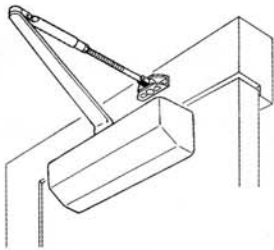


STANLEY

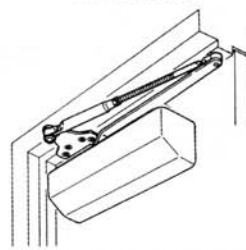
Security Solutions

DOOR CLOSER

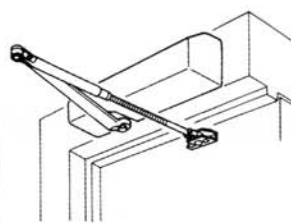
D-4550 AND D-4551  INSTALLATION INSTRUCTIONS**SELECT PROPER APPLICATION FROM ILLUSTRATIONS BELOW. THEN FOLLOW INSTALLATION INSTRUCTIONS ON GIVEN PAGE.****STANDARD APPLICATION**

CLOSER MOUNTED ON HINGE SIDE OF DOOR

USE PAGE 2

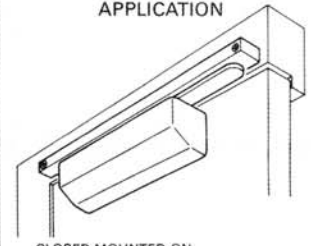
PARALLEL ARM APPLICATION

CLOSER MOUNTED ON STOP SIDE OF DOOR

USE PAGE 3
USE PAGE 6 (EDA)**TOP JAMB APPLICATION**

CLOSER MOUNTED ON FRAME ON STOP SIDE OF DOOR

USE PAGE 4

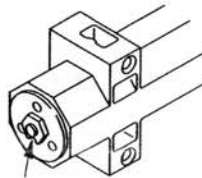
TRACK RAIL APPLICATION

CLOSER MOUNTED ON HINGE SIDE OF DOOR WITH TRACK-RAIL ON FRAME

USE PAGE 5

**ADJUST SPRING POWER ACCORDING TO CHART
(FOR STANDARD, PARALLEL ARM, AND TOP JAMB APPLICATIONS)****REFER PAGE 6 FOR TRACK RAIL APPLICATION**

ADJUST SPRING POWER FOR DOOR WIDTH AS INDICATED IN CHART. TO INCREASE CLOSING POWER, TURN SPRING ADJUSTING NUT CLOCKWISE. MAXIMUM ADJUSTMENT IS APPROXIMATELY 21 TURNS.

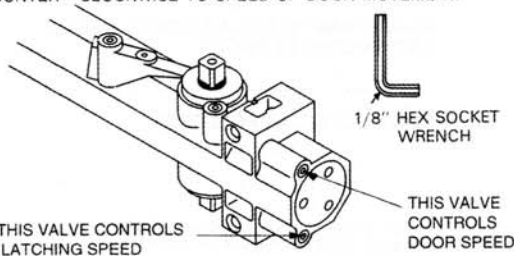


SPRING ADJUSTING NUT

Closer size	Max. Door Width		Turns of Spring Adjusting Nut			
	Exterior	Interior	D - 4550		D - 4551	
			from Preset	from Minimum	from Preset	from Minimum
1		Less than 2'-8"	-8	0	-2	0
2	Less than 2'-6"	2' - 8"	-5	3	1	3
3	2' - 6"	3' - 2"	-3	5	6	8
4	3' - 0"	3' - 8"	0	8	14	16
5	3' - 6"	4' - 0"	3	11		
6	4' - 0"	5' - 0"	6	14		

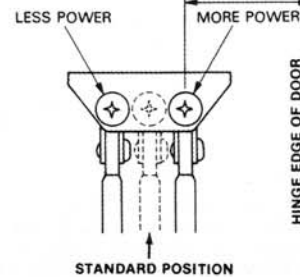
FINAL ADJUSTMENT AND REGULATING PROCEDURES**REGULATING DOOR SPEED AND LATCHING SPEED**

TURN SOCKET SCREW CLOCKWISE TO SLOW DOWN—OR COUNTER—CLOCKWISE TO SPEED UP DOOR MOVEMENT.



THIS VALVE CONTROLS LATCHING SPEED

THIS VALVE CONTROLS DOOR SPEED

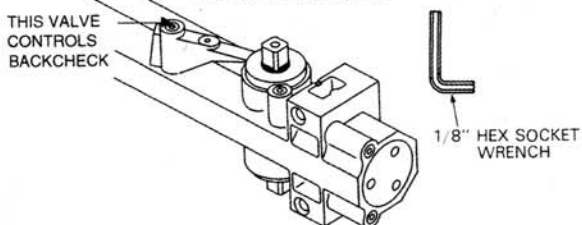
ADJUSTING FOOT FOR ADDITIONAL CLOSING POWER

STANDARD POSITION

REGULATING BACKCHECK

THE INTENSITY OF BACKCHECK ACTION IS REGULATED BY VALVE SHOWN. TURN CLOCKWISE TO INCREASE—OR COUNTERCLOCKWISE TO DECREASE CHECKING.

CAUTION: SET VALVE FOR A SLIGHT CUSHIONING EFFECT. IT IS DAMAGING TO THE CLOSER IF THE CHECKING ACTION IS TOO ABRUPT. BACKCHECK SHOULD NEVER BE USED IN LIEU OF A DOOR STOP.

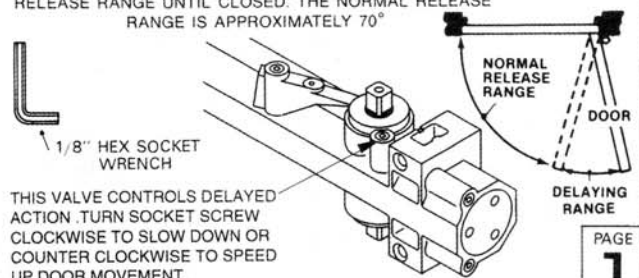


THIS VALVE CONTROLS BACKCHECK

1/8" HEX SOCKET WRENCH

FOR MODELS HAVING "DELAYED ACTION"

"DELAYED ACTION" IS OBTAINED BY OPENING DOOR INTO THE DELAYING RANGE, AS SHOWN. UPON RELEASE, THE DOOR TRAVELS SLOWLY THRU THE DELAYING RANGE THEN CONTINUES AT REGULAR SPEED IN THE NORMAL RELEASE RANGE UNTIL CLOSED. THE NORMAL RELEASE RANGE IS APPROXIMATELY 70°

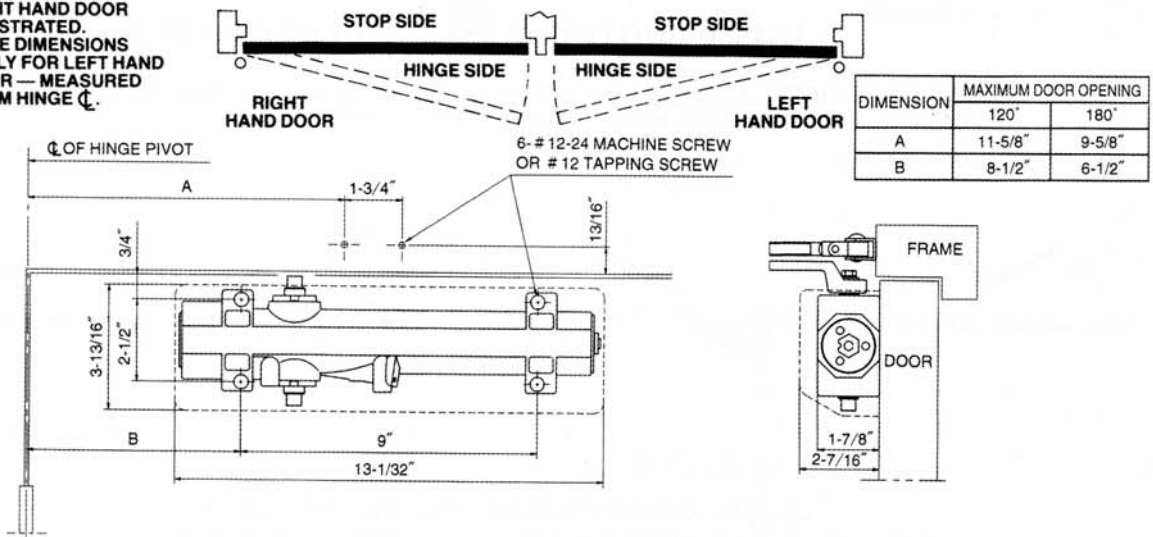


1/8" HEX SOCKET WRENCH

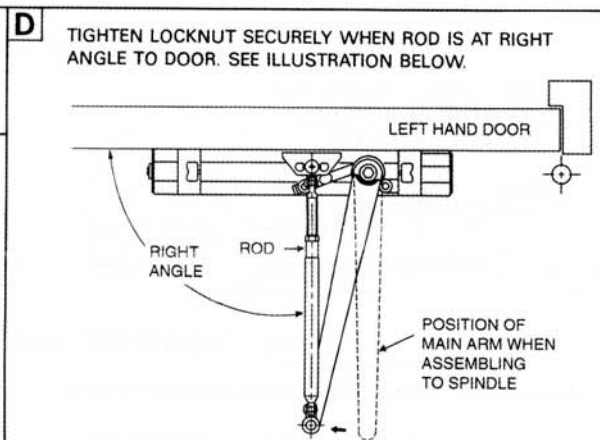
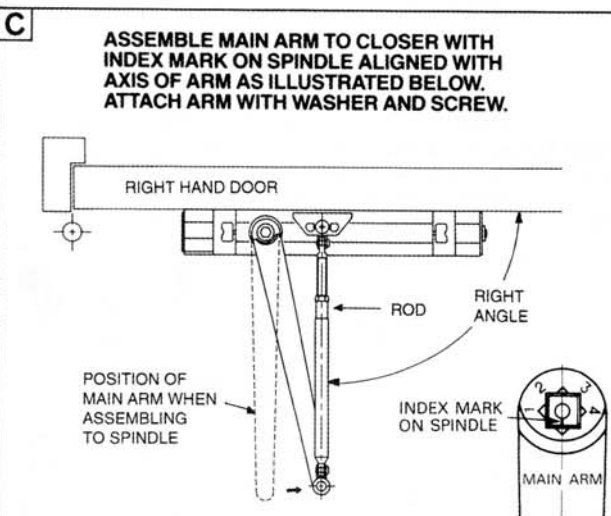
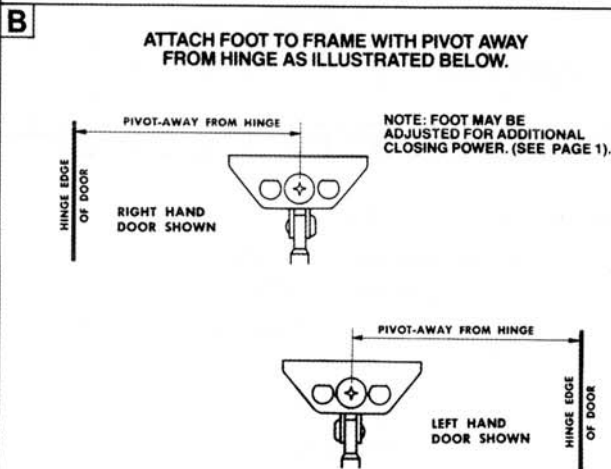
THIS VALVE CONTROLS DELAYED ACTION. TURN SOCKET SCREW CLOCKWISE TO SLOW DOWN OR COUNTER CLOCKWISE TO SPEED UP DOOR MOVEMENT.

NORMAL RELEASE RANGE
DOOR
DELAYING RANGE

RIGHT HAND DOOR ILLUSTRATED. SAME DIMENSIONS APPLY FOR LEFT HAND DOOR — MEASURED FROM HINGE \odot .

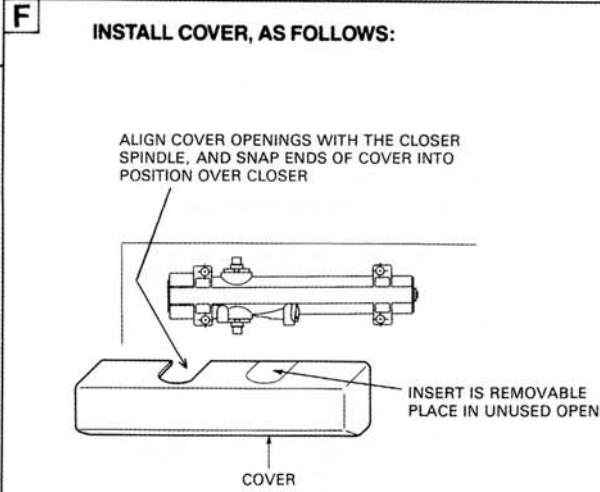


- A**
1. MARK LOCATION OF ATTACHING SCREWS ON DOOR AND FRAME AS SHOWN ABOVE.
 2. ATTACH CLOSER TO DOOR WITH SHORT END OF CLOSER FACING TOWARD HINGE.

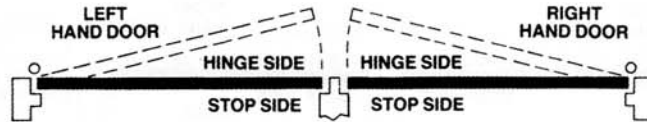


E

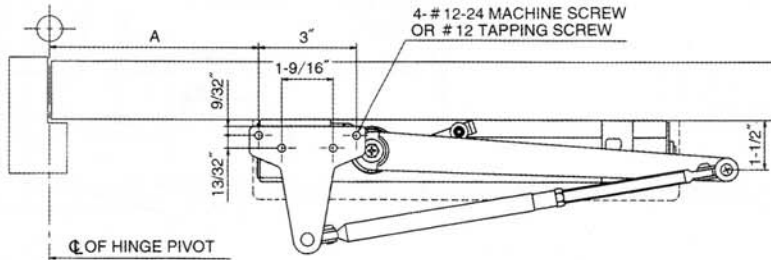
ADJUST AND REGULATE DOOR CLOSER AS DIRECTED AT PAGE 1.



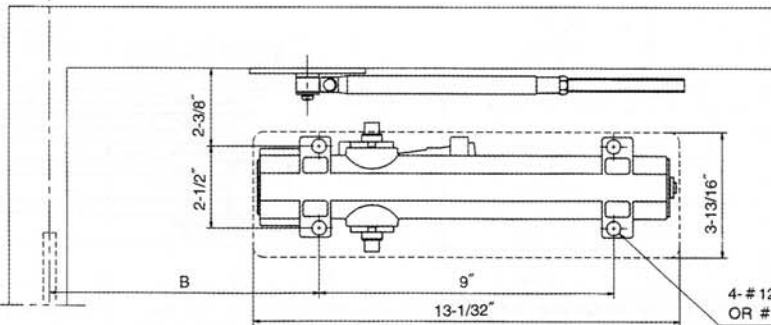
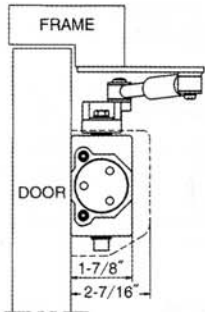
LEFT HAND DOOR
ILLUSTRATED.
SAME DIMENSIONS
APPLY FOR RIGHT HAND
DOOR — MEASURED FROM
HINGE \perp .



DIMENSION	MAXIMUM DOOR OPENING	
	120"	180"
A	9"	6-3/8"
B	10-27/32"	8-7/32"



\perp OF HINGE PIVOT



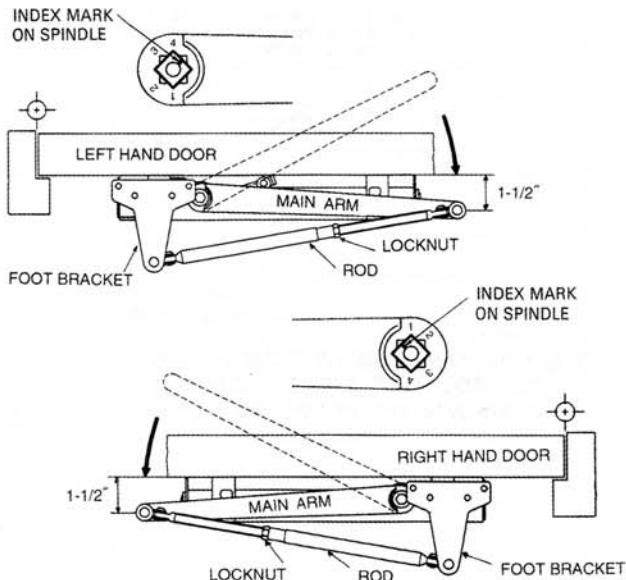
4- # 12-24 MACHINE SCREW
OR # 12 TAPPING SCREW

- A**
1. MARK LOCATIONS OF ATTACHING SCREWS ON DOOR AND FRAME AS SHOWN ABOVE.
 2. ATTACH CLOSER TO DOOR AND FOOT BRACKET TO FRAME (SHORT END OF CLOSER TOWARD HINGE).

- C**
- IF FOOT ASSEMBLY SHOWN ON PAGE 2 IS PACKED WITH CLOSER, CONVERT TO FOOT BRACKET ASSEMBLY SHOWN ABOVE AS FOLLOWS: REMOVE ROD ASSEMBLY FROM FOOT AND ATTACH ROD TO FOOT BRACKET USING WASHER AND SCREW SHOWN. TIGHTEN LOCKNUT SECURELY WHEN END OF MAIN ARM IS POSITIONED 1-1/2" AWAY FROM DOOR.

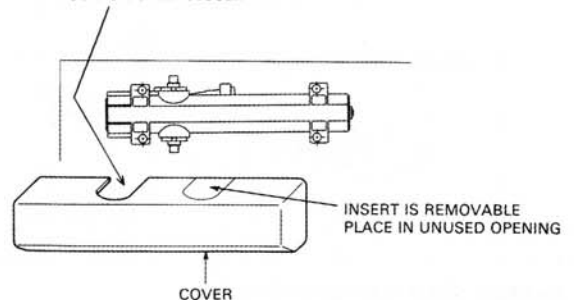
- B**
- ASSEMBLE MAIN ARM TO CLOSER WITH INDEX MARK ON END OF SPINDLE 45° FROM AXIS OF ARM, AS ILLUSTRATED BELOW, USING A WRENCH ON THE BOTTOM SPINDLE TO ROTATE SPINDLE INTO POSITION. ATTACH ARM TO SPINDLE WITH WASHER AND SCREW.

- D**
- ADJUST AND REGULATE DOOR CLOSER AS DIRECTED AT PAGE 1.

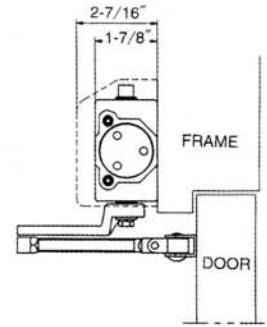
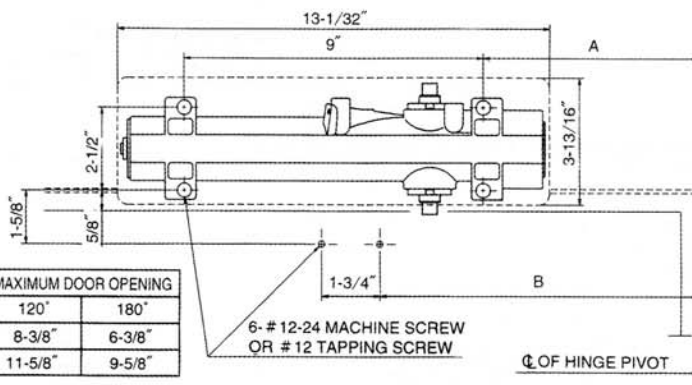
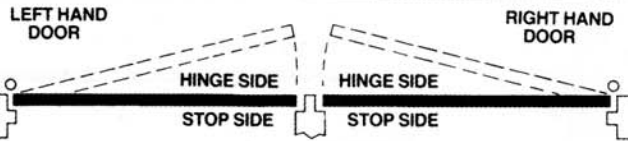


- E**
- INSTALL COVER AS FOLLOWS:

ALIGN COVER OPENINGS WITH THE CLOSER SPINDLE, AND SNAP ENDS OF COVER INTO POSITION OVER CLOSER



RIGHT HAND DOOR ILLUSTRATED. SAME DIMENSIONS APPLY FOR LEFT HAND DOOR—MEASURED FROM HINGE. \odot

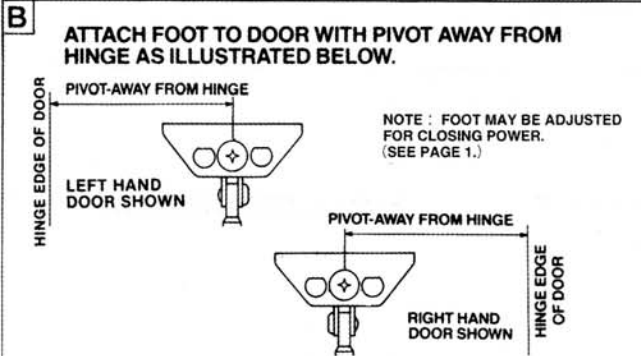


DIMENSION	MAXIMUM DOOR OPENING	
	120°	180°
A	8-3/8"	6-3/8"
B	11-5/8"	9-5/8"

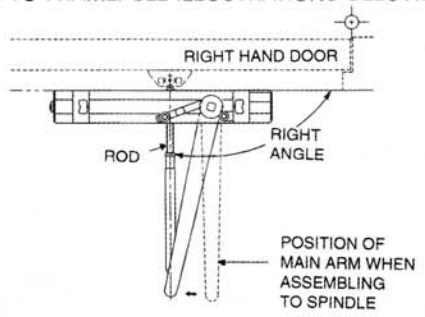
6-# 12-24 MACHINE SCREW
OR #12 TAPPING SCREW

\odot OF HINGE PIVOT

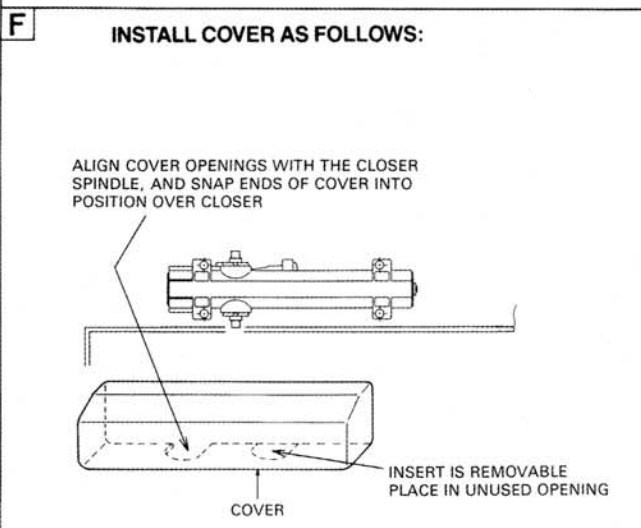
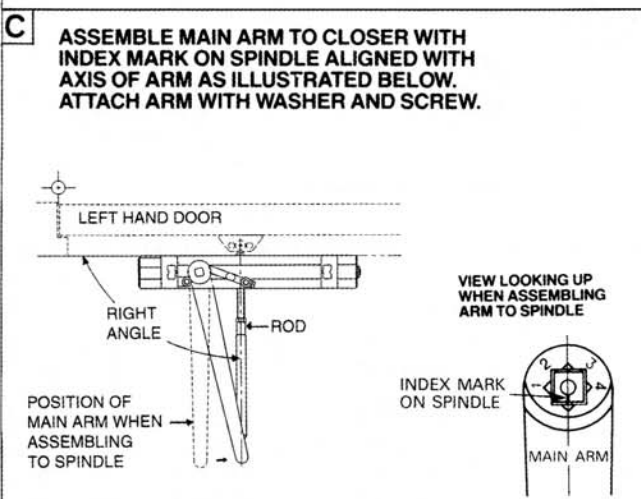
- A**
1. MARK LOCATION OF ATTACHING SCREWS ON DOOR AND FRAME AS SHOWN ABOVE.
 2. ATTACH CLOSER TO FRAME WITH SHORT END OF CLOSER FACING TOWARD HINGE.



- D**
- TIGHTEN LOCKNUT SECURELY WHEN ROD IS AT RIGHT ANGLE TO FRAME. SEE ILLUSTRATIONS BELOW.



- E**
- ADJUST AND REGULATE DOOR CLOSER AS DIRECTED AT PAGE 1.

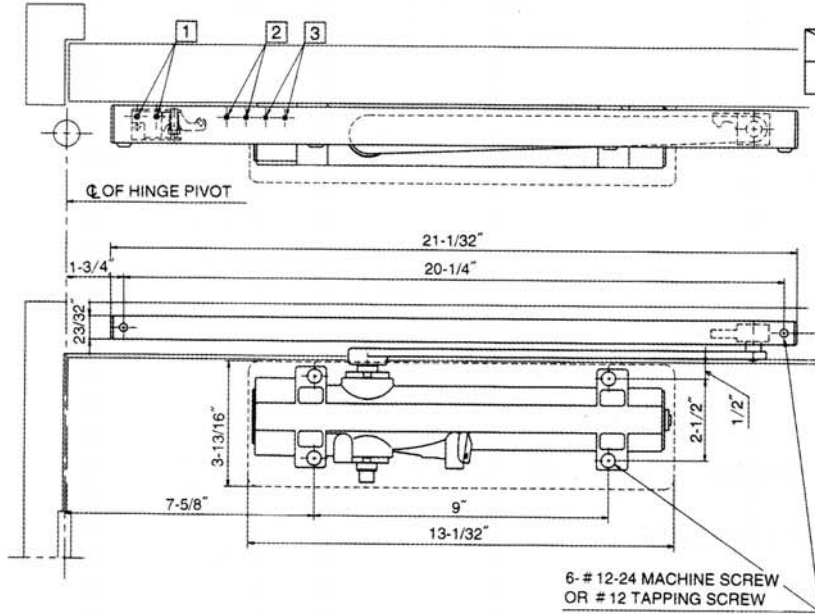
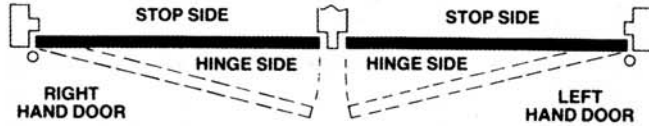


INSTALLATION INSTRUCTIONS

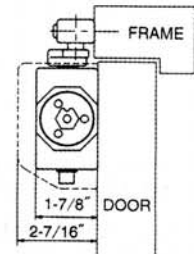
TRACK RAIL APPLICATION

CLOSER MOUNTED ON HINGE SIDE OF DOOR WITH TRACK RAIL ON FRAME

RIGHT HAND DOOR ILLUSTRATED. SAME DIMENSIONS APPLY FOR LEFT HAND DOOR — MEASURED FROM HINGE ϕ .

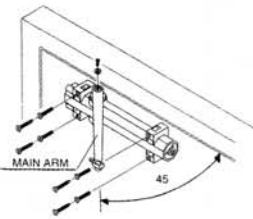


HOLD OPEN DEVICE	1	2	3
HOLD OPEN ANGLE	106°	86°	80°



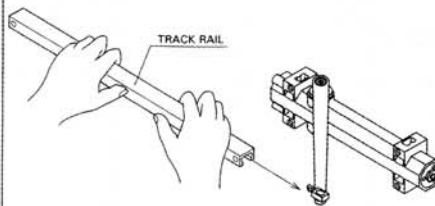
A

ASSEMBLE MAIN ARM TO CLOSER 45° AWAY FROM DOOR AS ILLUSTRATED BELOW. ATTACH ARM WITH WASHER AND SCREW. ATTACH CLOSER TO DOOR WITH SHORT END OF CLOSER FACING TOWARD HINGE.



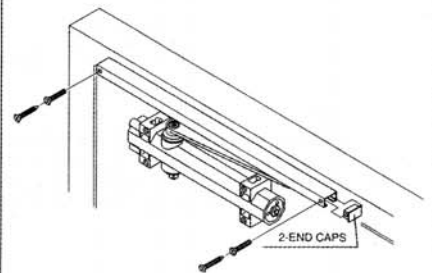
B

INSERT SLIDER OF ARM INSIDE TRACK RAIL AS ILLUSTRATED BELOW.



C

ASSEMBLE END CAPS ON BOTH ENDS OF TRACK RAIL. ATTACH TRACK RAIL ON FRAME WITH SCREW.



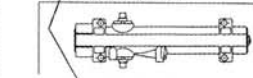
D

ADJUST AND REGULATE DOOR CLOSER AS DIRECTED AT PAGE 1.

E

INSTALL COVER, AS FOLLOWS:

ALIGN COVER OPENINGS WITH THE CLOSER SPINDLE, AND SNAP ENDS OF COVER INTO POSITION OVER CLOSER



INSERT IS REMOVABLE PLACE IN UNUSED OPENING

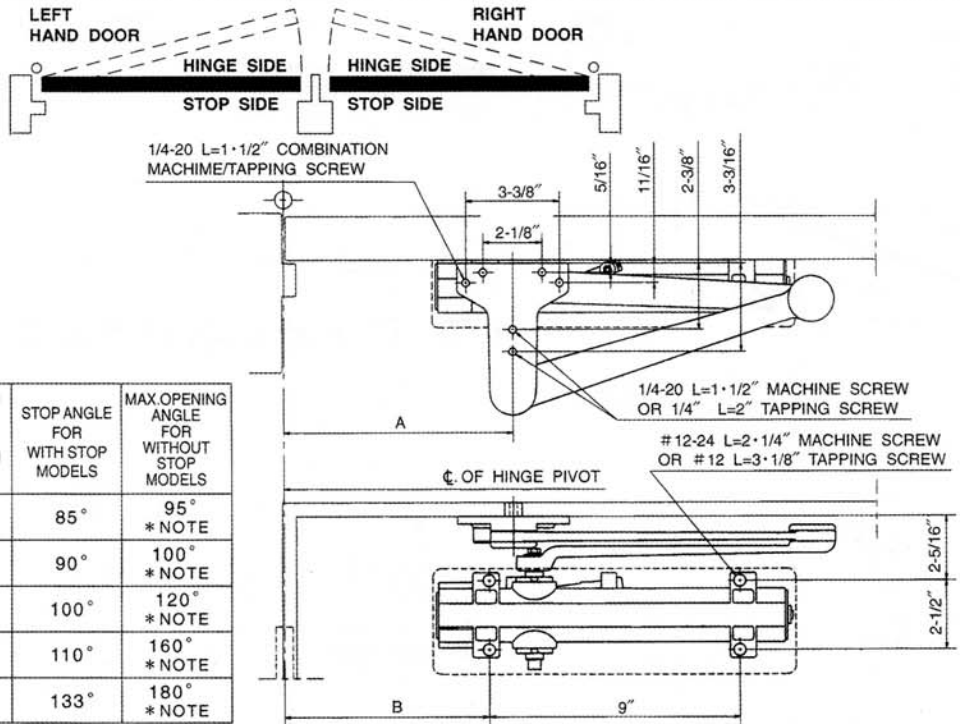
COVER

ADJUST SPRING POWER ACCORDING TO CHART FOR TRACK RAIL APPLICATION

Closer size	Max. Door Width		Turns of Spring Adjusting Nut	
	Exterior	Interior	from Preset	from Minimum
1		less than 2'-8"	-3 Turns	0
2	less than 2'-6"	2' - 8"	0	+3 Turns
3	2' - 6"	3' - 2"	+4 Turns	+7 Turns
4	3' - 0"	3' - 8"	+12 Turns	+20 Turns

* D-4550T: Identical closer can be used as Standard, Parallel Arm, and Top Jamb Application. Spring power is adjustable, as indicated in chart.

LEFT HAND DOOR
ILLUSTRATED.
SAME DIMENSIONS
APPLY FOR RIGHT HAND
DOOR—MEASURED FROM
HINGE C .

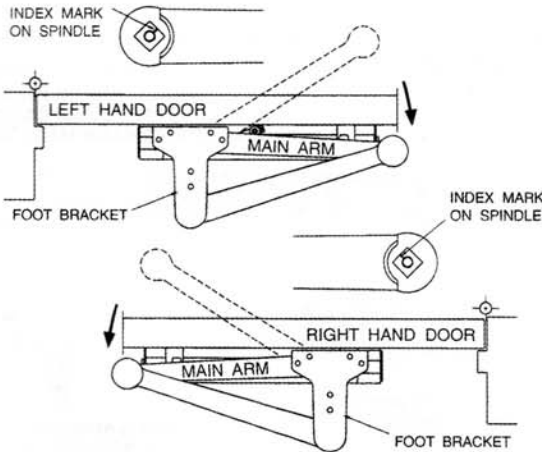


DIMENSION		HOLD-OPEN ANGLE FOR HOLD-OPEN MODELS	STOP ANGLE FOR WITH STOP MODELS	MAX. OPENING ANGLE FOR WITHOUT STOP MODELS
A	B			
11-1/8"	10-1/4"	85°	85°	95° * NOTE
10-1/2"	9-5/8"	90°	90°	100° * NOTE
9-3/8"	8-1/2"	100°	100°	120° * NOTE
8-1/4"	7-3/8"	110°	110°	160° * NOTE
6-5/8"	5-3/4"	133°	133°	180° * NOTE

* NOTE : A SUPPLEMENTAL DOOR STOP IS ALWAYS RECOMMENDED FOR INSTALLATIONS NOT INCORPORATING A STOP IN THE CLOSER ARM. DAMAGE TO THE DOOR, FRAME AND CLOSER MAY OCCUR IF NO STOP IS USED.

- A**
1. MARK LOCATIONS OF ATTACHING SCREWS ON DOOR AND FRAME AS SHOWN ABOVE.
 2. ATTACH CLOSER TO DOOR AND FOOT BRACKET TO FRAME (SHORT END OF CLOSER TOWARD HINGE).

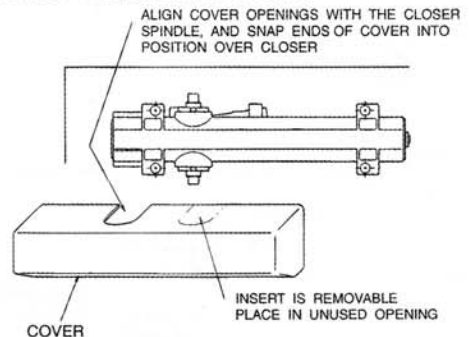
- B**
- ASSEMBLE MAIN ARM TO CLOSER WITH INDEX MARK ON END OF SPINDLE 45° FROM AXIS OF ARM, AS ILLUSTRATED BELOW, USING A WRENCH ON THE BOTTOM SPINDLE TO ROTATE SPINDLE INTO POSITION. ATTACH ARM TO SPINDLE WITH WASHER AND SCREW.



- C**
- MOUNT CLOSER ON DOOR AND MOUNT PARALLEL BRACKET TO FRAME STOP AS PER TEMPLATE.

- D**
- ADJUST AND REGULATE DOOR CLOSER AS DIRECTED ON PAGE 1 FOR SPEED, LATCHING ACTION, BACKCHECK, AND DELAYED ACTION.
CAUTION : BACKCHECK IS ESSENTIAL TO PREVENT ARM FROM STRIKING ARM STOP WITH IMPACT.

- E**
- INSTALL COVER AS FOLLOWS :



FOR HOLD-OPEN ARM : A QUARTER TURN ON THE CONTROL HANDLE WILL ENGAGE OR DISENGAGE THE HOLD-OPEN FUNCTION.