

E-Z RATCH

GARAGE DOOR TORSION SPRING TIGHTENING SYSTEM



Extendable Handles



Six Cone Adapter Pins



Safety Clamp

!! BECAUSE TIME AND SAFETY MATTER !!

E-Z RATCH: Z9202 OPERATING INSTRUCTIONS

HOW TO - WINDING A TORSION SPRING:



1. Select proper pin for spring cone boss.
2. To couple the Gear Adapter to the cone, open Gear Adapter and place it over the door torsion shaft and close the Adapter latching it shut. Ensure the Latch travels completely. Line up one of the Adapter arms with a cone boss and insert the pin into the Adapter and cone boss then tighten set screw to secure pin to Gear Adapter. For large springs assemble a second pin to using the other Adapter arm.
3. Place Ratchet Handle c-head over the torsion shaft, pull back on handle, and slide over the Adapter Gear. Repeat to assemble the second Ratchet handle. Place the Safety Clamp over the Gear Adapter and tighten the thumb screw.
4. Using the Ratchet handles begin tightening the spring by applying a force in the direction shown by the arrow on the Ratchet head casting and alternating handles until you reach desired tension on spring.
5. To apply your maximum leverage, extend the Ratchet handle by depressing the button and pulling back on the handle until the button seats in the hole giving the longest length.
6. Once the spring has been fully wound, tighten the cone set screw(s).
7. To remove tool reverse Steps 1-3.



HOW TO - UNWINDING A TORSION SPRING:



1. Begin by installing the tool on the spring assembly as is described for winding a spring. (Steps 1-3)
2. While applying enough force on one of the Ratchet handles to hold the force of the spring, loosen the cone set screw(s).
3. While allowing the handle holding the spring force to rotate in the unwinding direction, pull back on the handle of the 2nd Ratchet to retract the Dog Catch until it moves freely and rotate it in the direction opposite the spring force until you reach a point you can get the most travel. Let the handle return to normal position and let the Dog Catch engage the gear again. Now hold tension against the spring with the 2nd handle and pull back on the handle of the 1st Ratchet and allow the 2nd Handle to rotate in the unwinding direction while moving the 1st handle against the direction of the spring force. Continue to alternate handles in this manner until spring is fully unwound.
4. To remove tool, reverse Steps 1-3 of Winding instructions.



Caution

Safety Clamp should ALWAYS be used when winding or unwinding spring