

# Laptop Key Installation Guide



Ver. NT1B24

#### Thank You from QuikFix Laptop Keyboard Keys!

Thanks so much for purchasing your key replacement kits from QuikFix Laptop Keyboard Keys! You're already one step closer to repairing your missing, damaged, worn or faded keyboard keys and avoiding the high cost and hassle of replacing your entire keyboard!

As a small business, we appreciate each and every one of our customers. Without you, our business would not survive and we would not have the pleasure of offering our services to an entire world full of amazing clients! We strive to offer an unmatched level of service and support and are always here to help you. Our laptop key installation guides are designed to assist you with your purchase every step of the way! From initially receiving your new key replacement kit to finishing up and getting back to a full keyboard, our guides will help you get it done!

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#### Introduction

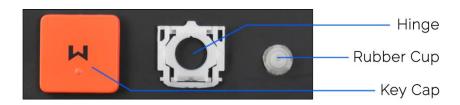
#### In This Chapter . . .

- The Basics
- How do laptop keys function?

This section will get you acquainted with the basic terms used for laptop key installation as well as how laptop keys operate to give you a better understanding of the key replacement process from start to finish!

#### The Basics

Laptop key replacement kits are comprised of three main components: the **key cap**, **hinge** piece (or multiple pieces for larger keys—these can also be referred to formally as 'retainer clips') and the **rubber cup** (also referred to as the rubber return spring, rubber bulb, etc). We'll be referring to these pieces throughout the guide, so it's important to understand each one and its purpose!



Your **key cap** serves as the main contact surface and is the physical "button" you press when typing. The characters printed on each key cap will designate the output onto your display and are language-specific, so not all will be the same. US-English keyboards will contain English characters, while other layouts will contain more or less characters specific to that particular language. Some keys may have metal "stabilizer bars" attached to the underside, which will give the key more rigidity and eliminate flex on longer keys such as the space bar.

The **hinge** piece serves two functions. It mainly acts as a connecting point between the key cap and the mounting points on the keyboard itself. This is what will allow the key cap to remain attached to your keyboard. The hinge also serves as a pivot point in conjunction with the rubber cup to allow the key to spring back into place when pressed (technically referred to as 'key travel'). Hinges are patented designs based on the keyboard manufacturer. Because the same laptop model can use multiple keyboard manufacturers, this is the main reason we require you to identify your precise "hinge type" so you are able to select the compatible product for the specific laptop you are repairing. In 98% of cases, hinge pieces from one keyboard manufacturer will not fit onto another manufacturer's product, which is why it's critical to assure you've selected the right part!

The **rubber cup** or return spring is the component that allows the key to return to its original position. These are generally secured into place on your keyboard with adhesive but can be torn or lost in some instances. Without a rubber cup, the key would lie flat and be unable to function properly. This component also touches the contact point on the keyboard when the

key cap is pressed, which activates a signal and allows characters to be input to your device.				

#### How do laptop keys function?

When you press down on any key cap, all three laptop key components will work together to contact a pressure point on the keyboard circuit, activating a signal and resulting in that particular character being input to your laptop and subsequently displaying it onto your screen.

If you have lost your key cap, there will be no physical button to press, which can be very frustrating and make it much more difficult to type! If both your key cap and hinge are missing, you'll only have the small rubber cup to press which will also decrease your typing experience. Should you be unfortunate enough to be missing all three components, you may find it nearly impossible to type that particular character! Our key replacement kits are designed to be able to repair and replace any of these damaged components, giving you back your full keyboard and smooth typing experience!

Please note our replacement kits will not fix "dead" keys. This means that if you press on the rubber cup (or area where the rubber cup would be affixed if missing) and there is no input at all, the underlying keyboard circuitry may be damaged or otherwise disrupted and would require the replacement of the entire keyboard. This is generally the result of a liquid spill or physical damage to the keyboard circuitry underneath.

### Before You Begin

#### In This Chapter . . .

- Tools Required
- Checking your Replacement Kits

Let's go over some basic tools that may be needed. We'll also show you how to examine your new key replacement kits for damage or any potential issues prior to beginning the installation.

#### **Tools Required**

In most cases, no special tools are required for laptop key replacement. However, having the following tools available can make the process easier and allow you to handle and place the components of your repair kit with greater precision. These include:

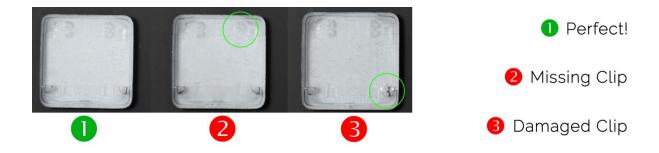
- Flat blade screwdriver
- Blunt tweezers
- Rubbing alcohol (91% isopropyl recommended)
- Super glue

#### Checking your Replacement Kits

It's important to check each replacement kit before beginning your laptop key installation. If you notice any damaged or missing components, stop and contact us immediately! Damaged pieces may not be able to be fully installed and can make it very difficult or even impossible to complete your repair.

First, assure all components are included with each replacement kit you've ordered. Each individual kit will contain one key cap, hinge and rubber cup. Some larger keys will contain multiple hinges. Each full replacement kit will be sealed inside of a small bag with its relative parts. Make sure you do not separate or lose any components to each kit!

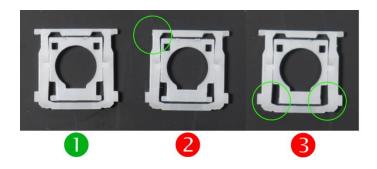
Upon removal, check the underside of the key cap first. Look for the small mounting clips that allow the key cap to attach to the hinge piece and examine them to assure there are no broken, missing or damaged pieces.



#### **Checking your Replacement Kits (continued)**

Next, examine the hinge piece(s) included with your replacement kit. Most hinges will mount onto your keyboard using three or four distinct points and all must be intact for the hinge to attach properly. There are also small pegs or protrusions from each hinge that are usually the mounting points for the key cap to clip onto. Assure these are all intact and not broken; otherwise the key may not clip or stay in place when attached!

Note: Your hinge piece is comprised of two separate pieces that will arrive preassembled. Do not separate the hinge components, as this may result in damage or the inability to reassemble correctly!



- Perfect!
- 2 Missing Outer Peg
- **3** Missing Inner Pegs

Your rubber cup generally needs no assessment, as it will simply set into position or can also be glued down if necessary. If you cannot find your rubber cup, be sure to check the underside of the key cap or the inside surface of the plastic bag. These can sometimes become temporarily stuck onto smooth surfaces during shipping and can easily be removed.

### **Preparing for Installation**

#### In This Chapter ...

- Removing Old Components
- **Examining Mounting Points**

If any components are still attached, you can use this section for information on how to remove them in order to install the new pieces. We'll also show you how to examine the mounting points on your keyboard to assure the new hinges will attach correctly.

### Removing Old Components

If you need to remove any of the old and/or broken components, you'll first need to identify if they are damaged or even need replacing at all. You can employ the same methods used previously to look over your existing key cap, hinge and rubber cup to see which items need to be replaced.

Caution: We strongly suggest powering off your unit and removing the battery (if possible) before proceeding with key replacement!

Obviously, a missing key cap would need to be replaced; however, you can also choose to change out your existing worn, cracked, damaged or otherwise unusable key caps with new ones. Key caps can be removed using a small flat blade screwdriver or similar tool. The exact method will vary between each and every model and key, so we can only give a general guide on removal. Gently lift the corner of the key cap and insert the tool underneath, applying slight inward force. Guide the tool so it works its way between the underside of the key cap and the hinge piece. By then applying a slight upward pressure, the key cap should disconnect from the hinge piece with one or two distinct clicks. This is the hinge piece separating from the small connecting clips on the underside of your key cap. You should now be able to remove the key, exposing the hinge underneath.

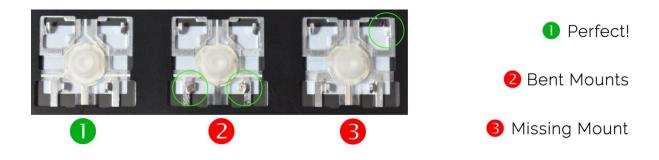


Removing broken hinge pieces is a much easier process, as you are able to see the connecting points and can use your tool to gently unclip or free the component from the mounting points on the keyboard. Again, the exact removal method will vary between models. Most hinges will attach via three or four mounting points located on the keyboard. Start by removing the hinge on the most accessible side and the remaining clips will come free.

Rubber cups do not need to be removed if undamaged. If these do require removal, they can be pulled free with your fingers or scraped off, as they are attached to the keyboard only by light adhesive.

### **Examining Mounting Points**

With the components now removed, you should now be able to see the small metal mounting points located physically on the keyboard. All hinges will generally mount to these points in three or four distinct locations to secure them into place. Check over your mounting points to assure they are not bent, missing or damaged in any way. If they are, installation of your new replacement kit may be more difficult or even impossible! You can check the image below to see the various conditions of keyboard mounting points.



# Installing your Replacement Kit

#### In This Chapter . . .

- Hinge Installation
- Rubber Cup
- Pressing Key Cap into Place

You're now ready to install your new replacement kit! This section will show you how to install your new hinge piece, the rubber cup (if needed) and how to press your key cap into place.

#### **Hinge Installation**

It's time to install the hinge mechanism for your new key replacement kit! If your existing hinge is still intact and attached, you may go ahead and skip this step since there's no need to replace it.

Still here? Great! Let's get your components in place by following the steps below:

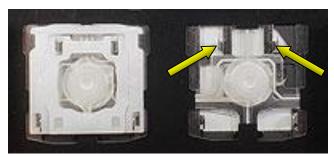
Check your hinge piece to determine the side that will face up and accept the key
cap when finished. This will generally be the flattest area of the hinge. By looking at
the side profile, the surface that will face toward you will be relatively flat, while the
surface that will be placed against the keyboard may have small ridges, bumps,
contours, etc.



2. You'll also need to orient the hinge so it can be mounted correctly onto the keyboard. Most hinges can only be installed properly in one direction, so this is a fairly straightforward step. However, if you aren't sure of the correct orientation just double check your laptop model and hinge type on our website. Our images on each product page will show the correct orientation for every hinge available for that particular model.

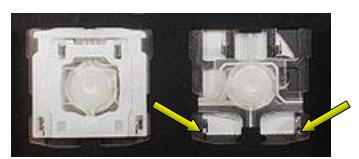
#### **Hinge Installation (continued)**

3. Next, begin installing the hinge by hooking one end over the protruding metal mounting point(s) located on the keyboard. Remember to keep the flattest side of the hinge facing up so it is able to properly receive the key cap!



Install onto upper mounts first!

4. Press the other ends of the hinge mechanism into the alternate bracket(s) and it will lock into place. Be careful with this step, as unnaturally forcing the hinge or placing too much stress on it can cause it to break! If installed properly, the hinge will need very little force applied in order to lock it onto the mounting points.



Next, press hinge into lower mounts

- 5. With the hinge now installed, you can give it a quick check to assure it pivots and functions smoothly. Use a small tool or your fingers to activate the hinge and assess the performance. If it seems jammed, sluggish or will not move at all, you may need to remove it and try reinstalling!
- 6. If your hinge has been successfully installed, you've now completed the most challenging part. The remainder of the installation will be a breeze!

#### **Rubber Cup**

You can now install your rubber cup if needed. If your existing rubber cup is already in place and fully intact, you can skip this step! There's no beneficial need to replace a rubber cup in good condition.

Your new rubber cup needs to be placed in the center of the hinge assembly for most keys. By checking your keyboard, you should be able to see the small contact point which the rubber cup will set upon. Place the rubber cup in the center of the hinge assembly over the contact point on the keyboard.



This will generally require no adhesive, as the key cap will hold the rubber cup in place when installed. If you wish to bond the new rubber cup to your keyboard, you can do so with a small amount of cyanoacrylate (also known as super glue or crazy glue - not included). Spread a *very thin* layer on the bottom surface of the rubber cup and set it into place. Allow it to dry **completely** before proceeding or you may risk damaging or inadvertently bonding other components!

If you have successfully replaced your rubber cup, please note this may affect the key travel of the repaired key, which can give it a slightly different feel and response when typing. This is completely normal and is an inevitable tradeoff when replacing any rubber cup.

### Pressing Key Cap into Place

With the hinge and rubber cup in place, it is now time to press your key cap on and complete your installation! Most key caps can be identified properly in the direction they are to be installed. Larger keys (such as the space bar) will be marked as to designate the correct orientation.

Caution: Using excessive force or trying to install an improperly oriented or incorrect key cap will result in damage to the component! If positioned correctly, the key will easily click into place.

Place the key cap centered over the hinge assembly and gently press down until it clicks into place. Assure all corners of the key cap are firmly attached to the installed hinge. You can give the newly installed key a few test keystrokes to make certain it is fully attached and ready to go.



That's it! Your new key replacement is installed and your keyboard is back to its full glory!

## Finishing Up

#### In This Chapter . . .

- Functionality Test
- Troubleshooting
- Conclusion

You're all finished installing your new key replacement kit! We'll go over a few final checks in this section to assure everything is ready to go!

#### **Functionality Test**

With your new key replacement kit properly installed, it should function as normal. You can now power your unit back on and use the keyboard as intended to assure it is registering keystrokes on your device.

If you have replaced a damaged rubber cup, the key may have a slightly different key travel and feel. This is completely normal and is unavoidable during a full key replacement process. It will not affect the functionality of the key input.

However, if you have installed your replacement kit and notice that the key does not register any keystrokes, you may have mounted the components incorrectly. You can remove the parts and retrace your steps to assure the products are correctly installed.

## **Troubleshooting**

Having a problem with installation? Check out our troubleshooting tips below to find easy solutions to the most common problems!

Problem	Cause(s)	Solution(s)
Hinge will not attach to keyboard.	<ul> <li>Incorrect installation method</li> <li>Bent or missing mounting points. Check for damage (see page 12).</li> <li>Wrong part version</li> </ul>	<ul> <li>Install product in proper orientation</li> <li>Inspect mounting points for damage or gently bend back into place.</li> <li>Contact support to verify correct part version</li> </ul>
Keys will not attach to installed hinge.	<ul> <li>Incorrect installation method</li> <li>Clips on underside of key are damaged</li> </ul>	<ul> <li>Center key over hinge or orient key correctly</li> <li>Inspect underside of key for damage (see page 8)</li> <li>Install hinge in correct orientation.</li> </ul>
Key does not match appearance of other keys	<ul><li>Wrong part selected</li><li>Variations in manufacturing</li></ul>	<ul> <li>Contact support to verify correct part version</li> <li>Slight color variations in manufacturing are to be expected</li> </ul>
Key stays depressed when activated	<ul> <li>Rubber cup is missing</li> <li>Rubber cup is torn</li> <li>Rubber cup may be stuck in 'down' position</li> </ul>	<ul> <li>Install rubber cup under key</li> <li>Inspect rubber cup for damage (uncommon)</li> <li>Manually lift and activate key a few times to acclimate rubber cup</li> </ul>
No characters display when key is pressed	Keyboard circuitry is damaged	A new keyboard is required. Our product is a cosmetic fix only.
Key will not fully depress	<ul><li>Hinge installed wrong</li><li>Debris under key</li><li>Stabilizer bars not installed properly</li></ul>	<ul> <li>Remove key and install hinge correctly</li> <li>Remove key and clean debris</li> <li>Install key and stabilizer bars properly</li> </ul>
Key shows signs of wear or previous use	To assure OEM fitment, keys are selected from new and used models	No solution. Brand new parts may not be released by manufacturer or are no longer in production.

#### Conclusion

If you've completed the installation of your new replacement kit, tested for functionality and confirmed normal operation, **congratulations!** You've successfully repaired or replaced your laptop keyboard keys and have saved yourself time, hassle and money!

We hope you found this guide useful and informative! If you have any questions, please feel free to <u>contact us</u> at any time and we'll be more than happy to assist you. You can also follow us on social media to keep up with some of the latest laptop models and news from our company!



From us here at quikfixlaptopkeys.com, we'd like to say thanks again for using our service!