

# Chapter 33 Pistons, Rings, And Connecting Rods

Find the words in the grid. Words can go across, down and in the two forward diagonals.

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R N D P Z C M Q H W G H F K L W C A M G R O U N D T R W H
C C U V K G Q G M A J O R T H R U S T S U R F A C E B T P
O T C N H Z H V R W L P F G N G M X C E M Q J Z M M R T M
N N T B T R Z P H O N L P B C J M T C Y K M B P B M R Z Y
N G I D W N Y L I I O A Y I N T Y N C R A N K T H R O W L
E R L C X M M R P S G V T Z K R A B G Y H V Q P T Q N R L
C E E M O N L T S G T C E W C R Y N Y L L Z M P P Q Q N N
T V I Q Y M S W N I E O N S A N I G T B M K Y F N T N P B
I E R N V I P I D T D I N E B R X M M M F R N H P C D G C
N R O B R P R R U L P E L B L G H S C R A P E R R I N G M
G S N W G Z I E E K A C C O A C F U L L F L O A T I N G L
R E S N G T R S N S K N R L S R G Q M T Y L Z K L L M B T
O T P L N E D A T C S T D F E L R M N J N P P E M O T L T
D W I G P W R B A O N I K S C A I E T J L R E M M C X E Y
B I T Y Q C K B L O N X O M W N R P L V N H N S M K V E D
E S H D D L J T C V D R D N R X N A P F W G Y K P R K D H
A T O Q T B T L Z B G O I R R M K W N E A M R I B I V H E
R R L N N W I C K Q G D U N W I H J E C R C H R T N L O A
I I E L R O K N W Q S W W B G X N R R V E S E T T G F L T
N N R F F P T R N G K M T F L E F G T Z W V K R T S X E D
G G D N M X X P N M X N K N M E X L S N M F D I I N W J A
J B A L A N C I N G B O S S E S K P Y B K W J Q R N L M M
O R F Y F M R S Q Z V K T Y Y L C N A M J Y V M X T G Z S
U F Y R G N B T B X M U K B R Z Q B O N P M R N G M G R P
R M X L O C H O N R R M W T F N K L V C D R M M R K L F N
N V D T D R W N M T F O R F X R Y Z Q R K E Z R Z T K M N
A F S Q W W L P S W L W B T A P E R F A C E R I N G M C L
L I V H R T H I W B H L I N T E R F E R E N C E F I T L L
P K G L J J N N P O S I T I V E T W I S T R I N G G R Y F

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|--------------------------------|------------------|----------------------|-----------------|
| Back clearance                 | Double knock     | Major thrust surface | Side clearance  |
| Balancing bosses               | Ductile iron     | Oil control ring     | Skirt           |
| Barrel face ring               | Freewheeling     | Piston               | Slipper skirt   |
| Bleed hole                     | Full floating    | Piston pin           | Spit hole       |
| Blowby                         | Grooves          | Piston ring expander | Struts          |
| Cam ground                     | Heat dams        | Piston rings         | Taper face ring |
| Compression rings              | Hypereutectic    | Positive twist ring  | Wrist pin       |
| Connecting rod bearing journal | Interference fit | Reverse twist ring   |                 |
| Crankpin                       | Lands            | Ring gap             |                 |
| Crank throw                    | Lock rings       | Scraper ring         |                 |