

Equipment: Torsion Balance Type: 790A,B,C

Balance Unit for balancing Loading Arms

Suitable for: Loading Arm Balancing

- Easy, Precise Adjustment
- No special tools required

Specifications

Type Right-Hand: 790A-0020 (White),
790B-0030 (Yellow), 790C-0050 (Red)
Left-Hand: 790ALH-0025 (Black),
790BLH-0035 (Gray), 790CLH (Orange)

Working Temperature Range -4°F to 176°F (-20°C to +80°C)



NEW: Easy-to-use Spring Cover Latch

Installation

Spring Unit Assembly

1. Position balance unit on the bosses at back of swivel joint.
2. Fix balance unit with Bolts and Lock Washers.
3. Attach backside of Link Arm [17] to Spring Arm [15] with Pin [16] and 2 Retaining Rings [14].
4. Remove the 4 Socket Head Screws [18] and take Snubber Block [26] off.
5. Raise loading arm to highest position (as vertical as possible).
6. Attach front side of Link Arm [17] to mounting ears on loading arm with Pin [16] and 2 Retaining Rings [14].
7. Check balancing action by pulling down the arm. If adjustment is necessary, follow adjustment instructions below.
8. Install lock-down unit 788-L, if used, by following 788-L installation instructions.
9. Replace Cover [21] using alignment pins [1] and latches [22].

Adjustment

When to adjust torque

- A. To raise loading arm higher or for more lifting action INCREASE torque.
- B. To decrease loading arm vertical travel or to slow the rate at which the arm rises, DECREASE torque.
- C. Note: Prior to any disassembly, Spring balance tension should be completely relieved to allow safe disassembly of level arm.

Torque

For more lifting action increase torque. For less lifting action decrease torque.

Place 3/4" socket wrench on worm gear hex drive.

To **INCREASE** torque rotate the worm gear hex drive counterclockwise (to the left).



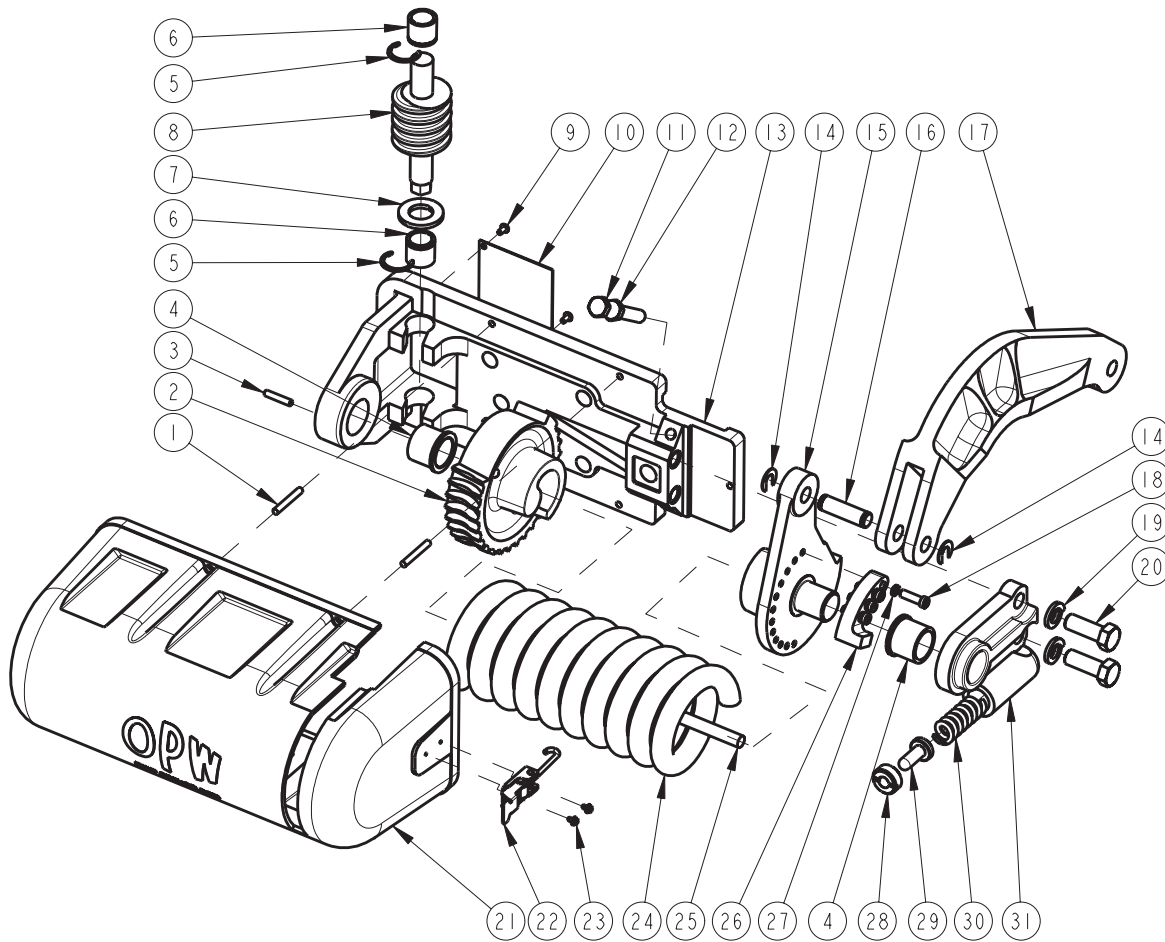
To **DECREASE** torque rotate the worm gear hex drive clockwise (to the right).

Release wrench and test loading arm lifting action.

Note: Prior to any loading arm disassembly, spring tension should be completely relieved.

Tip: Spring coil will be loose in housing when completely relieved of tension.

Parts List: 790 Series Counterbalance



Index	Qty	Part #	Description	Index	Qty	Part #	Description
1	4	H-31396-M	Spirol Pin, 1/4 x 1 3/4	17	1	E-20041-D1	Link Arm, D1
2	1	C-20185-BW	Spring Regulator, R.H. Worm Gear	18	4	H-31278-M	Socket Head Screw, ZP, .31-18 X 1"
3	1	H-30744-M	Dowel Pin .25 x 1.25	19	2	H-02507-M	Lockwasher, CP, 5/8"
4	2	H-01490-M	Flange, Bearing, BRZ. 1 1/2" DIA x 1 1/4" LG	20	2	H-05910-M	Screw, Hex Cap, CST, ZP, 5/8"-11 x 1 3/4"
5	2	H-32283-M	Retaining Ring, CST ZP	21	1	E20116P	790 Spring Balance Cover, RH
6	2	H-32282-M	Bearing, Cylindrical, Bronze	22	2	H32321M	Spring Cover Latch (SouthCo)
7	1	H-30743-M	Washer, Thrust, ZP, 7/8"	23	4	H32322M	Screw, Thread Forming, 8-32
8	1	C-20184-EW	Drive Worm, Torsion Spring	24	1	C-00626-M	Spring, Torsion, C
9	2	H-30741-M	Screw, Drive #10 x 3/8"	25	1	H-30742-RS	Bar, Safety
10	1	H-30740-M	Worm Cover Plate, Spring Balance	26	1	H-01489-D1	Snubber Block, RH, D1
11	1	H-30018-M	Bolt, 1/2"-13 x 3 1/2	27	4	H-03563-M	Washer, Lock, ZP, 5/16"
12	1	H-30049-M	Jam Nut, Hex, CST, ZP, 1/2"-13	28	1	H-01486-RB	Snubber Retainer, Brass, 1 1/8"-12 x 1/2"
13	1	E20074D1	790 Support Bracket, D1	29	1	H-01487-RE	Snubber Plunger, SST, 1 5/16" DIA x 1 1/8" LG
14	2	H-30321-M	Retaining Ring, CST, 5/8"	30	1	H-01502-M	Spring, Compression, ZP
15	1	D-00350-D1	Spring Arm, PTD, D1	31	1	C00635D1	Support, RH Side, D1
16	1	H-30320-RE	Pin, Torsion Spring, SST				