



ASTA Door Corporation

Installation Instructions

Model 281 Mini/Self-Storage Rolling Sheet Door

IMPORTANT REMARKS

THIS PAMPHLET IS DESIGNED TO ASSIST IN THE INSTALLATION OF THE ASTA MODEL 281 MINI DOOR. SAFETY IS FOREMOST. INSTALLATION SHOULD BE EXECUTED BY QUALIFIED DOOR PROFESSIONALS. INSPECT ALL OF THE SHIPPED PARTS AND ACCOUNT FOR EVERYTHING BEFORE COMMENCING ANY WORK. FOR QUESTIONS AND TECHNICAL ASSISTANCE, CONTACT ASTA CUSTOMER SUPPORT AT (770) 974-2600.

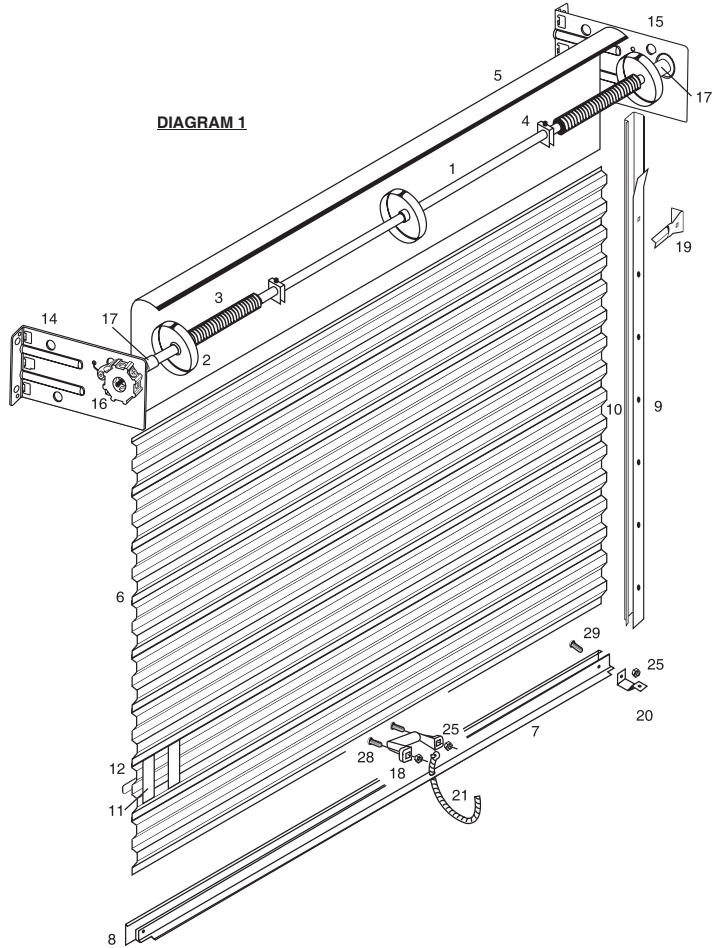
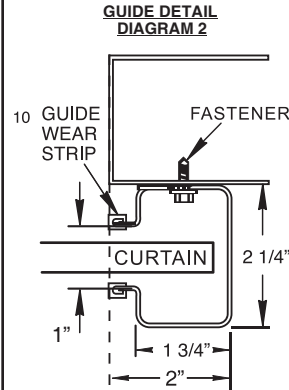


DIAGRAM 1



STEEL OR WOOD
CONCRETE OR MASONRY

MODEL 281 MINI LOCK

DIAGRAM 3

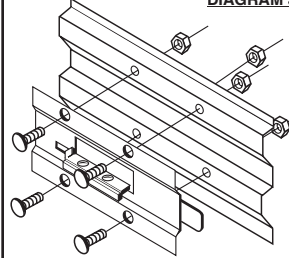
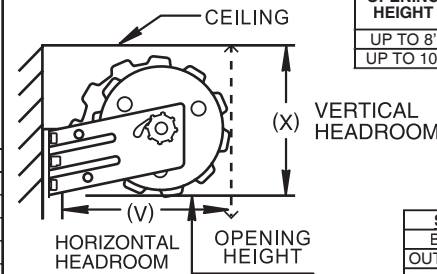
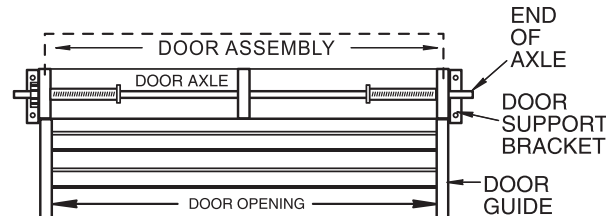


DIAGRAM 4



OPENING HEIGHT	HEADROOM	
	(X)	(V)
UP TO 8'	16"	17"
UP TO 10'	17"	18"

SIDEROOM (PER SIDE)	
BACK OF GUIDES	2"
OUTSIDE OF BRACKET	3 1/4"
END OF AXLE	5"



WARNING

MOVING DOOR can cause serious injury or death. Keep clear of opening while door is moving.



SAFETY INSTRUCTIONS

1. Do **Not** stand or walk under moving door. Keep door in full view and free of obstructions while operating.
2. Do **Not** allow children to operate the door.
3. Repairs or adjustments should be made by a trained service person using proper tools and instructions.
4. To avoid injury, do not put fingers between door and guides.
5. Read owner's manual for your door and operator for more information.

CAUTION: USE CORRECT LIFTING PROCEDURES AND EQUIPMENT DURING INSTALLATION OF THIS PRODUCT TO AVOID INJURY OR DAMAGE.

CAUTION: DO NOT REMOVE THE PLASTIC WHICH HOLDS THE DOOR IN A ROLL. YOU WILL BE TOLD AT A LATER TIME WHEN TO REMOVE IT. NO GUARANTEE WILL BE GIVEN OR RESPONSIBILITY ACCEPTED BY THE MANUFACTURER IF THE DOOR IS NOT INSTALLED AS INSTRUCTED. FOR PROPER OPERATION, FOLLOW THE INSTRUCTIONS AS GIVEN. PLEASE REVIEW ALL THE STEPS BEFORE BEGINNING.

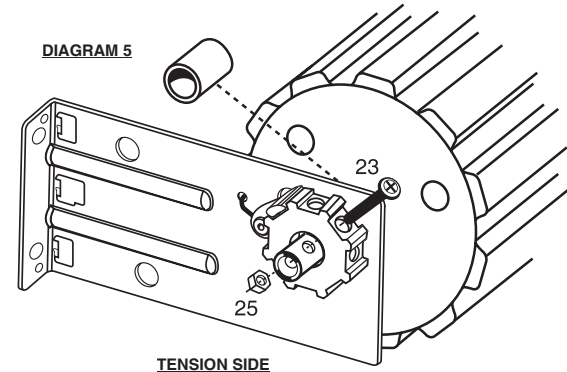
STEP #1 - VERIFY OPENING

- A. VERIFY OPENING WIDTH AND HEIGHT TO MATCH THE DOOR YOU ARE PREPARING TO INSTALL.
- B. VERIFY PROPER HEADROOM AND SIDEROOM CLEARANCE (SEE DIAGRAM #4).
- C. VERIFY JAMBS ARE PLUMB.
- D. VERIFY HEADER AND FLOOR ARE LEVEL.

STEP #2 - ASSEMBLE BRACKETS TO DOOR AXLE

- A. SLIDE 1" SPACERS OVER DOOR AXLE AGAINST DRUM BEARING ON BOTH SIDES OF DOOR.
- B. **TENSION SIDE** - SLIDE SUPPORT BRACKET ONTO DOOR AXLE AGAINST SPACER. THEN SLIDE TENSION WHEEL UP AGAINST BRACKET. BE SURE TENSION PAWL ENGAGES TENSION WHEEL (SEE DIAGRAM 5). ALIGN HOLES IN TENSION WHEEL AND DOOR AXLE. PLACE BOLT THROUGH ASSEMBLY AND FASTEN SECURELY WITH LOCK NUT.
- C. **NON-TENSION SIDE** - SLIDE SUPPORT BRACKET OVER DOOR AXLE AGAINST SPACER. THEN SLIDE SET COLLAR OVER DOOR AXLE AGAINST BRACKET AND TIGHTEN THE SET SCREW (SEE DIAGRAM 6).

DIAGRAM 5

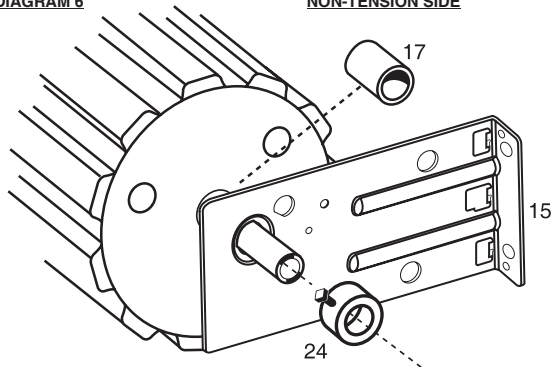


PARTS LIST - USE ASTA DOOR PARTS ONLY - ALL OTHERS SHALL VOID WARRANTY

REF.	PART #	DESCRIPTION	REF.	PART #	DESCRIPTION
1	VARIABLES	DOOR AXLE - 1" (O.D.) GALVANIZED	16	420206-1	TENSION WHEEL
2	220325-1	9.5" DRUM W/ BEARING	17	420203-1	1" SPACER
3	VARIABLES	SPRING(S)	18	420205-1	6" MINI-HANDLE
4	230002-1	SPRING CLAMP ASSY. - 1" AXLE	19	420204-1	MINI HEADSTOP - 281
5	VARIABLES	TOPSHEET - GALVANIZED	20	420202-1	MINI BOTTOM STOP - 281
6	VARIABLES	CORRUGATED DOOR SHEET	21	420207-1	5' - 1/4" NYLON ROPE
7	VARIABLES	BOTTOM ANGLE - 14GA. GALVANIZED	22	420100-1	FASTENER BAG (INCLUDES #23-29)
8	270201-1	BOTTOM ASTRAGAL	23	420208-1	1/4"-20 X 2" PAN HEAD PHILLIPS SCREW
9	VARIABLES	DOOR GUIDE - 18GA. GALVANIZED	24	420209-1	1" SET COLLAR W/ 5/8" SET SCREW
10	259998-1	DOOR GUIDE WEATHERSTRIP	25	420210-1	1/4"-20 LOCK NUT
11	260012-1	FELT STRIP - 1"	26	420211-1	1/4" FLAT WASHER
12	280710	MINI LOCK ASSEMBLY - 281	27	420212-1	1/4"-20 X 1/2" CARRIAGE BOLT
13	420003-1	HARDWARE KIT (INCLUDES #14-22)	28	420213-1	1/4"-20 X 1" CARRIAGE BOLT
14	420200-1	SUPPORT BRACKET (LH) + TENSION PAWL	29	420214-1	1/4"-20 X 3/4" TRUSS HEAD SLOTTED BOLT
15	420201-1	SUPPORT BRACKET (RH)			SEE REVERSE FOR MOUNTING HARDWARE

DIAGRAM 6

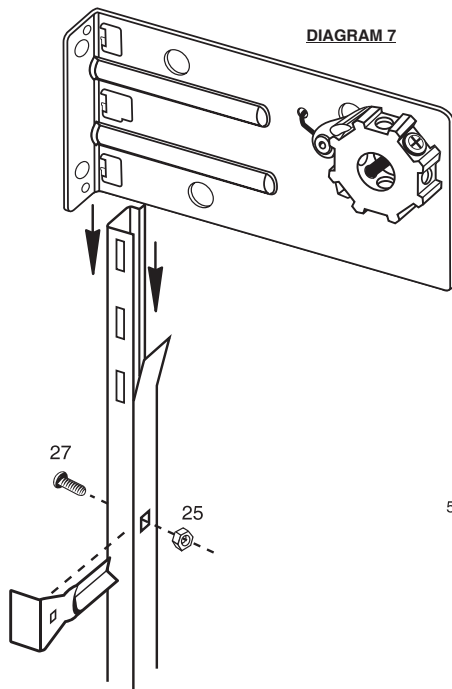
NON-TENSION SIDE



STEP #3 - ATTACH BRACKETS TO GUIDES

- A. POSITION GUIDES PERPENDICULAR TO EACH JAMB.
- B. PLACE DOOR ASSEMBLY AT TOP OF AND BETWEEN DOOR GUIDES.
- C. ATTACH BRACKETS TO GUIDES BY ALIGNING THE THREE TABS ON BRACKET WITH CORRESPONDING SLOTS IN GUIDE. USE HAMMER TO TAP BRACKETS INTO POSITION AND ENGAGE LOCK TAB (SEE DIAGRAM 7).

DIAGRAM 7



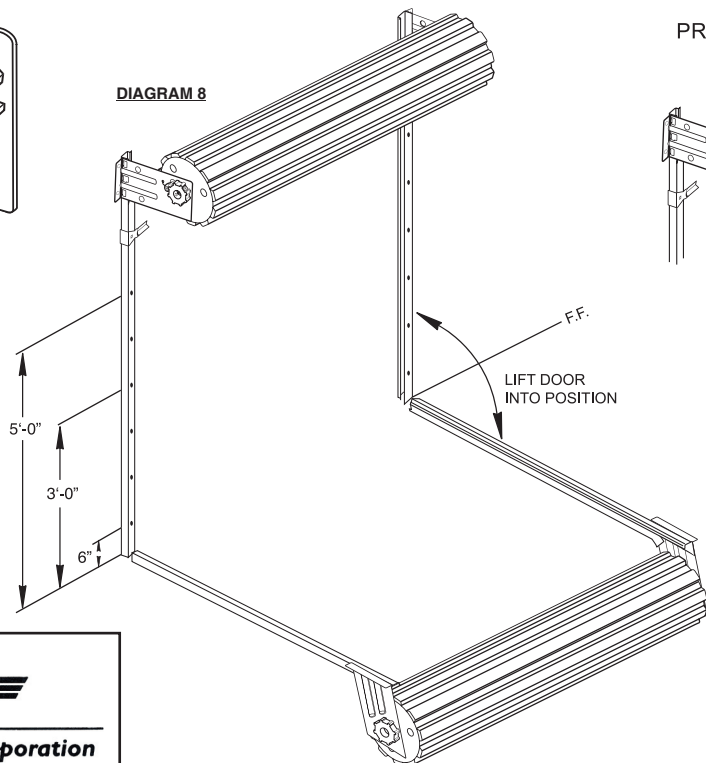
STEP #4 - RAISE THE DOOR

- A. WITH THE BOTTOM OF THE GUIDES POSITIONED AGAINST THE WALL AT THE DOOR JAMB. LIFT BOTH SIDES OF THE DOOR EVENLY AND "WALK" INTO POSITION AT THE DOOR HEADER (SEE DIAGRAM 8).
- B. WHILE ONE INSTALLER HOLDS THE DOOR IN PLACE, THE SECOND INSTALLER SHOULD VERIFY THAT THE DOOR IS CENTERED IN THE OPENING AND CHECK THE PLUMBNESS OF THE GUIDES. IF THE DOOR IS NOT CENTERED IN THE OPENING, IT IS EASILY MOVED LEFT OR RIGHT.
- C. INSTALL ONE GUIDE FASTENER PER GUIDE, APPROXIMATELY 5" - 0" UP (SEE DIAGRAMS 2 AND 8). INSTALL BRACKET FASTENER. THE DOOR SHOULD NOW SUPPORT ITSELF.

STEP #5 - FASTEN GUIDES & BRACKETS TO WALL

- A. VERIFY GUIDES ARE PLUMB AND DOOR IS CENTERED IN THE OPENING. IF NOT, LOOSEN FASTENERS AND ADJUST ACCORDINGLY. **GUIDES SHOULD BE INSTALLED AT DOOR CURTAIN WIDTH + 1". DIMENSION IS MEASURED FROM THE BACK OF LH GUIDE TO BACK OF RH GUIDE.**
- B. ONCE YOU HAVE VERIFIED DOOR IS CENTERED AND THE GUIDES ARE PLUMB, INSTALL THE REMAINING FASTENERS.
- C. MINIMUM AMOUNT OF FASTENERS PER BRACKET IS ONE EACH AND GUIDES REQUIRE ONE IN THE BOTTOM HOLE AND THEN 2' ON CENTER FOR REMAINING FASTENERS

DIAGRAM 8



STEP #6 - INSTALL HEADSTOPS

- A. ONCE YOU HAVE THE DOOR SECURELY FASTENED TO THE WALL, INSTALL THE HEADSTOPS TO THE GUIDES USING THE 1/4" x 20 x 1/2" CARRIAGE BOLTS AND LOCK NUTS PROVIDED (SEE DIAGRAM 7).

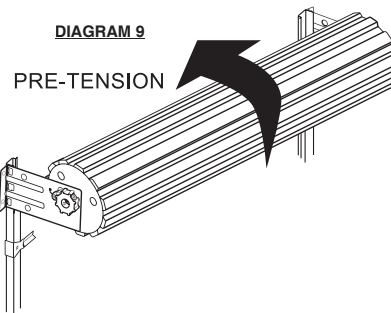
STEP #7 - PRETENSION DOOR

- A. ROTATE DOOR TOWARD THE OPENINGS 2 TURNS (SEE DIAGRAM 9).
- B. **WARNING: HOLD ONTO DOOR TO PREVENT COUNTER-ROTATION.** CUT THE PLASTIC HOLDING THE DOOR IN A ROLL AND PULL DOOR DOWN INTO THE GUIDES WELL PAST THE HEADSTOPS.

STEP #8 - INSTALL BOTTOM BAR HARDWARE

- A. INSTALL MINI BOTTOM CLIPS ON INSIDE OF BOTTOM BAR ON BOTH ENDS USING 1/4" x 3/4" CARRIAGE BOLTS AND LOCK NUTS PROVIDED.
- B. INSTALL MINI HANDLE TO EXTERIOR OF BOTTOM BAR USING 1/4" x 1" CARRIAGE BOLTS AND LOCK NUTS PROVIDED.
- C. LACE 1/4" NYLON ROPE THROUGH CENTER HOLE IN THE BOTTOM BAR AND TIE A KNOT SECURELY AT BOTH ENDS (SEE DIAGRAM 1).

DIAGRAM 9



STEP #9 - INSTALL EXTERIOR MINI LOCK

- A. INSTALL MINI LOCK ON EXTERIOR OF DOOR CURTAIN IN PREDETERMINED LOCATION USING FASTENERS PROVIDED (SEE DIAGRAM 3).
- B. ATTACH 5" FELT STRIPS TO CURTAIN INTERIOR TO PREVENT DAMAGE FROM LOCK BOLTS.

STEP #10 - INSTALL TORQUE TUBE FELT STRIP

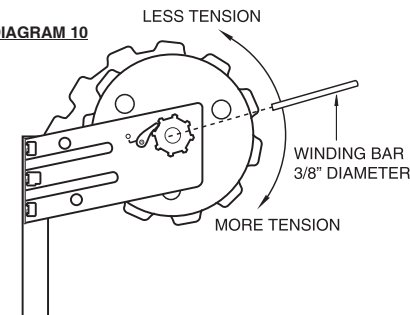
- A. INSTALL 24" LONG FELT STRIP AROUND TORQUE TUBE IN CENTER OF DOOR.

STEP #11 - CHECK DOOR OPERATION

- A. RAISE AND LOWER DOOR TO TEST FOR PROPER BALANCE.
- WARNING: MAKE SURE DOOR IS IN THE FULLY OPENED POSITION PRIOR TO MAKING ADJUSTMENTS.**
- B. IF DOOR IS HARD TO OPEN BUT EASY TO CLOSE, INCREASE SPRING TENSION.
- C. IF DOOR IS EASY TO OPEN BUT HARD TO CLOSE, DECREASE SPRING TENSION.
- D. ADJUST SPRING TENSION BY PLACING A 3/8" DIAMETER WINDING BAR INTO HOLES PROVIDED ON TENSION WHEEL (SEE DIAGRAM 10). PULL DOWN ON WINDING BAR TO INCREASE TENSION. EACH NOTCH YOU ENGAGE EQUALS 1/8 TURN.
- E. TO RELEASE TENSION, PULL DOWN ON WINDING BAR ENOUGH TO DISENGAGE TENSION PAWL. LIFT THE TENSION PAWL CLEAR OF TENSION WHEEL AND RAISE WINDING BAR UNTIL THE PAWL ENGAGES THE NEXT NOTCH IN THE TENSION WHEEL. CONTINUE AS NEEDED TO ACHIEVE PROPER BALANCE.

NOTE: MOST SIZE DOORS WILL REQUIRE BETWEEN 2-3 FULL TURNS TO ACHIEVE OPTIMAL BALANCE. WINDING BAR SUPPLIED BY OTHERS.

DIAGRAM 10



TRACK & BRACKET MOUNTING HARDWARE				
JAMB TYPE	REF.	DESCRIPTION	PART #	QTY.
STEEL:				
GUIDES	30	1/4"-14 x 3/4" TEK SCREW	730399-1	10
SUPPORT BRACKETS	30	1/4"-14 x 3/4" TEK SCREW	730399-1	4
WOOD:				
GUIDES	31	1/4"-10 X 1" LAG SCREW	730400-1	10
SUPPORT BRACKETS	31	1/4"-10 X 1" LAG SCREW	730400-1	4
CONCRETE/BLOCK:				
GUIDES	32	3/16" X 1 1/4" TAPCON SCREW	760204-1	10
SUPPORT BRACKETS	33	3/8" X 7/8" HEX NUTSLEEVE ANCHOR	760106-1	4

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Model 283 & 283-14 Windlock Installation Instruction Supplement

Installation of the Model 283 and 283-14 will follow the same procedure as the Model 281 with the exception of the following "Steps" referenced in the Standard "Installation Instructions - Model 281 Mini-Self Storage Rolling Sheet Door";

Step #2

A. - Six (6) 1" I.D Flat washers have been provided in the hardware carton(packaged separately). You will need to install three (3) washers over the axle on each end of the door PRIOR to installing the 1" spacer provided in the main hardware package. This will properly locate the support bracket and allow the additional clearance required for the windlock clips.

Step #5

A. - The Guides should be installed at - Door Curtain Width + 1 3/4" (opening width + 4 3/4"). The dimension would be measured from the back of the LH guide to the back of the RH guide.

C. - The minimum amount of fasteners per bracket is two (2) and the guides require one (1) in bottom hole and 12" on center for the remaining fasteners.

Fasteners Provided

<u>Steel</u>	<u>Description</u>	<u>Quantity</u>	<u>Wood</u>	<u>Description</u>	<u>Quantity</u>
Guide	#14 -1/4" x 1" Pancake Head Tek Screw	20	Guide	#10 - 13 x 1 1/2" GP Pancake Head Screw	20
Support Bracket	#14 -1/4" x 1" Pancake Head Tek Screw	4	Support Bracket	#10 - 13 x 1 1/2" GP Pancake Head Screw	4
Support Bracket	1/4" Flat washer	4	Support Bracket	1/4" Flat washer	4
<u>Concrete</u>	<u>Description</u>	<u>Quantity</u>	<i>* <u>Models 283 & 283-14 are not windload certified for wood mount applications.</u></i>		
Guide	1/4" x 1 1/4" Flat Head Tapcon Screw	20			
Support Bracket	1/4" x 1 1/4" Flat Head Tapcon Screw	4			
Support Bracket	1/4" Flat washer	4			