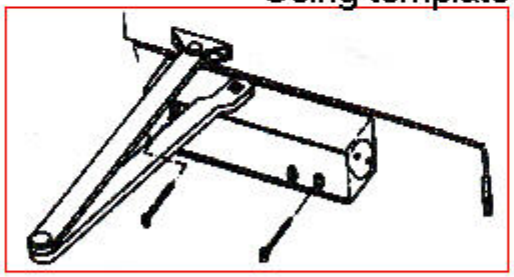
INSTALATION INSTRUCTIONS SIZES 2,3 & 4 B.S EN1154



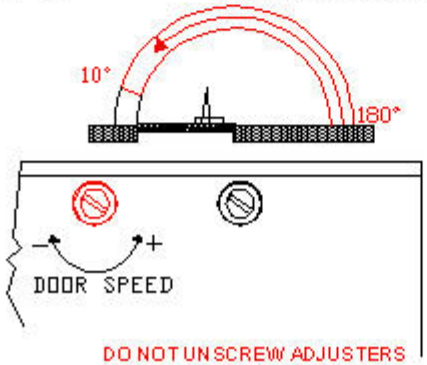
STEP 1 Fit arm bracket using template.



STEP 2 Screw on closer body. Using template.

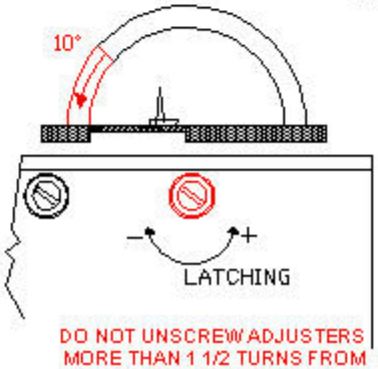


STEP 3 Set the closing speed.

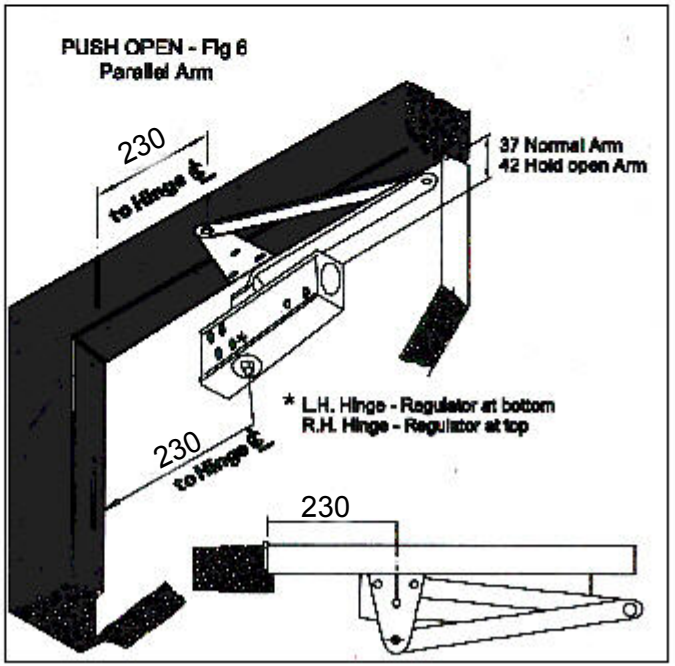


DO NOT UNSCREW ADJUSTERS MORE THAN 1 1/2 TURNS FROM FULLY CLOSED POSITION

STEP 4 Set the latching speed.

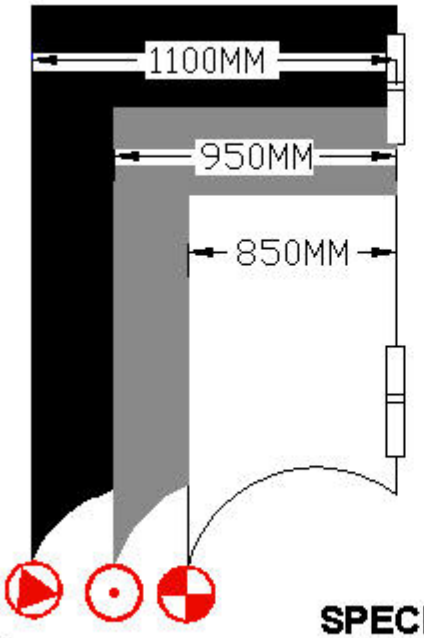


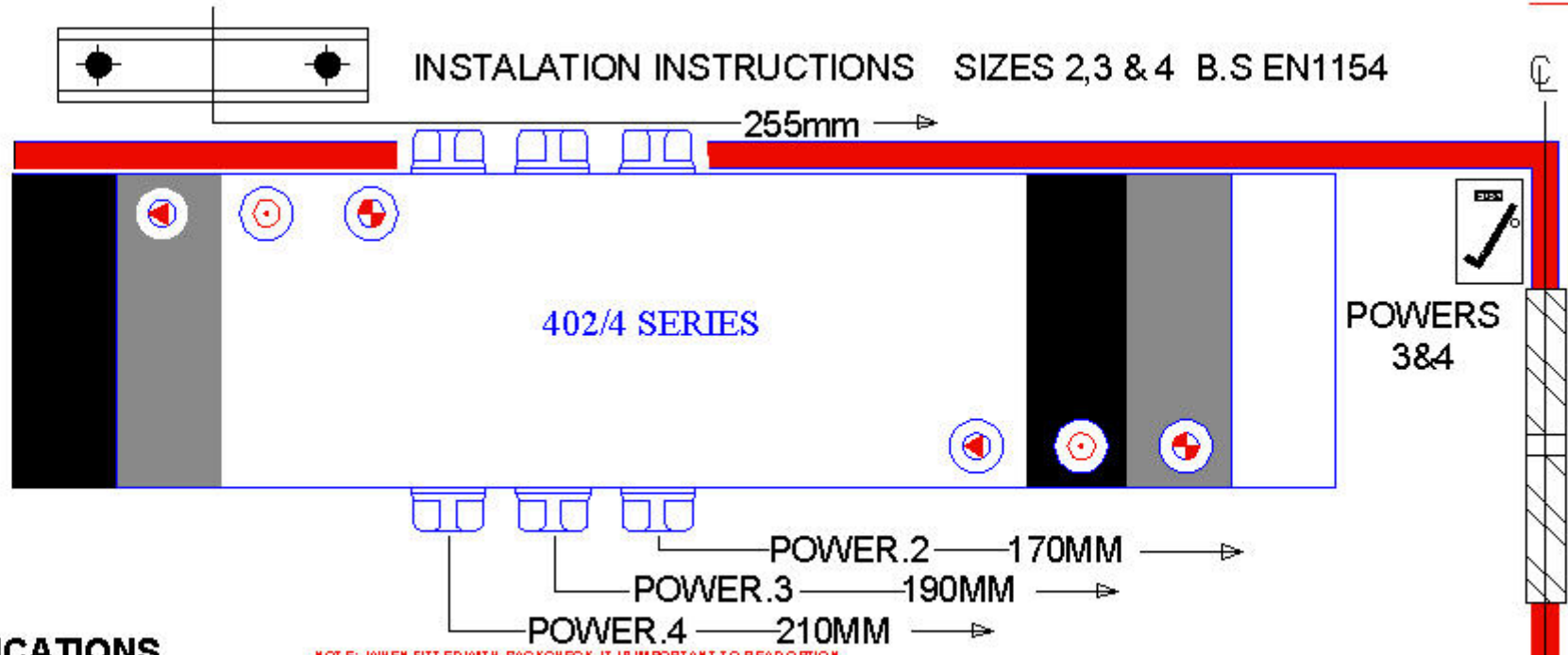
DO NOT UNSCREW ADJUSTERS MORE THAN 1 1/2 TURNS FROM FULLY CLOSED POSITION



ISSUE 1

INSTALATION INSTRUCTIONS SIZES 2,3 & 4 B.S EN1154



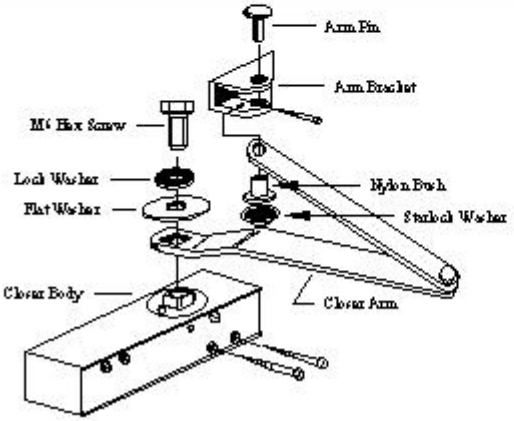


SPECIFICATIONS

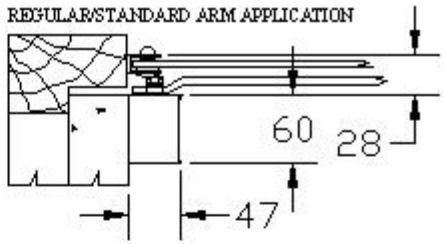
NOTE:- WHEN FITTED WITH BACKCHECK IT IS IMPORTANT TO READ OPTION.

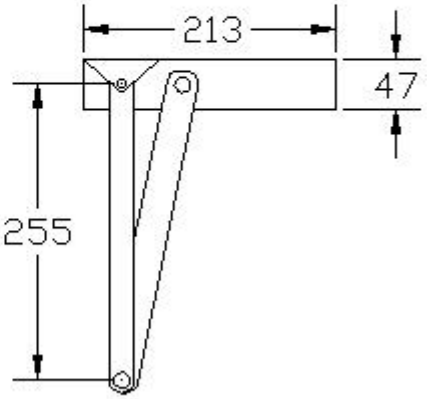
BS EN 1154 recommends that the minimum power size 3 closers are fitted to fire/smoke door assemblies,and that mechanical hold open devices should not be used.
Using the above regular arm template/dimensions,these door closers are designed to give 180° opening at their rated performance.
Door closers fitted in fig.6 parallel do not, due to arm geometry,transmit power to the door as effectively as closers fitted in fig.1 regular, hence if fitted in the former it maybe necessary to select a closer with a power size greater than that recommended for fig.1 regular arm fitting.(when fitted in fig.6 power.2 is achieved).

CLOSING FORCE TO BS EN 1154	MAX WIDTH	DOOR MASS
2	850MM	40
3	950MM	60
4	1100MM	80



REGULAR/STANDARD ARM APPLICATION

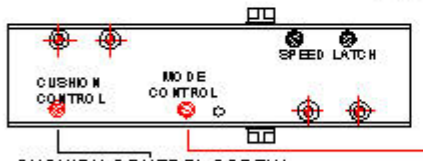


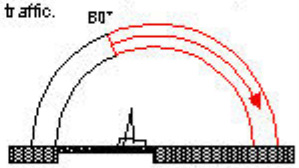


OPTION

All our door closers are fitted with door speed and latching controls as standard. Options include backcheck and delay action facilities. The backcheck is a device built into the door closer which applies a hydraulic brake during the opening cycle to check the movement of the door approxamatly 80° and beyond. Delay action delay`s the closing, down to approx. 80° door opening to allow free passage of slow moving traffic.

BACKCHECK





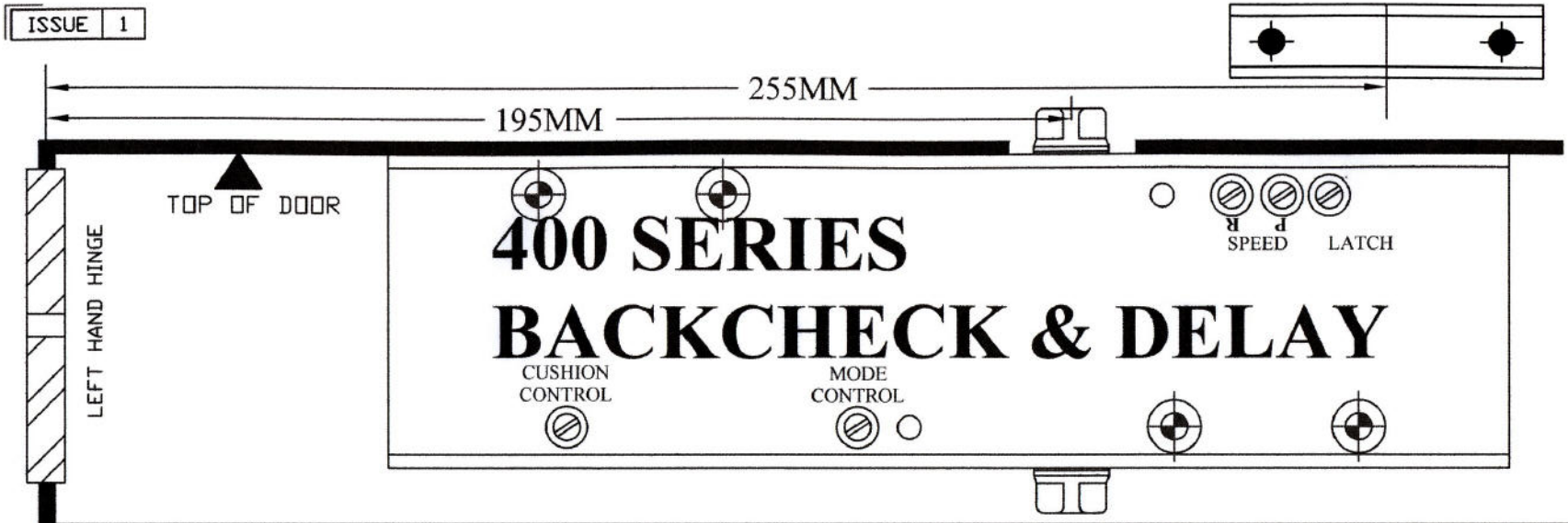
CUSHION CONTROL SCREW

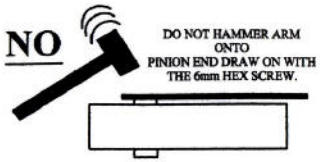
Tightening the cushion control screw will strengthen the braking effect.Unscrewing the cushion control screw will weaken the braking effect,if unscrewed by 1.1/2 turns from closed it will turn the backcheck facility off.

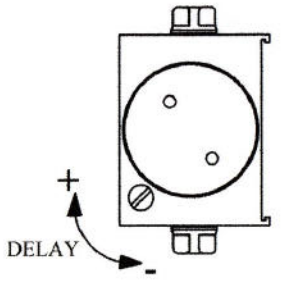
MODE CONTROL SCREW

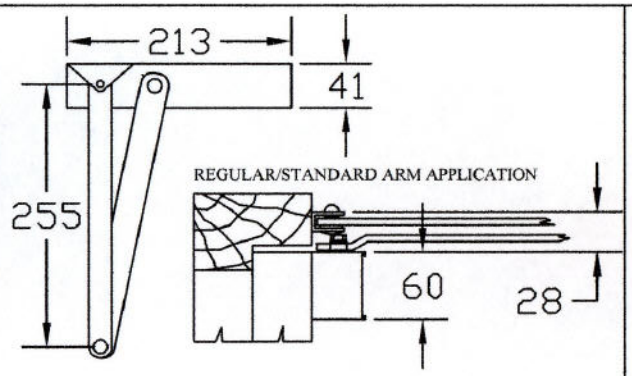
When screwed in fully the backcheck will function in the fig.6 parallel position. When unscrewed 1.1/2 turns from fully closed the backcheck will function in fig.1 regular position.

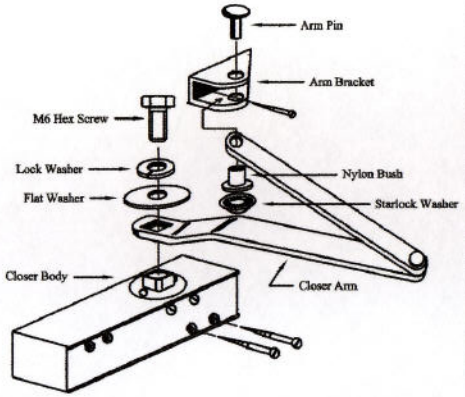
ISSUE 1









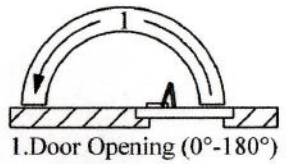


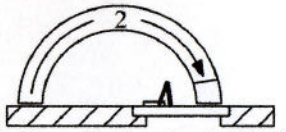
FITTING INSTRUCTIONS

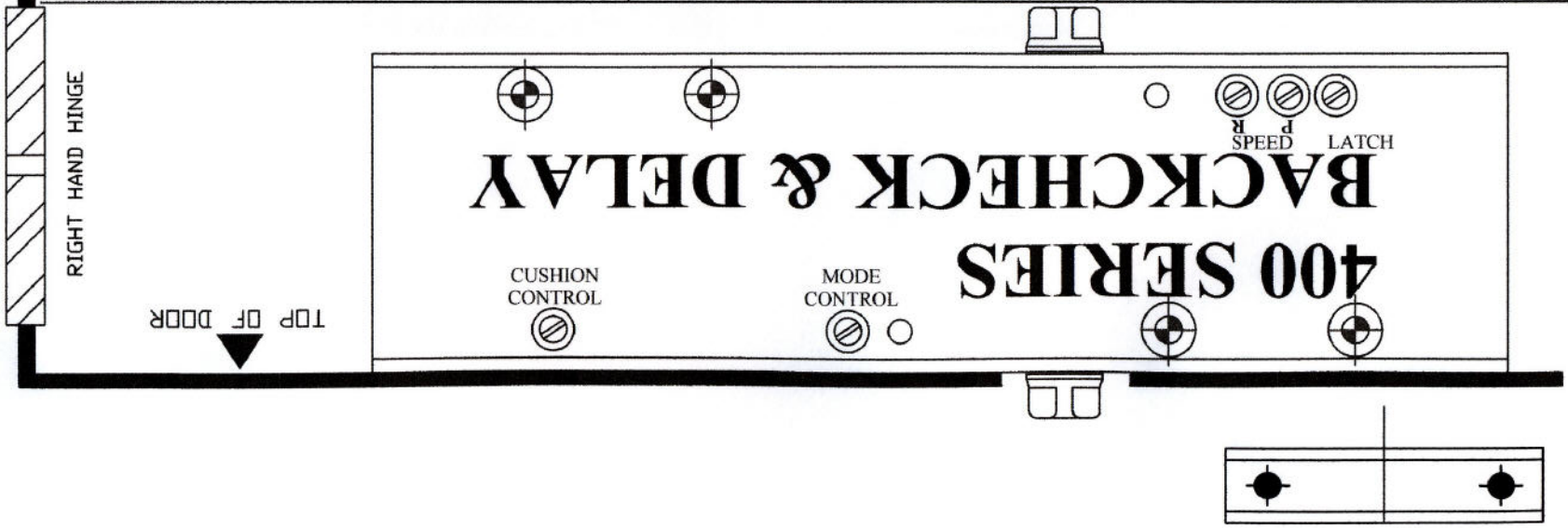
PLEASE READ CAREFULLY BEFORE ASSEMBLY & FIXING

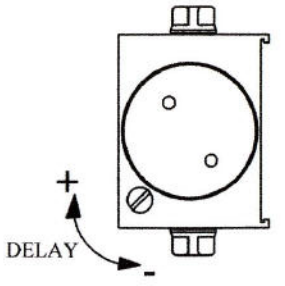
1. Using the template, drill holes ⊕ and screw on the arm bracket. Centre line of the bracket should be 255mm from the door hinge centre.
2. Still using the template, drill holes ⊕ and screw on the door closer body.Centre line of pinion should be 195mm from door hinge.
3. Fit arm to closer using the M6 bolt,spring washer,and plain washer. fit arm to bracket using nylon bush,arm pin and starlock washer.
4. Set door and latching speed, do not unscrew adjusters from fully closed more than 1.1/2 turns.

MAINTENANCE Periodically apply light oil to arm knuckle joint and check all screws are tight.









ISSUE 1

OPEN OUT (FIG.6)
L.H.HINGE

LEFT HAND HINGE

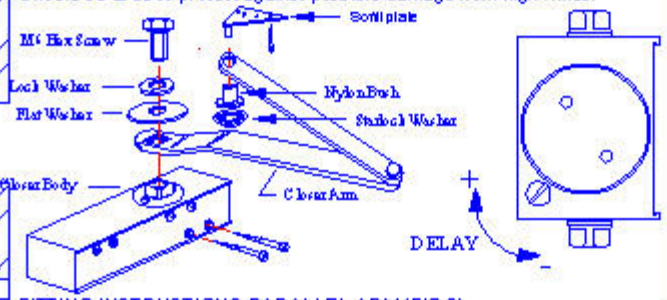
SOFFIT PLATE

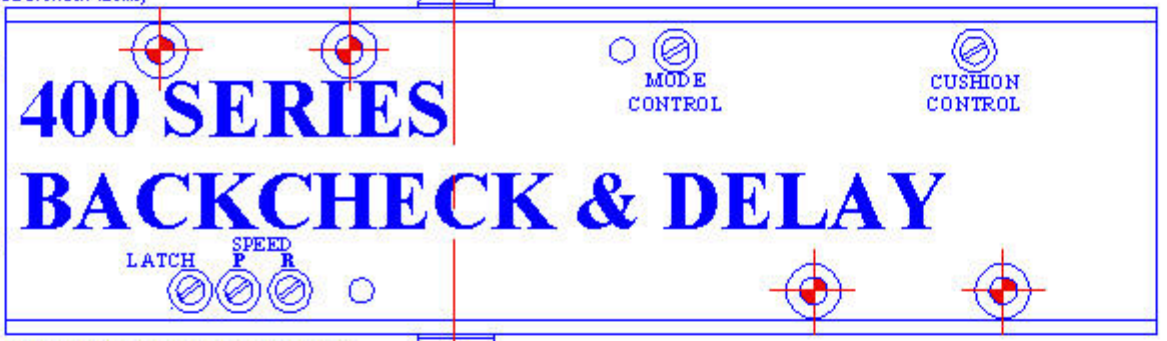
NO

210

▲ FOLD UP 90`▲

Use this side of the template for parallel arm application. The door closer pinion and the centre line of the soffit plate will be positioned 210mm from the door hinge. This position gives optimum opening/closing efficiency as well as 180° angle of door opening.
The closer can be fitted further away from the hinge to increase the closing power, but this will also increase the effort required to open the door as well as decrease the angle of door opening.
Door closers fitted in fig.6 parallel do not, due to arm geometry, trasmit power to the door as effectively as closers fitted in fig.1 regular application.
For parallel arm application on external doors opening out, door closers with backcheck facility should be used to protect against possible damage from high winds.





FITTING INSTRUCTIONS- PARALLEL ARM (FIG.6)

1. First fold the template 90° up along the transom line shown and mark hole positions in the door underside of transom.
2. Drill 3mm pilot holes and screw the closer body to the door with the 2.1/2" Posidrive screws. use 1" C`sk screws to fit soffit plate to soffit.
3. Secure closer arm to the pinion with the M6 hex screw.
4. Attach arm to soffit plate and secure with the domed starlock washer. If fitting an adjustable arm, set the length of the arm to be 255mm between the centre of the elbow joint and centre of the nylon bush in order that the closer arm lies parallel to the door.
5. Adjust closing speed and latching controls before sliding on the optional facia plate. Fit pinion cover and secure with the M6 C`sk screw or fit all over cover with two M4 domed headed screws.

All Arrow door closers are fitted with door speed and latching controls as standard. Options include backcheck and delay action facilities. The backcheck is a device built into the door closer which applies a hydraulic brake during the opening cycle to check the movement of the door approximately 80° and beyond. Delay action delays the closing, down to approx. 80° door opening to allow free passage of slow moving traffic.

CUSHION CONTROL SCREW — Tightening the cushion control screw will strengthen the braking effect. Unscrewing the cushion control screw will weaken the braking effect. Unscrewed by 1.1/2 turns from closed it will turn the backcheck facility off.

BACKCHECK — When screwed in fully the backcheck will function in the fig.6 parallel position. When unscrewed 1.1/2 turns from fully closed the backcheck will function in fig.1 regular position.

MODE CONTROL SCREW

DELAY ACTION

When adjusting delayed action first fully screw in the delay (this is the adjuster screw on the end face) next the R & P speed screws and then the latching screw. Open the door to about 90° adjust the delay screw (located on the end face) to suit your particular application down to approximately 80°. When you have set this to your requirement move on to the speed adjuster screw, when fitted in regular adjust screw marked "R". When fitted in parallel adjust screw marked "P" this will adjust your door speed from approximately 80° down to 10° approx this is where the latch will come in. Finally set your latch 10° until the door is closed.

NOTE:- WHEN DELAYED ACTION IS FITTED THE ADJUSTER SCREW ON THE END FACE CHANGES FROM SPEED TO DELAYED ACTION CONTROL, THE SPEED SCREWS ARE THEN ON THE FRONT FACE. (SEE DIAGRAM)

RIGHT HAND HINGE

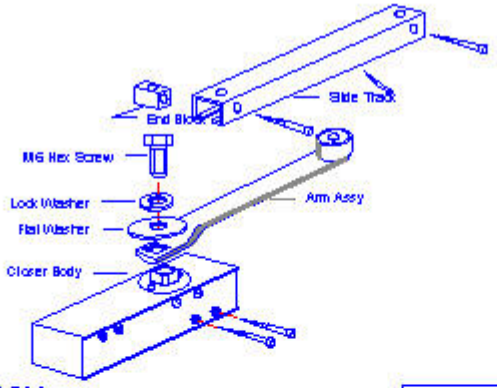
▼ FOLD UP 90`▼

SOFFIT PLATE

OPEN OUT (FIG.6)
R.H.HINGE

ISSUE 1

LEFT HAND HINGE



FIXING INSTRUCTIONS (FIG.1.)

PLEASE READ CAREFULLY BEFORE ASSEMBLY & FIXING

1. Using the template, drill holes ✦ and screw on the door closer body. Centre line of pinion should be 235mm from the door hinge.
2. At this point slide the black roller on arm into the slide track channel.
3. Using the template, drill holes ◆ and screw on the slide track, Remember to fit end blocks and centre fixing screws. End of track should be level with the end of the body and 22mm from the top of the closer body to the bottom of the track.
4. Using a 12mm open ended spanner on the bottom end of the pinion turn it slightly to match the square on the pinion to the square on the arm, press arm on to the pinion.
5. Open the door a small amount to enable the arm to be bolted on to the closer using the 6mm bolt, spring washer and plain washer.
6. This closer is fitted with delay action, follow these instructions [A] fully screw in the delay, speed and latching screws. [B] open the door. [C] slightly unscrew the delay to enable the door to move. [D] adjust speed, followed by latching. [E] return to the delay and adjust to suit.

When adjusting delay, speed and latch do not unscrew from fully closed more than 1.1/2 turns.

BACKCHECK

Backcheck is a device built into the door closer which applies a hydraulic brake during the opening cycle to check the movement of the door beyond 90°.
Tightening the cushion control screw will strengthen the bracking effect. Unscrewing the cushion control screw will weaken the braking effect, if unscrewed by 1.1/2 turns from closed it will turn the backcheck facility off.

THIS WAY UP FOR LEFT HAND HINGE

22

INSTALLATION NOTES
THIS TEMPLATE IS DESIGNED TO POSITION THE CLOSER AND SLIDE SUCH THAT 110° MAX OPENING IS ACHIEVED.
NOTE 1/ WHEN FITTED IN FIG 6. MAX DOOR OPENING IS 100°.
NOTE 2/ IT IS IMPORTANT TO FIT A DOOR STOP.

235MM

22

THIS WAY UP FOR RIGHT HAND HINGE

RIGHT HAND HINGE

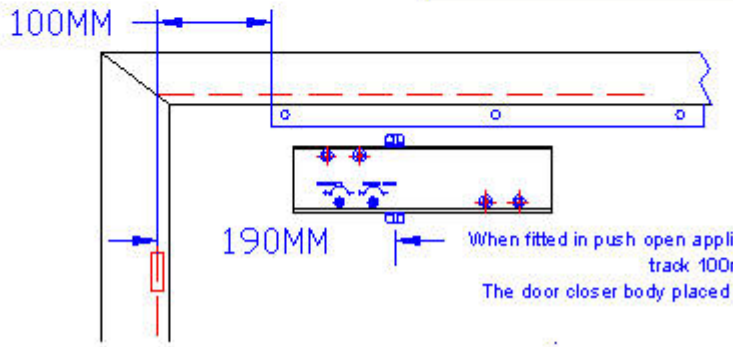


FIG 6. APPLICATION

When fitted in push open application (FIG 6) Place the slide track on the under side of the transom, the end of the track 100mm away from the door hinge c/line and against the door face.
The door closer body placed on the door with the adjuster screws nearest the hinge and the c/line of the pinion 190mm from the hinge.
(see diagram)

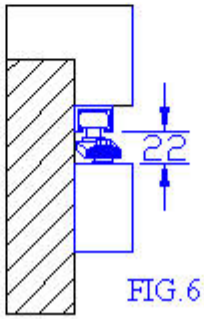


FIG. 6