



INTERNATIONAL

SCHOOLMASTER

SERIES



SEATING 16 TO 66 PASSENGERS

New International chassis *specialized* for school bus operation

Engineered throughout for safe, dependable, and economical transportation of school children—that's the new International Schoolmaster Series of school bus chassis.

These chassis help you maintain rigid school bus schedules. They operate at low cost. They require a minimum of service. They stand up for years and years.

One reason for their dependability and ruggedness is the careful specialization of International school bus chassis to widely varying school transportation needs.

The 5 Schoolmaster chassis offered by International make it easy for you to find just the right school bus chassis to meet your requirements exactly:

L-153 (GVW 12,500 pounds). Available in 154 and 172-inch wheelbases. Accommodates 15 to 18¾-foot bodies, seating from 30 to 42 pupils.

L-163 (GVW 15,500 pounds). Available in 172 and 190-inch wheelbases. Accommodates 16 to 21-foot bodies, seating from 30 to 48 pupils.

L-173 (GVW 17,500 pounds). Available in 190 and 208-inch wheelbases. Accommodates 20 to 23-foot bodies, seating from 42 to 54 pupils.

L-183 (GVW 19,500 pounds). Available in 208, 226, and 244-inch wheelbases. Accommodates 23 to 28-foot bodies, seating from 48 to 66 pupils.

L-193 (GVW 24,000 pounds). Available in 226 and 247-inch wheelbases. Accommodates 25 to 28-foot bodies, seating from 54 to 66 pupils.

Still another contribution to more specialized school transportation is the Metro* school bus on International chassis. This economical, compact unit, seating 16 pupils, is briefly described in this catalog on pages 19, 20 and 21.

*Metro. Registered trade mark of The Metropolitan Body Company, Inc., subsidiary of the International Harvester Company.



New International L-163 Schoolmaster: safe, dependable and economical transportation for school children.



New International L-173 Schoolmaster: pupils will be warm and comfortable in spite of cold weather.

New International L-183 and L-193 Schoolmasters photographed in front of the Flagstaff Grade School, Flagstaff, Arizona.



This L-183 SCHOOLMASTER provides a safe, economical answer to your school transportation problems. It transports 52 school children to and from school in this safe all-steel school bus body.



All New, All Proved Schoolmaster chassis *Heavy-Duty Engineered* for economy and safety

If you're interested in getting your money's worth for every dollar you spend on school bus transportation, you have something in common with the most exacting buyers of commercial transportation.

These men are heavy-duty truck owners. They are probably the most cost-conscious and profit-minded of the men who buy trucks. They keep records of cost right down to the penny and they use these records when it comes time to buy new trucks.

For 18 years, these exacting buyers have bought more heavy-duty Internationals than any other make.

Now the same management, engineers, test experts, and production men who kept International the top value in the heavy-duty field have developed every new model in the International Schoolmaster Series.

This means that in every Schoolmaster model you get stamina, durability, and economy. In short, you get the HEAVY-DUTY ENGINEERING that heavy-duty truck owners

have found assures them peak performance at lowest cost.

This Heavy-duty Engineering of International school bus chassis is important from a safety as well as an economy standpoint. It proved its importance both ways in millions of miles of tests from coast to coast—under actual operating conditions.

That's why we're so sure you'll find the new Schoolmaster models balanced for power, stamina, and economy... once you put them through their paces on your school routes.

We invite your close inspection of every Schoolmaster engineering and construction detail. Many of the facts you will want to know are outlined on the following pages. Other you will want to see in the actual Schoolmaster chassis.

Get all the facts. Make every comparison. Then we think you will agree: *here are... the best school bus chassis we ever built... the best school bus chassis you ever bought.*



Improved close-up visibility

Better close-up visibility for drivers is made possible by shorter front-axle-to-cowl dimensions. This is an added safety factor, particularly important when the bus is approaching loading stations, intersections, or being parked in congested areas. It is another contribution to greater driver efficiency—and consequently greater safety for *Schoolmaster* passengers.

"School Bus Safety" takes on *New* meaning in the *Schoolmaster* Series

In engineering school bus chassis, International keeps the safety of school children constantly in mind. It proves this by placing safety first, last, and always.

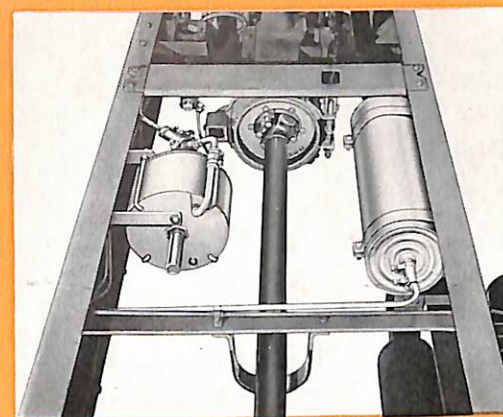
The entire chassis, from bumper to tail light, is safety engineered. This means added margins of protection in the springs, frame, drive line, axles, clutch—in each and every part.

That's why school boards and parents alike can breathe easier when International *Schoolmaster* chassis are on the job. They know that International, backed by 43 years of experience in engineering, places *safety* first!

Study the examples on these pages. They are typical of International's safety engineering in the great new *Schoolmaster* Series.

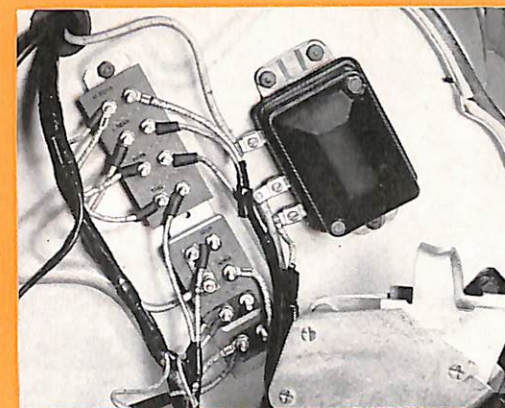
Greater driver comfort

Schoolmaster models are designed to provide more knee room, more leg room, more toeboard room for the driver. In addition, the new comfort angle of the steering column places the steering wheel in perfect position for safe, comfortable driving. The new curved contour instrument panel with its two-cluster instrument grouping reduces eye-strain to a minimum—assures easier, safer reading or reaching of controls.



Hydrovac for added safety

Here's another feature that makes every *Schoolmaster* driver a safer driver. This hydraulic power-braking unit—optional for L-153, standard for all other models—makes a little pedal pressure do the work of a lot, gives shorter stops with less "work" by driver. Single vacuum-powered cylinder "boosts" braking force built up by master cylinder, passes on "boosted" force to brake shoes. Unit completely sealed for long life. (Large-capacity vacuum reserve tank available as optional equipment.)



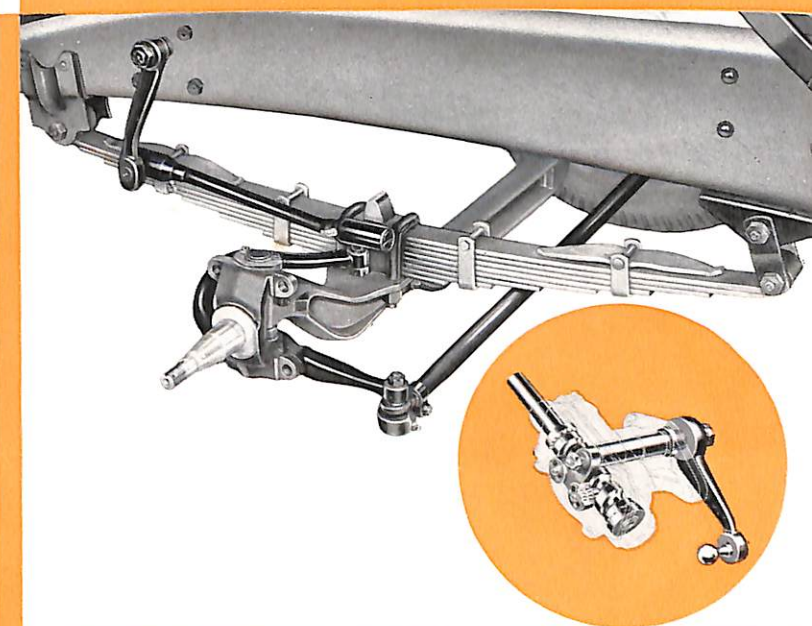
Automatic circuit breakers

Greater safety during all hours of darkness is provided. In event of failure in any electric circuit, this special breaker isolates the failure to that particular circuit, and other circuits continue to function normally. When your buses are being driven with the lights on, it's reassuring to know precautions have been engineered into the transportation provided for your pupils.

Safer, easier steering

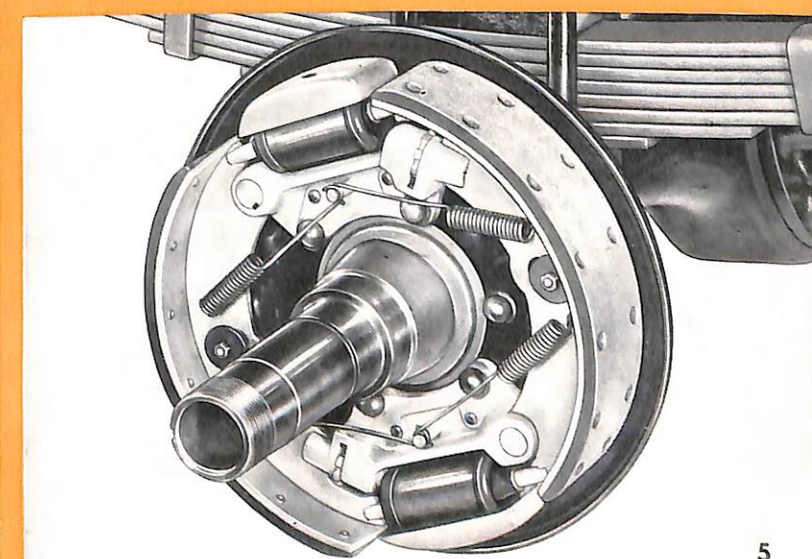
An entirely new steering system gives every *Schoolmaster* driver greater control, along with easier handling. Greater control results from correlating the deflection arc of the front spring and steering arm for true steering geometry. Ease of handling is increased by mounting of the steering gear ahead of the front axle, to position the steering column for "natural angle" driving.

INSET: The cam-and-lever dual-ratio gear, roller-mounted except in L-153, assures constant steering control throughout the complete turning arc.



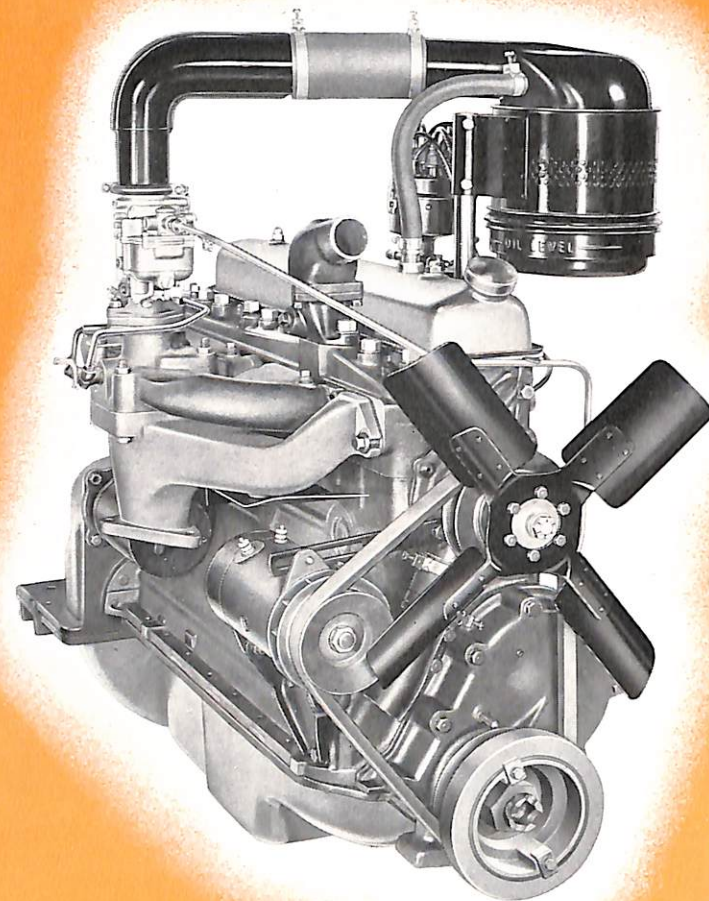
More effective two-cylinder type four-wheel brakes

This new brake offers surer stopping and greater safety through more effective use of the lining. The two cylinders force front and rear shoes to do equal work during each brake application. The two anchor points, both floating type, permit the ends of the brake lining as well as the centers to be effective. This two-shoe, full-area lining contact increases lining life and braking efficiency, lowers brake maintenance costs, assures swifter, straighter-line stops. (Single-cylinder type standard on L-153; air brakes optional for L-193.)

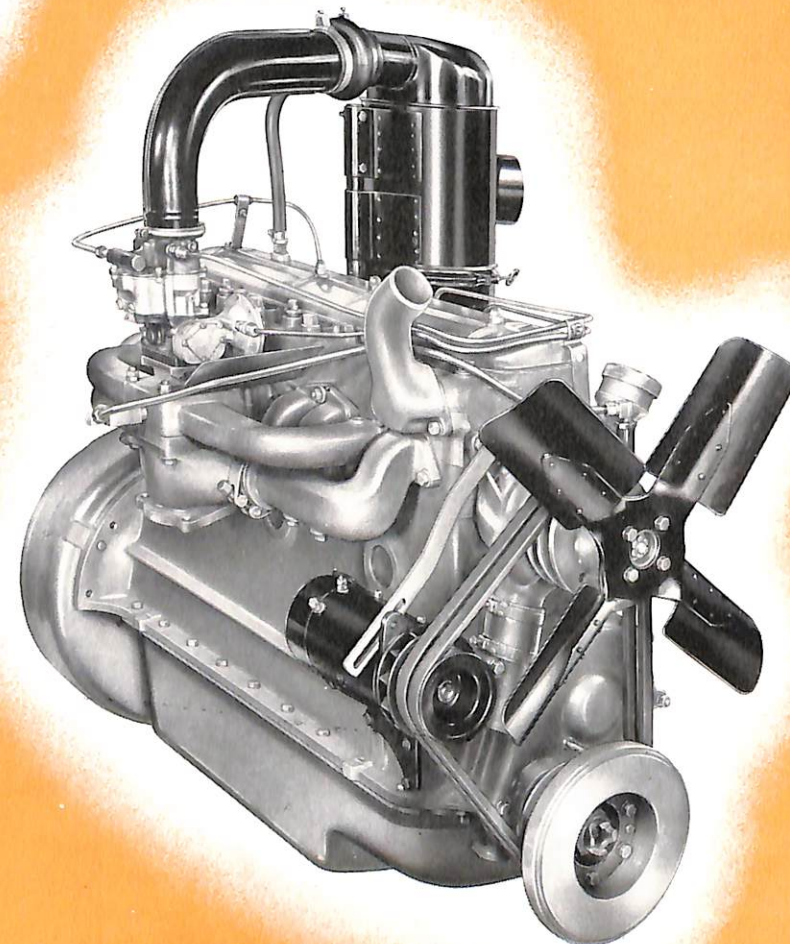


NEW International valve-in-head engines

provide economical power for low-cost bus operation



Super Blue Diamond 269 Engine (L-173 and L-183) develops 100.5 maximum brake h.p. at 3,000 r.p.m. and 88.6 net h.p. at 2,800 r.p.m.; maximum torque of 222 pound-feet at 1,600 r.p.m. and net torque of 216.5 pound-feet at 1,000 r.p.m. Compression ratio: 6.3.

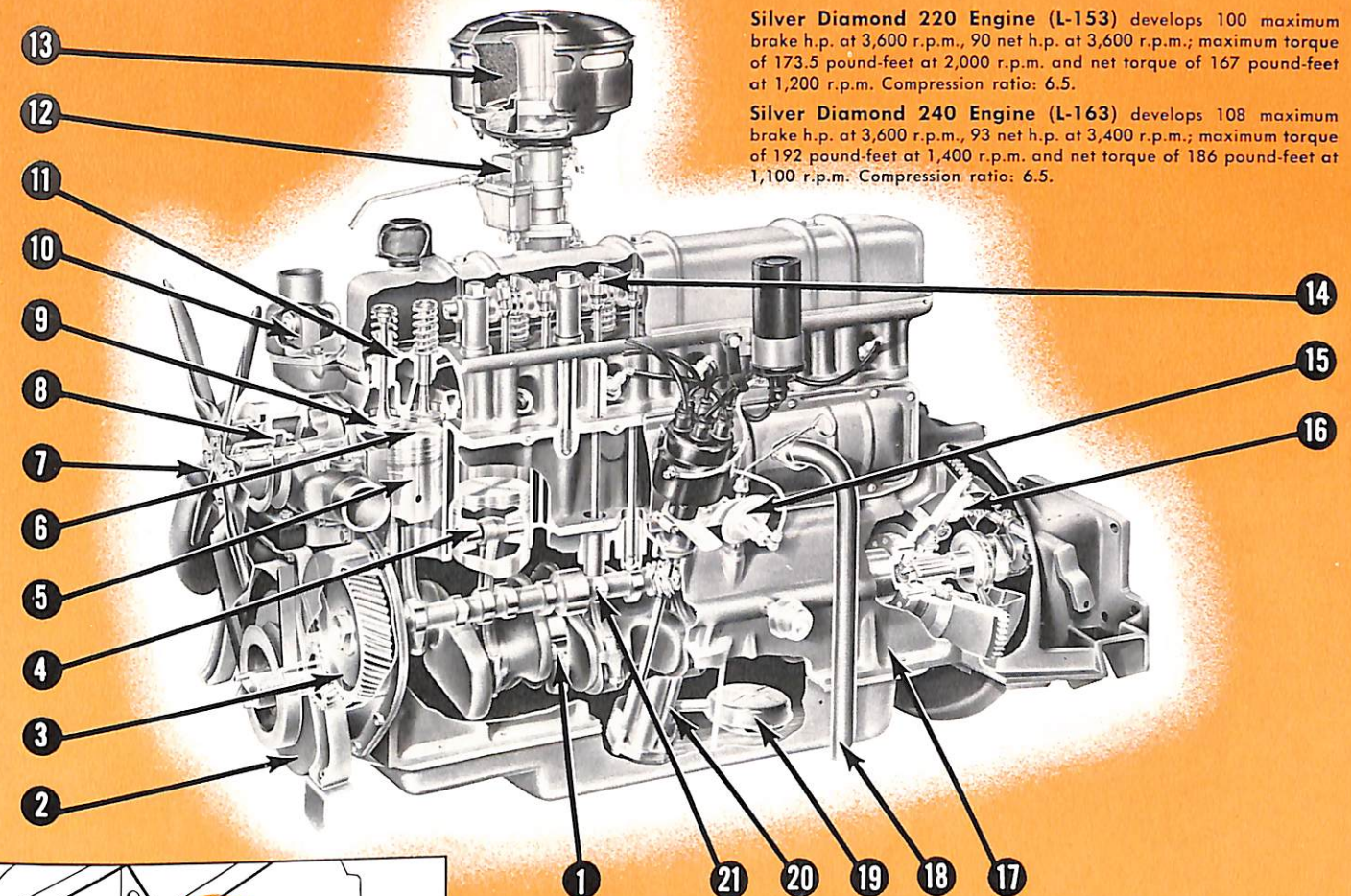


Super Red Diamond 372 Engine (L-193) develops 143.8 maximum brake h.p. at 3,200 r.p.m., 128 net h.p. at 2,850 r.p.m.; maximum torque of 282.5 pound-feet at 1,200 r.p.m., net torque of 280 pound-feet at 1,000 r.p.m. Compression ratio: 6.3.

The Silver Diamond, the Super Blue Diamond, the Super Red Diamond—these three great new International power plants are carefully matched to Schoolmaster power requirements for top operating economy.

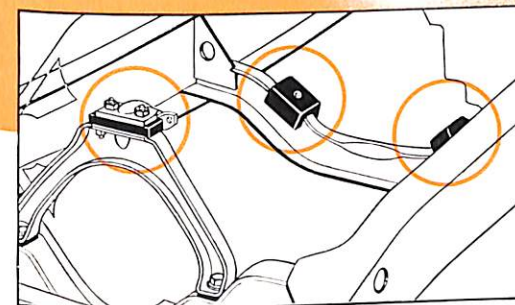
These engines—all of six-cylinder, valve-in-head design—deliver the dependable, economical performance essential to school bus operation. They provide more power for starting, more power for smoother accelerating, more power for climbing steep grades, more power for covering school routes in scheduled time. In addition they combine this power with economy and big reserve of stamina.

The Silver Diamond Engine, shown on the opposite page, is typical of the advanced power plant design you get in every Schoolmaster model. The Super Blue Diamond and Super Red Diamond Engines, though engineered for higher ranges of operation, meet the same high standards as the Silver Diamond Engine.



Silver Diamond 220 Engine (L-153) develops 100 maximum brake h.p. at 3,600 r.p.m., 90 net h.p. at 3,600 r.p.m.; maximum torque of 173.5 pound-feet at 2,000 r.p.m. and net torque of 167 pound-feet at 1,200 r.p.m. Compression ratio: 6.5.

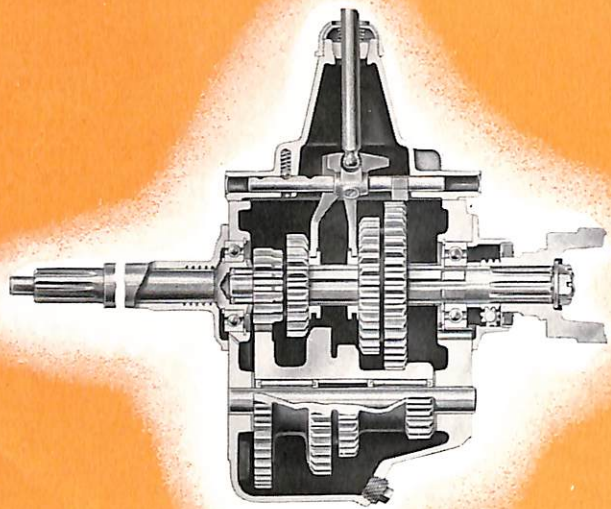
Silver Diamond 240 Engine (L-163) develops 108 maximum brake h.p. at 3,600 r.p.m., 93 net h.p. at 3,400 r.p.m.; maximum torque of 192 pound-feet at 1,400 r.p.m. and net torque of 186 pound-feet at 1,100 r.p.m. Compression ratio: 6.5.



Tri-point live-rubber engine mounting. A single mounting in front, and twin mountings in rear are cushioned in live rubber. This provides the necessary flexibility for dissipating natural engine vibrations, and for minimizing vibration at mounting points so that transfer of vibration to engine and cab is reduced.

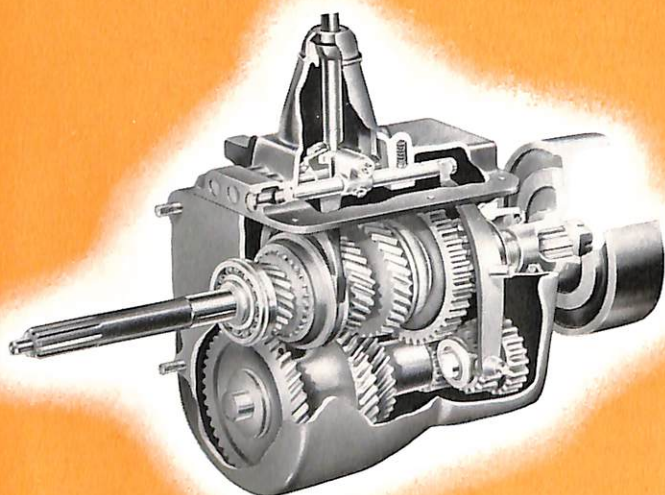
1. Precision-type, replaceable main bearings have large bearing area for long life. Heavy, heat-treated crankshaft statically and dynamically balanced.
2. Torsional vibration damper contributes to smooth, even, longer-lived power plant performance.
3. Precision-engineered, long-life timing gears.
4. Connecting rods with big bearing area rifle-drilled for full-pressure lubrication to full-floating piston pins.
5. Heat-treated, heavy-duty, 4-ring aluminum alloy pistons. (Super Blue Diamond and Super Red Diamond Engines have replaceable cylinder liners.)
6. Combustion chamber design assures maximum combustion uniformity and thermal efficiency.
7. Big air-flow fan draws full air blast through large radiator cooling surface.
8. Large-capacity, mechanically-sealed, ball-bearing water pump steps up efficiency of cooling system.
9. Heat-treated, long wearing durachrome seat inserts. (Exhaust valves for Super Blue Diamond Engine are stellite-faced; for the Super Red Diamond Engine, stellite-faced slo-roto type.)
10. Bi-metal thermostat regulates water flow to speed engine warm-up, maintains uniform temperature for efficient, economical operation.

11. Streamlined valve ports and cylinder jackets designed for maximum heat dissipation.
12. Heavy-duty, dust-sealed carburetor provides balanced fuel and air mixture. Fast-idle cam on Silver Diamond 220 and 240 positions throttle for easier starting when choke is applied. (Outside air intake on Super Red Diamond Engine.)
13. Oversize, oil-bath type air cleaner.
14. Rocker arms and tappets designed to provide proper lubrication to valve stems and push rods and to assure quiet operation.
15. Full-automatic ignition selector.
16. Heavy-duty, single-plate, vibration-dampened clutch. (Oversize clutch available.)
17. Crankcase ventilator drains off sludge-forming fumes and water vapor, prevents corrosion. (New positive-type crankcase lubrication system standard for the Super Blue Diamond and Super Red Diamond Engines.)
18. Floating, screened oil-intake insures "clean-level" oil supply.
19. Full-pressure lubrication system, with large-capacity, self-priming pump.
20. Induction-hardened camshaft with extra-large bearing area.



Four-speed sliding gear transmission
(Standard for L-153)

This sturdy four-speed transmission offers a large selection of gear ratios for efficient, economical operation. Alloy steel forged gears are carburized to provide an extra hardness of outside metal over a tough core. This increases transmission life. Large-capacity bearings. Cast steel case.



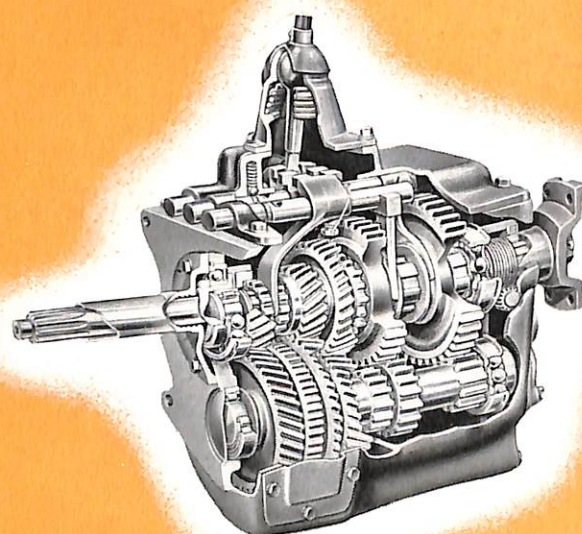
Four-speed Synchro-shift transmission (optional for L-153, standard for L-163 and L-173)

New four-speed synchro-shift transmission with constant-mesh helical gears assures smooth, easy, positive alignment shifting. Maximum gear-face contact lengthens transmission life, makes for quiet operation. Heavy-duty construction throughout—sturdy case, alloy carburized steel gears, extra-capacity bearings.

Specialized transmissions for specialized school bus operation

Specialization of the right transmission to your particular school bus operation is another important contribution of International to better school transportation. The right transmission *geared right for the job* permits the engine to operate within its most economical range. It gives maximum service with minimum maintenance. In short, it does a better job at lower cost.

So look over the transmissions described on this page. You'll find them engineered to match school bus requirements exactly.



Five-speed constant-mesh transmission
(Standard for L-183 and L-193)

The five-speed transmissions specified for L-183 and L-193 Schoolmaster models are built for a long, efficient life in school-bus service. Gears are specially heat-treated for extra surface hardness and construction throughout is exceptionally rugged. You can choose either (a) *over-drive in 5th* for greater operating economy or (b) *direct in 5th* for greater pulling power. (L-193 transmission illustrated.)

Chassis dimension engineering improves maneuverability and handling

Careful engineering of chassis dimensions is another reason why Schoolmaster models are so efficient in school transportation.

Shorter wheelbases for given body lengths and wider tread front axles give greater stability and at the same time permit Schoolmasters to turn right or left at the maximum practical turning angle of 37°. Schoolmaster drivers turn more easily in narrow roads and around sharp corners, back more easily through gates, park more

easily in cramped spaces.

Shorter wheelbases also contribute to better "load" distribution. As a result of more even balance of weight between front and rear axles, Schoolmaster models offer longer frame and axle life, greater ease of handling.

Improved maneuverability and easier handling are not the entire chassis dimension story. For an appreciation of the greater engine accessibility *also* offered by every Schoolmaster model, see the illustrations below.



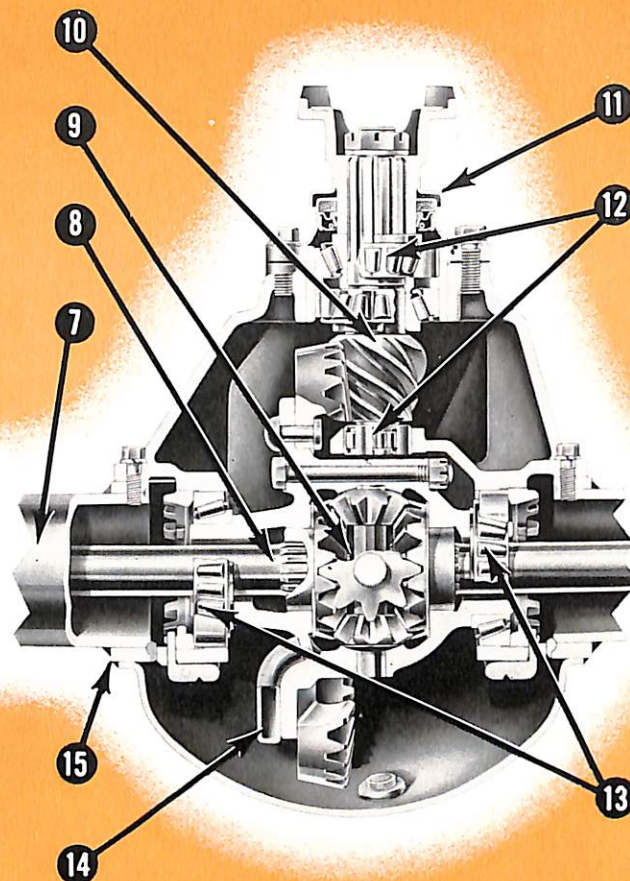
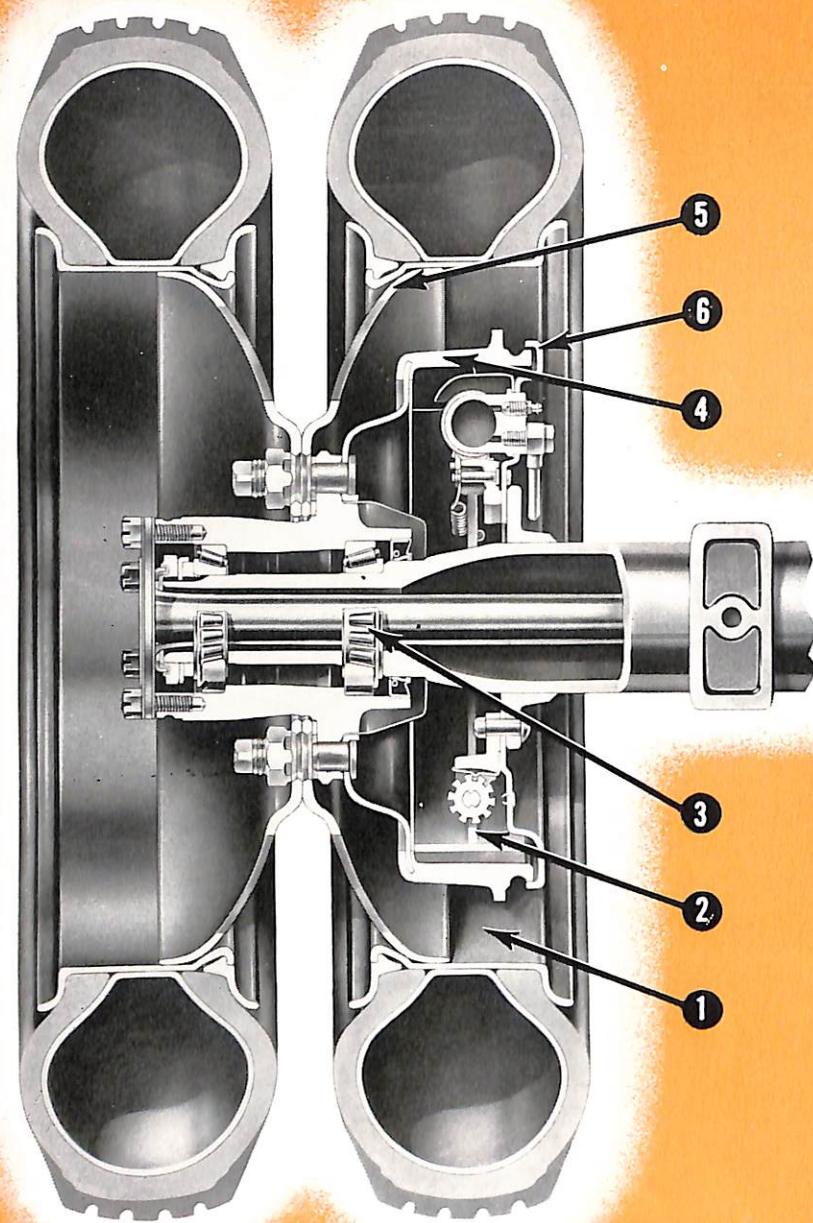
GREATER ENGINE ACCESSIBILITY



New Lock-hinge hood (L-153, L-163, L-173, and L-183). A simple grip-and-twist action unlocks hinge for raising from either side or easy removal. When closed, mechanism forms easy-acting hinge.



Convenient two-piece hood (L-193). Rugged hood folds easily out of the way. Easily removed for engine overhauls. New fender design provides more working space between the engine and fenders.



This L-163 hypoid-gear axle, engineered along the same high-quality lines as the L-153, L-173, and L-183 rear axles, offers the 15 advantages below.

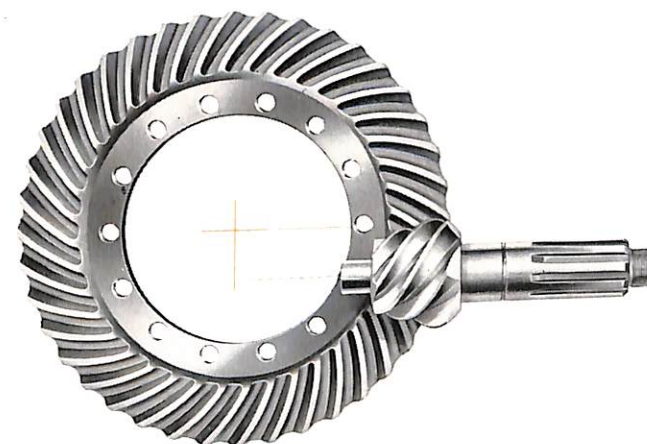
1. Wide-base rims increase road stability, prolong tire life, make tire servicing easier.
2. Powerful 4-wheel hydraulic brakes. Self-centering, two-shoe, double-anchor type designed for maximum braking efficiency. Special brake design permits quick, easy adjustment.
3. Large-capacity, tapered roller bearings wide-spaced for better stability and load support.
4. Large-size brake drum easily removed, easily replaced without disturbing other brake parts.
5. Heavy-duty spoke-type wheels. (Disc-type wheels standard for L-153 and L-163.)
6. Self-cleaning slinger keeps out dirt. Rib reinforces brake drum, throws off heat.
7. One-piece, tubular, banjo-type housing forged of high-carbon steel.
8. Large-diameter, 16-spline, heat-treated, chrome-nickel-molybdenum steel axle shafts with integral flange. Full-floating type.
9. Four long-lasting differential gears on spider-pin mounting distribute balanced power to axle shafts.
10. Accurately matched hypoid ring gear and pinion.
11. Centrifugal dust shield and efficient oil seal.
12. Straddle-mounted pinion, three heavy-duty roller bearings for firm alignment with ring gear.
13. Large-capacity roller bearings for long life.
14. Revolving oil scoop assures proper differential gear lubrication at all speeds.
15. Welded housing cover eliminates gasket leaks, provides rigid differential bearing support, and increases sturdiness of housing.

New axles engineered for quieter operation, and longer life

Hypoid gearing, heavier housing, wider wheel bearing centers, improved axle ratios, and straddle-mounted pinions are some of the reasons why new International rear axles offer more miles of trouble-free performance.

These improvements, made possible by engineering and manufacturing refinements, provide greater load-carrying capacity per pound of axle weight and proper axle ratios for operations under the most severe conditions. They provide greater safety, greater dependability, greater assurance of longer life.

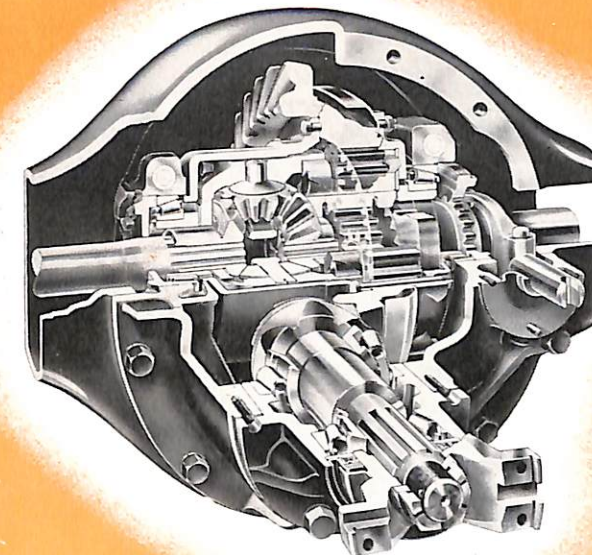
Single-reduction and two-speed axles are available to meet particular school transportation requirements.



Quieter, more efficient hypoid gearing

Hypoid drive pinion contacts ring gear below center line. Pinion has large tooth surface area and increased diameter. These, along with "off-center" alignment, permit greater tooth contact, increase torque-transmitting capacity, contribute to quieter final-drive operation and longer gear life.

In addition to a big increase in quietness and efficiency, hypoid design offers a decided increase in strength and durability without increasing weight proportionately.

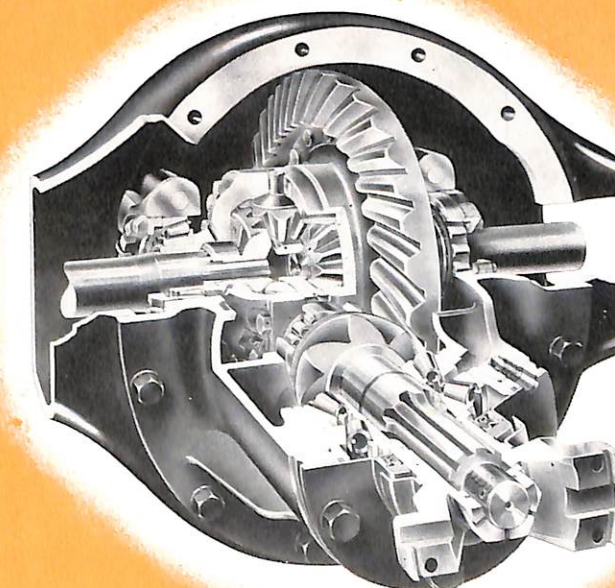


New electric-shift two-speed axle

This two-speed axle, optional for all models except L-153, cuts down engine wear, saves money on oil and gas, steps up the efficiency of a school bus under a wide range of road and load conditions. It does this by making two ratios available:

(1) *low-speed* for more difficult routes, climbing steep grades, going over bad roads; (2) *high-speed* for return trips with no load, for favorable road conditions.

The new, safer, more positive electric shift eliminates danger of vacuum leaks, dependence on engine speed. (Convenient switch on shifting lever.) Spread of load over four planetary gears lowers tooth stress, increases gear contact, decreases wear and tear. Forced-flow oiling system provides thorough lubrication under all operating conditions.



Rugged L-193 rear axle

The extra strength, stamina, and performance engineered into this axle make it ideal for school-bus operations in the L-193 range. Efficient hypoid gearing—gears scientifically carburized and hardened for longer gear life. Long-lasting differential gears on sturdy spider-pin mounting. Rugged housing cover securely bolted.

New, six-cylinder, valve-in-head Super Blue Diamond 269 Engine standard for L-173 and L-183. (Other standard engines are the Silver Diamond 220 for L-153, Silver Diamond 240 for L-163, Super Red Diamond 372 for L-193.)

Tri-point, live-rubber engine mounting provides up-and-down, side-to-side flexibility. This reduces amount of engine vibration transmitted to body and frame.

Full-automatic ignition control for smoother, more economical operation.

Live-rubber pads are used to cushion radiator against twisting and shock. Two-point mounting between radiator core-support and frame crossmember.

Deep, sturdy, channel-type bumper, rigidly mounted on frame siderails, serves as additional crossmember, strengthens frame, provides better front-end protection.

Steering gear is mounted forward of front axle to provide greater stability, easier handling, more comfortable steering position.

Extra-long, heavy-duty front springs shackled at rear to reduce road shock. Tension plates serve as shock absorbers. Main leaf double-wrapped for greater safety.

Heavy-duty, dust-sealed carburetor. Balanced fuel and air flow maintains proper mixture.

Large, efficient, oil-bath type air cleaner filters dust and dirt from intake air, prolongs engine life.

Heavy-duty, single-plate clutch has extremely tough, durable woven facing. Vibration-dampened for greater clutch life. (Oversize clutch available.)

New 4-speed Syncro-shift transmission standard for L-163 and L-173. (Other standard transmissions are 4-speed sliding-gear for L-153 and 5-speed constant-mesh with overdrive in 5th for L-183 and L-193.)

Heavy-section, 3-spoke steering wheel sturdily designed for natural gripping, better control, and driving comfort.

Large-capacity, 30-gallon fuel tank mounted outside of frame for added safety. (Tank location meets National Standards for School Bus Safety.)

Tailpipe extends beyond the body for safe dispersal of exhaust fumes.

Two propeller-shaft center bearings standard for L-173 (208-inch wheelbase), L-183, and L-193; one center bearing for L-153, L-163 and L-173 (190-inch wheelbase).

Wide-tread, heavy-duty, full-floating, hypoid-gear rear axle. Wide tread increases stability and chain clearance. One-piece banjo-type, forged steel housing.

Removable brake drums designed for maximum cooling, great strength and long life.

Wide-spaced, tapered roller wheel bearings for greater load capacity, stability, long life, smooth operation.

Extra-long, heavy-duty, easy-riding rear springs outboard mounted on exceptionally sturdy brackets. (Progressive-type springs optional.)

Rugged, heavy-duty bus frame, built to stand up under years of bus service. Sturdy crossmembers and channel-type bumper, extra-deep siderails insure great frame strength.

Propeller shafts, dynamically balanced for smoother operation, include needle-bearing universal joints, sealed against lubricant leakage, for long, trouble-free life. (Optional propeller-shaft guards offer school children maximum protection.)

Wide-tread front axle combines stability with shortest practical turning radius for easier handling and maneuverability. Large-diameter king pins for an extra margin of strength and life.

Large-size, efficient, drum-type, propeller-shaft emergency and parking brake. Brake guard available on all models.

Hydrovac power unit cuts down brake pedal pressure requirements, provides faster stops. Self-contained, fast-acting mechanism. (Reserve vacuum tank optional.)

New Chassis engineering assures long school bus life

Day-in-and-day-out, year-in-and-year-out dependability is just as much a part of the Schoolmaster design as the Triple-Diamond emblem.

A quick look at the L-183 school bus chassis, illustrated above, will prove this to you. This chassis is as rugged and long-lasting as it is safe and thrifty. The engine, the springs, the brakes, the axles—each and every part has a built-in margin of stamina that means longer, more efficient service in school bus operation.

The L-183 frame, for example, provides full support for bus bodies of recommended length without any need for frame extensions or frame reinforcements. Heavier front, center, and rear frame sections give added protection against widely varying "load" distribution.

Other Schoolmaster chassis, despite individual differences that fit them for their particular ranges of operation, are engineered to the same quality standards as the L-183 illustrated here.

This means that, no matter which International Schoolmaster chassis suits your needs best, it's sure to offer outstanding economy, outstanding safety, outstanding performance for years and years.

Chassis engineered for easy body mounting

Every Schoolmaster chassis is designed to save time and money in body mounting. Any bus body from 15 to 28 feet long can be quickly and easily mounted on one of the five International school bus chassis. No special fitting is required. Extra-long, extra-strong Schoolmaster frames are a standard 34 inches wide. Cows and fenders are engineered for easy matching with the body. Result: the entire body mounting operation is simplified from start to finish. (Hydrovac booster and reserve vacuum tank mounted inside frame.)

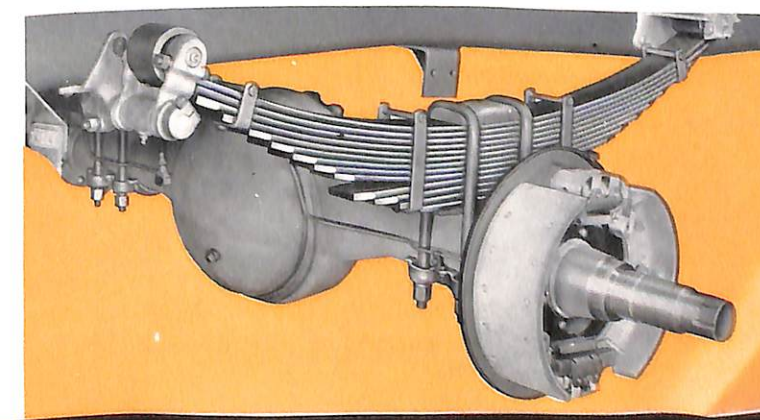
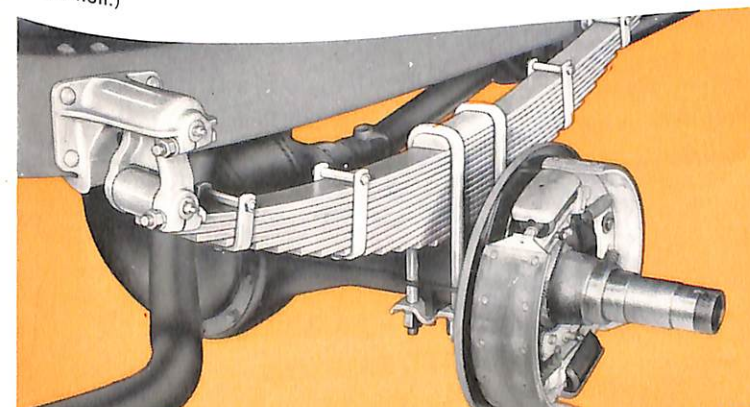
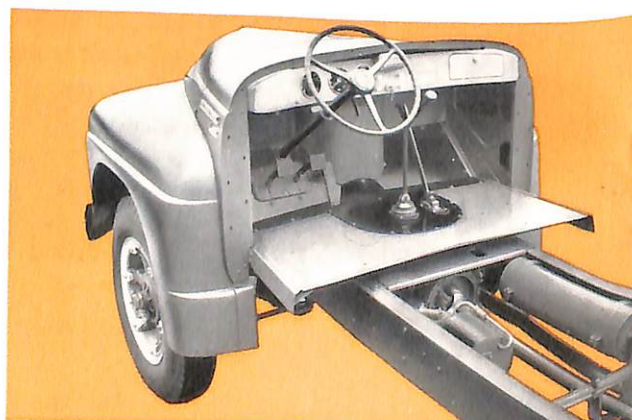
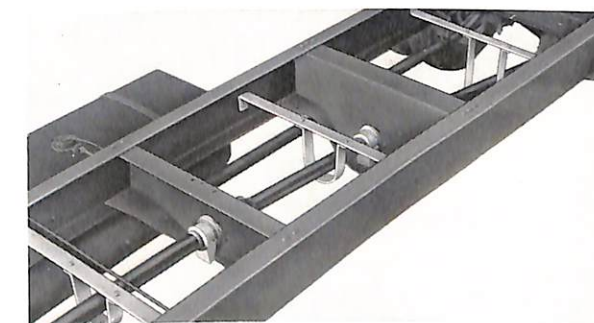
Easy-riding rear springs

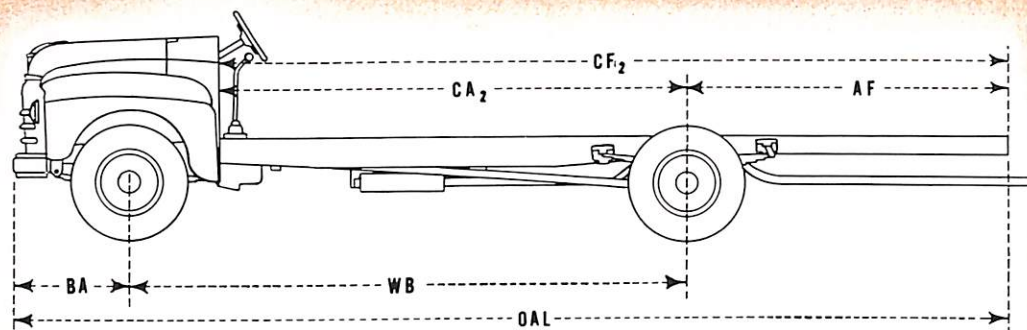
Standard: The L-173 rear springs shown below are typical of the smooth-riding springs that are standard for Schoolmaster models. These springs feature improved design and improved mounting for added riding ease and body support.

Optional: Illustrated at right below are optional L-183 progressive-type springs, especially designed for school bus use. These springs automatically adjust to "load" and road conditions—assuring a smoother, more comfortable ride. (Over-size brake shown in illustration.)

Propeller-shaft center bearings

Self-aligning propeller-shaft center bearings permit short propeller-shaft sections, thus avoiding whip and assuring accurate shaft alignment. Bearing assemblies are enclosed in spherical rubber-mounted housings and fully protected from dust and mud by specially designed shield, slingers, and felt seals. (Propeller-shaft guards optional.)





L-153

SPECIFICATIONS

Gross Vehicle Weight Rating	12,500 lb.
Nominal Gross Carrying Capacity (body, equipment, and payload)	8,200 lb.
Body Size	
Approximate body length	15-19 ft.
Seating capacity	30-42
Chassis Dimensions: (in inches) Weights: (in pounds)	
Wheelbase (WB)	154 172
Overall length, with front bumper (OAL)	246 292 1/4
Back of cowl to c/l of rear axle (CA ₂)	126 144 3/8
Back of cowl to end of frame (CF ₂)	182 228
C/l of rear axle to end of frame (AF)	56 83 3/8
Bumper to center of front axle (BA)	36 36 3/8
Turning radius with bumper clearance (feet)	27 30 1/2
Chassis weight, including fuel, oil, water and standard equipment (approx.)	3868 3915
Tread—front wheels, 63 7/16 in.; rear wheels, 65 3/4 in.	

The following dimensions (with 7.00 x 20 tires) are the same for all wheelbases:

Road clearance—front axle, 10 in.; rear axle, 10 1/16 in.
Overall width—front, 81 1/2 in.; rear, 82 7/8 in. (dual tires).
Height from top of frame to ground, loaded—front, 28 7/8 in.; rear, 28 7/8 in.

Frame: Pressed steel channel, 154-in. WB—8 1/8 x 3/16 x 2 15/16 in.; 172-in. WB—8 3/16 x 7/32 x 2 31/32 in.

Engine: International Silver Diamond 220, six cylinder, valve-in-head type; 3 9/16-in. bore, 3 1/16-in. stroke. Displacement, 220.50 cu. in.; compression ratio, 6.5; A.M.A. (N.A.C.C.) rating, 30.4 hp.; maximum brake hp., 100 at 3600 r.p.m., net 90 at 3600 r.p.m. Maximum torque, 173.5 lb.-ft. at 2000 r.p.m., net 167 lb.-ft. at 1200 r.p.m. Four steel-backed, replaceable-shell, precision-type main bearings; total projected area, 17.01 sq. in. Six replaceable-shell, precision-type connecting-rod bearings. Exhaust-valve seat inserts.

Lubrication: Full-pressure feed to all main, connecting-rod and piston-pin bearings, camshaft and timing gears. Gear-type, gear-driven oil pump. Oil capacity, 7 qt.

Cooling System: Centrifugal pump circulation, fin-and-tube radiator. Pump driven by V-type fan belt. Capacity, 18 qt.

Ignition: 6-volt, vacuum control, full-automatic distributor.

Generator: 6-volt, 30-ampere, shunt-wound, belt-driven.

Lights: Sealed-beam headlights.

Battery: 6-volt, 15-plate.

Starting Motor: 6-volt.

Carburetor: Downdraft type. Oil-bath-type air cleaner.

Fuel System: Mechanical fuel pump driven from camshaft. 30-gal. tank. Gasoline filter.

Clutch: 10-in. single-plate, with vibration damper.

Transmission: Four speeds forward, one reverse; sliding gear selective type, mounted in unit with engine.

Transmission Reductions: First, 6.40 to 1; second, 3.09 to 1; third, 1.69 to 1; fourth, 1 to 1; reverse, 7.82 to 1.

Propeller Shaft: Large-diameter, heavy-steel tubing. 2-piece shafts with self-aligning center bearing. Dynamically balanced.

Universal Joints: All-metal, roller-bearing, anti-friction type.

Front Axle: Drop-center, I-beam, heat-treated steel drop-forging. Steering knuckles of drop-forged, heat-treated, chrome-molybdenum steel.

Rear Axle: Full-floating, hypoid type. Hotchkiss-type final drive. Chrome-molybdenum steel axle shafts. Heat-treated, one-piece, tubular banjo-type steel housing. Differential and wheel bearings are tapered rollers. Pinion, straddle-mounted on roller bearings.

Axle Reductions: 4.88 to 1, 5.57 to 1, or 6.166 to 1.

Steering Gear: Cam-and-twin-lever type.

Brakes: Service: 4-wheel, hydraulic, internal-expanding, two-shoe, double-anchor type. Hand: Propeller-shaft type, mounted back of transmission.

Springs: Front and rear, semi-elliptic. Front, 46 x 2 in.; rear, 50 x 2 1/2 in.

Wheels: Disc type.

Standard Tires: 7.50-17, 8-ply, single rear.

Recommended Tires: 7.00 x 20, 8-ply, dual rear.

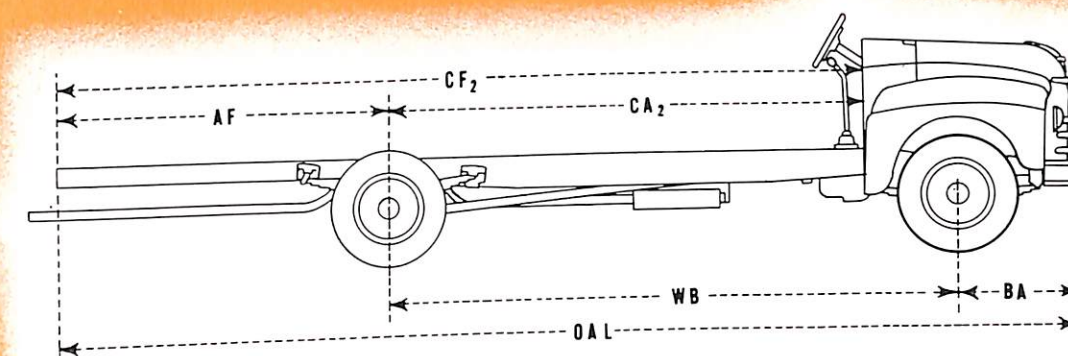
Controls: Throttle, light, and choke controls on instrument panel. Accelerator, clutch, and service brakes operated by pedals. Control levers located in center of driving compartment.

Standard Equipment: Flat-back cowl and dash; sealed-beam headlights; air cleaner; jack and handle.

Special Equipment: The following will be available at extra cost when specified on order: optional tires; hydrovac booster; vacuum reserve tank with gauge; 6-volt, 50-ampere, or 6-volt, 40-ampere low-speed generators; oil filter; governor; heavy-duty four speed synchromesh transmissions; increased cooling and increased capacity brakes (two-cylinder type); propeller shaft brake shield; propeller shaft guard.

Finish: Frame and wheels black. Grille, hood and fenders, a variety of optional colors.

Specifications subject to change without notice.



L-163

SPECIFICATIONS

Gross Vehicle Weight Rating	15,500 lb.
Nominal Gross Carrying Capacity (Body, equipment, and payload)	10,500 lb.
Body Size	
Approximate length	19-21 ft.
Seating capacity	42-48
Chassis Dimensions: (in inches) Weights: (in pounds)	
Wheelbase (WB)	172 190
Overall length, with front bumper (OAL)	292 316 1/4
Back of cowl to c/l of rear axle (CA ₂)	144 162 3/8
Back of cowl to end of frame (CF ₂)	228 252
C/l of rear axle to end of frame (AF)	83 89 3/8
Bumper to center of front axle (BA)	36 36 3/8
Turning radius with bumper clearance (feet)	30 32 1/2
Chassis weight, including fuel, oil, and water, standard chassis (approximate)	4,484 4,559

The following dimensions (with 7.50-20 tires) are the same for all wheelbases:

Tread—front wheels, 63 in.; rear wheels, 66 3/8 in.
Road clearance—front axle, 10 1/16 in.; rear axle, 9 1/16 in.
Overall width—front, 81 1/2 in.; rear, 85 5/8 in.
Height from top of frame to ground, loaded—front, 30 in.; rear, 31 1/16 in.

Frame: Pressed steel channel, 8 1/4 x 1/4 x 3 in.

Engine: International Silver Diamond 240, six cylinder, valve-in-head type; 3 3/16-in. bore, 4.018-in. stroke. Displacement, 240.30 cu. in.; compression ratio, 6.5; A.M.A. (N.A.C.C.) rating, 30.4 hp.; maximum torque, 108 at 3600 r.p.m., net 93 at 3400 r.p.m. Maximum torque, 192 lb.-ft. at 1400 r.p.m., net 186 at 1100 r.p.m. Four steel-backed, replaceable-shell, precision-type main bearings; total projected area, 17.01 sq. in. Six replaceable-shell, precision-type connecting-rod bearings. Exhaust-valve seat inserts.

Lubrication: Full-pressure feed to all main, connecting-rod and piston-pin bearings, camshaft and timing gears. Gear-type, gear-driven oil pump. Oil capacity, 7 qt.

Cooling System: Centrifugal pump circulation, fin-and-tube radiator. Pump driven by V-type fan belt. Capacity, 18 qt.

Ignition: 6-volt, vacuum control, full-automatic distributor.

Generator: 6-volt, 30-ampere, shunt-wound, belt-driven.

Lights: Sealed-beam headlights.

Battery: 6-volt, 15-plate.

Starting Motor: 6-volt.

Carburetor: Downdraft type. Oil-bath-type air cleaner.

Fuel System: Mechanical fuel pump driven from camshaft. 30-gal. tank. Gasoline filter.

Clutch: 11-in., single-plate, with vibration damper.

Transmission: Four speeds forward, one reverse; selective synchromesh type, mounted in unit with engine.

Transmission Reductions: First, 6.39 to 1; second, 3.09 to 1; third, 1.68 to 1; fourth, 1 to 1; reverse, 7.82 to 1.

Propeller Shaft: Large-diameter, heavy-steel tubing. 2-piece shafts with self-aligning center bearing. Dynamically balanced.

Universal Joints: All-metal, roller-bearing, anti-friction type.

Front Axle: Drop-center, I-beam, heat-treated steel drop-forging. Steering knuckles of drop-forged, heat-treated, chrome-molybdenum steel.

Rear Axle: Full-floating, hypoid type. Hotchkiss-type final drive. Chrome-molybdenum steel axle shafts. Heat-treated, one-piece, tubular banjo-type steel housing. Differential and wheel bearings are tapered rollers. Pinion, straddle-mounted on roller bearings.

Axle Reductions: 5.285 to 1; 6.166 to 1; 6.666 to 1; or 7.166 to 1.

Two-Speed Axle (optional): Full-floating, hypoid type, straddle-mounted pinion, forced lubrication. Axle reductions: 5.14—7.15 to 1; 5.83—8.11 to 1; or 6.33—8.81 to 1.

Steering Gear: Roller-bearing. Cam-and-twin-lever type.

Brakes: Service: 4-wheel, hydraulic, internal-expanding, two-shoe, double-anchor type with vacuum booster. Hand: Propeller-shaft type, mounted back of transmission.

Springs: Front and rear, semi-elliptic. Front, 46 x 2 1/4 in.; rear, 52 x 2 1/2 in.

Wheels: Disc type.

Standard Tires: 7.00-20, 8-ply.

Controls: Throttle, light, and choke controls on instrument panel. Accelerator, clutch and service brakes operated by pedals. Control levers located in center of driving compartment.

Standard Equipment: Flat-back cowl and dash; sealed-beam headlights; air cleaner; vacuum booster; jack and tools.

Special Equipment: The following will be available at extra cost when specified on order: optional tires; 6-volt, 50-ampere, or 6-volt, 40-ampere low speed generators; two-speed axle with electric shift; oil filter; governor; de luxe tool kit; increased cooling; increased capacity brakes; vacuum reserve tank with gauge; propeller shaft brake shield; propeller shaft guard; progressive type rear springs.

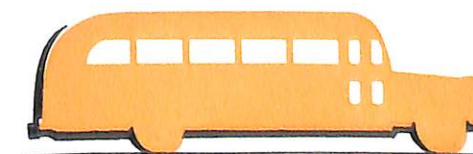
Finish: Frame and wheels black. Grille, hood, and fenders, a variety of optional colors.

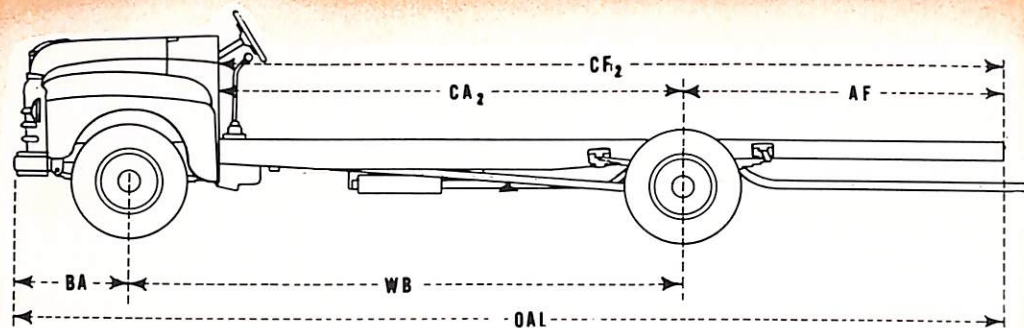
Specifications subject to change without notice.



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L-173

SPECIFICATIONS

Gross Vehicle Weight Rating 17,500 lb.

Nominal Gross Carrying Capacity
(Body, equipment, and payload) 12,200 lb.

Body Size:
Approximate length 20-23 ft.
Seating capacity 42-54

Chassis Dimensions: (in inches)	Weights: (in pounds)	
Wheelbase (WB)	190	208
Overall length, with front bumper (OAL)	309 ³ / ₈	343
Back of cowl to c/l of rear axle (CA ₂)	162 ³ / ₈	180 ³ / ₈
Back of cowl to end of frame (CF ₂)	245 ³ / ₈	278 ³ / ₄
C/l of rear axle to end of frame (AF)	83	98 ³ / ₈
Bumper to center of front axle (BA)	36 ³ / ₈	36 ³ / ₈
Turning radius with bumper clearance (feet) ..	33	35 ¹ / ₂
Chassis weight, including fuel, oil, and water, standard chassis (approximate)	4,994	5,284

The following dimensions (with 7.50-20 tires) are the same for all wheelbases:

Tread—front wheels, 66¹/₈ in.; rear wheels, 67¹/₂ in.
Road clearance—front axle, 9³/₄ in.; rear axle, 9¹/₂ in.
Overall width—front, 81¹/₂ in.; rear, 87¹/₄ in.
Height from top of frame to ground, loaded—front, 29³/₈ in.; rear, 32³/₈ in.

Frame: Pressed-steel channel, 8¹/₄ x 1¹/₄ x 3 in., 190-in. WB; 8⁵/₁₆ x 3¹/₂ in., 208-in. WB.

Engine: International Super Blue Diamond 269, six-cylinder, valve-in-head type, 3¹/₁₆-in. bore, 4¹/₂-in. stroke. Displacement, 269 cu. in.; compression ratio, 6.3; A.M.A. (N.A.C.C.) rating, 30.4 hp.; maximum brake hp., 100.5 at 3000 r.p.m., 88.6 net at 2800 r.p.m. Maximum torque, 222 lb.-ft. at 1600 r.p.m., net 216.5 at 1000 r.p.m. Four steel-backed, replaceable-shell, precision-type main bearings; total projected area, 12.78 sq. in. Six replaceable-shell, precision-type connecting-rod bearings. Exhaust-valve inserts. Replaceable cylinder liners.

Lubrication: Full-pressure feed to all main, connecting-rod and piston-pin bearings, camshaft and timing gears. Gear-type, gear-driven oil pump. Oil capacity, 7 qt.

Cooling System: Centrifugal pump circulation, fin-and-tube radiator. Pump driven by V-type fan belt. Capacity, 21 qt.

Ignition: 6-volt, full-automatic distributor.

Generator: 6-volt, 30-ampere, shunt-wound, belt-driven.

Lights: Sealed-beam headlights.

Battery: 6-volt, 19-plate.

Starting Motor: 6-volt.

Carburetor: Downdraft type. Oil-bath-type air cleaner.

Fuel System: Mechanical fuel pump driven from camshaft. 30-gal. tank. Gasoline filter.

Clutch: 11-in., single-plate, with vibration damper.

Transmission: Four speeds forward, one reverse; selective synchromesh type, mounted in unit with engine.

Transmission Reductions: First, 6.39 to 1; second, 3.09 to 1; third, 1.68 to 1; fourth, 1 to 1; reverse, 7.82 to 1.

Propeller Shaft: Large-diameter, heavy-steel tubing. 3-piece shafts with two self-aligning center bearings (208 in. WB). Dynamically balanced.

Universal Joints: All-metal, roller-bearing, anti-friction type.

Front Axle: Drop-center, I-beam, heat-treated steel drop-forging. Steering knuckles of drop-forged, heat-treated, chrome-molybdenum steel.

Rear Axle: Full-floating, hypoid type. Hotchkiss-type final drive. Chrome-molybdenum steel axle shafts. Heat-treated, one-piece, tubular banjo-type steel housing. Differential and wheel bearings are tapered rollers. Pinion, straddle-mounted on roller bearings.

Axle Reductions: 5.285 to 1; 6.166 to 1; 6.666 to 1; or 7.166 to 1.

Two-Speed Axle (optional): Full-floating, hypoid type, overhung pinion, forced lubrication. Axle reductions: 5.14—7.15 to 1; 5.83—8.11 to 1; or 6.33—8.81 to 1.

Steering Gear: Roller-bearing. Cam-and-twin-lever type.

Brakes: Service: 4-wheel, hydraulic, internal-expanding, two-shoe, two-cylinder type with vacuum booster. Hand: Propeller-shaft type, mounted back of transmission.

Springs: Front and rear, semi-elliptic. Front, 46 x 2¹/₄ in.; rear, 52 x 2¹/₂ in.

Wheels: Cast spoke, malleable iron.

Standard Tires: 7.50-20, 8-ply.

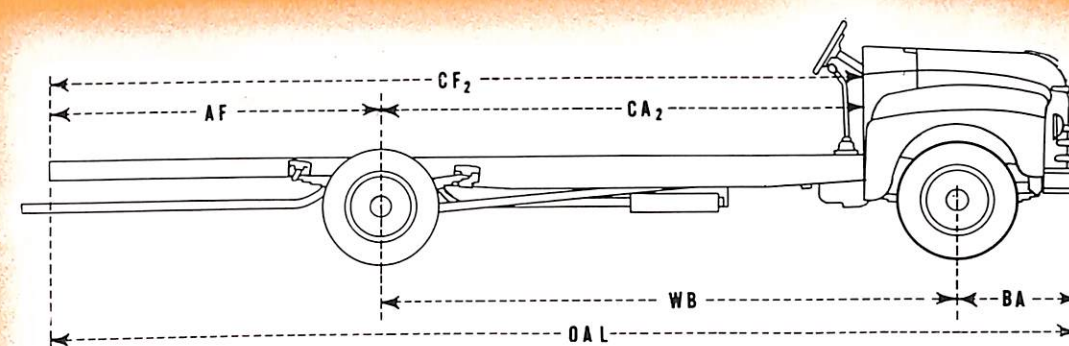
Controls: Throttle, light, and choke controls on instrument panel. Accelerator, clutch and service brakes operated by pedals. Control levers located in center of driving compartment.

Standard Equipment: Flat-back cowl and dash; sealed-beam headlights; air cleaner; vacuum booster; jack and tools.

Special Equipment: The following will be available at extra cost when specified on order: optional tires; 6-volt, 50-ampere, or 6-volt, 40-ampere low speed generators; two-speed axle with electric shift; oil filter; governor; de luxe tool kit; increased cooling; increased capacity brakes; five-speed transmission; vacuum reserve tank with gauge; propeller shaft brake shield; propeller shaft guard; progressive type rear springs.

Finish: Frame and wheels black. Grille, hood, and fenders, a variety of optional colors.

Specifications subject to change without notice.



L-183

SPECIFICATIONS

Gross Vehicle Weight Rating 19,500 lb.

Nominal Gross Carrying Capacity
(Body, equipment, and payload) 13,700 lb.

Body Size:
Approximate length 23-28 ft.
Seating capacity 48-66

Chassis Dimensions: (in inches)	Weights: (in pounds)	
Wheelbase (WB)	208	226 ¹ / ₂
Overall length, with front bumper (OAL)	343	370
Back of cowl to c/l of rear axle (CA ₂)	180 ³ / ₈	198 ³ / ₈
Back of cowl to end of frame (CF ₂)	278 ³ / ₄	305 ³ / ₄
C/l of rear axle to end of frame (AF)	98 ³ / ₈	107 ³ / ₈
Bumper to center of front axle (BA)	36 ³ / ₈	36 ³ / ₈
Turning radius with bumper clearance (feet) ..	35 ¹ / ₂	38 ¹ / ₂
Chassis weight, including fuel, oil, and water, standard chassis (approximate)	5,848	6,088

The following dimensions (with 9.00-20 tires) are the same for all wheelbases:

Tread—front wheels, 64¹/₈ in.; rear wheels, 70 in.
Road clearance—front axle, 10¹/₄ in.; rear axle, 9¹/₂ in.
Overall width—front, 81¹/₂ in.; rear, 92¹/₈ in.
Height from top of frame to ground, loaded—front, 30³/₈ in.; rear, 33³/₈ in.

Frame: Pressed steel channel, 208-in. WB—9¹/₈ x 3¹/₂ x 3¹/₂ in., 226-in. WB—9¹/₈ x 3¹/₈ x 3¹/₈ in., 244-in. WB—10 x 3¹/₈ x 3¹/₈ in.

Engine: International Super Blue Diamond 269, six-cylinder, valve-in-head type, 3¹/₁₆-in. bore, 4¹/₂-in. stroke. Displacement, 269 cu. in.; compression ratio, 6.3; A.M.A. (N.A.C.C.) rating, 30.4 hp.; maximum brake hp., 100.5 at 3000 r.p.m., 88.6 net at 2800 r.p.m. Maximum torque, 222 lb.-ft. at 1600 r.p.m., net 216.5 at 1000 r.p.m. Four steel-backed, replaceable-shell, precision-type main bearings; total projected area, 12.78 sq. in. Six replaceable-shell, precision-type connecting-rod bearings. Exhaust-valve inserts. Replaceable cylinder liners.

Lubrication: Full-pressure feed to all main, connecting-rod and piston-pin bearings, camshaft and timing gears. Gear-type, gear-driven oil pump. Oil capacity, 7 qt.

Cooling System: Centrifugal pump circulation, fin-and-tube radiator. Pump driven by V-type fan belt. Capacity, 21 qt.

Ignition: 6-volt, full-automatic distributor.

Generator: 6-volt, 30-ampere, shunt-wound, belt-driven.

Lights: Sealed-beam headlights.

Battery: 6-volt, 19-plate.

Starting Motor: 6-volt.

Carburetor: Downdraft type. Oil-bath-type air cleaner.

Fuel System: Mechanical fuel pump driven from camshaft. 30-gal. tank. Gasoline filter.

Clutch: 11-in., single-plate, with vibration damper.

Transmission: Five speeds forward, one reverse; constant mesh helical gears in third, fourth and fifth.

Transmission Reductions: First, 6.36 to 1; second, 3.72 to 1; third, 1.92 to 1; fourth, 1 to 1; fifth, .823 to 1; reverse, 6.39 to 1.

Propeller Shaft: Large-diameter, heavy-steel tubing. 3-piece shafts with two self-aligning center bearings. Dynamically balanced.

Universal Joints: All-metal, roller-bearing, anti-friction type.

Front Axle: Drop-center, I-beam, heat-treated steel drop-forging. Steering knuckles of drop-forged, heat-treated, chrome-molybdenum steel.

Rear Axle: Full-floating, hypoid type. Hotchkiss-type final drive. Chrome-molybdenum steel axle shafts. Heat-treated, one-piece, tubular banjo-type steel housing. Differential and wheel bearings are tapered rollers. Pinion, straddle-mounted on roller bearings.

Axle Reductions: 5.571 to 1; 6.5 to 1; or 7.166 to 1.

Two-Speed Axle (optional): Full-floating, hypoid type, overhung pinion, forced lubrication. Axle reductions: 5.571—7.749 to 1; 6.166—8.577 to 1; or 6.5—9.041 to 1.

Steering Gear: Roller-bearing. Cam-and-twin-lever type.

Brakes: Service: 4-wheel, hydraulic, internal-expanding, two-shoe, two-cylinder type with vacuum booster. Hand: Propeller-shaft type, mounted back of transmission.

Springs: Front and rear, semi-elliptic. Front, 46 x 2¹/₄ in.; rear, 54 x 3 in. 244-inch W.B.—56 x 3 in.

Wheels: Cast spoke, malleable iron.

Standard Tires: 8.25-20, 10-ply.

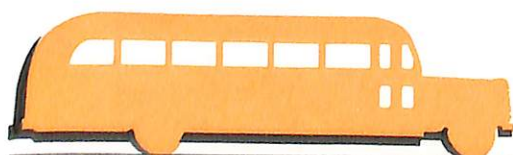
Controls: Throttle, light, and choke controls on instrument panel. Accelerator, clutch and service brakes operated by pedals. Control levers located in center of driving compartment.

Standard Equipment: Flat-back cowl and dash; sealed-beam headlights; air cleaner; vacuum booster; jack and tools.

Special Equipment: The following will be available at extra cost when specified on order: optional tires; 6-volt, 50-ampere, or 6-volt, 40-ampere low speed generators; two-speed axle with electric shift; oil filter; governor; de luxe tool kit; increased cooling; increased capacity brakes; vacuum reserve tank with gauge; propeller shaft brake shield; propeller shaft guard; progressive type rear springs.

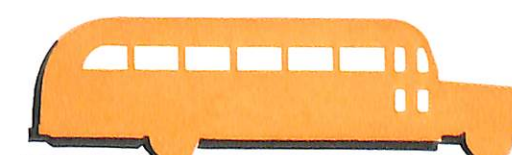
Finish: Frame and wheels black. Grille, hood, and fenders, a variety of optional colors.

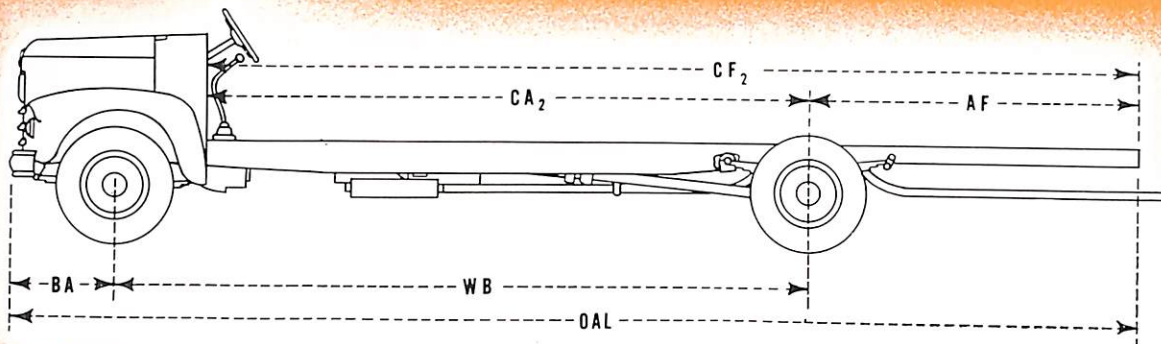
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L-193

METRO
BODY



SPECIFICATIONS

Gross Vehicle Weight Rating 24,000 lb.
Nominal Gross Carrying Capacity
 (Body, equipment, and payload) 16,500 lb.

Body Size:
 Approximate length 25-28 ft.
 Seating capacity 54-66

Chassis Dimensions: (in inches) Weights: (in pounds)

Wheelbase (WB)	226	247
Overall length, with front bumper (OAL)	371 ¹ / ₈	391 ¹ / ₈
Back of cowl to c/l of rear axle (CA ₂)	195 ³ / ₈	216 ³ / ₈
Back of cowl to end of frame (CF ₂)	305 ³ / ₄	326
C/l of rear axle to end of frame (AF)	110 ³ / ₈	109 ⁵ / ₈
Bumper to center of front axle (BA)	35 ⁵ / ₈	35 ⁵ / ₈
Turning radius with bumper clearance (feet)	40	42
Chassis weight, including fuel, oil, and water, standard chassis (approximate)	7,987	8,192

The following dimensions (with 10.00-20 tires) are the same for all wheelbases:

Tread—front wheels, 69¹/₈ in.; rear wheels, 72 in.
 Road clearance—front axle, 10¹/₂ in.; rear axle, 8³/₈ in.
 Overall width—front, 91⁷/₈ in.; rear, 95¹/₈ in.
 Height from top of frame to ground, loaded—front, 33 in.; rear, 34¹/₈ in.

Frame: Pressed steel channel, 10 x ⁵/₁₆ x 3¹/₂ in.

Engine: International Super Red Diamond 372, six-cylinder, valve-in-head type; 4³/₈-in. bore, 4¹/₈-in. stroke. Displacement, 372 cu. in.; compression ratio, 6.3; A.M.A. (N.A.C.C.) rating, 45.9 hp.; maximum brake hp., 143.8 at 3200 r.p.m., net 128 at 2850 r.p.m. Maximum torque, 282.5 lb.-ft. at 1200 r.p.m., net 280 at 1000 r.p.m. Seven steel-backed, replaceable-shell, precision-type main bearings; total projected area, 34.71 sq. in. Six replaceable-shell, precision-type connecting-rod bearings. Exhaust-valve seat inserts. Slo-rotor exhaust valves. Replaceable cylinder liners.

Lubrication: Full-pressure feed to all main, connecting-rod and piston-pin bearings, camshaft and timing gears. Gear-type, gear-driven oil pump. Oil capacity, 9 qt.

Cooling System: Centrifugal pump circulation, fin-and-tube radiator. Pump driven by V-type fan belt. Capacity, 28 qt.

Ignition: 6-volt, full-automatic distributor.

Generator: 6-volt, 30-ampere, shunt-wound, belt-driven.

Lights: Sealed-beam headlights.

Battery: 6-volt, 19-plate.

Starting Motor: 6-volt.

Carburetor: Downdraft type. Oil-bath-type air cleaner.

Fuel System: Mechanical fuel pump driven from camshaft. 30-gal. tank. Gasoline filter.

Clutch: 12-in., single-plate, with vibration damper.

Transmission: Five speeds forward, one reverse; overdrive in fifth standard; direct in fifth at no extra cost.

Transmission Reductions: First, 6.98 to 1; second, 3.57 to 1; third, 1.89 to 1; fourth, 1 to 1; fifth, .825 to 1; reverse, 6.95 to 1.

Propeller Shaft: Large-diameter, heavy-steel tubing. 3-piece shafts with two self-aligning center bearings. Dynamically balanced.

Universal Joints: All-metal, roller-bearing, anti-friction type.

Front Axle: Drop-center, I-beam, heat-treated steel drop-forging. Steering knuckles of drop-forged, heat-treated, chrome-molybdenum steel.

Rear Axle: Full-floating, single reduction, hypoid type. Hotchkiss-type final drive. Chrome-molybdenum steel axle shafts. Heat-treated, one-piece, tubular banjo-type steel housing. Differential and wheel bearings are tapered rollers. Pinion, straddle-mounted on roller bearings.

Axle Reductions: 5.571 to 1; 6.5 to 1; or 7.166 to 1.

Two-Speed Axle (optional): Full-floating, hypoid type, overhung pinion, forced lubrication. Axle reductions: 5.571—7.599 to 1; or 6.5—8.866 to 1.

Steering Gear: Roller-bearing. Cam-and-twin-lever type.

Brakes: Service: 4-wheel, hydraulic, internal-expanding, two-shoe, two-cylinder type with vacuum booster. Hand: Propeller-shaft type, mounted back of transmission.

Springs: Front and rear, semi-elliptic. Front, 52 x 3 in.; rear, 56 x 3 in.

Wheels: Cast spoke, malleable iron.

Standard Tires: 9.00-20, 10-ply.

Controls: Throttle, light, and choke controls on instrument panel. Accelerator, clutch and service brakes operated by pedals. Control levers located in center of driving compartment.

Standard Equipment: Flat-back cowl and dash; sealed-beam headlights; air cleaner; governor, plain type tachometer; oil filter; jack and tools.

Special Equipment: The following will be available at extra cost when specified on order: optional tires; 6-volt, 50-ampere, or 6-volt, 40-ampere low-speed generators; two-speed axle with electric shift; increased cooling; increased capacity or air brakes; vacuum reserve tank with gauge; propeller shaft brake shield; propeller shaft guard; progressive type rear springs.

Finish: Frame and wheels black. Grille, hood, and fenders, a variety of optional colors.

Specifications subject to change without notice.

SPECIFICATIONS

Gross Vehicle Weight Rating LM-120 5,300 lb.
 LM-121 5,800 lb.
 LM-122 6,300 lb.

Wheelbase: (in inches) 115

Body Length: (in feet) 9¹/₂

Turning Radius: (in feet) with bumper clearance 22

Frame: Pressed steel channel. 6³/₃₂ x 2¹/₄ x ¹/₄ in.

Engine: International Silver Diamond 220, six cylinder, valve-in-head type; 3¹/₈-in. bore, 3¹/₈-in. stroke. Displacement, 220.50 cu. in.; A.M.A. (N.A.C.C.), 30.4 hp.; maximum brake hp., 100 at 3600, net 90 at 3600 r.p.m. Maximum torque, 173.5 lb.-ft. at 2000 r.p.m., net 167 lb.-ft. at 1200 r.p.m. Steel-backed, replaceable-shell, precision-type main and connecting rod bearings. Exhaust-valve seat inserts. Full-pressure oil system. Updraft type carburetor with large oil-bath-type air cleaner.

Electrical System: 6-volt. 15-plate battery. 30-ampere, shunt-wound, belt-driven generator.

Fuel System: 15-gal. tank. Gasoline filter.

Clutch: 10-inch single-plate, with vibration damper.

Transmission: Three speeds forward, one reverse; synchromesh, mounted in unit with engine, gear shift lever on steering post. Ratios—first, 3.714 to 1; second, 1.871 to 1; third, 1 to 1; reverse, 4.588 to 1.

Front Axle: Drop-center, I-beam, heat-treated steel drop-forging. Steering knuckles of drop-forged, heat-treated, chrome-molybdenum steel.

Rear Axle: Full-floating, hypoid type. Heat-treated, one-piece, tubular banjo-type steel housing. Straddle-mounted pinion. Tapered roller bearings. Ratios—4.1 to 1; 4.777 to 1; 5.13 to 1.

Steering Gear: Cam-and-twin-lever type.

Brakes: Service: 4-wheel, hydraulic, internal-expanding, two-shoe, Servo-type. Hand: propeller-shaft type.

Springs: Front and rear, semi-elliptic. Front, 42 x 1³/₄ in.; rear, 52 x 1³/₄ in. Front and rear double acting shock absorbers.

Wheels: Pressed steel, disc type.

Tires: Standard: 6.50-16, 6-ply T.T.—all models. Recommended: 6.50-16, 6-ply T.T., LM-120; 7.00-16, 6-ply P.C., LM-121; 7.00-16, 6-ply T.T., LM-122.

Controls: Ignition and starter switch, throttle, light, and choke controls on instrument panel. Accelerator, clutch, and service brakes operated by pedals. Hand-brake lever at left of driver.

Special Equipment: Oil filter, 4-speed transmission; optional tires; auxiliary springs; 40-ampere low-speed or 50-ampere generator; and oversize clutch.

Specifications subject to change without notice.

Gross Vehicle Weight Rating LM-150 8,000 lb.
 LM-151 9,000 lb.
 LM-152 10,000 lb.

Wheelbase: (in inches) 115

Body Length: (in feet) 9¹/₂

Turning Radius: (in feet) with bumper clearance 22

Frame: Pressed steel channel. 7 x 3 x ³/₈ in.

Engine: International Silver Diamond 220, six cylinder, valve-in-head type; 3¹/₈-in. bore, 3¹/₈-in. stroke. Displacement, 220.50 cu. in.; A.M.A. (N.A.C.C.), 30.4 hp.; maximum brake hp., 100 at 3600, net 90 at 3600 r.p.m. Maximum torque, 173.5 lb.-ft. at 2000 r.p.m., net 167 lb.-ft. at 1200 r.p.m. Steel-backed, replaceable-shell, precision-type main and connecting rod bearings. Exhaust-valve seat inserts. Full-pressure oil system. Updraft type carburetor with large oil-bath-type air cleaner.

Electrical System: 6-volt. 15-plate battery. 30-ampere, shunt-wound, belt-driven generator.

Fuel System: 15-gal. tank. Gasoline filter.

Clutch: 10-inch single-plate, with vibration damper.

Transmission: Three speeds forward, one reverse; synchromesh, mounted in unit with engine, gear shift lever on steering post. Ratios—first, 3.714 to 1; second, 1.871 to 1; third, 1 to 1; reverse, 4.588 to 1.

Front Axle: Drop-center, I-beam, heat-treated steel drop-forging. Steering knuckles of drop-forged, heat-treated, chrome-molybdenum steel.

Rear Axle: Full-floating, hypoid type. Heat-treated, one-piece, tubular banjo-type steel housing. Straddle-mounted pinion. Tapered roller bearings. Ratios—4.8 to 1, 5.57 to 1, 6.16 to 1.

Steering Gear: Cam-and-twin-lever type.

Brakes: Service: 4-wheel, hydraulic, internal-expanding, two-shoe, Servo-type. Hand: propeller-shaft type.

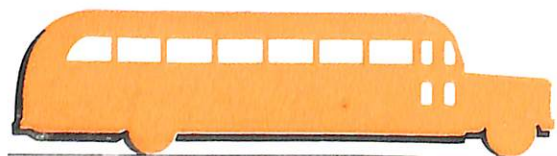
Springs: Front and rear, semi-elliptic. Front, 42 x 1³/₄ in.; rear, 52 x 2¹/₄ in. Front, double acting shock absorbers.

Wheels: Pressed steel, disc type.

Tires: Standard: 7.50-17, 8-ply T.T.—all models. Recommended: 7.50-17, 8-ply, T.T., LM-150; 7.00-17, 8-ply T.T., LM-151; 7.00-17, 8-ply T.T., dual rear, LM-152.

Controls: Ignition and starter switch, throttle, light, and choke controls on instrument panel. Accelerator, clutch, and service brakes operated by pedals. Hand-brake lever at left of driver.

Special Equipment: Oil filter; 4-speed transmission; optional tires; auxiliary springs; 40-ampere low-speed or 50-ampere generator; and oversize clutch.



Heavy-Duty Engineered
 FOR PERFORMANCE
 ...ECONOMY...LONG-LIFE

Heavy-Duty Engineered
 FOR PERFORMANCE
 ...ECONOMY...LONG-LIFE



Big new value in small bus field

16 Pupil METRO SCHOOL BUS

Here's a unit that will furnish more efficient, lower-cost-per-mile school transportation for years and years—the new "economy-size" METRO SCHOOL BUS.

This 115-inch wheelbase bus—a new improved version of a school bus thoroughly proved in actual service—combines the practical advantages of the all-steel Metro body with the operating efficiency of the Heavy-duty Engineered International chassis.

9½-foot Metro body built to stay on the job

The Metro bus body is engineered to stand up to the day-in-and-day-out job of transporting children to and from school.

Its under-structure, side panel framing, and door posts are high-tensile steel—4 to 6 times more rust resistant than ordinary carbon steel. Bolts, nuts, retainers, and grips are cadmium-plated to prevent corrosion. The entire body is quality-built for economical school transportation.

International chassis Heavy-duty Engineered for economy

The LM-120 and LM-150 International chassis, both carefully matched to the Metro body, are Heavy-duty Engineered for lower operating costs, longer bus life.

This extra-value Heavy-duty Engineering extends to each and every part. The Silver Diamond 220 engine provides extra economy and dependability in addition to greater power and pick-up. The 3-speed, heavy-duty Synchro-shift transmission offers ruggedness and stamina that mean more thousands of trouble-free miles of operation. The hypoid-gear, full-floating rear axle, the rugged Steel-flex frame, the super-safe Pres-stop

brakes—all are built to give extra-long, extra economical service on the toughest school routes.

It's the answer to YOUR small-bus needs

Here are four big reasons why it will pay your school district to use the Metro school bus for smaller routes, feeder service, and other small-bus school needs:

1. It's extra-safe! The Metro school bus more than meets the National Standards for School Bus Safety. School children travel in all-steel safety inside the Metro body. Special safety features include an emergency door at rear, non-slip floor covering, safety glass throughout, guard rails at sides, and stanchions at the entrance.

2. It's extra-comfortable! Space is efficiently utilized to assure maximum comfort for 16 school children and the driver. Seats are comfort-designed with soft cushions and restful back support. Glass wool between inner and outer panels provides comfortable insulation.

3. It's extra-thrifty! First cost is low—maintenance is low—and operating economy is built-in from bumper to bumper. Every Metro school bus is powered by the new Silver Diamond Engine—outstanding for its thriftiness.

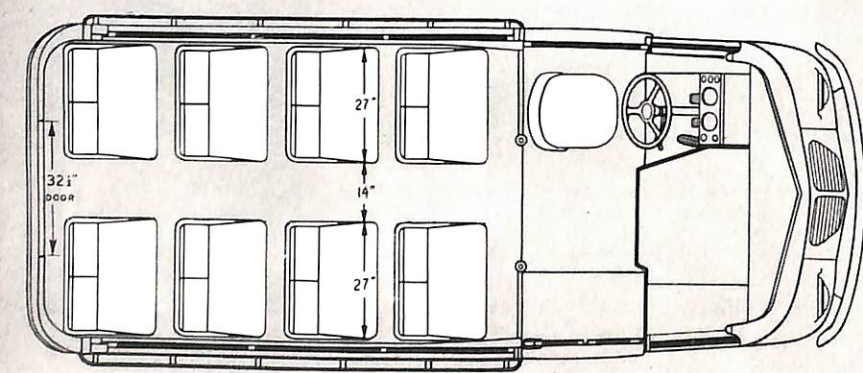
4. It's extra smart-looking! The Metro School Bus is a shining example of modern styling. Inside and out, it has the smart appearance that advertises a forward-minded school district.

Metro school bus features add up to longer life, lower maintenance costs, greater value. They also add up to the best possible answer to your school district's small-bus requirements.



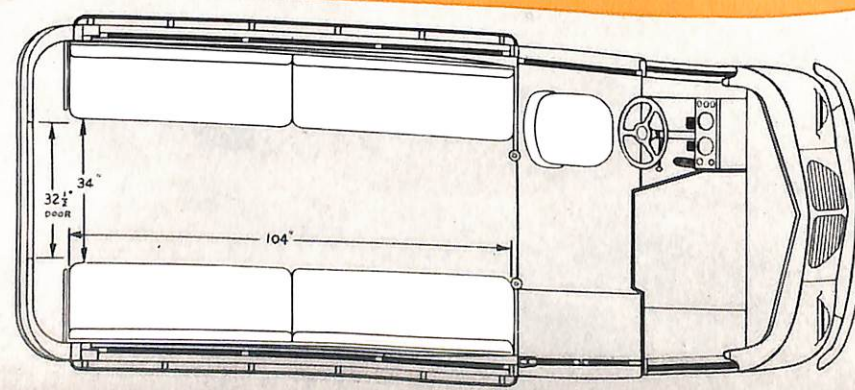
The new Metro school buses are easy on the school budget and the school board's and parents' peace of mind. First cost is low, maintenance is low, and operating economy is built-in from bumper to bumper.

Seating arrangements to meet your school needs!



Full-length side seating

Sectional side seats and lazy backs extend the full length of the body. Ample seating space, scientific seat design, and 34-inch aisle assure the 16 school children genuine comfort.



Comfortable cross seating

This cross seating arrangement seats 16 children in maximum comfort. Eight double seats, each 27 inches wide, help eliminate jamming and crowding and contribute to good order.





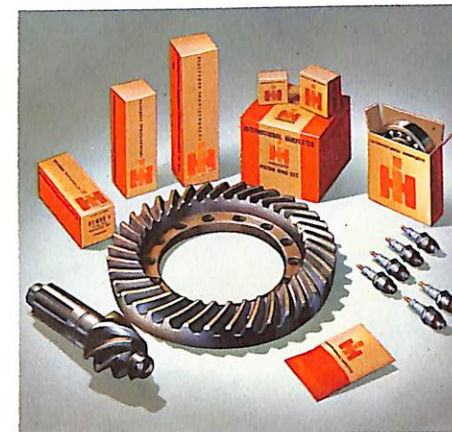
Above: Model L-193 Schoolmaster, 247-inch wheelbase, with 60-passenger body, transports children safely to and from school.

Below: Model L-163 Schoolmaster, 190-inch wheelbase, with 42-passenger body, provides safe, economical transportation in sparsely settled districts where longer routes are necessary.

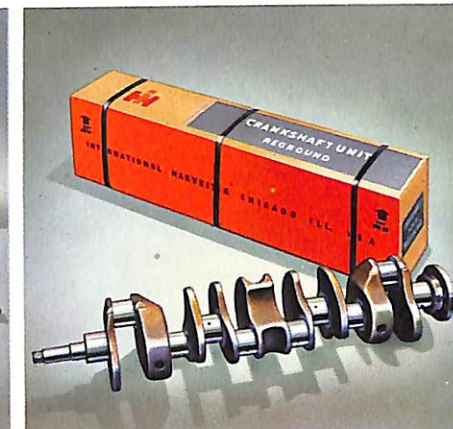


How to keep your school buses operating at *Peak Efficiency*

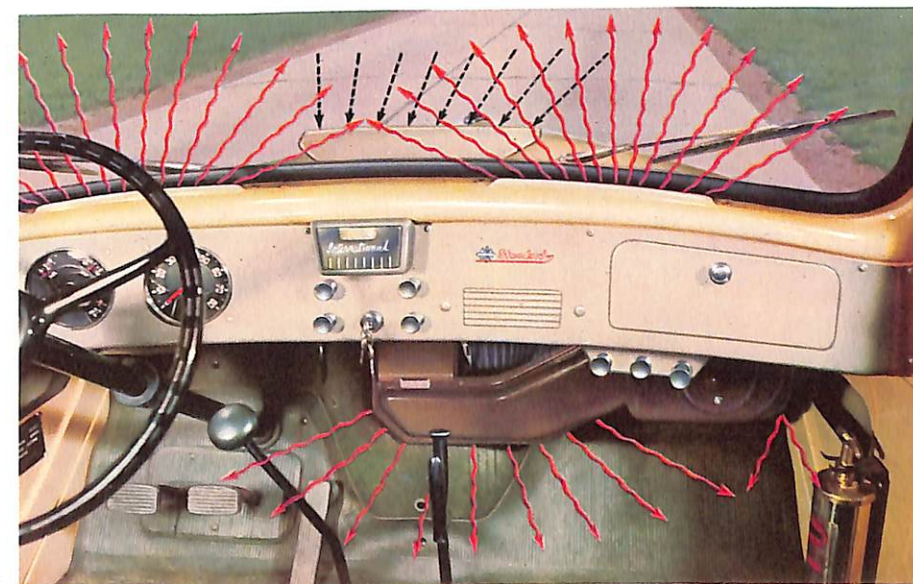
Your International Dealer or Branch has a complete supply of International replacement parts, factory-rebuilt exchange units, and International-approved accessories. Here's what this means to you:



Precision-engineered parts just like the originals! Replacement parts are of the same high quality as those used in a brand-new Schoolmaster. They are precision-engineered to the same exact specifications. They are precision-made of the same quality materials. They are precision-tested to assure the same perfect fit.



Factory-rebuilt exchange units at a saving of 1/3 or more! Under International's factory-rebuilt unit exchange plan, you save 1/3 or more by trading in old units for factory-rebuilt exchange units. Each rebuilt unit carries the International new-unit warranty. Reconditioned units available include: engines, engine blocks, crankshafts, carburetors, electrical units, clutches, transmissions, differentials, and brake shoes.



The International "All-fresh-air" heating, ventilating and defrosting system, supplied as optional equipment on all L-Line models provides all-weather comfort the year 'round. Fresh-air intake, through the cowl ventilator, eliminates the possibility that foul air will be taken into the system. In L-Line Internationals equipped with this system,

drivers choose their own weather—comfortably warm in winter, refreshingly cool in summer. Ask your International Truck Dealer or Branch for more information on the advantages of this heating, ventilating and defrosting system which provides year-round comfort, protects health, and contributes to safe driving.

INTERNATIONAL SCHOOL BUS SERVICE A nation-wide network —convenient, complete

THE NATION'S LARGEST exclusive truck service organization is ready to give your International Schoolmaster complete, quick, expert service — when and where you need it.

This organization is made up of 4,700 Dealers and 173 Company-owned Branches. It includes International factory-trained mechanics, with special equipment and tools. It includes precision-built replacement parts, factory-rebuilt exchange units, Company-approved accessories. It stands behind every International model.

Valuable aids to driving comfort, safety, dependa- bility!

International-approved accessories are selected to meet International Harvester standards of quality, utility, and value. Design, construction, and materials are closely inspected. Each accessory is subjected to tests under actual operating conditions. Your International Truck Dealer or Branch has a complete selection of spotlights, seat covers, portable hydraulic jacks, radiator grille guards, fog lights, skid chains, safety flares, and many other accessories.

INTERNATIONAL TRUCK SERVICE

A nation-wide network—convenient, complete



173 Company-Owned Branches and Service Stations—Dealers Everywhere

Aberdeen, S. Dak.	Dayton, Ohio	Kansas City, Mo.	Providence, R. I.	Springfield (West), Mass.
Abilene, Tex.	Decatur, Ill.	Kansas City, Kans.	Quincy, Ill.	Springfield, Mo.
Akron, Ohio	Denver, Colo.	Knoxville, Tenn.	Reading, Pa.	Springfield, Ohio
Albany, N. Y.	Des Moines, Iowa	La Fayette, Ind.	Richmond, Va.	Sweetwater, Tex.
Allentown, Pa.	Detroit, Mich. (2)	Lexington, Ky.	Rochester, N. Y.	Syracuse, N. Y.
Altoona, Pa.	Dubuque, Iowa	Lincoln, Nebr.	Sacramento, Calif.	Tacoma, Wash.
Amarillo, Tex.	Duluth, Minn.	Little Rock, Ark.	Saginaw, Mich.	Terre Haute, Ind.
Atlanta, Ga.	East Hartford, Conn.	Long Beach, Calif.	St. Cloud, Minn.	Toledo, Ohio
Aurora, Ill.	East St. Louis, Ill.	Long Island City, N. Y.	St. Joseph, Mo.	Topeka, Kans.
Baltimore, Md.	Eau Claire, Wis.	Los Angeles, Calif. (2)	St. Louis, Mo. (2)	Trenton, N. J.
Bangor, Maine	Elizabeth, N. J.	Louisville, Ky.	St. Paul, Minn.	Tulsa, Okla.
Baton Rouge, La.	Elmira, N. Y.	Madison, Wis.	Salina, Kans.	Utica, N. Y.
Beaumont, Tex.	El Paso, Tex.	Mankato, Minn.	Salt Lake City, Utah	Washington, D. C.
Billings, Mont.	Ephrata, Pa.	Mason City, Iowa	San Antonio, Tex.	Waterbury, Conn.
Binghamton, N. Y.	Erie, Pa.	Memphis, Tenn.	San Diego, Calif.	Waterloo, Iowa
Birmingham, Ala.	Evansville, Ind.	Milwaukee, Wis. (2)	San Francisco, Calif.	Watertown, N. Y.
Bismarck, N. Dak.	Fargo, N. Dak.	Minneapolis, Minn.	Savannah, Ga.	Watertown, S. Dak.
Boston, Mass.	Fort Dodge, Iowa	Minot, N. Dak.	Schenectady, N. Y.	West Haven, Conn.
Bridgeport, Conn.	Fort Wayne, Ind.	Nashville, Tenn.	Scranton, Pa.	Wichita, Kans.
Bronx, N. Y.	Fort Worth, Tex.	Newark, N. J.	Seattle, Wash. (2)	Wichita Falls, Tex.
Brooklyn, N. Y.	Fresno, Calif.	New Orleans, La.	Shreveport, La.	Wilkes-Barre, Pa.
Buffalo, N. Y.	Gary, Ind.	New York, N. Y.	Sioux City, Iowa	Williamsport, Pa.
Burlington, Vt.	Glendale, Calif.	Norfolk, Va.	Sioux Falls, S. Dak.	Wilmington, Del.
Camden, N. J.	Grand Forks, N. Dak.	Oakland, Calif.	Somerville, Mass.	Worcester, Mass.
Castle Shannon, Pa.	Grand Island, Nebr.	Oklahoma City, Okla.	South Bend, Ind.	York, Pa.
Cedar Rapids, Iowa	Grand Rapids, Mich.	Omaha, Nebr.	Spokane, Wash.	Youngstown, Ohio
Charleston, S. C.	Great Falls, Mont.	Parkersburg, W. Va.	Springfield, Ill.	
Charleston, W. Va.	Green Bay, Wis.	Paterson, N. J.		Branches in Canada
Charlotte, N. C.	Greensboro, N. C.	Peoria, Ill.	Brandon, Man.	Ottawa, Ont.
Chicago, Ill. (3)	Harrisburg, Pa.	Philadelphia, Pa. (2)	Calgary, Alta.	Quebec, Que.
Cincinnati, Ohio (2)	Houston, Tex.	Pittsburgh, Pa.	Edmonton, Alta.	Regina, Sask.
Clarksdale, Miss.	Hutchinson, Kans.	Portland, Maine	Hamilton, Ont.	St. John, N. B.
Cleveland, Ohio (2)	Indianapolis, Ind.	Portland, Oregon	Lethbridge, Alta.	Saskatoon, Sask.
Columbus, Ohio	Jackson, Mich.	Pottsville, Pa.	London, Ont.	Toronto, Ont.
Council Bluffs, Iowa	Jacksonville, Fla.	Poughkeepsie, N. Y.	Montreal, Que.	Vancouver, B. C.
Dallas, Tex.	Jersey City, N. J.	Presque Isle, Maine	North Battleford, Sask.	Winnipeg, Man.
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INTERNATIONAL HARVESTER COMPANY

180 North Michigan Ave. Chicago 1, Illinois

