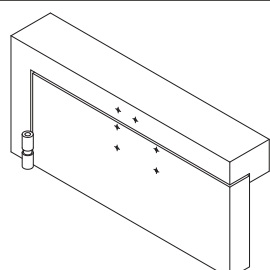


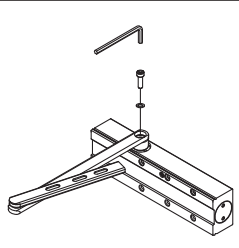
## Regular Fixing

**1**



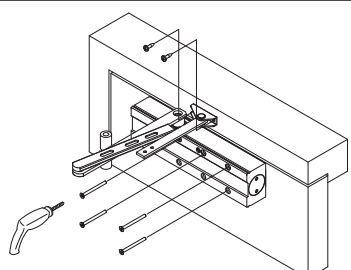
Using the templates provided, mark and drill pilot holes into the door and frame.

**2**



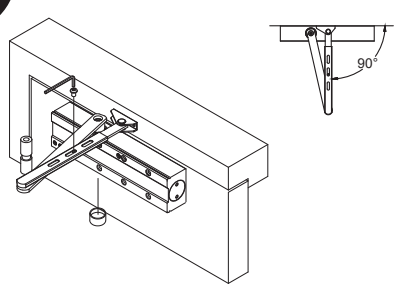
The Arm is fitted on the pinion with hex head screws.

**3**



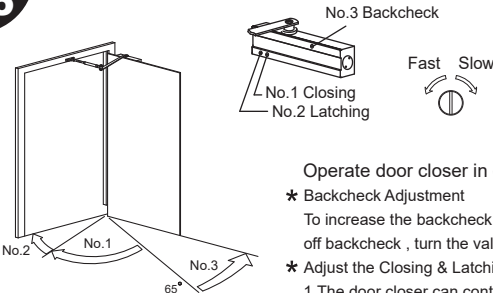
Using the templates provided, fix the mechanism to the door as well as the armset and any necessary brackets.

**4**



Connect the armset ensuring the pre-loading requirement has been completed.

**5**



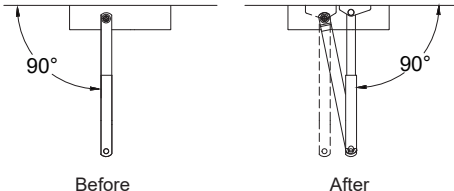
Operate door closer in order to check operation.

- ★ Backcheck Adjustment  
To increase the backcheck action, turn the valve clockwise. To decrease, or to turn off backcheck, turn the valve counter clockwise.
- ★ Adjust the Closing & Latching speed.
  - The door closer can control two different speeds.
  - The No.1 speed-adjusting valve controls the Closing speed, and the No.2 speed adjusting valve controls the Latching speed.

## Installation Instructions: Please refer to actual size template for exact fitting dimensions

**Pre-Loading of Arm**

For the unit to provide the optimum performance and overcome any resistance upon closing it is recommended that the armset is "pre-loaded" To pre-load, reposition the fixing angle of the arm onto the mechanism so that the end of the closing cycle would be past the stop position, as indicated below.



Before                      After

**Adjustment Details**

After installation check the operation of the door closer. Adjustment to the operation of the unit is made by altering the two valves at the front of the mechanism. PLEASE NOTE each valve is at its fastest speed with the adjustment of 1 full turn.


The following adjustment valves have a maximum adjustment of 1 full turn per valve. PLEASE NOTE over adjustment will damage the mechanism and/or the performance of the door closer and invalidate its guarantee.

Adjust the optional Backcheck (valve #3) before adjusting the Closing Speed (valve #1) and Latching Action (valve #2).


**Fixing in Fig.1 / Fig.61**

Power size	Max. Door width	Max. Door weight	Max. Door opening
2	850mm	40Kg	180°
3	950mm	60Kg	180°
4	1100mm	80Kg	130°


## Installation and Maintenance Instructions:

**Warning** 

- Please note the minimum power size requirement for fire / smoke door assemblies is 3 as required by Approved Document B.
- Do not install mechanical hold open devices on fire / smoke door assemblies.
- Take care not to exceed the maximum opening angle as detailed above.
- Care and attention must be taken when adjusting any of the units control valves to avoid damage through over adjustment.
- All Synergy Door Closer units are sealed for life and the internal components assembled under high load, therefore, tampering with the mechanism is to be strictly avoided.

**After Installation** 

- When the closer operates to close the door from its maximum opening position, it should ensure the lock latchbolt and any seals are overcome and the leaf returned into its frame.
- When the door is slightly open and the latch bolt resting against the strike, release the door to ensure the leaf fully closes into its frame.

**Maintenance** 

- Once the unit has been correctly fitted it is recommended that periodic checks (every six months) are carried out to ensure all fixings are tight and the door closes freely and positively into the frame, without slamming.
- A light oil lubricant (non-graphite) should be applied to the moving joints and exposed pivot points.

## Parallel Fixing

1

Using the templates provided, mark and drill pilot holes into the door and frame.

2

Using the templates provided, fix the mechanism to the door as well as the armset and parallel arm bracket.

3

Rotate the bottom pinion to approximately 100° with a wrench as illustrated and then assemble the main arm.

4

Connect the main arm and link arm as illustrated.

**Fixing in Fig.66**

Power size	Max. Door width	Max. Door weight	Max. Door opening
3	950mm	60Kg	130°

**Fixing in Fig.66**

Power size	Max. Door width	Max. Door weight	Max. Door opening
3	950mm	60Kg	130°