How to

youdoit door repair

measure mini-ware springs

IT IS VERY IMPORTANT THAT YOU ACCURATELY MEASURE YOUR SPRING. MEASURE UNWOUND SPRINGS ONLY!

CAUTION: *Repairing a garage door is a dangerous task. Garage door springs are under extreme tension and require appropriate safety precautions. Realize and understand the risks before undertaking any repair. Your health and safety is the #1 concern. No amount of financial savings is worth jeopardizing your health. Failure to understand/follow the recommendations below could result in property damage, personal injury or death. While all efforts are made to provide accurate information and guidance, it is impossible to predict all repair circumstances. Accordingly, the user agrees that use of this website; products and information contained herein are at your own risk. In no event shall youdoit Door Repair be liable for any property damage, personal injury/death, or any other loss or damage that may result from your use of the information and products provided on this site. All information contained within this site is provided "as-is" without warranty expressed or implied. User assumes all responsibility/risk for use of information and products purchased.*

Do not attempt any garage door related repair unless:

1) *You utilize the proper tools and safety equipment. Safety glasses and gloves must be worn at all times. Work boots are recommended. Loose fitting clothing and jewelry should NOT be worn during any repair.*

2) *You must possess a reasonable amount of mechanical aptitude and experience.*

3) *You are physically able to complete the task (climbing ladders, using wrenches and installing springs require a reasonable amount of physical strength, agility and ability).*

4) *You are able to completely read, precisely follow/understand the instructions.*

If you have any doubts about your ability to perform the work safely, we recommend you contact a door professional to complete your repair.

TOOLS NEEDED:

- Ladder
- Tape Measure
- Caliper
- Micrometer
- DIY Gauge?
- Gloves
- Safety Glasses

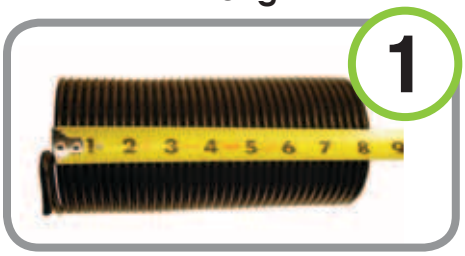
Measurements needed:

1 - Length
2 - Inside Diameter
3 - Wire Diameter
4 - RH. or LH Wound Spring

Accurate measurement of your spring or springs is extremely important. Exact measurements are critical. Torsion springs are rated in IPPT, inch pounds per turn. IPPT is the amount of torque a spring will exert with each wind of the spring. Each measurement directly affects IPPT, therefore each measurement must be accurate.

If your door has more than one torsion spring, we recommend replacing all springs at the same time.

#1 Length



Measure the entire length of the spring. This measurement is to include all coils of the spring. If your spring is broken, measure both pieces of the spring in their entirety. If the spring is deformed to the point that an accurate length cannot be determined, count the total number of coils of the UNWOUND spring. Multiply wire diameter by total coils and this is the length.

#2 Inside Diameter (Caliper)

(I. D.) Measured from the end of the spring, this is the measurement between the coil. This measurement can be taken with a tape measure or a caliper.

Inside Diameter (Tape Measure)

#3 Wire Diameter

This is the measurement of the thickness of one coil of the spring. There are several ways to measure wire diameter. Caliper , micrometer, tape measure and wire gauge.

Caliper or micrometer. Place the caliper or micrometer on one coil of the spring. This measurement, expressed in a decimal, is the wire diameter.

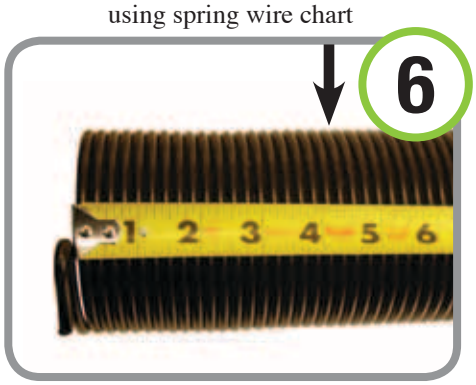
Tape measure. When using a tape measure to measure wire size you count a specific number of coils and convert that measurement to a decimal. Use our chart and count 10, 20, 30 or 40 coils. It is a good practice to count and measure at least two of these groups of coils. IE: count 20 coils, record this measurement then count 30 coils and compare both measurements to our wire chart.

Wire Diameter (Micrometer)

Wire Diameter (Caliper)

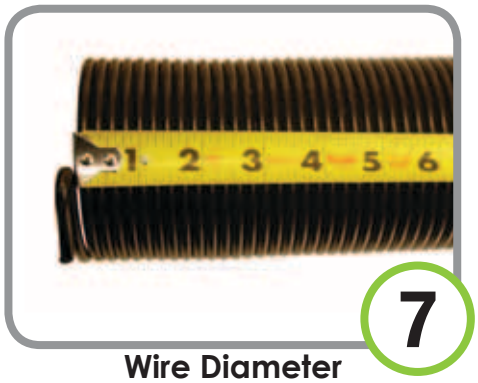
Wire Diameter

Count 10 coils, convert to decimal using spring wire chart



Wire Diameter

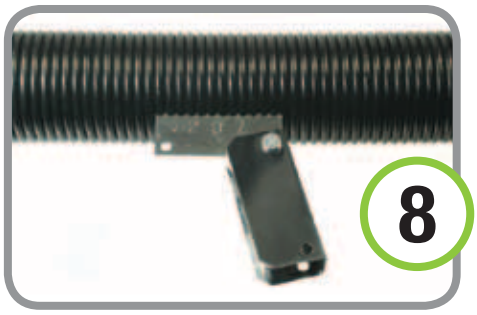
Count 20 coils, convert to decimal using spring wire chart



Wire Diameter (Spring Wire Gauge)

A spring wire gauge is available for purchase and can be used to accurately measure wire size.

Pocket Wire Gauge



Spring Wire Gauge

Wire Size	10 Coil Count	20 Coil Count	30 Coil Count	40 Coil Count
0.125	1-1/4	2-1/2	3-3/4	5
0.135	1-3/8	2-3/4	4	5-1/2
0.142	1-7/16	2-7/8	4-1/4	5-3/4
0.1483	1-1/2	3	4-1/2	6
0.1562	1-9/16	3-1/8	4-3/4	6-1/4
0.162	1-5/8	3-1/4	4-3/4	6-1/2
0.170	1-11/16	3-3/8	5	6-3/4
0.177	1-3/4	3-1/2	5-1/4	7
0.1875	1-7/8	3-3/4	5-5/8	7-1/2
0.192	1-15/16	3-7/8	5-3/4	7-3/4
0.207	2-1/16	4-1/8	6-1/4	8-1/4
0.2187	2-3/16	4-3/8	6-1/2	8-3/4
0.2253	2-1/4	4-1/2	6-3/4	9
0.2343	2-5/16	4-5/8	7	9-1/4
0.2437	2-7/16	4-7/8	7-1/4	9-3/4
0.25	2-1/2	5	7-1/2	10
0.2625	2-5/8	5-1/4	8	10-1/2
0.273	2-3/4	5-1/2	8-1/4	11
0.283	2-13/16	5-5/8	8-1/2	11-1/4
0.289	2-7/8	5-3/4	8-3/4	11-1/2
0.295	2-15/16	5-7/8	8-3/4	11-3/4
0.3065	3-1/16	6-1/8	9-1/4	12-1/4
0.3125	3-1/8	6-1/4	9-15/16	12-1/2
0.3195	3-3/16	6-3/8	9-1/2	12-3/4
0.331	3-5/16	6-5/8	10	13-1/4

WINDING CHART

LEFT HAND WOUND

RIGHT HAND WOUND

LENGTH _____

INSIDE DIA. _____

WIRE DIA. _____

RH OR LH WOUND _____