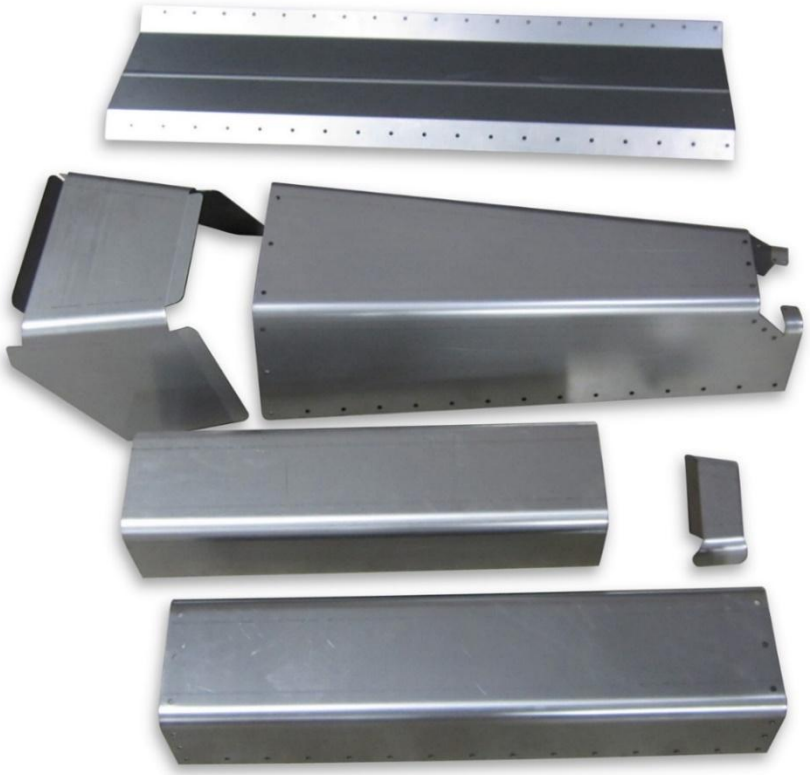
# Instruction Guide

Extreme Transmission Tunnel Cover 9919-441
55-57 Tri-5



Speedtech PERFORMANCE

CHASSIS - SUSPENSION - PRO TOURING - AUTOCROSS - DRAG RACING - CUSTOM BUILDS

435.628.4300 SPEEDTECHPERFORMANCE.COM

4160 S. RIVER RD, ST. GEORGE, UT 84790


*Figure 1: 1955 Bel Air features our Extreme transmission tunnel [photo by Tony Phillips]*

Congratulations on your purchase of the new Speedtech Performance Extreme transmission tunnel. Use only approved, appropriately rated jack and jack stands, and take all required safety precautions to complete the job safely and correctly. If you have any uncertainties, seek the assistance of a highly qualified workshop.

Read and understand all instructions thoroughly before you begin. Your main assembly and setup of your new Extreme transmission tunnel can be done in a home garage with hand tools and basic welding equipment.

Speedtech enjoys seeing the progress our customers are making as they work through their builds. Join the group Team Speedtech on Facebook and share your pictures and story.

Speedtech Performance wishes you the best with your project!

# TABLE OF CONTENTS

# 1.0 GENERAL INFORMATION

**Back to Table of Contents**

## 1.1 THIS GUIDE

Thank you for purchasing your new Speedtech Performance Extreme transmission tunnel. Read all instructions thoroughly before beginning, and take all required safety precautions to work safely and correctly. If you are uncertain, seek assistance from a highly qualified workshop.

The following instructions are intended for professional installers and are guidelines only. Speedtech Performance assumes no responsibility for the installation of any of its products installed by others. All products are intended to be installed by qualified professionals.

While Speedtech's Extreme suspension systems are safer and more comfortable compared to factory suspension on the street, they are also designed to meet the needs of those intending to participate in off-highway road races and autocross competitions. To maximize the benefit from our system, you should expect to adjust and tune the suspension to achieve the optimum. performance specific to the vehicle, driver, and type of racing. Some of this, such as tuning sway bars and shock settings, can be done trackside by making adjustments and seeing or feeling how the car responds. Speedtech recommends that a tire-probe pyrometer and an air pressure gauge be included in your trackside kit.

Other adjustments, such as tuning a bump steer and caster, may require specialized equipment. and professional help. Speedtech's technical department can share insight on making these. adjustments to help get you started.

## 1.2 OVERVIEW

These instructions outline the Extreme transmission tunnel. Photos in the instruction process may vary slightly from your exact setup, as this has been designed to work with the Extreme Speedtech Performance subframe or chassis. For example, in this guide, Speedtech has used only pictures of the Tri-5 transmission tunnel. Your application may have a slightly different shape; the part is functionally the same and is installed in the same manner described.

### 1.3 TOOLS

Installation of the Speedtech Performance Extreme transmission tunnel can be done on the floor with a basic welder, power tools, and simple hand tools.

You will also need two small pieces of 16-gauge scrap. sheet metal (step 5) and seam sealer. You will be required to drill some holes, one in the floor for transmission clearance and another in the tunnel cover for the shifter. If you are unsure of how to use the tools and materials or carryout the work required to install this cover, stop and seek a professional installer's help.

Additional things to have before you start:

- Welder
- Drill
- Grinder
- Floor Stands
- Floor Jack
- Hammer and Dolly

**FITMENT NOTE:** This tunnel cover has been designed around the T56 Magnum aftermarket transmission and its associated shifter locations. Some factory OEM transmissions put the shifter in different locations. For example, the Viper, '98-02 Camaro, GTO, etc. Some adjustments or modifications to the tunnel and/or tunnel cover may be required in those cases. For your convenience figure 11 is a diagram of all the tunnel measurements.

## 2.0 CHECK IN PARTS AND HARDWARE

**Back to Table of Contents**

### 2.1 CHECKING IN THE ORDER

Check in your order as soon as possible. To check the order, Speedtech has provided a table that can serve as a checklist, as shown in Figure 2. All bolts and nuts are NF unless otherwise noted. Hardware comes in several boxes. If you discover anything missing from your order, call your authorized dealer as soon as possible.

### 2.2 CHECK IN TABLE

| X | # | Description | Size |
|---|---|---|---|
| | 1 | Transmission Tunnel | T-56 |
| | 1 | Body Transition | |
| | 1 | Transmission Tunnel Cap Piece | |
| | 2 | Floor Tunnel Piece | |
| | 1 | Trunk Tunnel Piece | |

*Figure 2: Check in table with amounts, descriptions, and sizes*

# 3.0 GETTING STARTED

**Back to Table of Contents**

## 3.1 LEVELING AND SUPPORT

**WARNING:** The vehicle should be on a level surface before you start.

Jack up the vehicle and properly support the frame, then remove the front wheels. For cars with drop-off style rotors, reinstall one lug nut if needed to prevent the rotor from falling off.

## 3.2 DISCONNECT BATTERY

It is best to disconnect the battery because you will be cutting and welding on the car's floor and tunnel.

## 3.3 CARPET REMOVAL

Although not completely necessary, Speedtech has found it is easiest and safest to remove the carpet from the car to perform this installation.

## 3.4 FLOOR CUTTING

Before installing your Extreme Chassis in your car, you will need to remove a portion of the transmission tunnel, as the chassis crossmembers and transmission case will be taller than the factory tunnel. Completely assemble the chassis with the engine, transmission, driveline, and rear axle in place.

**NOTE:** We suggest you have the headers on the engine so you can adjust the transmission tail shaft height to match the header-to-floor clearance. This will also give you your end shifter height. With this height, you can adjust the final installed height of your tunnel cover.

# 4.0 CUTTING AND MOCK UP

**Back to Table of Contents**

## 4.1 TRANSMISSION TUNNEL MOCK UP

Mock up the front bell housing portion of the tunnel cover against the firewall, and the second cover piece against the first, overlapping the laser-cut flaps.

Trace the bottom edge of the tunnel cover with a marker onto the transmission tunnel, then remove the cover pieces.

Move 4" inward from your marker lines on each side and draw parallel lines; these will be your cut lines. *Remove the section of the tunnel at the new lines.

**NOTE:** The horizontal cut lines in Figure 3 will help you bend the tunnel upwards to meet the sides of the cover. Removing this section should allow enough room for the transmission to extend up through the transmission tunnel. Depending on which transmission you are using, further trimming may be necessary. Remember to double-check that you have enough sheet metal to attach the tunnel cover to the tunnel later. It is better to cut too little rather than too much initially. Once you have the tunnel cover mocked up and properly located, you can hammer and dolly the floor and tunnel to better match the tunnel cover's vertical sides.

**NOTE (before you begin cutting):** The transmission tunnel is a structural part of the car's body. Modifying a vehicle's structural integrity may make the body flimsy and prone to shifting. Speedtech recommends installing temporary bracing to hold the car's shape. For example, from the front kick panel area to the base of the transmission tunnel and the rear seat side panel area to the base of the tunnel, before cutting out the portion of the trunk, add bracing from the package shelf to the trunk floor. The installer should be able to make a good judgment of how and where to do this.

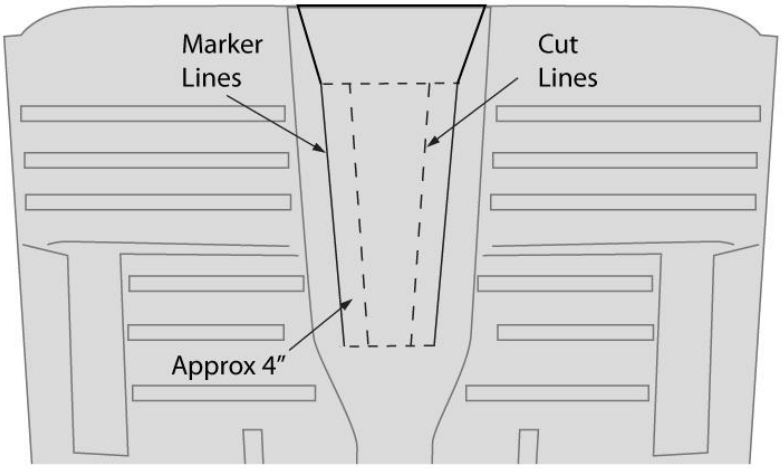
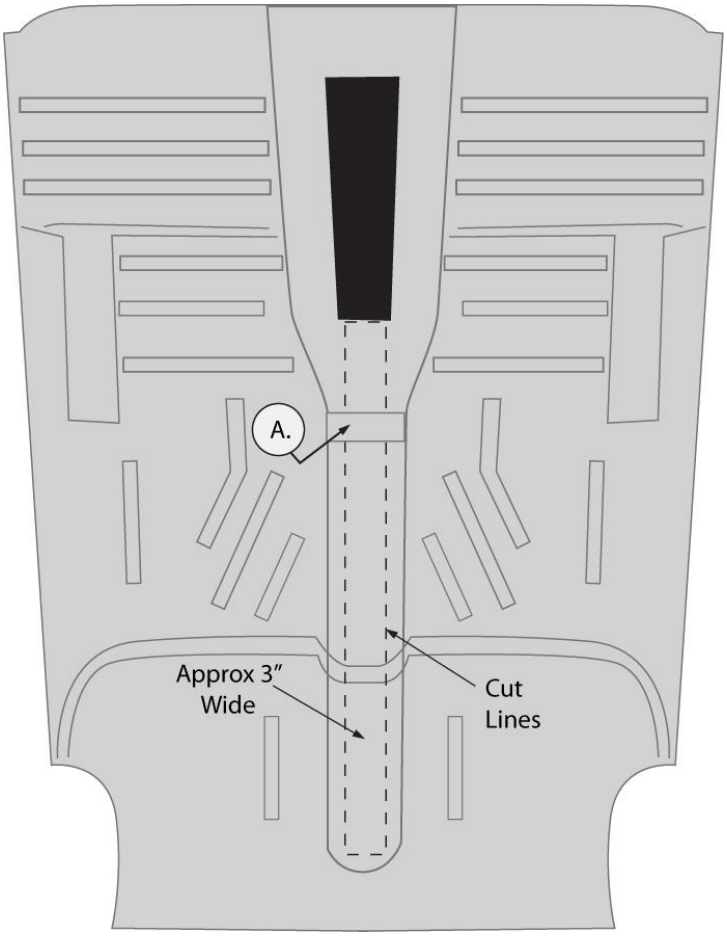



*Figure 3: Marker and cut lines*

## 4.2 FLOOR TUNNEL MOCK UP

With the front portion cut out, proceed to remove the top of the rest of the tunnel, cutting out an approximately 3" wide strip, front to back. You must do this to allow the chassis crossmembers to rise above the floor when the body is placed on the chassis. About mid-floor, there is a cross brace **(A.)** that the factory e-brake lever attaches to, as presented in figure 4. At this time, do not cut through this crossmember to help maintain floor pan stability. You will remove this crossmember later in the installation. You will cut through the rear crossmember at the rear seat at this time, as presented in Figure 4.

*Figure 4: Cutting through the rear crossmember at the rear seat*




Find the final location for the engine and transmission fitment within the car's frame. When installing the engine and transmission, Speedtech suggests installing the headers so you can adjust the transmission tail shaft height to match the header-to-floor clearance. We have found that a driveshaft angle of 1.5-2 degrees works best on the Extreme chassis. Adjust the engine/transmission angle with proper header clearance and drive shaft angle; this will give you the end shifter height.

**NOTE:** Observe how much higher the Extreme chassis crossmembers are above the floor. After removing the top of the tunnel, vertically "peel back" the metal to match the sides of the tunnel cover, as shown in Figure 5.

*Figure 5: Tunnel cover sides*

## 4.3 TRUNK MOCK UP

The vertical forward edge of the cove in the trunk will interfere with the chassis-raised rear frame rails and must be removed. A large flat panel has been included in your kit to patch this area. Place the flat rear panel portion of the tunnel cover kit in the trunk, centered between the rear wheel wells. You may need to trim the panel to fit between the widened mini tubs.

Trace the entire perimeter of the panel with a marker to define the outer edge. Move inward of those lines about 1" on all sides and draw cut lines parallel to your panel outline. Remove this portion of the trunk floor at your cut lines.


*Figure 6: Trunk mock-up*

## 4.4 UPPER SHOCK MOUNT

Cut out the upper trunk shock mounts as seen in Figure 7. Next, remove the spare tire well. You can use leftover flat scraps to patch the shock mount holes. For the spare tire well, you can purchase a patch kit or a full flat trunk floor pan from Tri-5 restoration parts suppliers.

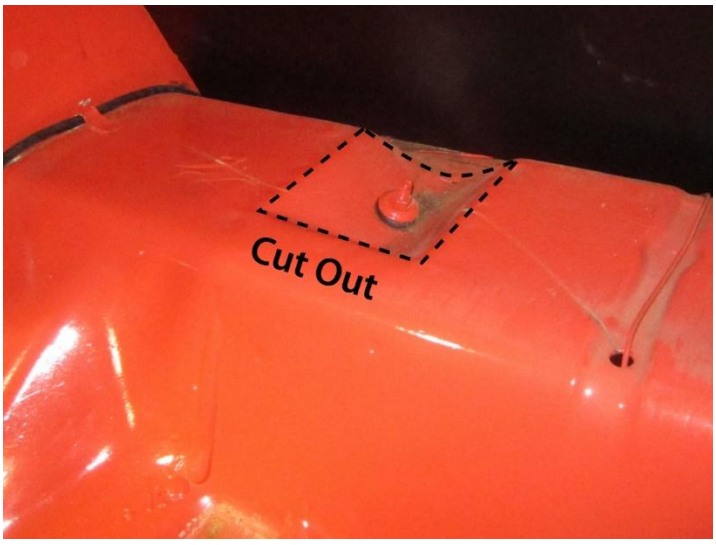



*Figure 7: Upper shock mounts*

### 4.5 BODY MOCK UP

With the floor pan and trunk now clear, place the body on the chassis for test fitting, trimming, and shaping the open areas as needed. You may need to cut out a portion of the front bell housing area for more clearance, depending on which transmission you are using, or if you are also installing our part number 81511 smooth firewall kit. With the body bolted down to the chassis, you can now cut out the remaining factory mid-floor cross member **(A.)** from step 4.2.

## 5.0 FINAL INSTALLATION

**Back to Table of Contents**

### 5.1 ATTACHING

With all sections of the tunnel cover in position, affix the tunnel cover and rear trunk panel permanently to the floor. Several methods could be used, including sheet metal screws, rivets, and welding. Speedtech recommends welding for the best seal and structural integrity. Even with welding, it is recommended to seam-seal where each tunnel cover section meets and at all points where the cover and floor meet. Speedtech also recommends covering the underside with undercoating, quality paint, or other weatherproof coatings.

*Figure 9: Cover mocked up*

Figure 9 shows the complete cover mocked up in place. Some trimming of the overall length may be required.

**NOTE:** Observe the temporary structural bracing.

### 5.2 SEAM SEALING

With the cover properly and securely fastened to the floor, be sure to seam seal all areas on top and underneath where the tunnel cover meets the floor.

### 5.3 COVERING

Cover your tunnel cover as needed. Speedtech recommends splitting and securing the vacuum tubing around the shifter hole's diameter to prevent the metal edge from gouging the transmission's rubber shifter boot. Since the cover design is fairly low, it will easily accommodate a custom center console.

## 6.0 CONGRATULATIONS

**Back to Table of Contents**

Congratulations on completing your project! We know you will get many years of enjoyment from your project. Please join the Team Speedtech group on Facebook. Team Speedtech is a community of customers, dealers, and factory employees who are passionate about pro-touring muscle cars and use Speedtech Performance products. You can ask questions, get advice from group members, and share your experience. Everyone enjoys seeing the videos and pictures as your project progresses, and Speedtech encourages you to share them!

Thank you for choosing Speedtech Performance and entrusting us with your tunnel cover for your custom muscle car.

Speedtech Performance, LLC
4160 S. River Rd.
St George, UT, 84770
(435) 628-4300