

Stihl Fs 86 Repair Manual

Stihl FS 86 Repair Manual: Your Comprehensive Guide to Maintenance and Repairs If you're a professional landscaper or a dedicated homeowner, keeping your Stihl FS 86 trimmer in optimal condition is essential for efficient yard work. The **Stihl FS 86 repair manual** serves as an invaluable resource, offering detailed instructions, troubleshooting tips, and maintenance guidelines to ensure your equipment performs reliably over time. In this comprehensive guide, we will explore the key aspects of repairing and maintaining the Stihl FS 86, empowering you to handle common issues confidently.

Understanding the Stihl FS 86: Overview and Key Features

Before diving into repair procedures, it's important to understand the machine's core components and features.

Key Features of the Stihl FS 86

1. Powerful 27.2 cc two-stroke engine
2. Ergonomic design with adjustable shaft length
3. Comfortable harness system
4. High-performance cutting head
5. Durable construction suitable for professional use

Common Causes of Malfunctions

Understanding typical issues helps in diagnosing problems swiftly. Common causes include:

2. Clogged or worn-out air filter
3. Carburetor problems
4. Damaged or dull cutting blades
5. Fuel system leaks or contamination

Preparation Before Repairing

Safety Precautions

1. Ensure the engine is turned off and cooled down before starting repairs
2. Disconnect spark plug to prevent accidental starting
3. Wear protective gloves and eye protection

Tools and Parts Needed

Having the right tools makes repair work smoother. Typically, you will need:

1. Screwdrivers (flat and Phillips head)
2. Socket wrench set

3. Replacement parts (spark plug, air filter, carburetor parts, etc.)
4. Cleaning brushes and compressed air
5. Lubricants and assembly grease

Step-by-Step Repair Procedures

1. Replacing the Spark Plug

The spark plug is crucial for engine ignition. Worn or faulty plugs cause starting issues or engine misfires.

1. Remove the engine cover by unscrewing the retaining screws.
2. Locate the spark plug and disconnect the spark plug wire.
3. Use a spark plug socket wrench to unscrew the old plug.
4. Inspect the spark plug for signs of wear or carbon buildup.
5. Install a new spark plug, ensuring it's properly gapped as per manufacturer specifications.
6. Reconnect the spark plug wire and reassemble the engine cover.

2. Cleaning or Replacing the Air Filter

A clean air filter is vital for engine performance and longevity.

1. Remove the air filter cover by unscrewing it.
2. Take out the filter and inspect it for dirt or damage.
3. If reusable, clean it with soapy water or compressed air; allow to dry completely.
4. If worn out, replace with a new filter compatible with the FS 86.
5. Reinstall the filter and cover securely.

3. Carburetor Maintenance and Repair

The carburetor controls fuel delivery; issues here can cause starting problems or poor performance.

1. Remove the carburetor following the manual's instructions, noting all connections.
2. Disassemble the carburetor carefully, cleaning all passages with carburetor cleaner.
3. Inspect diaphragms and gaskets for damage; replace if necessary.
4. Reassemble the carburetor, ensuring all parts are correctly seated.
5. Reinstall it onto the engine, reconnecting fuel lines and linkages.

4. Replacing the Cutting Head or Blades

Dull or damaged blades reduce cutting efficiency and can be unsafe.

1. Remove the cutting head assembly according to the manual's instructions.
2. Replace with a compatible new blade or sharpen existing ones.
3. Ensure blades are properly balanced and securely attached.
4. Reassemble the cutting head onto the shaft.

5. Fuel System Troubleshooting

Fuel leaks or contamination can hinder engine start-up and operation.

1. Check fuel lines for cracks, leaks, or blockages.
2. Drain old fuel and replace with fresh, high-quality mixture.
3. Clean the fuel filter or replace it if dirty.
4. Inspect the fuel cap vent for blockages to ensure proper vapor flow.

Regular Maintenance Tips

Maintaining your Stihl FS 86 regularly extends its lifespan and ensures peak performance.

Scheduled Maintenance Tasks

1. Clean or replace air filter every 25 hours of use.
2. Inspect spark plug every 50 hours; replace if worn.
3. Sharpen or replace cutting blades as needed.
4. Check and clean the carburetor annually.
5. Check fuel lines and replace if brittle or cracked.

Storage Tips

1. Drain fuel if storing the trimmer for more than a month to prevent gum deposits.
2. Store in a dry, cool place away from direct sunlight.
3. Keep the machine clean and inspect for any signs of damage periodically.

When to Seek Professional Repair Services

While many repairs can be performed with the right manual and tools, some issues require professional attention, including:

1. Engine overhaul or replacement
2. Electrical system diagnostics
3. Major structural repairs

If you're unsure about performing certain repairs or if the problem persists after troubleshooting, consulting a certified Stihl service technician is advisable.

Conclusion

Mastering the essentials of the **Stihl FS 86 repair manual** equips users with the knowledge needed to keep their trimmer running smoothly. From basic maintenance like air filter replacement to complex carburetor overhauls, understanding each component and repair step can save time and money, prolonging the life of your equipment. Regular upkeep, combined with a thorough repair manual, ensures your Stihl FS 86 remains a reliable tool for all your landscaping needs. By following this guide, you can confidently troubleshoot common issues, maintain peak performance, and enjoy your trimmer's full potential for years to come.

STIHL FS 86 Repair Manual: An In-Depth Guide for Maintenance and Troubleshooting The STIHL FS 86 repair manual is an essential resource for owners, operators, and repair technicians seeking to understand the intricacies of maintaining and repairing this powerful brush cutter. Known for its durability and efficiency, the STIHL FS 86 is a favorite among landscapers and homeowners tackling heavy-duty vegetation management. However, like any outdoor power tool, it requires regular maintenance and occasional repairs to ensure optimal performance. This comprehensive manual offers detailed instructions, troubleshooting tips, and maintenance procedures designed to extend the lifespan of your equipment and keep it operating smoothly.

Overview of the STIHL FS 86

Before diving into repairs, it's important to understand the core features and specifications of the STIHL FS 86. This string trimmer is renowned for its robust 2-stroke engine, ergonomic design, and versatility.

Main Features

- Engine Power: 1.15 kW (1.55 hp) - Displacement: 27.2 cc - Weight: Approximately 5.7 kg (12.6 lbs) - Cutting Head: Compatible with various attachments, including trimmer heads and brush blades - Vibration Control: Designed to reduce operator fatigue - Fuel System: Advanced carburetor for efficient fuel consumption - Durability: Built with high-quality materials to withstand tough conditions Having a detailed repair manual can help users troubleshoot issues such as engine stalls, starting problems, or cutting performance loss, ensuring minimal downtime.

Understanding the Repair Manual Structure

A typical STIHL FS 86 repair manual is organized into sections that guide users through different aspects of maintenance and repair: - Safety Precautions: Essential safety guidelines for handling repairs - Tools and Supplies Needed: List of necessary tools, lubricants, and replacement parts - Engine Repair: Step-by-step procedures for carburetor, spark plug, piston, and cylinder maintenance - Fuel System Maintenance: Cleaning and replacing fuel filters, checking fuel lines - Cutting Head and Line Maintenance: Replacing trimmer lines, adjusting the cutting head - Vibration and Noise Troubleshooting: Diagnosing and fixing excessive vibrations or noise - Electrical System: Spark plug inspection, ignition coil testing - Lubrication and Cleaning: Proper cleaning routines to prevent buildup and corrosion - Assembly and Disassembly: Guides for safely taking apart and reassembling components Having such a structured manual ensures that both novice and experienced users can systematically approach repairs.

Key Repair and Maintenance Procedures

The manual provides detailed, step-by-step instructions for common repairs. Here are some critical procedures:

1. Starting the Engine

- Check the fuel mixture (gasoline to oil ratio) - Inspect the spark plug and replace if worn or fouled - Ensure the air filter is clean - Prime the carburetor as per instructions - Use the choke to start a cold engine, then gradually open it Troubleshooting tips: - Engine fails to start: inspect spark plug, fuel supply, and air filter - Difficult to start after long storage: clean carburetor and replace spark plug

2. Carburetor Cleaning and Adjustment

- Remove the carburetor following the manual's disassembly guide - Clean all jets and passages with carburetor cleaner - Replace worn gaskets or diaphragms - Reassemble and adjust idle speed and mixture screws for optimal performance
Pros of proper carburetor maintenance: - Improved engine responsiveness - Increased fuel efficiency - Reduced emissions

3. Replacing the Spark Plug

- Unscrew the old spark plug with a spark plug wrench - Check the electrode gap (refer to manual for specifications) - Install a new spark plug, tightening securely - Reconnect the spark plug wire
Signs of a faulty spark plug: - Hard starting - Poor engine performance - Engine misfires

4. Air Filter Replacement

- Remove the air filter cover - Clean or replace the air filter depending on its condition - Ensure proper seating before reassembling
Benefits: - Prevents debris from entering the engine - Maintains airflow for efficient combustion

5. Cutting Head and Line Maintenance

- Remove the trimmer head as per instructions - Replace worn or broken lines - Adjust the line length according to manual specifications - Reassemble securely to prevent line jams

Common Problems and Troubleshooting

The repair manual is invaluable for diagnosing persistent issues. Below are some typical problems with solutions:

Engine Won't Start

- Check fuel quality and mixture - Inspect spark plug for fouling or damage - Clean or replace air filter - Adjust carburetor settings - Ensure the spark plug wire is connected properly

Loss of Power During Operation

- Clean the air filter and carburetor jets - Check for clogged fuel lines - Inspect the spark arrestor for blockages - Adjust carburetor mixture screws

Excessive Vibration or Noise

- Tighten all mounting bolts - Inspect the cutting head for balance - Replace worn or damaged vibration dampers - Check for loose or damaged engine mounts

Fuel Leaks

- Replace cracked or damaged fuel lines - Tighten the fuel cap - Inspect the fuel tank for cracks

Maintenance Tips for Longevity

Following the repair manual's recommendations can significantly extend the lifespan of your STIHL FS 86: - Regularly clean or replace air filters - Use fresh, properly mixed fuel - Keep the engine oil at recommended levels - Lubricate moving parts as specified - Store the equipment in a dry, sheltered area - Periodically inspect and replace worn parts

Pros and Cons of Using a Repair Manual

Pros: - Enables self-repair, saving time and money - Enhances understanding of machine operation - Helps identify issues early, preventing costly damage - Provides safety guidelines to prevent accidents
Cons: - Can be complex for beginners without mechanical experience - Requires basic tools and skills for disassembly - Not a substitute for professional repairs in severe cases

Conclusion

The STIHL FS 86 repair manual is an indispensable resource for maintaining the efficiency and durability of this powerful brush cutter. Whether you're performing routine maintenance like replacing the air filter and spark plug, or tackling more complex repairs such as carburetor overhaul or engine diagnostics, this manual provides clear instructions and troubleshooting guidance. Investing time in understanding and applying the procedures outlined can lead to a longer lifespan for your equipment, reduced repair costs, and safer operation. For best results, always adhere to safety precautions and use genuine replacement parts. With proper care and the help of the repair manual, your STIHL FS 86 will continue to serve reliably for years to come.

Questions & Answers About stihl fs 86 repair manual

No	Question	Answer
1	Where can I find a comprehensive repair manual for the Stihl FS 86 trimmer?	You can find official and third-party repair manuals for the Stihl FS 86 on the Stihl website, authorized dealer sites, or specialized online repair manual providers such as manualsLib or eReplacementParts.
2	What are common issues addressed in the Stihl FS 86 repair manual?	Common issues include carburetor problems, starter assembly repairs, fuel system cleaning, spark plug replacement, and troubleshooting engine performance or starting difficulties.
3	Does the Stihl FS 86 repair manual include step-by-step repair instructions?	Yes, the repair manual provides detailed step-by-step instructions, diagrams, and parts lists to assist both DIY enthusiasts and professional technicians in repairing the trimmer.
4	Is there a specific section in the manual for carburetor tuning on the FS 86?	Yes, the manual includes a dedicated section on carburetor removal, cleaning, and tuning procedures to optimize engine performance.
5	Are safety precautions covered in the Stihl FS 86 repair manual?	Absolutely. The manual emphasizes safety guidelines for disassembly, repair, and reassembly to prevent injury and ensure proper handling of parts.
6	Can I use the repair manual to replace the fuel filter and spark plug on the FS 86?	Yes, the manual provides instructions for replacing essential parts like the fuel filter and spark plug, including proper tools and torque specifications.

7	Is there troubleshooting guidance in the repair manual for engine starting issues on the FS 86?	Yes, the manual offers troubleshooting steps for common starting problems, including checking the spark, fuel supply, and compression.
8	Are repair manuals for the Stihl FS 86 available in digital format?	Yes, digital versions of the repair manual are available for download from authorized sources, making it easier to access repair info on your devices.
9	How often should I consult the repair manual for routine maintenance of the FS 86?	Routine maintenance tips are included in the manual, and it's recommended to consult it periodically for tasks like air filter cleaning, spark plug replacement, and fuel system checks to keep your trimmer in optimal condition.

Stihl FS 86, trimmer repair, chainsaw manual, outdoor power equipment, Stihl FS 86 parts, string trimmer maintenance, Stihl repair tips, engine troubleshooting, equipment service guide, Stihl FS series