

How to use Lincare – The *Chain Link Caring* Tool

Note: Lincare can not replace mechanical cleaning with brushes. If your chain requires such mechanical cleaning, meaning the chain cleaning is long overdue, please do it before using the Lincare. It is important to understand that pure cold water can not wash away impregnated greasy muck. Lincare is a tool for frequent maintenance, not a tool to recover your neglected chain.

- **Steps of tool initialisation /preparation**

1. Get the appropriate connector for your garden hose. Its thread should be 3/4" female. Most convenient is quick-connect snap-on garden connector type for their quick connection/disconnection ability. See Picture 1. Thus the usage of the tool is always a snap away. Have this adapter reserved for the Lincare only so you don't have to remove it. If you suspect there could be some dirt delivered to the tool with your water, a connector with integrated filter is recommended. Lincare facilitates tiny high pressure nozzles which can get clogged easily without sufficient attention.
2. Get the air compressor quick connect adapter suitable for your compressor hose. The thread should be NPT 1/4" male. See Picture 2. Fix a red plastic adapter (supplied with the Lincare) into a table vice and screw in your quick connect adapter into it. You don't need a special thread sealant, but you should screw it in for 1mm deeper than flush, so metal bites into a plastic. Have that air compressor quick connect male piece reserved for the Lincare so you don't have to remove it. If you remove it, there's a chance a threaded contact will not seal perfectly anymore.
3. Screw in a water adapter (from step 1.) to one of Lincare's valves
4. Screw in an air compressor adapter (from step 2.) to the other valve
5. Make sure the oil valve is in CLOSED or LOCKED position. Then unscrew transparent cap and fill up the Lincare tool with your favourite lubricant, no more than 20ml.
6. Lincare has three valves.
Important: Only one valve should be opened at the time!
7. Make sure all three valves on Lincare are closed before usage.
mark "X" = no flow
mark "II" = max flow
8. First-time-users should test the tool without water/air hoses attached, to get a proper feeling and to learn how to avoid derailing the chain.

- **Lincare maintenance step 1 - DEGREASING THE CHAIN**

1. In standard practice of Lincare usage, you should soak your drive chain in degreasing agent. Recommendation: Use a water soaked dishwashing sponge, incised over the middle to provide a slot for a chain. Put some degreasing detergent on the sponge, like dishwashing detergent or a special powerful degreasing detergent.
2. Hold the sponge with your hand around the chain while rotating the chain through the sponge. Rotation duration in this step depends on dirtiness of your chain. When you see foam between chain links, that's a good indicator the degreasing agent is activated and you can switch to the next maintenance step.

Note: If you're sure your chain is not very dirty and oil on it is not sticky (very frequent Lincare usage, good oil quality), you can try to skip this step and check the effect of cleaning without degreasing.

- **Lincare maintenance step 2 - WASHING/RINSING**

1. Make sure all three valves on Lincare are closed.
2. Snap your water and air hoses and your Lincare tool is ready for washing and drying.
3. Open water flow fully on your tap which supplies the garden hose which Lincare is connected to.
4. Put Lincare on lower route of the bike chain. Make sure chain slips fully into the guiding channel of the tool. This way the water spray will be tamed most efficiently, although some side spraying on wheels and frame can't be avoided due to high pressure. So, keep the chain securely railed in to reduce wet surrounding. Caution!: Hard pressing the tool downwards against the chain is not required nor recommended. Chain should not bend downwards excessively.
5. Open the water flow by turning ONLY ONE valve of the inlet valves – in this case the water line valve. Open as much as you feel comfortable, the best is fully open for strongest, most efficient water flow. Beginners should start moderately, to accommodate to the feeling.
6. Start rotating chain and observe how it's getting cleaned. All dirt is pushed downwards to the floor by water pressure.
7. Within half a minute of continuous rotation, this step could be finished. Close the water inlet valve.

- **Lincare maintenance step 3 – DRYING THE CHAIN**

1. Put Lincare on your chain (or keep it on chain if you continue from step 2). Make sure chain gets into the guiding channel of the tool. Keep the tool steady so chain remains securely railed in. Caution!: Hard pressing the tool against the chain is not required nor recommended. Chain should not bend downwards excessively.
2. Open the air flow by turning ONLY ONE valve of the inlet valves – in this case the air line valve. Open the valve as much as you feel comfortable, the best is fully open for strongest, most efficient air flow.
3. Rotate the chain until it's as dry as you want it. The slower you rotate the chain, drying will be more efficient.
4. It is important to understand that some water droplets on chain surface could remain due to transfer from other wet parts. This is not a problem. The important details to be dried are link joints; roller's inner surface, pins -a task done by Lincare quickly and effortlessly. If you want you can blow some air from blow pistol on front-rear chain rings to prepare those wet surfaced before chain drying. But it is not necessary. And take care of your discs if you do that, they shouldn't get sprayed with dirt.
5. Within half a minute this step could be finished. Close the air inlet valve.

- **Lincare maintenance step 4 – LUBRICATING THE CHAIN**

1. Always lubricate chain which is clean and dry. Lubricating a dirty chain can create more problems than benefits.
2. Make sure all three valves on Lincare are closed. Move oil valve from LOCKED to CLOSED.
3. Put Lincare on your chain. Make sure chain slips completely into the guiding channel of the tool. Keep the tool steady so chain remains securely railed in.
Caution!: Hard pressing the tool against the chain is not required nor recommended. Chain should not bend downwards excessively.
4. Position the tool a little bit diagonally to the chain. Thus the oil nozzles will be exactly in the centred position for correct lubrication, especially applicable for modern narrow chains. But don't exaggerate, there should not be grinding noise and chain should not be visually deformed – bent sideways.
5. Oil dosing: Less is better, just move the chain for a bit longer. More can easily make more mess. Correct oil flow regulation depends on chain moving speed and viscosity of your lubricant. The only way to figure it out is your practice.
6. When you're ready, start rotating the chain and when comfortable in rotation, open the oil dosing valve and regulate required oil flow rate.
7. An advice for beginners: after several chain revolutions check how much oil you have on chain joints. It's better to start with low flow and gradually open more if required. Overflow reduces efficiency and creates an oily mess. It is better to dose oil slowly than open the valve too much and have oil dripping everywhere. However, after some experience, you can try to finish this step faster by faster chain rotation and higher oil flow rate.
8. First close the oil valve and then stop rotating the chain. Otherwise you'll get an oil overflow on the spot where you've stopped the chain rotation.

- **After usage - Cleaning and Storage**

- After usage, turn oil dosing valve to LOCK position.
- Upon disconnecting from hoses, leave both inlet valves open so remains of water can drain and naturally dry out.
- Wipe chain channel with some paper tissue to store it clean, so it doesn't leave stains in your storage place/shelf.
- Don't use hot water for tool cleaning. If required, wash in lukewarm water with hand soap or dish detergent. Rinse and dry with clean cloth.
- Never use solvents of any kind on/in Lincare device.
- Never use hot air for drying the tool. Use pressurized air from your compressor if required.
- The convenient T-shape design enables hanging the tool on parallel hooks on your garage wall. The tool remains filled with oil, adapters are on it, so when you need it you just snap on the hoses and simply use it.
- Avoid storing in direct sunlight. Cleaned Tool should be stored in a house environment at temperatures not higher than +50°C.

*Additional but not less important details***Oil dosing valve adjustment**

1. At first, play with Lincare a bit, observe how oil flows when you open the valve. Required openness of the valve depends on
 - Oil viscosity (implies oil temperature)
 - Speed of chain rotation during lubrication
- CLOSED valve position is where the oil valve lever covers X mark, just before the LOCK position. O mark is the LOCK position. Use LOCK position when storing/carrying the tool, not necessary during usage.
- Although there is no need to do so, you can remove oil dosing valve by rotating it around. Turn valve lever clockwise until it's above the oil cap and pull the valve out. When returning the valve in place, adjust it to that same position, keep valve stem pressed in with your thumb while rotating it counter clockwise.
- Most accurate oil dosing comes with your experience after some trials and errors, when you realize what oil flow (valve openness) and lubrication speed is optimal for your chain and lubricant type.
- Keep the oil dosing valve in CLOSED (or LOCKED) position all the time, except when you're actively rotating the chain in chain lubrication maintenance step. Don't turn tool upside down if oil valve is not securely in LOCKED position because oil will leak out through the valve shaft hole even if it is in CLOSED position.

Check the oil level by simple rotation of the tool holding it in front of you, facing the marks E, F, 1/4, 3/4.. Rotate in steps: 90°, 180°, 270° if front of your eyes. Do it slowly, let all the oil flow down inside the reservoir. At the position which shows you the oil level in middle of inspection glass (transparent oil cap), read the mark which appears normal to read horizontally – this is your oil level inside the Lincare reservoir.

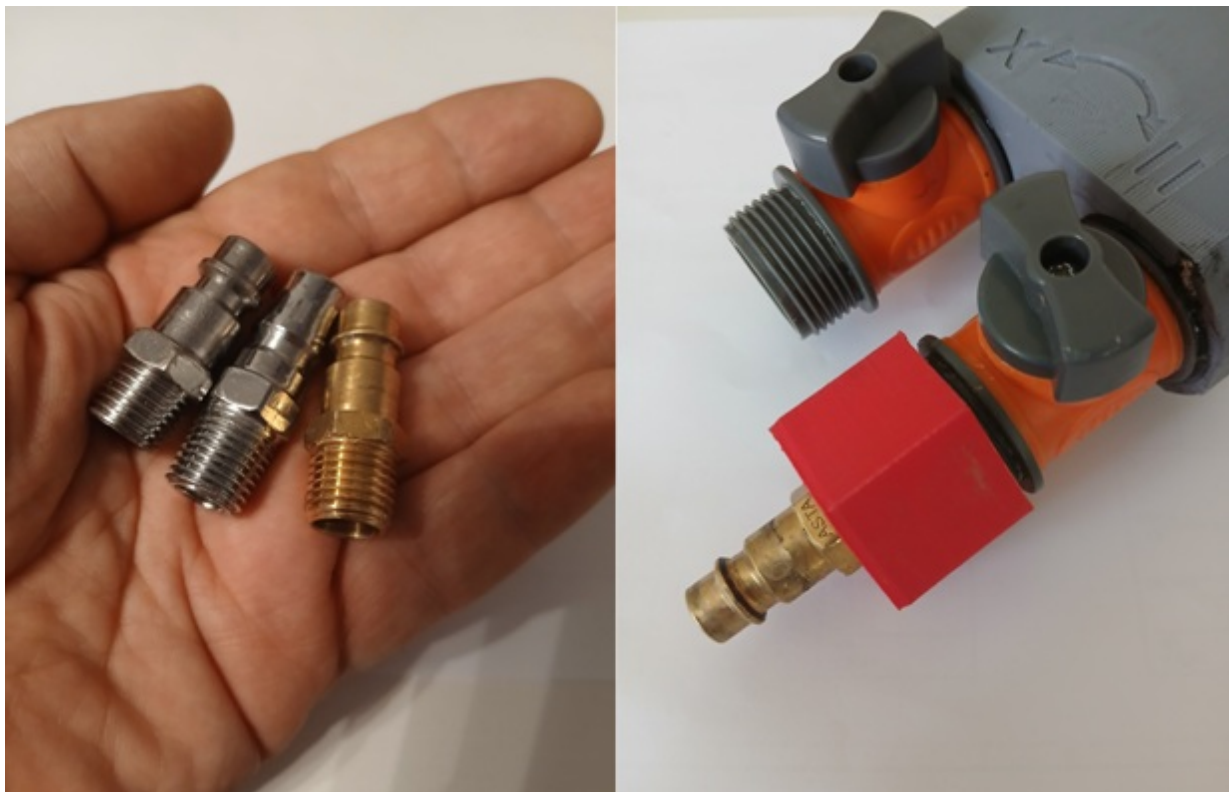
How to know there's enough oil on your chain? By probing with your finger tip, check if a faint oil mark appears on your finger. If it does, that's enough oil. The test point must be opposite side of the chain from the side of oil application. That means: You mount the Lincare on lower chain route rotating chain backwards. You test with your finger on TOP SIDE of link joints, on UPPER chain route. or BOTTOM SIDE of link joints, on LOWER chain route. When you see oily trace on the finger tip, you're done. If you see an oil drop forming on a chain link, that means you applied too much oil, wipe it off. The goal is to have all contact surfaces of the chain mechanism (link joints) lubricated without dripping of excess lubricant. Normal lubrication of complete chain requires 1 –2 ml of oil. That means one fill of 20ml would last around 15 rounds of chain maintenance. Your experience will tell you most accurately.

Mess on the floor is expected since there's no dirt/water collection possibility beneath the Lincare. Some water and dirt can get on rear tyre/rim too. That's why washing and drying should be done outdoors. Wipe tyre/rim with dry cloth after the chain maintenance process is completed.

Picture 1



Picture 2



For more info about the product, please check manufacturer's web page

<https://new-industry.art/lincare/>

