



## **AHWG TA#5 – DRV80 Gen. 1 to Gen. 1.5 Upgrade**

**Product:** DRV80 Gen. 1

**Topic/Problem:** Gen. 1 to Gen. 1.5 Upgrade Kit to Prolong & Extend existing DRV80 Gen. 1 Product

Armstrong International – Hot Water Group (AHWG) and our customers take great pride in assembling and installing durable and reliable products that remain in service for many years beyond their stated warranty periods. As the groundbreaking developers of digital water temperature control in 2001, we have demonstrated continual improvements and enhancements to existing product as well as new. To further reflect this commitment to providing customers the most robust product possible for areas that may be instigated by harsh water conditions such as the drive mechanism & motor methodology in our 1<sup>st</sup> generation DRV80 we are addressing via a new design concept. AHWG has a product in the DRV80 Gen. 1, that has stood the test of time, and this latest advancement will only further augment its robust durability in the field.

### **Proposed Solution(s):**

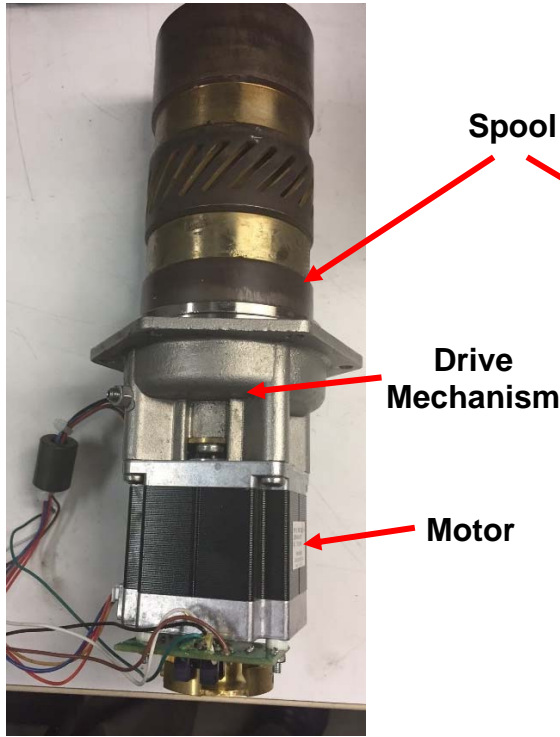
Over the course of the last year or so, we have been diligently working on a radical approach to a new design concept that addresses any and all potential part challenges along with a dramatic increase to product longevity and reliability for the DRV80 Gen. 1. We are now prepared to offer this in our new DRV80 Gen. 1 to Gen. 1.5 Upgrade Kit!!!

The overall premise behind the design upgrade is to have the DRV80 Gen. 1 take on the DRV80 Gen. 2 drive methodology which in part means rotating the motor 90° out of the direct path of water (i.e. no longer directly beneath the drive) as well as eliminating the linear worm gear drive mechanism by instead utilizing the Gen. 2 Gear Drive Assembly (GDA). Images and figures detailing & comparing this upgrade and change are included below.

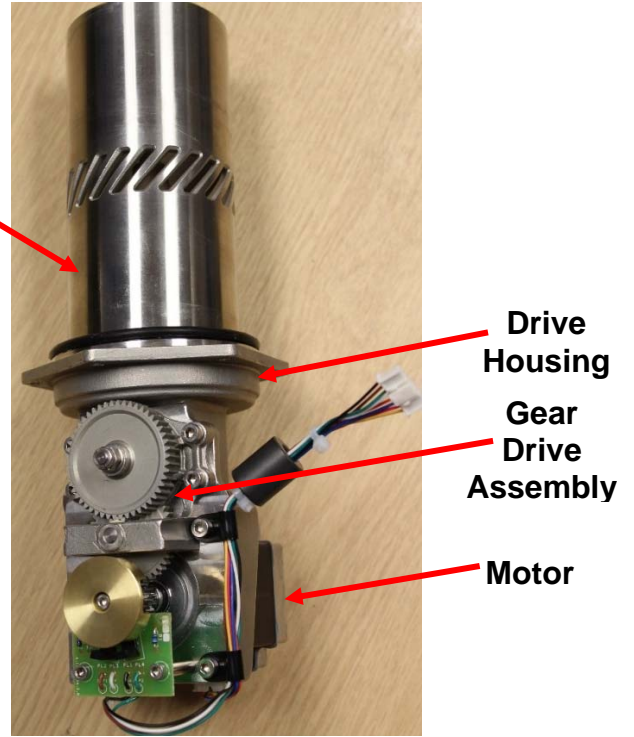
With the Gen. 1.5 Upgrade Kit you will receive all of the parts necessary to fully renovate & upgrade the DRV80 Gen. 1 including the following – stepper motor, GDA, drive housing, seals, spool, and PCBA. The seals will now take on the same shape & design as the DRV80 Gen. 2 making the GDA and seals now common across all generations. The upgrade kit comes fully preassembled allowing for easy replacement and installation in the field.

Warranty periods will remain as they have been with the warranty being the remainder of the original products' 5 year warranty or a 1 year warranty on the replacement upgrade kit whichever is longer. For any existing DRV80 Gen. 1 still under its' original 5 year warranty and has a drive mechanism/motor replacement needed (i.e. an 'Error Motor') this upgrade kit will be what will be used as the replacement going forward. We will cover this under our normal RMA procedure per the warranty period mentioned previously. The part number for this kit is p/n D88937 and a complete separate & specific to this upgrade process IOM, has been completed; **IOM-502**, and is posted to our website. A detailed step by step service video has also been created that is linked **here** as well as posted to the website. Product will be available for purchase and replacement beginning January 1, 2017.

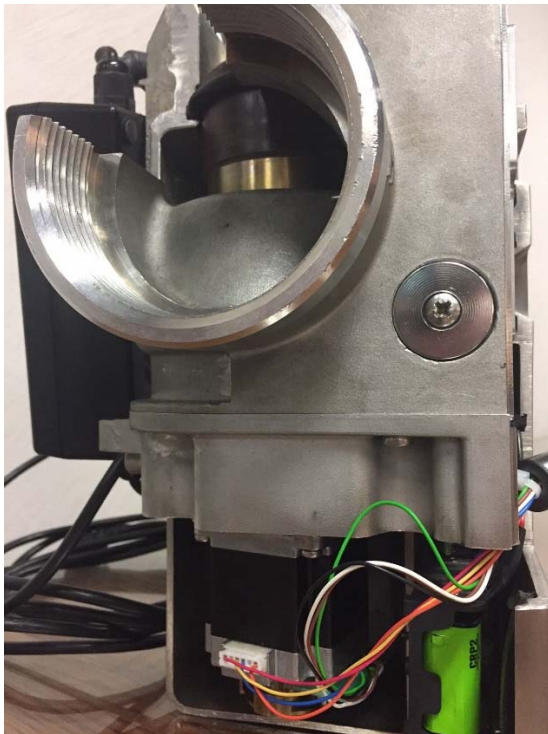
Figures/Pictures:



**Figure 1 – DRV80 Gen. 1 Drive Assembly**



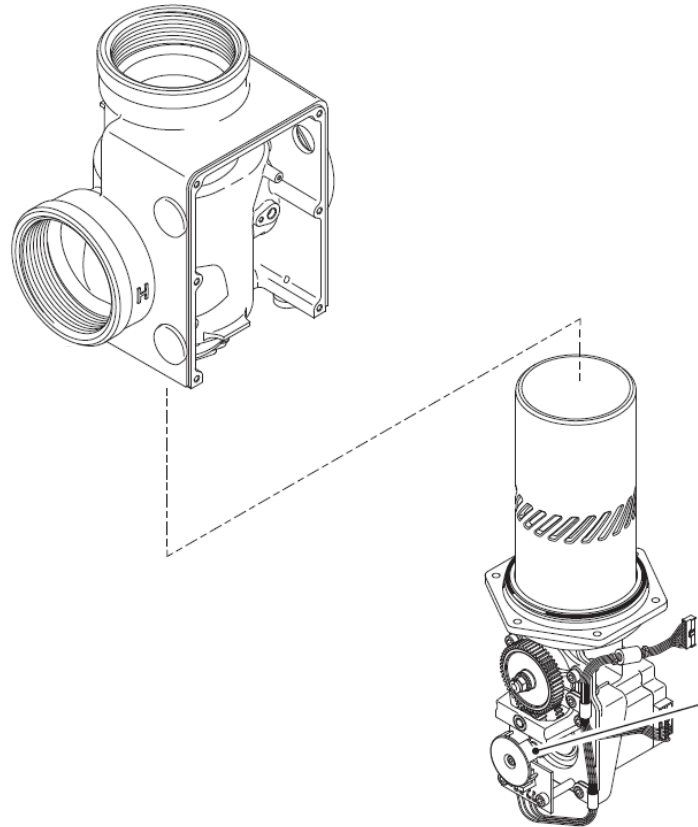
**Figure 2 – Gen. 1.5 Drive Assembly**



**Figure 3 – DRV80 Gen. 1**



**Figure 4 – DRV80 Gen. 1.5**



**Figure 5 – DRV80 Gen. 1. To Gen. 1.5 Upgrade**