|  |  |  |
| --- | --- | --- |
| Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date: \_\_\_\_\_\_\_\_\_ | Period: \_\_\_\_\_\_\_ |

Brakes Crossword

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  | 1B |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  R |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 2P |  |  |  A |  |  |  |  |  |  |  |  | 3P |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  R |  |  |  K |  |  |  |  |  |  |  |  |  A |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 4V |  E |  N |  T |  E |  D |  R |  O |  T |  O |  R |  |  |  R |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  S |  |  |  L |  |  |  |  |  |  |  |  |  A |  |  |  |  | 5D |  |  |  |
|  | 6H |  O |  L |  D |  D |  O |  W |  N |  S |  P |  R |  I |  N |  G |  S |  |  |  | 7D |  |  L |  |  |  |  |  I |  |  |  |
|  |  |  |  |  |  |  |  |  |  U |  |  |  N |  |  |  |  |  |  |  U |  |  L |  |  |  |  |  A |  |  |  |
|  |  |  |  |  |  | 8S |  T |  A |  R |  W |  H |  E |  E |  L |  A |  D |  J |  U |  S |  T |  E |  R |  |  |  |  L |  |  |  |
|  |  |  |  |  |  |  |  |  |  E |  |  |  S |  |  |  |  |  |  |  T |  |  L |  |  |  |  |  I |  | 9V |  |
|  |  |  |  |  |  |  |  |  |  D |  |  |  |  |  |  |  |  |  |  B |  |  I |  |  |  |  |  N |  |  A |  |
|  |  |  |  |  |  |  |  |  |  I |  |  | 10B |  |  |  |  | 11B |  |  O |  |  S |  |  |  |  |  D |  |  C |  |
|  |  |  |  |  |  |  |  |  |  F |  | 12C |  A |  L |  I |  P |  E |  R |  |  O |  |  M |  |  | 13H |  |  I |  |  U |  |
|  |  |  |  |  |  |  |  |  |  F |  |  |  C |  |  |  |  |  A |  |  T |  |  |  |  |  Y |  |  C |  |  U |  |
|  |  |  |  |  |  |  |  |  |  E |  |  |  K |  |  | 14A |  |  K |  |  |  |  |  |  |  G |  |  A |  |  M |  |
|  |  |  |  |  |  | 15E |  | 16G |  R |  A |  V |  I |  T |  Y |  B |  L |  E |  E |  D |  I |  N |  G |  |  R |  |  T |  |  B |  |
|  |  |  |  |  |  |  M |  |  |  E |  |  |  N |  |  |  S |  |  F |  |  |  |  |  |  |  O |  |  O |  |  O |  |
|  |  |  |  |  |  |  E |  |  |  N |  |  |  G |  |  |  |  |  A |  |  |  | 17D |  U |  O |  S |  E |  R |  V |  O |  |
|  |  |  |  |  |  |  R |  |  |  T |  |  |  P |  |  |  |  |  D |  |  |  |  |  |  |  C |  |  |  |  S |  |
|  |  |  |  |  |  |  G |  |  |  I |  |  |  L |  | 18L |  A |  T |  E |  R |  A |  L |  R |  U |  N |  O |  U |  T |  |  T |  |
|  |  |  |  |  |  |  E |  |  |  A |  |  |  A |  |  |  |  |  |  |  |  |  |  |  |  P |  |  |  |  E |  |
|  |  |  |  |  |  |  N |  | 19F |  L |  O |  A |  T |  I |  N |  G |  C |  A |  L |  I |  P |  E |  R |  |  I |  |  |  |  R |  |
|  |  |  |  |  |  |  C |  |  |  V |  |  |  E |  |  |  |  |  |  |  |  |  |  |  |  C |  |  |  |  |  |
|  |  |  |  |  |  |  Y |  |  |  A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  B |  | 20B |  L |  E |  E |  D |  E |  R |  S |  C |  R |  E |  W |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  R |  |  |  V |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | 21M |  A |  S |  T |  E |  R |  C |  Y |  L |  I |  N |  D |  E |  R |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  K |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  E |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

|  |  |
| --- | --- |
| **Across****4.** A disc brake rotor with cooling fins between its faces**6.** Hardware in a drum brake system that holds the shoes to the backing plate.**8.** A threaded adjuster mechanism in a drum brake that moves the brake shoes further apart so the linings will be closer to the drums.**12.** Found only on disc barkes, houses piston which uses the force of hydraulic brake fluid to squeeze brake pads against the roter**16.** A method of bleeding the brakes that allows fluid to dribble out of the open bleeder screws by gravity. It's a slow process and rarely used except in applications that require it because of metering valve arrangements that prevent normal manual or power bleeding procedures.**17.** A brake design that provides servo action regardless of which way the drum is turning (forward or reverse).**18.** The amount of sideways variation in the movement of a brake rotor or wheel. Lateral runout can be checked by positioning a dial indicator against the rotor and then turning the rotor. The amount of runout can then compared to specs to determine if the rotor needs to be resurfaced or replaced. **19.** A type of disc brake caliper where the housing is designed to slide on the guide pins from side to side over the brake rotor**20.** A screw valve designed with a hollow center to allow fluid to be bled through it**21.** Components in a drum brake setup with two piston that extend outward as the brake fluid pressure increases | **Down****1.** Steel tubing that delivers brake fluid under high pressure from the master cylinder to the brake hose at each wheel**2.** A safetly valve that monitors whether fluid pressure is equal in both seperate brake system circuits**3.** Refers to variations in the thickness of the rotor, or the parallel alignment of the two surfaces of the rotor. Parallelism is checked with a micrometer at six or more different points around the circumference of the rotor. If the thickness varies more than the specs allow, the rotor must be resurfaced or replaced. **5.** A special measuring tool with a gauge indicator that can be used to check rotor runout and wheel bearing play.**7.** A rubber seal on a disc brake caliper which prevents moisture and other debree from entering the cylinder area where the piston compresses the brake fluid**9.** Unit in a power brake system that multiplies the force exerted on the brake pedal to the master cylinder**10.** Flat metal plate inside the brake drum on which the brake shoes, wheel cylinders, and other brake parts are mounted**11.** When brake pad or shoe grip diminishes beacuse brake components have been overheated**13.** The ability to absorb fluids**14.** An automatic system that applies brake pressure, then releases, the applies in a rapid, pulsating fashion repeatedly.**15.** A mechanial back-up system that will activate rear brakes should all hydraulic operation somehow fail |