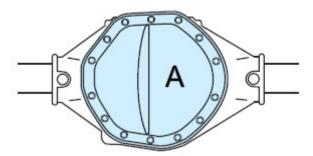
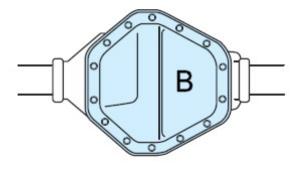
Manual Drivetrains	and Axles,	8th	Edition
Quiz 13B			

Name	
MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the quest	ion.
 1) Pinion depth is usually adjusted by A) Changing the thickness of a shim under the pinion bearing B) Adjusting the position of the ring gear C) Tightening the side bearing cap bolts D) Using a case spreader 	1)
 2) Backlash and carrier side bearing preload adjustments are made by A) Adding a shim behind the pinion shaft bearing B) Threaded adjusters or by changing shims C) Tightening or loosening the ring gear retainer bolts D) Using a case spreader 	2)
3) Pinion preload is being set on a pinion using a collapsible spacer. After tightening the pinion nut the preload exceeds the specification by 20 inch pounds. What should the technician do? A) Loosen the nut until the proper preload is measured B) Replace the spacer and repeat the adjustment C) Leave the nut in place, since the bearings will "wear in" D) Replace the bearings and start over	3)
 4) When removing and replacing a drive pinion seal, what should be marked before removing the pinion nut? A) Pinion flange B) Pinion nut C) Pinion shaft D) All of the above 	4)





- A) A only
- B) B only
- C) Either A or B
- D) Neither A nor B
- 6) The backlash exceeds specifications. The technician should position the ring gear _____. 6) _____
 - A) Closer to the drive pinion gear
 - B) Further from the drive pinion gear
 - C) Looser on the carrier
 - D) With less torque on the carrier bolts
- 7) Technician A says that if the backlash is okay, then the side bearing preload is also okay.

 Technician B says that a ring gear tooth pattern check will indicate if the drive pinion depth is correct. Which technician is correct?
 - A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician



- A) Backlash
- B) Pinion preload
- C) Side bearing preload
- D) Gear pattern
- 9) While checking a ring gear contact pattern it is noticed that the pattern moves from the middle towards the toe of the ring gear, once per revolution. Technician A says that is indicates ring rear runout. Technician B says that the pinion gear has runout. Which technician is correct?
- 9) ____

- A) Technician A only
- B) Technician B only
- C) Both technicians
- D) Neither technician
- 10) The drive pinion gear is installed with a shim that is too thick. What would this cause?
- 10) _____

- A) Pinion gear too close to the ring gear
- B) Pinion gear too far away from the ring gear
- C) Incorrect backlash
- D) None of these

Answer Key

Testname: MDA8_13B

- 1) A
 - Page Ref: 242
- 2) B
 - Page Ref: 247-249
- 3) B
 - Page Ref: 244
- 4) D
 - Page Ref: 236
- 5) B
 - Page Ref: 227
- 6) A
- Page Ref: 246-247
- 7) B
 - Page Ref: 246-249
- 8) A
 - Page Ref: 247
- 9) A
 - Page Ref: 250
- 10) A
 - Page Ref: 246