

TAP N' TWIST

a dynamite way to install balusters

INSTALLATION GUIDE





***Your Beautiful New Staircase is
Just Steps Away!***

Tools You Need:

- ✓ Tape Measure
- ✓ Pencil
- ✓ Finish or Smooth-Faced hammer
- ✓ Electric saw (ex: Saws-All)
- ✓ 8mm or 5/16 Wrench
- ✓ 2.5mm or 3/32" Allen Wrench (*exact size may vary*)
- ✓ Electric Drill with 3/4" diameter drill bit
- ✓ Circular or Hand saw with wood and metal cutting blades,

Before Beginning Your Project:

1. Read all instructions carefully before beginning your project.
2. If you feel uncomfortable performing any of these steps, stop your project immediately and consult with a staircase installation professional.
3. Always wear safety goggles and gloves while working with metal.
4. Metal shavings may damage wood floors, carpet, tile, concrete, or other finished flooring.
5. Protect all flooring and work areas with drop cloths, and dispose of these drop cloths properly.
6. Keep pets and children away from all work areas.
7. Shavings and scrap from cutting metal balusters are sharp and may cause severe injury, including but not limited to cuts, punctures, eye pain, blindness, even death.

Tap N' Twist Contents:

Each metal baluster requires all four parts below:



A

Top Cap



B

Base Insert



C

Hex Bolt w/
Lock Nut



D

Bottom Plug

Each Tap N' Twist Hollow Metal Baluster Kit contains the parts necessary to install five (5) metal balusters

TAP N' TWIST

QUICK VIEW

Tap N' Twist simplifies the installation of hollow metal balusters. Without messy epoxies, set-up times and bracing, you can securely install hollow metal balusters.

Using common tools and carpentry skills, you can have a remodeled staircase with a few hours of work. Go to tapntwist.com for more information and easy-to-follow instructional videos.



Ready to Begin!



Remove old wood baluster.
Measure and cut new metal baluster.



Tap Bottom Plug into existing hole



Insert Top Cap into existing hole in handrail;
Tap Base Insert into bottom of baluster



Insert top of metal baluster into Top Cap in handrail



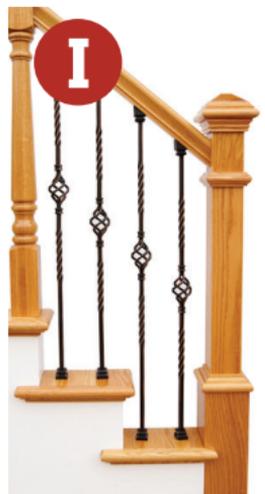
Insert Hex Bolt into Base Plug



Rotate baluster counter-clockwise. Baluster will rise into handrail until firm.



Tighten Set Screws on shoes at top and bottom



Repeat steps until all wood balusters have been replaced!

READ INSTRUCTIONS BEFORE BEGINNING YOUR PROJECT!

STEP

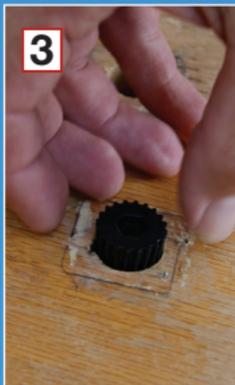
- 1** Remove wood baluster from handrail system:
 - a. Cut through middle of baluster with electric saw, handsaw or circular saw.
 - b. Remove all debris from bottom and top where baluster was installed
 - If there is a hole in tread or floor, remove all dust, nails, debris from hole
 - Remove nails, wood, debris from hole where top of baluster was attached to rail.



- 2** Prepare location where new hollow metal baluster will be installed. If no hole exists in the tread where wood baluster was removed, mark on tread at a point that is directly below the center-point of the hole directly above it in the rail. Using a drill and 3/4" diameter drill bit, drill a hole that is 7/8" to 1" deep.



- 3** Place **BOTTOM PLUG (D)** into hole in tread and tap with hammer until top of plug is flush with surface of tread.



- 4** Measure the distance between the top of **BOTTOM PLUG (D)** to the bottom of handrail where baluster will be inserted. Add $\frac{3}{8}$ " to that dimension. (ex: 36.0" between top of insert to bottom of rail, adjusted measurement is $36\text{-}\frac{3}{8}$ ")



- 5** On a new metal baluster, measure down from the top round pin towards the square bottom the distance from Step 4, and mark the baluster with a pencil.

In **Image 5** at right, the $35\text{-}\frac{1}{2}$ " measurement in our example has been adjusted to add the $\frac{3}{8}$ ", making final measurement $35\text{-}\frac{5}{8}$ ".



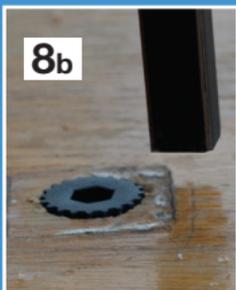
- 6** Using a metal cutting saw blade or hacksaw, make a 90-degree cut on the new metal baluster at the mark made from Step 5. After cutting, carefully remove any metal shavings/debris with a file. Do not place any inserts into bottom of baluster at this time.



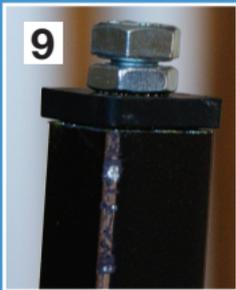
- 7** Check the depth of the drill hole in the underside of the hand rail.
- If it is less than 7/8" deep, take a drill and 3/4" diameter drill bit and increase the depth of the hole to 1".
 - If the hole is greater than 1-1/8" deep, insert a piece of 1/2" wood dowel long enough to reduce the hole depth to 1" into the hole prior to the top cap so that the cap will not seat too deeply into the rail.



- 8** Test fit the baluster by placing rubber **TOP CAP (A)** onto the round pin at the top of the metal baluster.
- Insert top of baluster and **TOP CAP (A)** into hole in bottom of handrail, and move bottom of baluster over **BOTTOM PLUG (D)**. There should be $3/8'' - 1/2''$ of space between bottom of baluster and top of **BOTTOM PLUG (D)**.
 - If baluster to Bottom plug gap is too tight, cut bottom of baluster so that $3/8'' - 1/2''$ of space exists between bottom of baluster and top of insert.



- 9** Take **HEX BOLT (C)** and screw it into **BASE INSERT (B)** until stopper nut touches bottom of Insert.



- 10** Place Optional Decorative Shoes over top and bottom of metal baluster. Depending on location of install, angled or flat shoes may be required.

TIP: Make sure set screws face in same direction for uniformity of appearance.



- 11** Place **BASE INSERT (B)** assembly into bottom of hollow metal baluster and tap into baluster with a hammer until bottom flange of Insert seats against bottom of metal baluster.



- 12** With **BASE INSERT (B)** tapped into bottom of Hollow Metal Baluster, place **TOP CAP (A)** over the round pin of baluster and then insert it into hole in the underside of the handrail.



- 13** Float bottom of baluster with **HEX BOLT (C)** over **BOTTOM PLUG (D)**, and insert head of Hex bolt into Bottom Plug. Hex head should fit into recess in upper face of Bottom Plug.

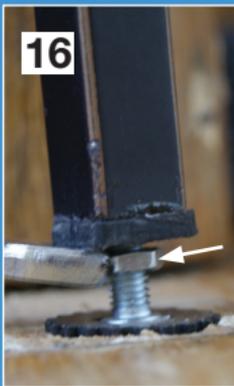
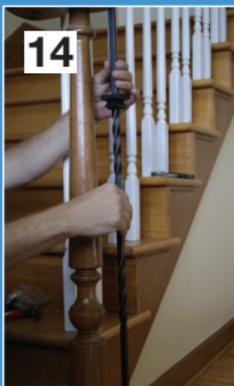


- 14** Twist/Rotate metal baluster **counter-clockwise** (when viewed from above) so that baluster rises into handrail. Twist until hand-tight. If installing angled handrail, be sure angled shoe is facing in correct direction.

DO NOT overtighten as it can result in damage to the hand rail, tread, baluster and/or components of the installation kit.

- 15** Raise Top Flat/Angled Shoe up to top of handrail and tighten with an Allen Wrench. If Angled Shoe does not fit snugly, unscrew baluster from handrail and remove Angled Shoe. Cut Angled shoe to desired angle, and reinstall the baluster.

- 16** Use 8mm or 5/16" wrench to tighten Lock Nut on **BASE INSERT (B)** at bottom of baluster. Lock Nut should tighten against bottom of Insert to keep baluster in place.



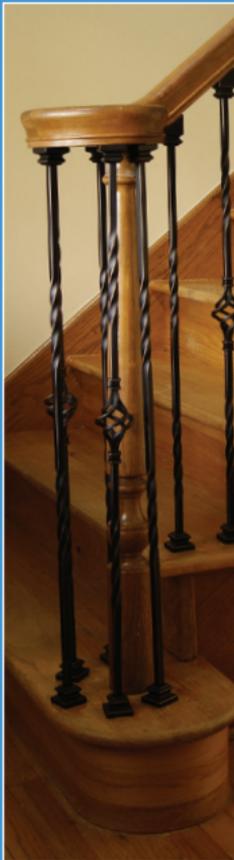
- 17** Once Top Flat/Angled Shoe is secured on top, Bottom Shoe can be tightened with an Allen Wrench.

Repeat steps above for every baluster on the staircase. For balcony installations, use Flat Shoes on both top and bottom of metal baluster. For lower knee wall use angle shoes at both top and bottom. Angled Shoes may have to be cut for proper fit.

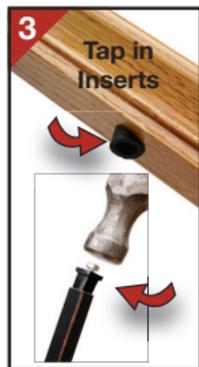
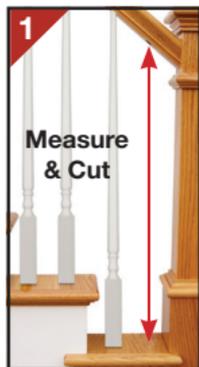
NOTE:

These instructions illustrate the replacement of wooden balusters with hollow metal balusters on a return-tread staircase using Tap N' Twist.

For additional instructional videos, new construction installation methods, FAQ's, and design ideas, please visit our web site at www.tapntwist.com.



INSTALL HOLLOW METAL BALUSTERS WITH TAP N' TWIST



Read Installation Instructions Carefully Before Beginning Your Project.

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