

# Lotus Europa 1974 TCS Fuel Sending Information

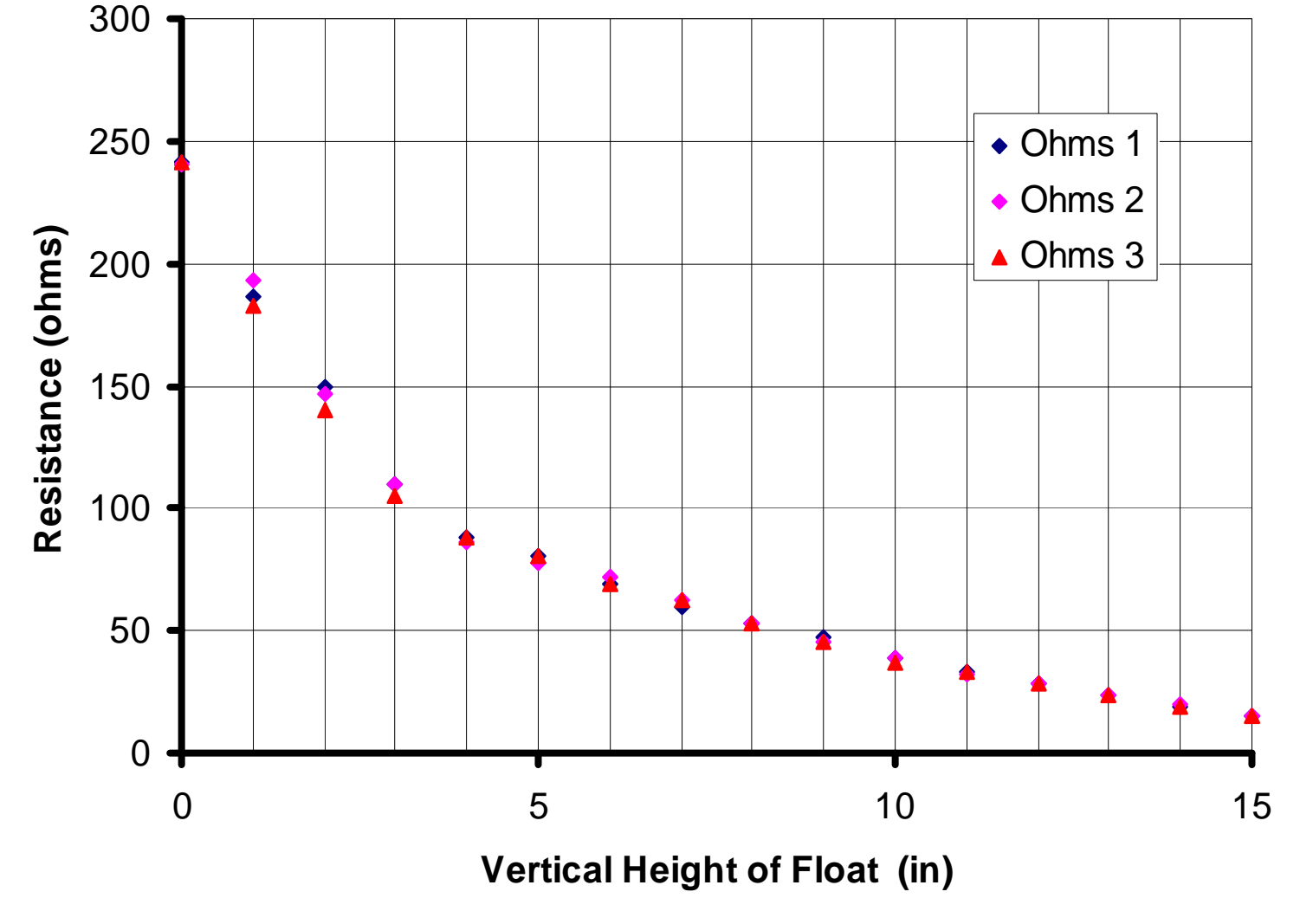
- The intent was to measure the resistance of the sending unit at different float heights covering the full range of operation, slightly over 15 inches
- Slide 2 shows the basic set up on my work bench using a digital multi-meter
- Slide 3 shows the results graphically for three runs
- Slide 4 shows the actual data taken
- Slide 5 shows the arc of travel of the float arm
- Slide 6 shows the internal windings of the sending unit

Future work to fill tank one gallon at a time and measure resistance, fuel height in inches and monitor how the fuel gauge responds from empty to full

# Resistance vs. Vertical Float Height, Test Set-up



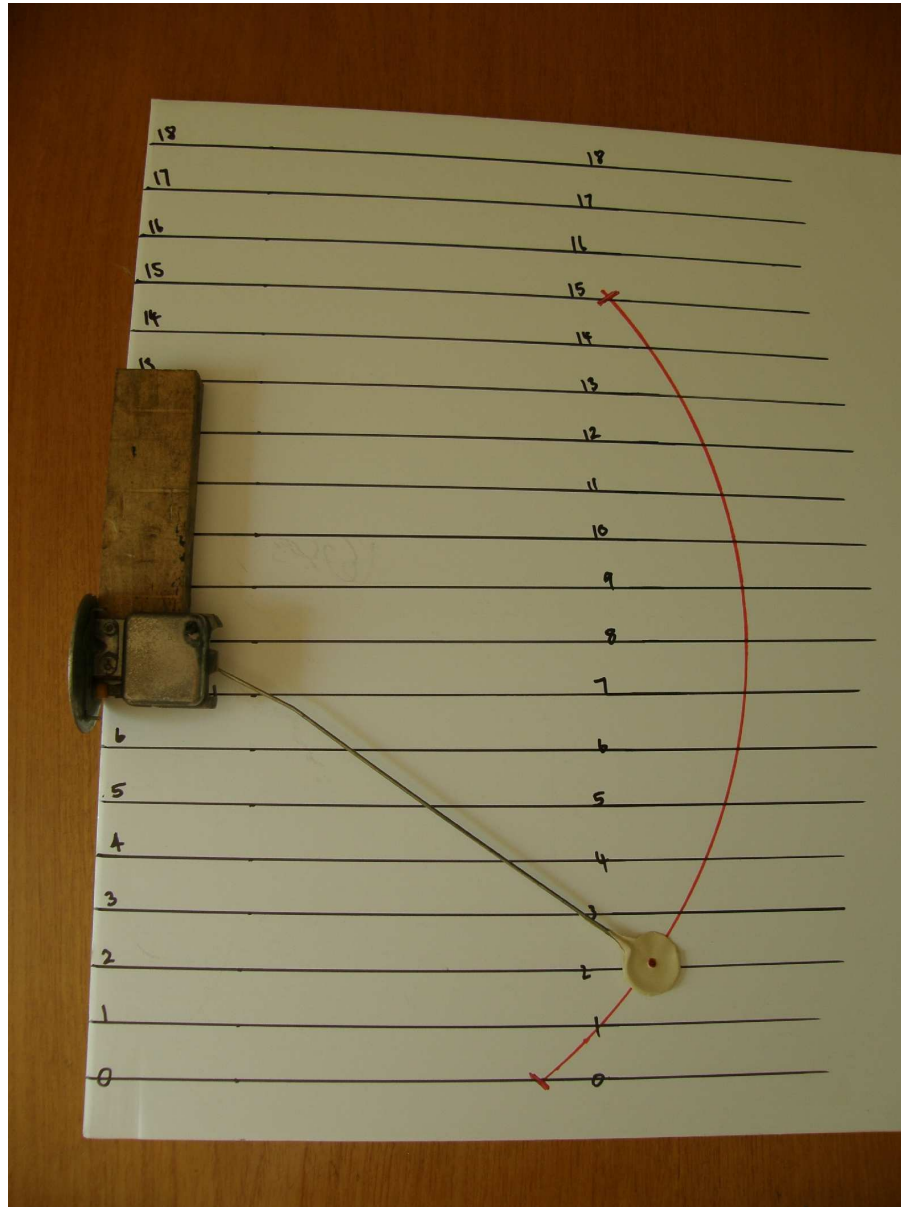
Resistance (Ohms) vs. Float Height (in)



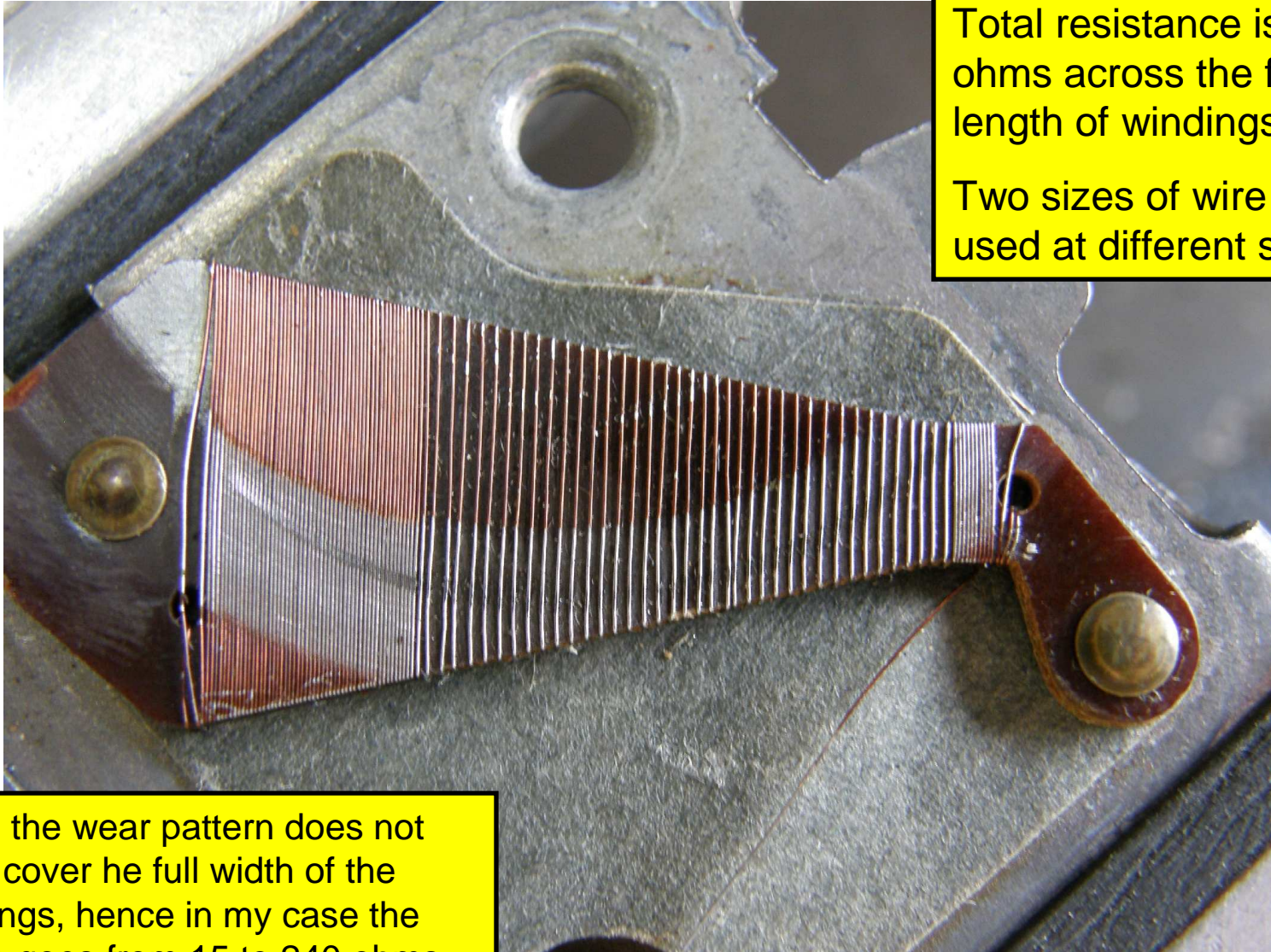
# Data from Resistance Chart

Position (in)	Ohms 1	Ohms 2	Ohms 3
0	241	240	241
1	186	193	183
2	150	147	140
3	110	110	105
4	88	86	88
5	80	78	80
6	69	72	69
7	60	62	62
8	53	53	53
9	47	45	45
10	39	39	37
11	33	32	33
12	28	28	28
13	24	24	24
14	19	20	19
15	15	15	15

# Arc of Travel of the Float Arm



# 74 TCS Fuel Sending Windings



Total resistance is ~280 ohms across the full length of windings

Two sizes of wire are used at different spacing

Note: the wear pattern does not quite cover the full width of the windings, hence in my case the range goes from 15 to 240 ohms