1
00:00:00,046 --> 00:00:03,976
>> This particular tire, unlike
a conventional spring tire made

2
00:00:03,976 --> 00:00:09,236
of spring steel, is
different because the material

3
00:00:09,236 --> 00:00:13,506
that it's made from is an
alloy-based stoichiometric

4
00:00:13,506 --> 00:00:14,416
nickel titanium.

5
00:00:15,136 --> 00:00:16,106
And that particular --

6
00:00:16,416 --> 00:00:19,326
this particular material
doesn't deform

7
00:00:19,326 --> 00:00:22,386
like conventional materials
where in those materials,

8
00:00:22,486 --> 00:00:23,866
when we put stress on them,

9
00:00:24,466 --> 00:00:26,286
we basically are
stretching the bonds

10
00:00:26,456 --> 00:00:27,716
between the atomic structures.

11
00:00:28,276 --> 00:00:31,596
This material has a unique
characteristic that allows it

12
00:00:32,226 --> 00:00:37,116
to do an atomic rearrangement
to accommodate deformation,

13
00:00:37,556 --> 00:00:41,606
and that lets us do about 30
times the deformation we could

14
00:00:41,726 --> 00:00:43,846
do in a conventional material

15
00:00:44,196 --> 00:00:47,186
without having permanent
deformation happen.

16
00:00:47,186 --> 00:00:51,256
We could actually deform this
all the way down to the axle

17
00:00:51,856 --> 00:00:53,236
and have it return to shape,