Front Suspension And Service
Chapter 113

ACROSS

1. At the end of many solid I-beam or tube axles are _________ that allow the front wheels to rotate for steering.

4. A ______ can also be used to help locate worn or defective suspension components.

7. A _______ _______ uses two control arms as well as a structural strut assembly.

9. Another name for an SLA suspension is the ___ suspension.

10. To control longitudinal support, a ______ is attached to each beam and is anchored to the frame of the truck using rubber bushings.

13. The two main links in a ___ suspension are the upper control arm and the lower control arm.

15. Early versions of the twin I-beam systems used kingpins, while later models used ball joints to support the suspension and spindle.

DOWN

2. Many load-carrying ball joints have wear indicators with a raised area around the grease fitting, called ________ ________.

3. ______ can be of several types, including a MacPherson.

5. Defective shock absorbers can cause ______.

6. A _______ front suspension is very strong and is still being used in the manufacture of medium and heavy trucks.

8. A _____-_____ front suspension was used for over 30 years on Ford pickup trucks and vans.

11. Some replacement control arm bushings have a higher ______ rating than the original.

12. Many GM front-wheel-drive vehicles use a MacPherson strut with a large-diameter spring seat area, this is called a _______.

14. Some ball joint studs have a slot or groove where a _________ is used to hold the ball joint to the steering knuckle.