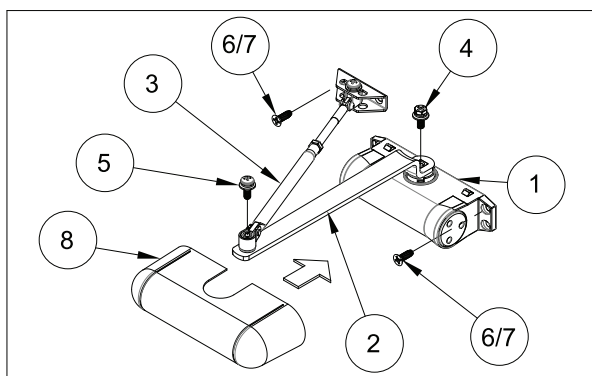


BEFORE STARTING THE INSTALLATION Compare the requirements of the installation with the specifications below, to make sure the correct model of CLOSER will be installed.

Model	UH4013 / UH4014
Type	UL Listed
Maximum door width	38"
Maximum door weight	140 lb.
Maximum open angle body mounted on door	120°-155°

1. PARTS AND ASSEMBLY DIAGRAM

Tools needed for installation: Hammer, #2 Phillips Head Screwdriver, 1/8" and 5/32" drill bits, Punch, Drill & Tape.
Check that all parts shown in the parts list and in the illustration are present.
Match screw size and type to hardware drawing.



Ref No.	Name of Parts	Qty.
1	Body	1
2	Main Arm	1
3	Forearm and Link Arm Shoe	1
4	Main Arm Screw (Hex Head), Lock Washer & Washers	1
5	Forearm Screw (Pan Head), Lock Washer & Washers	1
6	Phillips Oval Head Wood Screw #10 x 1-1/4"	6
7	Phillips Oval Head Self-Tapping Screw 10-32 x 3/4"	6
8	Body Cover	1

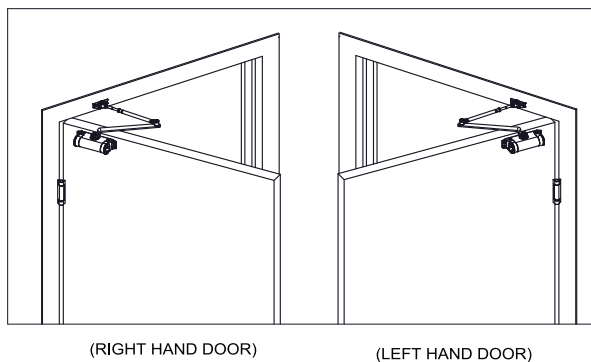
FOR WOOD	FOR ALUMINUM OR STEEL
(6)	(7)
(SCREWS SHOWN ACTUAL SIZE)	

2. LOCATION OF CLOSER ON THE DOOR

Determine whether the door is left or right hand using the following illustrations. Remember that the CLOSER is always mounted inside the building near the hinge edge of the door

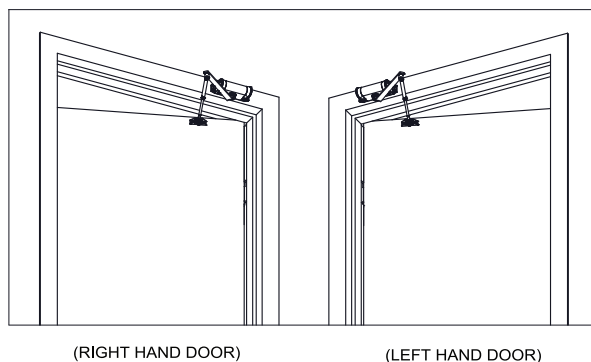
2A. INWARD OPENING DOOR

This illustration shows the mounting for **inward** opening doors, as **seen from inside** the building.



2B. OUTWARD OPENING DOOR

This illustration shows the mounting for **outward** opening doors, as **seen from inside** the building.



3. INSTALLATION PROCEDURE

Perform each of the following seven steps in sequence.

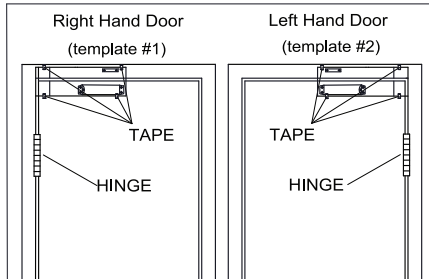
3A. POSITIONING TEMPLATE

Templates to help position the CLOSER correctly are provided on an enclosed sheet, **BE SURE TO USE CORRECT TEMPLATE.**

For installation of model UH4013 or UH4014, decide the maximum opening angle for the door (120° or 155°) before cutting out the template. The template must be cut differently for each angle.

INWARD OPENING DOORS

Cut out the right or left hand template marked "INWARD OPENING". Tape the template to the upper edge of the door on the hinge side, following template instructions for desired degree opening.



3B. MARKING HOLE LOCATION.

Use a hammer and punch to mark the center of each screw hole then remove the template.

3C. PREPARING SCREW START HOLES

NOTE: Numbers in parentheses () indicate the item number shown in Parts and Assembly Diagram on the front of this sheet.

a. Wood Door

Soft Wood – use a 1/8" drill bit and drill four holes for the closer body (1) and two holes for the forearm and shoe assembly (3) 1-1/4" deep.

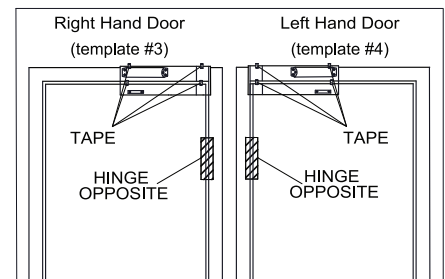
Hard Wood – use a 5/32" drill bit and drill four holes for the closer body (1) and two holes for the forearm and shoe assembly (3) 1-1/4" deep.

b. Aluminum or Steel Door

Use a drill with a 5/32" bit and drill four holes for the body (1) and two holes for the forearm shoe (3) approximately 3/4" deep.

OUTWARD OPENING DOORS

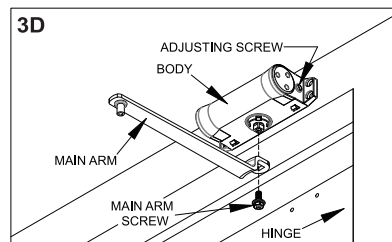
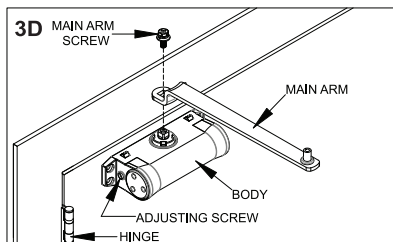
The templates are in two parts. Cut out the right or left hand templates marked "OUTWARD OPENING". Tape the closer body and forearm shoe templates following the template instructions for desired degree opening.



3D. ATTACHING MAIN ARM TO BODY

NOTE: Speed adjustment valve on closer body must be positioned towards the door hinge.

Place main arm onto the TOP spindle of the closer body for an inward opening door and attach with hex screw, lock washer and flat washer.



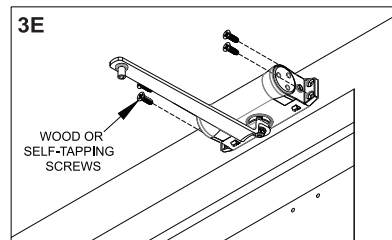
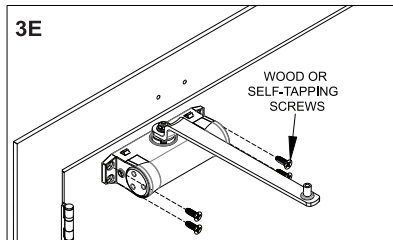
3D. ATTACHING MAIN ARM TO BODY

NOTE: Speed adjustment valve on closer body must be positioned towards the door hinge.

Place main arm onto the BOTTOM spindle of the closer body for an outward opening door and attach with hex screw, lock washer and flat washer.

3E. ATTACHING BODY

Position closer body with main arm attached over the drilled holes on the door. The spindle with main arm attached must be on the top. Fasten closer to door using screws for either wood or aluminum doors.

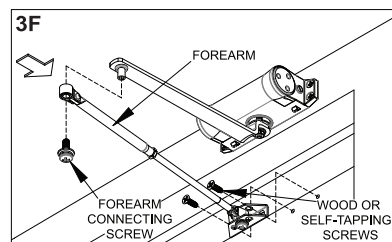
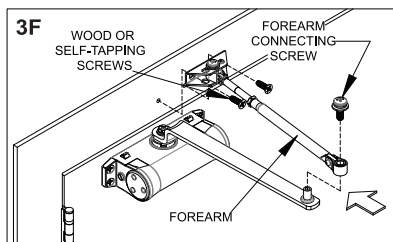


3E. ATTACHING BODY

Position closer body with main arm attached over the drilled holes on the jamb. The spindle with main arm attached must be on the bottom. Fasten closer to door using screws for either wood or aluminum door jambs.

3F. ATTACHING FOREARM AND SHOE ASSEMBLY

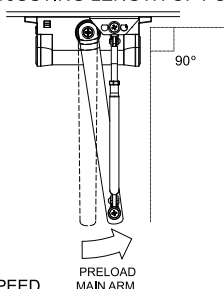
Position the forearm shoe over holes on the top door jamb and fasten using screws for either wood or aluminum door jambs.



3F. ATTACHING FOREARM AND SHOE ASSEMBLY

Position the forearm shoe over holes on the door and fasten using screws for either wood or aluminum doors.

3G. ADJUSTING LENGTH OF FOREARM



3G. CONNECTING MAIN ARM TO FOREARM

Adjust length of forearm to position the forearm at a right angle to frame, when connected to main arm at the elbow. Use washer and screw (4) provided to secure the pivot connection. Tighten forearm locknut.

Important: When door is fully closed and the forearm is at a 90 degree angle to the door, this position creates pressure, which forces the door closed.

4. SPEED ADJUSTMENT

Closer speed is factory set. If a different speed is desired, both sweep and latch speed can be adjusted by a single screw adjustment.

4A. SWEEP SPEED ADJUSTMENT

Turn speed adjustment screw clockwise (1 turn) for a slower speed and counter clockwise (1 turn) for a faster speed. Do not exceed two turns in either direction.

4B. LATCHING SPEED ADJUSTMENT

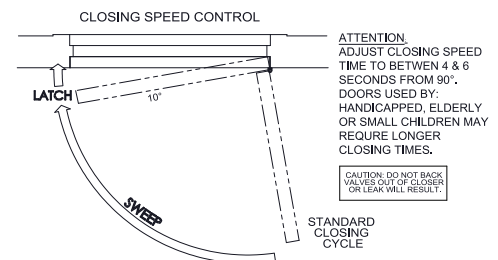
For fastest latching speed, the slot in the adjustment screw is parallel to the door. For a slower latching speed, the slot in the adjustment screw is perpendicular to the door.

5. ATTACH COVER

Slide cover (8) onto body (1).

6. INITIAL OPENING POWER ADJUSTMENT

Adjusting foot for opening power (see illustration on right)



ATTENTION
ADJUST CLOSING SPEED TIME TO BETWEEN 4 & 6 SECONDS FROM 90°. DOORS USED BY HANDICAPPED, ELDERLY OR SMALL CHILDREN MAY REQUIRE LONGER CLOSING TIMES.

CAUTION: DO NOT BACK VALVES OUT OF CLOSER OR LEAK WILL RESULT.

ADJUSTING FOOT FOR INITIAL OPENING POWER

