

Process to Clean a Bicycle Chain

Biking serves many purposes – it’s a fulfilling hobby, an intense workout, and a practical mode of transportation. Due to their simplicity, durability, and convenience, bicycles are used worldwide across all cultures and peoples. However, one aspect that is overlooked about bike care is chain maintenance. Maintaining a clean and greased bike chain is crucial for both the longevity and performance of a bike, preventing early deterioration and ensuring smoother rides. Neglecting bikes, especially in regions with high humidity or rainfall, suffer from chains and gears rusting over, increasing the risk of breakdowns - compromising the safety of riders and bystanders.

SAFETY INFORMATION

- Review all warning and safety labels of clean chemicals and grease before using.
- Avoid touching eyes or mouth after handling chemicals or touching rust.
- Secure hair and clothing to prevent getting caught in the gear system or wheels.
- Ensure the bike is stable throughout the cleaning process to avoid toppling.
- Be cautious of body parts when wheels, chains, and gear are in motion to prevent injury
- Ride with caution immediately after cleaning in case the chain is dislodged during cleaning.

MATERIALS

- | | | |
|----------------------|--------------|--------------------|
| ● Bicycle with Gears | ● Dish Soap | ● Bristle Brush or |
| ● Towel (optional) | ● Warm Water | Tough Sponge |
| ● Gloves (optional) | ● Bowl | ● Paper Towels |
| ● Bike Grease | | ● Shop Rag |

INSTRUCTIONS

Setting Up Bike (3 minutes)

1. While riding the **bike** outdoors, shift the bike to the highest gear. This ensures the chain will be easier to maneuver and reset if it falls off.



2. Flip the **bike** so it rests on the handlebars and seat rest. No other part of the bike should be touching the floor or wall.

***Tip:** Place a **towel** under the handlebars to prevent scratches.*

***Caution:** Wheels may spin freely – watch your fingers and grasp on the **bike** to avoid injury.*

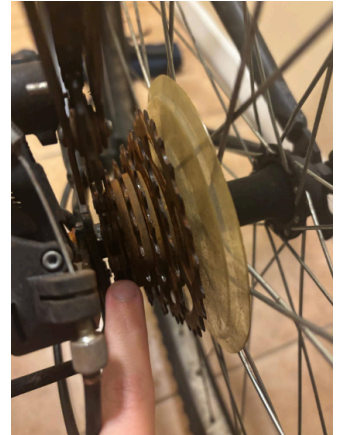


3. Take note of the **chain** position on both the pedal and wheel gear sets.

***Note:** If the chain is not on the largest gear of the pedal set or the smallest gear of the wheel set, consult the Troubleshoot table*



Pedal Gear Set



Wheel Gears Set

Cleaning Bike Chain (5 minutes)

4. Put on **gloves** to avoid staining or irritation from grease, rust, and chemicals.

***Note:** Usually none of the chemicals are dangerous in contact with skin, although check the bottle or packet for instructions on handling.*

5. Fill a **bowl** with **warm water**.
6. Add **dish soap** to the **bowl** as well.
7. Soak the **bristle brush** (or tough sponge) in the **bowl**.

8. Using the **brush**, scrub up the length of the section of the chain between the gear sets.



9. Push the bike pedal by hand, rotating the section of the exposed chain.
10. Repeat steps 8 and 9 until the entire length of the chain has been scrubbed.

11. Quickly and thoroughly dry the entirety of the chain using **paper towels**.

Note: The chain should be dry to the touch, otherwise it risks rusting.



12. Manually inspect each of the chain links to ensure they are able to move freely.

Note: Repeat the process of cleaning and drying for any links that remain stuck.

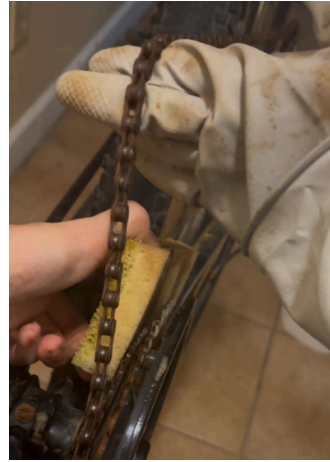
13. Ensure that the chain is still on the gears as noted in Step 3.

Cleaning Gear Sets (10 minutes)

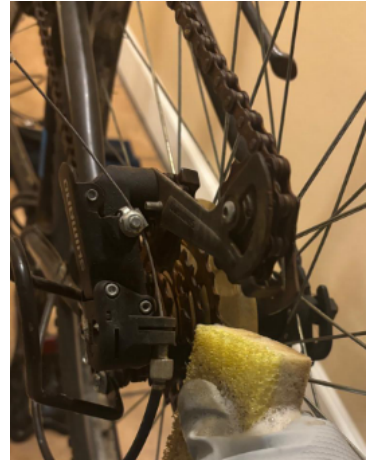
14. Resoak the **brush** in the **water-soap solution**.

15. Brush the side of each of the gear sets. Lift the chain as needed to clean all of the gears.

*Note: Avoid placing the **brush** directly on the teeth of the gears, this will cause unnecessary wear to both.*



Pedal Gear Set



Wheel Gears Set

16. Quickly and thoroughly dry the entirety of the gear using **paper towels**.

Caution: Ensure the axle itself is dry, as any rust build-up on this piece can severely degrade the bike.

Greasing Bike Chain (5 minutes)

17. Apply **grease** to the **shop rag**.

*Note: this will stain the **shop rag**, in addition to any remaining rust in later steps.*

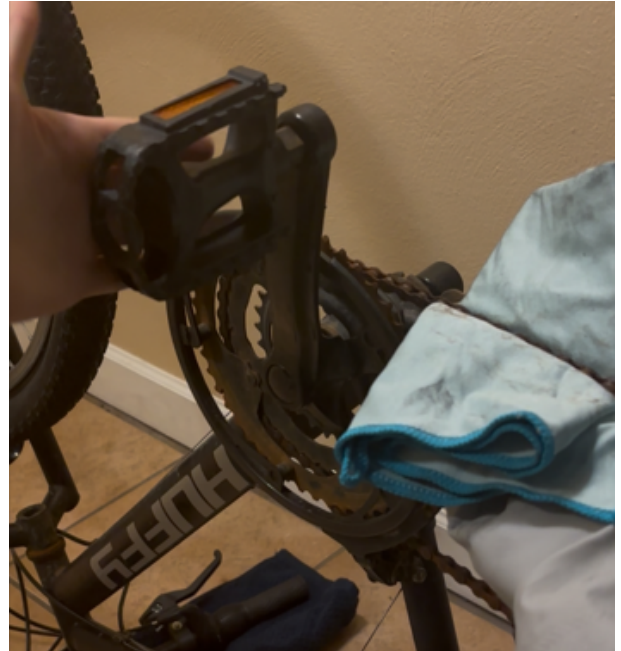


18. Hold the **shop rag** against the chain with enough pressure to apply the **grease**.

Note: The pressure should not exceed holding the chain off of the gears.

19. While holding the **shop rag** in place, slowly move the pedal by hand. This ensures the **grease** is evenly spread

Caution: Move the pedal slowly to avoid having your hand cough in gears or tearing the fabric of the rag.



20. Continue this process until the entire chain is evenly coated in **grease**.

Note: If the **grease** runs low before completing, add more using Step 17.

21. Manually spin the pedals a few times (~10 cycles) to ensure all of the links and gears are covered in **grease**.

Finish Bike Chain (12 hours)

22. Leave the **bike** in the sun, or a dry indoor environment for 12 hours to allow the remaining moisture to dry and the grease to set.
23. Congratulations, you have completed one of the most important processes for maintaining your bike. Well done and happy cycling!

Troubleshoot

Q: What if the chain falls off the gears or is located on the wrong gear?

A: Resetting the chain is fairly simple:

1. Pick up the chain and pull on it so it has some slack, removing it from the set of gears.
2. Hold the chain against the underside of the gear set, aligning it with the intended gear.



3. Manual rotate the pedal, feeding the chain along the gear, allowing it to set itself back into place.

Note: If the chain is dislodged for both gear sets, apply this to both sides individually.

4. The chain should now be set, rotate the pedal a few times without holding the chain to ensure it remains on.

Q: What if the chain is still rusty after cleaning several times?

A: It may be that you'll need to use stronger soap for the cleaning process. If it remains, you may need to consider replacing the chain altogether.