

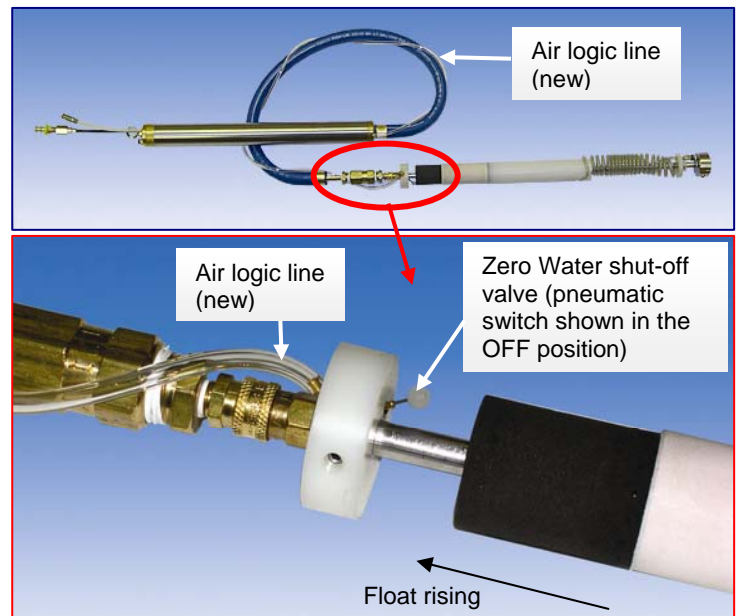
## F.A.P. Plus™ ZW — “Zero Water” With AccuPos™ Indicator

Introducing the F.A.P. Plus™ ZW, an upgraded version of the standard pump. The new pump incorporates the “Zero Water” pneumatic logic that stops and starts the F.A.P. Plus™ ZW automatically — depending on the position of the skimmer inlet — and prevents the ingress of water when the water level rises more than the skimmer travel allows.

The AccuPos™ Indicator helps locate the product/water interface level accurately which makes it easy to install the pump at the proper level. This unique feature makes installation precise, easy and very efficient. In addition, the AccuPos Indicator shows the status of the Zero Water valve (i.e., if high water turned the pump off).

### 1.0 Operation

- 1.1 As the water table rises, the float moves up. When its rise exceeds the standard 36-inch skimmer travel, the float will open a pneumatic switch which closes the air supply to the pump and thereby turning it off. When the water table recedes and the skimmer inlet is at the proper product/water interface, the air switch is released, allowing the compressed air to re-start the pump automatically. This in-well technology prevents any water from being pumped to the surface.
- 1.2 Totally pneumatic operation.



Top: F.A.P. Plus™ ZW with optional rod skimmer.  
Bottom: Close-up showing the Zero Water shut-off valve.



## 2.0 AccuPos™ Indicator

The AccuPos (short for “accurate positioning”) is mounted at the well head and is used to install of the F.A.P. Plus ZW pump at the proper level and to confirm the pumping status.

- 2.1 The standard AccuPos comes with pressure gauge only. The box (as shown on figures 1 and 2) with the pressure gauge and internal wiring for electronic signal output is an upgrade.
- 2.2 During installation, the F.A.P Plus system is lowered in the well with the air pressure on. The dial gauge shows an air pressure and the visual indicator is green (Fig.1). This is the normal, active pump situation. As soon as the air pressure drops, you know the Zero Water switch has been triggered which indicates the product/water interface is at the top of the skimmer travel. At that point, the system is raised to the appropriate level to accommodate the expected water table changes.

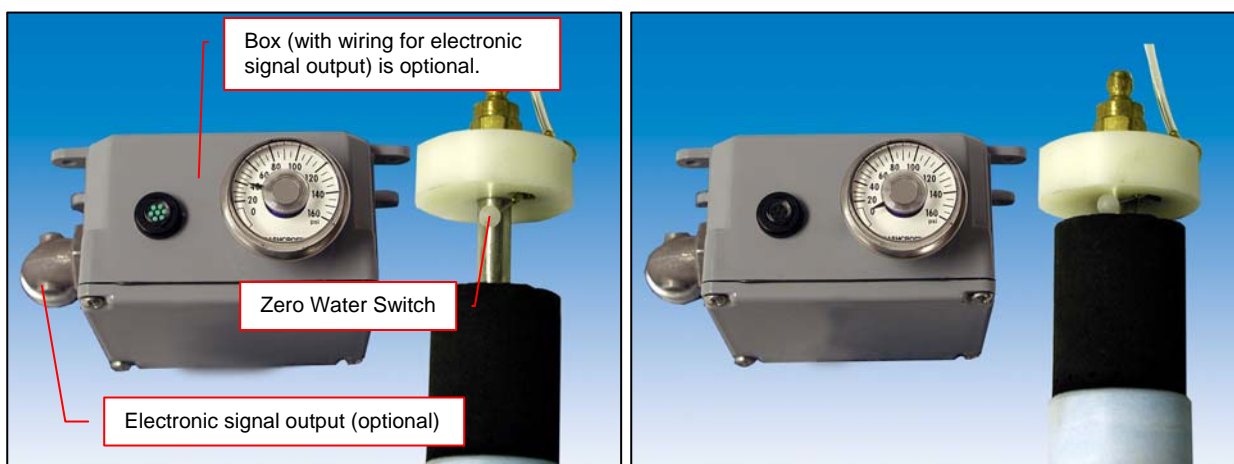


Fig. 1: Normal state with air pressure ON, pump active. The float is not in contact with and not activating the Zero Water switch. The switch is ON. The AccuPos gauge shows normal air pressure and the visual indicator is green.

Fig. 2: Dormant state with pump inactive. The float is maintaining the Zero Water switch in the OFF position. The AccuPos gauge shows zero air pressure and the visual indicator is black.

- 2.3 The AccuPos indicates if the pump is active or dormant which makes troubleshooting that much easier. If the pump is not pumping, it does not necessarily mean that the pump requires service but how do you know without the AccuPos? In normal conditions, if the AccuPos shows no air pressure, it means that the Zero Water is activated: the water table has risen high enough to activate the switch and turn the pump off. As soon as the water level recedes or the system is properly positioned, and the Zero Water switch is turned back ON, the pump will start pumping again and the indicator gauge will show air pressure and the sight gauge will be green.
- 2.4 AccuPos works only with the FAP Plus ZW pump.
- 2.5 AccuPos will start shipping June 1, 2006.



### 3.0 Ordering Information:

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Order the pump and the rod skimmer(s) separately.

#### 3.1 Pump:

<b>TR-51640</b>	<b>FAP Plus ZW Pump (with Zero Water Shut-off)</b>	<b>List price: \$1,535.00</b>
TR-516	FAP Plus Pump (the “standard” FAP Plus Pump )	List price: \$1,395.00

(Prices may change without prior notice)

#### 3.2 Rod Skimmer:

Any of the rod skimmers (TR-517, TR-51711, TR-70410) can be fitted to either TR-51640 or TR-516.

3.3 Available starting immediately.

3.4 Replacement parts: N/A

3.5 Retrofits: You current F.A.P. Plus pump and skimmer may be upgraded to the ZW system. It must be sent back to DGS for an estimate.

3.6 Repair kit: N/A.

### 4.0 How to distinguish with the standard pump.

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4.1 The small air line wrapped around the blue hose (see upper photo) indicates that this pump is fitted with the Zero-Water shut-off valve.