

STOPPING DISTANCE CHART

With brakes in perfect operating condition, the stopping distance depends upon the friction between the tire and road surface. It can be readily understood that even with perfect brakes a vehicle cannot make a very rapid stop on a slippery pavement. The stopping distances from various speeds for a vehicle with perfect brake equipment and tire-treads operating on the average dry, concrete, brick or cold asphalt road surface would be as shown below. Incidentally, a vehicle with perfect brake equipment must have a sufficiently powerful brake on each wheel so that all wheels may be brought up to the locking point. The vehicle is stopping at the fastest rate just as skidding is impending at all four wheels.

In order to find the actual total stopping distances from the various speeds it is necessary to add from 30 to 80 feet, depending on the car speed, to take care of the distance the car travels during the time interval between the instant the

driver decides to stop and the instant his foot actually applies the brake. The stopping distances after the brakes are applied and the total stopping distances which take into account the average driver reaction time of $\frac{3}{4}$ second are as follows:

Speed of Car	Reaction Distance	Braking Distance	Total Stopping Distance
20 M.P.H.	22 ft.	18 ft.	40 ft.
30 M.P.H.	33 ft.	40 ft.	73 ft.
40 M.P.H.	44 ft.	70 ft.	114 ft.
50 M.P.H.	55 ft.	110 ft.	165 ft.
60 M.P.H.	66 ft.	160 ft.	226 ft.
70 M.P.H.	77 ft.	220 ft.	297 ft.

It should be remembered that the above figures are for a vehicle with perfect brakes and tire-treads operating on a dry brick, concrete or cold asphalt road. Under less favorable conditions, the vehicle could not be stopped in as short a distance as shown here.

INDEX OF BRAKES USED ON VARIOUS PASSENGER CARS

Make	Year	Model	Type of Brakes	Page
Buick	1947-36	All	Bendix Hydraulic	16
Cadillac	1947-36	All	Bendix Hydraulic	16
Chevrolet	1947-36	All	Huck Hydraulic	26
Chevrolet	1935-30	All	Huck Mechanical	25
Chrysler	1947-30	All	Lockheed Hydraulic	7
De Soto	1947-30	All	Lockheed Hydraulic	7
Dodge	1947-30	All	Lockheed Hydraulic	7
Ford	1947-39	All	Ford Hydraulic	11
Ford	1938-28	All	Ford Mechanical	21, 22, 23
Frazer	1947	All	Bendix Hydraulic	16
Graham	1940-30	All	Lockheed Hydraulic	7
Hudson	1947-36	All	Bendix Hydraulic	16
Hudson	1935-30	All	Bendix Mechanical	18 & 19
Hupmobile	1939-36	All	Lockheed Hydraulic	7
Kaiser	1947	All	Bendix Hydraulic	16
LaSalle	1940-36	All	Bendix Hydraulic	16
LaSalle	1935-34	All	Bendix Mechanical	18 & 19
Lincoln	1947-39	All	Bendix Hydraulic	16
Lincoln	1938-36	Zephyr	Bendix Mechanical	18 & 19
Nash	1947-40	All	Bendix Hydraulic	16
Nash	1939-37	Some	Bendix Hydraulic	16
Nash	1939-37	Some	Lockheed Hydraulic	7
Nash	1936-34	All	Bendix Mechanical	18 & 19
Oldsmobile	1947-34	All	Bendix Hydraulic	16
Oldsmobile	1933-30	All	Bendix Mechanical	18 & 19
Packard	1947-37	All	Bendix Hydraulic	16
Packard	1936-30	All	Bendix Mechanical	18 & 19
Plymouth	1947-30	All	Lockheed Hydraulic	7
Pontiac	1947-35	All	Bendix Hydraulic	16
Pontiac	1933-32	All	Bendix Mechanical	18 & 19
Reo	1936-30	All	Lockheed Hydraulic	7
Studebaker	1947-35	All	Lockheed Hydraulic	7 & 12
Studebaker	1934	Some	Bendix Mechanical	18 & 19
Willys	1946-41	Some	Lockheed Hydraulic	7
Willys	1947-41	Some	Bendix Hydraulic	16
Willys	1939-30	All	Bendix Mechanical	18 & 19