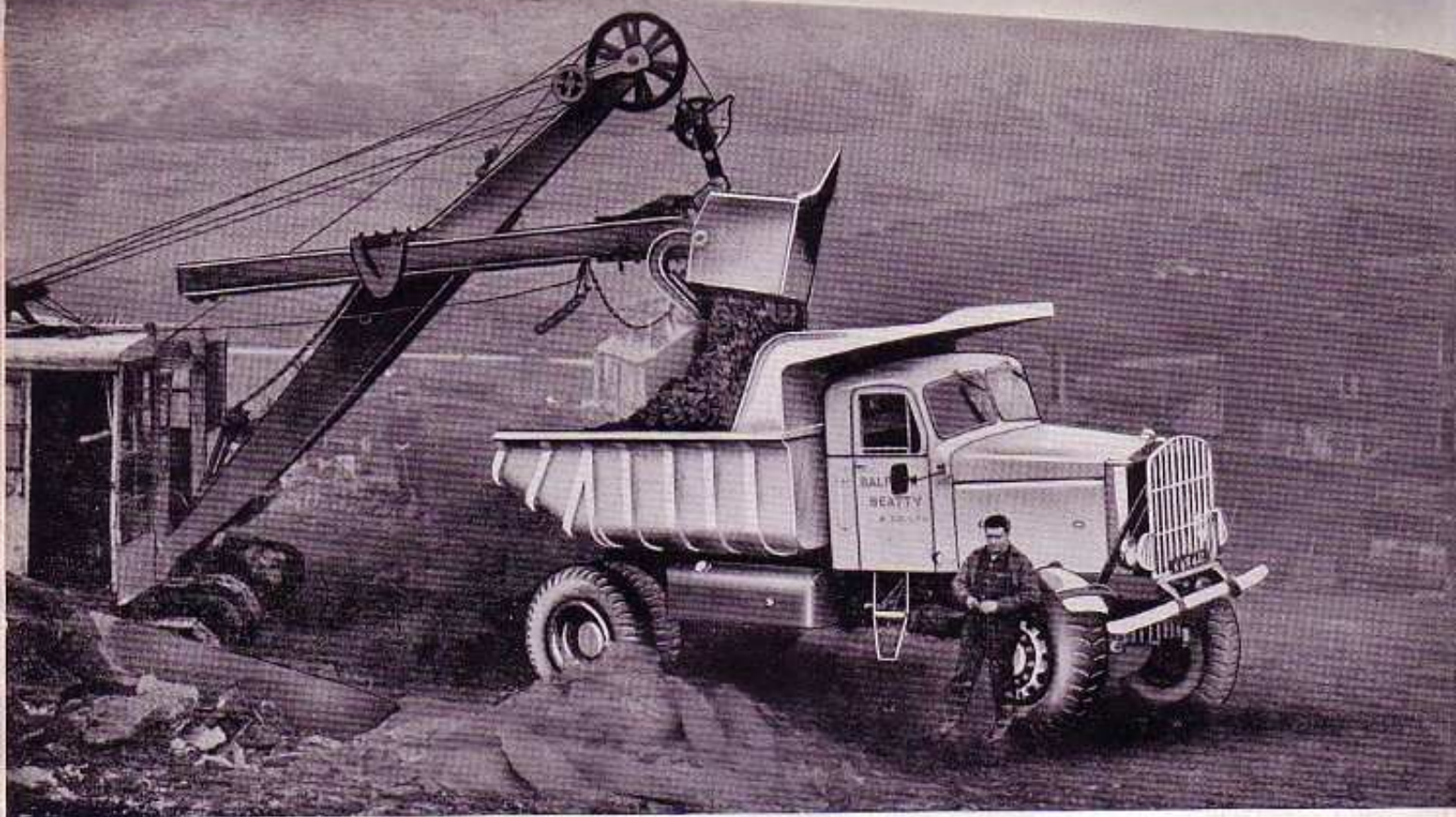


The
SCAMMELL
4 x 4
MOUNTAINEER



Go Anywhere

TRUCK



Tough

because The "Mountaineer" range has been exclusively designed to meet the arduous demands of "off-the-highway" operation. Sound engineering practice, coupled with the finest materials available are embodied in a vehicle that will give long life and reliable service during the toughest assignments.

Powerful

because The six cylinder Diesel engine provides a high power-to-weight ratio, the Scammell six speed constant mesh gearbox and double reduction epicyclic driving axles, ensure that the available power is utilised to the best advantage. The drive being on all wheels, coupled with the unique system of suspension employed, means that the maximum tractive effort is transmitted and exceptionally high efficiency maintained.

Economical

because Elimination of wasted effort by the use of an exceptionally efficient transmission system enables fuel consumption to be kept to the absolute minimum. The generous safety factor used for the design and the robust construction have almost eliminated mechanical failures. The quality of the materials used and the generous proportions of the working parts ensure a long life between overhauls with consequent economy in replacement expenditure.

The SCAMMELL

Go Anywhere



"Mountaineer" 19' Wheelbase Oilfields Truck with a load capacity of 22,000 lbs. showing winch being used to load unitized equipment.



"Mountaineer" 17' Wheelbase Oilfields Motive Unit with bulk cement hopper semi-trailer, load capacity 50,000 lbs.

where

MOUNTAINEER



"Mountaineer" 14' Wheelbase Tractor with drawbar trailer for abnormal indivisible loads. Suitable for gross train weights up to 134,400 lbs.



"Mountaineer" 19' Wheelbase "off the highway" Truck. One of a number operating over virgin territory for carriage of locust balm in Saudi Arabia. 130 h.p. engine provides ample power for trailer towing if necessary.



"Mountaineer" Articulated Timber Transporter 14' Wheelbase Motive Unit with 25 ton extensible Pole Trailer for forestry operation.



"Mountaineer" 17' Wheelbase Tanker. Capacity 2,500 gallons. Discharge by power driven pump through flowmeter.



"Mountaineer" 17' Wheelbase $4\frac{1}{2}$ c. yd. transit Cement Mixer

... ON THE HIGHWAY

SCAMMELL 'MOUNTAINEER'

FOUR-WHEEL-DRIVE FOUR-WHEELER

FRAME. Sidemembers of sturdy channel section in carbon frame steel adequately braced by crossmembers.

ENGINE. Scammell-Meadows 6,DC.630 six-cylinder Diesel direct injection engine. Bore 130 mm. ($5\frac{1}{8}$ "). Stroke 130 mm. ($5\frac{1}{8}$ "). Cubic capacity 10.35 litres (633 cu. in.). 125 B.H.P. at 1,750 R.P.M. governed speed. Compression ratio 16:1. Piston speed 1,490 ft. per min. at 1,750 R.P.M. Maximum torque 420 lb./ft. at 1,000 R.P.M.

ALTERNATIVELY: Gardner 6LWK six-cylinder Diesel direct injection engine. Bore 107.95 mm. ($4\frac{1}{4}$ "). Stroke 152.4 mm. (6 "). Cubic capacity 8.4 litres (513 cu. in.). 112 B.H.P. at 1,700 R.P.M. governed speed. Compression ratio 13.5:1. Piston speed 1,700 ft. per min. at 1,700 R.P.M. Maximum torque 358 lb./ft. at 1,300 R.P.M.

FIRING ORDER. 1, 5, 3, 6, 2, 4 (numbering from fan end).

ENGINE MOUNTING. 3-point mounting on rubber. Positive fore-and-aft location of the power unit is provided.

CLUTCH. 16" diameter. Single dry plate, with ball-bearing release bearing. Fully adjustable for wear. A clutch brake is operated by the clutch pedal and assists rapid upward gear changes.

GEARBOX. Six speeds under control of one lever working in visible gate. All gears except first and reverse are in constant mesh, with sliding dog engagement. Ball and roller bearings are used throughout. A gear type oil pump distributes a low viscosity oil round the box. The gearbox is mounted on rubber at three points and is thereby insulated from chassis distortion. A power-take-off capable of transmitting the full engine torque can be fitted. On the back of the gearbox is mounted the transposing drive for driving the front axle. The drive to the front axle is by means of a dog clutch operated from the driving seat as required (while the vehicle is in motion or stationary). Gearbox ratios: 6.1, 4.07, 2.53, 1.61, 1.00 and .667:1. Reverse 7.8:1. Transposing drive ratio: 1.31:1.

PROPELLOR SHAFTS. Needle roller bearing universally jointed, balanced tubular propellor shafts transmit the drive from transposing box to both front and rear axles.

AXLES. Of spiral bevel and epicyclic type with four-pinion differentials. In the front axle the drive is transmitted to the steered wheels through constant velocity type universal joints. The swivels run on tapered roller bearings. Axle ratio: 10.25:1; alternatively 11.28:1.

HUBS. Cast steel hubs run on tapered roller bearings and carry pressed steel wheels and alloy iron brake drums.

WHEELS AND TYRES. Pressed steel 4-piece wheels carry single tyres on front axle, twin tyres on driving axle. The wheels are secured by nuts and self-locating loose collars to 10 studs each $\frac{3}{8}$ " diameter. Available tyre equipment 11.00-20", 11.00-24", 12.00-20", 12.00-24", 13.00-24", 14.00-20". Twin 14.00-24" on Dump Truck Chassis.

STEERING. Steering gearbox has spiral cam and double roller follower. Drop arm secured to rocking shaft on tapered serrations. Air pressure power assistance is provided giving light operation over all types of surface.

SUSPENSION. The front suspension is by the Scammell rocking front axle, with a centrally pivoted transverse laminated spring; triangulated radius arms ball-mounted to a crossmember locate the axle endwise and allow considerable transverse articulation with no frame distortion. The roll centre, being high, results in no loss of stability. Rear suspension is by laminated springs mounted on the driving axle.

BRAKES. Front and rear brakes are of the floating expander type. Front brakes are of Girling design and are operated by air pressure cylinders operating directly on wedges expanding the shoes. The rear brakes are operated through the medium of a cross-shaft upon which the main air pressure cylinder operates. Pressure is generated by a 2-cylinder air cooled compressor, belt-driven from the engine crankshaft. The air is stored in a large capacity reservoir, and an unloader valve is arranged to connect compressor delivery to atmosphere at a pre-set reservoir pressure. The foot pedal operates a reaction type valve which regulates the air pressure to the cylinders in proportion to the pressure on the pedal.

RADIATOR. This is of special Tropical design, being fitted with Clayton Still cooling tubes. It is flexibly mounted to the chassis frame.

CAB. Centrally positioned or offset to right or left according to controls. Of pressed steel construction with sloping Vee windshield and well rounded contours. Both halves of the windscreen can be opened and the door windows are adjustable. A roof shield provides protection from direct sun.

CONTROLS. Right or left hand available. Steering by 20" wheel. Air-pressure assisted. Centrally placed gear change lever in visible gate, the power-take-off lever, when supplied, is adjacent. Manually operated parking brake.

FUEL TANKS AND FILTERS, ETC. A 50-gallon (Imperial) capacity fuel tank is provided with a strainer in the filler neck. The suction pipe draws through a gauze strainer mounted on a detachable cover in the bottom of the tank. The lift pump delivers fuel to two filters and thence to the injector pumps. The injector pumps deliver to the nozzles clamped in the cylinder heads.

INSTRUMENTS AND ACCESSORIES. Engine and air compressor draw air supply through a large capacity oil bath type air cleaner. From the air reservoir a cock-controlled off-take is provided, together with 20-ft. of pressure hose for tyre inflation. Couplings for trailer brake operation can be provided. Instrument panel fitted with speedometer incorporating distance record, and pressure gauges for engine lubricating oil, gearbox lubricating oil, and air pressure for brakes and power steering. An ammeter with centre zero is fitted. Twin air windshield wipers and twin electric horns are fitted. A fuel gauge is mounted in the side of the fuel tank.

ELECTRICAL EQUIPMENT. A $\frac{5}{8}$ " diameter positively engine-driven generator is regulated by compensated voltage control board. The voltage is 24 and the lead-acid batteries are of 97 amp. hour capacity. One tail lamp, two head lamps, arranged to dip and switch, and a pass-light or fog lamp are the normal lamp equipment. If desired, a revolving searchlight may be fitted and also plugs and sockets for electrical connections to trailer. All wiring double pole.

AVAILABLE WHEELBASES. 14' (168"); 17' (204"); 19' (228").

- VEHICLE TYPES AVAILABLE.**
- a. 14' W.B. 8/10 cu. yard Dump Truck.
 - b. 14' or 17' W.B. Motive Unit with fifth wheel.
 - c. 14' W.B. Tractor for towing drawbar trailers.
 - d. 17' or 19' W.B. Oilfields Truck with special body.
 - e. 14', 17' or 19' W.B. Cross-country Load Carrier with body to suit specific requirements.

GROSS VEHICLE WEIGHT — 20 TONS 44,800 lbs.

GROSS TRAIN WEIGHT — 60 TONS 134,400 lbs.

POWER DRIVE FOR AUXILIARIES. A split transmission type of power take-off can be provided on the 17' and 19' W.B. models. The drive is taken to the front or rear and a choice of ratio varying from 1.5 step up, through 1 to 1, to 1.5 reduction is available. All gears including reverse can be utilised.

On the 14' W.B. model the power take-off is driven by means of a gear from the reverse idler in one direction only with main gear box in neutral. Suitable for intermittent duty at full engine torque.

PERFORMANCE DATA WITH 20-TON GROSS WEIGHT

Tyres: 12.00 x 24" - 14 ply Rating. Axle ratio: 10.25:1. Transposing box ratio: 1.31:1. Rolling radius: 23.48". Revs./mile: 435.

MEADOWS 6,DC.630 DIESEL ENGINE. — Max torque: 429 at 1,000 r.p.m., and max. b.h.p.: 125 at 1,750 r.p.m. (at sea level).

Gear	Gearbox Ratio	Overall Ratio	Assumed Efficiency	Speed at Max. r.p.m.	Tractive Effort	Climbable Gradient with 30 lbs. R.R.
1	6.1	81.9	90%	2.99	15,830	1 in 3
2	4.07	54.7	90%	4.47	10,570	1 in 4½
3	2.53	34.8	92%	7.2	6,720	1 in 7½
4	1.61	21.6	92%	11.33	4,265	1 in 12½
5	1.0	13.43	92%	18.2	2,652	1 in 22
6	.667	8.95	92%	27.35	1,766	1 in 39

**Whatever the load
Whatever the road
There's a SCAMMELL
*for the job!***

"Mountaineer" 14 ft. Wheelbase Dump Truck effectively illustrating its 73° angle of tip and clean discharge of load from the 8/10 cubic yard capacity body.

