

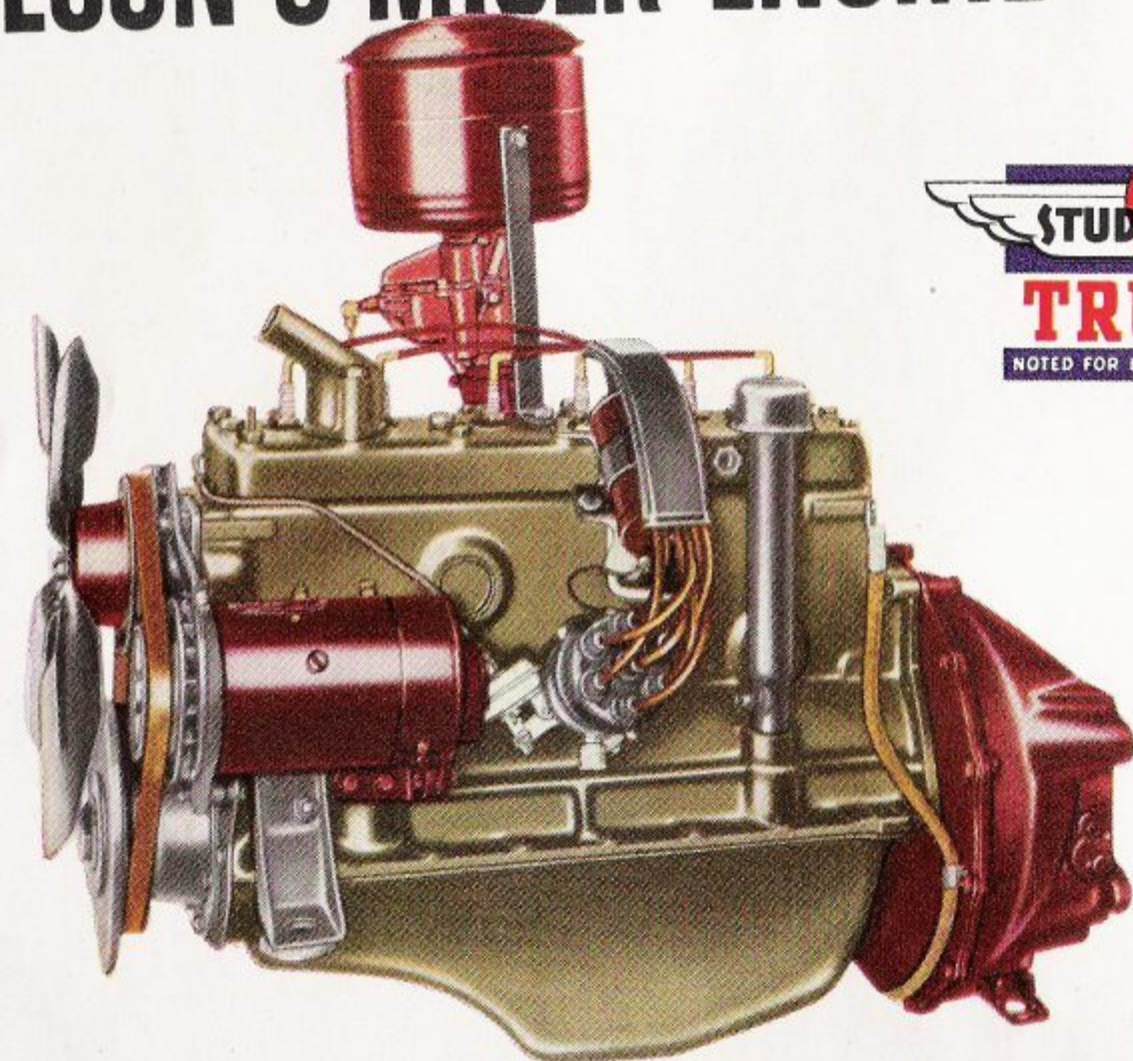
# MONEY-SAVING STUDEBAKER TRUCKS



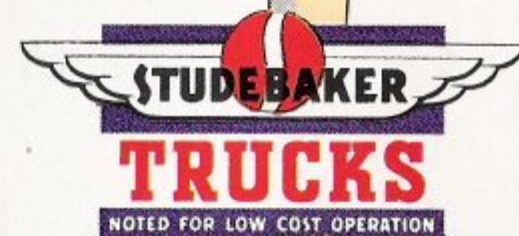


# Studebaker builds the right engine for top performance on the job!

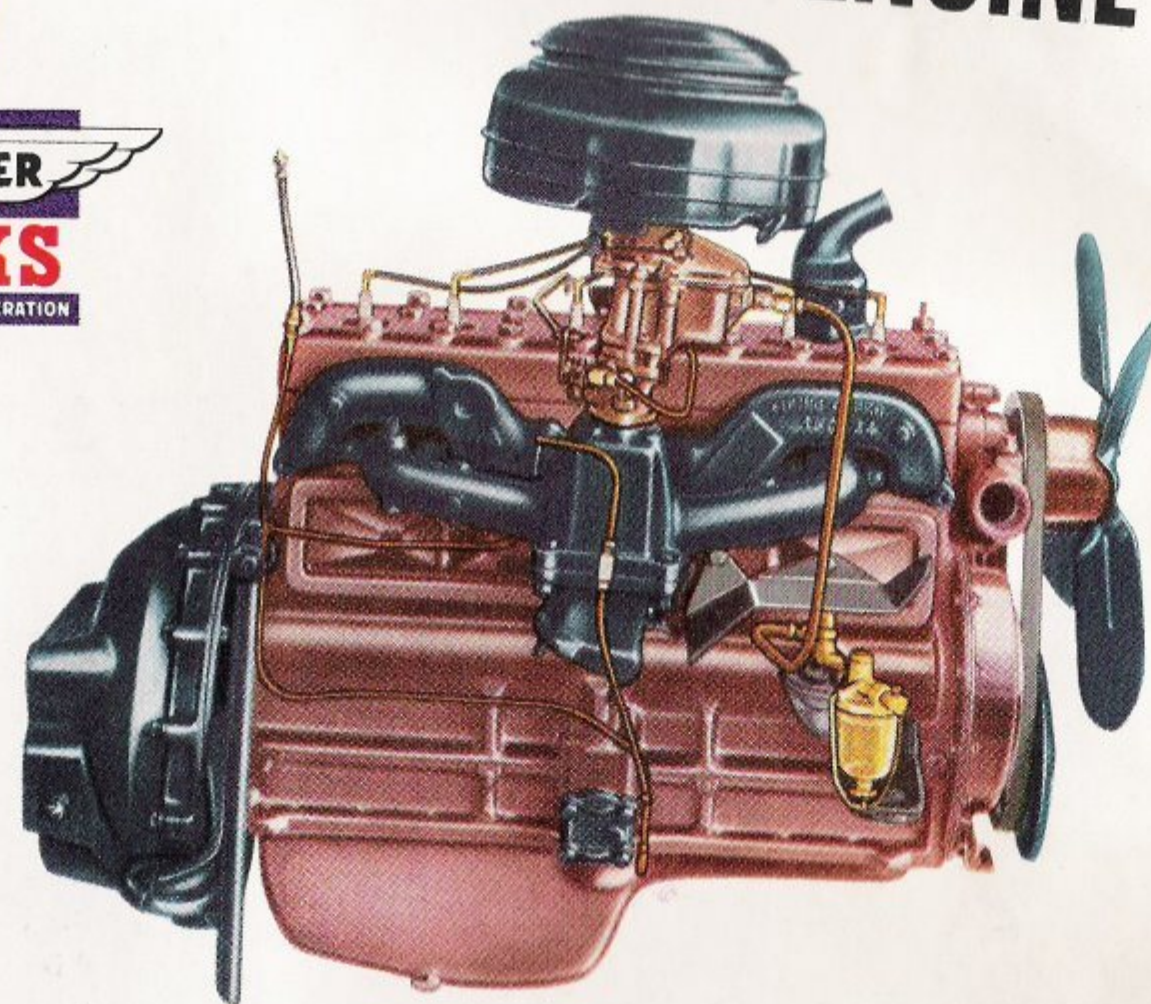
## ECON-O-MISER ENGINE



Plenty of pulling power with top operating economy in Studebaker's half-ton, three-quarter-ton and one-ton trucks. Simplified design makes servicing easier. High turbulence heads join up with high compression to build power and stamina. Integral valve seats and full-depth cylinder cooling insure smooth, flowing performance.



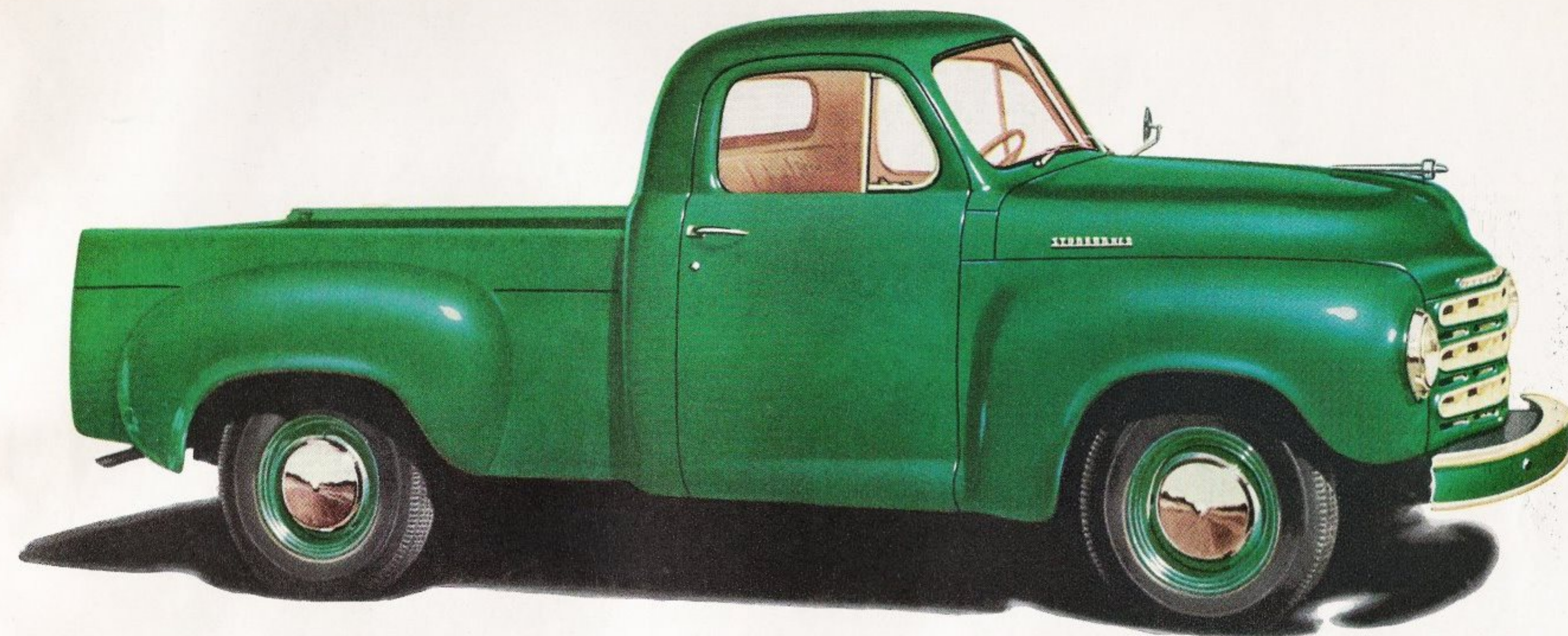
## POWER-PLUS ENGINE



A new combination of horsepower and high torque in the 1½-ton and 2-ton truck field! 102 horsepower, 205 lbs. ft. torque! Fuel saving is remarkable—you seldom have to add oil. Thanks to modern design, Studebaker's Power-Plus truck engine operates at a low cost per mile that effectively reduces the hauling expense of many a business.

Bodies shown on the following pages not supplied by Studebaker are available through established body builders.

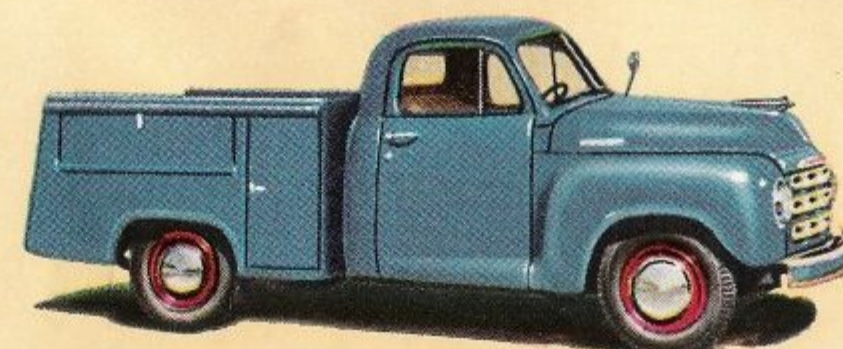
# Streamlined style...Easy riding...Low-cost mileage



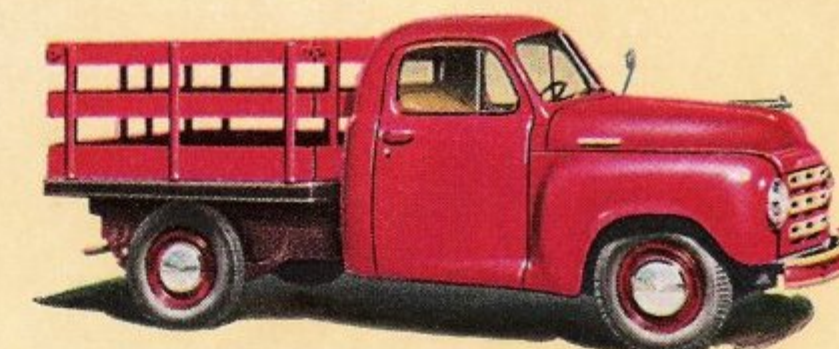
### STUDEBAKER HALF-TON 6½-FT. PICK-UP

Start cutting your operating costs all along the line with a revolutionary new Studebaker half-ton truck. Moreover, along with new thrift, this husky, handsome Studebaker brings you almost unbelievable new comfort and convenience. It has weather-protected steps enclosed inside the doors—a low cab floor that saves strenuous climbing—

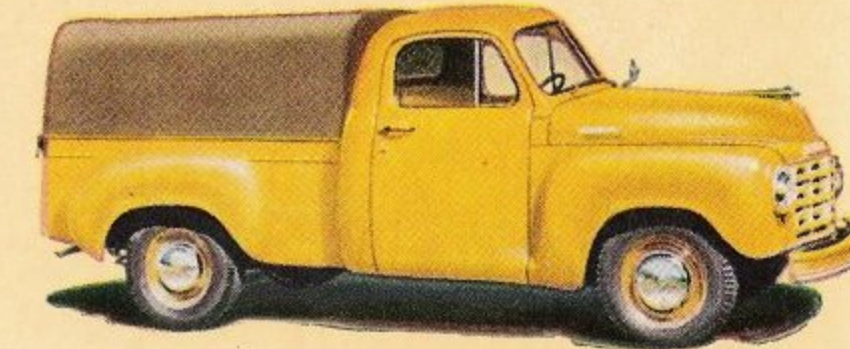
foot-regulated air-scoop floor ventilators—automatic "hold-open" door stops—tight-gripping rotary door latches—variable-ratio "extra leverage" steering—self-adjusting, self-centering brakes. It starts, steers, brakes to a stop and maneuvers with delightful ease. It rides with almost velvet smoothness, loaded or empty.



HALF-TON SHOWN WITH ALL PURPOSE BODY



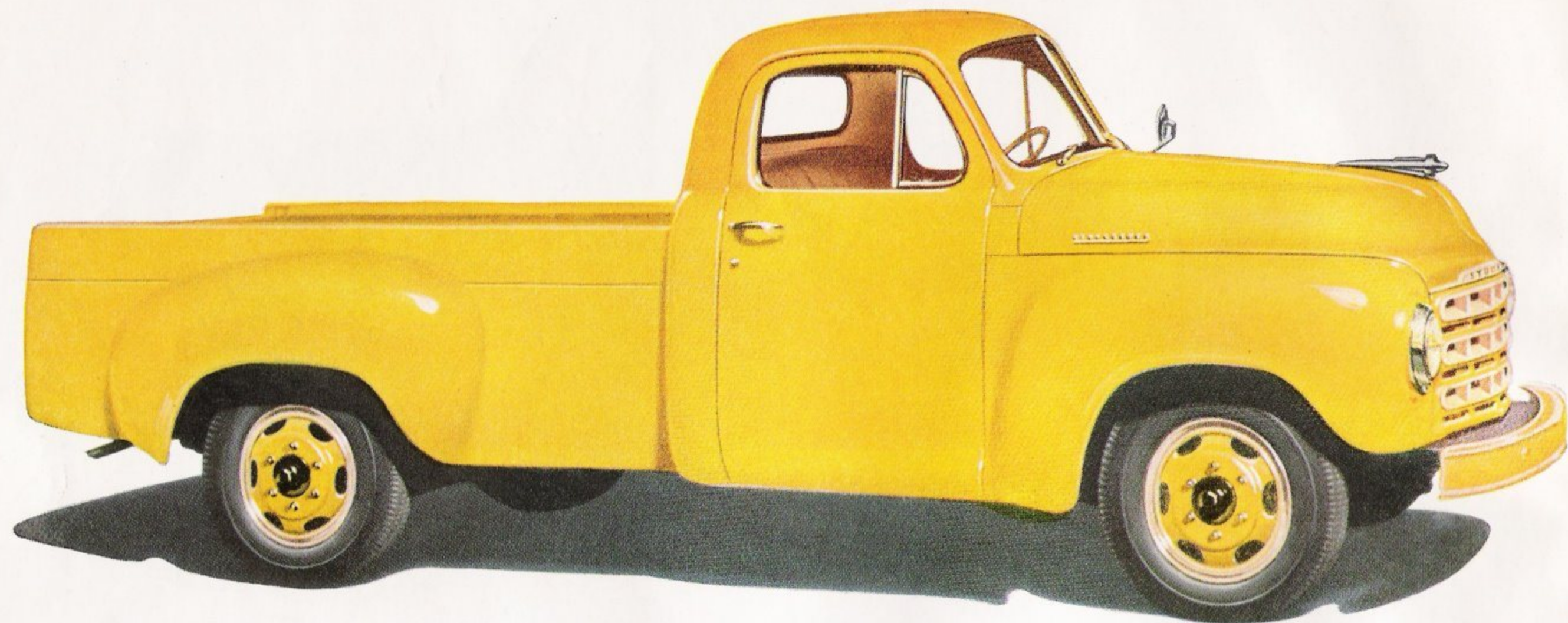
HALF-TON 6½ FT. STAKE



HALF-TON 6½ FT. PICK-UP—CARAVAN TOP



## Tops in all around utility...Tops in savings

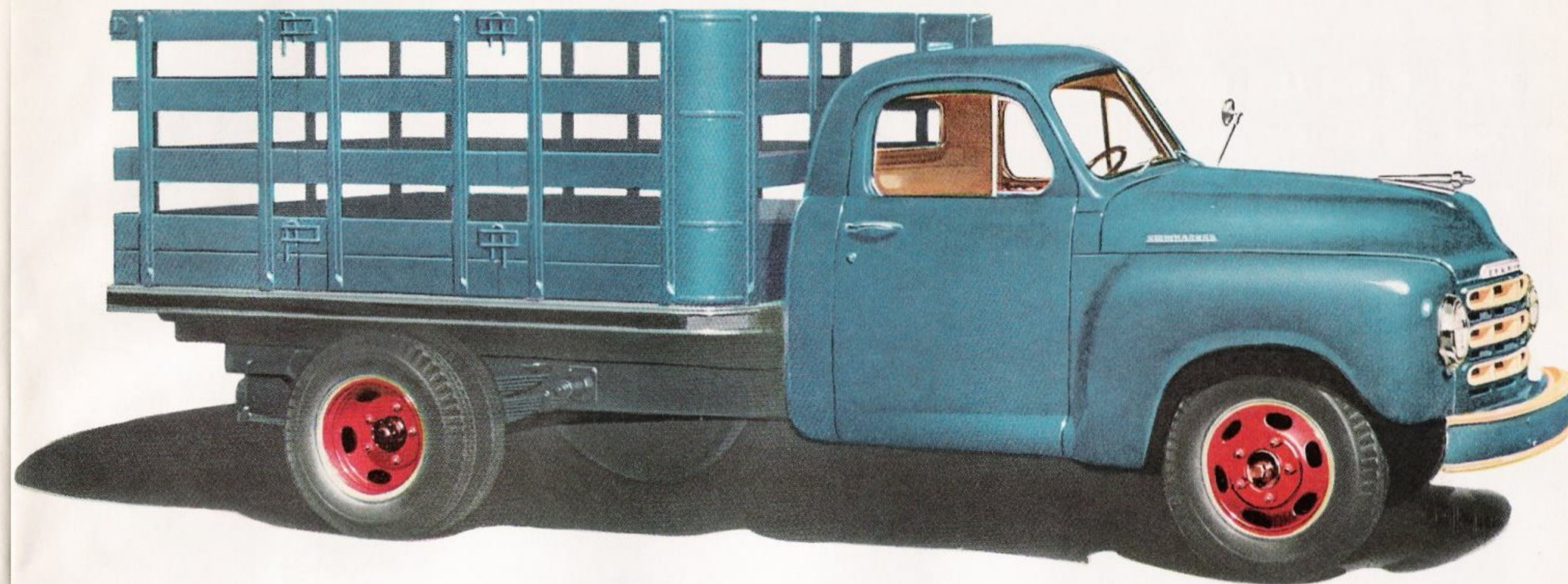


**STUDEBAKER THREE-QUARTER-TON 8-FT. PICK-UP**

Studebaker three-quarter ton trucks are noted for stand-up stamina—stand-out operating economy—modern design—advanced conveniences. They're famous for trustworthy performance—for structural reliability—and for wear-resisting master craftsmanship. This husky, handsome

Studebaker truck gives drivers an easier working day, thanks to roomy, full-comfort, big-vision cabs. Servicing a Studebaker truck—on the road or in the garage—is simplicity itself, thanks to a new kind of "lift-the-hood" accessibility to engine, ignition and instrument panel wiring.

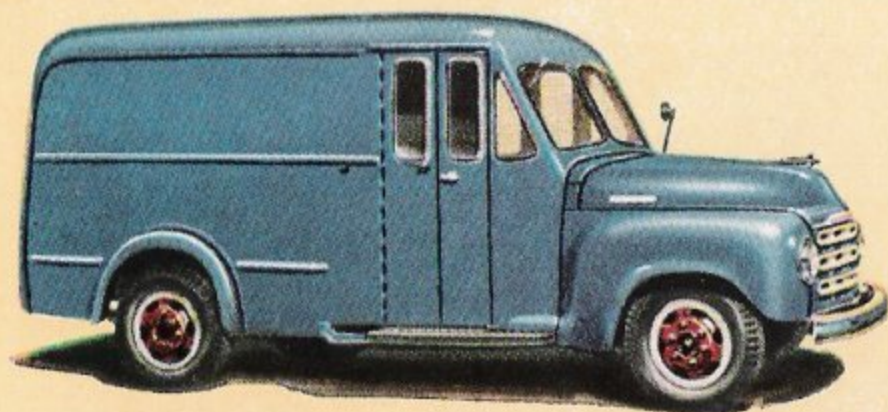
## Plenty of low-cost power...Amazing durability



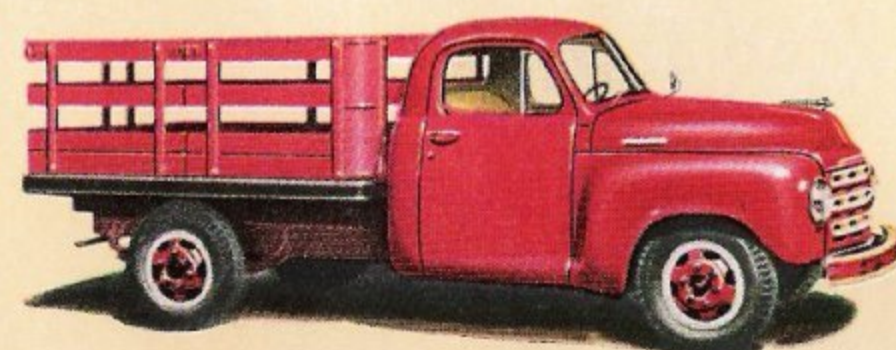
**STUDEBAKER ONE-TON 9-FT. STAKE**

Whether the loads you haul are hefty or small, you get plenty of low cost power and top performance every time and all the time with a Studebaker one-ton truck. You cash in to the full on the brilliant modern engineering and 99 years of experience that have won for Studebaker respect

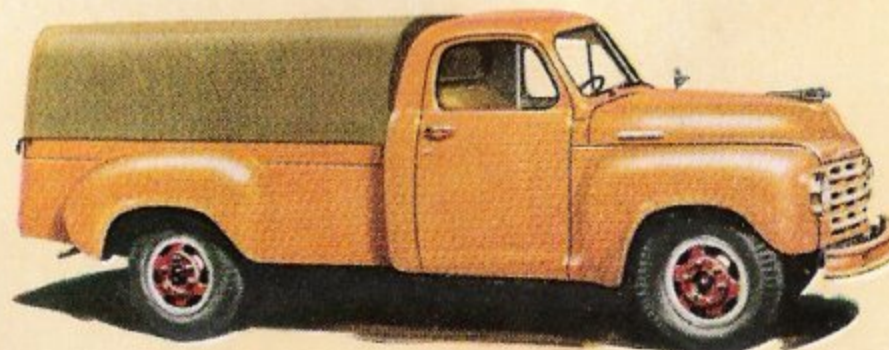
and confidence from coast to coast. What's more, a Studebaker is a standout in looks and solid construction. There's new ruggedness in the extra K-member frame—rear axles are tremendously sturdy—exceptionally strong springs front and rear are easy riding. Available in 121" or 131" wheelbases.



3/4-TON SHOWN WITH UTILITY PANEL



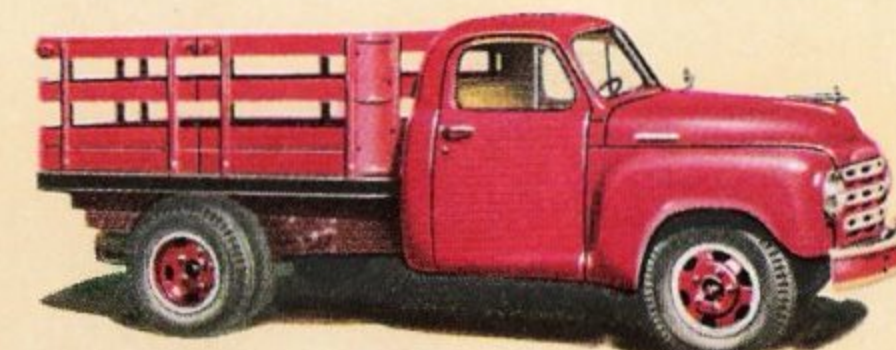
3/4-TON 8 FT. STAKE



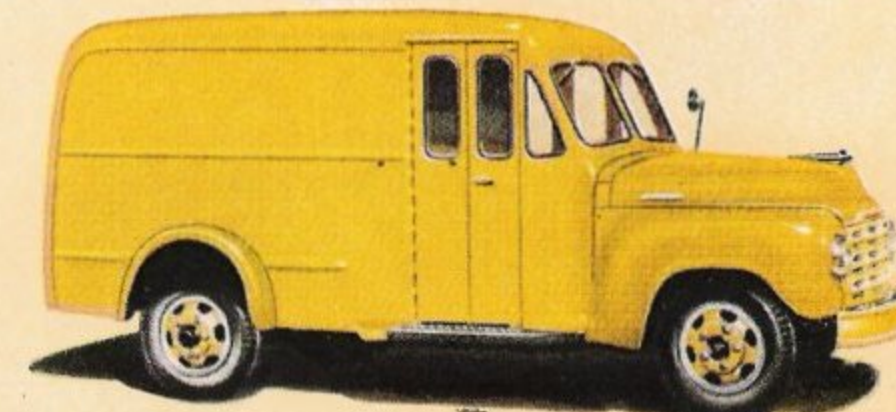
3/4-TON 8 FT. PICK-UP—CARAVAN TOP



ONE-TON 8 FT. PICK-UP



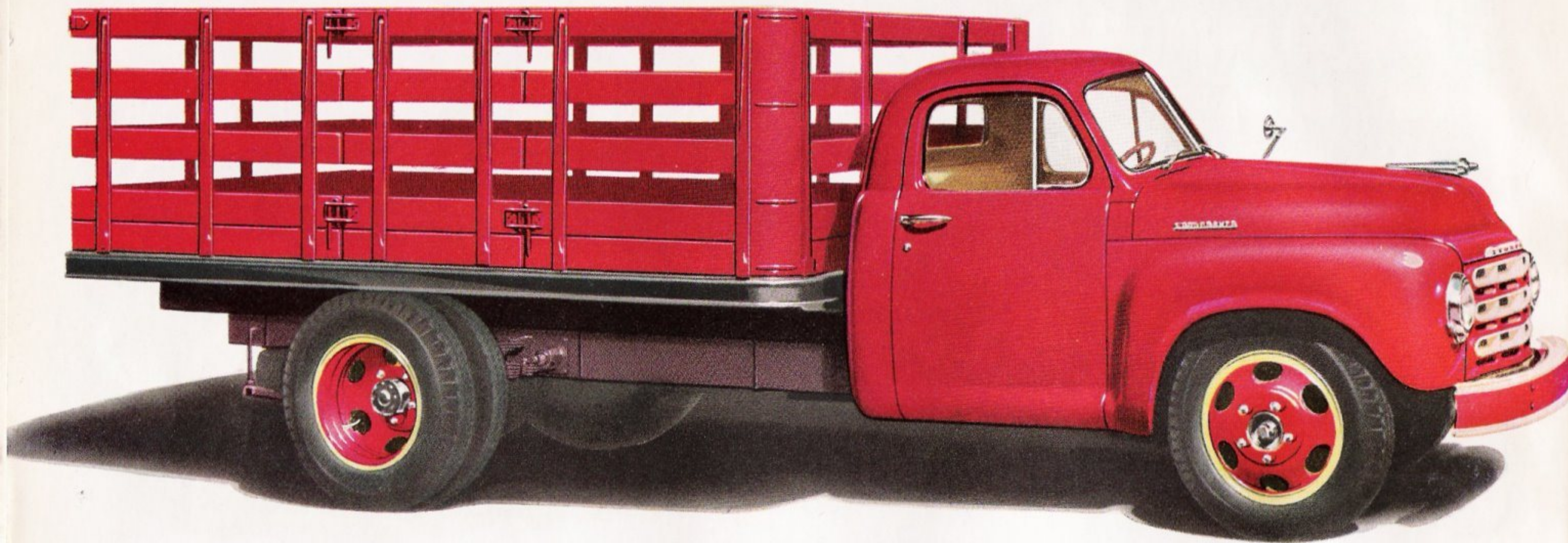
ONE-TON 8 FT. STAKE



ONE-TON SHOWN WITH UTILITY PANEL



## Extra comfort...Extra power...Extra thrift

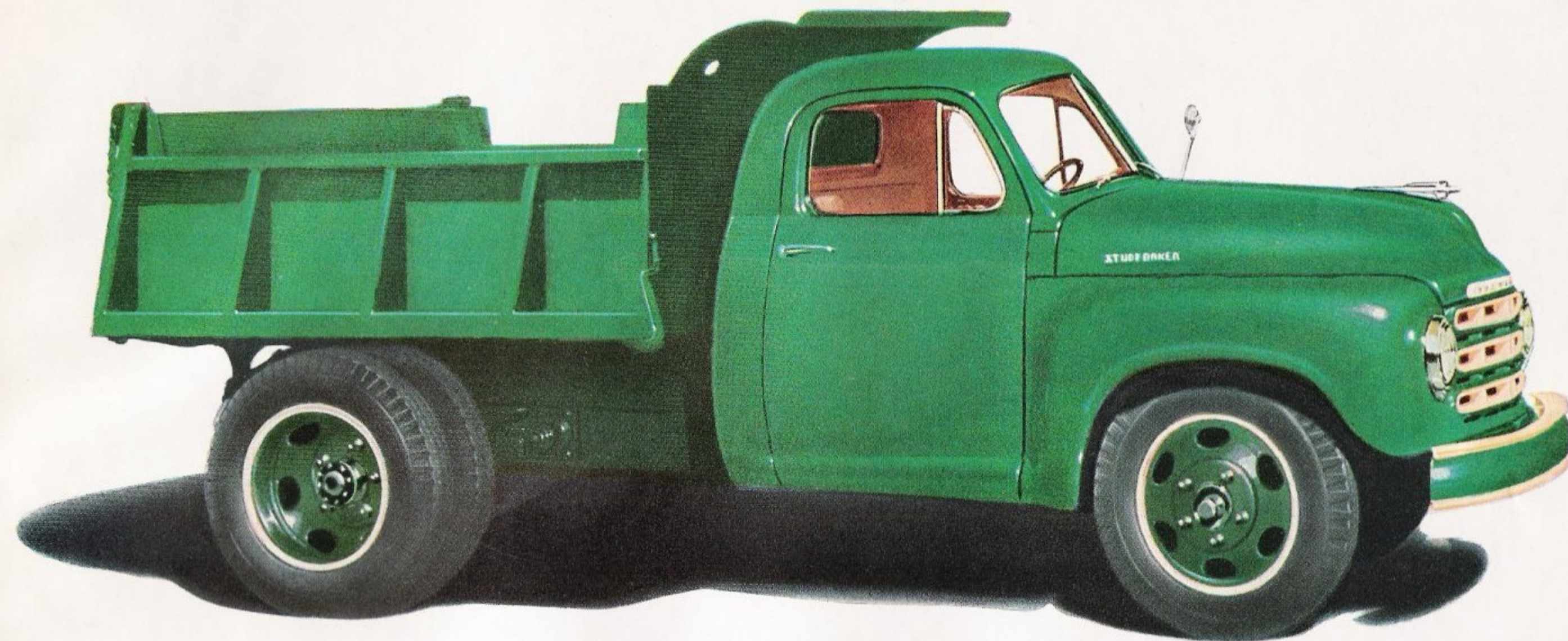


**STUDEBAKER 1 1/2-TON 12-FT. STAKE**

The advanced 1 1/2-ton Studebakers are marvels of pulling power and marvels of staying power. They work for less money. A Power-Plus Studebaker truck engine develops 102 horsepower at 3400 r.p.m. It delivers 205 lbs. ft. torque. There's plenty of ruggedness with an extra

K-member up front for extra strength—a "plus" of frame length for maximum load space—tremendously sturdy rear axles. The cab is extra roomy—with foot-operated floor ventilation—Adjusto-Air seat cushion—visibility is enormous. They're real stand-outs in solid value!

## High torque...High horsepower...for heftier hauling



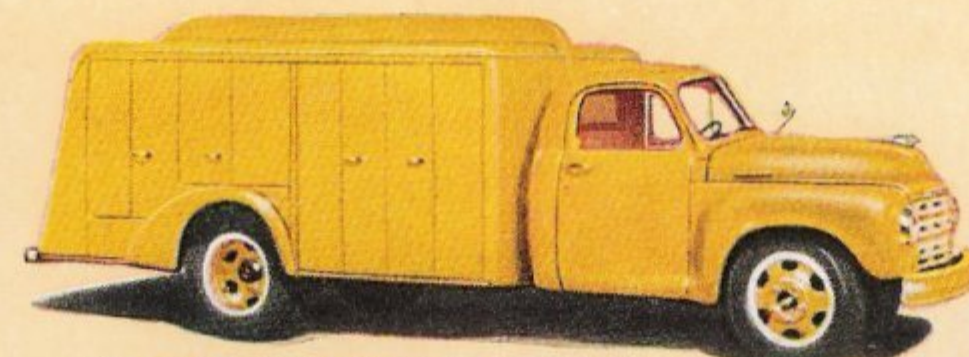
**STUDEBAKER 2-TON (shown with dump body)**

These rugged reliable Studebaker 2-ton trucks do a truly sensational job of hauling when the footing is bad and the going is strenuous . . . and they're mighty easy on gasoline. Whether it's used in construction work, or in hundreds of other kinds of haulage, every Studebaker two-ton truck

has the special advantage of the amazing Studebaker "Power Plus" truck engine—a standout performer both in horsepower and in pounds feet of torque. There's new ruggedness of structure and there's new comfort for the driver and his helpers in the spacious new Studebaker truck cab.



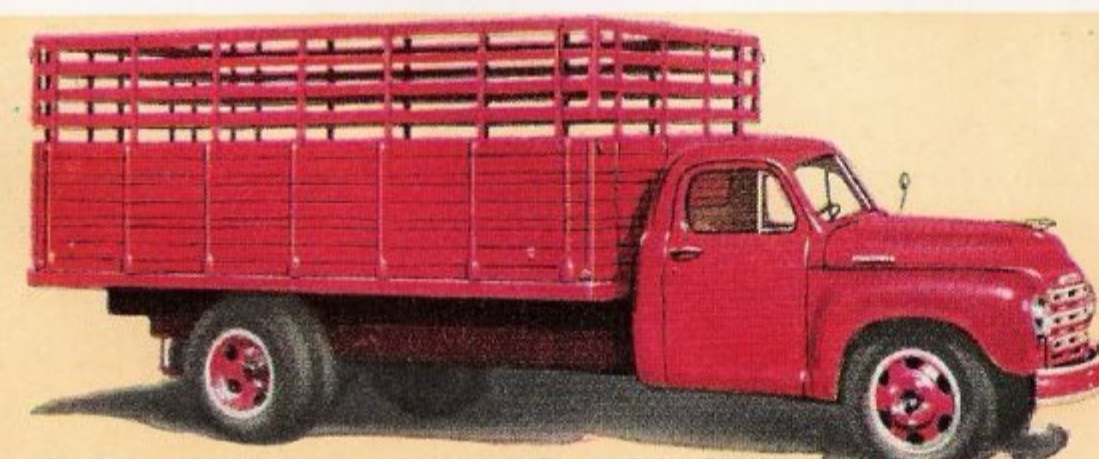
1 1/2-TON SHOWN WITH MILK DELIVERY



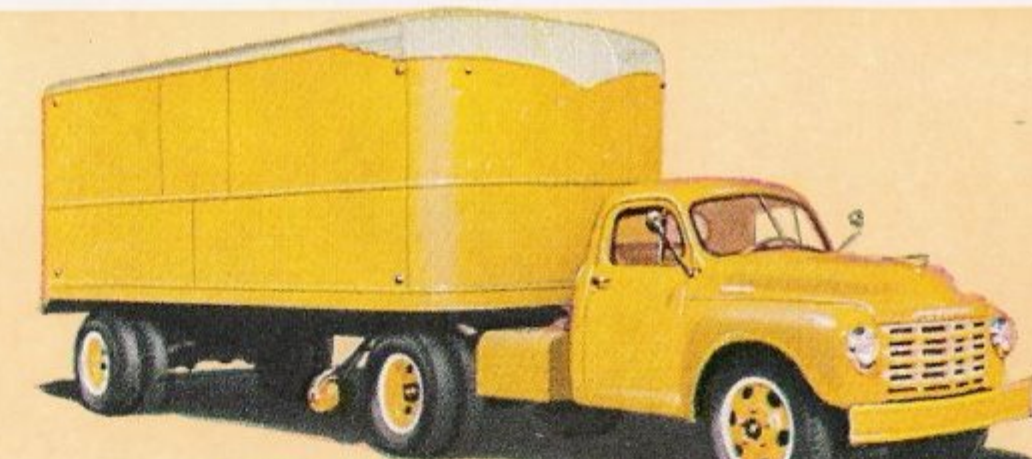
1 1/2-TON SHOWN WITH CLOSED BOTTLERS



1 1/2-TON SHOWN WITH CLOSED VAN



2-TON SHOWN WITH COMBINATION STOCK-GRAIN



2-TON TRACTOR SHOWN WITH 26 FT. TRAILER



# EXTRA DRIVER COMFORT in the roomy, big-vision Studebaker cab!

You get easy-chair comfort, world's finest ventilating system, rotary door latches, enclosed safety steps.

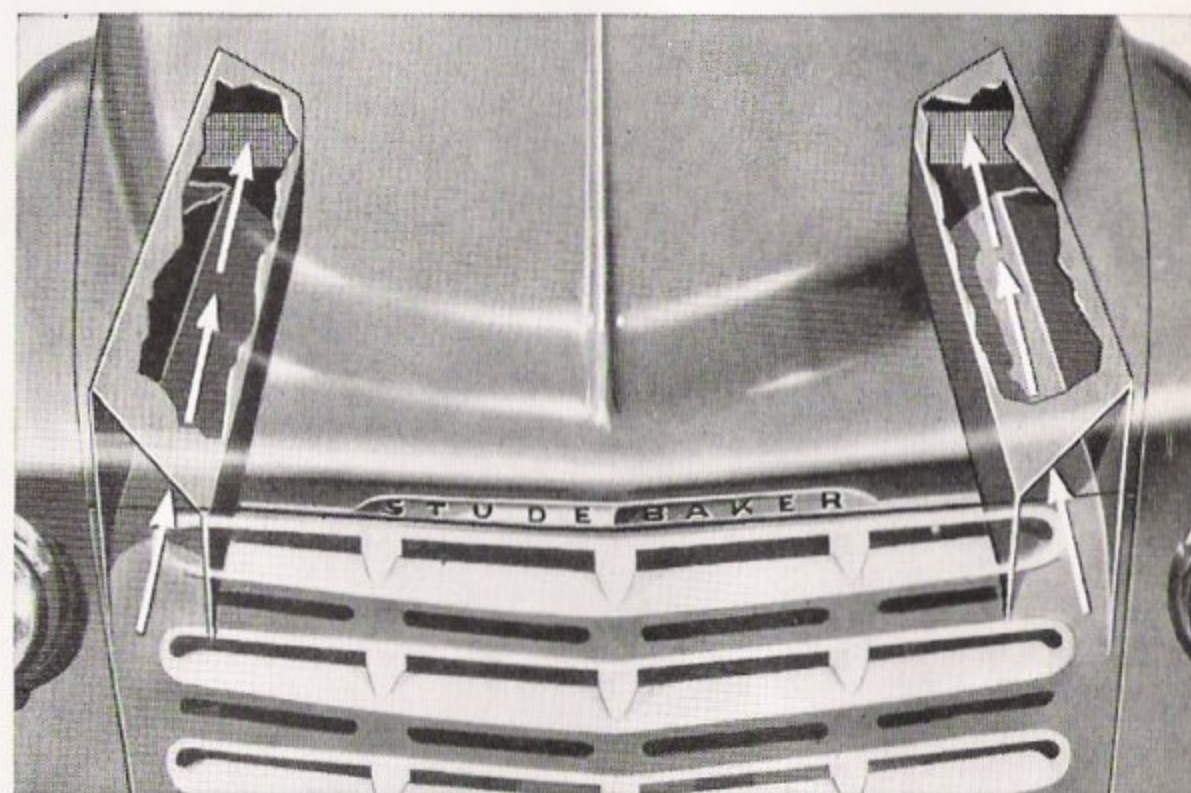


Studebaker's cab is a full vision cab—front, sides and rear. Whether you look left, right, or straight ahead, truck drivers can now see what's going on in every direction. Blind spots have been virtually eliminated.

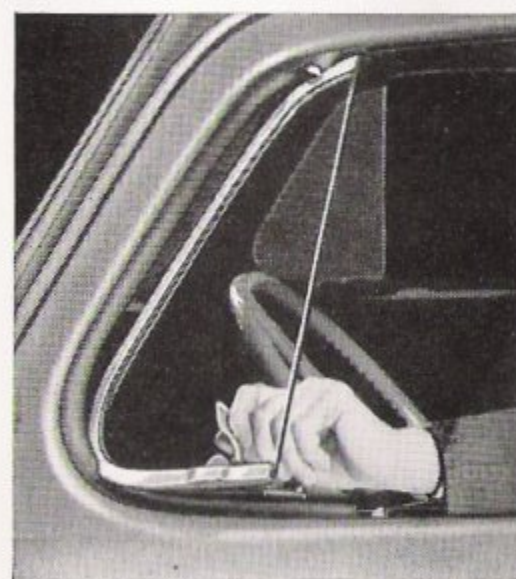


*You step into the Studebaker cab!*

Studebaker's walk-in doors cut down on driver fatigue because they enable drivers to enter and leave the cab quickly and with a minimum of exertion. What's more, steps are enclosed inside the cab—an important safety factor under bad weather conditions.



Two tunnels, or "air scoops," carry cool, fresh air from the radiator directly into both sides of the cab at floor level, through grilles that can be opened or closed with a movement of the foot. The "air-scoop" on left side acts as air intake for the Climatizer, supplying fresh air to the heater and defroster.



A flick of the finger and Studebaker's wide-vane window wings open or close exactly to your liking. No tricky gadgets or cranks to get in your way.



Studebaker's Truck Climatizer fresh air heating, ventilating and defrosting system (optional at extra cost) circulates warm healthful air constantly throughout the cab—real comfort on the coldest days.



Foot-regulated openings on both sides of the cab at floor level let in fresh, soothing air that finds its way to every nook and cranny of the cab. Welcome relief for the driver on muggy days.



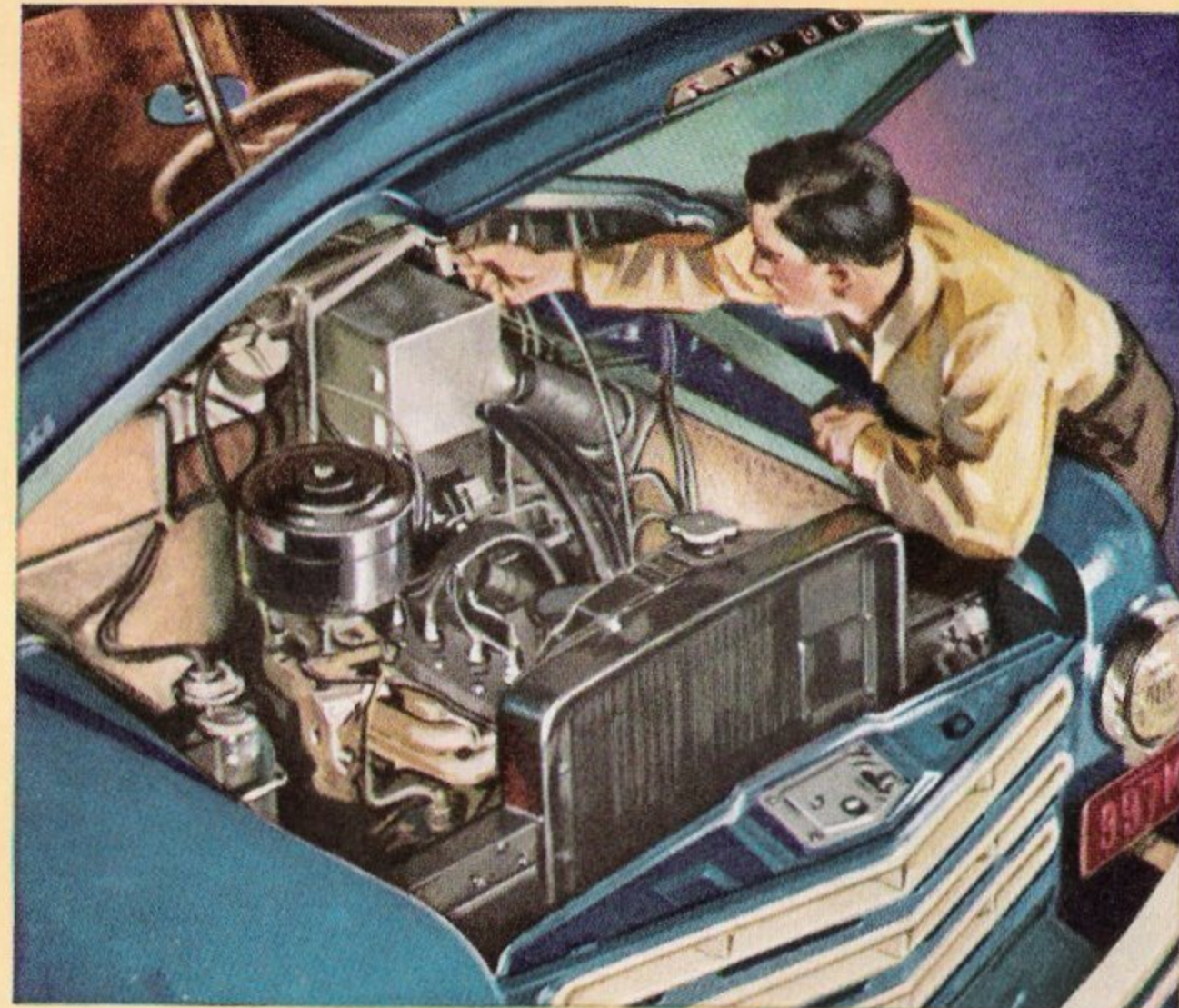
*Steering post gear shift standard on 1/2-ton and 3/4-ton models with 3-speed transmission or overdrive.*

Studebaker's roomy big-vision truck cab—with wide, deep seats and ample leg room—assures relaxed, restful riding, even for three adults. Adjusto-Air coil-spring seats designed for driver comfort and covered with a soft, durable upholstery make every trip in a Studebaker truck an "easy-chair" ride. What's more, standard equipment in every Studebaker cab includes dual windshield wipers, two sun visors, two arm rests, ash tray, cab light which turns on and off with both door and hand switches, door lock, rotary door latches, metal-lined dash compartment, extra wide door openings with automatic door stops and double weather stripping running clear around.



# Lift-the-hood accessibility

for quick and easy servicing

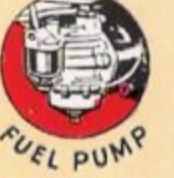


**Just lift the hood! Everything's easy to get at!**

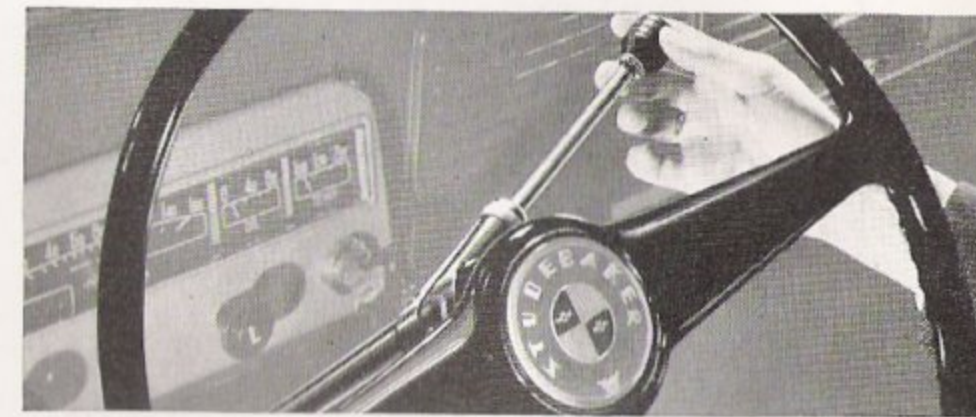
Owners, drivers and service men welcome the revolutionary "lift-the-hood" accessibility that distinguishes Studebaker's new line of motor trucks.

Now, it's no longer necessary to stand on a box to "get at" the engine, ignition, instruments or accessories. The hood opens 'way wide. The strain and fatigue of standing even on tip-toe are eliminated. Every important part is easy to service because it's easy to see and easy to reach.

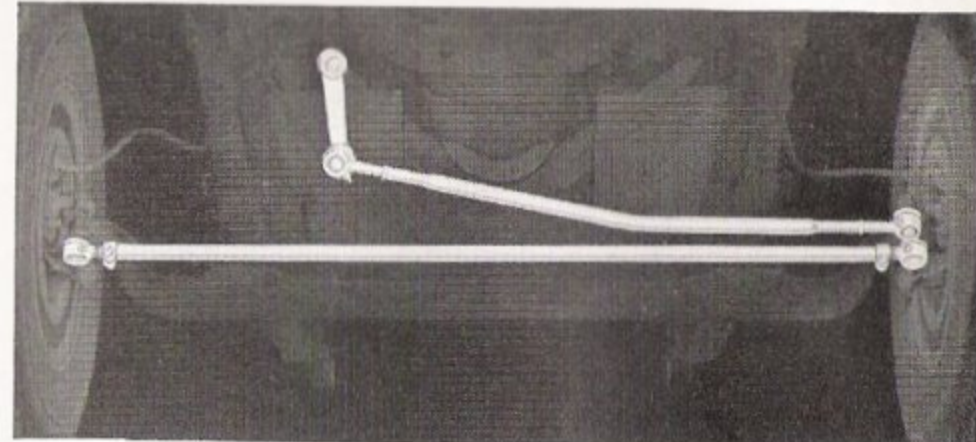
Thanks to Studebaker's advanced truck engineering, repair and service costs can be cut 'way down because of time savings.



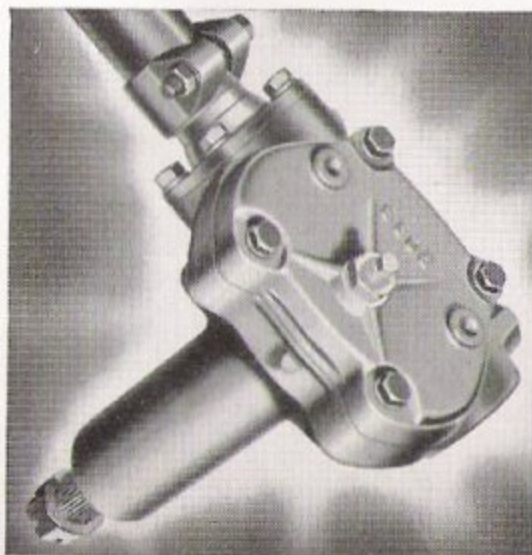
## Easy to drive!



Steering post gear shift lever is standard on Studebaker's 1/2- and 3/4-ton models with 3-speed transmission and overdrive. Combined with the off-the-floor parking brake lever it removes all obstructions from the floor and gives plenty of leg room. Comfort gets careful attention in a Studebaker truck.

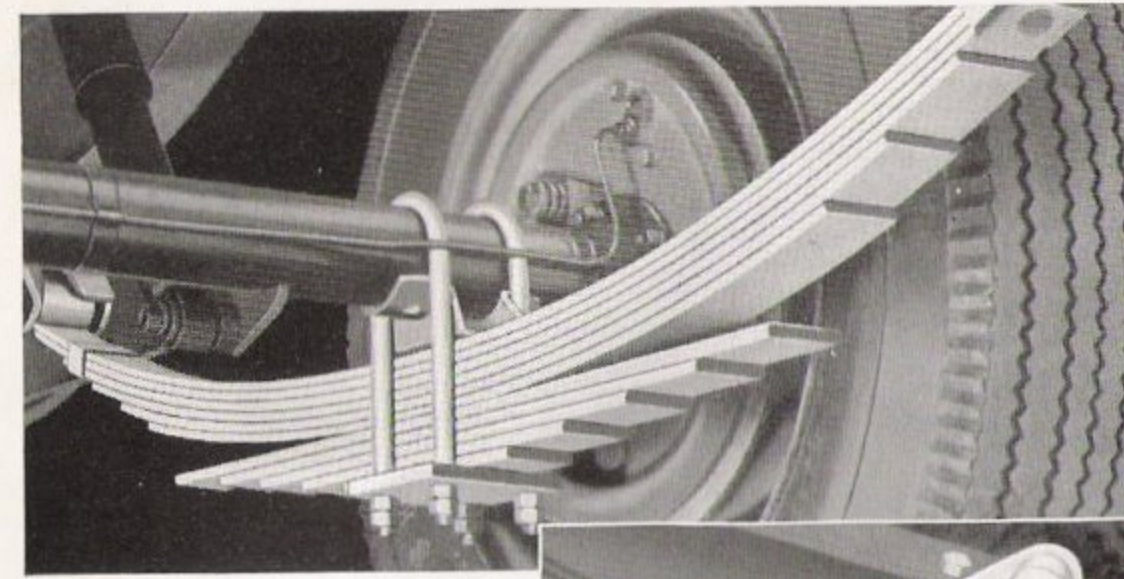


Studebaker's cross link steering eliminates "wheel-fight" and road shock. On Studebaker trucks, there's no steering wheel "kick back," thanks to variable ratio and cross-link steering. Steering rods run directly from the steering gear box through linkage to one wheel and then on to its opposite.



Variable-ratio steering pioneered by Studebaker for easier parking and turning. Another Studebaker origination. The low gear ratio makes straight-ahead driving easier, simpler because a finger-tip movement of the steering wheel turns the front wheels quickly, surely. Progressively higher ratios make turning corners or parking easier.

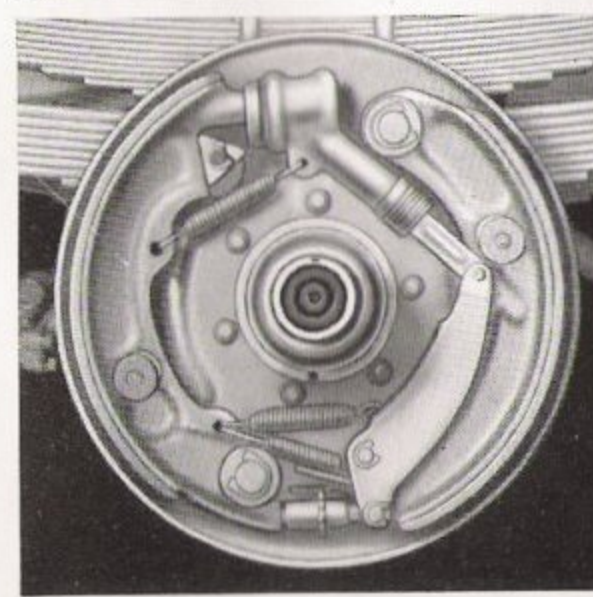
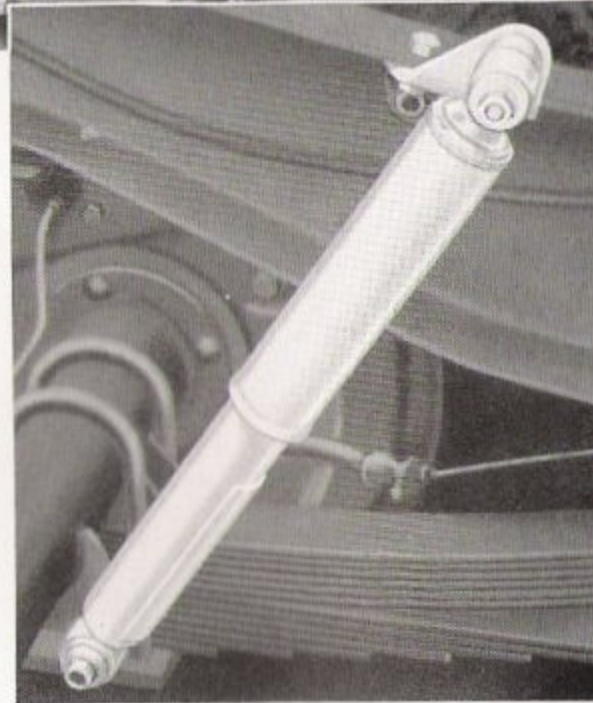
## Easy to park!



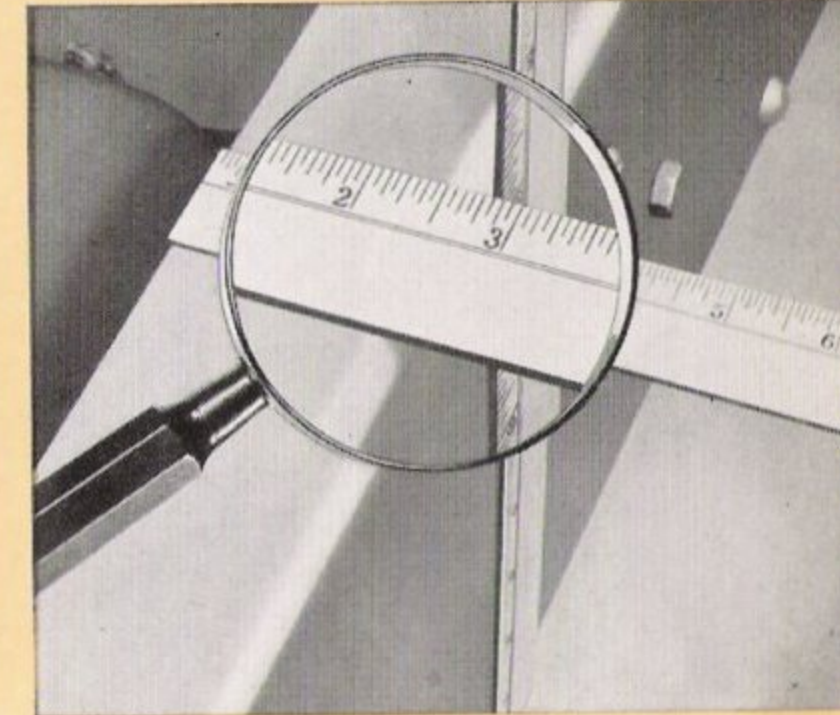
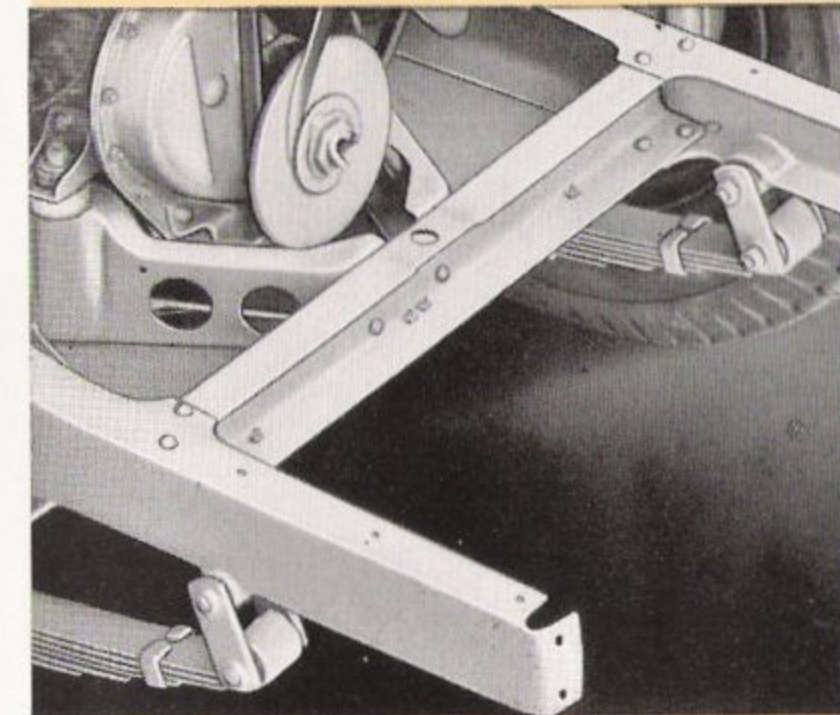
Easy riding springs! On 1/2- and 3/4-ton Studebaker trucks, progressive two-stage and heavy-duty springs are optional at slight extra cost. The front springs are specially designed to function with a light rate of action.

Airplane-type double acting shock absorbers are standard equipment, front and rear, on the 1/2- and 3/4-ton models. Heavy duty "shocks" are standard front and rear on the 1-ton and available at extra cost on 1 1/2-ton models; they are standard on the front of the 2-ton model.

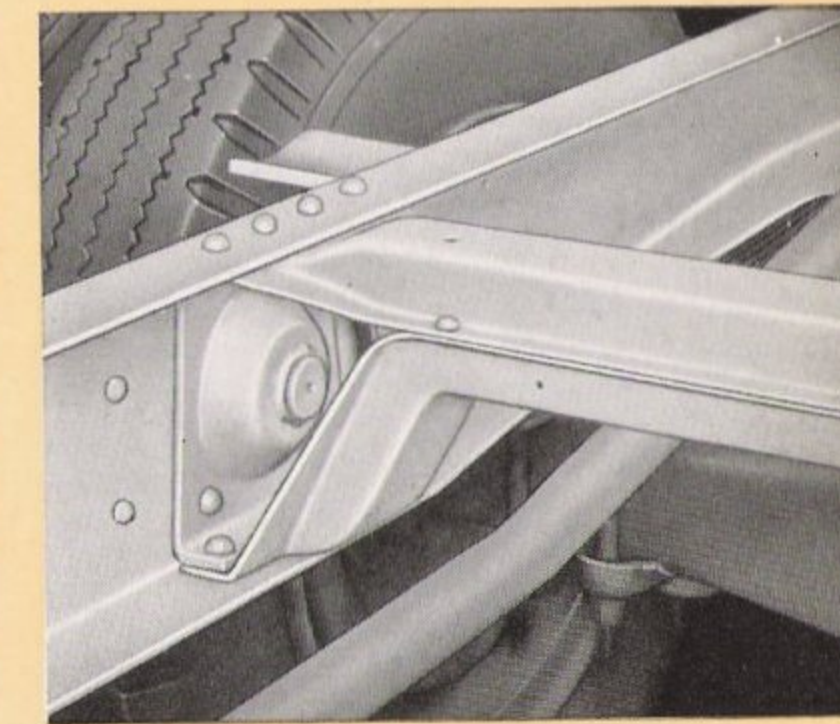
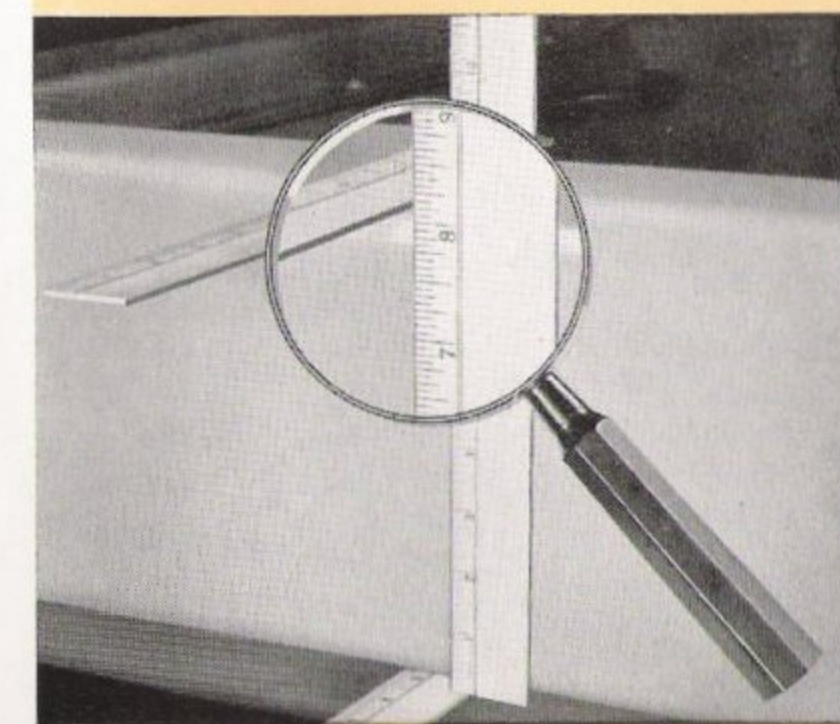
Super-safe, super-powerful Hi-Tork rear brakes make swift, smooth stops a sure bet with the 1-ton, 1 1/2-ton and 2-ton Studebaker trucks. Positive self-centering brakes are fitted to the 3/4-ton model. The 1/2-ton model has Studebaker's famous self-adjusting, self-centering brakes. The self-adjusting mechanism automatically repositions the forward brake shoe with each five-thousandths of an inch of lining wear. This maintains a correct, uniform clearance between drum and shoe.



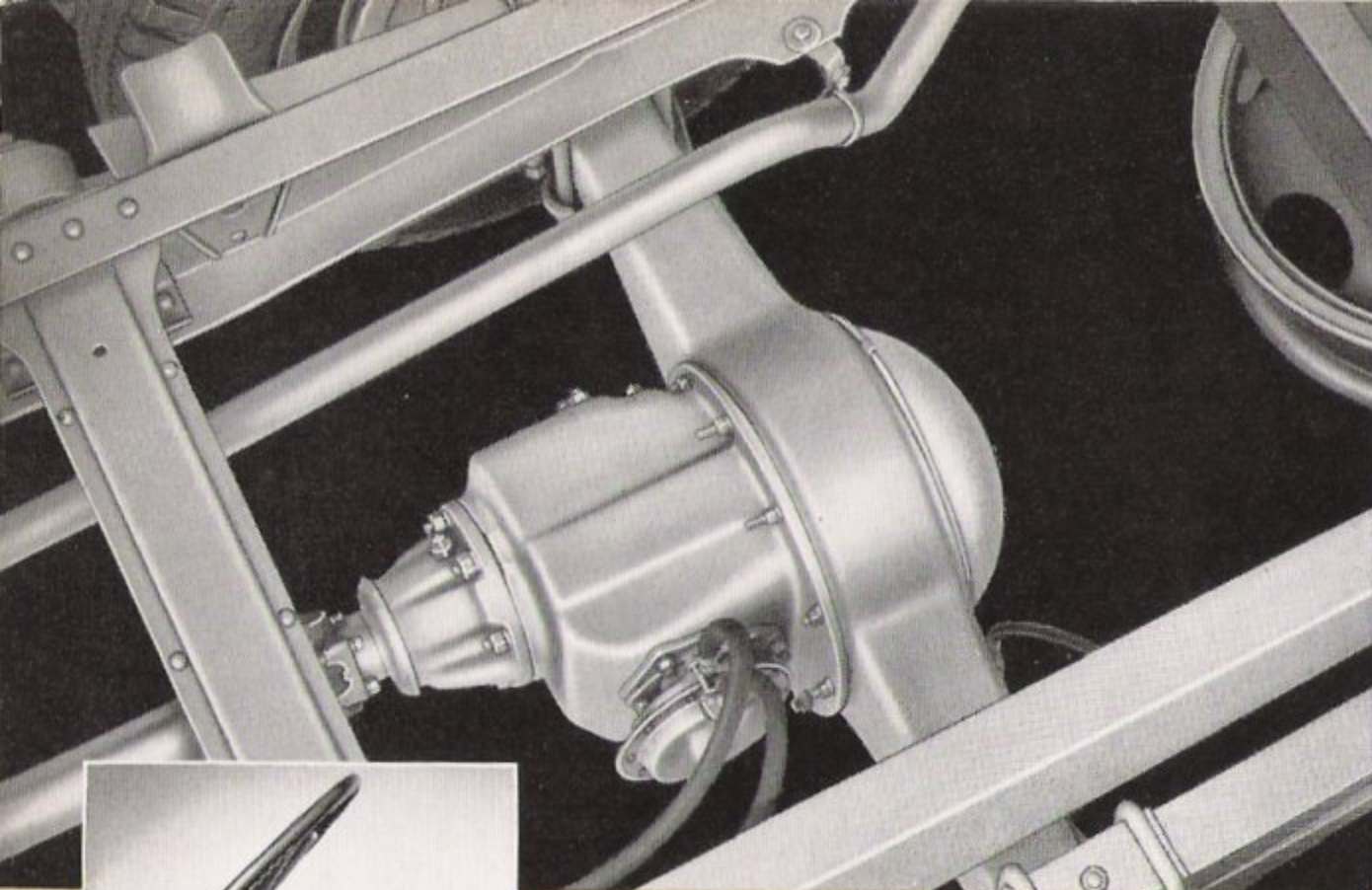
## Stand-up ruggedness



New safety frames with exclusive K-member for extra durability. Look at that massive, rigid K-member! It's used in all Studebaker trucks. It gives firm support to the engine mounts—reinforces the truck's whole front structure. Frame breadth is wider at the upper and lower flanges on the side rails. Frame design includes an extra margin of frame length from the center line of the rear axle to the end of the frame. Full box-section cross members fortify points of extreme frame stress and divide into powerful alligator jaws at frame juncture.

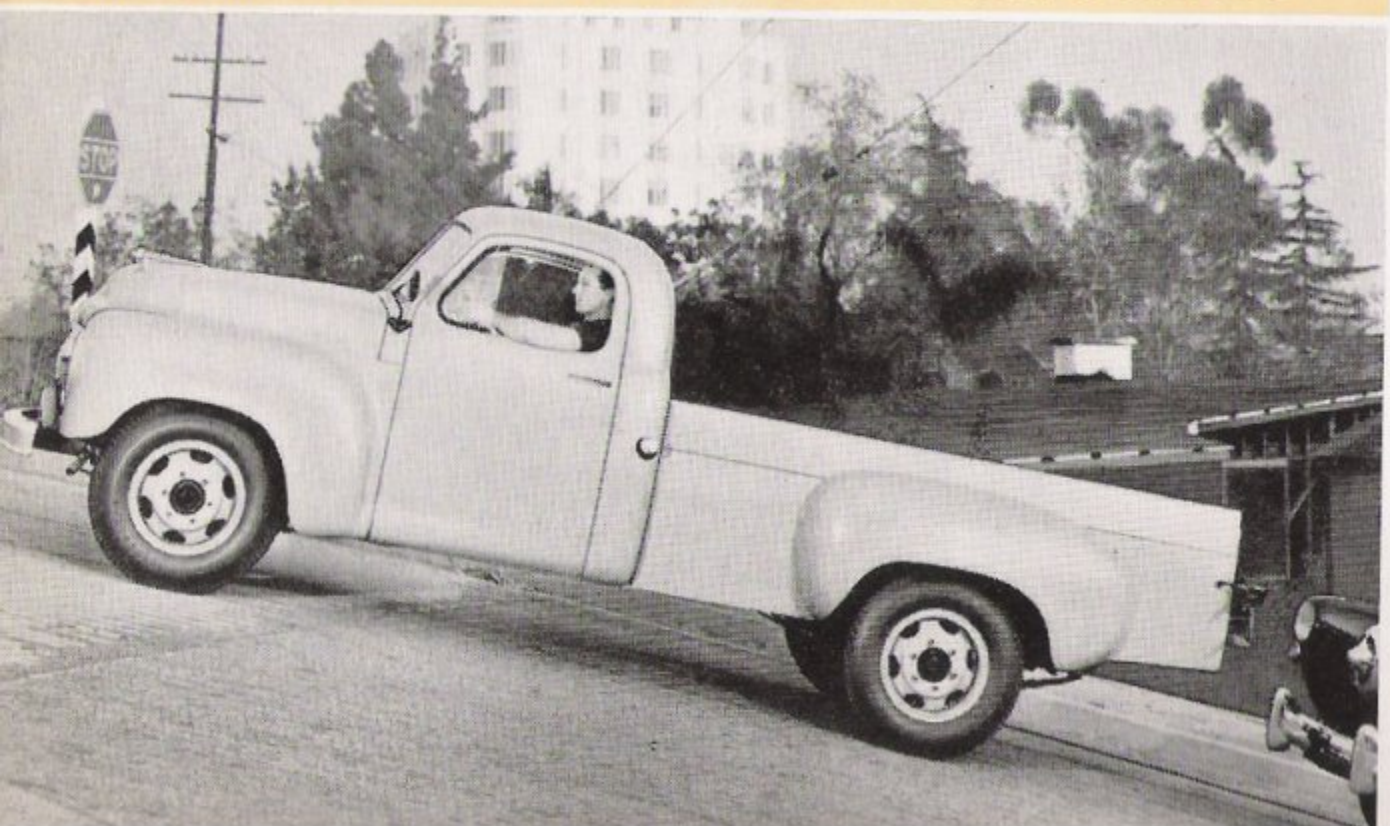




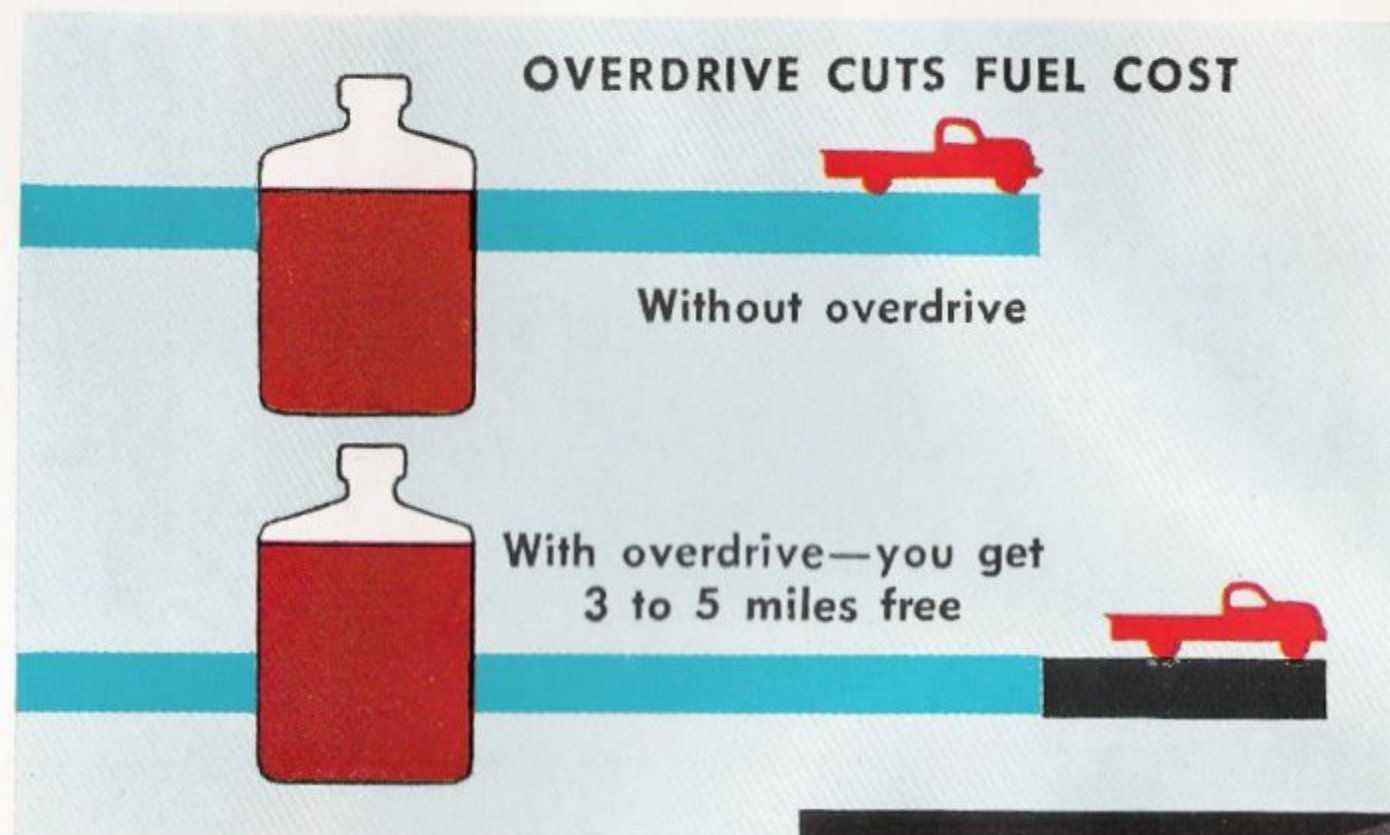


A two-speed axle is available (R16A-R17A models) at extra cost. It provides you instantly with the extra power of a low gear reduction or the top speed of a fast rear axle ratio. In combination with 4-speed transmission, it supplies a range of 8 speeds forward and 2 reverse. You merely push or pull the control located on the gear shift lever to change gear ratios without removing your hand from gear shift lever.

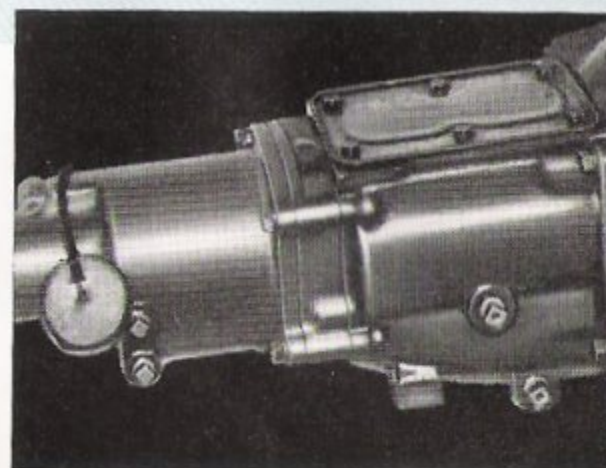
Studebaker's automatic hill holder keeps you from rolling back on upgrades. When you come to an uphill stop, keep clutch pedal depressed, take right foot off brake pedal. When you release the clutch you go forward without roll-back. Available on all Studebaker truck models at extra cost.



## Studebaker automatic overdrive transmission cuts fuel costs!



Studebaker's unique automatic overdrive transmission is available at added cost in the Studebaker 1/2-ton and 3/4-ton models. Engine revolutions are reduced approximately one-third without reducing speed. Overdrive starts paying its extra cost right away in extra gas savings—it greatly reduces engine wear, too. An automatic control permits an instant shift from overdrive to conventional gear ratio when a surge of extra power is needed. Overdrive may be locked out by pulling control on dash.



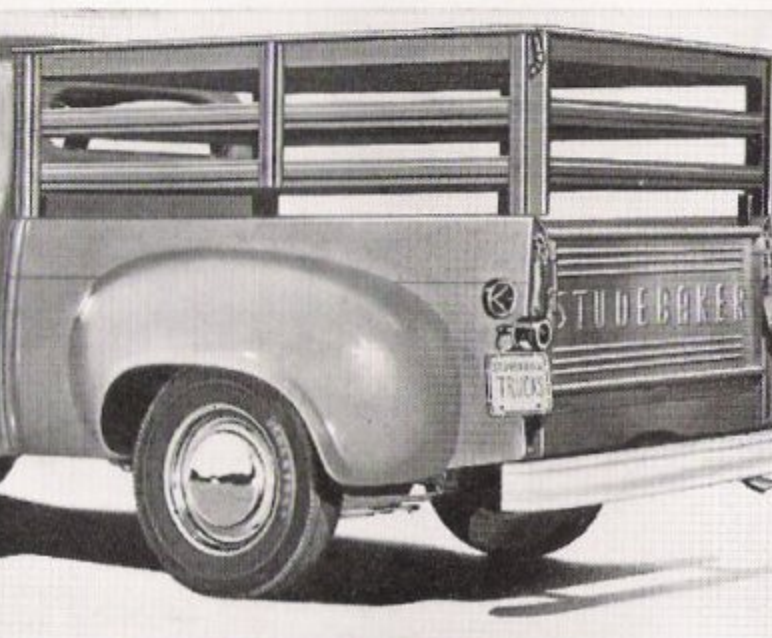
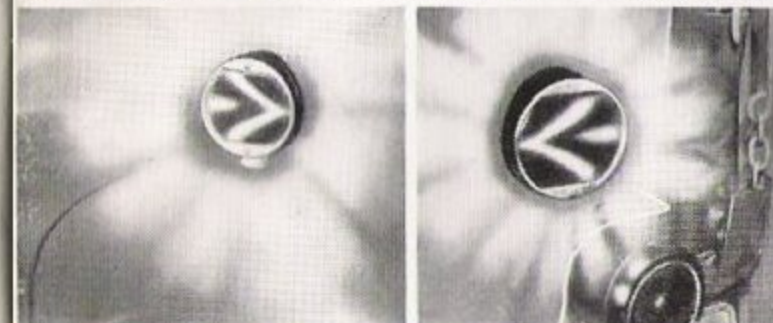
Wet-type oil bath air cleaner and Fram oil filter (optional at extra cost) combine to effectively bar grit and dirt from the engine. In addition, the Studebaker floating oil screen uses only the cleanest oil in the crankcase. It operates just below the surface, getting a minimum of floating impurities as well as a minimum of those that sink to the bottom.



**Automatic Windshield Washer.** A safety convenience. Turn knob and two streams of water permit wipers to clean away dirt.



**Front and Rear Directional Signals.** Safe and convenient. A flick of a finger without removing hand from steering wheel signals intended turns. Tell-tale light indicates signals are operating.



**Steel Stake Rack.** Tough welded channel steel. Side sections slide into built-in body stake sockets; front and rear sections bolt to side sections. **Rear Bumper** is available on 1/2-ton and 3/4-ton—either painted or chrome finish.



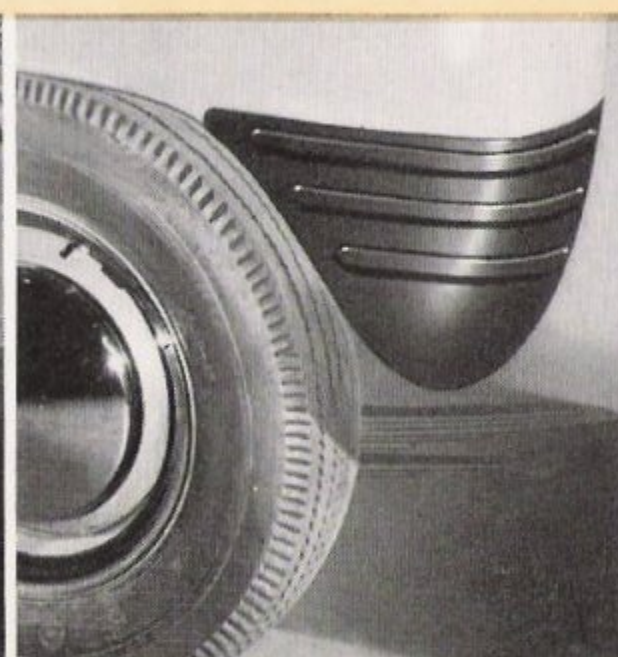
**Tail Gate Folding Step.** Here is time saving convenience and safety. Folding step mounted on the tail gate of your Studebaker Pick-up will facilitate loading and unloading. Heavy construction. Folds out of way.



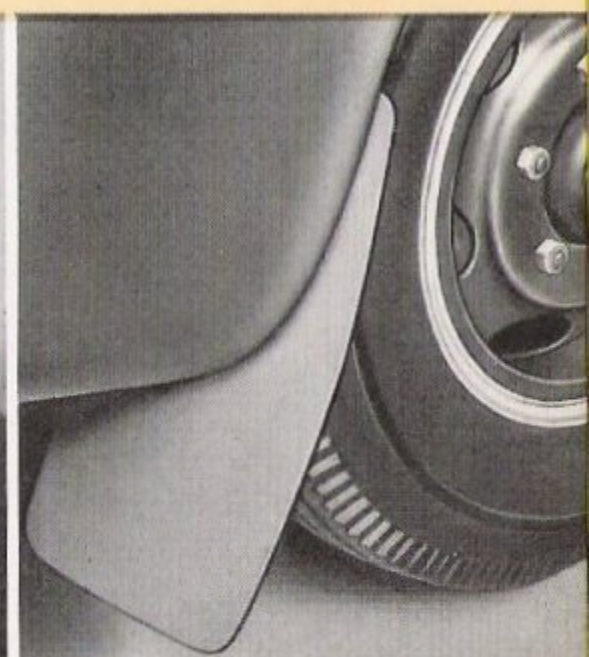
**Side Loading Step.** Made from heavy stamped steel—ruggedly supported with special attaching braces—step plate of non-skid design—can be mounted on either right or left side.



**De Luxe Seat Cover.** For cleanliness and added riding comfort. Long-wearing closely woven fibre. Smooth, snug fit.



**Rear Fender Gravel Shields.** Protection for rear fenders of all pick-up models. Stop dings, scratches and abrasions caused by flying stones, gravel and mud.

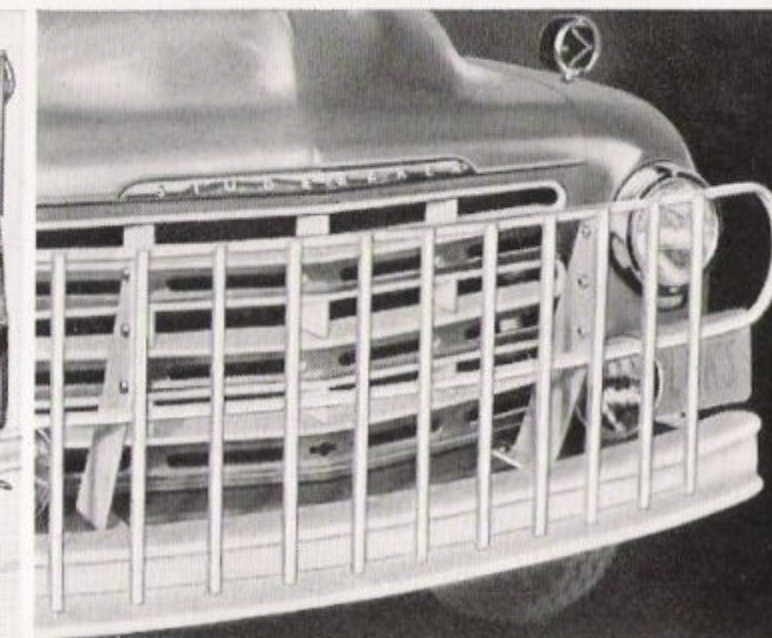


**Front Splashguards.** Deflect cinders, gravel, stones and road oil... protect finish of fenders, body and cab. Attractively designed in heavy, reinforced black rubber.

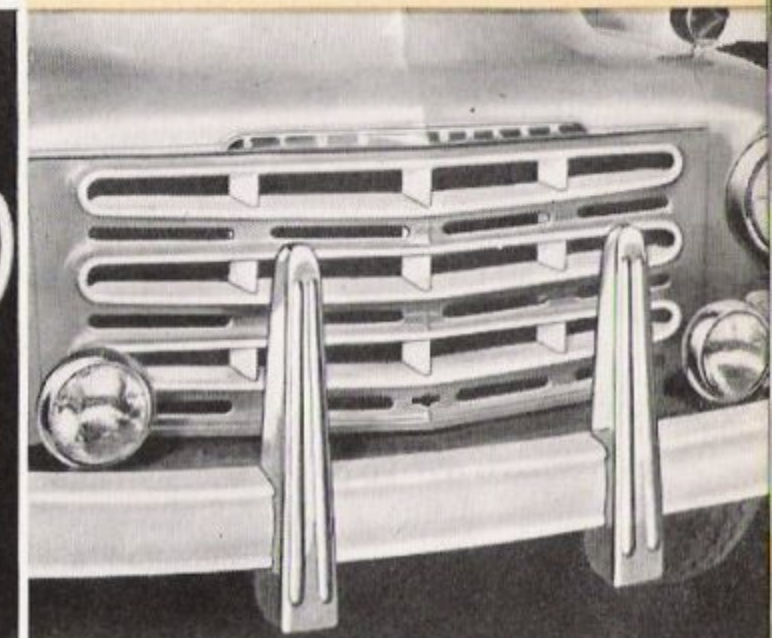
## Studebaker truck accessories engineered for rugged service



**Automatic tuning radio.** Special shock-proof chassis. Long range performance. Superb tone. Exclusive noise suppression eliminates interference.



**Grille Guard.** Complete, yet sturdy and attractive protection for entire front end. Rails are 1/2-inch bar steel, welded as a unit for super strength. Heavy steel supports. Enamel finish. For all models.



**Single Vertical Guards.** Heavy die-pressed steel... enduring chromium finish. **Fog Lights.** For better vision in fog, snow, rain or mist "Glasealed" Bulbs. Wiring and fused switch designed for legal installation.



**GENERAL**

Model and Wheelbase	R5, 112"	R10, 122"	R15-21, 121"	R15-31, 131"
Maximum gross rating	4600	6100	7800	10,000
Nominal tonnage rating	1/2-Ton	3/4-Ton	1-Ton	1-Ton

**PISTONS**

Type.....Heat dam, T-slot, cam ground, tin plated  
Material.....Aluminum Alloy

**CRANKSHAFT**

Type.....Drop-forged, heat treated  
No. of bearings.....4

**COOLING SYSTEM**

Frontal area of radiator core.....344 sq. in.  
Depth of core.....2 1/4"

**TRANSMISSION**

	R5-R10	R15
Steering post gear shift	Standard	
No. speeds forward	3	4
Gear reductions—1st	3.34 to 1	6.4 to 1
2nd	1.85 to 1	3.09 to 1
3rd	1 to 1	1.69 to 1
4th (R15 only)		1 to 1
Reverse	4.53 to 1	7.82 to 1

**OPTIONAL OVERDRIVE TRANSMISSION** (at extra cost—R5-R10 only)—with steering post gear shift—Direct in third, fourth overdrive, 3.34 to 1—1.85 to 1—1 to 1—4.53 to 1

**REAR AXLE**

	R5	R10	R15
Type	Semi-floating Hypoid	Full-floating	Full-floating
Standard ratio	4.82 to 1	5.571 to 1	5.83 to 1
Optional	No	4.857 to 1	6.66 to 1
Tread	59 1/8"	60 3/16"	60 3/16"

**FRONT AXLE**

	R5	R10	R15
Type	Reverse Elliott	Reverse Elliott	Reverse Elliott
Tread	60 13/16"	60 13/16"	60 27/32"

**STEERING**

Ratio.....15.4-13.5-15.4 to 1 20-18-20 to 1  
Type.....Variable ratio; Cam and twin lever

**ELECTRICAL SYSTEM**

Battery.....15 plate—100 ampere hour  
Generator.....Air cooled, shunt wound, hi-output  
Automatic voltage and current control.....Yes  
Automatic spark control.....Yes

**TIRES**

	R5	R10	R15
Standard—Front, single rear	with spare tire		
Optional—Front, single rear (at extra cost)	4 ply 6.00/16	6 ply 6.50/16	6 ply 7.00/17
	6 ply 6.00/16	6 ply 7.00/16	6 ply 7.00/17
	6 ply 6.50/16	8 ply 7.50/16	8 ply 7.50/17
			8 ply 6.50/20
			8 ply 7.00/20

**FUEL SYSTEM**

Carburetor, make and size.....Carter, 1 1/4"  
Octane selector.....Yes  
Type of air cleaner.....Oil bath—1 pt.—with silencer

**FRONT SPRINGS**

	R5-R10	R15
Length and width	40" x 1 3/4"	42" x 2"
No. of leaves—Standard	8	8

**REAR SPRINGS**

	R5	R10	R15-21	R15-31
Type	Semi-elliptic	Semi-elliptic	Semi-elliptic	Semi-elliptic
How mounted	Under the axle	Above axle	Above axle	Above axle
Length and width	51 3/4" x 1 3/4"	52" x 2"	45" x 2 1/2"	45" x 2 1/2"
No. of leaves	9	10	8	9
Shackles	Rubber mounted	Rubber mounted		
Auxiliary springs (at extra cost)			33" x 2 1/2"	33" x 2 1/2"
No. of leaves			7	8

**SERVICE BRAKES**

	R5	R10	R15
Total effective area	170 1/2 sq. in.	197 3/4 sq. in.	226 sq. in.
Type	Hydraulic, self-centering self-adjusting	Hydraulic, self-centering	Hydraulic, self-centering

**FRAME**

	R5	R10	R15-21	R15-31
Depth of side member	7"	7 1/8"	8"	8 1/8"
Width of flange	2 1/4"	2 3/8"	2 3/8"	2 3/4"
Thickness	3/8"	3/8"	3/8"	3/8"

# Specifications

## STUDEBAKER

### 1/2-ton, 3/4-ton and 1-ton trucks

**ECON-O-MISER ENGINE—R5-R10-R15**

Type. No. of cylinders, bore and stroke.....L-Head; 6 cyl.; 3" x 4"  
Piston displacement (cu. in.).....169.6, compression ratio 7 to 1  
Rated horsepower (S. A. E.).....21.6  
Maximum developed horsepower......85; maximum torque (lbs. ft.) 138

**CHASSIS EQUIPMENT**—spare wheel and carrier; 18 gallon gasoline tank; 1 pint oil bath air cleaner; Alemite lubrication fittings; 100 amp. battery; circuit breaker; sealed beam headlights; foot controlled headlight dimmer switch; horn; combination stop and tail light with license bracket; rheostat controlled instrument lights; foot and clutch pedal operated starter button; painted front bumper; hood ornament.

**CAB EQUIPMENT**—leather-like fabric upholstery; pressed fibre head liner; anti-rattle metal inside door panel; door stops; rotary latches; controlled ventilation; window wings; 2 arm rests; cab light; ash tray; dual windshield wipers; 2 sun visors; outside rear view mirror LH; outside door weatherstrip.

**COLORS**—Cherokee Red, Clover Green, Tuscan Tan, Iroquois Blue, Midnight

# Specifications

## STUDEBAKER

### 1 1/2-ton and 2-ton trucks

**POWER-PLUS ENGINE—R16A-R17A**

Type.....L-Head; 6 cyl.; 26.33 h.p. (S. A. E.)  
Bore and stroke.....3 3/16" x 4 3/4"  
Piston displacement (cu. in.).....245.6; compression ratio 7 to 1  
Maximum developed horsepower, 102; maximum torque (lbs. ft.) 205

Blue. Prime coat only is supplied with chassis and cowl.

**EQUIPMENT AVAILABLE**—at extra charge—oil filter; fog light; radiator grille guard; radio; spotlight; flares; windshield washer kit; heavy duty vertical grille guards; hand throttle kit; dash starter kit; inside rear view mirror; outside right hand rear view mirror; cigar lighter; heater and defroster; chrome front bumper (R5-R10); painted or chrome rear bumper (R5-R10); 2-stage rear springs (R5-R10); overdrive transmission (R5 and R10).

*Studebaker reserves the right to change any of the specifications listed in this catalog without obligation to subsequent purchasers or to add new designs or improvements without making similar alterations in vehicles manufactured.*

**GENERAL**

Models	R16A-31	R16A-55	R16A-71	R16A-95
	R17A-31	R17A-55	R17A-71	R17A-95
Wheelbases	131"	155"	171"	195"

**PISTONS**

Type.....Heat dam, T-slot, cam ground, aluminum alloy

**CRANKSHAFT**

Type.....Drop forged, heat treated  
Total surface bearing area (sq. in.).....45.16; No. of bearings—4

**COOLING SYSTEM**

Frontal area of radiator core.....441  
Water distributing tube with by-pass circulation.....Yes

**ELECTRICAL SYSTEM**

Battery—Standard.....15 plate—100 ampere hour  
Generator.....Air cooled, shunt wound; hi-output  
Automatic voltage and current control.....Yes  
Automatic spark control.....Yes

**TRANSMISSION**

	R16A	R17A
Speed	4 speed	
Gear reductions—1st	5.9 to 1	1st 6.4 to 1
2nd	3.09 to 1	2nd 3.09 to 1
3rd	1.69 to 1	3rd 1.69 to 1
4th	1 to 1	4th 1 to 1
Reverse	7.21 to 1	Reverse 7.82 to 1

**REAR AXLE**

	R16A	R17A
Type	Full-floating	Full-floating
Type of final drive	Spiral bevel	Hypoid
Type of housing	Split	Banjo
Rear axle ratios—Standard	6.66 to 1	6.8 to 1
Optional	5.66 to 1	6.2 to 1
2-Speed—Optional (at extra cost—gov. included)	6.13-8.10 to 1	6.13-8.10 to 1
Capacity—standard axle	11,500	13,000

**FRONT AXLE**

Tread (standard tires).....63 1/2" on R16A; 62" on R17A

**FUEL SYSTEM**

Gasoline tank capacity and location.....18 gal., inside frame  
Octane Selector.....Yes

**TIRES**

Standard on R16A 6 ply 6.50/20 front and dual rear  
Standard on R17A 8 ply 7.50/20 front and dual rear  
Optional on R16A only  
With allowance—on R16A

R16A models—(at extra cost)

8 ply 7.00/20 front and dual rear  
8 ply 7.50/17 front and dual rear  
8 ply 7.00/20 front and single rear or dual rear  
8 ply 7.50/20 front and single rear or dual rear

**STEERING**

Type.....Variable ratio, cam and twin lever  
Ratio.....20-18-20 to 1  
Shockless cross steering.....Yes

**FRONT SPRINGS**

Length and width.....42" x 2"  
No. of leaves.....10 on R16A; 11 on R17A

**REAR SPRINGS**

Length and width.....45" x 2 1/2"  
No. of leaves.....11 on R16A; 13 on R17A  
Auxiliary springs.....33" x 2 1/2"; 11 leaves

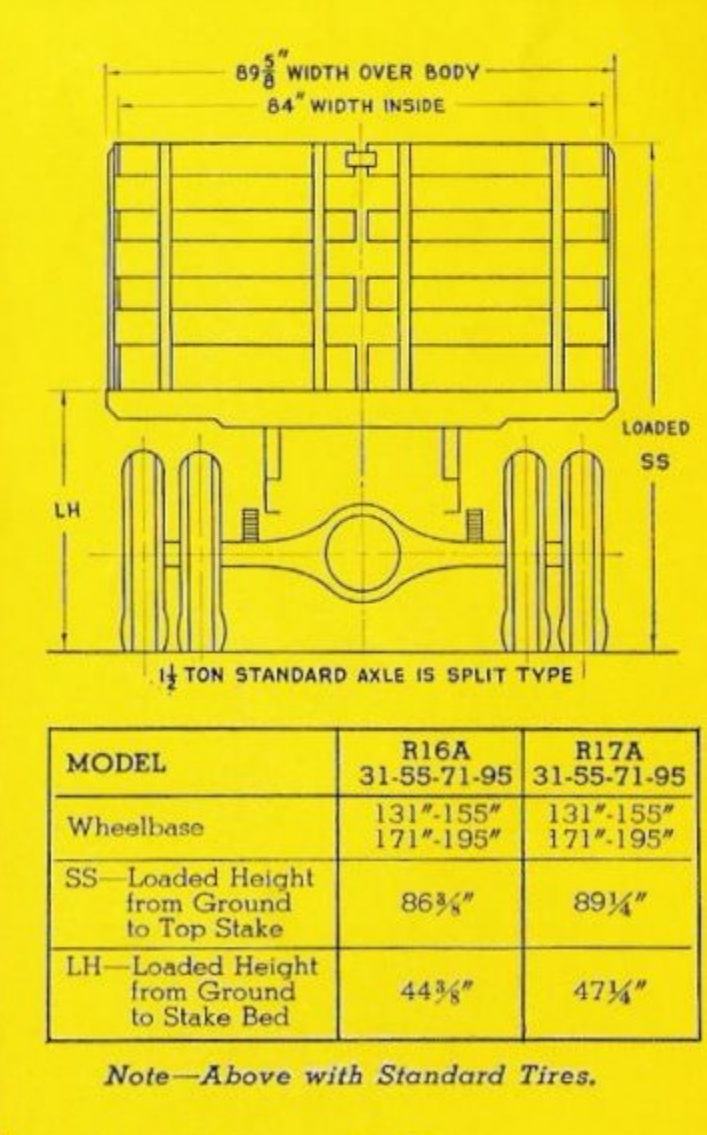
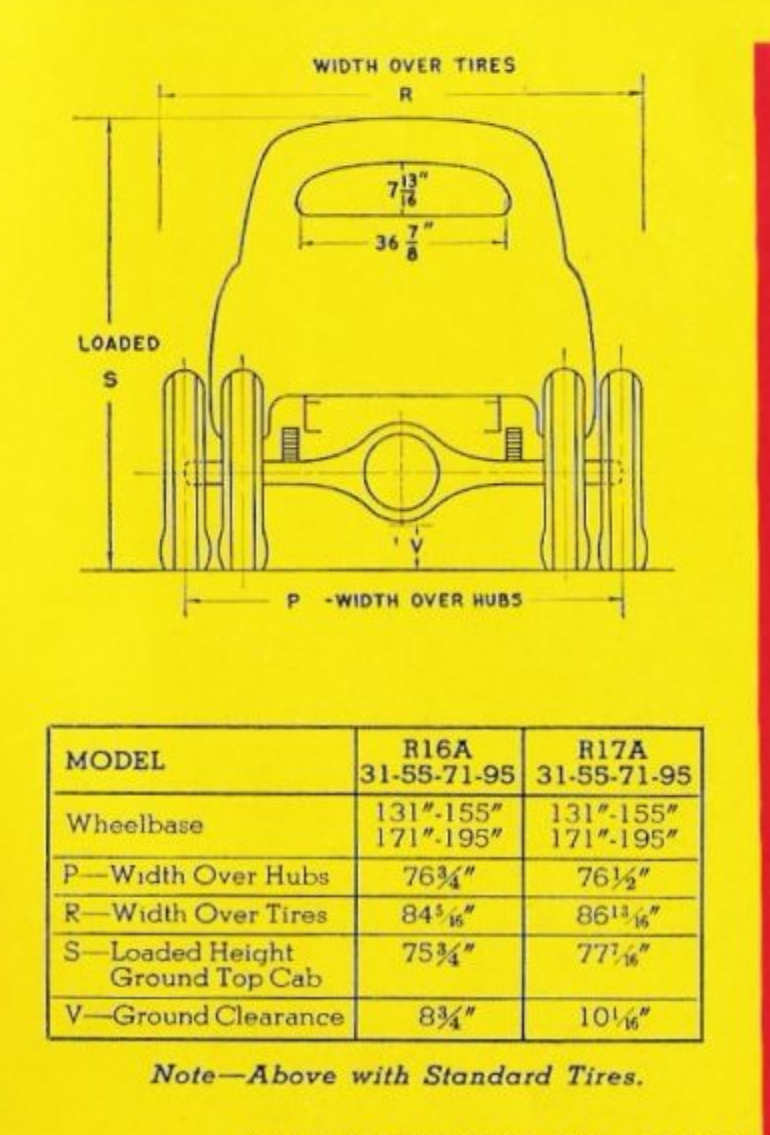
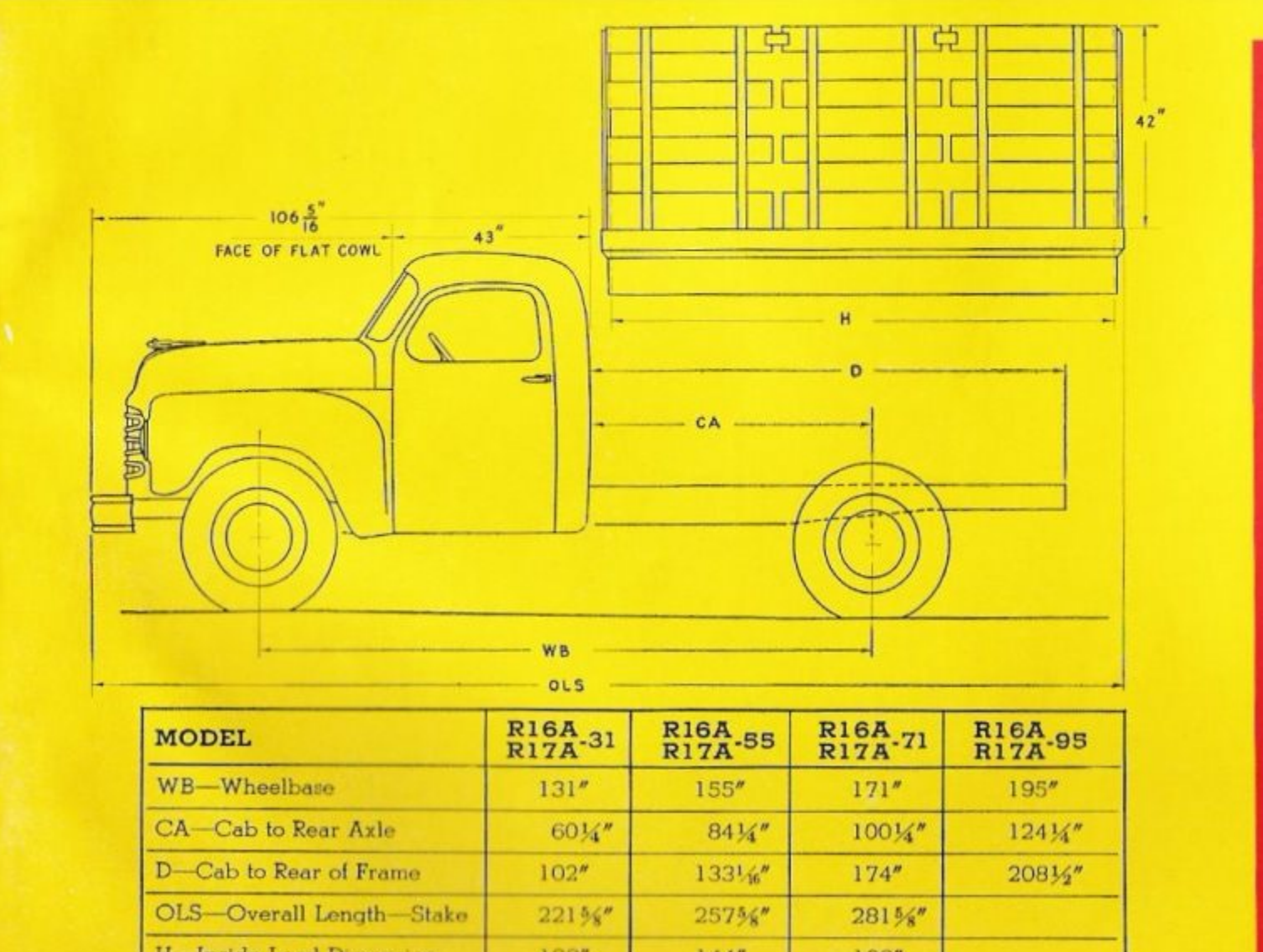
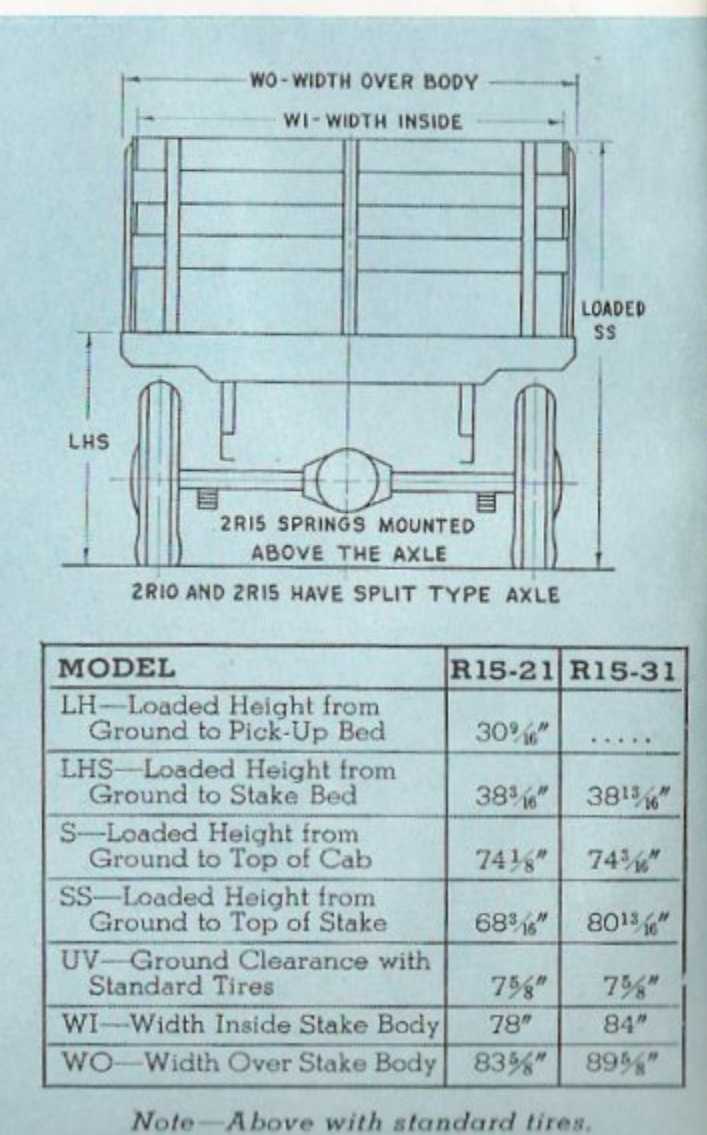
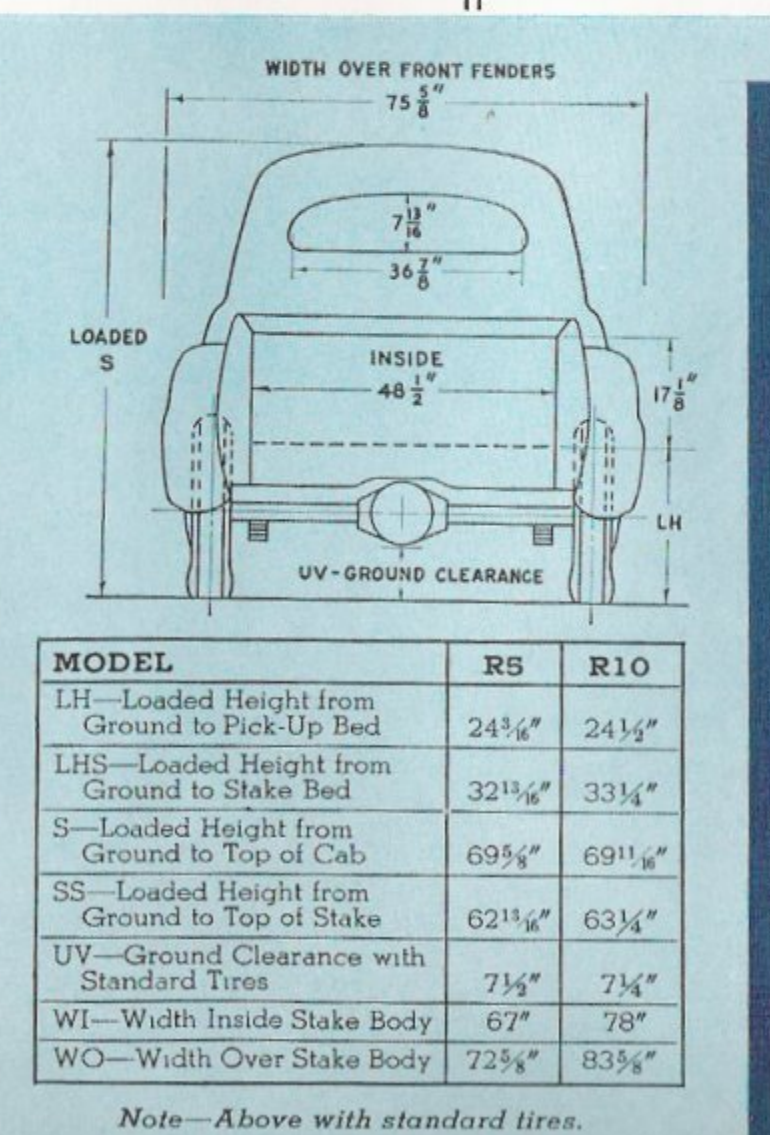
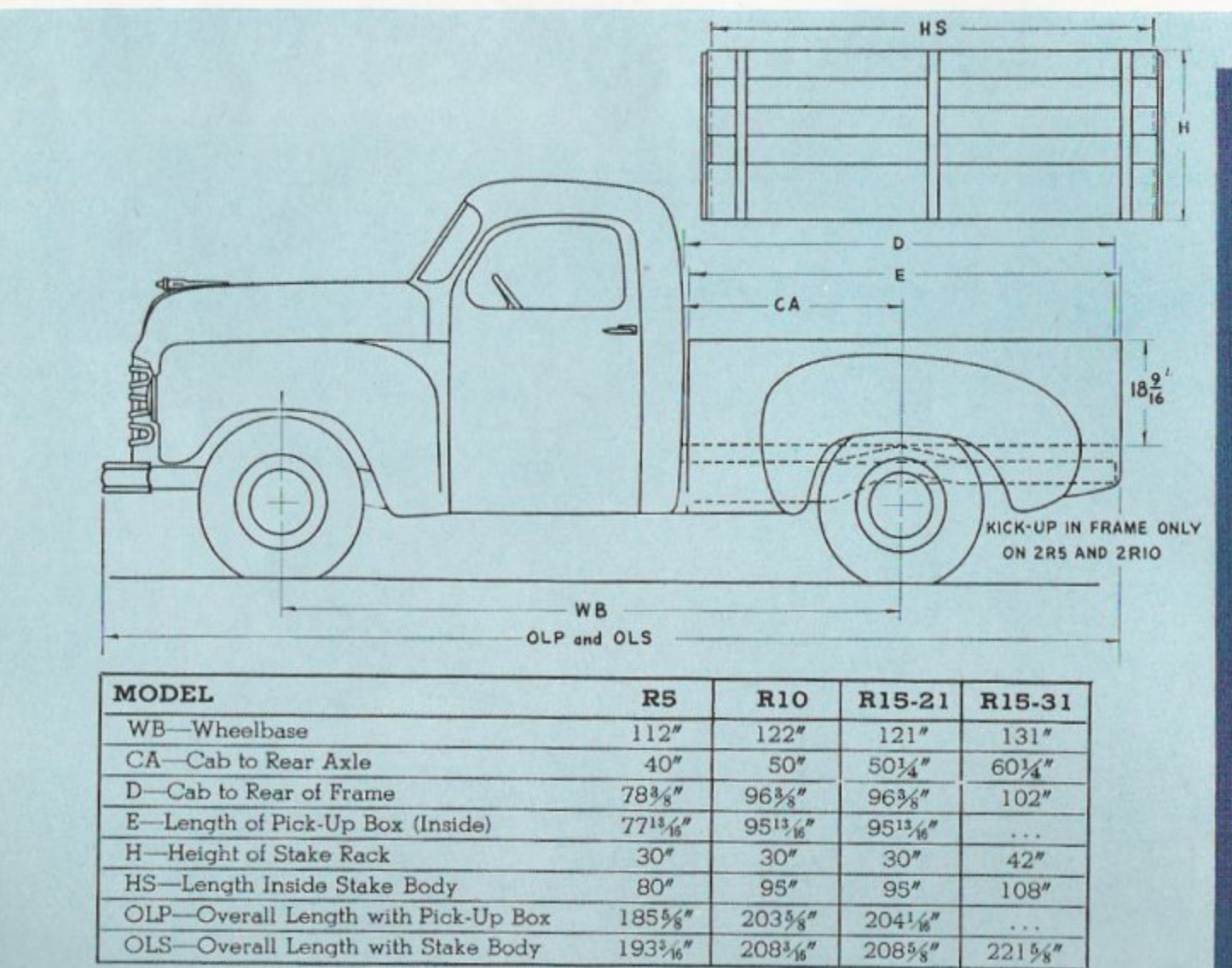
**SERVICE BRAKES**

Type—Front.....Lockheed hydraulic  
Rear.....Hi-Tork hydraulic  
Effective area.....293 3/4 sq. in., on R16A; 367 1/2 sq. in., on R17A

**FRAME**

Type of frame.....Channel  
Dimensions of side rail.....131" W.B. 8 1/8" x 2 3/4" x 3/8"  
155" W.B. 8 1/8" x 2 3/8" x 7/16"  
171" W.B. 195" W.B. 8 1/8" x 2 15/16" x 3/4"

Frame side rail plate standard equipment on R17A models.  
Box type cross members used at points of stress.





# STUDEBAKER TRUCKS

*Brilliantly engineered and superbly constructed  
by America's finest craftsmen*



Studebaker's corps of truck engineers have designed some of the world's most successful civilian and military vehicles. They put years of brilliant planning and painstaking research into developing every new truck.

Studebaker's world-famed craftsmen are men of conscience as well as competence—and their care is evident in the top quality workmanship of every detail of these new trucks.



This huge modern plant is the manufacturing headquarters for Studebaker's sensational new trucks. Here, on 22 acres of floor space, the newest and finest kind of truck production machinery, operated by the nation's most competent and conscientious truck craftsmen, fabricates and assembles the new Studebaker trucks.

Studebaker's 800-acre proving ground. Through sand traps, water holes and hub-deep muck, up and down the stiffest grades, the new Studebaker trucks have taken gruelling punishment in stride and graduated with honors.