



## Strato-Charged Engine Technology

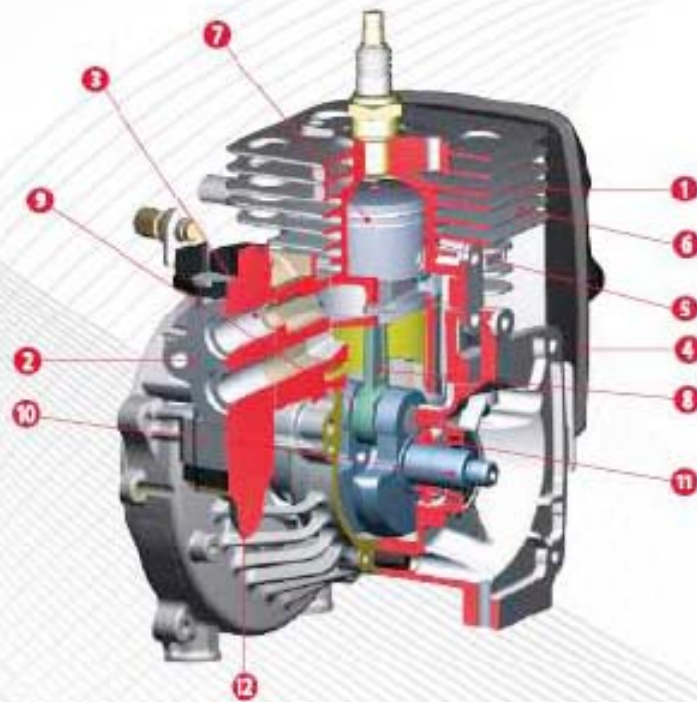
RedMax is the original inventor of the world's first stratified-charged 2-stroke engine. Introduced in 1998, our state-of-the-art Strato-Charged engines are designed with advanced **green and clean** technology that preserves the environment through efficient engine design, increased fuel economy and reduced emissions.

For ten years, this proven technology has delivered maximum performance in a light, rugged design with outstanding features that set it apart from the competition. The Strato-Charged 2-stroke engine:

- Achieves up to 20% more fuel efficiency than standard 2-stroke engines
- Produces extremely low emissions that meet clean air regulations without the need for a heated, heavy catalytic converter
- Requires no valve adjustments, oil changes or daily oil reservoir level checks
- Generates 15 to 20% more horsepower than a typical 4-stroke or 4-stroke hybrid engine of the same engine displacement size
- Includes the hallmarks of RedMax engineering and design: MaxPower, MaxTorque, MaxSpeed, MaxAcceleration, MaxPerformance and MaxTechnology

RedMax's Strato-Charged 2-stroke engines operate at maximum efficiency with just three moving parts. By comparison, 4-stroke or 4-stroke hybrid engines contain as many as 30 moving parts. RedMax Strato-Charged 2-stroke engines are 20 to 25% lighter per same engine size as compared to 4-strokes or 4-stroke hybrids, resulting in much less operator fatigue. Engines with a high power to weight ratio and a high-power output per engine cc size are classified as high-performance engines, and these are the only type of engines made by RedMax.

**It is easy to identify RedMax products that include our patented Strato-Charged engine technology: Simply look for a "Z" in the model number.**



## Strato-Charged Engine Construction

1. **Hemispherical Combustion Chamber:** Promotes and optimizes clean combustion of fuel for more power output
2. **Walbro WYA Rotary Valve Carburetor:** For dependable, fast, crisp acceleration
3. **Fresh-Air Dam Strato Intake:** Helps prevent unburned fuel from exiting with exhaust
4. **Glass-Filled, Low-Tone Muffler:** For additional noise reduction
5. **Industrial Hard-Chrome Plated Cylinder:** Provides additional cylinder and piston life for commercial use
6. **Super-Thin Cooling Fins:** For greater heat dissipation and longer engine life
7. **Two-Ring Piston:** Holds compression longer and increases power output and engine life due to superior heat transfer
8. **Forged I-Beam Connecting Rods:** Lightweight and strong with case-hardened bearing surfaces to increase engine life
9. **Floating-Caged Needle Bearings:** Reduces friction and wear to increase engine life
10. **Chrome Moly Crankshaft:** For additional high-speed performance and engine durability
11. **Heavy-Duty Ball Bearings:** Main bearings support crankshaft to increase engine life
12. **Carburetor Purge System:** Recirculates fuel back to the fuel tank, which makes for easier starting

Electronic computerized ignition systems are completely sealed from dirt and moisture, delivering consistent high-output voltage that ensures fast, easy starts; fast acceleration; smooth power output and optimum performance in any weather condition.