

SPIRAL STAIR INSTALLATION GUIDE

Econo Stair

-Vinyl Handrail

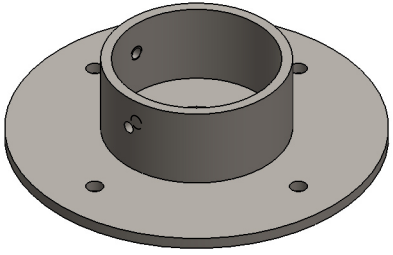
-Galvanized



Illustrations are general and may not match your specific stair design.

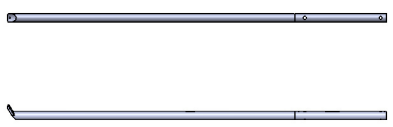
PARTS

1



BASEPLATE

3



MAIN BALUSTER

4



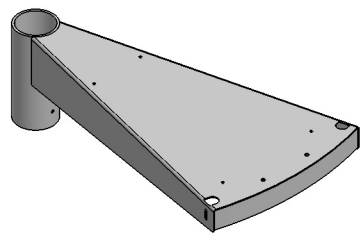
CENTER BALUSTER

5



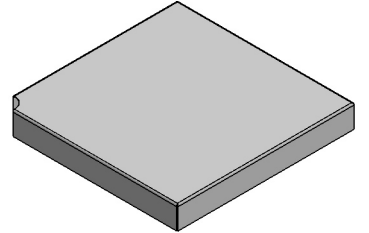
CENTER COLUMN

6



TREAD

7



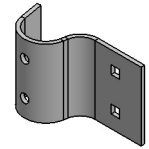
PLATFORM

11



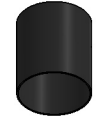
VINYL HANDRAIL

13



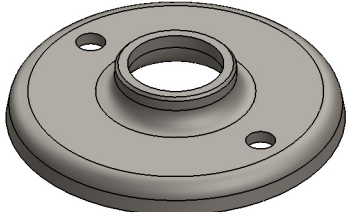
TOP BALUSTER BRACKET
(ONLY REQUIRED WITH 5' DIAMETER
AND LARGER STAIRS)

14



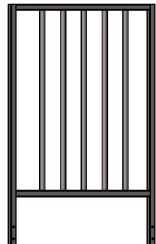
VINYL HANDRAIL END CAP

16



BOTTOM BALUSTER BRACKET

22



PLATFORM RAILING

HARDWARE

A



INCLUDED IN PACKAGE(S): [W3039847](#)
[W3046179](#)

5/16"-18 x 5/16" SOCKET SET SCREW

AA



CODE RISER CLAMP
(ONLY FOR STAIRS WITH CODE RISER OPTION)

B



INCLUDED IN PACKAGE(S): [W3046179](#)

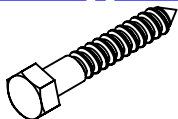
5/16" FLAT WASHER

BB



1/4"-20 x 3/8" SCREW
(ONLY FOR STAIRS WITH CODE RISER OPTION)

C



INCLUDED IN PACKAGE(S): [W3046179](#)

3/8" x 2" LAG SCREW

CC



#12-11 x 1" WOOD SCREW

D



INCLUDED IN PACKAGE(S): [W3079402](#)
[W3039847](#)
[W3043922](#)

1/4" FLAT WASHER

E



INCLUDED IN PACKAGE(S): [W3039847](#)
[W3046179](#)
[W3043922](#)

1/4" LOCK WASHER

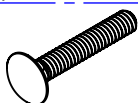
F



INCLUDED IN PACKAGE(S): [W3043922](#)
[W3079402](#)
[W3039847](#)

1/4"-20 HEX NUT

G



INCLUDED IN PACKAGE(S): [W3039847](#)
[W3079402](#)

1/4"-20 x 1-1/2" CARRIAGE BOLT

H



INCLUDED IN PACKAGE(S): [W3043922](#)

1/4"-20 x 3/4" CARRIAGE BOLT

I



INCLUDED IN PACKAGE(S): [W3043922](#)

#10 x 3/4" SQ. DRIVE D&T

J



INCLUDED IN PACKAGE(S): [W3083112](#)

VINYL HANDRAIL CLIP

K



INCLUDED IN PACKAGE(S): [W3083112](#)

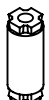
VINYL HANDRAIL SCREW

S



LEAD SLUG SCREW

T



LEAD SLUG

**PLATFORM & BASE INSTALLATION:
ADJUSTABLE SLEEVE WITHOUT TREAD COVERS**

1. WHILE ALL TREADS ARE ON THE GROUND, PARTIALLY THREAD SETSCREWS INTO EACH TREAD AND PLATFORM SLEEVE.
2. ATTACH THE BASE PLATE (1) TO THE CENTER COLUMN (5) WITH SET SCREWS (A).
3. STAND CENTER COLUMN UP INSIDE WELL OPENING.

HARDWARE



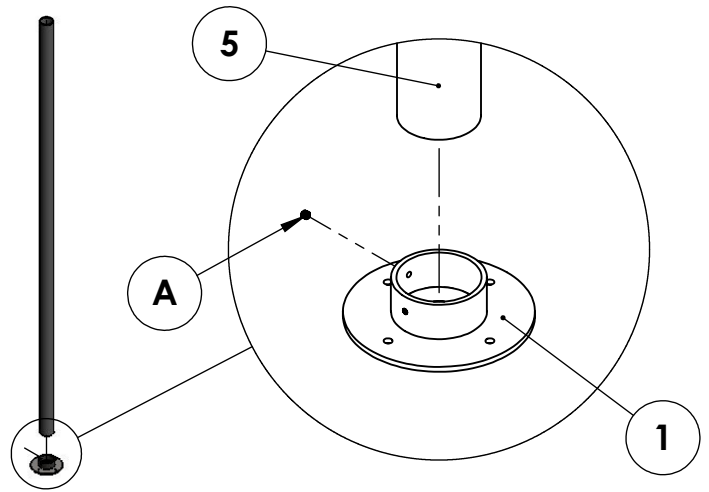
PARTS ADDED



TOOLS NEEDED



(INCLUDED)



4. SLIDE THE TREADS (6) OVER THE COLUMN.
5. SLIDE THE PLATFORM (7) OVER THE CENTER COLUMN. POSITION PLATFORM TO WHERE THE TOP SURFACE OF THE PLATFORM IS FLUSH WITH MOUNTING FLOOR SURFACE.

NOTE: HOLES MUST BE DRILLED THROUGH PLATFORM EDGE AS NEEDED TO INSTALL THE MOUNTING LAGS. IF CORNER MOUNT, ENSURE BOTH EDGES ARE BOLTED.

6. USE 3/8" x 2" LAG SCREWS (C) AND WASHERS (B) TO ATTACH PLATFORM TO MOUNTING SURFACE.

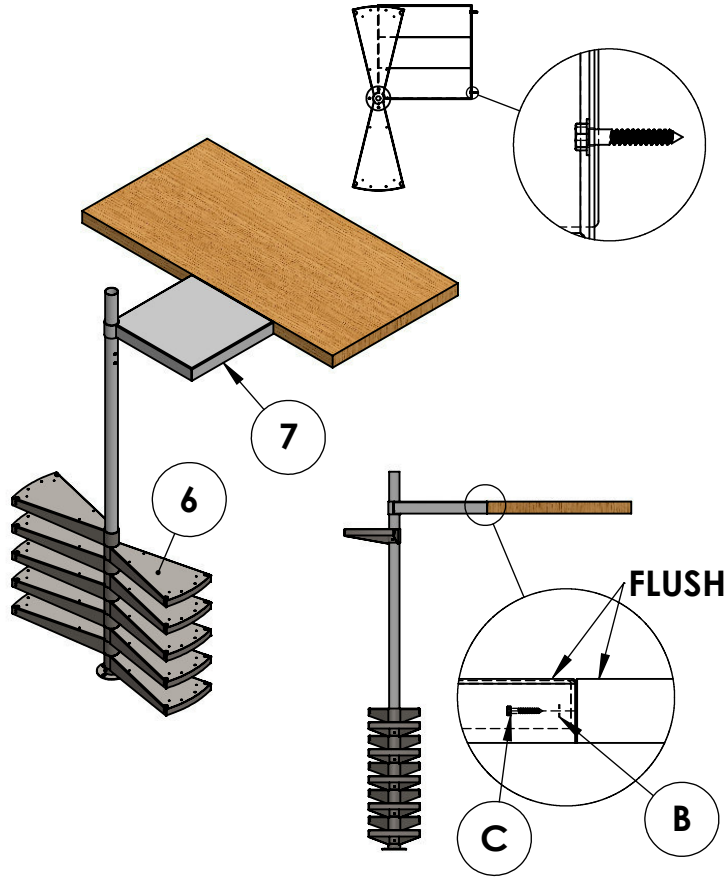
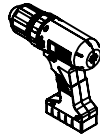
HARDWARE



PARTS ADDED



TOOLS NEEDED



7. PLUMB CENTER COLUMN AND ATTACH BASE PLATE TO FLOOR WITH 3/8" x 2" LAG BOLTS (C) AND WASHERS (B). LEAD ANCHOR SHIELDS WILL BE NEEDED IF INSTALLING ON CONCRETE.

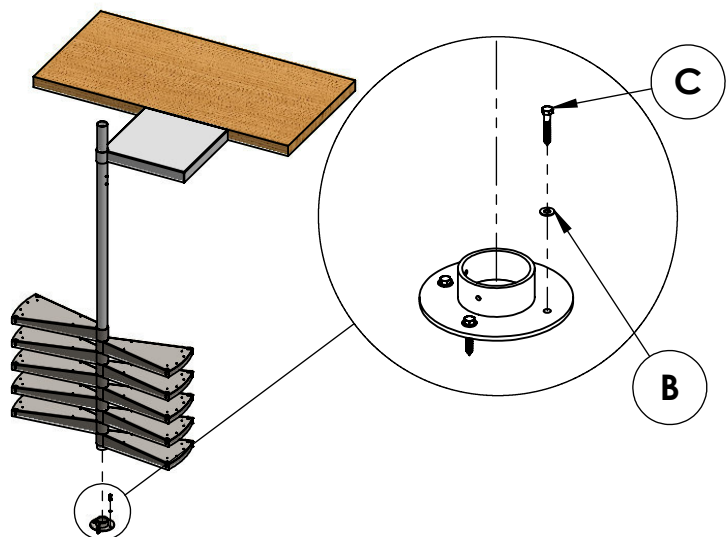
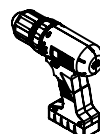
NOTE: STEPS 5 AND 6 REQUIRE ONE PERSON AT BASE TO KEEP COLUMN STEADY WHILE TWO PEOPLE HOIST AND HOLD PLATFORM IN PLACE. A FOURTH PERSON MAY THEN DRILL AND FASTEN PLATFORM.

8. TIGHTEN THE PLATFORM SET SCREWS TO THE CENTER COLUMN.

HARDWARE



TOOLS NEEDED



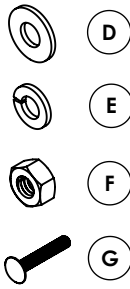
ADJUSTABLE TREAD & BALUSTER INSTALLATION

1. START INSTALLATION WITH THE TOP TREAD. PLACE A MAIN BALUSTER (3) IN THE HOLE CLOSEST TO THE PLATFORM. MOVE UP OR DOWN UNTIL THE BOTTOM OF BALUSTER IS FLUSH WITH THE BOTTOM EDGE OF THE TREAD SUPPORT (A1).

NOTE: MAIN BALUSTERS HAVE TWO DRILLED HOLES NEAR THE BOTTOM.

2. ATTACH THIS BALUSTER TO THE TREAD USING A 1/4"-20 x 1-1/2" CARRIAGE BOLT (G), NUT (F), WASHER (D) AND LOCK WASHER (E).

HARDWARE



PARTS ADDED

3

TOOLS NEEDED

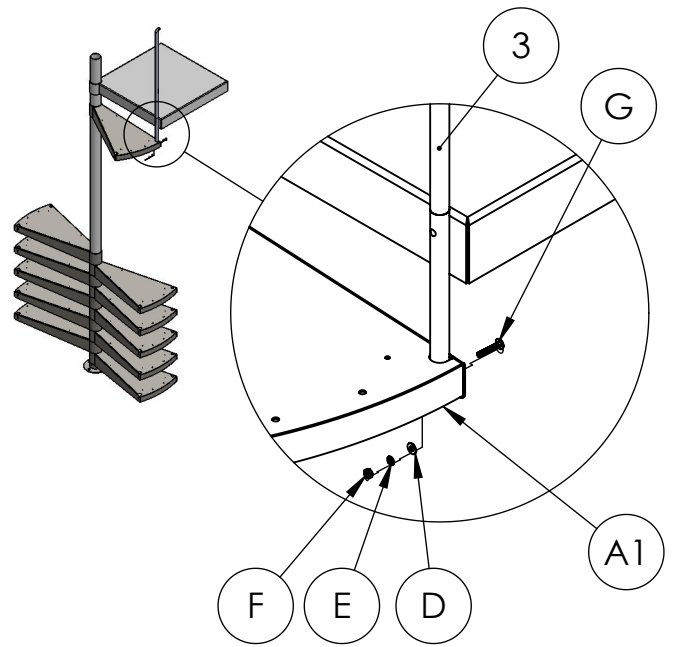
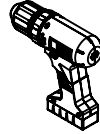


FIGURE 1: LESS THAN 5' DIAMETER

3. MOVE THE TOP TREAD TO THE PROPER RISER HEIGHT REQUIRED. YOU MAY FIND THIS BY:

1. ADD NUMBER OF TREADS AND PLATFORMS
2. MEASURE FLOOR TO FLOOR HEIGHT IN INCHES
3. DIVIDE THIS HEIGHT BY THE NUMBER CALCULATED IN STEP 3.1
4. RISER HEIGHT IS USUALLY BETWEEN 8-1/2" AND 9-1/2".

4. FOR STAIRS WITH DIAMETER LESS THAN 5', REFER TO FIGURE 1.

PLUMB THE MAIN BALUSTER AND ATTACH TO THE FACE OF THE PLATFORM USING A 1/4"-20 x 1-1/2" CARRIAGE BOLT (G), NUT (F), WASHER (D) AND LOCK WASHER (E).

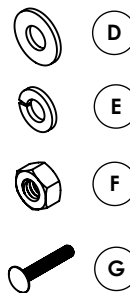
NOTE: A HOLE MUST BE DRILLED IN THE PLATFORM AT THE LOCATION OF THE PRE-DRILLED HOLE IN THE BALUSTER.

5. FOR STAIRS WITH DIAMETER 5' OR GREATER, REFER TO FIGURE 2.

PLUMB THE TOP BALUSTER AND ATTACH TO THE FACE OF THE PLATFORM USING THE TOP BALUSTER BRACKET (13) WITH A 1/4"-20 x 3/4" CARRIAGE BOLT (H), #10 x 3/4" SQUARE DRIVE D&T (I), NUT (F), WASHER (D) AND LOCK WASHER (E).

6. CHECK THAT THE TREAD IS LEVEL AND THE BALUSTER PLUMB. TIGHTEN THE 5/16" SET SCREWS TO LOCK THE TOP TREAD TO CENTER COLUMN.

HARDWARE



TOOLS NEEDED

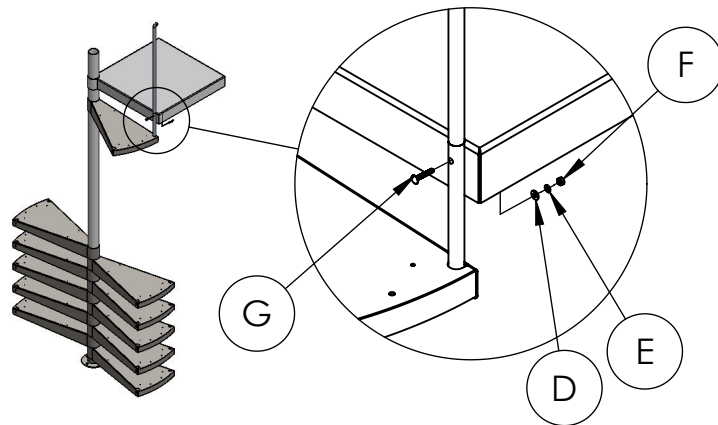
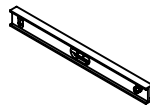
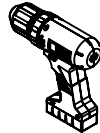
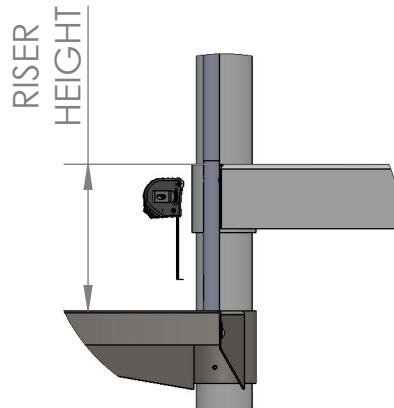
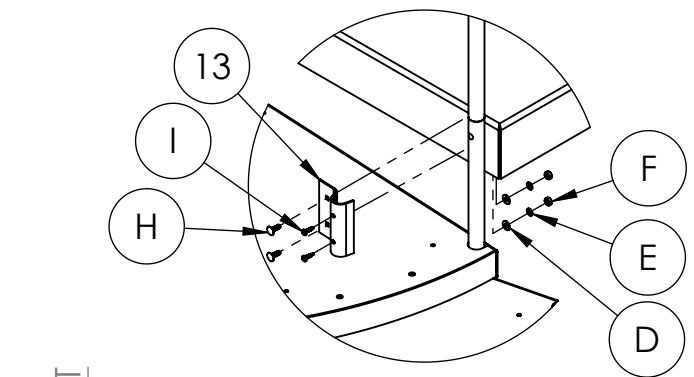


FIGURE 2: 5' DIAMETER AND LARGER



6. SPIN THE NEXT TREAD INTO POSITION BENEATH THE TREAD ABOVE. PLACE A MAIN BALUSTER (3) THROUGH THE UPPER TREAD AND INTO THE LOWER TREAD. MOVE UP OR DOWN UNTIL THE BOTTOM OF BALUSTER IS POSITIONED FLUSH WITH THE BOTTOM EDGE OF TREAD SUPPORT (A1).

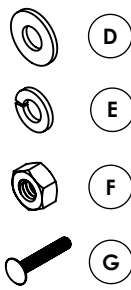
7. SECURE BALUSTER TO LOWER TREAD WITH 1/4" x 1-1/2" CARRIAGE BOLT (G), NUT (F), WASHER (D) AND LOCK WASHER (E).

8. ADJUST THE HEIGHT OF THE LOWER TREAD TO BE ONE RISER HEIGHT BELOW THE TREAD ABOVE, THEN FINISH FASTENING THE BALUSTER WITH 1/4" x 1-1/2" CARRIAGE BOLT (G), NUT (F), WASHER (D) AND LOCK WASHER (E).

9. TIGHTEN SET SCREWS IN TREAD SLEEVE.

10. REPEAT STEPS 7-10 WITH REMAINING TREADS

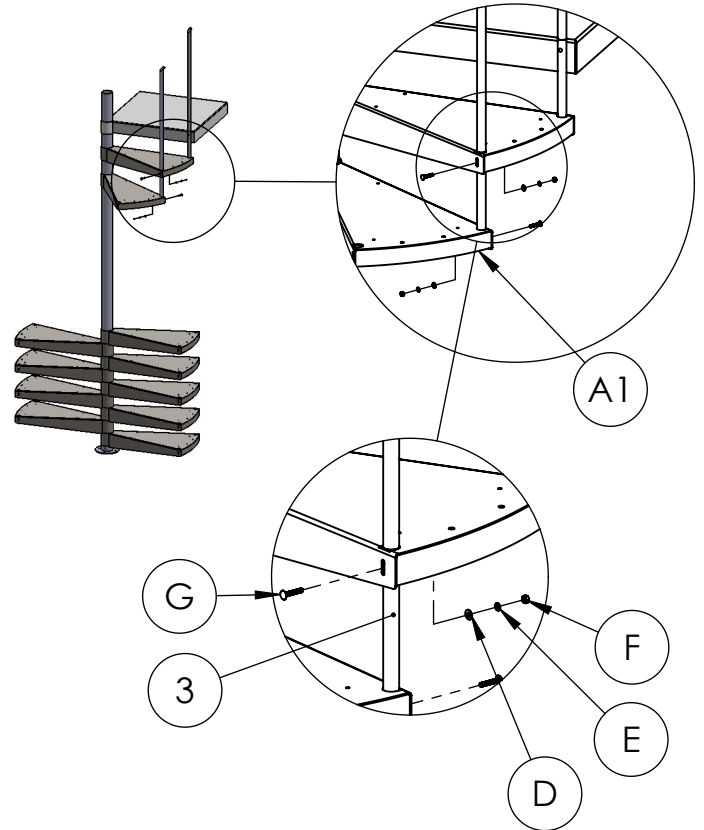
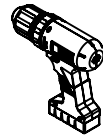
HARDWARE



PARTS ADDED



TOOLS NEEDED



NOTE: THE MAIN BALUSTER CONNECTING THE FIRST TREAD TO THE FLOOR MUST BE CUT

11. TO SECURE THE TRIMMED MAIN BALUSTER (3), PLACE THE BOTTOM BALUSTER BRACKET (16) ON THE GROUND BELOW THE FIRST TREAD. GUIDE THE BALUSTER THROUGH THE HOLE IN THE TREAD AND THROUGH THE BOTTOM BALUSTER BRACKET.

12. PLUMB THE BALUSTER AND FASTEN TO THE FIRST TREAD ACCORDING TO STEP 8.

13. ENSURE THAT THE BALUSTER REMAINED PLUMB, THEN FASTEN BOTTOM BALUSTER BRACKET TO FLOOR WITH #12-11 x 1" WOOD SCREWS (CC). MASONRY FASTENERS WILL BE NEEDED IF INSTALLING ON CONCRETE.

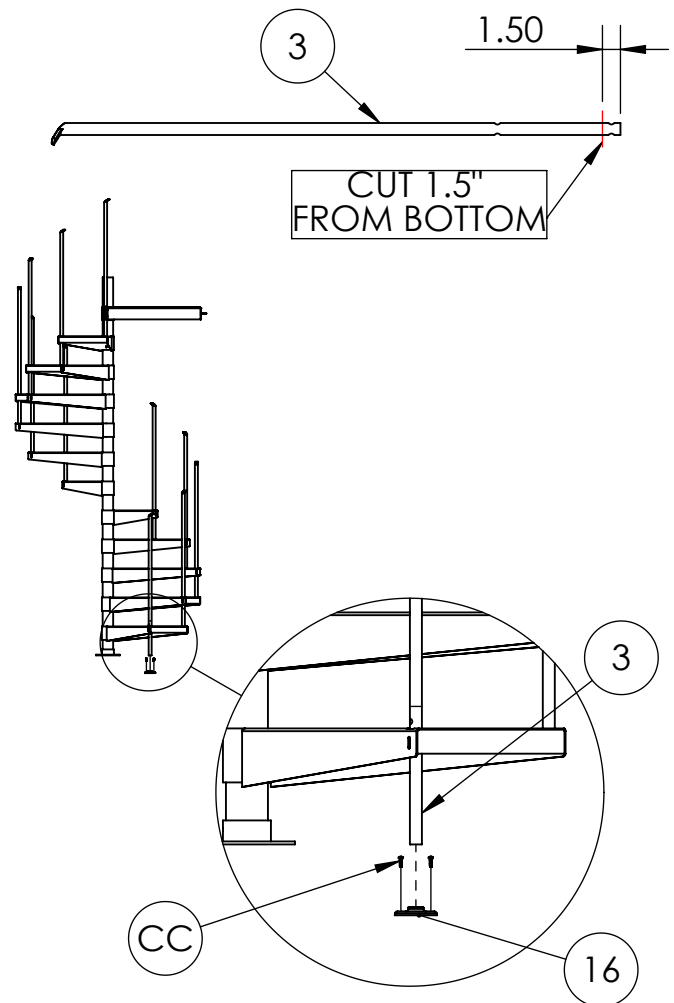
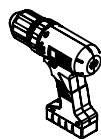
HARDWARE



PARTS ADDED



TOOLS NEEDED



VINYL HANDRAIL INSTALLATION

1. THE VINYL HANDRAIL (11) IS SHIPPED IN A FLAT COIL, HOWEVER, IT MAY BE SHAPED EASILY BY HAND.

2. DRY FIT THE HANDRAIL TO THE BALUSTERS.

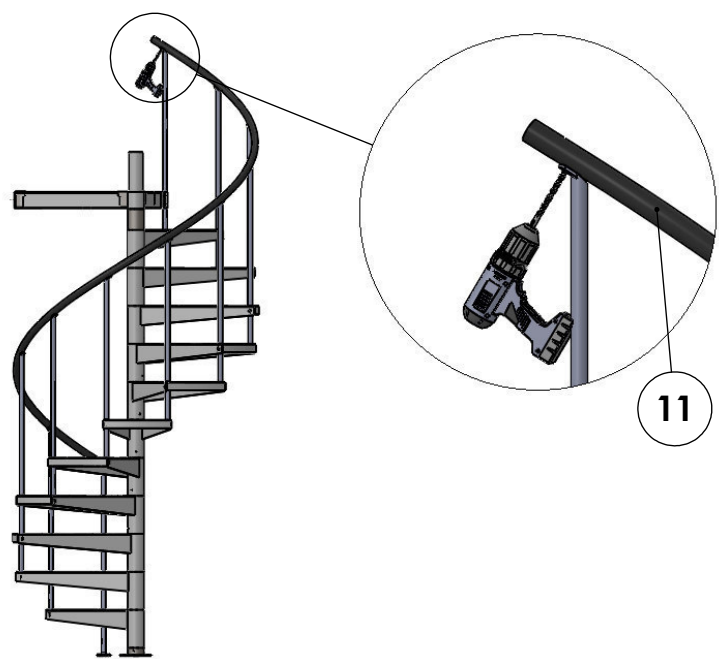
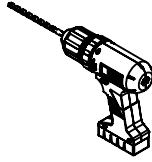
3. ENSURE THAT THE HANDRAIL OVERHANG IS ROUGHLY EQUAL AT THE TOP AND BOTTOM.

4. DRILL A 3/8" HOLE IN THE HANDRAIL AT EACH BALUSTER LOCATION. USE THE BALUSTER TIP HOLES AS A GUIDE.

PARTS ADDED

11

TOOLS NEEDED



5. ATTACH THE HANDRAIL TO THE BALUSTERS WITH A HANDRAIL CLIP (J) AND SCREW (K) ASSEMBLY AT EACH HOLE.

NOTE: IF THE HANDRAIL DOES NOT SIT FLUSH ON THE BALUSTER TIPS, THE BALUSTER TIPS CAN BE BENT UP OR DOWN AS NEEDED WITH AN ADJUSTABLE WRENCH TO BETTER MATCH THE ANGLE OF THE HANDRAIL. PLACE A RAG BETWEEN THE WRENCH AND BALUSTER TIP TO PREVENT SCRATCHES.

HARDWARE

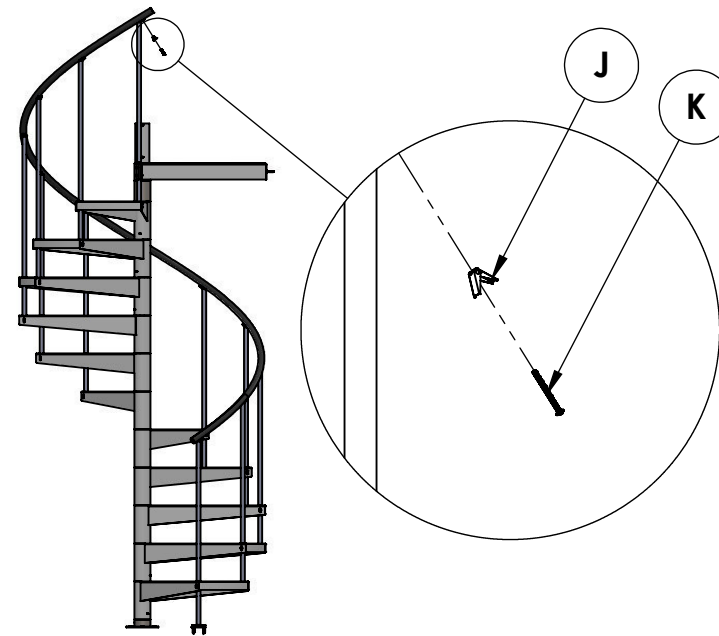
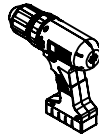


J



K

TOOLS NEEDED



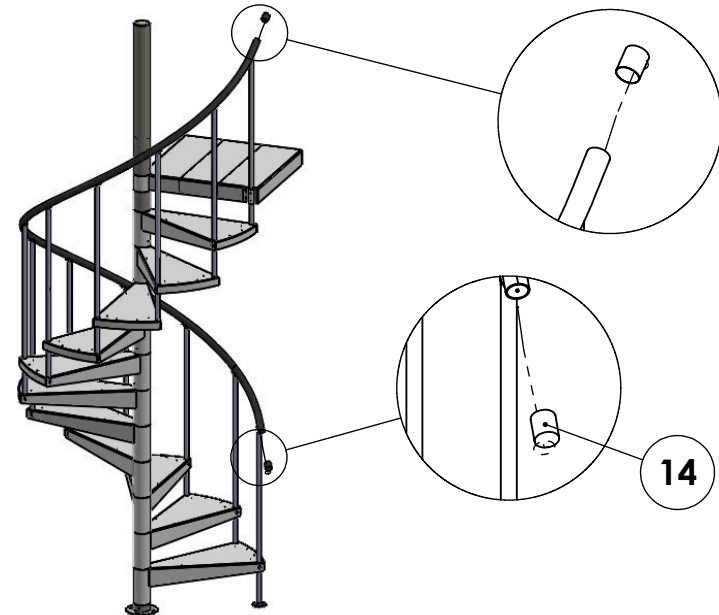
6. ONCE ATTACHED TO ALL BALUSTERS, CUT THE RAILING 3" ABOVE THE TOP BALUSTER AND 3" BELOW THE BOTTOM BALUSTER UNLESS YOUR BUILDING CODE CALLS FOR A LONGER LENGTH. BE SURE TO CUT HANDRAIL SQUARE.

7. SLIP VINYL RAILING CAPS (14) OVER EITHER END OF THE HANDRAIL TO COMPLETE THE HANDRAIL INSTALLATION.

NOTE: DO NOT APPLY PAINT TO THE VINYL HANDRAIL.

PARTS ADDED

14



CENTER BALUSTER INSTALLATION: GALVANIZED STAIR

1. MEASURE EACH CENTER BALUSTER (4) FROM TIP (AT HANDRAIL) TO THE TOP OF THE CORRESPONDING TREAD.

2. WITH A SAW, CUT CENTER BALUSTER TO LENGTH.

NOTE: DO NOT CUT ALL CENTER BALUSTERS TO THE SAME LENGTH.

3. FASTEN LEAD SLUG (T) TO BARE TREAD WITH LEAD SLUG SCREW (S). DO NOT FULLY TIGHTEN LEAD SLUG SCREW.

4. SLIDE BALUSTER ONTO THE LEAD SLUG. TIGHTEN THE LEAD SLUG SCREW TO LOCK THE BALUSTER IN PLACE.

5. TO FASTEN BALUSTER TIP TO HANDRAIL, USE:

1. A #10 x 1" SCREW (R) IF INSTALLING AN ALUMINUM HANDRAIL.

2. A #7 x 1-1/2" FILLISTER SCREW (Q) IF INSTALLING A WOOD HANDRAIL.

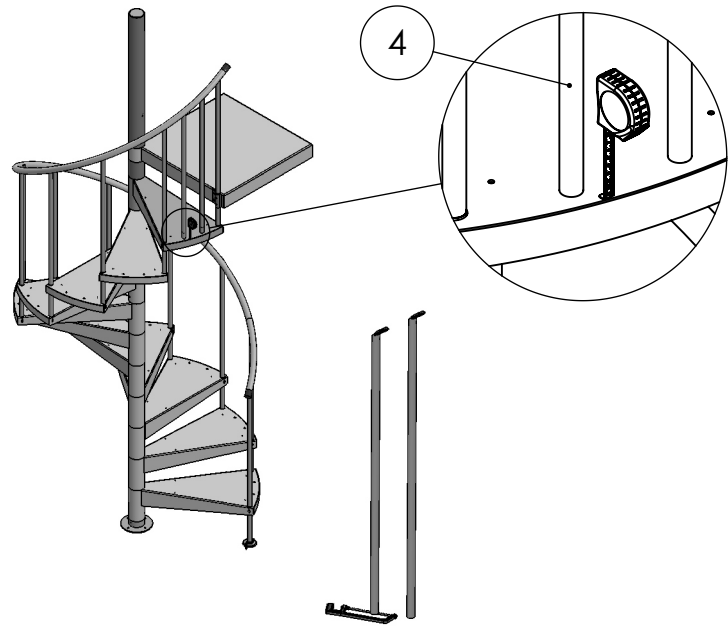
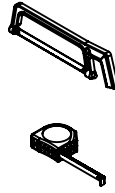
3. A VINYL HANDRAIL CLIP (J) AND SCREW (K) IF INSTALLING A VINYL HANDRAIL.

6. REPEAT STEPS 1-5 FOR EACH CENTER BALUSTER.

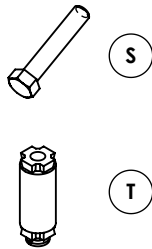
PARTS ADDED

4

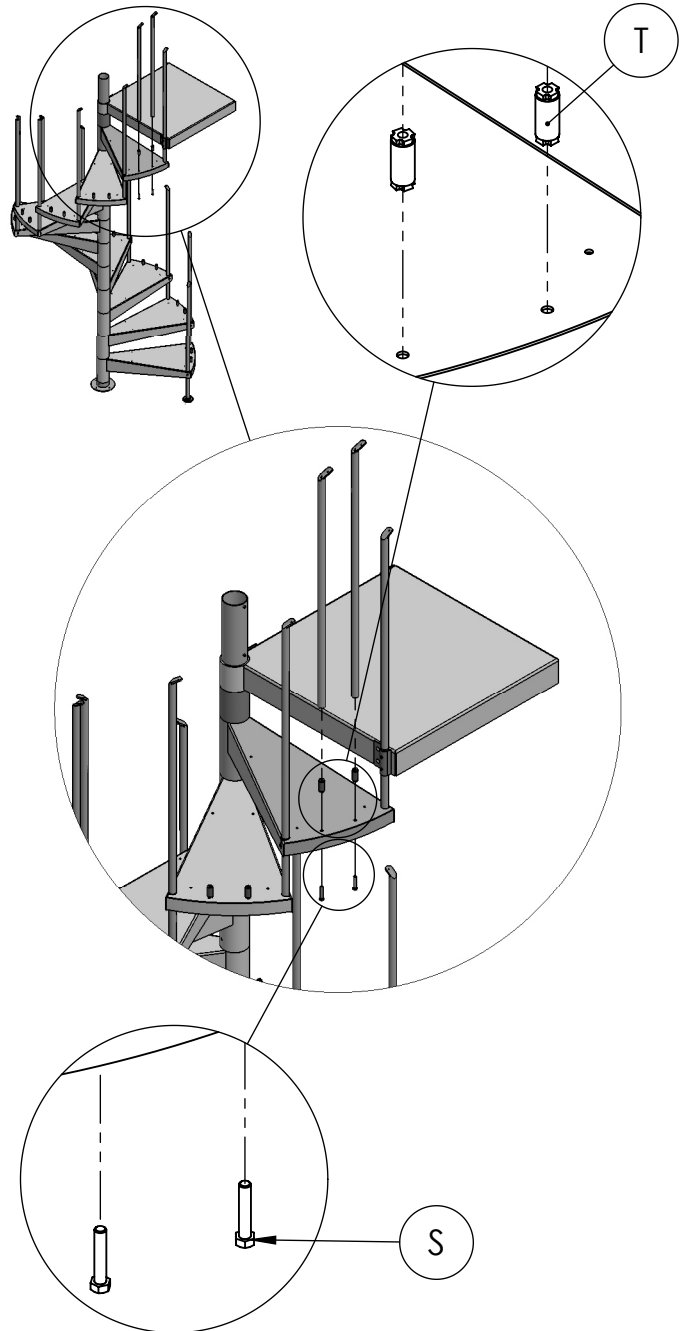
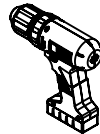
TOOLS NEEDED



HARDWARE



TOOLS NEEDED



CODE RISER BAR INSTALLATION

1. MEASURE AND DRILL 1/4" HOLES AT THE INDICATED LOCATIONS ON THE RISER SURFACE OF EACH TREAD.

-FOR 60" DIAMETER STAIRS,
REFER TO FIGURE A.

-FOR 66" DIAMETER STAIRS,
REFER TO FIGURE B.

-FOR 72" DIAMETER STAIRS,
REFER TO FIGURE C.

-FOR 78" DIAMETER STAIRS,
REFER TO FIGURE D.

TOOLS NEEDED

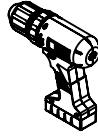


FIGURE A: 60" DIAMETER STAIR

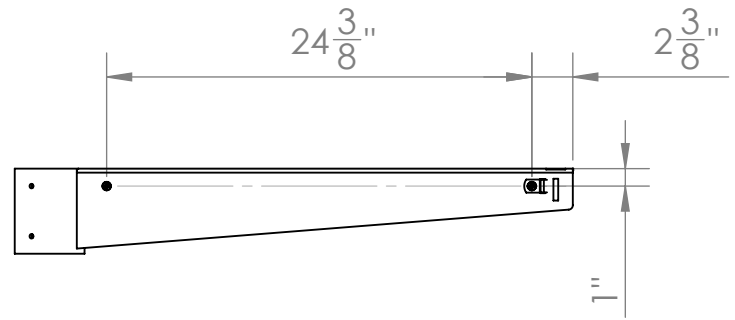


FIGURE B: 66" DIAMETER STAIR

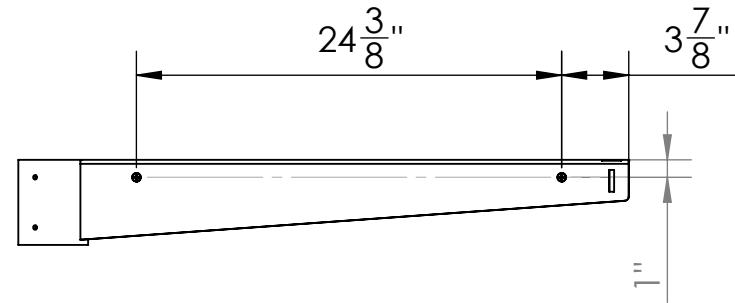


FIGURE C: 72" DIAMETER STAIR

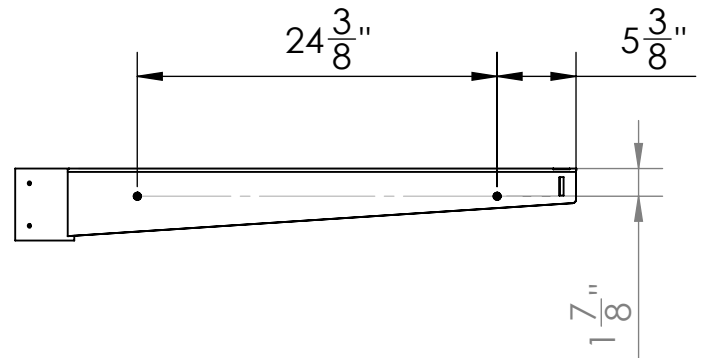
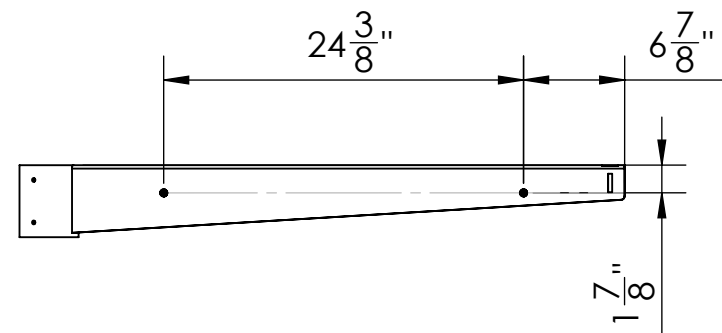


FIGURE D: 78" DIAMETER STAIR



CODE RISER BAR INSTALLATION

2. FASTEN THE CODE RISER CLAMP (AA) TO THE TREAD (6) WITH A 1/4"-20 x 3/8" SCREW (BB) AND 1/4"-20 HEX NUT (F). DO NOT FULLY TIGHTEN.

3. GUIDE THE CODE RISER BAR (31) INTO THE CODE RISER CLAMPS.

-FOR 60" AND 66" DIAMETER STAIRS, REFER TO **FIGURE E** TO POSITION THE CODE RISER BAR.

-FOR 72" AND 78" DIAMETER STAIRS, REFER TO **FIGURE F** TO POSITION THE RISER BAR.

4. POSITION THE CODE RISER BAR AND FULLY TIGHTEN THE 1/4"-20 x 3/8" SCREWS AND 1/4"-20 HEX NUTS TO SECURE THE RISER CLAMPS AND RISER BAR IN PLACE.

TOOLS NEEDED

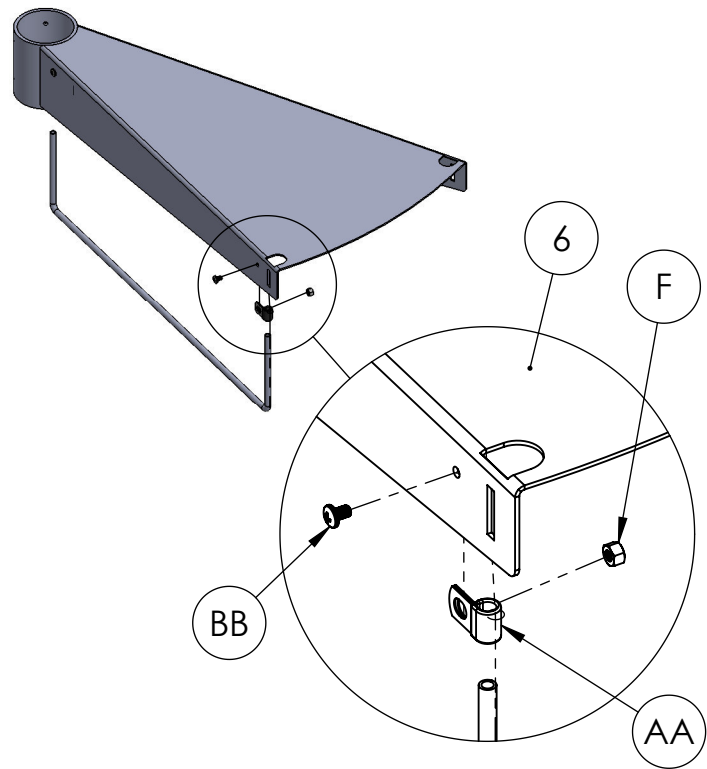
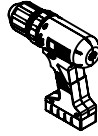
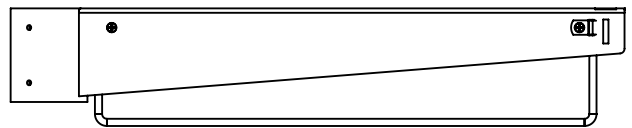


FIGURE B: 60" AND 66" DIAMETER STAIR

FRONT VIEW



SIDE VIEW

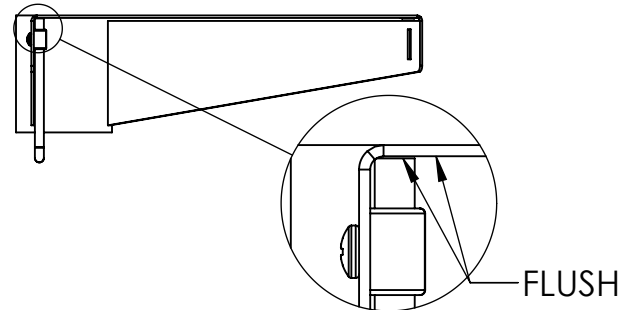
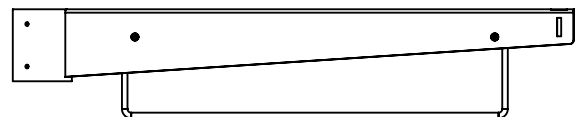


FIGURE C: 72" AND 78" DIAMETER STAIR

FRONT VIEW



SIDE VIEW

