## LIST OF HUDSON "FIRSTS"

- 1910 Fluid cushioned clutch
- 1912 First successful 6-cylinder car at a popular price
- 1913 First sedan type body
- 1913 First cabriolet-type body
- 1916 First high-compression L-head engine with non-detonating cylinder heads
- 1916 Modern high-speed power plant
- 1916 Simplified engine design
- 1916 Automatic and positive engine lubrication
- 1916 Compensated inherently-balanced crankshaft
- 1916 Deep section chassis frame side members
- 1918 Full floating piston pins
- 1918 Patented box-type frame crossmembers
- 1919 Metric spark plugs standard
- 1921 Adjustable seats
- 1922 Quiet roller-cam valve tappets
- 1922 First coach, first low-priced closed body
- 1922 Sedan-type body with non-reflecting windshield
- 1924 Pressed steel motor supports
- 1924 Patented splayed rear spring suspension
- 1924 Front and rear axles heavy duty roller axles
- 1924 Felt insulation of dash and front compartment
- 1924 First 6-cylinder closed car to list for less that \$1,000
- 1924 Full balloon tires -- low priced field
- 1924 Adjustable steering wheel -- low priced field
- 1926 First to produce steel bodies on a production basis in own plant
- 1926 Starter on instrument panel
- 1928 First natural grip steering wheel
- 1929 Duo-Flo oiling (patented)
- 1929 Labyrinthian motor oil cooling
- 1929 Combination electric oil and gas gauges
- 1932 Unit engineering
- 1932 Successful vacuum-operated clutch
- 1932 Chrome-alloy cylinder blocks in the low-priced field
- 1932 Teleflash signals ("idiot lights")
- 1932 Steel flywheel
- 1934 First "pinned" piston rings in American cars
- 1934 Direct-action shock absorbers
- 1934 Rear luggage compartment and enclosed tire in rear
- 1934 Crank-operated sliding rear quarter windows
- 1935 Rotary-equalized brakes
- 1935 First bodies of all steel
- 1935 Shifting of gears at steering wheel (steering column; with "Electric Hand")
- 1936 Patented double-safe brakes -- hydraulic & reserve mechanical systems from same foot pedal.

- 1936 Automatic draft eliminator
- 1937 Double carburation on a 6-cylinder engine
- 1937 Full 3-passenger width seats
- 1939 Patented Auto-Poise front wheel control
- 1939 Airfoam seat cushions
- 1939 Dash locking safety hood (was it also the first front-hinged hood?)
- 1940 Silver-plated electrical connections
- 1940 Cushion-action door latches
- 1941 Symphonic styling
- 1941 Vacumotive drive
- 1941 Fluted insulator spark plugs
- 1941 Built-in rainproof cowl ventilator
- 1942 Drive-Master
- 1948 All-steel monobuilt body and frame with low center of gravity

Additional possibilities:

- 193(?) Disappearing front vent windows
- 193(?) Pivoting front seat for ease of rear-seat entry