

The tradition with a future



ROYALE

By DIAMOND REO

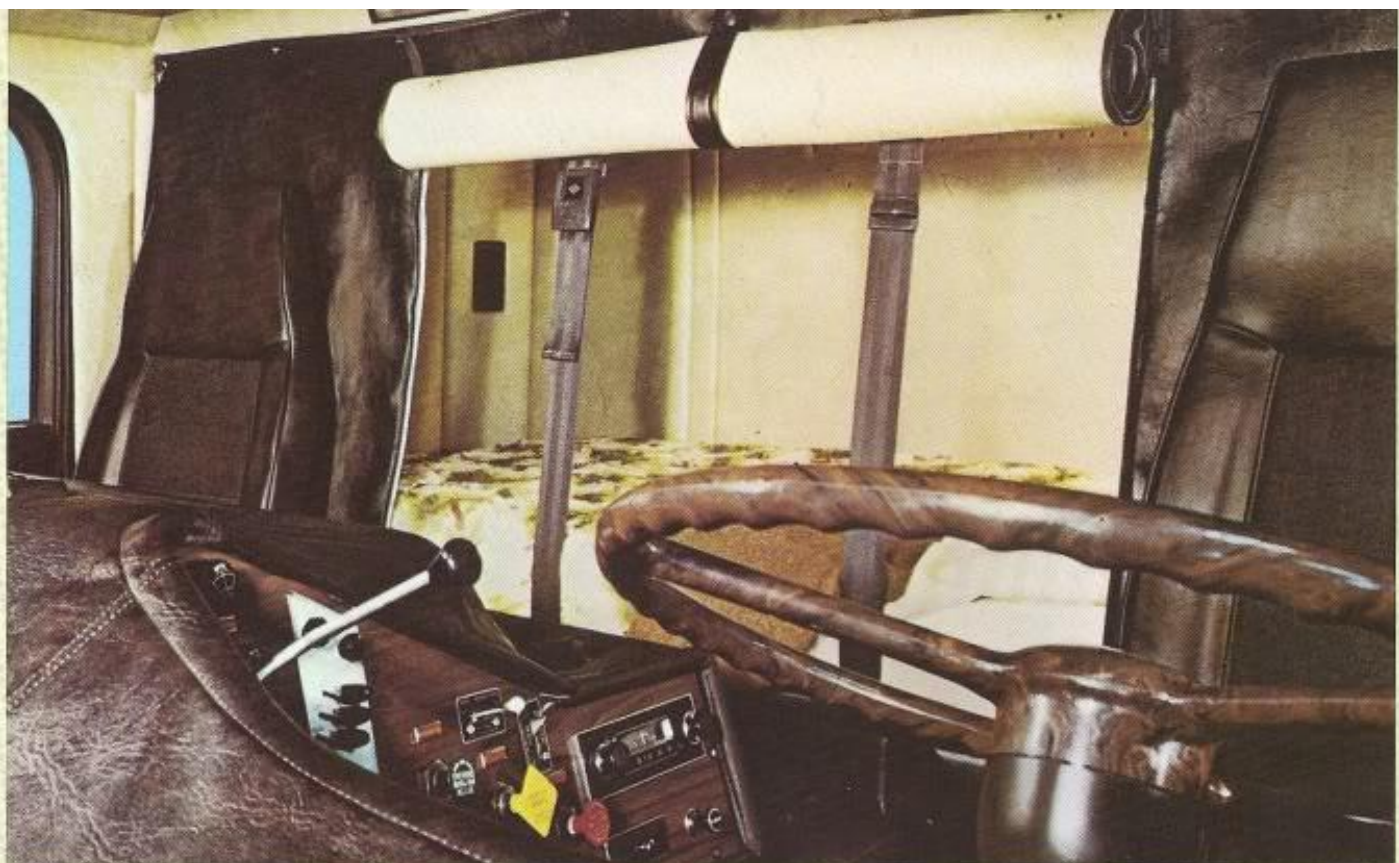


the uniqueness of Royale

- ✓ sturdy four point cab mounts
- ✓ the most reliable, serviceable instruments
- ✓ tilting steering column
- ✓ right-hand safety mirror
- ✓ flow-thru ventilation
- ✓ super, thin, lightweight windshield
- ✓ air controlled pantographic wipers
- ✓ Interior air conditioner
- ✓ nut-and-bolt frame
- ✓ hydraulic 90° tilt cab
- ✓ super lightweight design and construction



DIAMOND REO TRUCKS, INC., LANSING MICHIGAN 48920
"The world's largest and most experienced independent heavy duty truck builder"



Relax in the lap of luxury . . . on six inch thick coil spring mattress, 36" x 78" . . . enjoy your favorite magazine with the light from an "eyeball" swivel reading lamp

. . . stay cool in summer, warm in the winter as separate air ducts to the sleeper compartment keep it comfortable at all times . . . a three-piece heavy duty vinyl curtain assures privacy

. . . the sides, back wall and roof are padded in a handsome embossed beige vinyl . . . separate speakers (optional) bring in your favorite radio programs.

The world's widest selection of power train options

Royale is available with Caterpillar, Cummins and Detroit Diesel power up to 475 horsepower. A full range of heavy duty, performance proven Fuller and Spicer transmissions. Weight saving aluminum transmission cases available in many cases.

Clutches: Long-lived, rugged Spicer 14" two-plate clutch is standard with a 15½", two-plate optional.

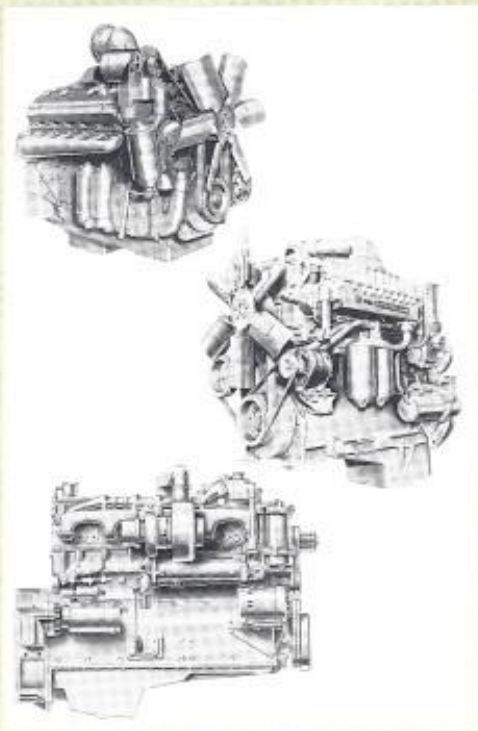
Rear Axles: Select either single Eaton or Rockwell rears from 23,000 to 34,000 lbs., both single and two-speed, hypoid and spiral bevel, single and double reduction. By the same token, Royale is available in tandem model from 34,000 lbs. to 44,000 lbs. with both Rockwell and Eaton axles . . . single and double reduction with or without inter-axle differential, spiral bevel and hypoid. Cast spoke and

disc (aluminum and steel) at your option. Stemco Oil Seals are standard with Royale.

Suspensions: Select from Hendrickson, Page, Rockwell, Reyco and Neway suspensions — there is one that will be ideal for your operation.

Rear Springs: Vari-rate rear springs are standard on Royale 54. Vari-rate springs assure maximum driving comfort, for as the truck is loaded and the springs deflect, the spring slides in the spring hangers becoming shorter, more rigid and thereby increasing the load carrying capacity.

Progressive front springs are standard, while lightweight taper leaf springs are optional with 12,000 lbs. front axles. The taper leaf springs will save you more than 100 valuable pounds.





Royale... the tradition with

Diamond Reo invites you to step into the future with Royale, an entirely new line of diesel powered COE trucks and tractors for the discriminating operator. Royale, available in a 54" BBC non-sleeper version as well as an 88" sleeper model, is the cab-over built on more heavy-duty truck experience — 130 years — more than any other manufacturer can muster.

Royale offers you the thousand and one things you have wanted in a big, COE diesel but have never been able to find in one model before . . . grace, power, durability, comfort, serviceability, quiet performance, class, economy. Royale continues in the Diamond Reo tradition of excellence, conceived and built for tomorrow.

The panoramic instrument console surrounds you in all the elegance of a luxury passenger car. Yet, Royale is more. It is a precision-built machine engineered for years of profitable service. One glance at the instrument panel confirms it. The bold, new gauges are a Diamond Reo exclusive and promise the driver the utmost in visibility and reliability.

Warning lights are incorporated into the low oil pressure, low air pressure and high water temperature gauges for positive identification of any hazard condition. The visual warning system is backed up with an optional audible warning system.

For safety, all instruments and controls are located in strict compliance with SAE/RCCC recommendations, while all switches are a rocker-type design, imprinted and illuminated with functional identification.

The non-glare, walnut-grain instrument console compliments the entire decor of Royale. The cab interior is a tasteful combination of rich, deep brown on the lower half of the cab with a contrasting beige on the upper portions. The standard floor mat is a rugged, dark brown vinyl with a thick respond insulation backing or, if you prefer, a deep pile carpeting is optional.

While super-comfort, high back Bostrom seats are standard (suspension for the driver, stationary for the companion), a full line of National and Bostrom models are offered.

The clutch, brake and accelerator pedals are suspended for operating ease.



a future



The Royale instrument package is designed for maximum serviceability. Simply remove two screws on the front of each gauge, pull out and release the quick disconnect plug on the rear side of the gauge, and it is free for bench repair or replacement. Likewise, the speedometer and tachometer can be replaced quickly. In addition to the quick-release plug on the back, a second plug on the bulkhead allows the mechanic to replace the speedometer or tachometer cable in minutes.



An adjustable, tilting steering column with an infinite number of positions insures that the steering wheel is always properly positioned. The tilting column, an option, has a travel range of 20°.



For those long lonely hauls, Royale can be equipped with a variety of radio/stereo combinations . . . AM/FM or either band separately or in combination with a stereo tape deck. The antenna is an integral part of the roof and concealed within it.

Safety first. Royale instruments are easy to read day or night. The numerals and letters are white, highlighted against a black background with a fire orange indicator for positive identification on the brightest days. At night, proper illumination is assured with rheostat controlled lighting.

Twin coffee cup holders, a coin pocket, an open "glove" compartment that is ideal for trip tickets plus two separate map pockets are but a few of the many "standard" extras built into Royale. The list includes two ash trays, combination fresh air heater and defroster with a capacity of 40,000 b.t.u.'s with separate controls in the sleeper compartment, cigarette lighters on both sides of the engine housing, dual sun visors (each with storage pocket), arm rests and grab handles, and individually locking doors. Open either door and the dome lights as well as an outside-the-cab courtesy light goes on. The owner may specify an optional, electric, remote controlled right hand window. No need to reach across the doghouse to raise or lower the window in a Royale.

MIRRORS — Dual stainless West-Coast mirrors are standard.

WINDSHIELD — The large two-piece, tinted windshield is super thin, yet it offers superior resistance to stones and

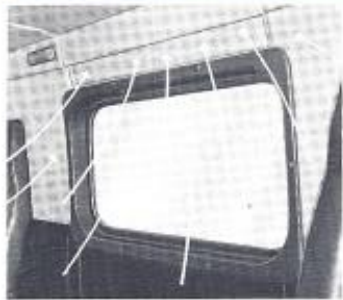
other objects thrown up off the highway. This is a Royale exclusive.

WINDSHIELD WIPERS — Royale is the industry's only cab-over with dual, individually air controlled pantographic wipers for maximum visibility. There is

a three quart capacity container for washer solvent inside the cab with hinged base for easy refill.

INTERIOR AIR CONDITIONING SYSTEM — Gone is the exterior mounted air conditioning. The 19,000 b.t.u., optional air conditioning system is located within

the same cover as the heater atop the engine housing, concealed beneath the rich vinyl interior trim.



ALL WEATHER VENTILATION keeps the cab air-fresh and comfortable. Air flows in through the heater vent windows or side door vents out thru a one-way ventilation panel on the back of the cab. A Diamond Reo first is the flow of defroster air thru vents in the windshield pillar post which assures clear side windows.

HIGH EFFICIENCY COOLING SYSTEM — Diamond Reo has engineered the cooling system for diesel power to 475 h.p., operating under the most demanding conditions.

OIL AND COOLANT FILL — The coolant level sight gauge and radiator cap can, of course, be checked from the front without tilting the cab. Oil check and fill

is at the right rear of the cab and is readily accessible. Both the coolant and engine oil may be added without tilting the cab.

ACOUSTICAL BARRIER — A one-inch, lead impregnated foam pad with plush vinyl trim forms a cocoon around the

engine house deadening sound to conversation levels and minimizing heat transfer.



ENGINE COVER AND FLOOR STRUCTURE — Lightweight, strong .100" thick aluminum forms the engine cover and the floor structure. The aluminum sub-structure is constructed of aluminum channel that is slip fitted and securely welded.

FOUR-SPLINE STEERING SHAFT—Long life, Spicer Glidecote steering shaft seldom requires relubrication in normal use. A standard plus on Royale.

DOORS — The doors of Royale are 35" wide for easy access, are constructed of lightweight aluminum and are mounted

to the cab with full length piano-type hinges.

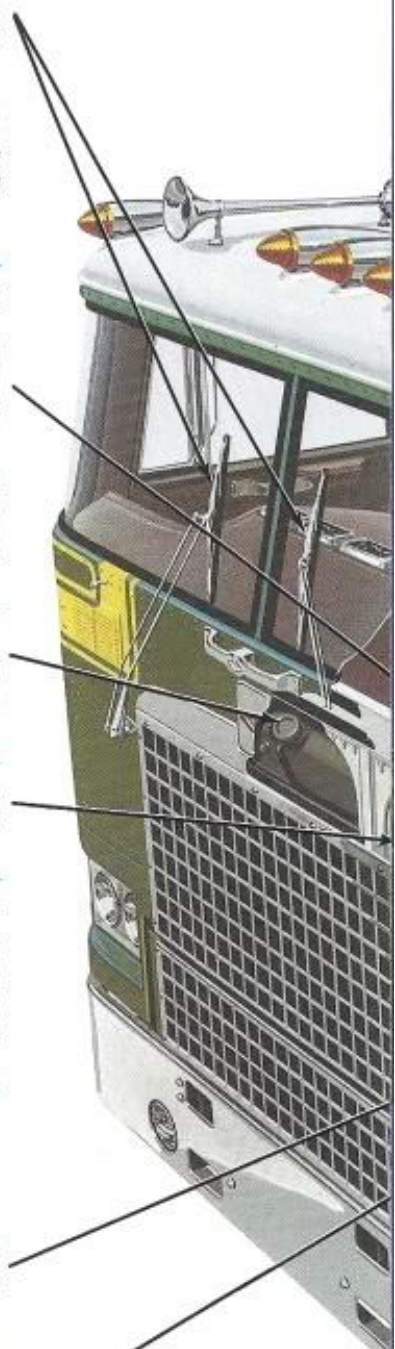
EASY ACCESS — Double grab handles on both sides together with open grid aluminum steps for positive footing as-

sure easy access to the cab. Recessed door latches are located on the cab near the bottom of the door within easy reach.

FUEL SAVINGS DESIGN — Royale is engineered to minimize fuel consumption. The cab's aerodynamic design cuts

wind resistance and keeps the side windows clean.

RUNNING LIGHTS — lamps are standard five bullet-type lamp and signals are side faced lamps. Four lights are standard.



- Pedestal marker with the option of s. Directional/haz-mounted, double-beamed beam head-

RIGHT-HAND SAFETY MIRROR — A Diamond Reo exclusive is this CONVEX mirror to provide the driver with a wide view along the right side of the cab.



CENTRALIZED ELECTRICAL SYSTEM — Trouble-shooting the Royale electrical system is made easy in that all exterior harnesses lead to one of three master plugs located inside the cab away from the elements. Sure-lock electrical plugs

LIGHTWEIGHT CAB STRUCTURE — Royale is the long distance cab — Lightweight but strong. Extensive testing by an independent laboratory and Diamond Reo indicate that the cab will provide years of trouble-free service. The entire frame is built of aluminum channel (1 3/4" and 3" vertical sections and 3" horizontal and roof sections), slip fitted and

STURDY CAB MOUNTS — A unique four-point system assures the smoothest of rides. On extremely rough roads or off-highway, the cab rear mounts will offset mechanically up to 1 1/8 inches to reduce transferring to the cab deflections in the frame. The result is a more comfortable ride plus longer cab life. Both the front and rear mounts are made of strong, lightweight cast aluminum.



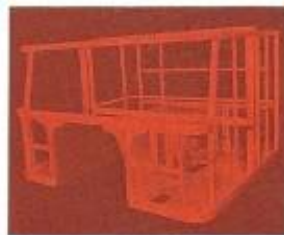
LONG LIFE EXHAUST SYSTEM — Both single and optional dual systems are available. The vertical stacks are frame

INSULATION — The roof, side walls and back of cab have 1 3/4" of glass wool to lock out road noise and the worst wind,

SINGLE PIECE ROOF — A single moulded piece of fiberglass forms the

minimizes the effects of vibration throughout the entire system. Each electrical wire is stamped at two-inch intervals with the circuit number for ease of identification.

welded together, then covered with .050" aluminum. All areas are sealed with a vinyl, adhesive strip that reduces sound levels inside the cab and locks out the elements. The special designed rivets resist the severest vibration under the most demanding road conditions, yet can be easily removed if required.



90° TILT CAB — The cab may be tilted a full 90° for complete service accessibility. Dual hydraulic cylinders raise and lower the cab. In addition, a hydraulic controlled latch must be manually released, an extra safety feature, before the cab can be tilted.

STORAGE COMPARTMENT — There are two large storage areas under the sleeper. Each compartment is lighted when you open the door and the doors are equipped with inside the cab locking devices.

NUT-AND-BOLT CONSTRUCTION FRAME — The Royale starts with two full depth side rails of heat-treated steel or premium aluminum. Crossmembers, I-beam engine support and sections are held in place with SAE Grade 8 bolts. Full interchannels are available. Select wheelbases in six inch increments from 116" for single axle models to 206" on tandems.

mounted for a quieter ride and longer life.

rain and snow. The floor has a special half inch sound deadening and insulation material.

roof and is "welded" to the frame with epoxy for an air-tight, watertight fit.

LIGHTWEIGHT COMPONENTS for maximum payloads

ALUMINUM COMPONENTS

- Frame side rails
- Axle stops tandem
- Cross members
- Bumper
- Radiator inlet and outlet fittings
- Air compressor housing
- Engine rear brackets
- Engine flywheel housing
- Engine gear cover
- Engine intake manifold
- Engine oil pan — (Cummins only)
- Engine rocker cover — (Cummins only)
- Fan spacers
- Air intake and muffler cab mounting brackets
- Fuel tank(s)
- Front springs front and rear hangers
- Rear spring front and rear hangers (single axle)
- Front spring shackles
- Spring clip saddles (single axles)
- Suspension saddles (rubber suspension) tandem
- Walking beams tandem
- Steering gear housing
- Battery box
- Air brake manifold junction block
- Relay valve housing
- Breakaway valve housing and trailer hose glad hands (tractor)
- Front cab supports — left side includes clutch support
- Brake valve and treadle
- Water filter housing
- Aluminum vane radiator shutters
- Windshield wiper motor housing
- Transmission bell housing

All of the above are standard on
Royale lightweight models

OTHER STANDARD LIGHTWEIGHT COMPONENTS

- Compact air compressor (Cummins only)
- Fiberglass fan shroud
- Spring type emergency and parking brake
- Rubber suspension (lightweight models)
- O & S straddle mount torque rods
- Air cleaner tubing
- Alternators

ALUMINUM OPTIONS

- Front axle hubs — FF-921 and FE-970
- Rear axle hubs
- Carrier housings — SLHD and SQHD
- Disc wheels
- Transmission cases