

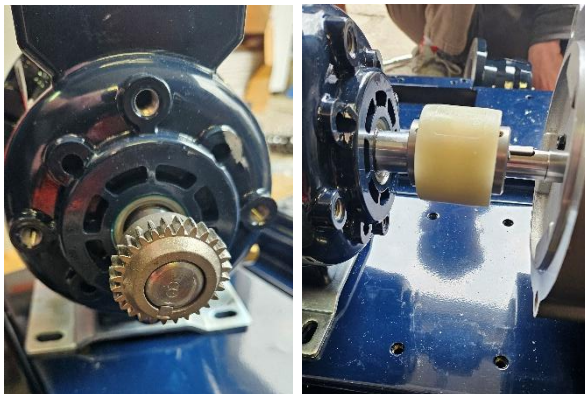
D10 Hydra-Cell Pro Pump, Motor, Adapter, Coupling and Baseplate Assembly

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The following article provides an illustrative overview of the components and process of assembling a model D10 Hydra-Cell Pro pump to a motor using an adapter, shaft coupling and baseplate

Shaft Coupling

Sometimes referred to as a "jaw coupling" due to the ridged circumference, it consists of two hubs and a "spider" (the plastic piece which connects the two hubs together). Attach a hub to the pump shaft and to the motor shaft such that the end of the shaft is flush with the pump/motor shaft.



Although you are not going to actually couple the shafts together yet, the picture above shows how they will be eventually positioned.

Baseplate

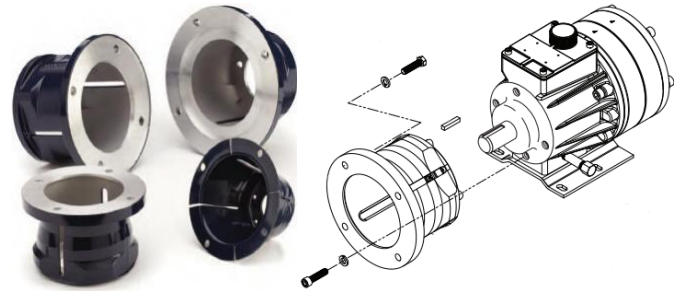
While you may fabricate your own baseplate design, Wanner has a baseplate design for each pump model and corresponding compatible motor sizes. The key feature of the Wanner design is that the baseplate is predrilled in the correct locations for the pump and motor with the underside having welded nuts such that all tightening/loosening can be accomplished from above with the provided bolts.



Mount either the pump or the motor to the baseplate, choose whichever has the highest shaft height. In most cases that will mean mounting the motor first.

Adapter

The pump/motor adapter is a cast piece which positively aligns the pump and motor shaft, preventing shaft deflection and resulting in long coupling wear life.



Mount the adapter to either the motor or pump, whichever was attached to the baseplate.

Install the coupling spider inside the adapter onto the pump/motor shaft.

Attach the component not yet connected to the baseplate (pump or motor) to the adapter; you will align its shaft/hub such that it fits into the plastic spider and this will enable bolting it to the adapter.

It is important to note that either the pump or the motor (whichever has a shorter shaft to grade height) may "hang" from the adapter – this is perfectly normal and acceptable. There will be no additional vibration or stress to the corresponding shafts because the adapter is providing alignment and it is designed to support the weight of the pump and motor. Some customers prefer to install a shim to ensure both pump and motor are in contact with the baseplate which is okay if you want to do that but it is not a functional or necessary thing to do.

This assembly method applies to the F21/22, D03, D04, D10, D15 and H25 Hydra-Cell Pro pump models.



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