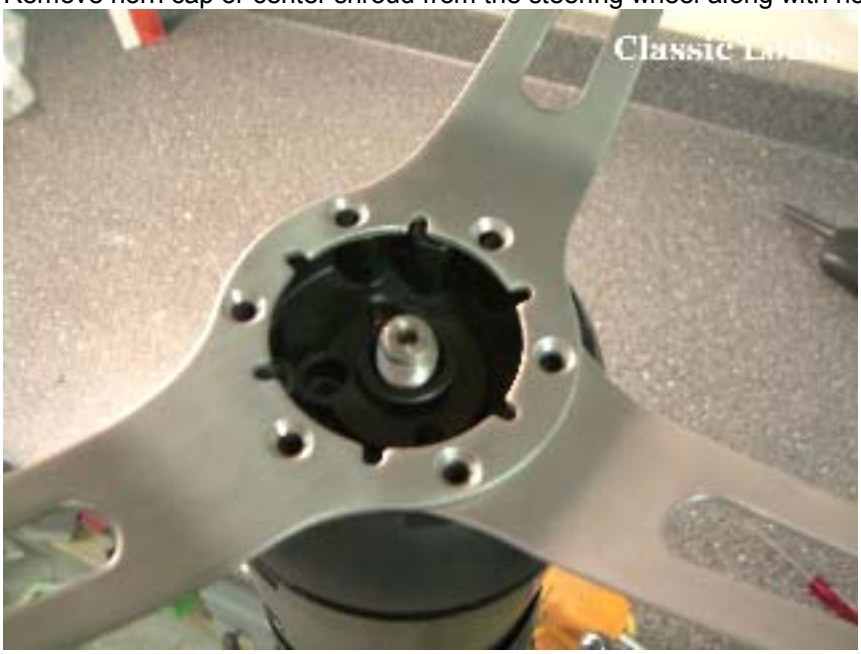
Tools Required:

- Steering Wheel Puller
- Lock Ring Compression Tool
- General Hand Tools

If you do not have the steering wheel puller and compression tool, you may want to try your local auto parts store to purchase or rent these items. They are a must and will save time and fingers!

Ignition Lock

Remove horn cap or center shroud from the steering wheel along with horn wires.



Next you need to remove the steering wheel. This type will unscrew from the mounting hub, and then you will need a puller kit to remove the hub. A standard wheel is one piece and will also require a puller for this step.

Install the wheel puller by installing the outer bolts onto the holes of the hub or wheel. Once threaded and secured, you can start to tighten the center bolt against the post and the wheel will slowly start to come off.

Once the hub or wheel is removed simply lift it away from the column and the locking plate will be revealed. Some locking plates will also have 3 screws holding down a dust cover. If you encounter this then remove the dust cover and the locking plate will be in plain view.

Next step is to slide the compression ring tool down over the center shaft and secure with the wheel nut. Now you can tighten down the outer screws which will depress the locking plate and reveal the snap ring that locks it down around the center shaft. Notice the small screwdriver is engaging the snap ring to work it loose. This should only be done after you have compressed the plate to remove the pressure from the clip. I caution you not to try this without the proper tools or serious injury can occur. This compression plate is under heavy load.

With the plate compressed and the retainer free to be removed, hold one side with a flat screwdriver while a small flat blade is used to gently lift the snap ring out of the groove it locks into. Once you have it started you can work it around with the blades to remove it.

After sliding the clip up and out of the way you can back off the outer screws to remove pressure from the compression plate. Turn these crews back until all pressure is removed before to take the center nut off.

Remove the plate along with the clip and secure until required on reassembly.

Next you can remove the horn plate by sliding it up over the shaft.

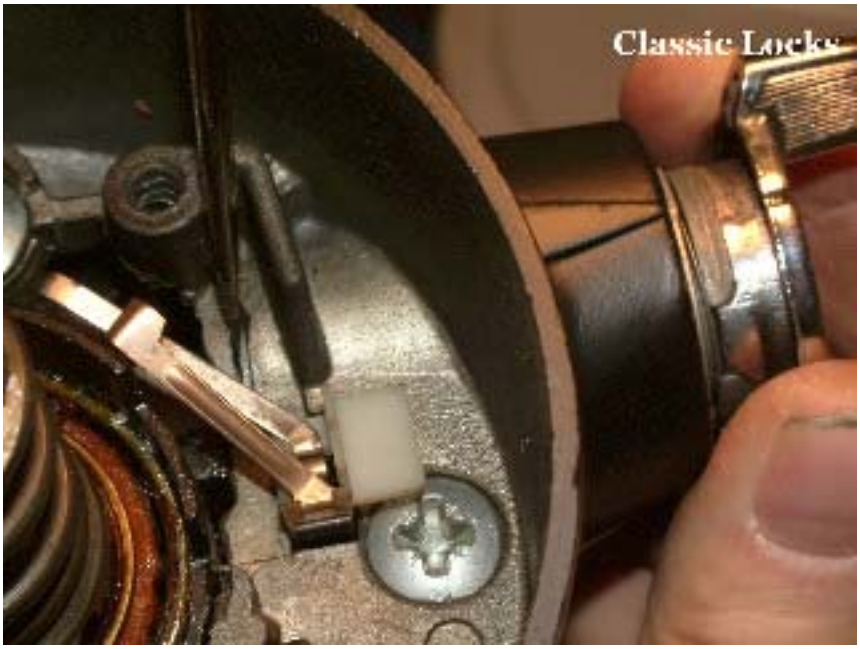
The next step will be to remove the screw for the turn signal lever. This is secured into the plastic turn signal cam assembly. You will also need to remove the hazard flasher button from the opposite side of the column just under the lock cylinder.

With the lever removed, unscrew the three black screws that hold the assembly into the column.

With the screws removed, gently lift the white plastic assembly out of the column. Be careful to apply even pressure when lifting it out so that you don't damage the wires connect to the underside. There should be enough give in the harness to allow the assembly to clear the center shaft. Simply turn it sideways over the shaft which will give you clear access to work under it.

Here is a picture with the harness and assembly tucked out of the way.

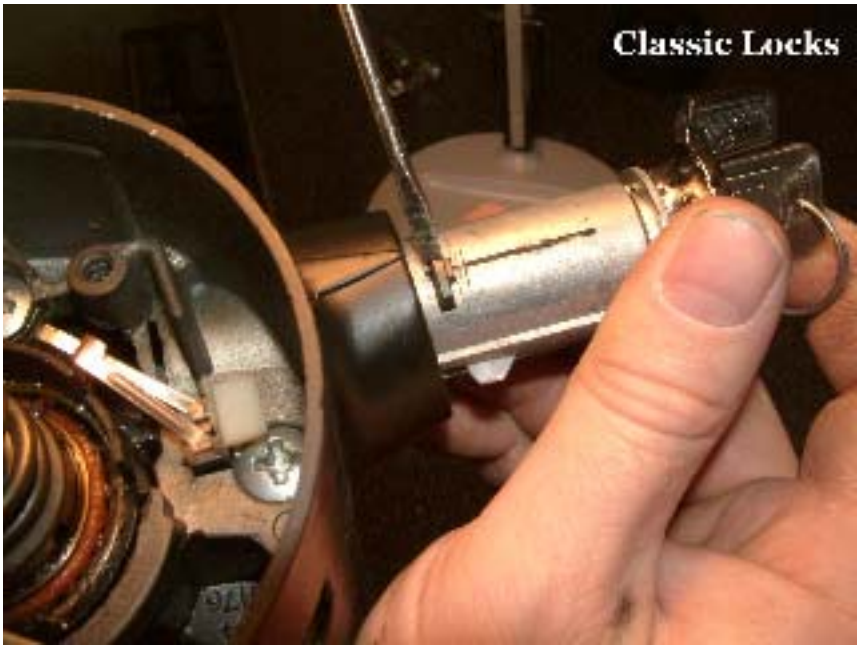
The 12:00 position shows a small screwdriver pointing the way to the detent slot. This slot that is located right in the center of this picture, is where the lock retainer clip secures the cylinder into the column. Simply slide your small flat screwdriver into this slot and you can depress the spring loaded clip. Once depressed this will allow you to slide the lock cylinder out of the housing by pulling it sideways with your hand. No pressure should be required to remove the lock cylinder if you have depressed the retainer clip.



This photo shows the blade inserted into the slot and the cylinder being removed.

Note the retainer clip at the back of the lock cylinder (right). This is the clip that was depressed in order to remove the lock. Newer style ignition locks and columns newer than 1976 will use a locking screw rather than a spring-loaded retainer clip. Also, some columns were cast in such a way that the retainer clip is not readily seen. In this case you will still find a depression in the cast right where the clip is secured. Take a small precision screw driver and lightly tap it into the hole and it will pierce through the light casting and will end up depressing the retainer. I usually use a small flat blade and once a have tapped through the soft casting, I turn the blade sideways to ensure that I have the blade across the top of the retainer clip and then I push it down.

If for some reason you column is not original and is newer than 1976, the cylinder may be held in with a screw. If this is the case, you would see the screw (Black Head) located just under the white plastic tab of the horn switch. If this is evident, simply pull the white horn switch out of it's slot and the black screw head will be revealed. It is sometimes a Phillips head and some are Torx head.



Now you can start to reassemble the parts in reverse order. This photo shows the new ignition going in with the retainer aligned correctly. Depress it with a flat blade as you slide it back into the housing. Once in it will slide freely until the retainer snaps back into the locking position.

Ensure the key is still in the off position when inserting of the cylinder will not align the cam inside of the column. The cam slides into the back of the lock cylinder for direct engagement.

Here is a final photo with the new lock cylinder installed. Once it has snapped into place, insert the key and ensure that the switch turns freely. It should travel to the start position and backwards to the accessory position. Once tested in working order, remove the key and continue with the rest of the reassembly process. It is the exact reverse of the way it was disassembled.

Note that there is only one way for the compression plate to install. The grooves in the center will show a wide gap between the millings and it is very easy to see how it lines up. The same holds true with the steering wheel or hub assembly. Just look to see if there is a wide milling that aligns with the center shaft. If you marked both pieces during the removal process this should make for an easy way to realign the parts.

Part 2 – Door Locks

Here are the components required in order to operate the door locks. Some of your old parts such as the lock pawl retainer and clips may be required. This is for display purposes only.

If the car is already assembled with an existing lock in the door, please follow these steps. First you should raise the window and then you can remove the inner door panel. With the door panel removed, pull back the inner water deflector sheet. With a long screwdriver or comparable tool, remove the lock retainer clip from the back of the lock. (please see inner door photo below)

Now you can remove the lock cylinder from the door and proceed with installation of the new locks.

Slide a new gasket over the new cylinder and then install the locking pawl onto the rear of lock. Secure with the small retainer clip and it's ready to install. If you are missing any of these pieces I suggest you check with your local auto parts store where all of these parts are readily available.

Caution: If your car has been recently painted you may have to dress the lock preps in the sheet metal. This is especially true if the car was painted with the locks removed. I use a fine pippin files to gently clean the paint away and dress the metal for unobstructed installation. If the cylinder seems tight then file the opening clean. Trust me on this one….if you force the cylinder in it can chip you expensive new paint. This is always the case if the cylinder gets stuck and is then pulled back out. Should this happen to you, be sure to remove it very carefully so that you do not damage your edges of the paint? Nobody likes chipped edges in new paint and please use a new gasket.

Install the cylinder into the hole and be sure to align the inner cam through the rear of the locks pawl lever. This can easily be viewed during the installation by peering through the inside of the door and aligning it correctly.

With the cylinder installed and sitting flush with the face of the door, you can now secure the inner retainer clip within the door.

Part 3 – Trunk Locks

This photo shows you a shot of the rear cylinder with the locking cam aligned and the retainer clip installed. Simply slide it in behind the lock cylinder and the hard part is done. Be careful not to use your fingers to install or remove this clip. One slip can result in a trip to the hospital with a sliced open finger or other injuries to your hands. There are a lot of sharps edges within this door and I stress the use of proper tools before you proceed with this installation.

Here is the finished product with properly coded keys. Depending on the year of your vehicle and the lock application you purchased, the door locks may be operated by the square type ignition key, or it might be the round style trunk lock key. Either option is correct depending on your application and will function properly. Now you can reinstall or assemble the inner door panels and move onto the trunk lock section of this guide.

Part 3 – Trunk Locks

The trunk lock will require the retainer clip (shown) and the use of your existing tail shaft before it can be installed. The photo is for display purposes only and may differ by model and year.

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Install the cylinder into the hole and be sure to align the tail shaft through the correct slot in the lock case. Guiding the tail shaft into and through the lock case is best viewed by peering through the back of the lock mechanism inside of the trunk. If you are installing this lock with the same type of retainer clip shown above, the retainer must be held in place while the lock is installed through the rear tail panel. This can easily be viewed during the installation by peering through the inside of the trunk and looking in between the tail panel and the mounting plate for the lock itself.

With the cylinder now installed, you can secure the retainer clip at the back of the lock and screw it into position. The side of the retainer will often have a small screw hole that fastens the retainer plate to the body. This is to prevent it from becoming dislodged.

This picture shows the cylinder installed with the correct retainer clip for a 1969 Camaro.

Caution: Before closing and locking the deck lid or trunk, be sure to lock the keeper (catch) manually and then test the locks operation. It should release the lock keeper when turned to the right. I prefer to test this three times and then try it by closing the lid. If all id aligned with the locking mechanism and the keeper on the deck lid, the trunk should open and close smoothly. If not, adjustments to the deck lid keeper will need to be made.

Part 4 – Glove Box Locks

If you purchased this kit complete with an optional glove box cylinder, then please follow these remaining instructions. If you purchased a kit without the optional cylinder, then please skip this section.

In order to remove the glove box cylinder from its housing you must first put the cylinder to the locked position which is the key cylinder pointing up and down to the 12 O'clock position. If you have a key, insert and then manually lock the keeper (inside catch) of the door. Remove the key in the locked position with the door open and you are ready to proceed. If you do not have a key for

your existing lock then you must insert a small wire or bobby pin device to depress the inside locking wafers. Simply rake the pick tool over the wafers from back to front while you gently turn the knob of the key cylinder to the left. This will allow you to pick it to the locked position, which is where the core needs to be in order to remove it easily.

The cylinder is held in with a silver retainer wafer. In order to remove the cylinder you will need to align the wafer with the access hole (12:00 O'clock Position) and must depress it with a small awl or a tool that can reach through the hole to gently push down on this spring loaded retainer.
If you cannot see this retainer, then check to see if the cylinder is locked with the door in the open position. (Step 1 above)

While gently depressing the retainer, insert a small flat screw drive under the face cap of the lock on the outside of the door. Gently apply pressure to the face of the lock cylinder by lightly prying it outwards as the retainer is depressed on the inside of the door.

You should now be noticing that the lock popped out about 1/8" and the front cylinder face is now away from the glove box door. That is because the retainer has been depressed and it has bypassed it's location in the casting. There are four similar wafers in behind that one and they will need to be depressed in order to get the cylinder all the way out. Use the exact same manor and repeat the same step by depressing a tool through that access hole and gently working the cylinder out, it will pop out one wafer at a time until it is free.

Once it's out you will see a series of wafers. The silver one (first position) is the retainer wafer, and the four brass ones behind it are code wafers that are actuated by the last four cuts on the key. These wafers give different combinations of keying by changing their depths. If you wanted to rekey an existing lock, simply take this to your local locksmith and ask him to insert new wafers

and set it up to a new or existing key. Once you insert the correct key, all wafers should sit flush in the cylinder with the exception of the silver retainer wafer. It should be sticking up out of the cylinder, which is how it locks the core into the housing once installed.

To install the cylinder back into the door or insert the new lock we supplied you with, remove the key and align the wafers up at 12:00 position. Depress the lock keeper to the locked position and then insert the cylinder back into the hole with it positioned to 12:00 O'clock noon. You will need to depress the retainer wafer to get it back into the lock as you are sliding it in. When you depress it, the lock will pop back into the door and will then engage behind the cylinders retainer cavity.

I always suggest people look inside the lock after the core is removed so they understand where the wafers lock in to. This will be visible by shining a small light into the opening with the cylinder removed.

When the cylinder is inserted, the retainer wafer should be visible in the correct hole at 12:00 O'clock once again. Now you can insert the new key and turn it to the right. This will open the lock keeper and allow you to close the glove box door. In the same method as the trunk lock, I suggest you lock it by hand with the door in the open position and test it a few times before closing the actual door. Better safe than sorry as the last thing you want is a failure.

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We guarantee your satisfaction with our lock products and offer a full refund for any unused product that is returned in its original packaging. To be very fair about things, we do not cover or refund shipping charges. Any products being returned for credit must be sent registered mail requiring my signature, and costs are at the shipper's expense. Once any returned products are received in original condition, a full refund will be issued in the purchase amount excluding any related shipping costs.

Any damaged products will be refused and no credit will be given. If you believe your shipment was damaged in transit, please file a claim with the carrier. We offer insurance on all shipments and recommend this option although it is optional to the customer as an extra charge. We have no damage recourse on any shipments that are sent out without the optional insurance and will not accept liability for product damaged in transit once it leaves our facility. We ship all products via postal service and offer tracking numbers for all shipments. Claims for lost items must be routed through proper channels and lead-time must be allowed for recovery of lost items before any refunds or credits are issued.

Sincerely,

Graeme Browne CML / CJL
aka Norcam sYc