

Stihl 020 Av Chainsaw

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THE LEGACY OF THE STIHL 020 AV CHAINSAW: A LOOK BACK AT A PIONEER

In the world of forestry and arboriculture, certain tools transcend their functional purpose to become icons. The **Stihl 020 Av Chainsaw** is undoubtedly one of those legends. For decades, this compact powerhouse was a mainstay in the hands of professional tree surgeons, arborists, and dedicated landowners. While modern technology has introduced lighter, more powerful, and arguably safer saws, the 020 Av remains a beloved piece of machinery for many. Its reputation for reliability, balance, and raw cutting ability continues to resonate, making it a frequent topic of discussion among chainsaw enthusiasts and collectors. This article delves deep into the history, design, performance, and enduring legacy of the Stihl 020 Av, exploring why it still commands respect in an industry defined by constant evolution.

Introduced during the golden age of two-stroke engineering, the Stihl 020 Av was a direct response to the growing need for a professional-grade saw that could be used comfortably in the trees. Before its arrival, many top-handle saws were either underpowered or poorly balanced. Stihl, a company already known for pioneering the first electric chainsaw and the first gasoline-powered chainsaw, set out to create a saw that would redefine the top-handle category. The result was a machine that not only met the demands of professional arborists but also set a new standard for what a compact saw could achieve. Even today, finding a well-maintained Stihl 020 Av is like finding a piece of mechanical history that is still perfectly capable of earning its keep.

The Engineering Behind the Icon: What Made the 020 Av Special

The "020 Av" designation itself tells a story of engineering innovation. The "020" refers to the engine displacement, measuring 34.4 cubic centimeters, which was a substantial output for a saw of its size at the time. However, it was the "Av" that truly set this saw apart. "Av" stands for **"Antivibration"** (in German, "Anti-Vibration"). This was one of the earlier commercial applications of a sophisticated rubber buffer system designed to isolate the engine and cutting head from the handles. For a professional using the saw all day, particularly in the awkward positions required for tree climbing, this reduction in vibration was not a luxury—it was a necessity. It significantly reduced operator fatigue and the risk of vibration-induced white finger syndrome, a serious condition caused by prolonged exposure to vibration.

Beyond the antivibration system, the Stihl 020 Av was built with a focus on durability and serviceability. The saw featured a robust magnesium alloy housing, which was both lightweight and incredibly strong, able to withstand the bumps and drops that are part and parcel of tree work. The engine was a traditional two-stroke design, known for its simplicity and ease of repair. Many arborists learned to rebuild carburetors and replace piston rings on these saws because the design was so straightforward. The starter assembly, fuel system, and clutch were all engineered with a no-nonsense approach, prioritizing function over form. This mechanical honesty is a primary reason why so many of these saws are still running today, decades after they were first built. A well-tuned Stihl 020 Av has a distinct, crisp sound that aficionados recognize instantly—a high-revving snarl that speaks to its performance-oriented design.

Performance and Practicality: The 020 Av in the Field

When it comes to real-world performance, the Stihl 020 Av was a revelation. Its power-to-weight ratio was exceptional for its era. Weighing in at just over 7.5 pounds (without the bar and chain), it was light enough to be used confidently with one hand during limbing and pruning operations, yet powerful enough to handle medium-sized trunk sections. The saw was typically equipped with a 14-inch or 16-inch bar, making it perfect for cutting large limbs that required more reach and power than a manual saw could provide. The chain speed was impressive, allowing for fast, clean cuts that minimized damage to the tree.

One of the most celebrated features was its exceptional balance. Because Stihl designed the 020 Av with the fuel tank positioned partially around the engine and the handle placed at the optimal center of gravity, the saw felt like an extension of the climber's arm. This balance was crucial when working at height, where every ounce of weight and every degree of awkwardness is magnified. An arborist could maneuver the saw into tight crotches, make precise plunge cuts, and limb with surgical precision, all while maintaining a secure footing. The manual oiler, in addition to the automatic oiler, gave the operator control over lubrication in different wood densities, ensuring the bar and chain stayed cool and sharp. This attention to detail in ergonomics made the Stihl 020 Av not just a tool, but a trusted partner in a dangerous profession.

Comparing the Classic to Modern Counterparts

It is important to place the Stihl 020 Av in its historical context. Today, the direct descendant of this saw is the Stihl MS 201 T (and more recently, the MS 201 TC-M). These modern saws are undeniably superior in several key areas. They feature advanced electronic ignition, fuel injector systems (on the M-tronic models), and much more effective air filtration, which prolongs engine life. They are also lighter and produce fewer emissions, meeting strict environmental regulations that the 020 Av was never designed for. The antivibration systems are also more refined, and features like the side-access chain tensioner make adjustments much quicker and cleaner.

How does the 020 Av hold up? Surprisingly well, in the eyes of many. For a saw that is often 30 to 40 years old, its performance is still respectable. While a new MS 201 T will outcut it and cause less fatigue over an eight-hour day, the 020 Av still offers a raw, engaging experience. It is a saw that requires a skilled hand to start properly—priming, choking, and a solid pull. It lacks the convenience of a decompression valve or a toolless fuel cap. However, this very simplicity is part of

its charm. Many users argue that the older saws feel more "solid," with fewer plastic components. The metal fuel tank and air filter cover of the 020 Av feel indestructible compared to the modern composite materials. This durable construction gives the 020 Av a unique tactile quality that is hard to replicate.

Collectibility, Maintenance, and Finding Parts

The Stihl 020 Av has transitioned from a primary work tool to a highly collectible item. You will find them for sale on online marketplaces, at tractor shows, and in the garages of retired arborists. A fully restored 020 Av in excellent condition can fetch a surprising price, reflecting its classic status. Collectors look for original paint, decals, and bar-and-chain sets. However, the true value often lies in a running, functional example that can still be used for light-duty work around the property.

Maintaining a vintage 020 Av requires some dedication.

- **Parts Availability:** Stihl has discontinued many specific parts for the 020 Av. However, the aftermarket community is strong. You can still find carburetor kits (Walbro or Zama), fuel lines, air filters, and ignition modules from third-party suppliers. NOS (New Old Stock) parts are sought after but can be expensive.
- **Fuel Mix:** It is critical to use the correct fuel-to-oil ratio, typically 50:1 with a high-quality synthetic oil designed for air-cooled two-stroke engines. A common mistake is using old or improperly mixed fuel, which can gum up the carburetor.
- **Common Issues:** The most frequent problems with the 020 Av include hardened fuel lines (which become brittle with age), failed carburetor diaphragms, and cracked impulse lines. The ignition modules can also fail over time, but they are usually replaceable with modern equivalents.
- **Restoration Guidance:** For those looking to restore a saw, start by cleaning the carburetor and replacing all fuel and impulse lines. Check the condition of the spark arrestor screen in the muffler, as a clogged screen can cause a dramatic loss of power. A compression test is also wise; a healthy saw should have at least 120 PSI.

Safety Considerations with a Vintage Saw

While the Stihl 020 Av is a great tool, it is essential to acknowledge its limitations regarding modern safety standards. The chain brake on the 020 Av is a manual, inertia-activated design, but it is not as responsive or reliable as the brakes found on new saws. The chain tensioning system requires a tool (the combination wrench), which is less convenient but also less likely to be over-tightened. There is no captive chain nut or quick-release system.

In terms of personal protective equipment (PPE), the standards remain the same. If you are operating a Stihl 020 Av, you should wear:

1. **Chaps or chainsaw pants:** These provide critical protection against accidental contact with the chain.
2. **Hearing protection:** The 020 Av is loud, even by modern chainsaw standards.
3. **Eye protection:** A face screen or safety glasses are non-negotiable.
4. **Gloves and boots:** Chainsaw gloves and steel-toed boots with good grip are essential.

Furthermore, if you are using this saw for climbing, be aware that modern climbing techniques and equipment have evolved. The 020 Av lacks the advanced chain catcher and throttle interlock features of newer tree saws. It should only be used by experienced operators who understand its quirks and are prepared to handle a less forgiving machine. Using a vintage saw requires a heightened sense of awareness and a respect for its older design.

The Enduring Appeal: Why the 020 Av Still Matters

In an age of disposable tools and planned obsolescence, the Stihl 020 Av stands as a testament to an era when products were built to last and to be fixed. Its enduring presence in workshops, garages, and online forums is not just about nostalgia. It is about appreciating good design. The 020 Av is a machine that rewards mechanical aptitude. It is a saw that you can learn to fully understand and maintain yourself, without needing a diagnostic computer or proprietary software.

For the modern user, owning a Stihl 020 Av is a connection to the history of arboriculture. Many of the techniques used in tree climbing and pruning today were developed on the back of this very saw. When you hold a well-preserved 020 Av, you are holding a tool that has likely participated in hundreds of thousands of cuts, shaping trees in cities and parks around the world. It is a symbol of a time when "professional" meant robust, serviceable, and capable. While it may not be the first choice for a full-time production arborist today, for the collector, the hobbyist, or the retired pro who just wants to hear that engine sing one more time, the Stihl 020 Av is an irreplaceable piece of machinery.

Conclusion

The Stihl 020 Av Chainsaw is far more than just an old piece of equipment. It is a benchmark, a classic, and a beloved workhorse that defined a segment of the chainsaw market. Its combination of a powerful 34.4cc engine, groundbreaking antivibration technology, and indestructible magnesium construction created a tool that professionals trusted with their lives and livelihoods. While newer saws have surpassed it in power, weight, and safety features, the 020 Av remains a highly respected and capable machine for those who understand its nuances. Whether you are looking to restore a piece of history, seeking a reliable saw for light land management, or simply curious about the tools that built an industry, the Stihl 020 Av deserves your respect. It is a classic that continues to run, proving that good engineering never truly goes out of style.