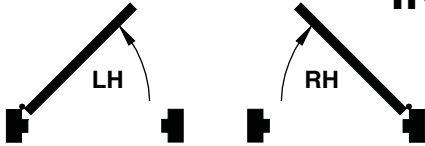


INSTALLATION INSTRUCTIONS

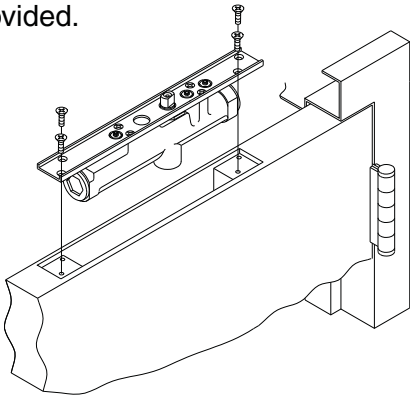
CAUTION

IMPROPER INSTALLATION OR REGULATION MAY RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE. FOLLOW ALL INSTRUCTIONS CAREFULLY. FOR QUESTIONS, CALL LCN AT 800 - 526 - 2400

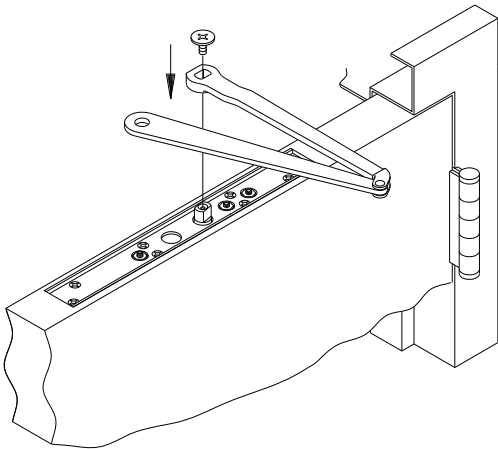


1. Determine hand of door using diagram above. Hand of closer must match hand of door. The closer mtg. Plate is marked with an "R" or "L". Determine desired degree of opening and prepare door & frame per template on reverse side. **Proper mortising of door and frame is required for closer to operate correctly.**

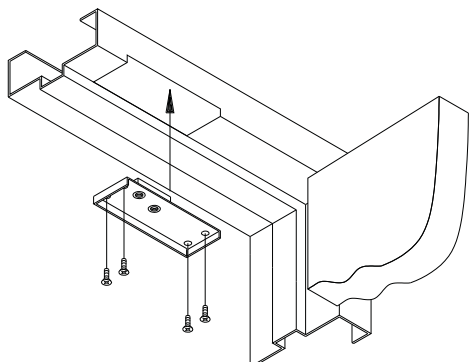
2. Install closer into door as shown below and secure with screws provided.



3. Attach arm to closer as shown below, then fasten with arm shaft screw.

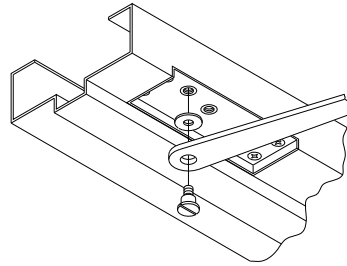


4. Install soffit plate into mortised frame, as shown below. Fasten securely with screws provided.

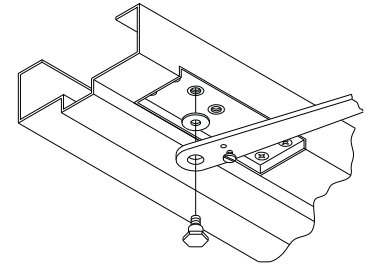


TO MEET ADA ARM SHOULD BE MOUNTED IN THE HOLE MARK "LIGHT".

5. Attach arm to soffit plate as shown. Arm stud screw should be threaded into hole marked "LIGHT". Be sure brass washer is between arm and soffit plate. Tighten arm stud screw securely.



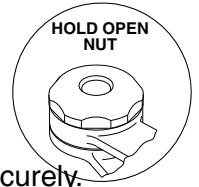
REG. & H-90 ARM



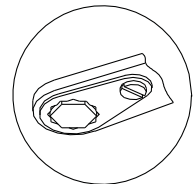
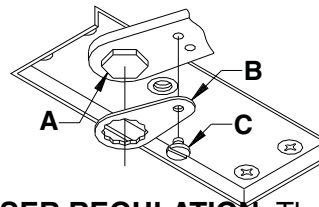
H-180 ARM

6. **Adjustment of H-90 (90°-140°) arm:**

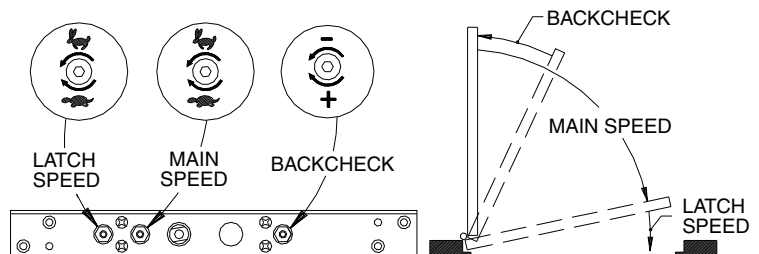
The arm is preset at factory to hold open at approx. 90°. To adjust setting: Loosen hold open nut; open door to 3°- 5° before desired hold open position; then tighten hold open nut securely.



7. **Adjustment of H-180 (140°-180°) arm:** Remove screw "C" from arm. Loosen arm stud "A". Open door to 3°- 5° before desired hold open position. Tighten arm stud "A" firmly. Locate locking plate "B" in closer box. Fit locking plate "B" onto arm stud "A" and fasten with screw "C". **NOTE:** depending on arm stud position, screw "C" will go in either of two holes provided.



8. **CLOSER REGULATION:** The 330 series closer has been regulated prior to shipment. If adjustments are needed, use socket screw key furnished and consult diagram below.



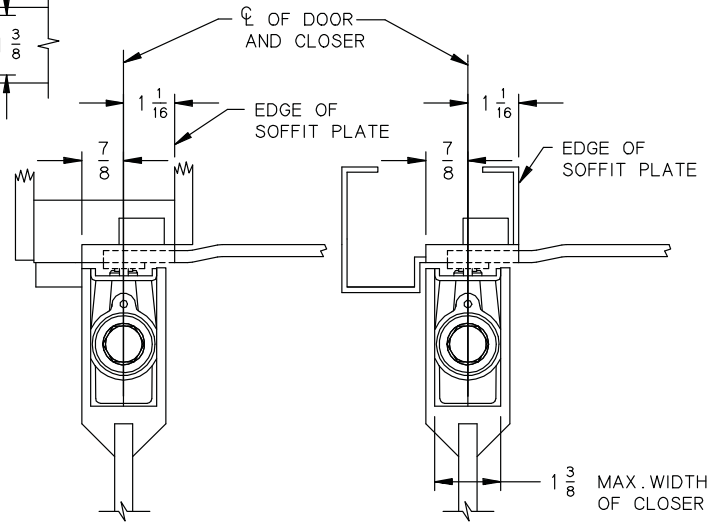
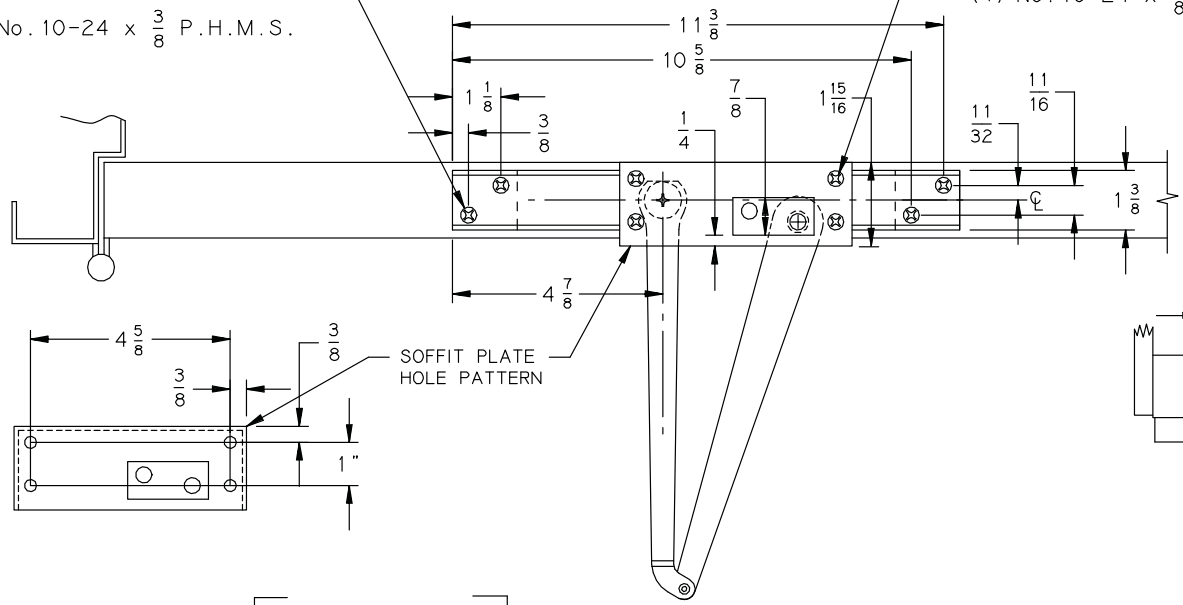
9. **FOR INCREASED CLOSING POWER:** Refer to step No. 5. Thread arm stud into hole marked "HEAVY".

(4) No. 10 x 1 P.H.W.S. OR
 (4) No. 10-24 x $\frac{3}{8}$ P.H.M.S.

(4) No. 10 x $\frac{5}{8}$ P.H.W.S. OR
 (4) No. 10-24 x $\frac{3}{8}$ P.H.M.S.

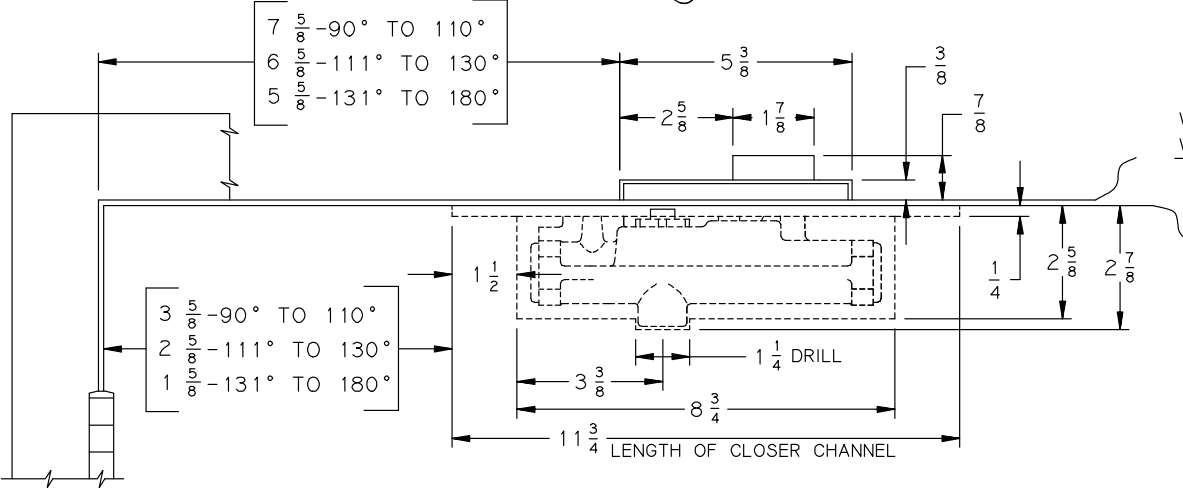
331 } NON HOLD OPEN-(90°-180°)
 332 } H90-(90° TO 130° HOLD OPEN)
 333 } H180-(UP TO 180° HOLD OPEN)
 334 }

AUXILIARY STOP RECOMMENDED
 RIGHT HAND DOOR AND CLOSER SHOWN. LEFT HAND OPPOSITE 6/96



WOOD DOOR
WOOD FRAME

METAL DOOR
METAL FRAME



GENERAL NOTES-

1. LOCATION OF CLOSER DEPENDS ON DEGREE OF DOOR OPENING AND HOLD OPEN DESIRED.
2. LOCATE CLOSER & SOFFIT PLATE FROM CL OF PIVOT OR SWING CLEAR HINGE PIN IF USED.
3. ADJUSTMENT OF POWER:
CLOSING POWER IS ADJUSTED BY MOVING THE FOREARM AT THE SOFFIT PLATE.
4. FOR INTERIOR DOORS ONLY.
5. REINFORCING PER ANSI/SDI-100 RECOMMENDED FOR HOLLOW METAL DOORS AND FRAMES.
6. HOLE PATTERN FOR 4 CHANNEL SCREWS IDENTICAL FOR R.H. & L.H.

INCH	1/4	11/32	3/8	5/8	11/16	3/4	7/8	1	1 1/16	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 11/16	
M.M.	6	9	10	16	17	19	22	25	27	29	32	35	38	41	43	
INCH	1 15/16	2 5/8	2 7/8	3 3/8	3 5/8	3 7/8	4 5/8	4 7/8	5 3/8	5 5/8	6 5/8	7 5/8	8 3/4	10 5/8	11 3/8	11 3/4
M.M.	50	67	73	86	92	98	118	124	137	143	168	194	222	270	289	299

No.	REVISION	BY	DATE
1	330 WAS 330-101	RJS	3/78
2	REDRAWN ON CAD	JEJ	2/95
3	TEMPLATE UPDATE	JEJ	6/96

LCN[®]

APP BY JEJ 6/96
DO NOT SCALE

CONCEALED DOOR CLOSER-EXPOSED
ARMS WITH SOFFIT PLATE

330