REIVER

Designed for world-wide operation
The Albion Reiver is purpose-built to tackle those loads too heavy for a 4-wheeler and uneconomical for a maximum load 6-wheeler. It is another excellent example of Albion’s long experience and ‘know-how’ in the successful design and production of vehicles of the highest possible payload with the minimum unladen weight.

The ‘Reiver’ light 6-wheeled chassis has been designed to operate at a gross laden weight of 15½-tonnes (15,749 kg).

It is a forward-controlled chassis, available with left- or right-hand driving controls, and with single or double drive rear axles. There are three twin-drive models, two for haulage and one for tipping, and three haulage models with trailing axles. The weights, tyre equipment and loadings are tabulated below.

**SOLVES THE PROBLEM**

- Easy access luxury cab with all-round vision
- 50-gallon capacity fuel tank
- Right-or left-hand steering
- Twin-drive hollow axles or single drive with trailing axle
- Epicyclic hub reduction gears
- New 125 bhp. 6-cylinder diesel
- Heavy duty low 6-speed constant mesh gearbox
- Relay gearbox with locking differential on twin-drive models
- Non-reactive p. suspension
- Powerful air/steer hydraulic brake

**OF THE 10 TON PAYLOAD**

**TABLE OF WEIGHTS AND LOADINGS**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Rear Drive Arrangement</th>
<th>Wheelbase</th>
<th>Tyre Equipment</th>
<th>Chassis and Cab</th>
<th>Weight</th>
<th>x Equipment</th>
<th>Payload including Body</th>
<th>Gross Vehicle Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE3SAN (Maulage)</td>
<td>Twin</td>
<td>9½ ft (2.9 m)</td>
<td>9½ ft (2.9 m)</td>
<td>91 cwt.</td>
<td>4,423 kg</td>
<td>5 cwt.</td>
<td>209 cwt. (949 kg)</td>
<td>309 cwt. (1,391 kg)</td>
</tr>
<tr>
<td>RE35AL (Maulage)</td>
<td>Twin</td>
<td>9½ ft (2.9 m)</td>
<td>9½ ft (2.9 m)</td>
<td>91 cwt.</td>
<td>4,423 kg</td>
<td>5 cwt.</td>
<td>209 cwt. (949 kg)</td>
<td>309 cwt. (1,391 kg)</td>
</tr>
<tr>
<td>RE35AT (Tipper)</td>
<td>Single</td>
<td>9½ ft (2.9 m)</td>
<td>9½ ft (2.9 m)</td>
<td>91 cwt.</td>
<td>4,423 kg</td>
<td>5 cwt.</td>
<td>209 cwt. (949 kg)</td>
<td>309 cwt. (1,391 kg)</td>
</tr>
<tr>
<td>RE37AN (Maulage)</td>
<td>Single</td>
<td>9½ ft (2.9 m)</td>
<td>9½ ft (2.9 m)</td>
<td>91 cwt.</td>
<td>4,423 kg</td>
<td>5 cwt.</td>
<td>209 cwt. (949 kg)</td>
<td>309 cwt. (1,391 kg)</td>
</tr>
<tr>
<td>RE37AT (Tipper)</td>
<td>Single</td>
<td>9½ ft (2.9 m)</td>
<td>9½ ft (2.9 m)</td>
<td>91 cwt.</td>
<td>4,423 kg</td>
<td>5 cwt.</td>
<td>209 cwt. (949 kg)</td>
<td>309 cwt. (1,391 kg)</td>
</tr>
<tr>
<td>RE37AT (Maulage)</td>
<td>Single</td>
<td>9½ ft (2.9 m)</td>
<td>9½ ft (2.9 m)</td>
<td>91 cwt.</td>
<td>4,423 kg</td>
<td>5 cwt.</td>
<td>209 cwt. (949 kg)</td>
<td>309 cwt. (1,391 kg)</td>
</tr>
</tbody>
</table>

* Equipment includes spare wheel, tools, water and fuel.
NON-REACTIVE REAR SUSPENSION

This new suspension on the 'Riviera' completely overcomes the disadvantages associated with rocking beam suspension on the rear axles of multi-wheelers.

The front end of each rear spring is anchored to the frame. A system of bell crank levers and tension rods link the rear ends of the springs at No. 1 and No. 2 rear axle on each side of the chassis frame ensuring that the forces at the rear ends of the springs are equalized at all times. The tendency to lose adhesion experienced when sufficient torque is applied to the axles in driving or braking, causing one axle to lift relative to the other, is entirely eliminated. This results in even braking on all wheels, making possible an increase in brake power with equal tyre wear.

The springs themselves are of the normal semi-elliptic type in silico-manganese steel 46 in. (1,168 mm.) in length and 3 in. (88.9 mm.) in width.

POWER-BOOSTED AIR-HYDRAULIC BRAKES

Wheels on all axles are fitted with 'two-leading-shoe' wedge-operated brakes. The footbrace acts on all wheels and is air-pressure assisted hydraulically-operated through two brake chambers with hydraulic master cylinders.

Air pressure is provided by a 2-cylinder air compressor mounted on the engine. The footbrace is coupled direct to the air control valve, which in turn is connected to the air pressure reservoir.

The handbrake of the multi-pull ratchet type operates the same rear wheel shoes as the footbrace by mechanical linkage.

Total effective braking area is 840 sq. in. (5,419 sq. cm.).

TWIN-DRIVEN SPIRAL BEVEL AXLES WITH HUB-REDUCTION GEARING

Designed to withstand the most rigorous treatment, the new axle gives increased strength with reduced weight. The driving pinion is extra large and strong. It drives a rigidly supported crown wheel bevel gear and differential unit. In the hubs, a second reduction is provided by epicyclic gears, combining an induction-hardened sun wheel, which is integral with the axle shaft, and three planet wheels that rotate in a fixed annulus to transmit the drive to the hubs.

Axle shafts are thus lightly stressed, the torque applied to them being three or four times lighter than in a conventional axle. Oil, filled into the centre casing, lubricates the whole axle including the hub gears and the taper roller bearings supporting the hubs.
The cab is of entirely modern design with every feature essential to the vehicle of today. Particular emphasis has been placed on ease of entrance, visibility and driver comfort.

It is a pressed-steel welded assembly based on a rigid sub-frame of deep box-section pressings, combining strength and durability with pleasing lines and styling.

The instruments are grouped in a detachable panel with concealed illumination, mounted centrally in a facia panel, and adjacent to the driver. Provision is made for the installation of a fresh air heater with de-mister, radio, windscreen washers and flashing indicators.

Driving controls are ideally placed and include organ-type pedal accelerator. Floor of cab has rubber mats and pedals and doors are fully draught sealed.

Easy access to the cab is a great feature; one step from the kerb and you're in. The comfortable driver's seat is adjustable vertically and longitudinally. The underside surfaces of cab and wings are treated with weather sealing.

Designed for Comfort - Safety - Durability
The reputation of Leyland diesel engines for economy and reliability is recognized throughout the world. The latest 'Power Plus' series marks a new advance in the design of high-speed engines to give still longer life with low maintenance costs. It has a capacity of 6.52 litres, develops 125 b.h.p. with a maximum torque of 300 lb. ft. (41.4 kg.m.). The entirely new design of cylinder block and head, radial arrangement of cylinder head stud wing and positioning of valve ports ensure a high degree of thermal efficiency.

### CONSTANT MESH 5-SPEED GEARBOX WITH 6th SPEED OVERDRIVE

Tens of thousands of the Albion 5-speed constant-mesh gearbox are in service throughout the world and have proved their ability to withstand the most severe treatment. All gears are of case-hardened nickel-chrome steel, and to ensure silence in operation, helical gears are used for 3rd, 4th and 5th speeds. To improve fuel consumption, or to obtain a higher road speed, a helical-toothed overdrive 6th speed, with a 0.76 to 1 ratio, can be incorporated at an extra charge. A low or high-speed power take-off can be fitted on side of box.

### HEAVY-DUTY RELAY BOX WITH AIR OPERATED LOCKING DIFFERENTIAL

On twin-drive models a relay gearbox is fitted, which divides the drive from the main gearbox into two, thus providing two final-drive shafts. One is coupled direct to the No. 1 axle, while the other passes through the leading axle body via a relay shaft to the second axle. It incorporates a locking differential, controlled from the driver’s cab, for use when ground conditions are difficult, e.g., over soft ground or on ice.