Steering system

Task 1. Read the text.

The car features a rack-and-p in ion steering system. The steering wheel connects to a column called a steering shaft. The s haft's other end connects to a gear-shaped pinion. When the steering wheel turns, the pinion does too. The pinion's teeth fit into those of a long rod called a rack. Thus, when the pinion rotates, the rack moves right or left.

Tie rods connect the rack's ends to control arms. The inner tie rod connects to the rack. The outer tie rod connects to the control arms. As the rack moves, the control arm s turn. Then, a spindle attached to the control arm turns the wheels.

The car also features a power steering system. As such, the carrack has a piston that connects to a power steering pump. This pump supplies high-pressure fluid to either side of the piston. This allows it to help the driver turn the car.

Task 2. Mark the following statements as true (T) or false (F).

1. The steering shaft is connected directly to the rack.
2. The pinion moves the rack right or left by rotating.
3. The power steering system uses fluid to move the pinion.

Task 3. Match the words or phrases (1-7) with the definitions (A-G).

1. rotate
2. pinion
3. control arm
4. outer tie rod
5. inner tie rod
6. steering shaft
7. power steering pump

a metal rod that connects to w heels and turns them

a metal rod that connects a steering box to a steering column

to turn around a center point or axis

a pivot that connects a control arm to a steering mechanism

a gear with teeth that fit into those o f a rack

a pivot that connects an outer tie rod to a steering mechanism

a device that applies pressurized fluid to a steering system

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