

### THE BATTERY

1. The battery is the source of electrical energy for the vehicle.

2. It provides the initial surge of current to start the engine.

3. It maintains the electrical system voltage when the engine is not running.

4. It stores energy to power accessories when the engine is off.

5. It provides a ground for the electrical system.

6. It is connected to the positive (+) terminal of the alternator.

7. It is connected to the negative (-) terminal of the alternator.

8. It is connected to the positive (+) terminal of the starter motor.

9. It is connected to the negative (-) terminal of the starter motor.

10. It is connected to the positive (+) terminal of the ignition switch.

11. It is connected to the negative (-) terminal of the ignition switch.

12. It is connected to the positive (+) terminal of the horn.

13. It is connected to the negative (-) terminal of the horn.

14. It is connected to the positive (+) terminal of the headlights.

15. It is connected to the negative (-) terminal of the headlights.

16. It is connected to the positive (+) terminal of the taillights.

17. It is connected to the negative (-) terminal of the taillights.

18. It is connected to the positive (+) terminal of the brake lights.

19. It is connected to the negative (-) terminal of the brake lights.

20. It is connected to the positive (+) terminal of the turn signals.

21. It is connected to the negative (-) terminal of the turn signals.

22. It is connected to the positive (+) terminal of the horn relay.

23. It is connected to the negative (-) terminal of the horn relay.

24. It is connected to the positive (+) terminal of the horn.

25. It is connected to the negative (-) terminal of the horn.

26. It is connected to the positive (+) terminal of the headlights.

27. It is connected to the negative (-) terminal of the headlights.

28. It is connected to the positive (+) terminal of the taillights.

29. It is connected to the negative (-) terminal of the taillights.

30. It is connected to the positive (+) terminal of the brake lights.

31. It is connected to the negative (-) terminal of the brake lights.

32. It is connected to the positive (+) terminal of the turn signals.

33. It is connected to the negative (-) terminal of the turn signals.

### IGNITION



Component	Function
Battery	Provides electrical energy to the ignition system.
Coil	Converts the battery's low voltage into the high voltage needed to create a spark.
Distributor	Distributes the high voltage to the spark plug.
Spark Plug	Creates a spark to ignite the air-fuel mixture in the cylinder.
Fuse	Protects the ignition system from electrical overload.
Switch	Controls the flow of electrical current to the coil.
Ground	Provides a common reference point for the electrical system.

The ignition system is responsible for providing the spark that ignites the air-fuel mixture in the cylinder. It consists of several components, including the battery, coil, distributor, spark plug, fuse, and switch. The battery provides the electrical energy to the system, while the coil converts this energy into the high voltage needed to create a spark. The distributor then distributes this high voltage to the spark plug, which creates the spark. The fuse and switch are used to protect the system from electrical overload and to control the flow of current, respectively.

The ignition system is a critical component of the engine, and it is essential to ensure that it is properly maintained and functioning correctly. Regular inspection and replacement of worn components can help prevent ignition-related problems and ensure optimal engine performance.