

DDMWorks



Automotive Performance Specialists

Solstice /Sky Short Throw Shifter



This short throw shifter kit for the Solstice / Sky reduces the amount of forward and side to side movement that is required to shift the transmission into gears.

Installation time of the short throw shifter depends on you and your mechanical skills. It is suggested that you read through the directions a few times to familiarize yourself with the components of the kit, and your car. If you are pretty handy with tools the shifter can be installed in 30 minutes, however we suggest that you schedule at least a couple of hours for the installation.

If you have any questions during the installation you can call us at (864) 907-6004 or email us at Tech@ddmworks.com.

TOOLS NEEDED

3/16" Allen key

Socket wrench

10mm socket

Socket extension

All purpose Grease

5mm Allen key

Paper Towels

DDMWorks



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Piedmont, SC 29673

Automotive Performance Specialists

Tech Support

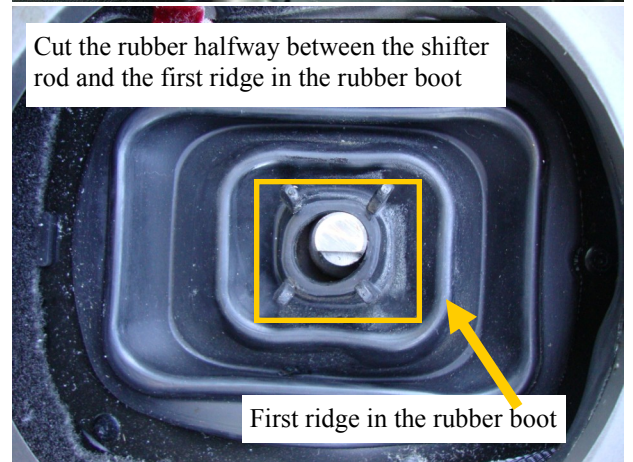
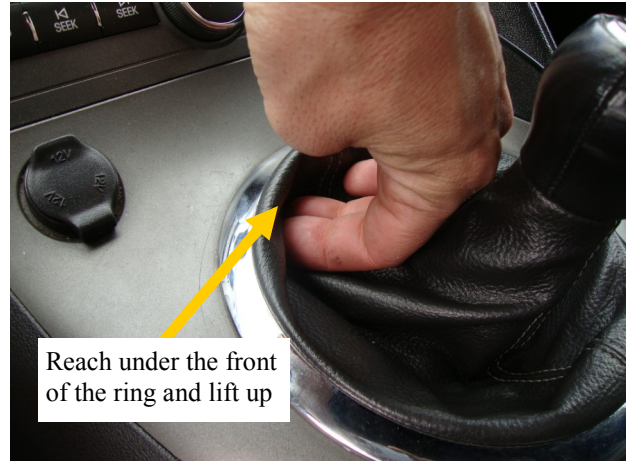
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Rev A 8-19-14 DLM

Removing the Stock Shifter Mechanism

1. **Make sure your car is in neutral and the parking brake is on before starting installation.**
2. The first step is to release the plastic ring around shifter (although these pictures show the ring on a Pontiac Solstice, the operation is the same for the Saturn Sky). To get the ring to pop up, grab under the front of the ring and pull up, that will release the ring in the front and allow you to lift the ring up.
3. With the ring up, the shift knob assembly needs to be removed from the car. The shifter comes off of the stock shifter mechanism by loosening one 3/16" bolt at the base of the shifter. Loosen that bolt until you can pull and lift the shifter off of the stock mechanism.
4. Now that the shifter is off, the upper rubber boot needs to be cut to get access to the stock shifter mechanism from inside the car. (Once the install is complete, this cutout section will almost be completely covered back up.) The picture to the right shows what the stock shifter boot looks like, you will need to trim along the lines drawn on the picture. Basically the line to trim is halfway between the shifter rod and the first ridge in the rubber. This is not a super critical cut and a little more or less will still work.
5. With the rubber boot cut you will be able to look through the hole and see a smaller rubber boot that is around the stock shifter mechanism. Reach in and with your finger start to pull it up through the hole you just cut in the rubber boot. Once this smaller rubber boot is pulled out it will expose 4 10mm head bolts that hold the stock shifter mechanism in place. Using a socket and extension, remove those 4 bolts.
6. With the 4 bolts removed, lift up the metal cap that was directly underneath them and set it aside, it will be reused.
7. Now you can pull up on the stock shifter mechanism and it will pull out of the car. Be careful since it will be covered with grease and you will want to have some paper towels around to set it on.



With the rubber boot cut and the smaller rubber boot removed you will see the 4—10mm head bolts you need to remove.



After removing the stock shifter mechanism, your car should look like this, and it is time to start installing the new parts.

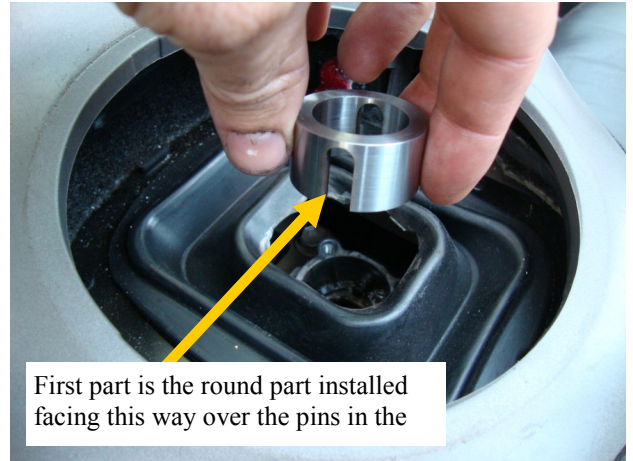
Rev A 8-19-14 DLM

Installing the DDMWorks short shifter

1. When you removed the stock shifter from the car, there should be a small black spring that stayed in the bottom of the cavity that the stock shifter is in, just make sure it is flat to install the next piece. The first piece to install is the round piece that has 2 slots machined into it. It installs with the slot openings facing down, with the slots lined up to fit over the 2 pins in the cavity that the stock shifter came out of.
2. Next there are 2 parts that need to come off of the stock shifter and moved to the new shifter. On the stock shifter there is a white plastic piece that fits over the larger ball portion. You can pop this piece up and over the ball and it will come off the stock shifter. Next, the smaller plastic piece on the small ball at the end of the shifter needs to come off. This one is held in place a little firmer. We have found the best way to get it off is to use a wrench and a pair of needle nose pliers like in the picture below:



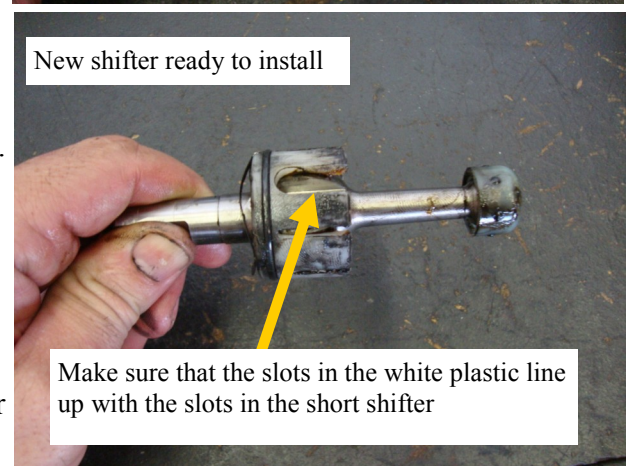
To get the plastic end off of the stock shifter, place a wrench against the big ball on the stock shifter, then use a pair of needle nose to pry the piece off of the stock shifter



First part is the round part installed facing this way over the pins in the



These 2 pieces get transferred to the new shifter



New shifter ready to install

Make sure that the slots in the white plastic line up with the slots in the short shifter

3. Now take those 2 pieces and make sure to spread grease on them, then install them on the same places on the new shifter. Make sure that the small black spring is still on the top of the white plastic piece that goes over the large ball. Also make sure that the slots in the white plastic piece line up with the slots in the shifter.
4. With the short shifter ready to install, we need to install the other metal piece that came in the kit. It has 2 pins pressed into it. This piece will set down into the cavity that the shifter came out of with the pins on the bottom. The pins also need to be installed so that they are facing the front and back of the car (not side to side like the stock shifter). Roughly line up the 4 holes in this piece with the 4 holes for the bolts in the transmission below.



Pins are facing front and back, slot in new shifter is lined up with the new pins

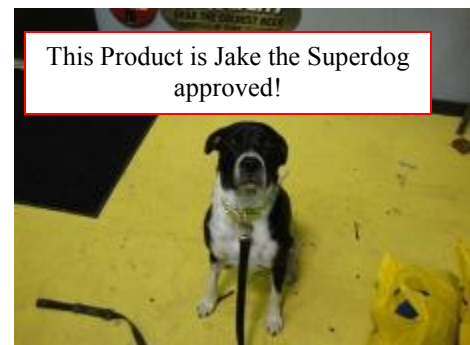
Installing the DDMWorks short shifter (continued)

1. With the short shifter rod ready to install, you will want to make sure that the small plastic bushing at the end of the shifter is nice and level, then slowly start lowering it into the cavity that the stock shifter came out of. Since the car is in neutral, the hole that the bushing needs to go into is straight down. If you have a flashlight you can look down and see it. While lowering the shifter into position if it touches anything, the small bushing will kick to the side and not go into the transmission. It may take a couple tries, but eventually the short shifter will drop into position. When it is all the way down, it will sit pretty flush with the piece that had the 2 pins in it that was just installed. The small black spring will sit a little higher and that is normal. Next find the small plate that was removed from the stock shifter and it will go on top of the shifter mechanism now.
2. The small plate that is being reused will be installed upside down, with the edges facing up. Then using the longer bolts supplied in the kit, use the 5mm allen key and tighten down the 4 bolts to secure the new shifter in place.
3. Next, find the small rubber boot that was removed and place it over the short shifter and over the small plate that was just installed.
4. Lastly, put the white insulation back over the shifter, then slide the shift knob assembly over the shifter and tighten down the 3/16" bolt to secure it in place.
5. Line the shifter ring up in the back and snap it back into place and you are done!

Congratulations! You have finished the install. All of us here at DDMWorks thank you for your purchase and hope you enjoy your new short shifter.

If you have any questions feel free to give us a call or text us at 864-907-6004. You can also email us at Tech@ddmworks.com.

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