

Vacuum Gauge Reading

PERTAINING TO MOTOR TUNE-UP

DARK NEEDLE INDICATES STEADY HAND
LIGHT NEEDLE INDICATES FLUCTUATING HAND

Normal Motor



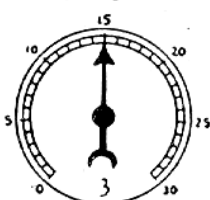
Hand steady between 17 and 21

Normal Motor



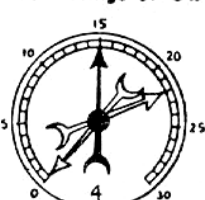
Opening and closing throttle rapidly. Rings and valves O.K.

Poor Rings or Oil



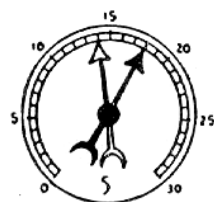
Hand steady but lower than normal

Poor Rings or Oil



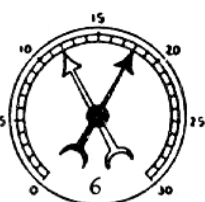
Opening and closing throttle rapidly. Hand pulls down to zero

Sticky Valve



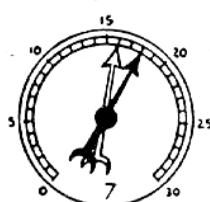
Hand drops occasionally about 4 divisions

Burnt Valve



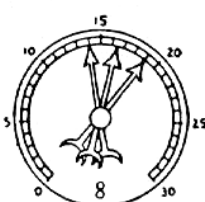
Hand drops regularly several divisions

Leaky Valve



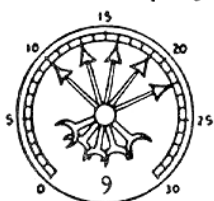
Hand drops 2 or more divisions when valve should close

Loose Valve Guides



Fast vibration of hand between 14 and 19

Weak Valve Springs



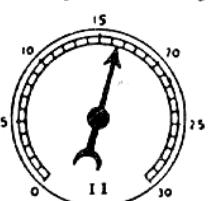
Motor racing, hand registers 10 to 22. Wider variations as speed is increased

Late Valve Timing



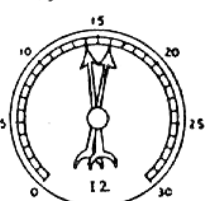
Hand reads from 8 to 15 and remains steady

Late Ignition Timing



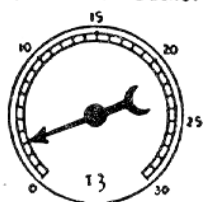
Hand reads from 14 to 17 and remains fairly steady

Plug Gaps too Close or Points not Synchronized



Hand floats slowly between 14 and 16

Leaky Intake or Carburetor Gasket



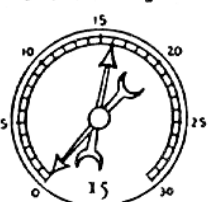
Hand reads below 5

Leaky Head Gasket Between Cylinders



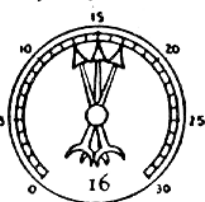
Hands float regularly between 5 and 19

Choked Muffler



High reading at first. Breaks to 0 and builds back slowly to about 16

Carburetor Out of Adjustment



Hand floats slowly between 13 and 17



Best internet source
of information and help
for old Ford tractors.

www.ntractorclub.com