

FAGEOL
BILL-BUILT
SIX-WHEELER

Single-Driver
1026

Dual-Driver
1046

GOLDEN BEAR



MANUFACTURED BY **FAGEOL MOTORS COMPANY** OAKLAND, CALIFORNIA



**VARIED TASKS
WELL DONE**
STEEL for mountain bridges,
building supplies for civic
progress, power line mate-
rials to span desert wastes,
cream for a city's break-
fast, excavation work and petro-
leum transports... in every
field where varied tasks de-
mand reliable and efficient
equipments, there you will
find Fageols.



Aluminum Alloy Construction

IN DEVELOPING the six-wheel aluminum truck chassis, the Fageol Motors Company has not forgone its policy of building motor trucks especially adapted to western hauling conditions, but rather, has contributed the most outstanding advancement toward increasing the net pay-load of heavy duty trucks over anything attempted by the industry since the advent of the compound transmission and the six-wheel, four-wheel drive truck.

In these days when operators are faced with the facts of highway weight limits and small profit margins, the matter of structural dead weight has become a serious problem. It slows up schedules, requires extra power to move and takes its toll of profit at every turn of the wheel.

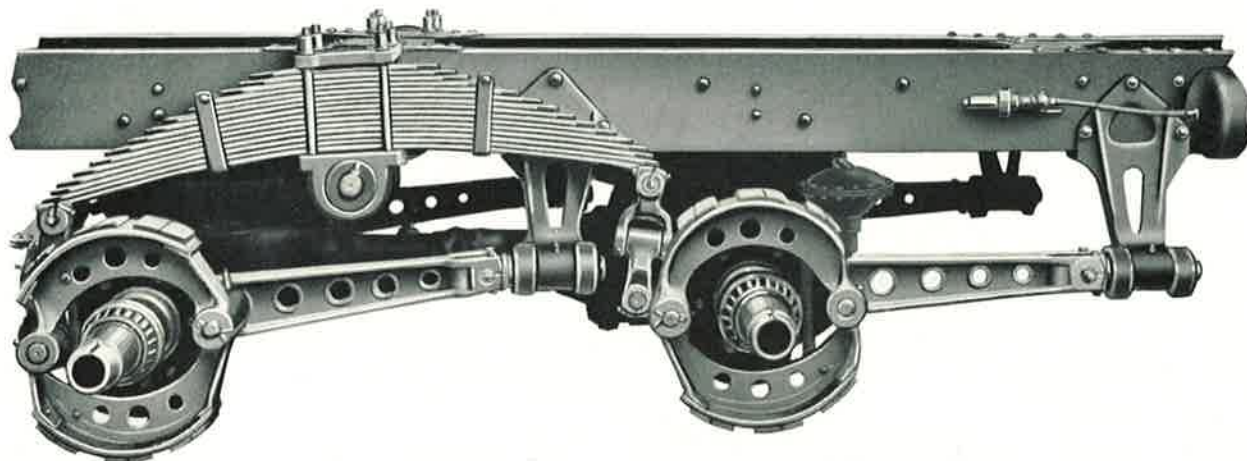
With the heat-treated aluminum alloy construction, we are offering truck operators more pay-load per pound of truck at an additional first cost that is very reasonable when compared with the extra revenue earned—and it is backed up by the Fageol guarantee. The tensile strength of this heat-treated aluminum alloy is equal to that of the best grades of steel. It is a versatile metal and in the Fageol six-wheel chassis

design its use has been extended to include the entire frame construction, frame brackets, special Fageol three-piece rear axle housings, front and rear hubs, brake shoes, brake spiders, brake diaphragms and brackets, radius rods, cab, hood, fenders and radiator shell. An example of the tremendous saving in chassis weight effected by the use of aluminum alloy may be had by a comparison with that of the chassis weight in steel:

Weight of steel construction chassis with cab and dual tires on both rear axles (Model 1046)	14,100 lbs.
Weight of aluminum alloy chassis with aluminum cab and dual tires on both rear axles (Model 1046)	11,629 lbs.

Total saving in weight or extra net pay-load..... 2,471 lbs.

The six-wheel aluminum alloy construction is the result of many months of experimenting and exhaustive tests by Fageol engineers. The perfecting of this design is a typical example of Fageol ingenuity in its unceasing endeavor to produce better transportation equipment to meet the many and varied types of operating conditions of the West—to perform economically and earn greater profits for Fageol owners.



Spring Suspension

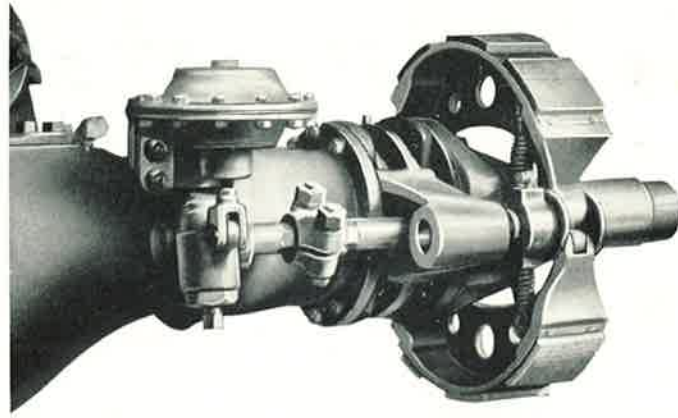
FACEOL six-wheel construction embodies a unique principle of spring suspension whereby each of the two driving axles are hooked up as though they were independent units. The springs are mounted in the center to a trunnion which is built integral with the frame and by this method an oscillating movement is permitted and the springs assume the same action as a "walking beam."

The spring eyes are connected to the rear end of each

radius rod by means of double-acting spring shackles. In addition to the movement necessary to compensate for spring deflection, these spring shackles provide for a lateral movement that relieves the springs of torsional twist caused from road irregularities. Further, this lateral movement comes into play very effectively in conjunction with the lateral "slip" movement provided in the radius rod journals on the axle housing when making turns.

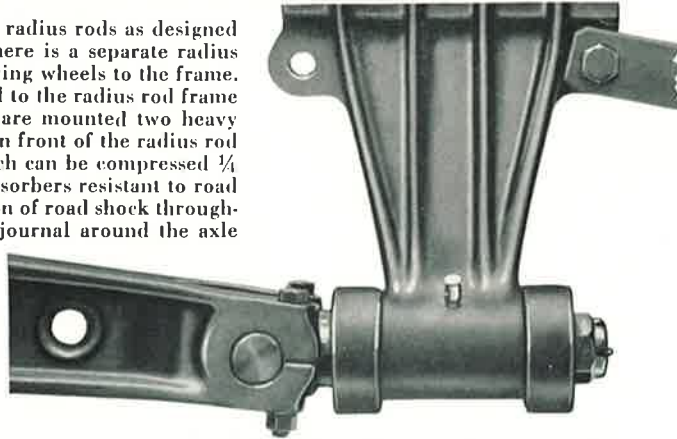
Brakes

Two important things are accomplished in the brake assembly on Fageol six-wheel models. First, the axle driving assembly, consisting of the worm, worm wheel and differentials, are relieved of all braking torque. Second, all braking torque is distributed to the frame and load through the radius rods. Fageol engineers accomplished this by mounting the Westinghouse air brake units on separate castings that are bolted to the inner flange of the radius rod journal. The brake spiders are bolted to the outer flange of the radius rod journal. The brake camshafts running from diaphragm plungers to the brake shoes pass through the radius rods. In this manner, each radius rod and brake mechanism assembly forms a complete unit, one to each rear driving wheel. This construction permits positive braking contact and eliminates brake "grabbing."



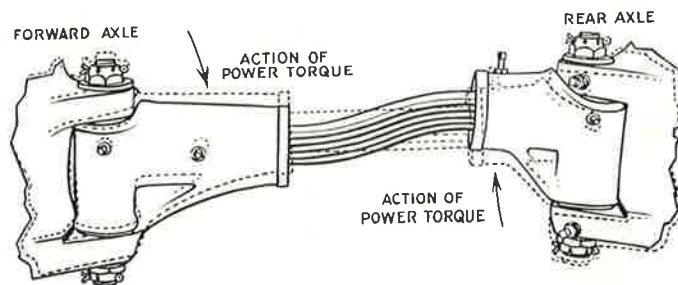
Shock-Proof Radius Rod Construction

THE CONSTRUCTION and mounting of the radius rods as designed by Fageol engineers are outstanding. There is a separate radius rod connecting each of the four rear driving wheels to the frame. The front of each radius rod is connected to the radius rod frame bracket by a swivelled pin upon which are mounted two heavy gum rubber shock absorbers—one in front of the radius rod bracket and one in the rear, each of which can be compressed $\frac{1}{4}$ inch. Not only are these rubber shock absorbers resistant to road irregularities, but aid in equal distribution of road shock throughout the spring linkage. The radius rod journal around the axle housing has been so designed that a lateral "slip" movement amounting to about $\frac{1}{4}$ inch is permitted, which relieves springs from torsional twist caused from road irregularities. This lateral "slip" also permits enough flexibility so that each pair of driving wheels track when making turns. Consequently, the vital parts of the driving unit are relieved from shock and strains to a great degree, resulting in long life to working parts. The lateral "slip" movement is one of the three factors that have resulted in very high tire mileage being secured by operators of Fageol six-wheel motor trucks.



Advantages of Fageol Patented Torque Spring

1. The flexibility of the torque spring allows a slight rotation of the axles as the driving torque is applied, so that each axle finds its own driving center and equal distribution of power torque is obtained.
2. Keeps both axles in alignment at all times.
3. By sliding free in the one knuckle sleeve, a telescoping action is permitted to compensate for deflection in the torque spring and separation of axles under spring deflection when loaded.
4. Permits a rotating action to allow for difference in wheel angularity caused from uneven road conditions.
5. Torque spring knuckle sleeves are mounted to axle housings by vertical pins. Under extreme conditions of wheel angularity a slight lateral movement of the torque spring and knuckle sleeve assembly is necessary to relieve strain from the axle housing. This lateral movement aids the four driving wheels to track when turning.

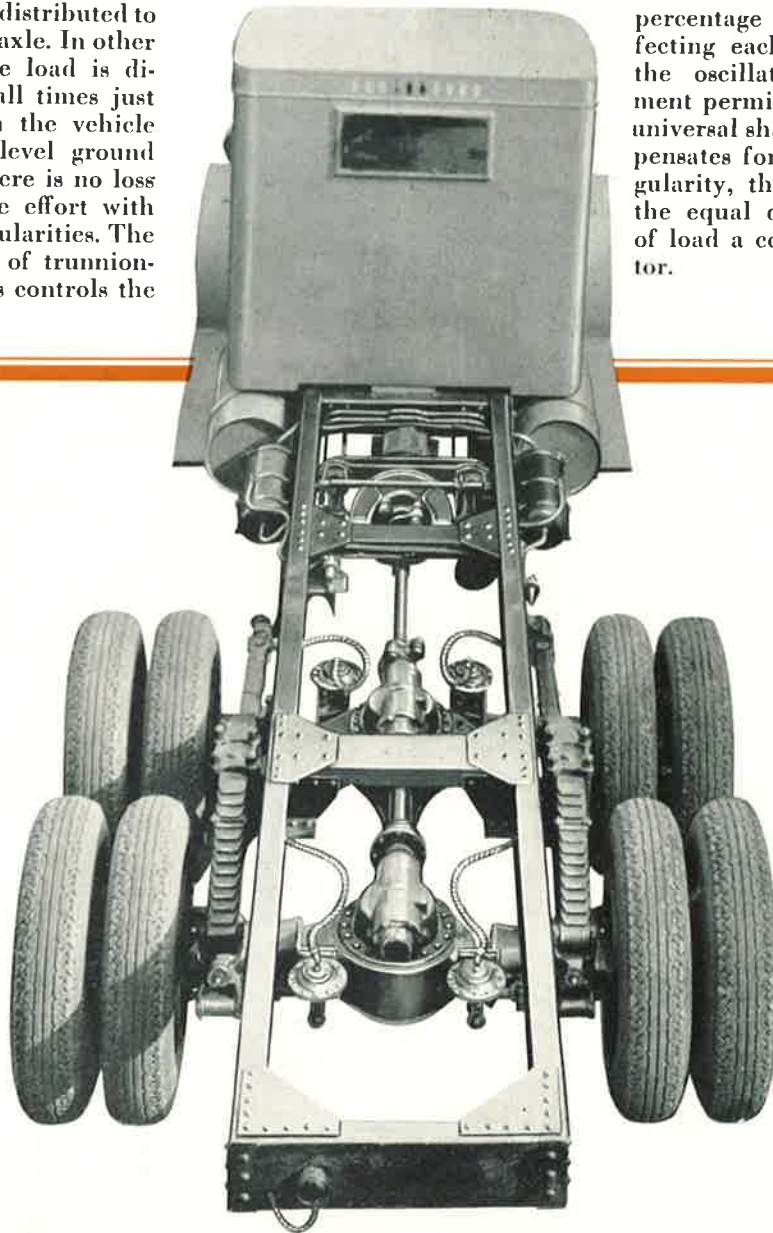


«« The only complete factory designed and built six-wheel truck available either as a "Single-Driver" or "Dual-Driver" in the same chassis

THE FACEOL SIX-WHEEL TRUCK is a startling improvement over all other methods of double rear axle hookups, regardless of whether power is applied to one or both rear axles. The theory embodied in this design is a perfection of all six-wheel principles—principles which have definitely established the economy and efficiency of this type of installation. There are two types of drive available in all Fageol six-wheel models, which, for purposes of distinction, are known as "Single-driver," and the "Dual-driver." The basic construction, which represents an integral part of the engineering of the truck, is the same for both types of drive. The outstanding feature of this construction is its adaptability for change over from either a "Single-driver" to a "Dual-driver" or from a "Dual-driver" to a "Single-driver," as operating conditions dictate, all of which can be done in a minimum of time and without disturbing the rear axle hookup in any way.

The two axles are connected by the patented Fageol torque spring, which has many advantages over the conventional type of rigid connection. This torque spring is an important "safety valve" against material shocks, serious unit damage, or perhaps complete destruction of the driving assembly. When power impulse is applied, there occurs an immediate flexing of the torque spring connector, permitting a sufficient axle rotation to dissipate unnecessary initial shock and the proper division of tractive effort is accomplished. The type of construction and hookup of the two rear axles is such that under all kinds of conditions and no matter what position the wheels are in, the same percentage of gross load is equally distributed to each rear axle. In other words, the load is divided at all times just as though the vehicle were on level ground so that there is no loss of tractive effort with road irregularities. The mounting of trunnion-
ed springs controls the

percentage of load affecting each axle and the oscillating movement permitted by the universal shackles compensates for wheel angularity, thus keeping the equal distribution of load a constant factor.



SPECIFICATIONS

Fageol Six-Wheel "Single-Driver" and "Dual-Driver"

MODELS 1026 and 1046

MAXIMUM GROSS WEIGHT ALLOWANCE.....Model 1026—32,000 lbs.
(Chassis, body and load) Model 1046—40,000 lbs.

CHASSIS WEIGHT.....Model 1026—13,700 lbs.
Model 1046—14,100 lbs.

FRAME—Pressed steel channel, 8½-inch web, 4-inch flange, ⅜ inch thick.

WHEELBASE—231½ inches, standard; optional for dump body, 183¾ inches.

MOTOR—Six-cylinder Waukesha. Bore, 4½ inches; stroke, 5¾ inches; S.A.E. horsepower, 48.6, actually develops 110 at 2,000 R.P.M.; displacement, 549 cubic inches; maximum torque, 330 foot pounds at 1,000 R.P.M. Genuine Ricardo head, full pressure lubrication, Hall-Winslow oil filter. "Silv-O-Lite Special" aluminum pistons.

CARBURETOR—Zenith, model 116½ AX.

IGNITION—Delco-Remy distributor, generator and starting motor; distribution through heavy duty truck type battery, 12-volt system.

COOLING—Tubular radiator core; four-piece rustproof cast aluminum housing, highly polished; cushioned to frame by thermoid rubber pads. Water circulated by pump. Double "V" belt-driven fan.

CLUTCH—Brown-Lipe.

TRANSMISSION—Brown-Lipe, Model 714, four speed, direct on fourth; low ratio, 5.18 to 1; reverse, 5.75 to 1; used in conjunction with Brown-Lipe Model 60 three-speed compound.

DRIVE SHAFT—Three section; first section, Spicer with 600 series universal joints; second section, Peters 700 series; Spicer shaft connecting two driving axles with 600 series universal joints.

FRONT AXLE—Timken drop forged "I" beam section. Timken wheel bearings.

REAR AXLE—On the Model 1046, "Dual-driver," two patented "Synchro-Drive" special nickel steel cast housings with Timken 66700 series differentials. Axles connected by Fageol patented torque spring. On the Model 1026, "Single-driver," a double reduction or worm driving assembly can be furnished as ordered.

AXLE RATIO—To suit operating requirements.

BRAKES—Westinghouse air. Separate diaphragms operate on each of the four driving wheels. Total braking area, 504 square inches. Hunt-Spiller gun-iron cast drums. "Tru-Stop" 16-inch emergency brake mounted on rear of compound transmission, with total area of 123.25 square inches. Steel to steel brakes optional on request.

SPRINGS—All leaves chrome-vanadium steel; front size, 42½x3; rear size, 49½x4; rear springs mounted on frame trunnions, connected to axles by double-acting spring shackles.

RADIUS RODS—Separate radius rod to each driving wheel, journaled to axle housings. Front ends connected to frame brackets by swivel pins, protected from shock by rubber bumpers.

CONTROLS—Left-hand drive with transmission and emergency brake levers at center; separate lever for using compound gears; spark and throttle levers mounted on steering wheel; improved foot accelerator. Right-hand drive optional.

STEERING GEAR—Ross cam and lever type with large diameter steering wheel. Steering post set to give maximum driving comfort. Ball thrust bearings.

CHASSIS LUBRICATION—Alemite high pressure system to all working parts.

FUEL SUPPLY—Two twenty-five gallon tanks mounted on side of frame. Stewart Vacuum System, special four gallon tank.

WHEELS—Budd steel disc. Spare wheel furnished.

STANDARD TIRE EQUIPMENT—Model 1026: 9.00-20 balloon tires front, dual on "Driver" axle, single tires on "Idler" axle. Model 1046: 9.00-20 balloon tires front, dual on both rear axles.

ELECTRICAL UNITS—Electric headlights, electric horn, electric tail light and dash light.

STANDARD EQUIPMENT—Steel front bumper; crown type fenders; speedometer; motometer; hinged hood; metal dash; tow hooks on front; tool kit; grease gun; wheel wrenches; heavy duty jack; oil can and tire carrier. *Note*—Tire carrier not furnished on dump trucks.

CAB—Fully enclosed or half door optional at extra cost. Constructed entirely of steel; cushions upholstered in genuine leather over deep coil springs. Built for utmost driver comfort.

SPECIAL EQUIPMENT AT EXTRA COST—Fishplated frame; Westinghouse trailer connection; draw bar; Waukesha, 5x5¾ Model "RB" motor, and other specials.

Note—Specifications subject to change as often as additional proven refinements are perfected.

Trailer Recommendations

MODEL 1026—Six-wheel trailer permitted for highway operation only.

MODEL 1046—Use of six-wheel trailer permitted under all operating conditions.

Body Builders' Dimensions

The following dimensions are for all wheelbases:

Clearance required for body.....	7"
Frame height from ground (loaded).....	38½"
Overall height from ground.....	93½"
Cab width.....	58"
Dash to back of cab.....	48"
Dump body capacity.....	7 yds.

ALL DIMENSIONS ARE IN INCHES

Wheelbase.....	231½	183¾
Back of cab to end of frame.....	214¼	138⅝
Back of cab to center line rear axle (mean).....	144⅞	92½
Center line rear axle to end of frame (mean).....	69⅞	46⅞
Overall length of chassis.....	326	250½
Frame width.....	34	34
Overall width of chassis, front.....	86¾	86¾
Overall width of chassis, rear.....	93	93
Front tread.....	72	72
Rear tread.....	72¾	72¾

