



# PROCESSTEC

GET TOMORROW'S TECHNOLOGY TODAY

## ViscoTwin

R+W Disengaging Coupler



Address: 9938 West Legacy Ave | Visalia, CA 93291 | Phone: +1 (559) 429-4227  
Fax: +1 (559) 429-4228 | Email: [info@processtec.com](mailto:info@processtec.com) | <http://processtec.com>

**1. R+W DISENGAGING COUPLER..... 1**

- 1.1 Re-engaging the Coupler ..... 1
- 2.1 Re-engaging the Coupler Movie ..... 8

**2. TECHNICAL SPECS..... 9**

- 2.1 VT130 Explosion Drawing..... 9
- 2.2 VT130 Torque Chart ..... 10
- 2.3 Frame #4 Explosion Drawing ..... 11



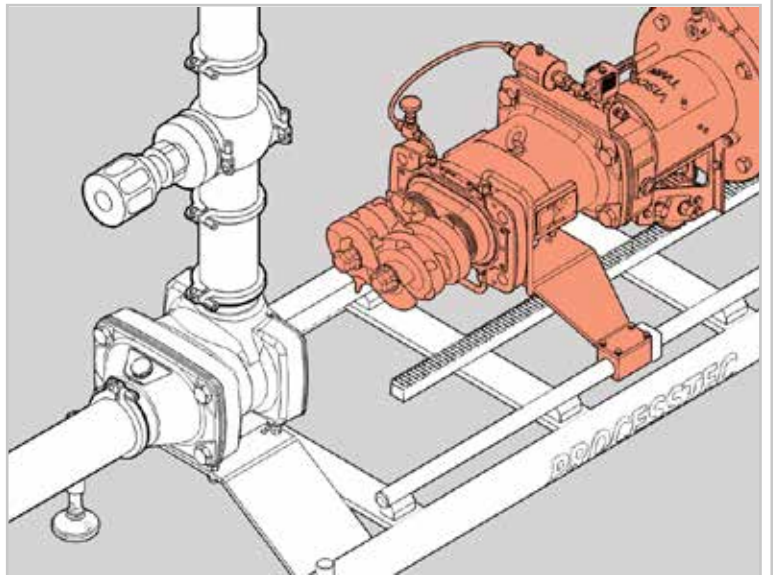
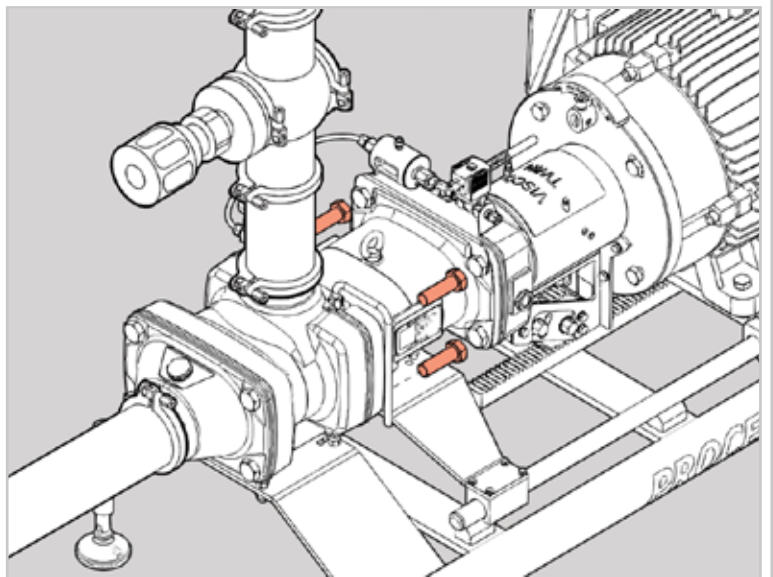
## 1. R+W DISENGAGING COUPLER

### 1.1 Re-engaging the Coupler

#### STEP 1)

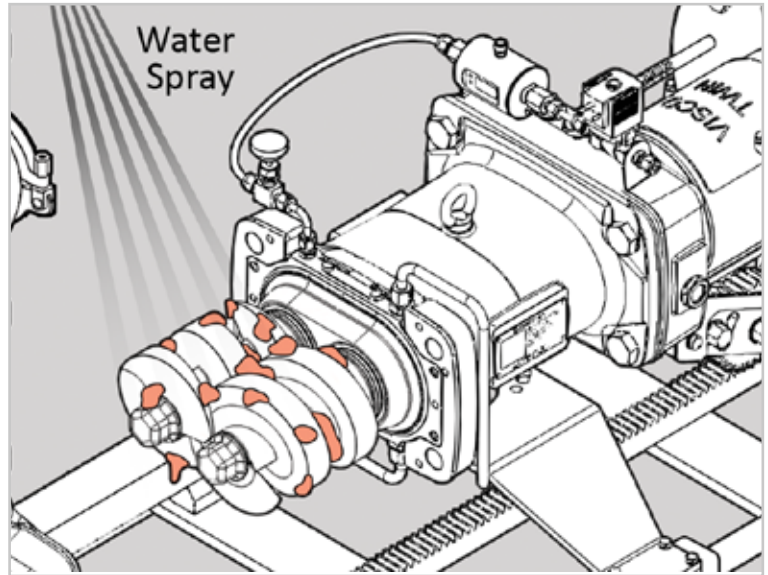
Disconnect the Pump Housing Bolts (Pos. 1016) from the Pump Housing (Pos. 2530).

Using the Frame #4 Gear Console underneath the Lantern (Pos. 3000), slide the Pump/Lantern/Motor all the way back until the Bearing Housing Sliders reach the Stop Brackets on Frame #4.



**STEP 2)**

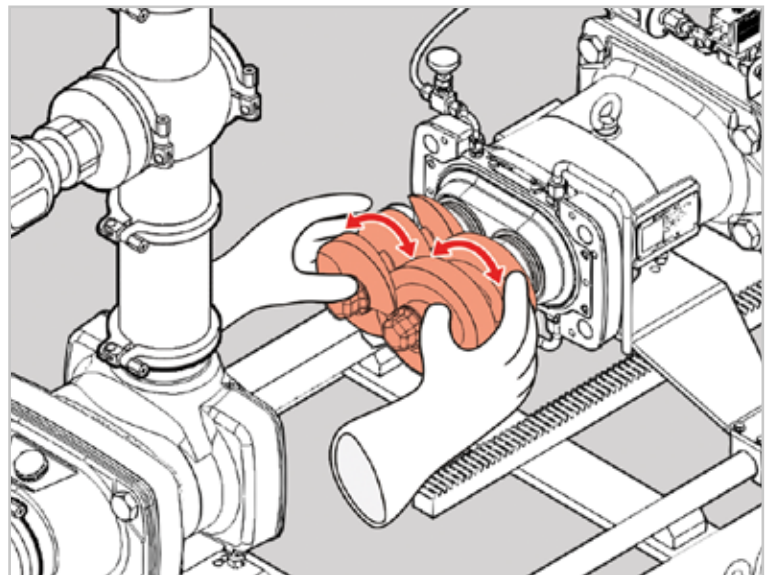
Clean and inspect the Spindles (Pos. 2200 & 2201) for foreign matter and check for Spindle deformation. Determine the cause of the blockage.



**STEP 3)**

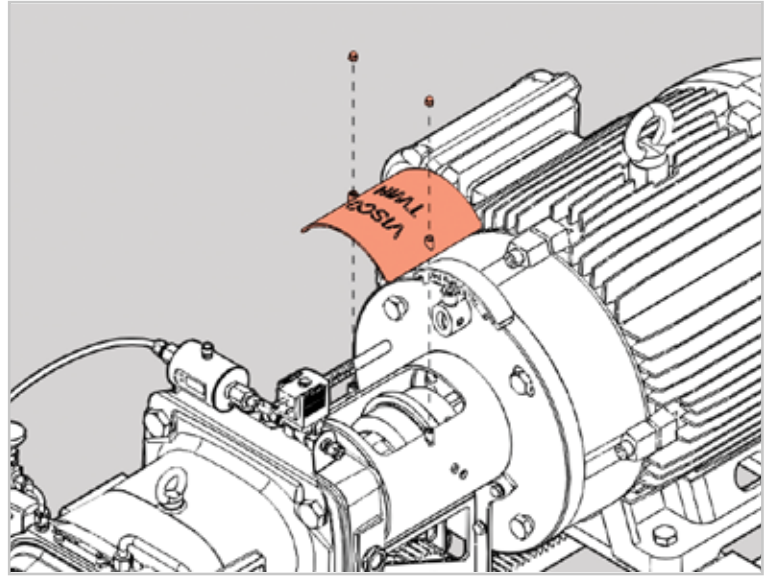
**IMPORTANT:** Wearing a pair of Safety Gloves for this step is required.

Grab both Spindles (Pos. 2200 & Pos. 2201) and check for full 360 degree rotation, in both directions. Ensure that there is no touching or rubbing between the Spindles. If rubbing exists, you will need to either remove the high points with light sanding, or re-gap the Spindles.



**STEP 4)**

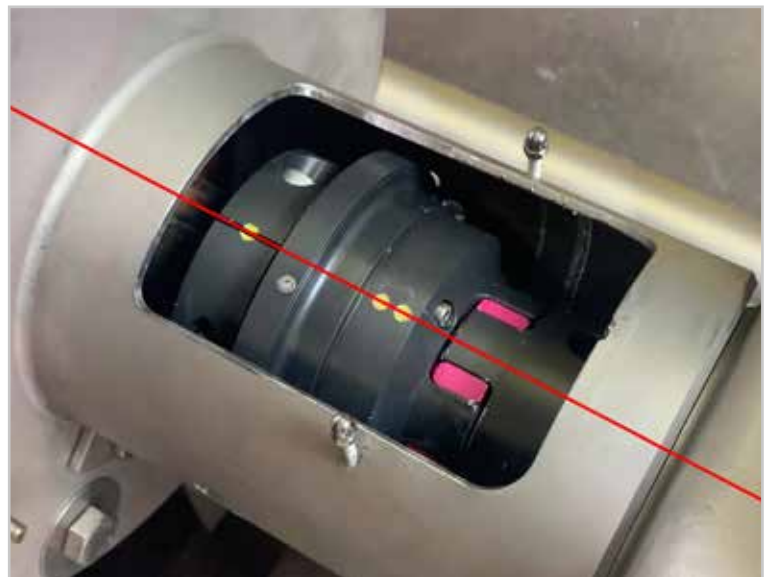
Remove TWO (2) Lantern Cap Nuts (Pos. 3002) and then remove the Lantern Safety Shield (Pos. 3001) from the Lantern (Pos. 3000).



**STEP 5)**

Align the 3 yellow dots on the Pump Coupler (Pos. 2247) and the Motor Coupler (Pos. 2248) by rotating the Motor Coupler until all THREE (3) yellow dots are perfectly aligned.

The Coupler cannot be re-engaged if these dots are not first aligned.





**STEP 6)**

Remove the TWO (2) Breakaway Coupler Levers (Pos. 3030) that are threaded on the side of the Lantern (Pos. 3000). These tools will be used to Re-engage the R+W Coupler.

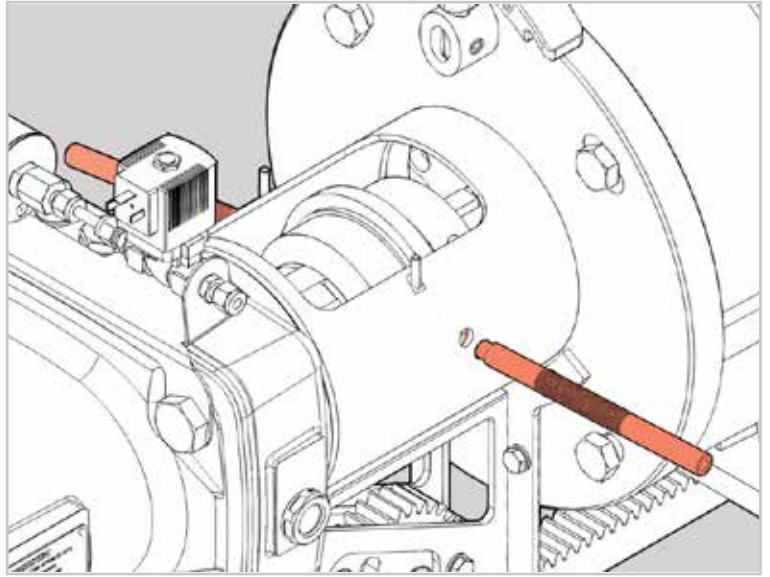
Arrange the flat surfaces of the tips so that they will be able to rest against the backside of the Motor Hub Outer Ring.





**STEP 7)**

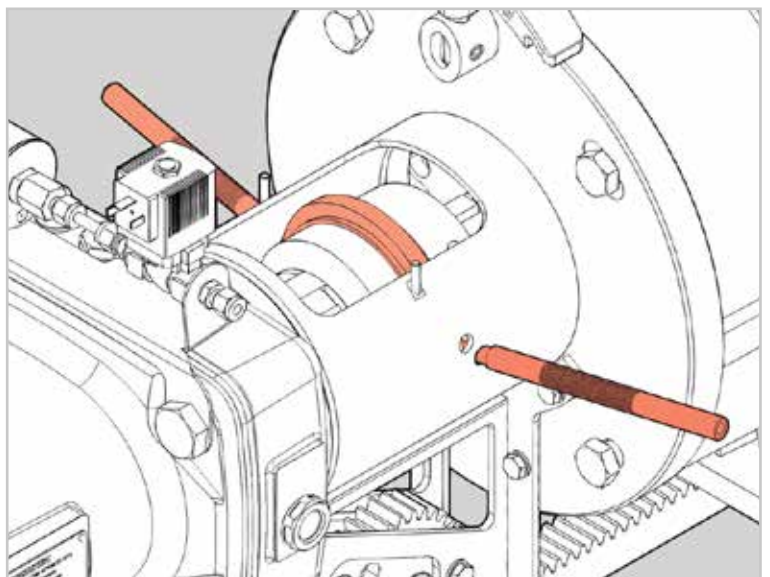
Insert both Breakaway Coupler Levers (Pos. 3030) into the small holes on the sides of the Lantern (Pos. 3000) that are closest to the Motor (Pos. 3003), with the flat surfaces of the tips touching the Motor Hub Outer Ring.



**STEP 8)**

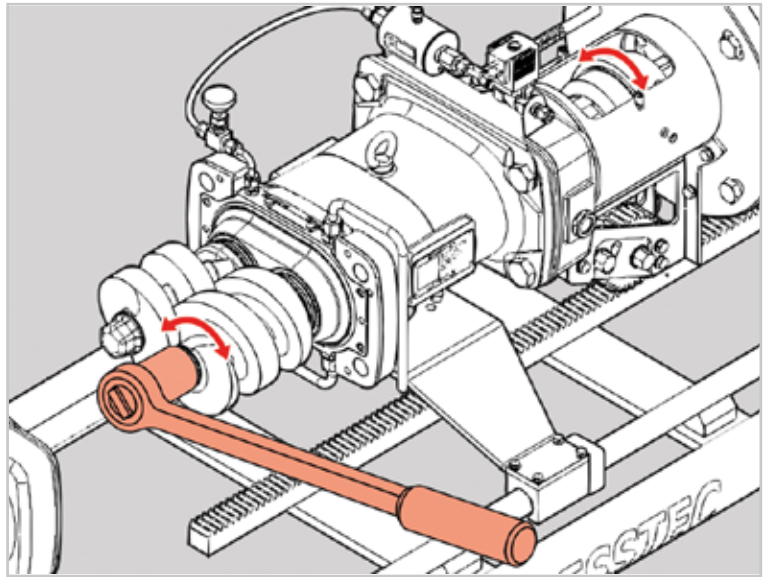
Using leverage on both tools inserted into the Lantern openings, move the tools towards the Lantern Flange, prying the Motor Hub Outer Ring (Pos. 2248) towards the Pump.

A "click" sound should be heard as you see the movement of the outer ring when the coupler has been properly re-engaged.



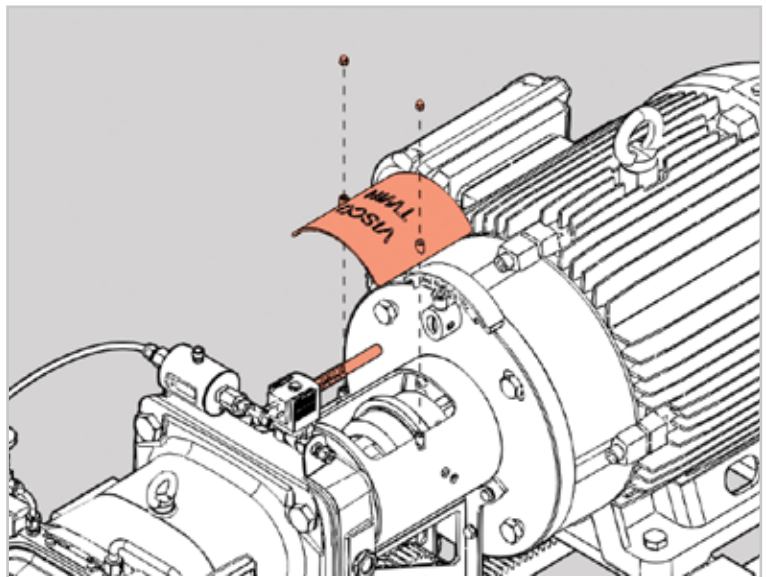
**STEP 9)**

Test for the complete re-engagement of the Coupler by turning one of the Shaft Spindle Bolts (Pos. 2180) with a wrench, and confirm that the Motor Hub (Pos. 2248) and Pump Hub (Pos. 2247) move together.



**STEP 10)**

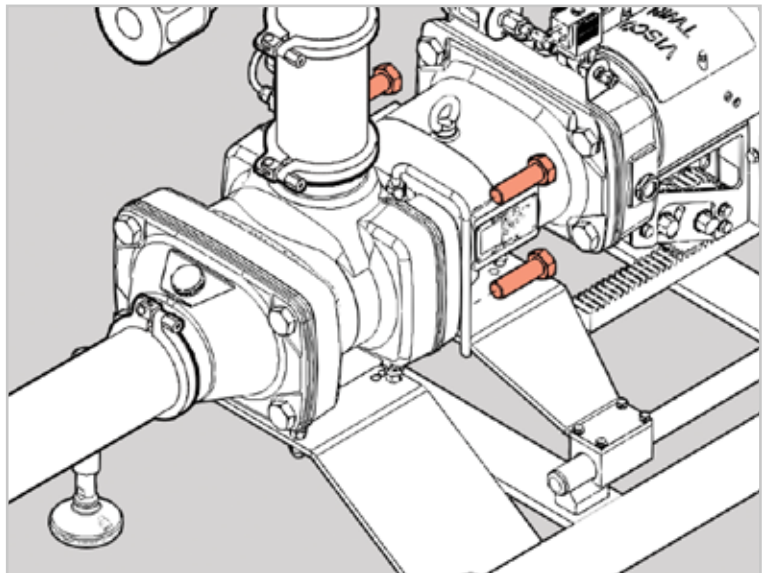
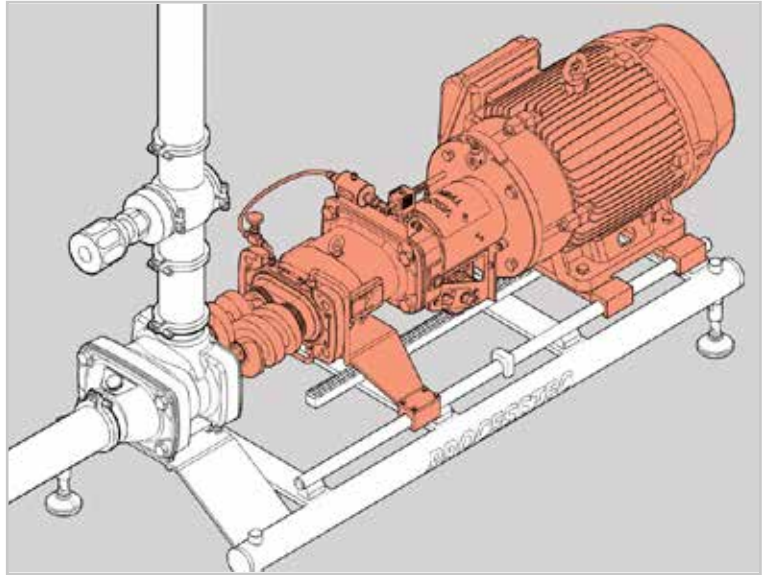
Replace the Re-engagement Tools (Pos. 3030) onto the Lantern (Pos. 3000), reattach the Lantern Safety Shield (Pos. 3001) and then fix the Cap Nuts (Pos. 3002) in place.



**STEP 11)**

Close the Pump by moving the Pump/ Lantern/Motor along the Frame #4 Track until the Spindles are fully inserted into the Pump Housing. Take care not to pinch the O-ring Seal (Pos. 1088) when closing the Pump.

When the Pump Housing (Pos. 2530) and Bearing Housing (Pos. 1001) are completely closed, you can reinstall the Pump Housing Bolts (Pos. 1016).



2.1 Re-engaging the Coupler Movie



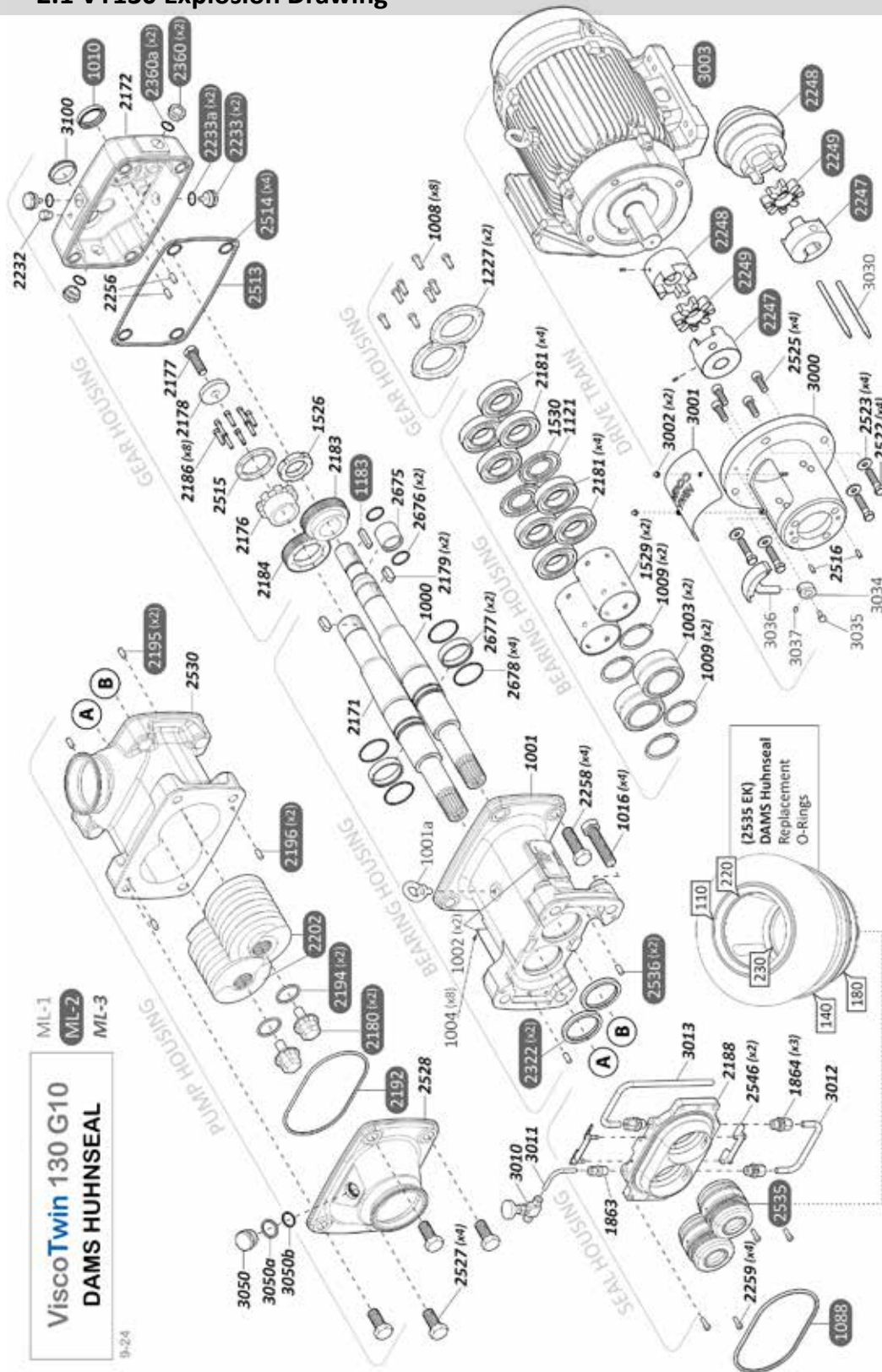
A short movie has been created showing the process of Re-engaging the Motor Hub after it has become disengaged.

You can access this movie via the QR Code.



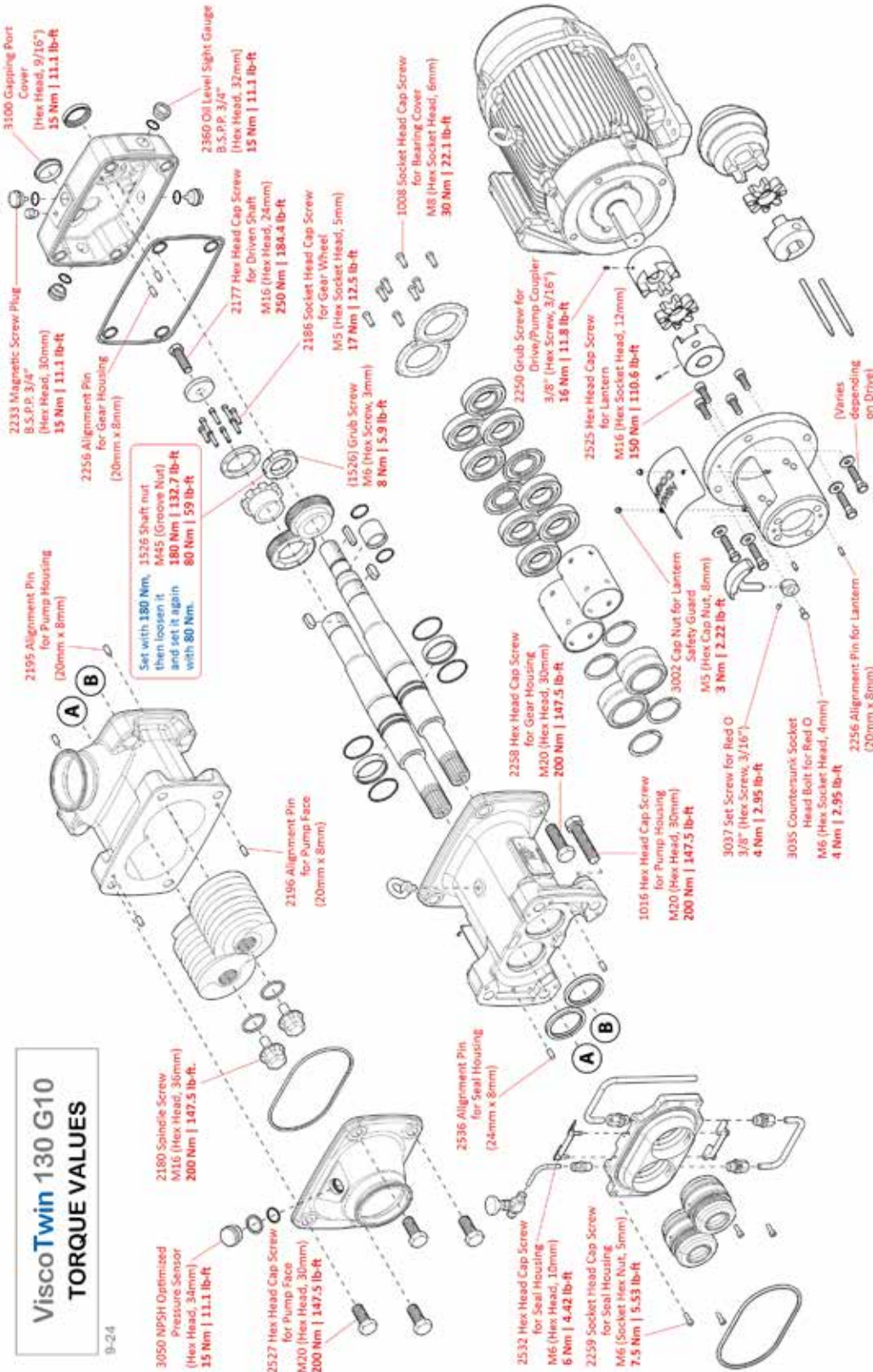
2. TECHNICAL SPECS

2.1 VT130 Explosion Drawing



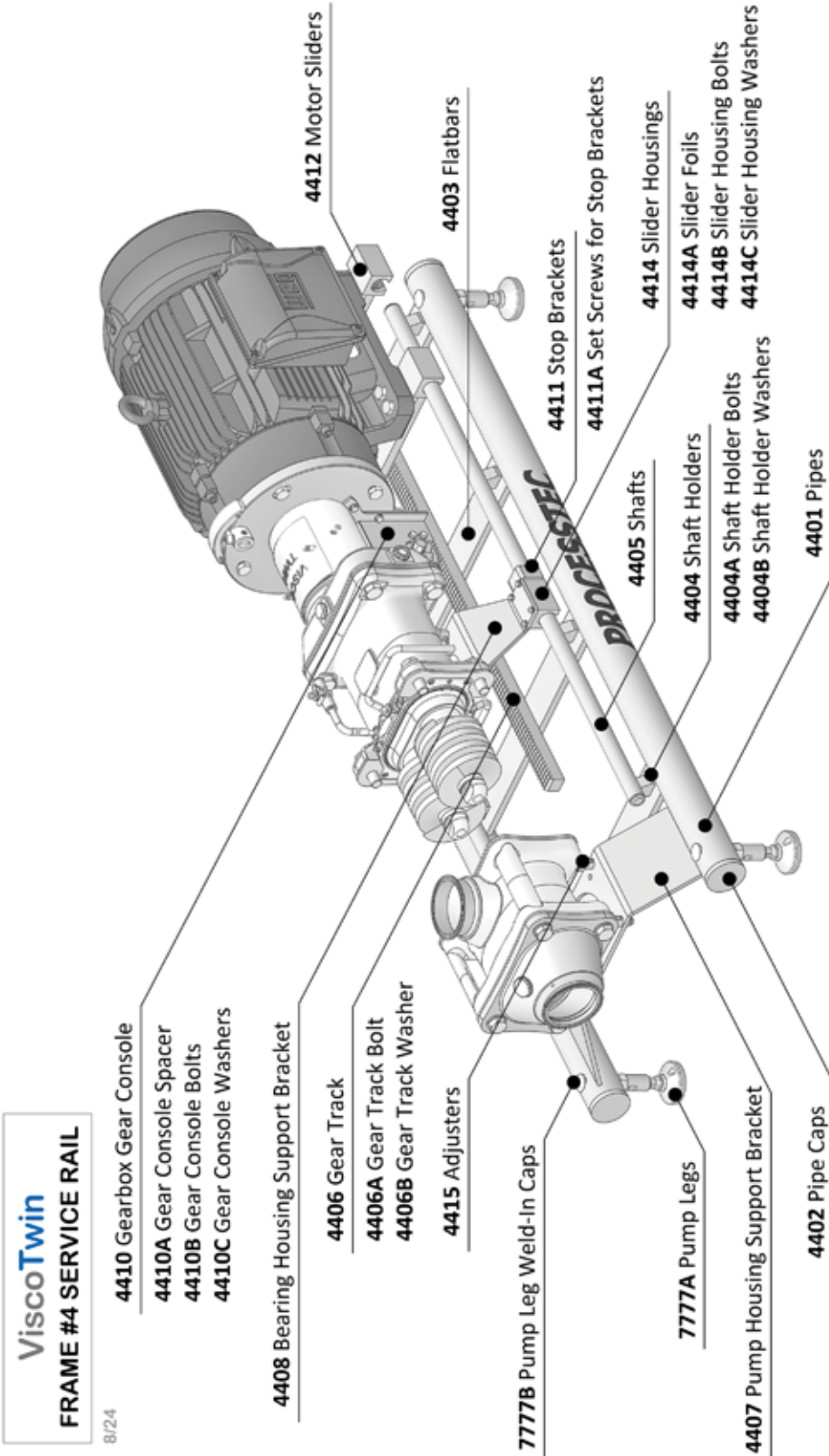
Tabloid Size  
(11" x 17")

**2.2 VT130 Torque Chart**



Tabloid Size  
(11" x 17")

2.3 Frame #4 Explosion Drawing



Tabloid Size  
(11" x 17")