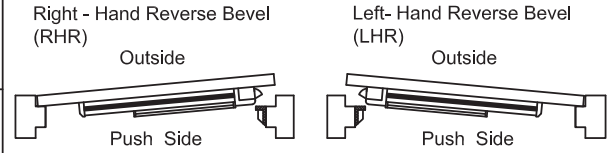


Installation Instructions

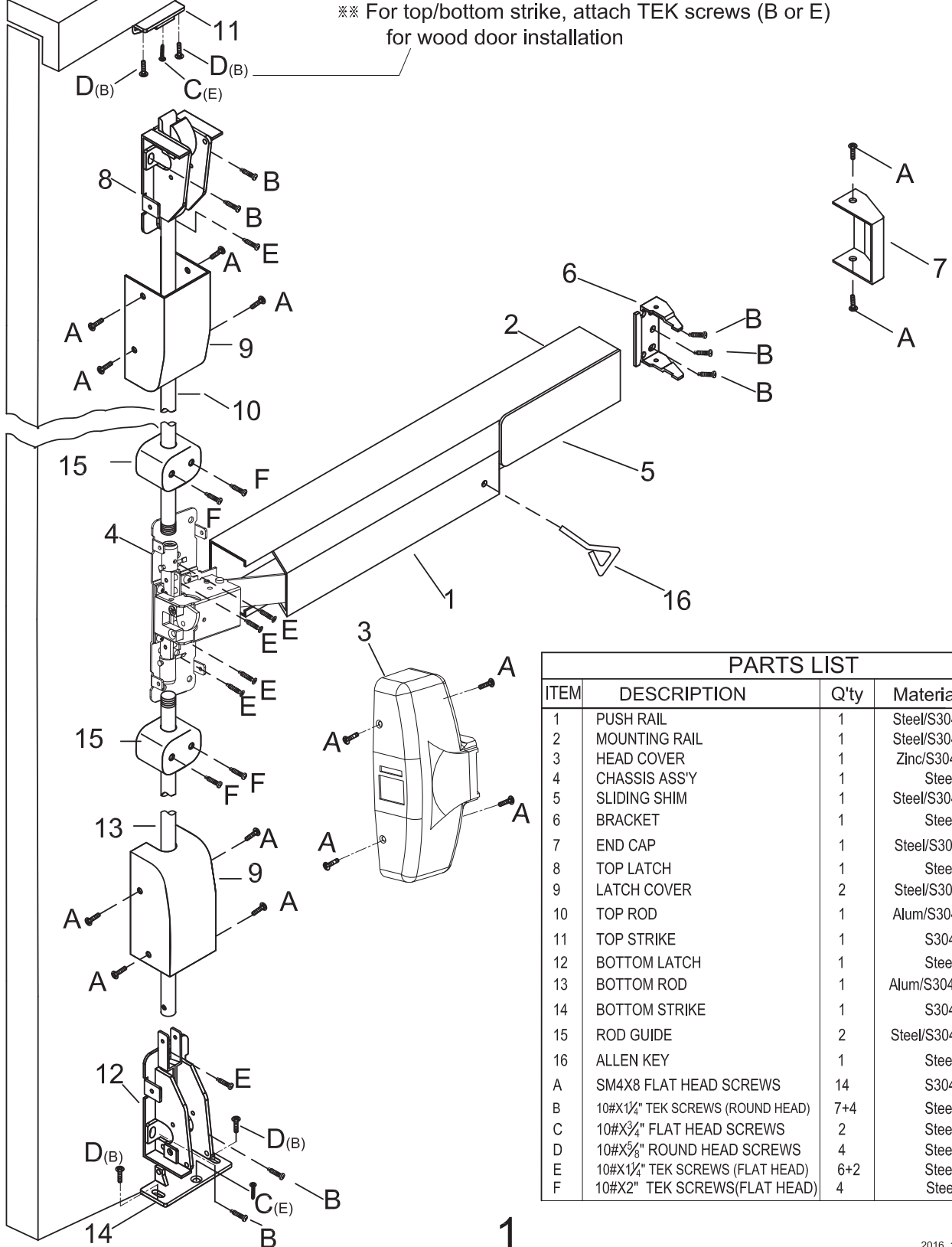
8900 Surface Vertical Rod Device

※ The screws (item B & E) changed to TEK screws (self-drilling screws) since 2014, May. Only top / bottom strike still attach machine screws (item C & D) for install selection.

How to determine hand of door



※※ For top/bottom strike, attach TEK screws (B or E) for wood door installation



PARTS LIST

ITEM	DESCRIPTION	Q'ty	Material
1	PUSH RAIL	1	Steel/S304
2	MOUNTING RAIL	1	Steel/S304
3	HEAD COVER	1	Zinc/S304
4	CHASSIS ASS'Y	1	Steel
5	SLIDING SHIM	1	Steel/S304
6	BRACKET	1	Steel
7	END CAP	1	Steel/S304
8	TOP LATCH	1	Steel
9	LATCH COVER	2	Steel/S304
10	TOP ROD	1	Alum/S304
11	TOP STRIKE	1	S304
12	BOTTOM LATCH	1	Steel
13	BOTTOM ROD	1	Alum/S304
14	BOTTOM STRIKE	1	S304
15	ROD GUIDE	2	Steel/S304
16	ALLEN KEY	1	Steel
A	SM4X8 FLAT HEAD SCREWS	14	S304
B	10#X1½" TEK SCREWS (ROUND HEAD)	7+4	Steel
C	10#X¾" FLAT HEAD SCREWS	2	Steel
D	10#X⅝" ROUND HEAD SCREWS	4	Steel
E	10#X1½" TEK SCREWS (FLAT HEAD)	6+2	Steel
F	10#X2" TEK SCREWS(FLAT HEAD)	4	Steel

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STEP 1 MARK CENTER LINES

Mark Center Lines on INSIDE of door .Establish the horizontal center line of the device by drawing a line across the door 41" (1041mm) above floor line . Establish the top and bottom rod backset center line by drawing a vertical line from the top to bottom of the door measuring from the LOW SIDE of the DOOR BEVEL. After marking & drilling, please install pushbar according to its marked location. With establishment of pushbar, then go for next step of other installations.

Regularly furnished unless otherwise ordered.

INSIDE OF LHR DOOR IS ILLUSTRATED

LOW SIDE OF DOOR BEVEL

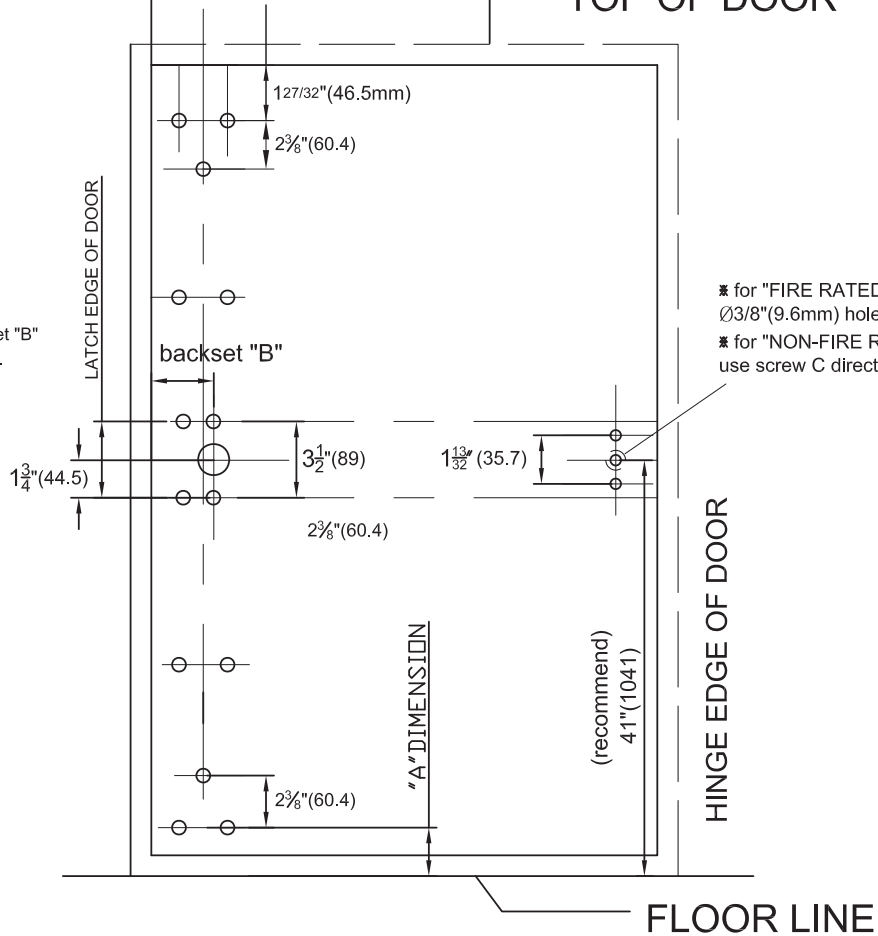
TOP OF DOOR

Determine backset "B"

- ✦ If lock stile is approx. 4½" wide or wider, backset "B" = 2¾"
- ✦ If lock stile is less than 4½" wide, backset "B" = ½ of the visible width of the lock stile.

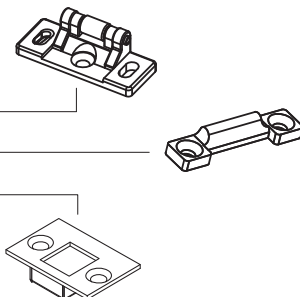
(when door is closed against stop)

- ✦ for "FIRE RATED" : please drill Ø3/8"(9.6mm) hole for sex bolt
- ✦ for "NON-FIRE RATED" : please use screw C directly



Regularly furnished unless otherwise ordered.

"A" DIMENSION	INSTALLATION
1-47/64"(44mm)	For Surface Strike
1-9/16"(39.5mm)	For Handicap Strike
1-5/32"(29.5mm)	For Mortise in Strike



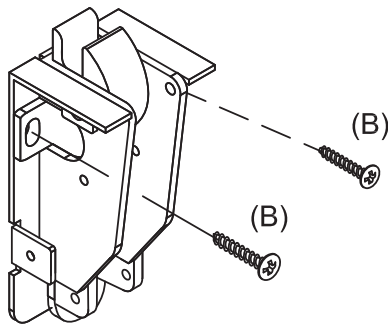
8900 & F8900 Surface Vertical Rod Devices

STEP 2 LOCATE TOP/BOTTOM LATCHES

Locate Top and Bottom Latch .Mark for later installation .
(See illustration on this Page for dimensions and locations.)

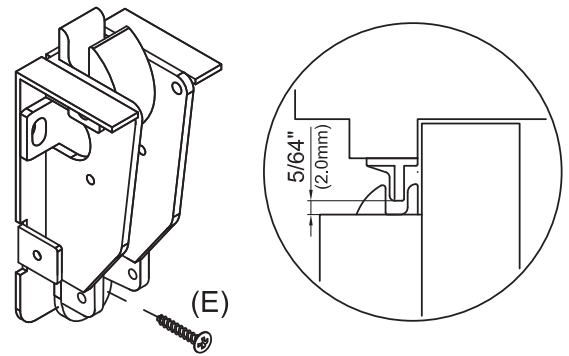
STEP 3 INSTALL TOP LATCH

Follow TEMPLATE to install top latch vertically.
Fix 2 screws (B) in the oval-shaped holes.
(DO NOT TIGHTEN screws (B) temporarily)



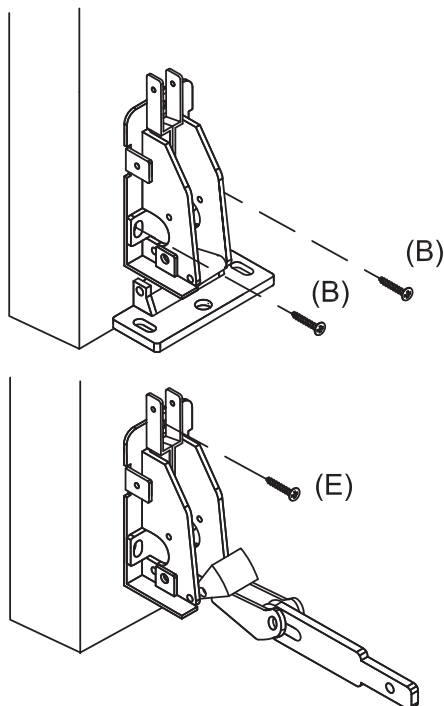
STEP 4 INSTALL TOP STRIKE

Follow TEMPLATE to install top strike vertically. After adjusting top latch to the proper gap between strike, which is about $\frac{5}{64}$ " (2.0mm), tighten screws (E). Then, fix screw (B) and tighten it.



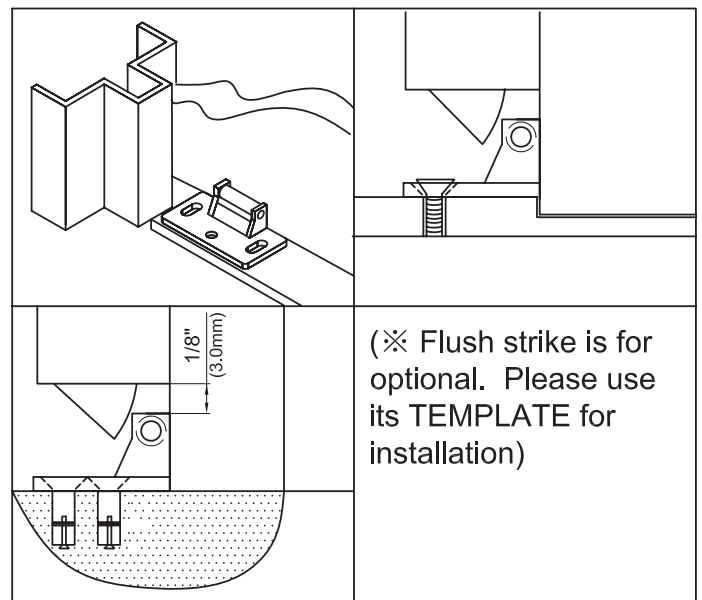
STEP 5 INSTALL BOTTOM LATCH

Follow TEMPLATE to install top latch vertically. Fix 2 screws (B) in the oval-shaped holes.
(DO NOT TIGHTEN screws (B) temporarily)



STEP 6 INSTALL BOTTOM STRIKE

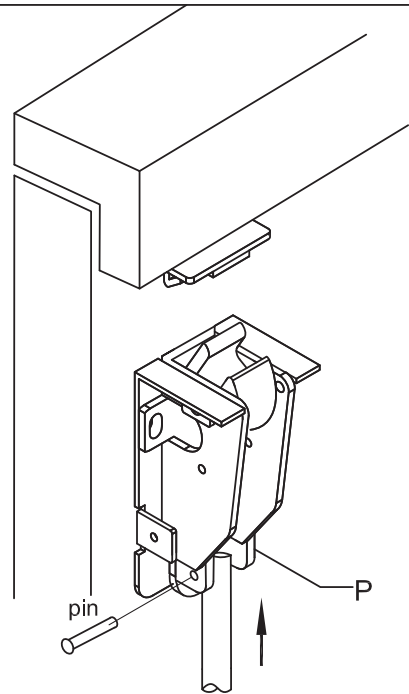
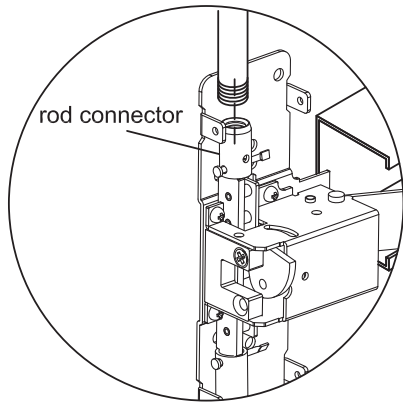
Follow TEMPLATE to install bottom strike vertically. After adjusting bottom latch to the proper gap between strike, which is about $\frac{1}{8}$ " (3.0mm), tighten screws C). Then, fix screw (D) and tighten it.



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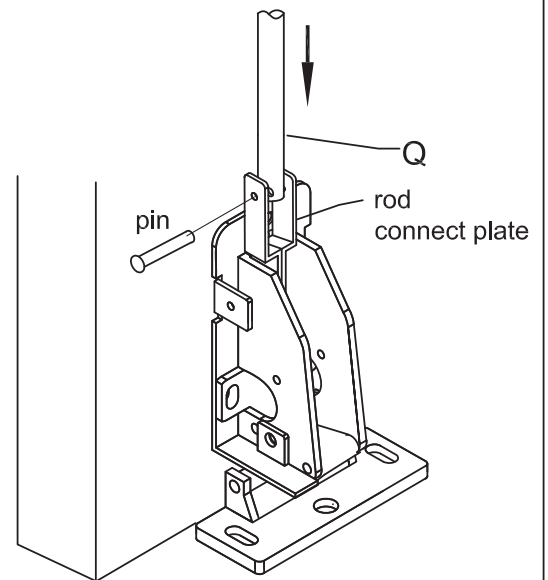
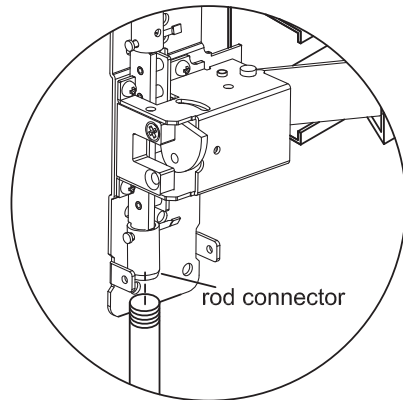
STEP 7 INSTALL & ADJUST TOP ROD

The rod length can be adjusted by the thread of the rod. Adjust it to the correct length when door is under closed position, by aiming the rod to the hole of the part (P).
※ If top rod had been cut to fit door height, please drill hole for pin loading.



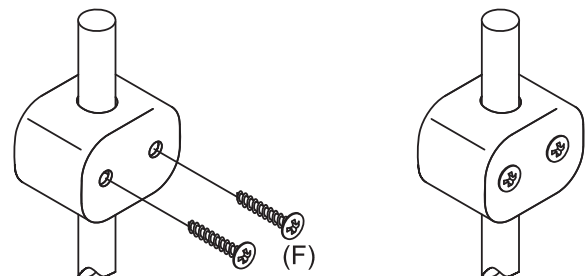
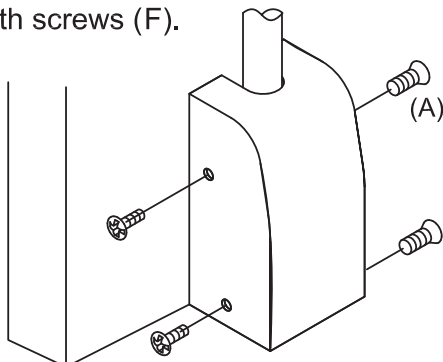
STEP 8 INSTALL & ADJUST BOTTOM ROD

The rod length can be adjusted by the thread of the rod. Adjust it to the correct length when door is under closed position, by aiming the rod to the hole of the part (Q).



STEP 9 INSTALL LATCH COVERS & ROD GUIDE

- (1) .Install latch covers and fix/tighten them with screws (A).
- (2) .Position rod guide midway between head cover and latch. Then, fix & tighten rod guide with screws (F).

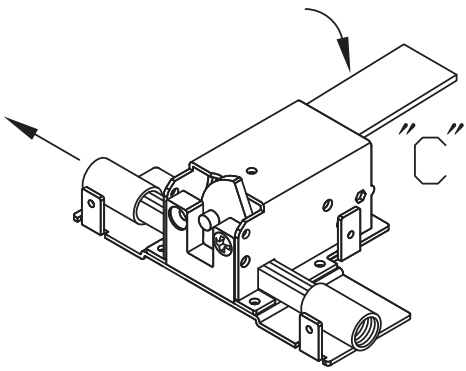
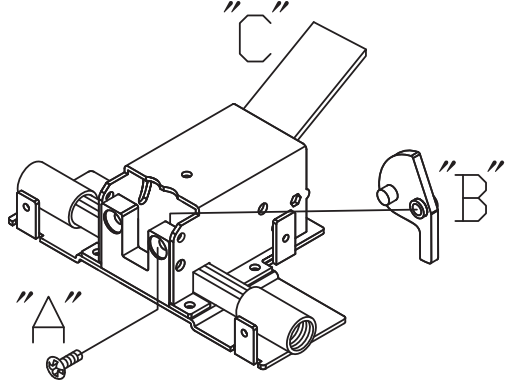


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STEP 10 TEST PUSH RAIL & THE DOGGING FUNCTION

- 1.The latches should engage the strikes when the door is closed. If the door can be pushed open without depressing the push rail, please check the rod length / installation(starting from step 3)
- 2.The latches should disengage from the strikes freely when the push rail is depressed or dogged down. If not, please check the rod length/installation again (starting from step 3)
- 3.When applying outside trims: (please refer to "Apply trin+CHASSIS,page 6)
 - (1).No trims: Exit only, latch bolts are retracted just by the push rail inside.
 - (2).Entry: latch bolts are retracted by trim outside after setting the trim unlocked.
 - (3).Storeroom: latch bolts are retracted by trim outside with key only.
 - (4).Passage: latch bolts are retracted by trim outside freely.
- 4.Dogging:Use allen key and turn clockwise 90° when depressing push rail. Latch bolts will remain retraced.

STEP 11 CHANGE HAND OF DEVICE (FOR EXAMPLE: FROM R SIDE TO L SIDE)

1.PRESS LIFT ARM "C" AND ENSURE THE DIRECTION. SCREW IS BELOW HOLE AS FLG SHOWN.	2.UNSCREW "A" AND TAKE OFF "B".
	
3.TURN "B" 180° AND PUT IT BACK AS FLG SHOWN.THEN, FASTEN "A" AT ABOVE SCREW HOLE.	4.OPERATE LIFT ARM "C" TO ENSURE THE PROCESSING DIRECTION IS REVERSED.
