

# Steeda S550 Mustang Race Differential Bushing Insert System - Aluminum

Installation Instructions For Part:  
555-4440



## **Tools Needed**

1. 18mm socket and ratchet
2. 7/8" socket and ratchet
3. 21mm socket
4. 13mm socket
5. Blue Loctite

## **Installation**

**Note:** This kit comes with billet aluminum inserts. They will greatly increase NVH. These are considered a hardcore racing part. Designed for track use only as they will greatly increase NVH. These will eliminate any amount of differential movement.

## **Positioning and Support**

1. Lift and support the car, by the chassis on a vehicle lift, or on jack stands. Do not place the jack stands underneath the rear subframe.
2. Once the car is supported, place a jack underneath the front of the subframe, to support it independently from the car.

## **Additional Clearance**

1. For additional clearance, remove the two exhaust hanger bracket bolts and allow the exhaust to droop.

**Note:** If you have an aftermarket exhaust, it is recommended that you unbolt and remove it from the IRS assembly in order to allow additional clearance to install the IRS Differential Bushing inserts.

## **Rear Bushing Installation**

1. To install the rear IRS differential bushing, you must loosen the two rear 21mm bolts that hold the subframe in place.

**Note:** You can only completely remove these two rear 21mm subframe bolts if the front subframe brackets and bolts are securely fastened. This is to prevent misalignment of the subframe.

2. Doing one side at a time, remove the factory differential 18mm bolt. On some cars a damper is installed onto this bolt, it must be removed. *Figure 3.*
3. Once the bolt is removed, install the aluminum bushing with the provided large washer. *Figure 4, 5 and 6.*
4. Install the bushing into place where the 18mm factory bolt was removed. *Figure 5.*
5. Apply grease to the 7/8" (head) 14mm x 110mm long bolt to install the rear bushing in the rear with blue loctite and apply grease. *Figure 5 and 6.*
6. Torque the 110mm long bolt to 129 ft-lbs.
7. Repeat steps 2 through 6 on the other side.
8. Tighten the factory 21mm subframe bolts to 129 ft-lbs.

### **Front Bushing Installation**

1. Locate the main subframe bolts (blue, 21mm hex head bolts). Remove the two front bolts and four 13mm hex head bolts (two per side) securing the front subframe support bracket to the chassis allowing the subframe to drop down in the front.

**Note:** If more clearance is needed, loosen the rear subframe bolts, but do not remove them completely.

2. With the IRS drooped down you can now remove the front differential bolt. *Figure 7.* Remove only one at a time. **You're removing one factory bolt and replacing it with two new bolts.**
3. Remove the 18mm bolt completely. *Figure 7.*
4. Then install the included 7/8" (head) 14mm x 65mm long bolt and 7/8" washer with blue loctite from the rear towards the front, in the same manner the stock bolt was. *Figure 8 and 9.*
5. Torque to 129 ft-lbs.
6. Fit the bushing into place from the front side of where the original factory differential bolt was located.
7. Rotate the bushing so the grooves match the factory bushing and apply some grease to allow the bushing to slide into place with less resistance.

**Note:** Grease is included for ease of installation only and is not required for operation.

8. Bolt the front bushing into place with the provided 7/8" (head) 14mm x 35mm long bolt and washer with loctite. Torque to 35 ft-lbs. *Figure 10 and 11.*
9. Repeat steps 3 through 8 for the other side front differential bolt.
10. Once both front IRS differential bushings are installed, tighten back up the subframe support bracket plate and subframe bolts. Torque the 21mm main subframe bolts 129 ft-lbs and the 13mm bolts to 41 ft-lbs. Then reattach the factory exhaust brackets.



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7



Figure 8



Figure 9

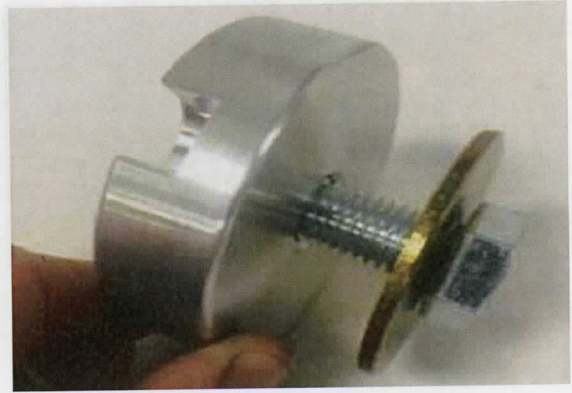


Figure 10

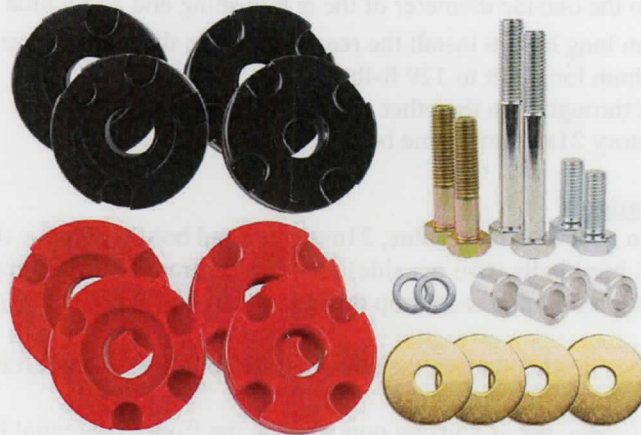


Figure 11



# Steeda S550 Mustang Adjustable Differential Bushing Insert System- Urethane

Installation Instructions For Part:  
555-4439



## Tools Needed

1. 18mm socket and ratchet
2. 7/8" socket and ratchet
3. 21mm socket
4. 13mm socket
5. Blue Loctite

## Installation

**Note:** This kit comes with two separate yet complete sets of bushings, one black and one red. The black performance bushings are stiffer and are 90 durometer. The red street bushings are softer and are 80 durometer. Using either will greatly reduce and slow down the amount of differential movement.

## Positioning and Support

1. Lift and support the car, by the chassis on a vehicle lift or on jack stands. Do not place the jack stands underneath the rear subframe.
2. Once the car is supported, place a jack underneath the front of the subframe, to support it independently from the car.

## Additional Clearance

1. For additional clearance, remove the two exhaust hanger bracket bolts and allow the exhaust to droop.

**Note:** If you have an aftermarket exhaust, it is recommended that you unbolt and remove it from the IRS assembly in order to allow additional clearance to install the IRS Differential Bushing inserts.

## Rear Bushing Installation

1. To install the rear IRS differential bushing, you must loosen the two rear 21mm bolts that hold the subframe in place.

**Note:** You can only remove these two rear 21mm subframe bolts if the front subframe brackets and bolts are securely fastened. This is to prevent misalignment of the subframe.

2. Doing one side at a time, remove the factory differential 18mm bolt. On some cars a damper is installed onto this bolt, it must be removed. *Figure 4*
3. Once the bolt is removed, install the urethane bushing with the provided large washer. *Figure 5, 6, 7 and 8*
4. First insert the shorter billet aluminum spacer into the rear urethane bushing and then install the bushing into place where the 18mm factory bolt was removed. *Figure 5*
5. Apply grease to the outside diameter of the rear bushing and apply blue Loctite to the 7/8" (head) 14mm x 110mm long bolt to install the rear bushings in the rear. *Figure 5 and 6*
6. Torque the 110mm long bolt to 129 ft-lbs.
7. Repeat steps 2 through 6 on the other side.
8. Tighten the factory 21mm subframe bolts to 129 ft-lbs.

### **Front Bushing Installation**

1. Locate the main subframe bolts (blue, 21mm hex head bolts). Remove the two front bolts and four 13mm hex head bolts (two per side) securing the front subframe support bracket to the chassis, allowing the subframe to drop down in the front.

**Note:** If more clearance is needed, loosen the rear subframe bolts, but do not remove them completely.

2. With the IRS drooped down you can now remove the front differential bolt. *Figure 9*. Remove only one at a time. **You are removing one factory bolt and replacing it with two new bolts.**
3. Remove the 18mm bolt completely. *Figure 9*.
4. Then install the included 7/8" (head) 14mm x 65mm long bolt and 7/8" washer with blue loctite from the rear towards the front, in the same manner the stock bolt was. *Figure 10 and 11*.
5. Torque to 129 ft-lbs.
6. Take the longer billet aluminum spacer and insert it into the front urethane bushing. *Figure 12*.
7. Fit the bushing into place from the front side of where the original factory bushing and apply some grease to allow the bushing to slide into place with less resistance.
8. Rotate the bushing so the grooves match the factory bushing and apply some grease to allow the bushing to slide into place with less resistance

**Note:** Grease is included for ease of installation only and is not required for operation.

9. Bolts the front bushing into place with the provided 7/8" (head) 14mm x 35mm long bolt and washer with Loctite. Torque to 35 ft-lbs. *Figure 13*.
10. Repeat steps 3 through 9 for the other side front differential bolt.
11. Once both front IRS differential bushings are installed, tighten back up the subframe support bracket plate and subframe bolts. Torque the 21mm main subframe bolts to 129 ft-lbs and the 13mm bolts to 41 ft-lbs. Then reattach the factory exhaust brackets.



Figure 1



Figure 2



Figure 3

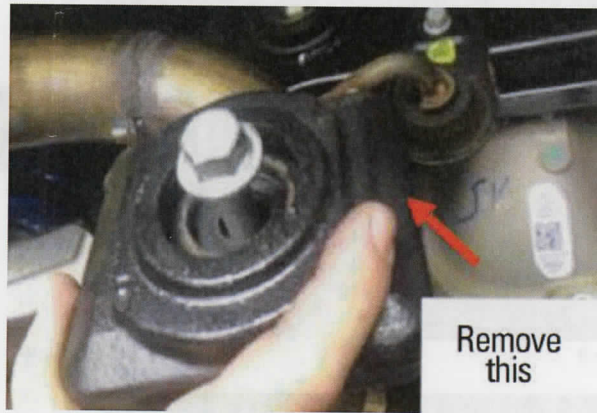


Figure 4



Figure 5



Figure 6



Figure 7

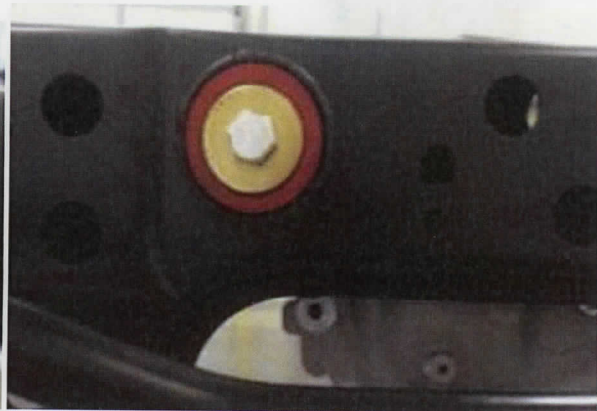


Figure 8



Figure 9



Figure 10



Figure 11



Figure 12



Figure 13