

# Hybrid 4®

engine technology from  
**shindaiwa®**

Shindaiwa's done it again. Hybrid 4 engine technology is the absolute best choice available today, and it's brought to you by the same legendary Shindaiwa name that introduced the renowned T27 Trimmer, the revolutionary Speed-Feed head, and the PowerBroom™. Hybrid 4 is the latest innovation representing the next generation of engine technology that blends the best parts of 2-stroke and 4-stroke engine technologies.



## The Best of Both Worlds

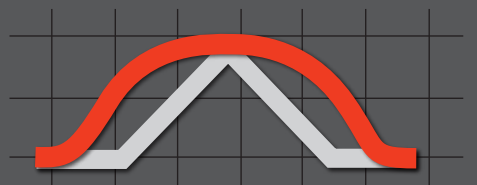
Historically, most outdoor power tools were powered by 2-stroke engines which are lightweight, easy to maintain with few moving parts and have excellent power-to-weight ratios. But since the early-1990s, manufacturers have been under regulatory pressure to achieve lower exhaust emissions.

Four-stroke engines inherently offer a much cleaner-burning alternative to provide lower emission levels than even the best 2-stroke engines, but add weight to the product.

So Shindaiwa's low-emissions engineering team believed a "hybrid" engine, blending the best elements of two-stroke and four-stroke technology, would provide an ideal solution for the handheld products. The result is Hybrid 4 Engine Technology.

**Hybrid 4® Engine  
Technology**

**Conventional  
2-stroke Engine**



**Power Curve Comparison**

## Hybrid 4 vs Traditional 2-Stroke

Looking for a greener alternative to traditional 2-stroke engine-driven equipment? Hybrid 4 is definitely the answer. This extraordinary technology combines the best part of 2-stroke engines (lightweight, high power-to-weight ratios, minimal maintenance and all-position operation) with that of 4-stroke engines (precise ignition/exhaust timing and reduced emissions). Hybrid 4 products have less emissions, better fuel economy, and more torque than traditional 2-stroke models.





# What are the Benefits of Hybrid 4?

Blending the finest features of two-stroke and four-stroke technology, along with incomparable Shindaiwa engineering tweaks make Hybrid 4 the best technology available but what makes it better? Hybrid 4 is:

- Better for the environment: Some of the lowest emissions levels for any handheld products.
- Better for the operator environment: Reduction in fumes and a low engine tone (see below).
- Better for productivity: Hybrid 4 design has performance-enhancing Power Boost Chamber.
- Better starting technology: Hybrid 4 engines feature a built-in decompression that reduces the pressure within the cylinder thereby reducing the effort needed to pull the starter rope.
- Better true all-position utility: Thanks to its fuel-born lubrication system, Hybrid 4 engines may be operated in any position—even upside down—on an extended basis.
- Better torque: Hybrid 4 products deliver higher torque to the lower end for more power in tougher applications or environments.
- Better business: Equipment powered by Hybrid 4 engines is easy to maintain and use the same fuel mix as two-stroke engines. Unlike conventional four-stroke engines, there is no messy oil sump and no oil level to check and maintain. This simply means no mandatory oil changes at short intervals.
- Better quality: Like all Shindaiwa products, Hybrid 4 engines incorporate premium components and close-tolerance engineering for long life and practical serviceability. Hybrid 4 engines feature a longer piston skirt that reduces play and wear within the cylinder. Hybrid 4 engines feature a forged crankshaft vs. some competitor units that use stamped components.
- Better durability: Besides high-quality components, Hybrid 4 engines also include dual-stage air filtration for cleaner air passing into the engine which increases engine life and reduces internal engine wear.
- Better economy: In addition to an exceptional life expectancy, Hybrid 4 engines use 10 - 25% less fuel than equivalent Shindaiwa two-stroke engines for even greater operational savings (Fuel economy will vary depending on product use and operating habits.)
- Better warranty: Hybrid 4 equipment carries a 2-year commercial warranty – dependability you can count on.

## What's that Sound and Where's the Smell?

### *Hybrid 4: It Sounds Good and Smells Even Cleaner!*

The first thing users notice about Hybrid 4 products is the sound. It does not sound like a traditional 2-stroke in terms of engine noise and level or tone. People often question the sound because they're so used to the standard "2-stroke noise". Believe by the performance of a Hybrid 4 product – it may sound out of the ordinary but the results are extraordinary.

The other thing users notice is the lack of smell – not from the product but on the operator after a day of use – just ask anyone who has used a hedge trimmer lately. Because the emissions are cleaner in Hybrid 4 products there is a drastic reduction in the oily, gas smell that is exhausted from a traditional 2-stroke product.

***So if you're ready for a greener alternative to traditional 2-stroke engines look for Shindaiwa Hybrid 4 engine technology.***



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