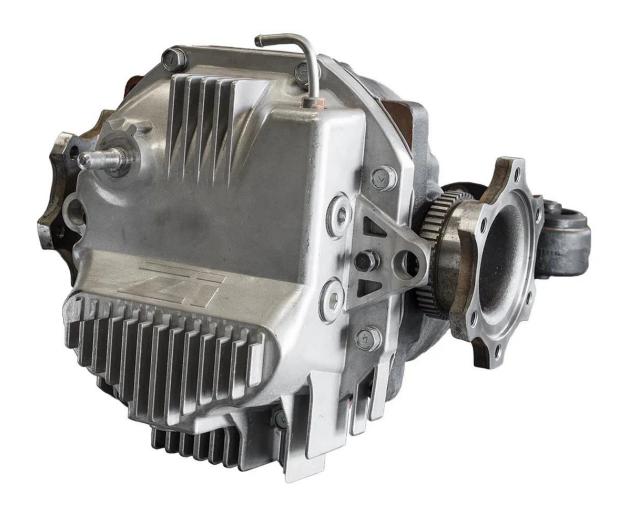


### ZI DIFFERENTIAL BREAK IN PROCEDURE



#### PROLOGUE:

Study these instructions completely before proceeding to assembly. The installer must have a thorough knowledge of automotive systems operation. If unfamiliar with any of the concepts outlined in this instruction, we recommend the installation be completed by a qualified professional.

#### WARNING!

Extreme caution should be taken when performing maintenance or performance upgrades to your vehicle. Please observe and abide by any Warning or Caution labels placed on the various components and tools used when servicing your vehicle. If you have any questions regarding installation or the various components included with the Z1 Motorsports Differential Break In Procedure, consult with a Professional Mechanic, or contact Z1 Motorsports for more information.

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The Procedure to break in your Built Differential will vary depending on your differential and choices for upgrade. Follow the Procedures below related to your Built Differential Options.

### **New Gear Ratio Break In:**

This Break In is for users who only changed the gear ratio of their differential.

#### PROCEDURE:

- 1. Install your differential into vehicle. Use the installation manuals on <u>This Page</u> for your Z1 Differential Cover and Differential Bushing Selections.
- 2. Fill Differential with Fluid until level with *Oil Fill Plug* hole. A <u>75w90 Differential Fluid</u> is recommended for street driving, while a <u>75w140 Differential Fluid</u> is recommended for Track use and Spirited Driving. Make sure to not overfill the differential, and use the proper fill port on the Z1 Differential Cover. *Figure 1*.

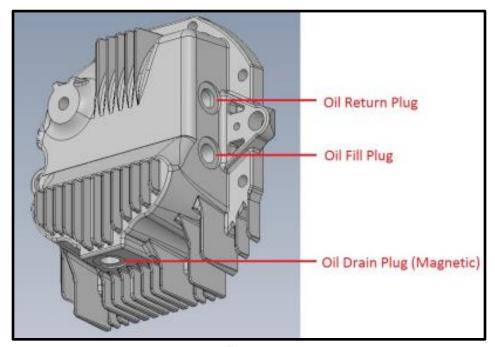


Figure 1

- 3. Drive your car normally for 500 miles. <u>DO NOT</u> drive aggressively.
- 4. Change Differential Oil. Refer to Step 2 for instructions if necessary.
- 5. Your Differential is now broken in.

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## New Gear Ratio + Z1 Street Pro Differential Break In:

This Break In is for users who changed the gear ratio of their differential and upgraded to the <u>Z1 Street Pro</u> <u>Differential</u>.

### PROCEDURE:

- 1. Install your differential into vehicle. Use the installation manuals on <u>This Page</u> for your Z1 Differential Cover and Differential Bushing Selections.
- 2. Fill Differential with Fluid until level with *Oil Fill Plug* hole. A <u>75w90 Differential Fluid</u> is recommended for street driving, while a <u>75w140 Differential Fluid</u> is recommended for Track use and Spirited Driving. Make sure to not overfill the differential, and use the proper fill port on the Z1 Differential Cover. *Figure 1*.

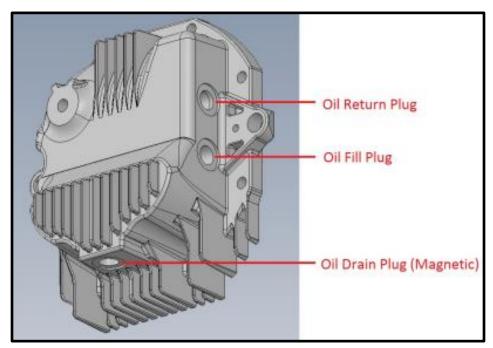


Figure 1

- 3. Drive your car normally for 500 miles. DO NOT drive aggressively.
- 4. Change Differential Oil. Refer to Step 2 for instructions if necessary.
- 5. Your Differential is now broken in.

## **Clutch Type Differential Break In:**

This Break In is for users who upgraded to a Clutch Type Differential.

### PROCEDURE:

- 1. Install your differential into vehicle. Use the installation manuals on <u>This Page</u> for your Z1 Differential Cover and Differential Bushing Selections.
- 2. Fill Differential with Fluid until level with *Oil Fill Plug* hole. A <u>75w90 Differential Fluid</u> is recommended for street driving, while a <u>75w140 Differential Fluid</u> is recommended for Track use and Spirited Driving. Make sure to not overfill the differential, and use the proper fill port on the Z1 Differential Cover. *Figure 1*.

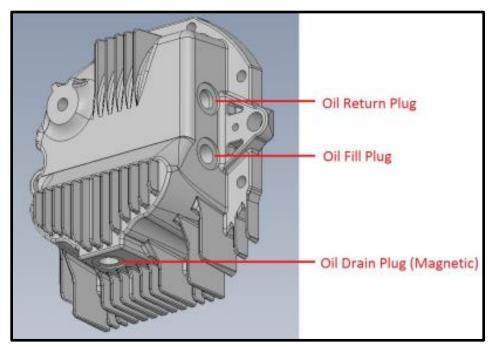


Figure 1

**NOTE**: Depending on the brand of Differential you purchased, the break in procedure may vary. Study and follow the instructions that the Manufacturer supply, or follow the steps below for the Z1 R200 Clutch Type Differential break in.

3. Drive the car normally for 30-45 minutes to heat up the differential.

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4. Drive in a Figure 8 pattern for 30 minutes as shown below. Turn the wheel to full-lock when turning (maximum steering angle). Accelerate up to at most 15mph when the car is straight, and coast when turning the car, with the clutch disengaged. You will hear some clunking and whining from the Differential when the clutches start working properly, this is normal. *Figure 2*.

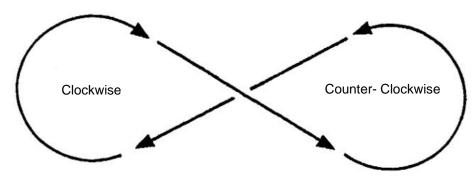


Figure 2

- 5. Allow the differential to cool with a short 15 minute drive.
- 6. Change Differential Oil. Refer to Step 2 for instructions if necessary.
- 6. Your Differential is now broken in.

## Clutch Type Differential + New Gear Ratio Break In:

This Break In is for users who upgraded to a Clutch Type Differential and changed to new Ring and Pinion Gears.

### PROCEDURE:

- 1. Install your differential into vehicle. Use the installation manuals on <u>This Page</u> for your Z1 Differential Cover and Differential Bushing Selections.
- 2. Fill Differential with Fluid until level with *Oil Fill Plug* hole. A <u>75w90 Differential Fluid</u> is recommended for street driving, while a <u>75w140 Differential Fluid</u> is recommended for Track use and Spirited Driving. Make sure to not overfill the differential, and use the proper fill port on the Z1 Differential Cover. *Figure 1*.

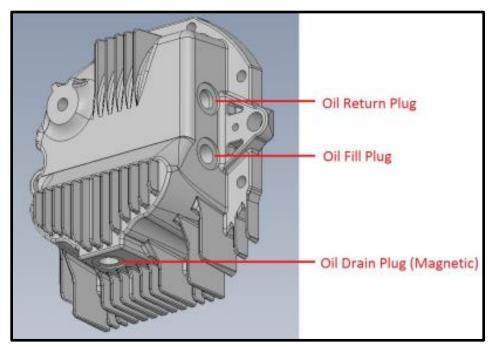


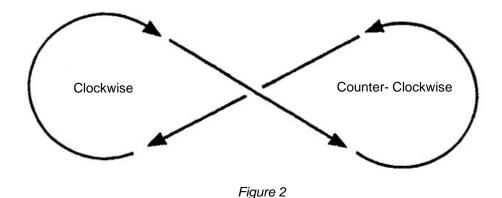
Figure 1

**NOTE**: Depending on the brand of Differential you purchased, the break in procedure may vary. Study and follow the instructions that the Manufacturer supply, or follow the steps below for the Z1 R200 Clutch Type Differential break in.

3. Drive the car normally for 30-45 minutes to heat up the differential.

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4. Drive in a Figure 8 pattern for 30 minutes as shown below. Turn the wheel to full-lock when turning (maximum steering angle). Accelerate up to at most 15mph when the car is straight, and coast when turning the car, with the clutch disengaged. You will hear some clunking and whining from the Differential when the clutches start working properly, this is normal. *Figure 2*.



- 5. Allow the differential to cool with a short 15 minute drive.
- 6. Change Differential Oil. Refer to Step 2 for instructions if necessary.
- 7. Drive another 400 miles normally to seat Ring and Pinion gears.
- 8. Change Differential Oil. Refer to Step 2 for instructions if necessary.
- 9. Your Differential is now broken in.

### **END**

#### **Additional Technical Support:**

Contact Z1 Motorsports at info@z1motorsports.com Or call 770-838-7777 between 9am and 6pm ET

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