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CYCLOMETERS
FOR BICYCLES AND
MOTORCYCLES

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Veeder

THE
VEEDER MFG. CO.
HARTFORD, CONN.
U. S. A.

Veeder

Cyclometers

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THE VEEDER MFG. CO.
Hartford, Connecticut
U. S. A.

CAT. No. 308.

FACTORY AND GENERAL OFFICES LOCATED AT
HARTFORD, CONN.



VEEDER MANUFACTURING COMPANY

Veeder Cyclometers for Bicycles and Motorcycles



Every part of the mechanism of our Cyclometers is as scientifically designed and as accurately made as the most vital part of a watch. The Veeder Cyclometer has no springs, however, and no delicate parts to get out of adjustment. By our very unique method of making the gears and internal parts, we have so reduced the cost and improved the accuracy of these instruments that there is a demand for our product all over the world. There has been considerably over four millions of our instruments sold in America and Europe up to the present time.

We endeavor in the following pages, to tell you all you want to know about Cyclometers and to tell it briefly and clearly. We believe that you will find it all worth reading.

THE VEEDER MFG. CO.

Veeder Regular Cyclometer



Price, complete, \$1.00

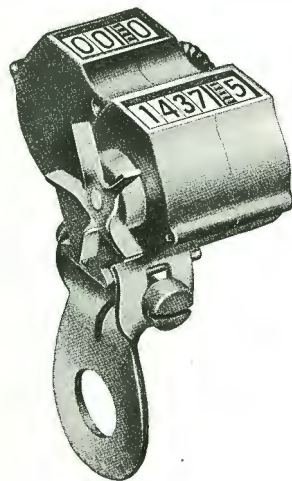
Cut full size

The right hand figure represents tenths of a mile and is in black on white back-ground. The above instrument reads 1,437 and 5-10 miles. We can supply the same instrument with reading in kilometers or Russian versts.

The instrument is **dust and water proof**, and since it has no springs in the mechanism, it cannot skip or register too much. The **figures are large**, and close to the glass. They can be plainly read from the saddle at all times. The crystal is clear, thick, and practically unbreakable.

An **elastic friction clamp** prevents the star wheel from spinning. This Cyclometer will register up to **9999.9 Miles**, when the next registration will be **0000.0** and it will then be ready to repeat.

The Veeder Trip Cyclometer



Price, complete, \$2.00

Cut full size

As in the case of the Regular Cyclometer, the right hand figure on each dial represents tenths of a mile, the figure being black on white back-ground. The other figures are white and give the miles. We can supply readings in kilometers or in Russian versts.

All of the good points in the Regular Cyclometer are embodied in this instrument. It is just like the Regular Cyclometer, except that it has **another, smaller dial which can be set to zero at will** and can therefore be used to show the mileage made on each trip.

It requires but a few seconds to set the trip record back to zero.

Spoke Pin for Cyclometers

Our spoke Pin, illustrated herewith is a feature of our Cyclometer. It can easily be attached to any wheel, no matter how or where the spokes are tied. The cut shows it clamped to a section of a spoke. The striker is covered with a brass roller, making its contact with the star wheel practically noiseless.



Price, each, 15 cents

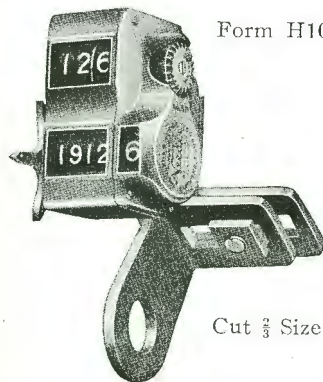
Bicycle Cyclometer Bracket



Bracket used for both the regular and trip cyclometer, stamped from heavy steel, very strong, nickel plated to match cyclometer.

Price, complete, with screw and nut, 15c

Veeder Motorcycle Trip Cyclometer



Form H10

Cut $\frac{2}{3}$ Size

This illustration shows the new Veeder Motorcycle Trip Cyclometer which is **especially made for motorcycles**. The cyclometer mechanism is made stronger than the regular bicycle cyclometer and is designed to withstand the harder usage due to the high speed of motorcycles.

A much **stronger** type of **star wheel** is supplied and **special friction** is used which prevents the star wheel from spinning when going at a high rate of speed.

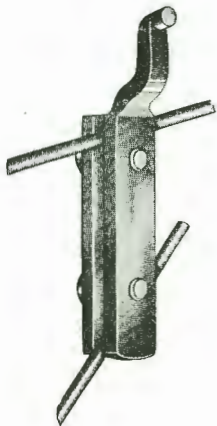
The **new Motorcycle Bracket** which is regularly supplied with the Motorcycle Trip Cyclometer is **adjustable** and by a simple arrangement can be made to fit on all makes of motorcycles. See page 11.

The motorcycle striker is regularly supplied with this instrument which makes it a most substantial and durable instrument for motorcycles.

Note—For some makes of Motorcycles **Form H-7** Motorcycle Cyclometer **must be used**. See pages 9, 10 and 11.

Price, complete, \$3.00

Veeder Motorcycle Striker



This striker is made especially for motorcycle service. It is readily attachable to the spoke. The long, stout clamp holds it in position firmly. The small pin which constitutes the striker itself, is made as short as would be serviceable to allow for the narrow space between fork and spoke.

Price, each, 25 cents

Form H-7 Cyclometer Attached

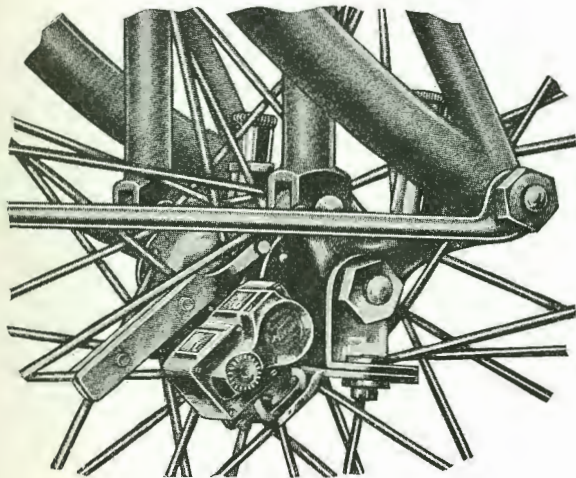


Fig. 1

Use Form H-7 For
DE LUXE
DAYTON
CYCLONE
INDIAN
POPE
EXCELSIOR
SCHICKEL
THOR MODEL V

Use Form H-10 For

All Other Makes of Motorcycles, except for
Harley-Davidson. See page 12.

Form H-10 Cyclometer Attached

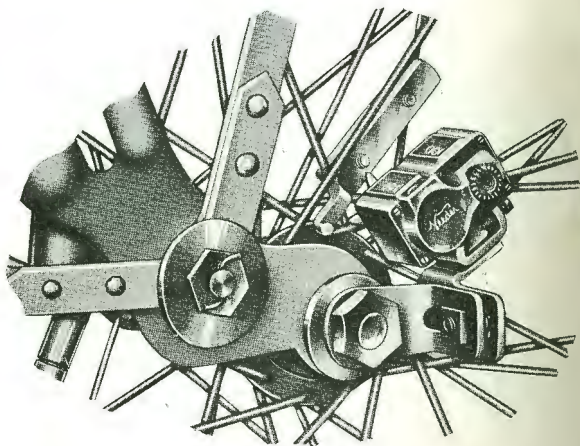


Fig. 2

The Veeder **Motorcycle cyclometer** is regularly furnished in **two styles** termed H-7 and H-10.

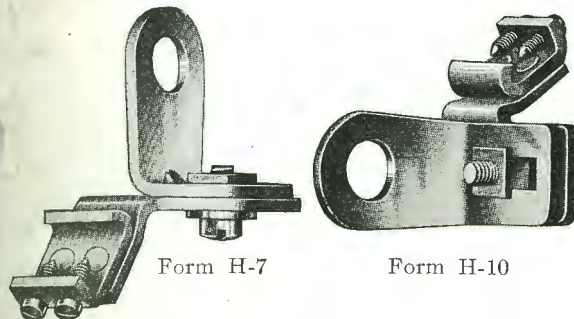
The **Form H-7** cyclometer is **used** on motorcycles **where the wheel trails** behind the fork such as Indian, Pope and others.

The **Form H-10** cyclometer is **used** on motorcycles **where the wheel stands in front of the fork** such as Thor model V, Reading Standard, etc.

Attach cyclometer on the right side, to the bolt which passes through the front wheel.

The **bracket** of the Form H-7 cyclometer should hang straight down as shown on page 9, and the bracket of the Form H-10 cyclometer should project directly forward, as above.

Motorcycle Trip Cyclometer Adjustable Brackets



Form H-7

Form H-10

Above cuts show the **adjustable brackets** designed for attaching cyclometers to motorcycles. They can be adjusted so as to allow of attachment to practically all makes of motorcycles.

Attention is called to the distinction between the Form H-7 motorcycle trip cyclometer and the Form H-10 motorcycle trip cyclometer. Notice the difference between the illustration on pages 7 and 10, showing the instrument as usually furnished and the illustration on page 9, showing the Form H-7 attached to a spring fork in which the wheel trails.

The **Form H7** bracket cannot be used for a Form H-10 instrument nor the Form H-10 bracket for the form H-7 instrument.

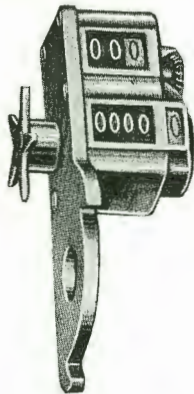
The **brackets** consist of two parts fastened together by a bolt and nut and may be adjusted to suit the different makes of motorcycles.

These brackets are stamped from steel and are nickel plated and very durable.

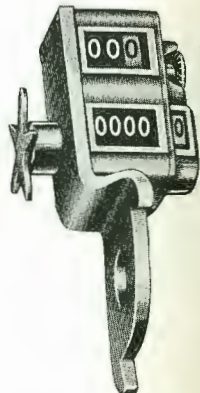
Price, 35 cents

H-D Motorcycle Cyclometer with Bracket

For 1914-1915 motorcycle



For 1916 motorcycle



The above illustrations show the new Veeder motorcycle cyclometers made expressly for the Harley-Davidson 1914, 1915 and 1916 motorcycles. As they require a special bracket and striker, the instruments cannot be used on any other make. The **mechanism** is made stronger than the regular bicycle cyclometer and is designed to withstand the hard usage due to the high speed of the motorcycle.

A much stronger type of star wheel is supplied and our **specially designed friction** is used, which prevents the star wheel from spinning when going at a high rate of speed.

The figures are large and can be easily read from the seat.

Price, complete, \$3.00

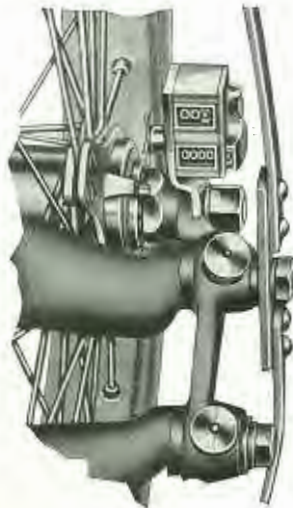


This striker is especially designed for the 1914, 1915 and 1916 Harley-Davidson motorcycles. It is strong, durable and will give, satisfactory service.

~~Price of Striker, 25c. each~~

Price of Striker, 40c. each

1916 Harley-Davidson Cyclometer
Attached



How to Determine the Correct Size of Cyclometer for Your Wheel



It will be noted that the diameters given in the table (following) are for solid, that is, incompressible wheels or tires. As all *pneumatic* tires are compressible and as many of them are *very much* under their nominal size, the only way to choose the correct size of cyclometer is by determining the actual distance traveled in one revolution of the wheel.

To do this, place the bicycle, or motorcycle, on a smooth floor; have the tire pumped to the usual pressure and have a rider in the saddle, of the average weight. Make a mark on the tire and on the floor where they touch each other, then push the machine ahead in a straight line until the wheel makes one revolution and the mark on the tire touches the floor again. Now mark the floor opposite the mark on the tire. The distance between the two marks is the distance traveled in one revolution. If this distance is $84\frac{3}{4}$ inches our M-28-S bicycle cyclometer, or our M-28-S motorcycle cyclometer will be the correct one to use.

If this distance is considerably greater or less than this, then look on the table and find the size most nearly suited to your wheel.

To find the number of revolutions a wheel makes in one mile, divide 63360 (the number of inches in one mile) by the distance, in inches, traveled in one revolution by the wheel, as found above.

Sizes and Gearing of Bicycle Cyclometers to Register in Miles

Nominal size of instrument or gearing	Diameter of a solid wheel for which gearing is exactly correct.	Distance a wheel travels in one revolution for which gearing is exactly correct.	Number of revolutions per mile of a wheel for which gearing is exactly correct.
	Inches	Inches	
M-11 1/5-P	11.243	34.909	1815.
M-15-P	14.829	46.588	1360.
M-18-P	17.825	55.998	1131.425
M-20	20.02	62.88	1007.5
M-23 1/4	23.18	72.83	870.
M-24-P	23.727	74.541	850.
M-26-S	25.05	78.71	805.
M-26-P	25.50	80.12	788.35
*M-28-S	26.97	84.74	747.727
M-28-P	27.73	87.10	728.35
M-28-1/4-P	28.011	88.00	720.
M-29-P	28.56	89.73	706.1
M-30-S	28.935	90.904	697.
M-30-P	29.55	92.83	682.5
M-32-P	31.62	99.33	637.85
V-24-P or M-36-P	35.57	111.74	567.
K-24-P or M-38	37.94	119.176	531.65
V-26-P	38.79	121.85	520.
K-26-P	41.160	129.31	490.
V-28-P	41.64	130.81	484.375
K-28-P	44.33	139.25	455.
V-30-P	44.82	140.80	450.
K-30-P	47.83	150.26	421.665

* This size is usually furnished for so-called 28-inch bicycle tires.

Size and Gearing of Motorcycle Cyclometers to Register to Miles

Nominal size of instrument or gearing.	Diameter of a solid wheel for which gearing is exactly correct.	Distance a wheel will travel in one revolution for which gearing is exactly correct.	Number of revolutions per mile of a wheel for which gearing is exactly correct.
	Inches	Inches	
M-15-P	14.811	46.531	1361.666
M-20½	20.580	64.653	980.
M-24-P	23.727	74.541	850.
M-26-P	25.856	81.231	780.
M-28-S	26.981	84.763	747.5
M-28-P	27.691	86.993	728.333
M-29-P	28.607	89.872	705.
M-30-P	29.659	93.176	680.
M-31-P	30.744	96.585	656.
M-32-P	31.636	99.388	637.5
V-24-P	35.759	112.340	564.
V-26-P	38.758	121.763	520.357
V-28-P or M-42	41.872	131.545	481.666
K-24-P	38.259	120.196	527.14
K-26-P	41.401	130.064	487.143
K-28-P	44.610	140.151	452.083
K-30-P or M-48	47.830	150.261	421.666

As many of our cyclometers are used on bicycles for exact road measuring and surveying, we desire to caution users to take note of the following facts.

A cyclometer which may be perfectly exact for a certain wheel when the tire is pumped to the pressure at which it was originally measured, and while being ridden by a person of the same weight as the one that was on the saddle when the wheel was first measured, will, however, *over-register* if the machine is ridden by a heavier rider or with *soft* tires, and will *under-register* if the machine is ridden by a lighter rider or with tires pumped to a greater pressure than that when first measured, consequently, for exact measuring the tire should be pumped up with a pump having a gauge to indicate the number of pounds, and it should be constantly kept at the correct pressure, also the machine should only be ridden by persons having the same weight.

Veeder GUARANTEE

We guarantee Veeder Cyclometers for one year against imperfections in material or workmanship. If any instrument is broken by accident, and not injured beyond repair, return to us and it will be repaired at a reasonable charge. We are not responsible for instruments lost in the mails unless 10 cents is enclosed for registering.

Write name and address plainly on package and write us a letter or postal stating repairs needed.

The Veeder Mfg. Co. Hartford, Connecticut, U. S. A.

C. H. VEEDER, *President*
D. J. POST, *Treasurer*

H. W. LESTER, *Secretary*
E. B. SMITH, *Ass't Secretary*

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CYCLOMETERS

For Bicycles and Motorcycles, to Register the Distance Traveled.

ODOMETERS

For Pleasure and Commercial Cars and Horse-Drawn Vehicles, to Measure Distance Traveled.

COUNTERS

To Record Number of Revolutions or Reciprocating Movements. For practically every possible purpose where count is desired.

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For Finding the Revolutions per Minute made by a Shaft or any other Revolving part.

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To Indicate the Speed and Record the Distance Traveled, both Trip and Total. For use on Automobiles, Locomotives and Electric Railway Cars.

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