

Name _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1) Explain how to determine the axle ratio without removing the housing cover.

2) Explain how to achieve proper drive pinion gear bearing preload.

3) What are three methods that may be used to determine the proper drive pinion gear depth.

4) Describe how to adjust the position of the ring gear to achieve the proper backlash.

5) Describe how to perform a ring gear tooth contact pattern test.

Answer Key

Testname: SHORT 130

- 1) After hoisting the vehicle, mark the rear tires and the drive shaft. Have an assistant hold one drive wheel and slowly rotate the other wheel exactly 10 revolutions. Multiply the drive shaft revolution by 2 and then, move the decimal point one place to the left to get the final ratio.
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- 2) To achieve proper drive pinion gear bearing preload, use an inch-pound torque wrench and measure the turning torque.
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- 3) Proper drive pinion gear depth can be determined by the wear pattern, markings on the pinion gear, or with a gauging set.
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- 4) Shims or adjusting collars are used to adjust the relationship between the ring gear and drive pinion gear to achieve the proper backlash.
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- 5) To perform a ring gear tooth contact pattern test, coat the ring gear with marking grease and apply a torque to the ring gear as an assistant rotates the pinion gear.
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