

Alarm When Backing Out of Garage



The new C7 Stingray is 73.9 inches wide versus 72.6 inches for the C6. Note: That does not include mirrors which are 82 5/8 inches tip-to-tip for the C6. Measuring the our crystal Red, Z51 C7 mirror tip to tip shows it is 85 inches or 2 3/8 inches wider. Pulling the C6 into what is referred to as an 8 foot wide garage door required some

caution. The C7 requires even more!

Garage:

Our 3 car garage has individual 8 foot wide overhead doors, measuring 93.5 inches between the moldings. That leaves 4 1/4 inches on either side of the C7 – if it is perfectly straight when pulling in. However the Vette requires backing up to get close to 90 degrees, providing even less clearance.

Pulling in at Night:

During the day, pulling into the garage should not be a problem, but more care will be needed at night. Using a convex mirror, a spot light and a laser parking assist, a visibility aid was constructed. Details are available at: http://NetWelding.com/Narrow_Garage_Device.pdf

Backing Out – A Simple Alarm:

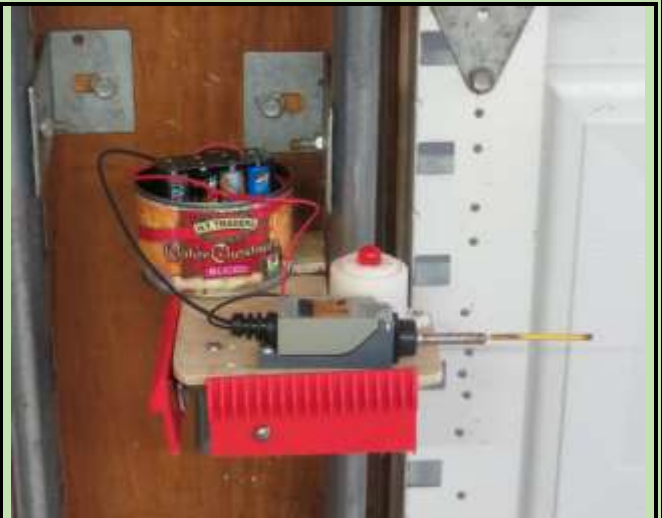
Having successfully followed the Andy Grove philosophy of, “Only the Paranoid Survive”, I thought pulling out of the garage might still be a problem. This is especially true at night! Best to plan and manage the possible problem, especially if the cost is small. A simple alarm was built to warn if the passenger side mirror was getting too close to the door edge as the car exits. It might be useful only 1 in 1000 times, however a damaged mirror would cost far more than this >\$20 device!

The following is a step by step picture summary of what was built.

Photo Sequence

This photo is of the final assembled device that utilizes a limit switch, a 100 dB alarm with a flashing light and a battery pack. It is mounted near the garage door track in the passenger side. It is low cost, simple to assemble and works great!

The red plastic is just a border to make it more visible so it is less likely someone (including me!) will inadvertently walk into the device.



The first step was to build a platform to hold the limit switch, alarm and battery pack. A piece of $\frac{1}{4}$ inch plywood was cut to the shape required. A metal "L" bract was attached to the platform and then screwed into the wood panel between the doors.



The limit switch selected is a model TZ-8169, a SPDT switch that has a thin, 0.050 inch diameter, 2 inch long probe wound into a spring that is $1\frac{1}{4}$ inches long before entering the switch. It has both normally closed and normally open terminals. The device only uses the normally open contacts which close if the probe is touched by a mirror.

It was purchased for under \$8 on EBay.



To assure the metal probe does not scratch the mirror, if it ever hits, it was first dipped in liquid plastic. Then a piece of yellow vinyl shrink tubing was placed over the coated wire, extending $\frac{1}{8}$ inch past the end. A heat gun secured it to the coated probe.

This shows the limit switch and platform mounted to the rear wood panel. It was decided to have the probe end 2 inches past the edge of the door molding. Another set of holes was drilled to reposition the switch if decided later. In addition, since it mounts with screws to the wood panel it can be adjusted by moving the "L" bracket. When the C7 arrives it will be positioned with the probe centered on the mirror.



A 100 dB, 12 volt alarm, with a flashing red indicator light, was purchased on ebay for under \$7. The sound is a warble and is readily heard over any engine noise. A quick look to the right while pulling out of the garage will also show a flashing light if getting too close to the edge. The probe remains activated as it bends and until any force is removed.



To supply the 12 volts needed for the alarm buzzer, a holder for 8 AA batteries is used. It was less than \$4 on ebay.

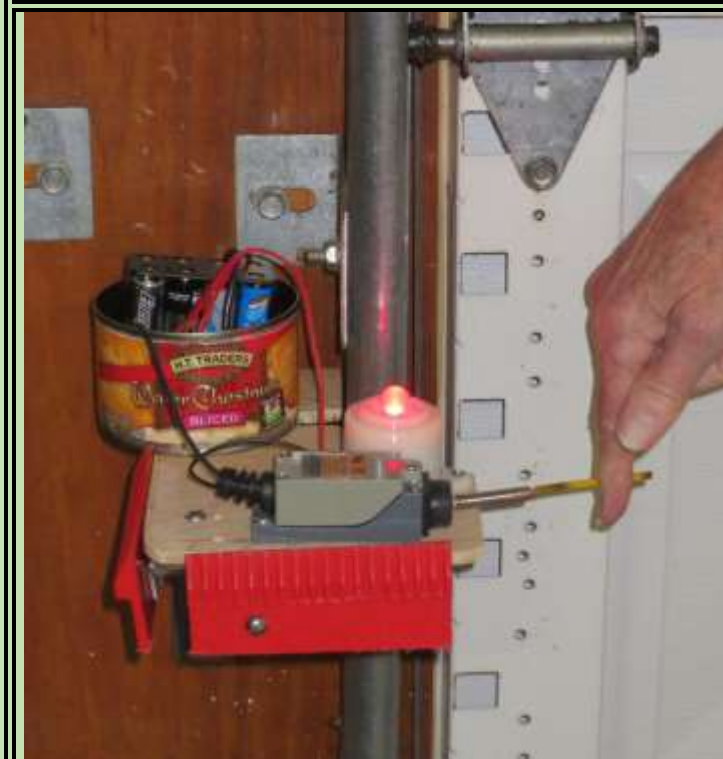


Needed a simply way to hold the battery pack so they could be easily removed when requiring replacement. Have always liked Andy Warhol's Campbell Soup Can pictures so why not use a low height, vegetable can! Opened it with a deseamer so the edges were smooth.



This is the finished assembly with the battery pack in the “vegetable can” holder screwed to the platform! Not quite an Andy Warhol picture but it works. The battery pack can be removed when needed, which hopefully will be seldom.

Since the assembly is at waist height wanted to be sure it was not inadvertently bumped by someone passing. Some red plastic borders makes it more visible.



When the limit switch is pressed the alarm and flashing light are energized. You can see the light in this photo. If the warbling sound doesn’t get your attention the flashing red light will—especially at night. Frankly nighttime is when the extra precaution may come in handy for that once in a thousand occurrence as I get more complacent about pulling the C7 out of the garage! The \$20 cost is 30 times less than a mirror repair!

Other Stingray PDF's Available:



Some 37 items discuss improvements or information about the Stingray function and/or esthetics. Some are minor and others, like the genuine carbon fiber side skirts, include detailed install information.

Below are the PDF's available. Click on picture (may need Ctrl pressed.) Or just copy and paste the PDF info (Blue type) into your browser. Or email me at GUttrachi@aol.com and state the title desired, shown in Yellow:

Rusty C7 Muffler

Why the C7 muffler is rusted and a simply way to make rust turn matte black.

Bottom pic rusted, top pic treated

http://netwelding.com/Muffler_Rust.pdf



Change C7 Oil

WHY change your own oil and HOW to do it

Revised, includes C7 Lifting Methods

http://netwelding.com/Changing_Oil.pdf



Latch Hatch

Window Valet Helps 2014/2015 Latch

Includes M7 Crazy Seat Memory Recall

http://netwelding.com/Hatch_Latch.pdf



C7 Carbon Fiber Side Skirts

How to install side skirts with jacking information for DIY's without lifts

http://netwelding.com/Side_Skirts.pdf



Carbon Fiber Splitter w/End Plates

How to install Splitter & Nylon bra fit

http://netwelding.com/CF_Splitter.pdf



Removing GM Plastic Film

How To Remove The Rocker Panel Film

http://netwelding.com/Rocker_Panel_Film.pdf



C7 Mirrors 2 3/8" Wider Than C6

Device assists with 8 foot garage door

http://netwelding.com/Narrow_Garage_Device.pdf



Mirror Proximity Alarm

Limit switch alarm warns when passenger mirror is too close to door frame

http://netwelding.com/Mirror_Proximity_Alarm.pdf



Making Jacking Pads for C7

Jacking Pads must 2 1/2 inch max OD. Made four. Also Hockey Puck pad and 2 1/2 inch OD x 2 inch high pads bought after installing side skirts.

http://netwelding.com/Jacking_pads.pdf



C7 Radar Power

The C7 cannot tap the mirror or sun visor for power !

http://netwelding.com/Radar_Detector_Power.pdf



C7 Belt Rattle

Passenger seat belt rattles against the seat back. The solution, add a shoulder belt pad.

http://netwelding.com/Eliminate_Rattle.pdf



Aluminum C7 Chassis and Weld Repair

The C7 has an all aluminum chassis, made from 117 welded pieces

http://netwelding.com/Aluminum_Chassis.pdf



Carbotech Ceramic Brake Pads

The Z51 has very dusty brakes. These pads help!

http://netwelding.com/Ceramic_Pads.pdf



C7 License Plate Frame;

Must Meet South Carolina Law

http://netwelding.com/License_Plate_Frame.pdf



Manage C7 Spilled Gas

Protect the side of the C7 when filling up with gas

http://netwelding.com/Manage_Spilled_Gas.pdf



C7 License Plate & Cargo Lights

LED license plate light & cargo area bulbs are brighter and whiter

http://netwelding.com/License_Plate_Light.pdf



C7 Rear Cargo Area

Rear cargo area needs storage device and rear protector

http://netwelding.com/Rear_Cargo_Area.pdf



C7 Door Panel Protector

protector plate added to prevent scuffing of door when exiting

http://netwelding.com/Door_Panel_Protector.pdf



C7 Improved Cup Holder

A solution to the cup holder spilling under hard braking or sharp turns.

http://netwelding.com/Improved_cup_Holder.pdf



C7 Wheel Chatter/Hop

Why sharp, low speed turns with cold tires causes the front tires to chatter/hop.

http://netwelding.com/Wheel_Chatter.pdf



Carbon Fiber Grille Bar

Install genuine carbon fiber grille bar overlay

http://netwelding.com/CF_Grille_Bar.pdf



Jacking a C7 Vette

Safely jacking either front only or back and front

http://netwelding.com/Jacking_A_C7.pdf



Deer Whistle Installed on C7

Do they work? Plus Install Info

http://netwelding.com/Deer_Whistle.pdf



C7 Battery Issues

Even after using a GM type charger and showing fully charged, voltages were still low!

http://netwelding.com/Battery_Issues.pdf



C7 Splash Guards

GM offers splash guards for the C7 Corvette. An easy DIY installation.

http://netwelding.com/Splash_Guard.pdf



C7 Blind Spot Mirror

Smaller rear and side windows cause C7 blind spots. Small "blind spot mirrors" help

http://netwelding.com/Blind_Spot.pdf



C7 Skid Pad Protector

After the air dam, the aluminum "skid pad" hits driveway ramps etc. Plastic protector helps.

http://netwelding.com/Skid_Pad_Protector.pdf



C7 Wheel Locks

Wheel locks, torqued to required 100 ft-lbs, help protect your expensive wheels from theft.

http://netwelding.com/Wheel_Locks.pdf



C7 OnStar Lights

The OnStar LED's in the rear view mirror, at a quick glance, look like a police car flashing light! This is a fix.

http://netwelding.com/OnStar_Lights.pdf



C7 Skip Shift Eliminator

Skip Shift Eliminator install with suggestions on jacking a C7.

http://netwelding.com/Skip_shift_Eliminator.pdf



C7 Catch Can & Clean Oil Separator

Direct inject engines like the LT1, are particularly subject to "coking." What is Coking and how to reduce the potential?

http://netwelding.com/Catch_Can.pdf



C7 Round Shift Knob

A round shift knob shortens throw.

http://netwelding.com/Shift_Knob.pdf



C7 Stingray Sill Plate

Stingray sill plate replaces original.

http://netwelding.com/Sill_Plate.pdf



C7 Nylon Bra

Nylon Bra Stops Bugs on Front and Grill.

http://netwelding.com/Nylon_Bra.pdf



C7 Clutch Fluid Change

Clutch fluid after 3000 miles gets dirty

http://netwelding.com/Clutch_Fluid.pdf



Carbon Fiber Hood Vent

Replaces Plastic Hood Vent

http://netwelding.com/Hood_Vent.pdf



Cold Air Intake

Low Restriction Air Filter & Duct

http://netwelding.com/Cold_Air_Intake.pdf



May Be Of Interest:

Engineering a ProStreet Rod

*How Our '34 ProStreet Rod Was Designed and Built
8.2 Liter Engine, 4 Wheel Disk Brakes & Coilover*

<http://netwelding.com/Engineering%20Street%20Rod%203-08.pdf>

