# **PHILIPS**

## **Qwik Tech Tips**

Volume 1 Issue 12

December 2011

#### **FEATURED PRODUCT**

### STA-LOCK™ Gladhand

- Durable cast iron connector plate
- Stainless steel ballbearing provides a positive lock for gladhand mating
- Aluminum body to save weight





VISIT US ON THE WEB

www. phillips qwiktechtips .com

TO BE ADDED TO OUR
MAILING LIST AND
FOR ALL
PAST ISSUES

## **Gladhands and Corrosion - Part 2**

#### **The Connector Plate**

As with the gladhand body that we discussed in Part 1 last month, there are also several types of connector plates to choose from; Gold Chromate, Cast Iron, Powder Coated Steel and Stainless Steel with Powder Coating. You will experience the same reaction to corrosion with these as with the body; however there are other things to watch for as well. If the small dimple on the plate wears down, the gladhands will start to lose their ability to seal properly when coupled, allowing air to leak in the system. Currently there is only one manufacture that has designed a heavy-duty solution, the STA-LOCK<sup>TM</sup> connector plate. This feature increases the lifetime of the gladhand by using a ball-bearing to help latch the gladhand.

Tip: Use stainless steel connector plates for best anti corrosive protection.



Stainless steel connector plate

Powder Coated steel plate



Connector dimple with wear

#### The Detent Plate and Rivets

After many cycles the metal starts to shave off and create grooves. Watch for heavy wear, if the plate becomes loose, it is time to replace the gladhand. You'll find detent plates made of a Cold Rolled Steel with Gold Chromate or Stainless Steel. Stainless offers better corrosion prevention. The rivets are what hold the detent plate to the gladhand body and are usually made of Zinc with a gold chromate finish, although some manufacture are standard with Stainless Steel. Corroded rivets on detent plate will cause the plate to loosen and eventually break off, making coupling impossible.



Heavy abrasion



Corroded detent plate and rivets

**Important Note**: Watch for loss of tension when coupling and uncoupling gladhands, this is a sure sign they need to be replaced.



- Material used to manufacture the connector plate, the detent plate and the rivets makes a significant difference in wear characteristics and replacement requirements.
- If the small dimple on the connector plate wears down, the gladhand will start to lose its ability to seal properly when coupled, allowing air to leak in the system.
- A gladhand needs to be replaced if the detent plate becomes loose as metal shaves off from heavy wear or if rivets become corroded loosening the plate.
- An easy way to know if gladhands need to be replaced is to watch for loss of tension when coupling/ uncoupling.