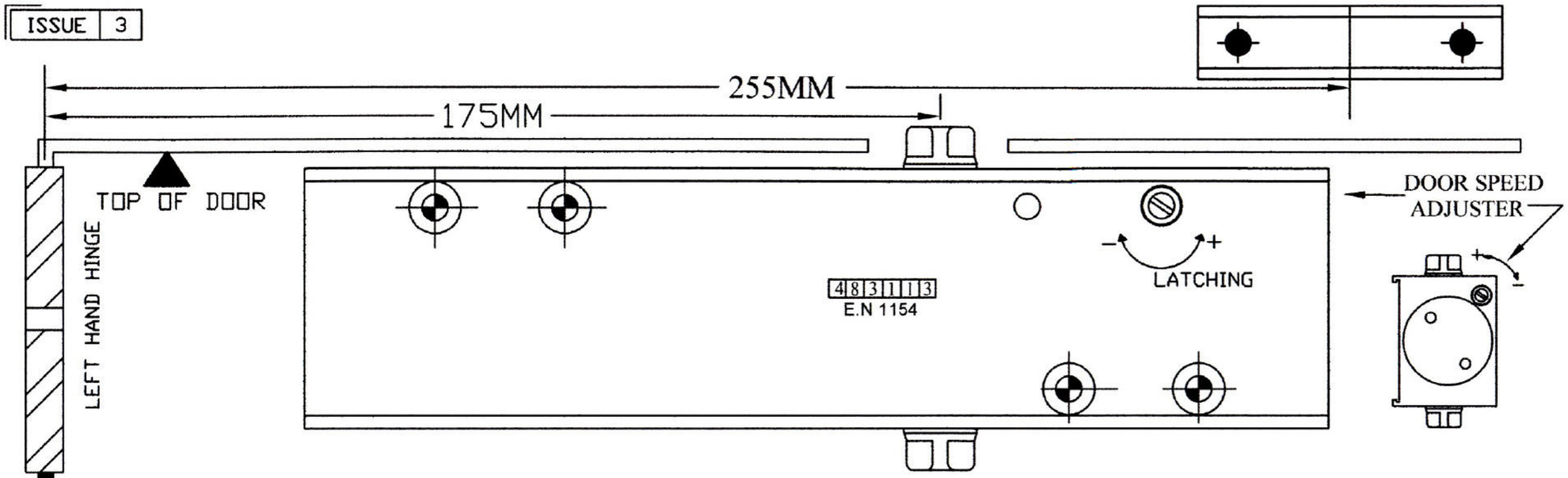
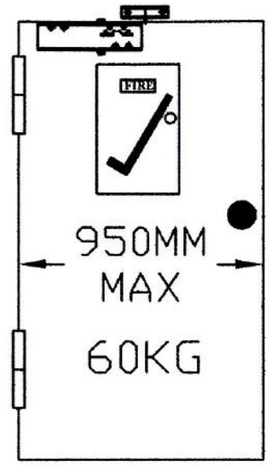
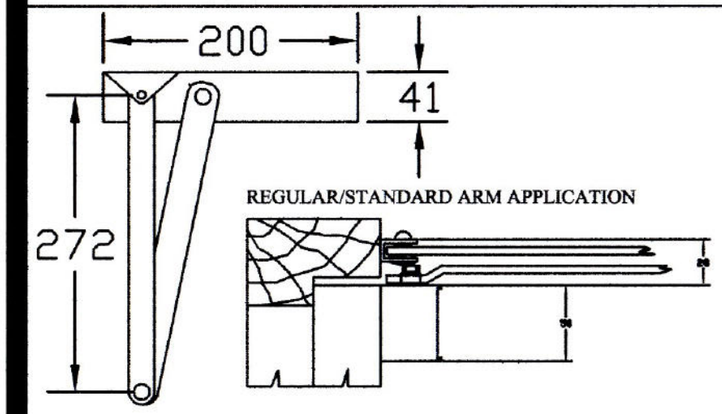
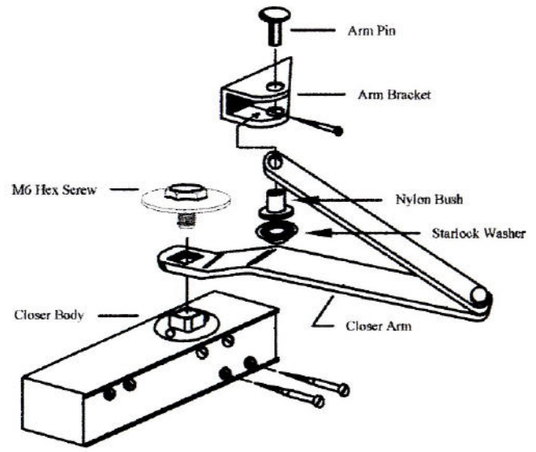
ISSUE 3







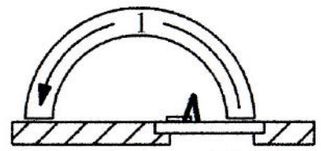


FITTING INSTRUCTIONS

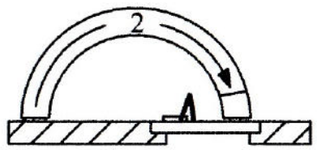
PLEASE READ CAREFULLY BEFORE ASSEMBLY & FIXING

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.

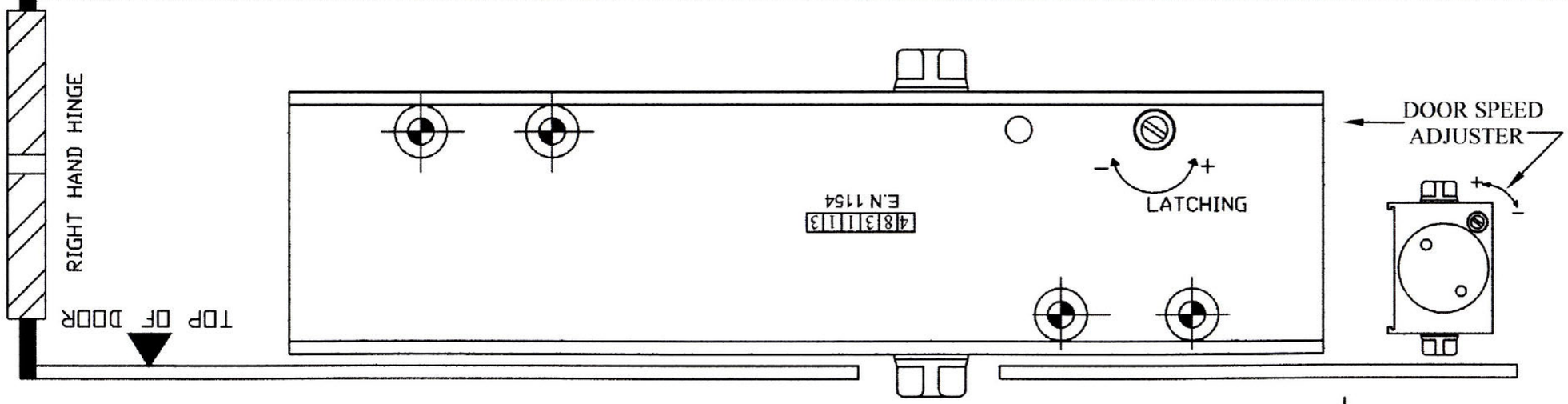
MAINTENANCE Periodically apply light oil to arm knuckle joint and check all screws are tight.

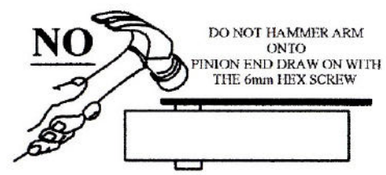


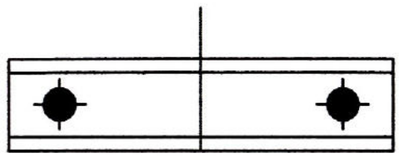
1.Door Opening (0°-180°)



2. Door Closing Arc(180°-10°)
Latching(10°-0°)







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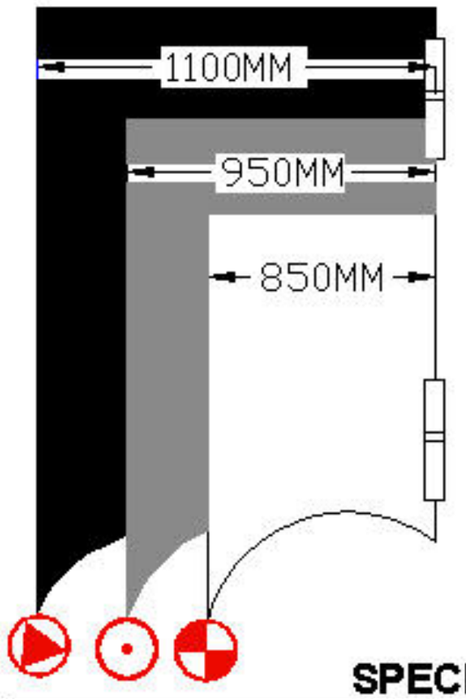
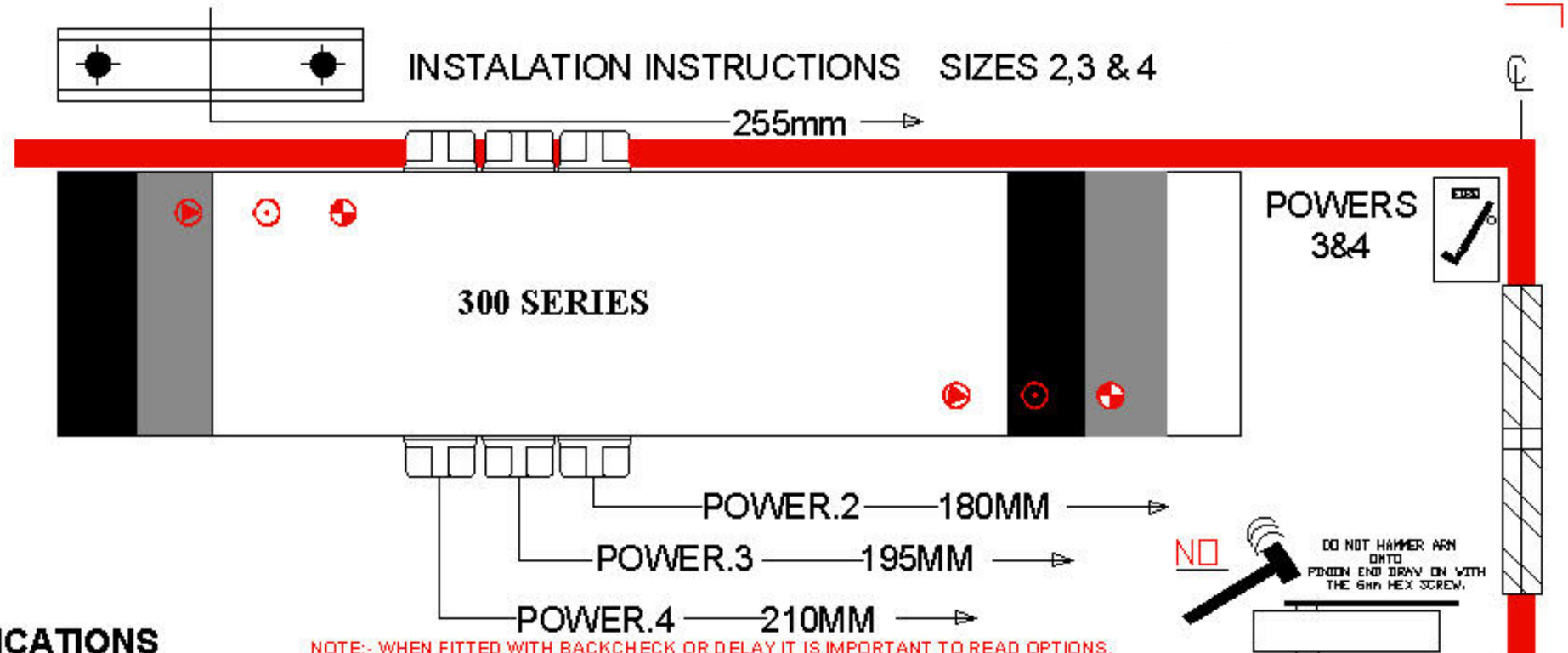


INSTALATION INSTRUCTIONS SIZES 2,3 & 4

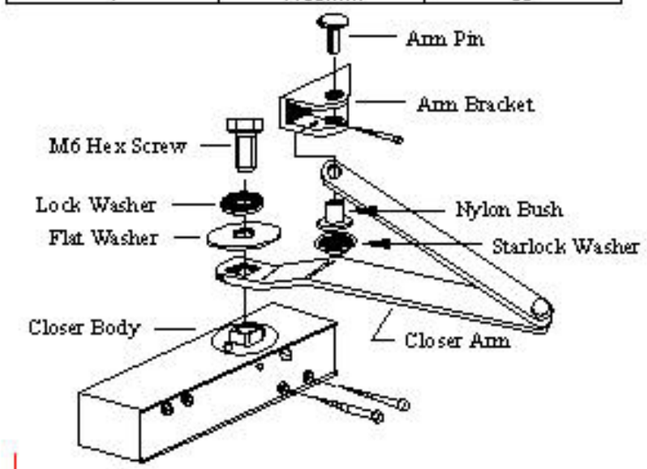


NOTE:- WHEN FITTED WITH BACKCHECK OR DELAY IT IS IMPORTANT TO READ OPTIONS.

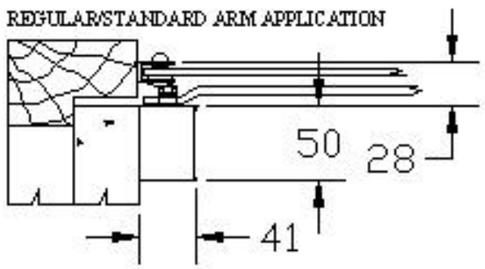
SPECIFICATIONS

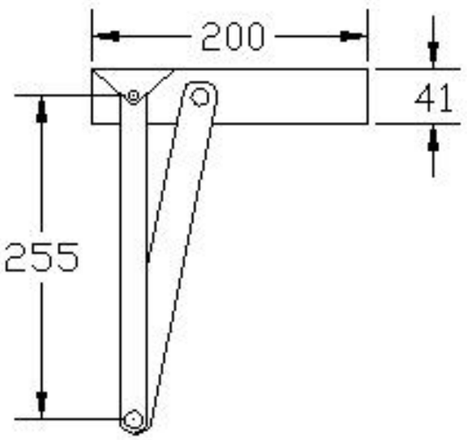
BS EN 1154 recommends that the minimum power size 3 closers are fitted to fire/smoke door assemblies,and that mechanical hold open devices should not be used.
Using the above regular arm template/dimensions,these door closers are designed to give 180° opening at their rated performance.
Door closers 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

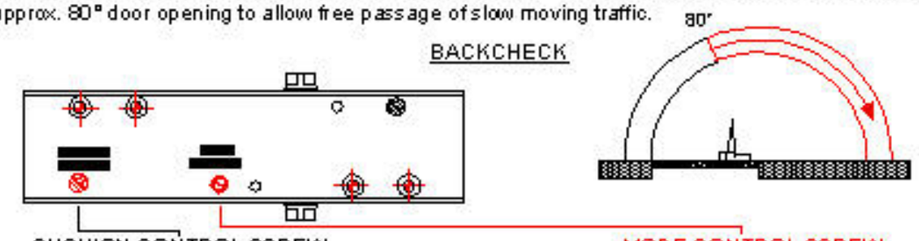




OPTIONS

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



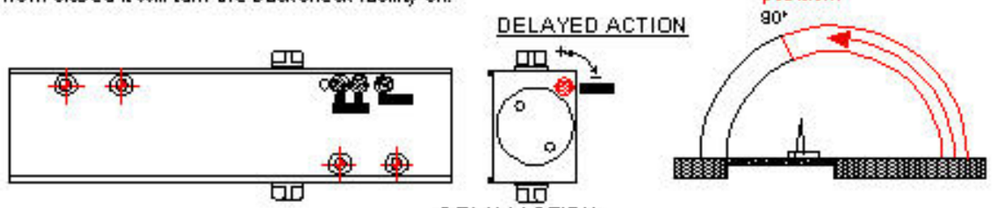
CUSHION CONTROL SCREW

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.

DELAYED ACTION



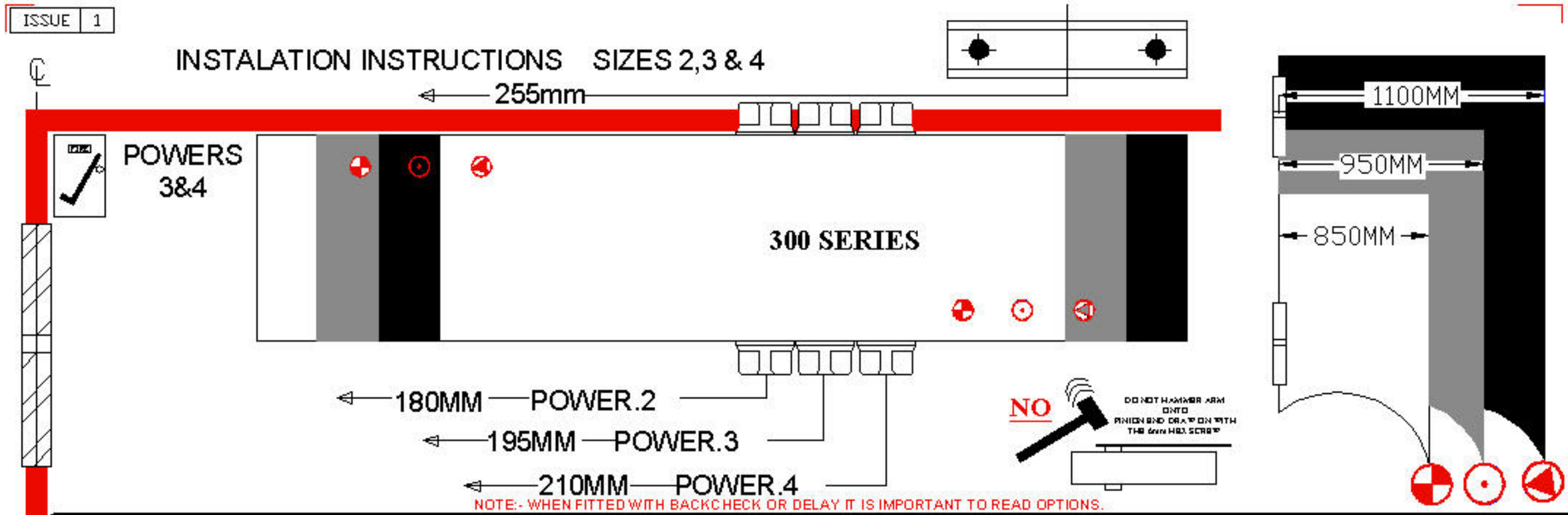
DELAY ACTION

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 approxamatly 80°. When you have set this to your requirment 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 approxamatly 80° down to 10° approx this is where the latch will come in. Finaly set your latch 10° untill 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)

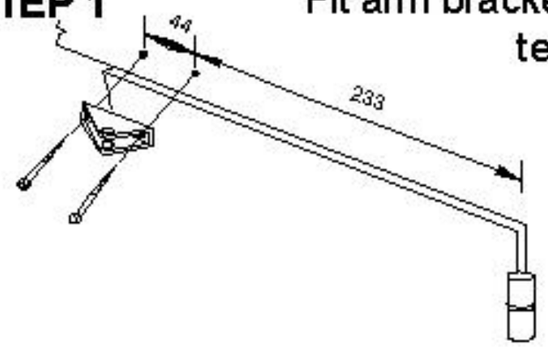
ISSUE | 1

INSTALATION INSTRUCTIONS SIZES 2,3 & 4

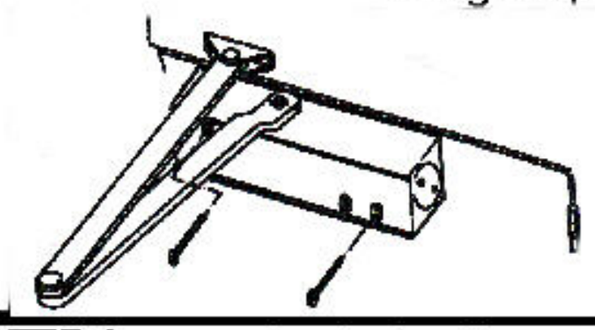


NOTE:- WHEN FITTED WITH BACKCHECK OR DELAY IT IS IMPORTANT TO READ OPTIONS.

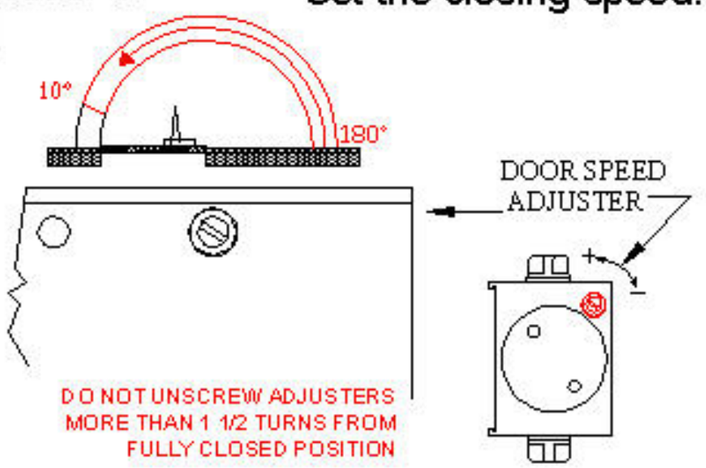
STEP 1 Fit arm bracket using template.



STEP 2 Screw on closer body. Using template.

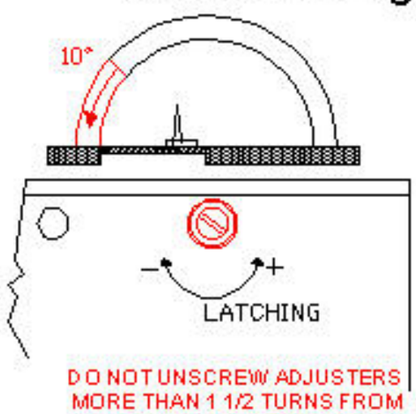


STEP 3 Set the closing speed.

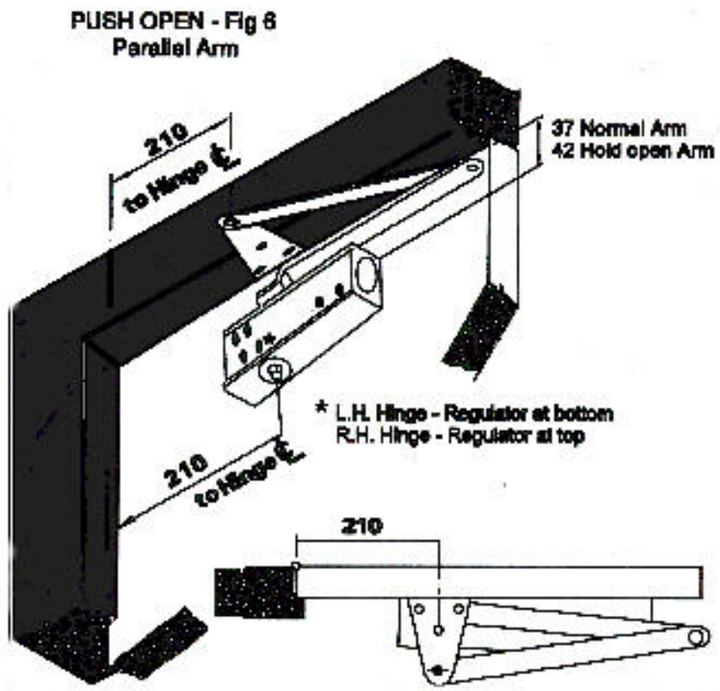


DO NOT UNSCREW ADJUSTERS MORE THAN 1 1/2 TURNS FROM FULLY CLOSED POSITION

STEP 4 Set the latching speed.

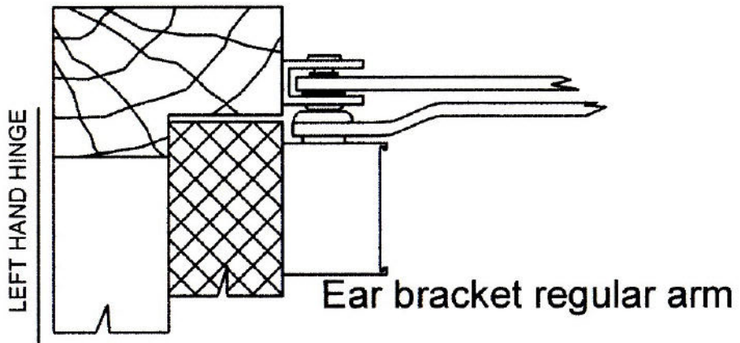


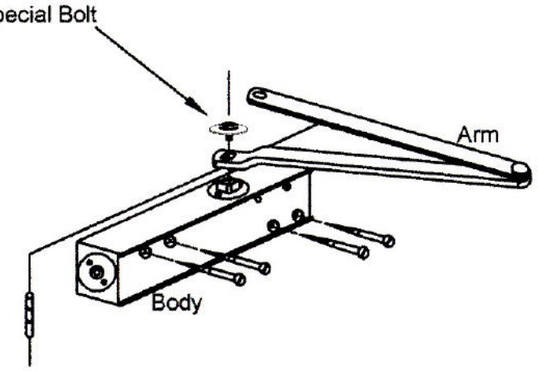
DO NOT UNSCREW ADJUSTERS MORE THAN 1 1/2 TURNS FROM FULLY CLOSED POSITION

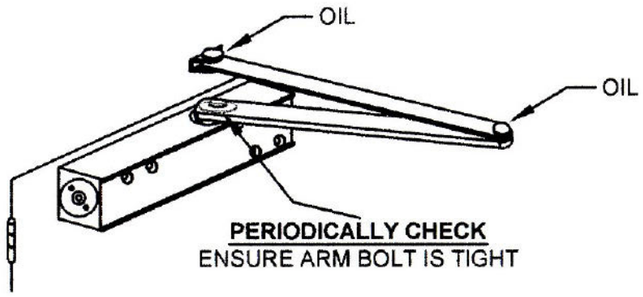


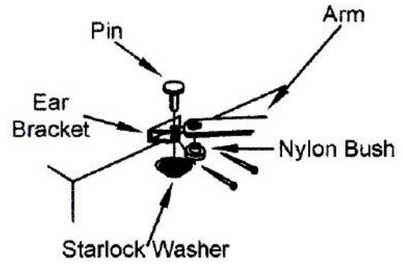
ISSUE | 1

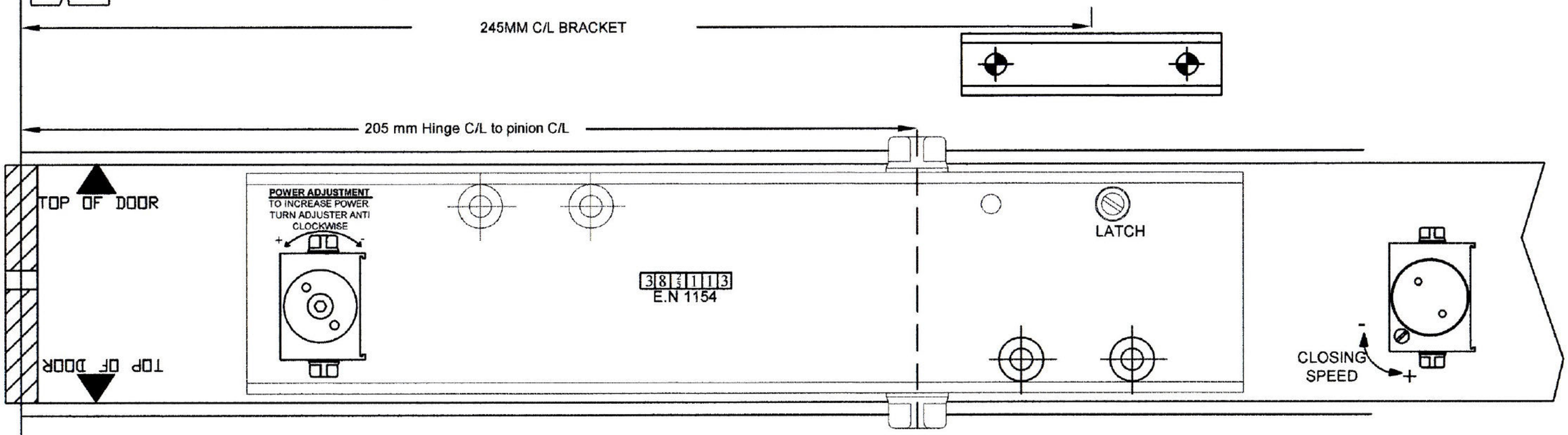
REGULAR/STANDARD ARM APPLICATION (FIG.1)

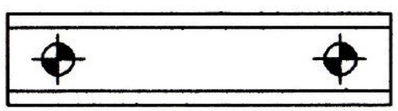












FITTING INSTRUCTIONS

PLEASE READ CAREFULLY BEFORE ASSEMBLY & FIXING

1.Using the template to position the arm bracket, drill 2 holes ⌖ Screw 2 1" wood screw to secure the arm bracket, Centre line of the bracket to hinge should be 245mm

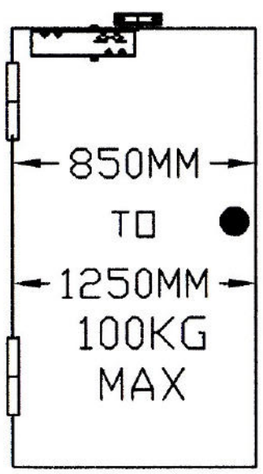
2. Still using the template, drill holes ⌖ and screw on the door closer body.Centre line of pinion should be 205mm from door hinge.

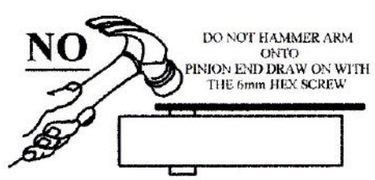
3. Fit arm to closer using the Special M6 bolt. fit arm to bracket using nylon bush,arm pin and starlock washer.

4.To adjust the closer power use the hex key supplied, clockwise to decrease power, anticlockwise to increase the power.

5.Set door and latching speed, do not unscrew door speed and latching adjusters from fully closed more than 1.1/2 turns.

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





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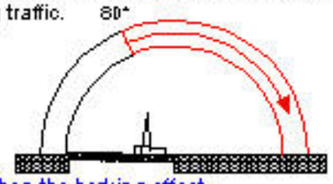
ISSUE | 1

OPTIONS

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.

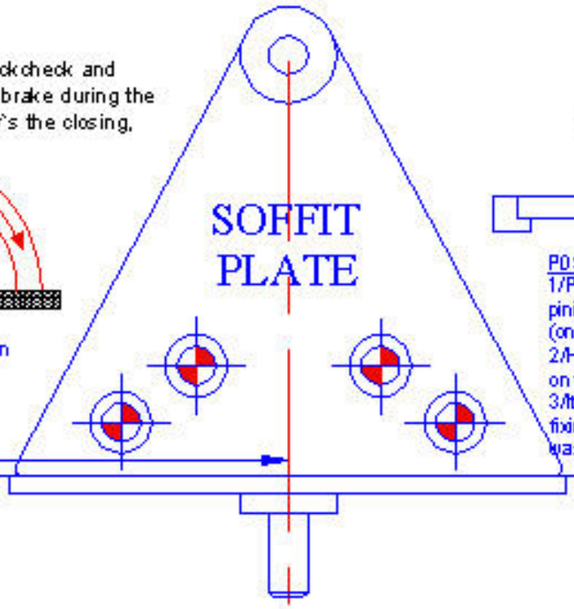
BACKCHECK



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

LEFT HAND HINGE



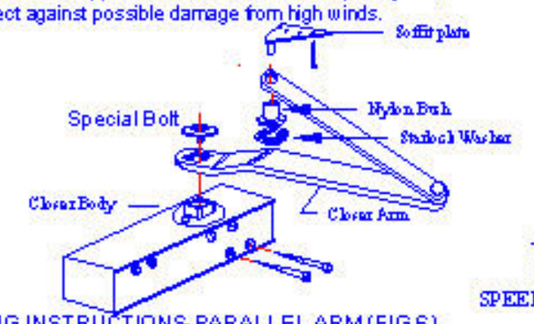
210

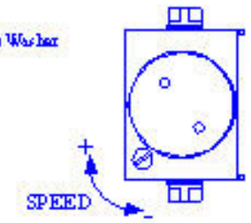
Use this side of the template for parallel arm application. The door closer pinion and the centre line of the soffit plate will be positioned 210mm from the door hinge. This position gives optimum opening/closing efficiency (with no preload the door will open to 180`. If you preload the max door opening is 100` but produces a power 3 which can be fitted on a fire door.

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, transmit 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.

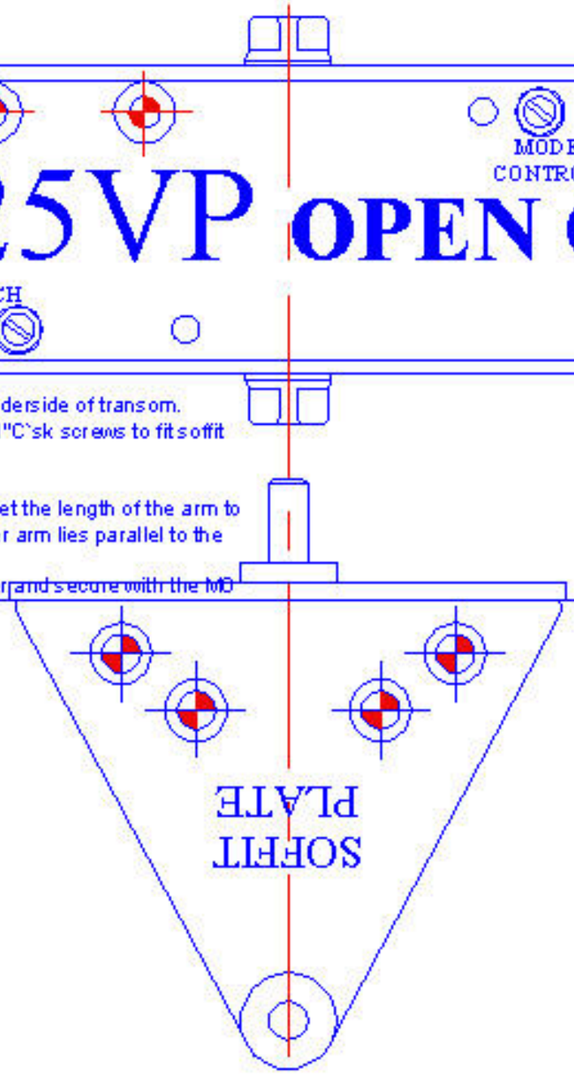


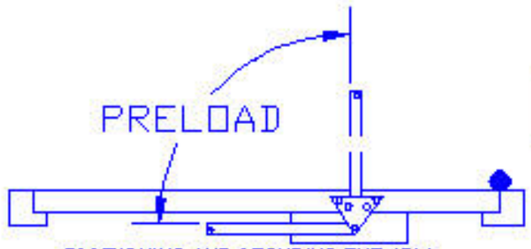


FITTING INSTRUCTIONS-PARALLEL ARM (FIG.6)

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 special M6 hex screw.(SEE PRELOAD DIAGRAM)
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 M3 C`sk screw or fit all over cover with two M4 domed headed screws.

RIGHT HAND HINGE



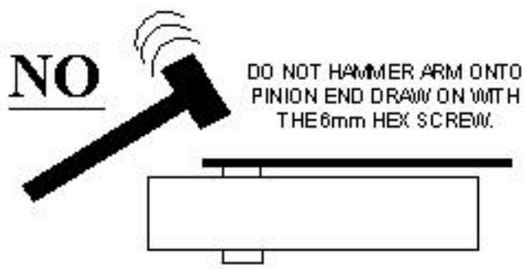


POSITIONING AND SECURING THE ARM

1/Place a 12mm spanner on the bottom square of the pinion, turn clockwise(away from the door)a full 90` or (one flat)
2/Holding the arm parallel to the door, locate the square on the arm to fit on the pinion.
3/It is important to hold the spanner on the pinion whilst fixing the arm to the pinion using the flat washer, spring washer and the M6 hex screw.

▲ FOLD UP 90`▲

▼FOLD UP 90`▼



BACKCHECK

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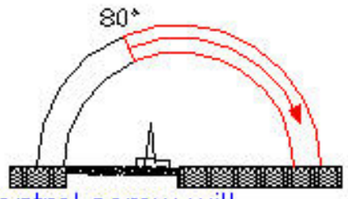
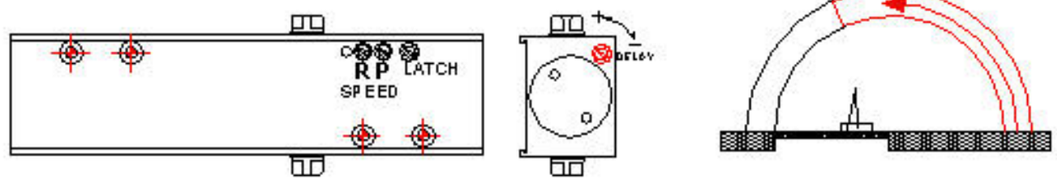


Cushion control screw. Tightening the cushion control screw will strengthen the braking effect. Unscrewing the cushion control screw will weaken the braking effect,if unscrewed by 1.1/2 turns from closed it will turn the backcheck facility off.

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

DELAYED ACTION

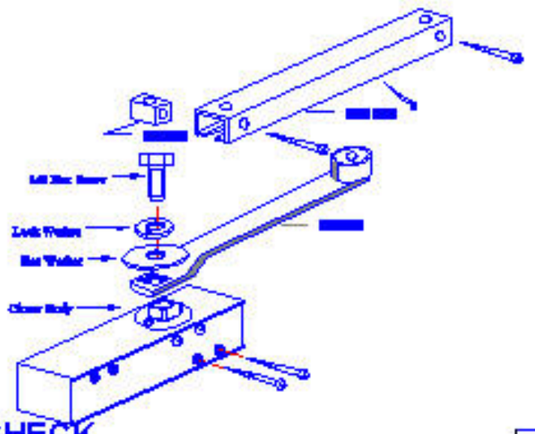


DELAY ACTION

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 approxamatly 80°. When you have set this to your requirment 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 approxamatly 80° down to 10° approx this is where the latch will come in. Finaly set your latch 10° untill 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)

ISSUE 2



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 hole ✛ and screw on the slide track, Remember to fit end blocks and centre fixing screws. End of track should be 100mm from the door hinge 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. Set door and latching speed.

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

LEFT HAND HINGE

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

TOP OF DOOR

TOP OF DOOR

S330 SLIDE ARM + B/CHECK

DOOR SPEED

LATCHING

INSTALLATION NOTES
THIS TEMPLATE IS DESIGNED TO POSITION THE CLOSER AND SLIDE SUCH THAT 100° MAX OPENING IS ACHIEVED.
NOTE 1/ WHEN FITTED IN FIG 6. MAX DOOR OPENING IS 95°.
NOTE 2/ IT IS IMPORTANT TO FIT A DOOR STOP.

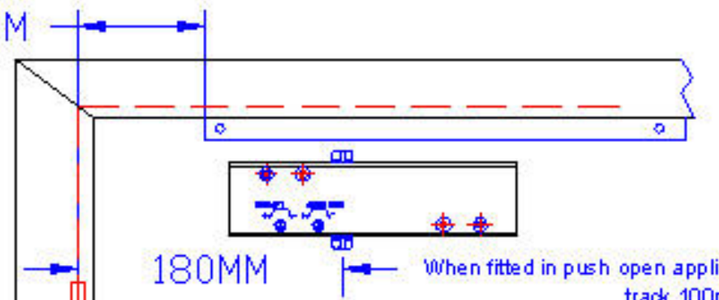
22

235MM

THIS WAY UP FOR RIGHT HAND HINGE

RIGHT HAND HINGE

100MM



180MM

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 180mm from the hinge.
(see diagram)

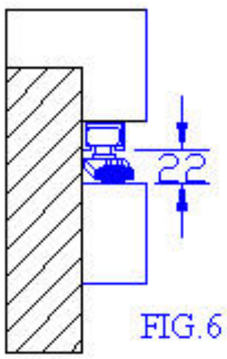


FIG.6