



## OILCO Spring Balance Adjustment Procedure Models 640, 641 & 645 Assemblies

### General Precautions:

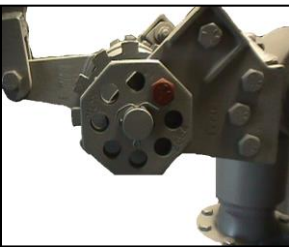
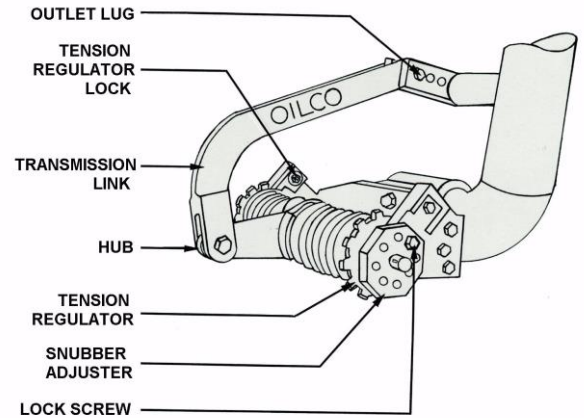
All OILCO spring balance assemblies are manufactured with spring covers for added safety to the operator. *(For illustration purposes, the covers have been removed)*

Springs are under high tension. To avoid personal injury or damage to the unit observe the following:

Block loader in a parked (up) position before attempting adjustment on the torsion springs.

Hold snubber adjuster and tension regulator with a wrench while removing and tightening bolts.

Spring balance adjustment is a two man operation, *do not attempt this alone.*



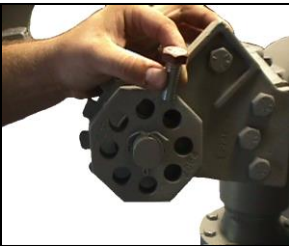
#### Single Spring (Model 641):

The snubber spring is tightened by rotating the snubber adjuster on the single unit, counter clock-wise

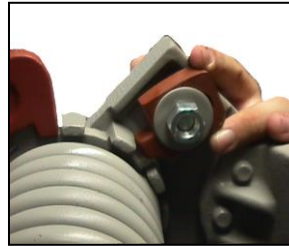
#### Double Spring (Model 640 & 645):

The snubber springs are tightened by rotating the snubber adjuster clockwise

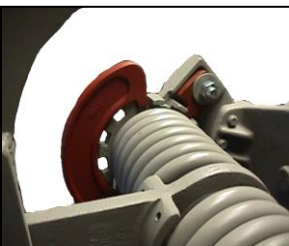
**NOTE:** *Turning the snubber in the wrong direction will destroy the spring*



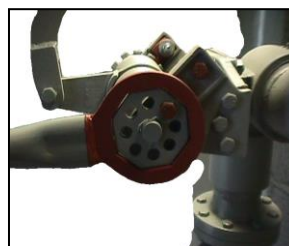
STEP 1: Remove the snubber adjuster lock screw and carefully remove the tension from the snubber spring by allowing the snubber adjuster to unwind to a relaxed position.



STEP 3: Check the return action of the loader and continue adjustment until the proper balance is obtained. (A half notch adjustment can be made by removing the nut and washer and reversing the tension regulator lock )



STEP 2: Loosen the tension regulator lock. It is not necessary to remove the bolt completely. Increase or decrease the spring tension as desired. And then tighten lock securely.



STEP 4: Increase tension on the snubber adjuster one hole at a time until the snubber absorbs the return momentum of the loader, and the unit parks itself at the necessary angle. Tighten bolt and arm is ready for use.

### Double Spring Units

Both torsion springs must be changed equally with adjustment

### Four Spring Units

Begin with the bottom springs and change all torsion springs equally with each adjustment



## OILCO Spring Balance Repair Parts List Models 640 & 645 Assemblies

Number	Description	Part Number
1	Left Support Bracket (640)	2212
1	Left Support Bracket (645)	2328
2	Snubber Connector Key	5061
3	Outer Snubber Connector	2067
4	Inner Snubber Connector	2066
5	Torque Transmission Lever (640,645)	2047
5	Torque Transmission Lever (641)	2267
6	Spring Cover Screw (4)	2058
7	Spring Cover (2)	2057
8	Nut/Washer for Tension Regulator Lock (2)	5065
9	Tension Regulator Lock (2)	2068
10	Right Support Bracket (640)	2212
10	Right Support Bracket (645)	2328
11	Bolt for Tension Regulator Lock (2)	2068
12	Snubber Adjuster	2064
13	Snubber Adjuster Bolt	5064
14	Cotter Pin (2)	5069
15	Center Support Shaft (640,645)	2243
15	Center Support Shaft (641)	2052
16	Snubber Connector Key	5061
17	Outer Snubber Connector	2067
18	Snubber Adjuster Connector Key	5062
19	Left Hand Wound Snubber Spring (Right Side)	2017
20	Right Hand Wound Torsion Spring (Right Side)	2147(P), 2011 (D)
21	Inner Snubber Connector	2066
22	Left Hand Wound Torsion Spring (Left Side)	2148 (P), 2010 (D)
23	Right Hand Wound Snubber Spring (Left Side)	2016
24	Return Spring Tension Regulator (2)	2063
25	Bottom Mounting Plate (Not shown 640,645)	2211
25	Bottom/Side Mounting Plate (Not shown 641)	2019
26	Side Support Plate (Not shown 641)	2025
27	Side Plate Mounting Bolts (Not shown - Universal)	5081

*The parts break down is illustrated on the diagram following the table for the Model 640 Torsion Spring Counterbalance. The Model 645 is a double bank, and the Model 641 is a single bank, with left or right orientation.*



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