

Heavy Duty Clutches Made in the U.S.A.



# Technical Hot Sheet

### **SELF-ADJUST CLUTCH**



How it works •

Why you need it •

For Immediate Assistance

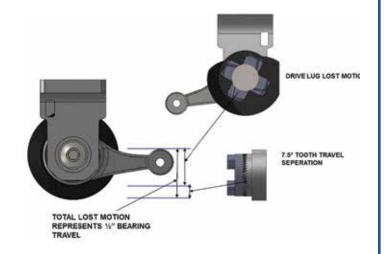
1-800-325-6138

24/7 TECHNICAL SUPPORT

### **SELF-ADJUST CLUTCH**

#### **How it works**

As a clutch wears, the loss of materials in friction faces moves the clutch assebmly out of its optimal operation window. This is why a technician needs to adjust a clutch every so often. A self-adjust clutch constantly takes this measurement and keeps the clutch in its optimal operation window at all times.

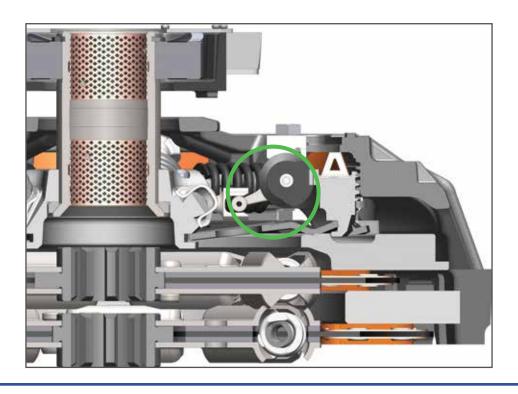


During clutch disengagement,

if release bearing travel is 1/2" or less, no adjustment is necessary and the built-in lost motion window ensures optimal release bearing position.

When the clutch wears, release bearing travel increases beyond lost motion window and advances worm gear. The worm gear then turns the adjusting ring to compensate for wear, repositioning the release bearing.

On clutch engagement, one way ratchet advances and restores the ideal lost motion window.



## **SELF-ADJUST CLUTCH**

#### Why you need it

Decreased down time and maintenance cost.

If you have hydraulic linkage you MUST use a self-adjusting clutch.

- Hydraulic linkage systems do not have "free travel". The fork is tight on the bearing at all times, so the driver cannot sense when adjustment is needed.
- If a manual adjust clutch is installed in a hydraulic system and is not kept in proper adjustment, the fork can contact the cover causing premature failure.

Note: Self-Adjust clutches can be installed with mechanical linkage.

### **Familiarity**

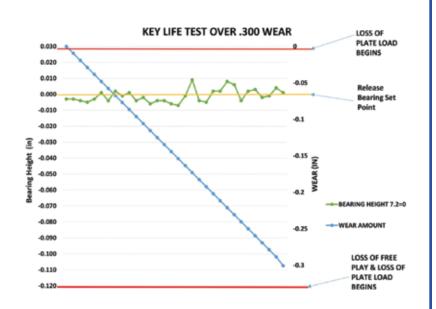
- Same installation procedure as manual adjust clutch
- Service procedure is the sames as manual adjust clutch
- Interchangeable adjuster for reset procedure if needed



### **Longevity**

If a clutch is not kept in optimal adjustment you lose plate load, lowering your torque carrying capabilities. This can lead to slipping and accelerated wear. You can also lose release. (Top and bottom red lines on graph).

The self-adjusting clutch makes small adjustments as the clutch wears to keep it in its optimal adjustment window (As seen in bearing height - green line).



The blue line shows simulated wear of .300"

Ace-Mfg.com





Manufacturing & Parts Co.

**American Made Clutches Since 1967** 

300 Ramsey Street Sullivan, MO 63080 U.S.A.

Toll Free: 800-325-6138

Fax: 573-468-5584

customerservice@ace-mfg.com