

Matching a Motor Conversion Kit to My Hand-Crank Extractor

When you buy our Lyson Motor Upgrade Kit, there are four purchase options that you can select:



If your hand-crank extractor is manufactured by Lyson, you should be considering Options (a) and (b).

The difference between these options is that for larger extractors an extension cord is needed to connect the controller unit to the motor unit, so we include that extension cord in your order. The model number of your extractor will let you choose whether you need the normal kit (a) or the kit with the extension cord (b).

If your hand-crank extractor is manufactured by SAF, Lega, or another company, you should be considering Options (c) and (d).

The difference between these options is that Option (c) is the same base-model Lyson extractor motor kit as Option (a), while Option (d) includes a modified motor assembly with an extra piece of metal (a spacer tube) welded to the bottom of the motor as well as a pair of shaft adaptors. These modifications are meant to make the motor kit compatible with many (but NOT all) hand-crank extractors manufactured by SAF and Lega. These will often work with other brands of extractor as well, but such conversions are undertaken at your own risk. Option (d) also includes two adapters that can connect the motor shaft to the shaft of your extractor, but you should take measurements before ordering so that you know whether your shaft will fit into the motor or into either of the adapters.

To understand how the whole extractor motor kit fits together on an extractor, please view this video: https://www.youtube.com/watch?v=o3ZVf49nE0g

The rest of this document clearly explains the dimensions and properties of Option (d), the SAF / Lega / Other brands conversion motor kit. Please read carefully to determine if the kit will work for your extractor. It will not work with some extractors.

There are four ways to use the Lyson motor kit for SAF / Lega / Other extractors:

- 1. Use small adapter (1.5" extension with 0.56" bore)
- 2. Use large adapter (2" extension with 0.63" bore)
- 3. Use no adapter mount directly onto the extractor shaft
- 4. Make you own adapter to fit your extractor, or modify your extractor shaft to fit.



"SAF / Lega" Motor with rectangular spacer tube (gray) (shown without either shaft adapter installed):



Mounting bolt size: M8 (0.315" diameter). Bolts protrude 0.80" and include a nut and washer. Adjustable bolt spacing: 2-5/8" to 2-15/16" center to center.

SAF / Lega Motor Kit with "small" adapter installed:



The small adapter shaft extends 1.5" below the rectangular tube when installed. It will fit a shaft up to **0.56"** diameter (about 14 mm). The 0.56" bore is 0.98" deep. The slot for engaging the shaft pin is 0.195" by 0.79". Overall the adapter measures 3" long by 0.87" outside diameter on the large end.



SAF / Lega Motor Kit with "large" adapter installed:



Large adapter: extends 2.03" below the rectangular tube. **Bore is 0.63"** diameter by 0.83" deep. The slot is 0.273" by 0.80". Overall the adapter measures 3.5" long by 0.87" outside diameter on the large end.

SAF / Lega Motor Kit without a shaft adapter installed:



This version of the motor kit can also be used without an adapter shaft. The built receiver has an inner diameter of 0.595" with 0.19" by 0.78" slots (see image to left). The top end of the bore is 1.65" above the bottom surface of the gray rectangular tube, meaning your extractor shaft can extend up to 1.65" above the cross bar of the extractor.

Shaft adapters:



Both shaft adapters have roll pins installed in the small end which interlock with slots in the motor shaft (see above). The rolls pins measure 0.16" by 0.80".