# CARCO | SERVICE BULLETIN

Bulletin No. 103 R2 August 2007

### **Model H110 Minimum Motor Displacement Adjustment**

There are two methods for adjusting the minimum motor displacement on the H110 series of Carco winches that are equipped with a Rexroth hydraulic motor. This adjustment affects the speed of the winch under no load conditions.

If the no load cable drum speed is slower than specified, there will be no adverse affect on the winch. Setting the cable drum speed too fast could result in premature gear failure or motor damage.

#### **METHOD 1**

- 1. Remove the cable from the winch.
- 2. Mark the cable drum on the flange with a piece of tape or paint that is easily visible.
- 3. Operate the winch in the reel-in direction and run the tractor at maximum governed speed.
- 4. Measure the drum RPM with a stop watch.
- 5. If adjustment is required, remove (break) the small plastic protector cap covering the minimum displacement adjusting screw.
- 6. Adjust the displacement stop until the correct speed is obtained. (Ref. drawing on back side)

H110 unloaded drum speed (See not below to determine winch ratio)

TRACTOR	RATIO	RPM	TRACTOR	RATIO	RPM
D7H & D7R D/S*	156:1	27.5	D8N & D8R, D65EX12	245:1	$17.5 \pm .5$

NOTE: The winch model number is stamped into the right front, top surface of the main winch housing. The model number contains the ratio of the winch.

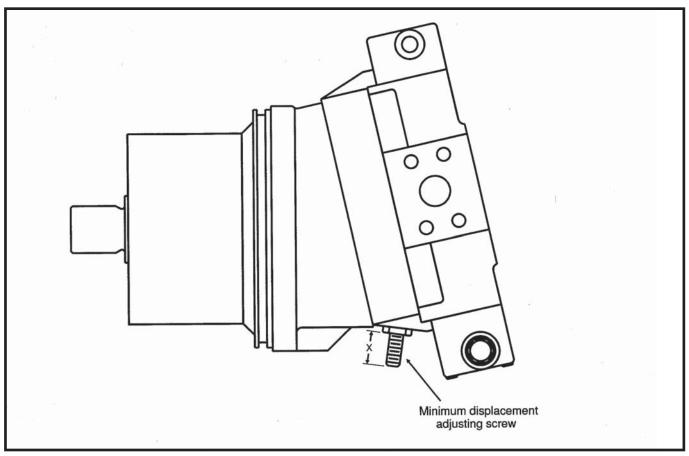
#### **METHOD 2**

- 1. Remove (break) the small plastic protector cap covering the minimum displacement adjusting screw.
- 2. Adjust the motor displacement stop screw to the "X" dimension in the chart below and shown in the drawing on the back of this bulletin. (for winches built prior to 5/98)

Carco	Carco	Ref.	Min. Motor	Overall Screw	Dimension "X"	
Motor No. Ref. Winch No.		Tractor	Displacement (CID)	Length (mm)	Inches	mm
29830	08638	D7H, D7R D/S*	2.25	70	0.48	12.2
100064	08639	D65EX12	3.20	80	0.59	15.0
100065	08645	D8N, D8R	3.30	80	0.55	14.0
100068	08663	D85E21	1.80	70	0.62	15.8

<sup>\*</sup> D/S = Differential Steer

## **6.1 Series Displacement Settings**



Typical H110 Hydraulic Motor

Should questions arise regarding your Carco winch or this Service Bulletin, please contact your nearest Carco dealer or the Carco Service Department, Monday-Friday, 0800 hrs - 1630 hrs CST at:

Phone: (918) 251-8511

Fax: (918) 259-1575

Email: winch.service@paccar.com

Provide the complete winch model number and serial number when making inquiries.