

Hinge Tutorial

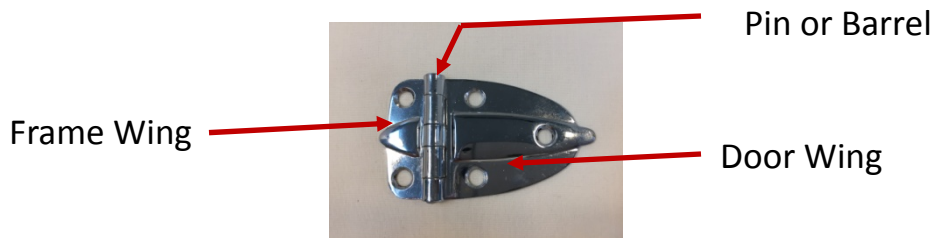
Stan the Old Hardware Man

There are many different types of hinges. I will cover primarily hinges for kitchen cabinets in this tutorial.

Parts of a Hinge

There are three basic parts to a hinge:

1. Pivot point – the pin or barrel
2. Frame Wing – on cabinet side of the barrel
3. Door Wing – on the door side of the barrel



NOTE: the above is an example of a flush mount hinge but these three components are common in all types of hinges.

Butt Hinges

Are made to mount to either – (1) the side of the face frame and to the side of the door (like the front or back door of a home), or (2) they can be surface mounted on both the door and face frame.

Butterfly Hinges

Are surface mount hinges (usually for flush doors) that have a shape to them that are reminiscent of a butterfly.

Cup Hinges

- Sometimes called European cup hinges are mounted to the door with a "cup". They mount to the inside of the door in a round hole drilled part of the way into the door. They are secured with two screws that may be fastened into plastic plugs forced into holes in the door. The location of the hole in relationship to the edge of the door and the degree of opening are *very* important.
- For frameless cabinets, the frame or sidewall mount is usually done with a bracket. Some of them are "clip-on" versions, meaning that once the bracket is attached to the frame or sidewall then you can "clip on" the hinge to the bracket.. There are many versions/brands of these hinges.
- These are highly specialized hinges and you need to deal with someone who has a lot of knowledge. If you get stuck I will refer you to a couple of good places to contact.

Door Wing Hinges – can come in different configurations:

- **Surface mount**– mounts to the front of the door with exposed screws. The most common application might be the colonial weathered steel hinges in black or antique copper, in either an "H" or "HL" configuration. There were also a lot of rectangular hinges made back as far as the 1930's, often with horizontal lines in them. Sometimes the lines were colored with

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black, red, yellow, white, blue, or green. And there are other surface mount door wings as well.

- **Slab overlay** – has a door wing that is flat and mounts to the back side of the door. It may also be called a variable overlay hinge because the amount that the door overlays the door opening in the cabinet is not a fixed amount set by the hinge configuration.
- **Slab overlay reverse bevel** – the door wing has a bevel, usually 30 degrees, to accommodate a reverse beveled door edge. This is done to save on cabinet hardware cost or to achieve a very clean look, maybe both. The homeowner opens the door by putting his/her fingers behind the door lip and pulling.
- **Lip doors** – the lip covers a part of the face frame when the door is closed. The portion of the door that is behind the lip protrudes back into the cabinet door opening when the door is closed. These lip doors have two critical measurements when trying to match hinges to them – (1) the width of the lip, and (2) the depth of the inset of the door (the amount that the door goes back into the cabinet behind the face frame). The most common lip is 3/8" some are 1/2" but it can vary. The most common inset is 3/8", less common but standard is 1/2", 5/8", and 3/4".
- **Full inset doors** –
 - Go all of the way back into the cabinet door opening and when closed, is flush on the surface with the face frame. These doors are most commonly mounted with a flat surface hinge. Both wings are mounted on the front of the frame and door. The next most common application would be a hinge whose frame wing mounts to the side of the face frame, and whose door wing mounts to both the side of the door, and wraps behind the door and is again secured to the door there with screws.
 - Some of the newer full inset hinges have fancy pins and may have an angled mount/wrap for attaching to the face frame. The door thickness will make a difference in the hinge you use. The most common is 3/4" but some can be 9/16", 11/16", or 13/16". Partial wrap frame wings work on most face frames. There are some full wrap door wings made for 3/4" face frames.
 - *See Full Inset Hinge section in the website FAQ for image example and further details.*
- **Demountable hinge** – the door wing mounts to the door with a wedge that fits into the edge of the door in a slot that has been routed into the door on an incline. A single screw allows adjustment of the door.

Frame Wing Hinges – can mount several different ways

- The most common is the **fully exposed frame wing** with the exposed screws going directly into the surface of the face frame
- Some hinges have screws that mount under the door directly into the surface of the face frame, leaving only the barrel of the hinge showing when the door is closed. This hinge has a hidden surface mount frame wing.

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- Some frame wings wrap around the face frame and the screws holding the hinge to the frame go into the edge of the face frame. This frame wing is a wrap variety. If it turns again to go behind the frame it is a full wrap. If it only goes around the edge of the frame it is a partial wrap. *NOTE: if you have a partial or full wrap hinge then you need to know the "overlay" or the amount that the door overlays or covers the face frame. See [Overlay section in the website FAQ for image example and further details](#).*
- Some **demountable** hinges have a frame wing that attaches into a "T" slot cut into the face frame with a screw into a wedge.

Pin Hinges

Come in both self-closing and non-self closing. They can mount to the top and bottom of the door and also can come configured to mount into a saw kerf in the middle of the door. It is important to know the overlay (the amount that the door overlays the face frame) and you may need to know the door thickness/face frame thickness as well. *See [Overlay section in the website FAQ for image example and further details](#).*

Non-self Closing Hinges

Don't help you close the door and require a catch to keep the door closed.

Self Closing Hinges

Finish closing the door for you. Hold the door closed (but not in a motor home, travel trailer, or boat. Normally has thicker steel than a non-self closing hinge.

This tutorial does not cover all hinges but is a good start. There are many specialty hinges that have been produced over the years. I hope that the above has helped you learn enough "hinge language" to impress someone and to communicate your needs. Most importantly, to help you find what you need!

Be sure to look at some of the photographs of hinges on the website. They may help you better understand some of the different varieties of hinges and their applications.

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