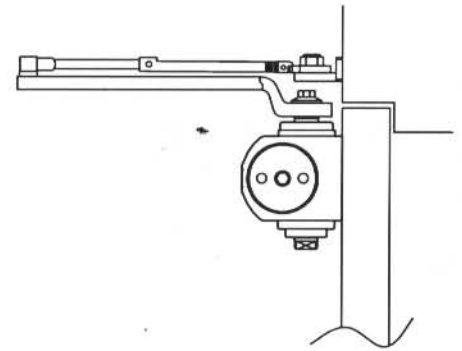
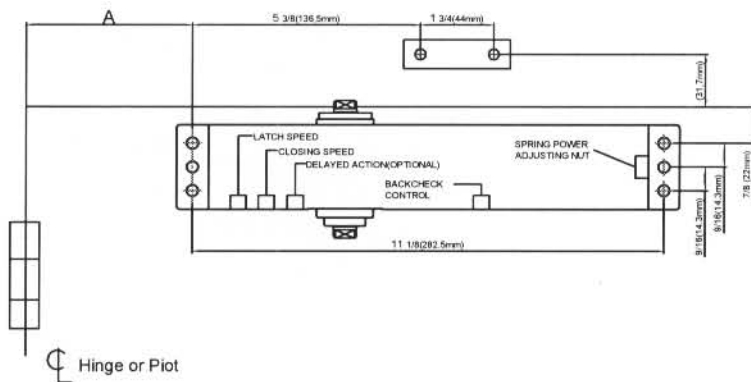


# Installation Instructions for REGULAR ARM (PULL SIDE ) Mounting with HOA ARM



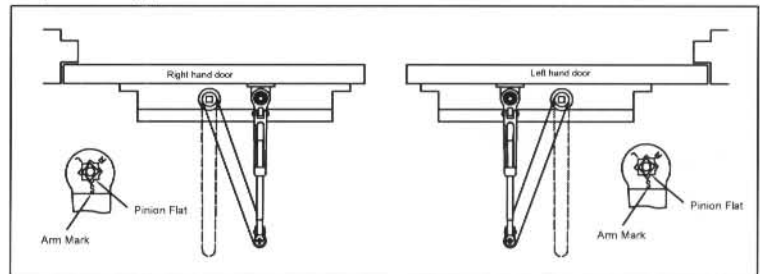
| OPENING   | DIM. A         |
|-----------|----------------|
| TO 120°   | 7-3/32(180mm)  |
| 120°-180° | 3-15/16(100mm) |

| CLOSER SIZE   |   | CLOCKWISE<br>TURNS OF<br>ADJUSTING NUT |
|---|---|--|
| BC/DA  | BF  |  |
| 1   | 1/2   | -3*                                    |
| 2   | 1   | 0                                      |
| 3   | 2   | 3                                      |
| 4   | 3   | 6                                      |
| 5   | 4   | 9                                      |

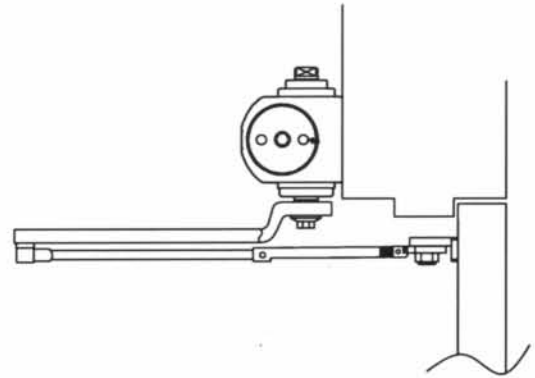
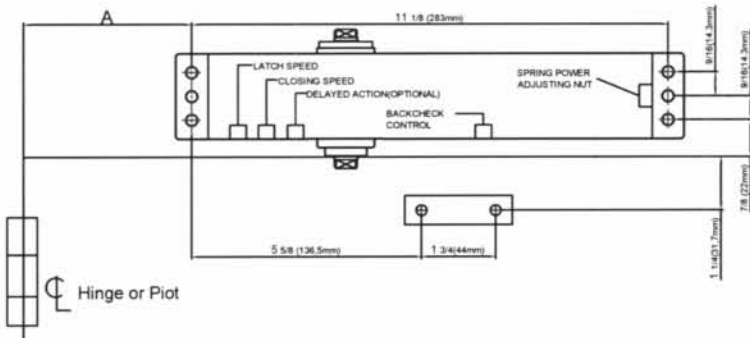
\*-3=3 TURNS COUNTERCLOCKWISE

- Select degree of opening from table and use template dimensions shown in above, mark six(6) holes on door for door closer and two(2) holes on frame for arm shoe.
- Drill pilot holes in door and frame for #14 all-purpose screws or drill and tap for 1/4-20 machine screws.
- Install adjustable forearm/arm shoe assembly to frame using screws provided.
- Install main Arm to tap pinion shaft using screw provided.
- Mount closer on door using screws provided.
- Adjust length of adjustable forearm so that adjustable forearm is perpendicular to frame when assembled to preloaded main arm (illustration below) secure forearm to main arm with screw provided.
- Snap pinion cap over shaft at bottom of closer (When using full cover, pinion cap is not necessary)
- Adjust closing speed, back check control and spring power of door, following instructions as shown page 6 or "How To Adjust Spring Power"  
Remove hold open bracket and holder loop from arm assembly. Fasten hold open bracket and holder loop to frame. **Hold Open Nut UP** on Right Hand door. **Hold Open Nut DOWN** on Left Hand door.

## Top View Typical Installation



# Installation Instructions for TOP JAMB (PUSH SIDE) Mounting With HOA ARM



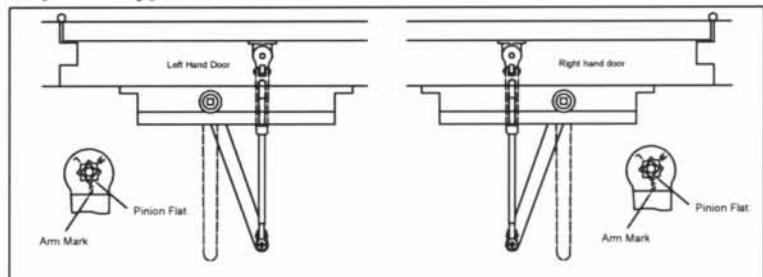
| OPENING   | DIM A          |
|-----------|----------------|
| TO 120°   | 7-3/32(180mm)  |
| 120°-180° | 3-15/16(100mm) |

| CLOSER SIZE   |   | CLOCKWISE<br>TURNS OF<br>ADJUSTING NUT |
|---|---|--|
| BC/DA  | BF  |  |
| 1   | 1/2   | -3*                                    |
| 2   | 1   | 0                                      |
| 3   | 2   | 3                                      |
| 4   | 3   | 6                                      |
| 5   | 4   | 9                                      |

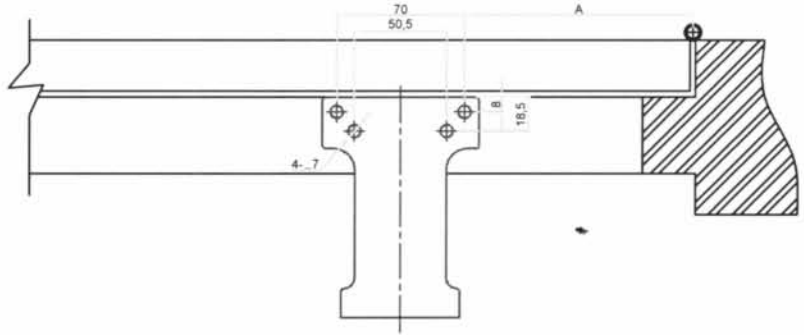
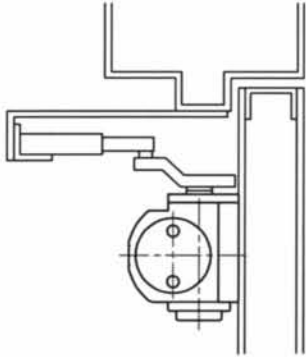
\*-3=3 TURNS COUNTERCLOCKWISE

- Select degree of opening from table and use template dimensions shown in above, mark six(6) holes on door for door closer and two(2) holes on frame for arm shoe.
- Drill pilot holes in door and frame for #14 all-purpose screws or drill and tap for 1/4-20 machine screws.
- Install adjustable forearm/arm shoe assembly to frame using screws provided.
- Install main Arm to tap pinion shaft using screw provided.
- Mount closer on door using screws provided.
- Adjust length of adjustable forearm so that adjustable forearm is perpendicular to frame when assembled to preloaded main arm (illustration below) secure forearm to main arm with screw provided.
- Snap pinion cap over shaft at bottom of closer (When using full cover, pinion cap is not necessary)
- Adjust closing speed, back check control and spring power of door, following instructions as shown page 6 or "How To Adjust Spring Power"  
Remove hold open bracket and holder loop from arm assembly. Fasten hold open bracket and holder loop to frame. **Hold Open Nut UP** on Right Hand door. **Hold Open Nut DOWN** on Left Hand door.

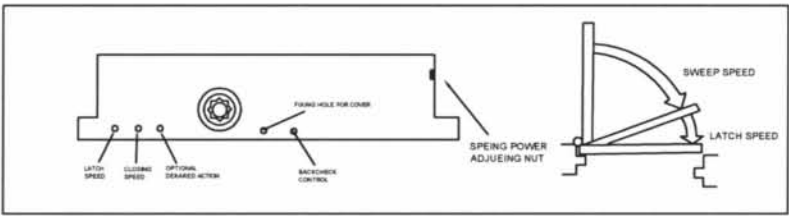
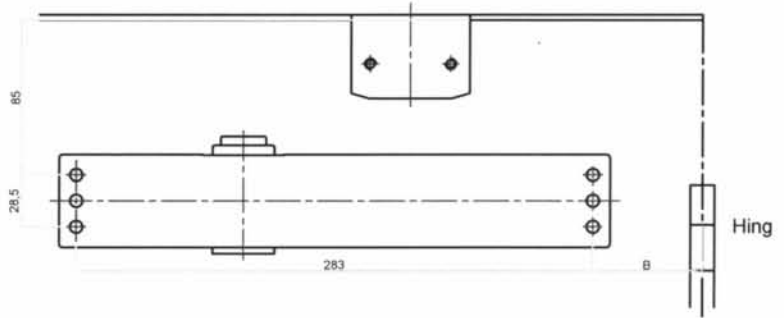
## Top View Typical Installation



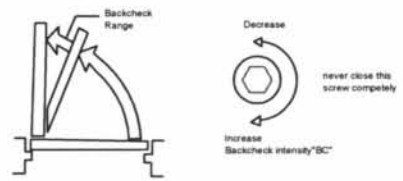
# Installation Instructions for Parallel Arm(PUSH SIDE) with HOA arm



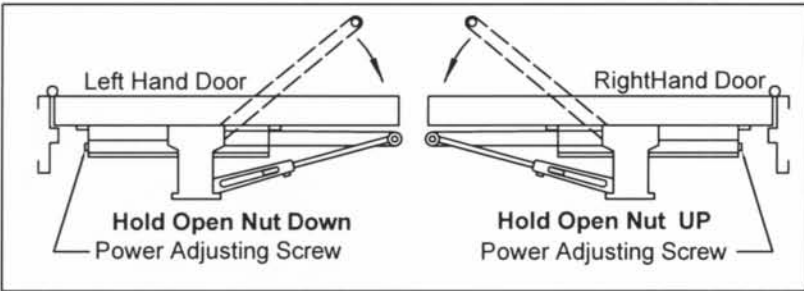
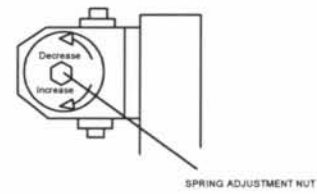
| OPENING   | DIM.A   | DIM.B |
|-----------|---------|-------|
| TO 100°   | 241mm   | 151mm |
| 120°-180° | 149.2mm | 65mm  |



### OPENING CYCLE



### ADJUSTABLE SPRING MODELS



| CLOSER SIZE |    | CLOSER SIZE            |
|-------------|----|------------------------|
| BC/DA       | BF | TURNS OF ADJUSTING NUT |
| 3           | 1  | 3                      |
| 4           | 2  | 4                      |
| 5           | 3  | 6                      |
| 6           | 4  | 12                     |