

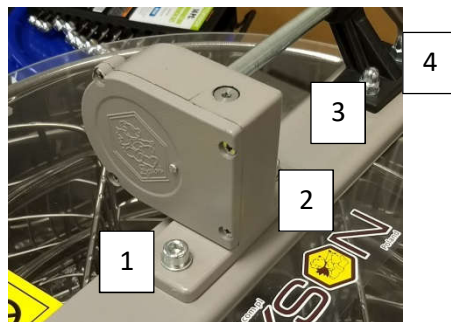
# Betterbee®

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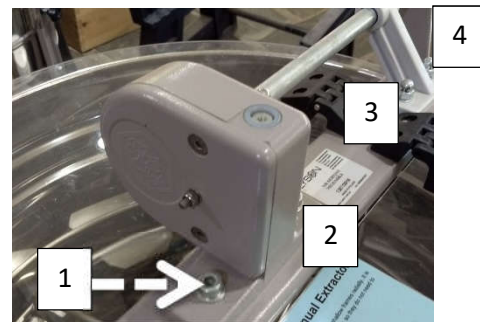
## Lyson 2019N, 2019Combo, and other small Lyson extractors: How to Replace Gearbox

*Gearbox replacement is required if the crank has become **very stiff and difficult to turn**, or if the output shaft (that spins the basket) is very difficult to turn. If the problem is that the crank turns freely but the extractor does not spin or does not engage, please see the separate instructions “How to Adjust Lyson Extractor Gearbox” to repair that issue.*

1. There are two styles of gearbox. With both styles, the gearbox is attached with four bolts that need to be removed. Bolts are labeled below.

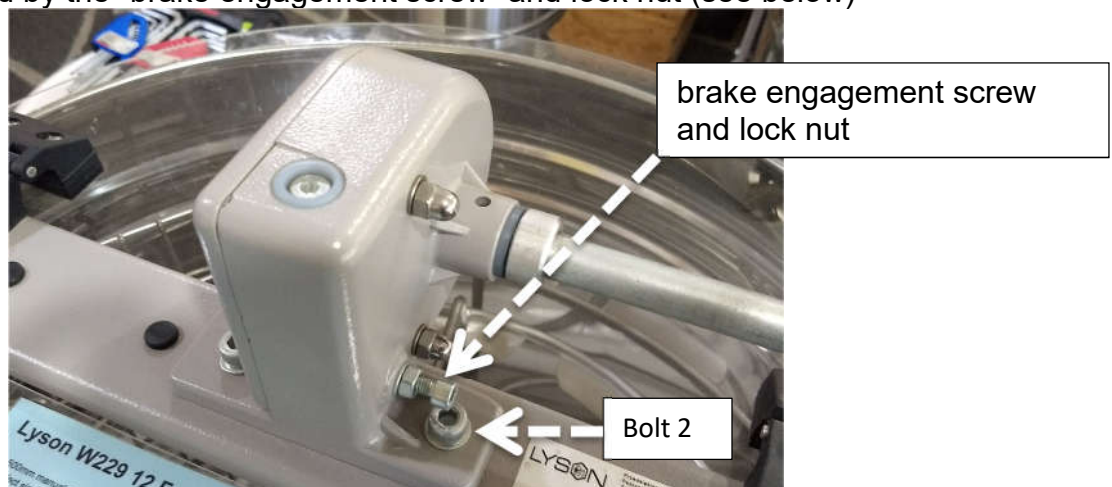


Style A



Style B

2. Bolt 2 is blocked by the “brake engagement screw” and lock nut (see below)



Remove the brake engagement screw to access bolt #2. All four bolts will require one wrench on top and one wrench below to remove.

3. While the gearbox is off, lift the extractor basket and ensure there is a single ball bearing in the cup in the bottom of the extractor. This ball should be lubricated with food grease or vegetable oil; add lubricant if the ball is dry.
4. Prepare the new gearbox to install. Remove the brake engagement screw on the new gearbox temporarily, being careful to leave the lock nut in approximately the same position on the screw.
5. Install the new gearbox on the extractor using the four previously removed bolts and nuts.
6. Reinstall the brake engagement screw on the gearbox after the gearbox is bolted onto the extractor. Carefully insert the screw to the same depth that it was installed before and tighten the lock nut. If inserted too deep, the extractor will not spin.
7. Turn the extractor to make sure it spins freely, and test the brake by turning the crank backwards. If the extractor does not spin freely, the brake engagement screw may be too tight. Turn counterclockwise one turn at a time until the extractor spins freely. If the brake does not work, tighten this screw one turn at a time until the brake works properly. Tighten the lock nut after adjusting the screw.