

C H R Y S L E R

C U S T O M

I M P E R I A L

THE FIRST AMERICAN MOTOR CAR EQUIPPED WITH FLEET DRIVE



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C H R Y S L E R

*Custom Imperial*

- SEVEN PASSENGER SEDAN LIMOUSINE
- SEVEN PASSENGER SEDAN
- FIVE PASSENGER SEDAN



# CHRYSLER'S FINEST

## THE CHRYSLER CUSTOM IMPERIAL...WITH FLUID DRIVE



AMONG motorists, the world over, there is always a very limited and most discriminating clientele who expect to pay a relatively high price to satisfy their requirements for personal transportation. In this select group are found a great many owners of the Chrysler Custom Imperial—a car specifically designed and built to provide the very maximum in physical ease and luxury, as well as in performance, safety and distinctive styling.

It is not surprising, therefore, that this car should be the first to offer American motorists the amazing benefits of the very latest development of Chrysler Corporation engineers—The Fluid Drive. Here, at long last, has been attained the engineering ideal of a car that, under all ordinary conditions, may be driven without declutching or gearshifting.

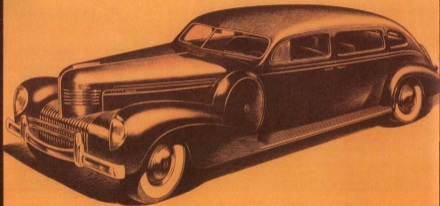
Fluid Drive is, as the name suggests, an application of hydraulic principles to the transmission and control of motive power. Basically, Chrysler Fluid Drive is simple and rugged in its elements of construction, but its effect on driving ease, smoothness of operation and safety is almost incredible.

An explanation of the operating principle and unique advantages of Fluid Drive will be found in later pages of this catalog. Having read it, you probably will be frankly skeptical of the claims made for Fluid Drive—but your first ride in a Chrysler Custom Imperial will dispel every doubt.

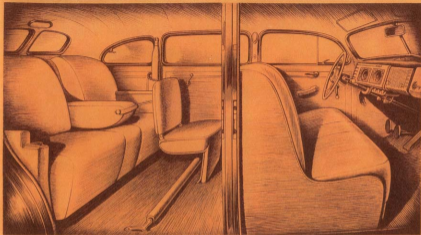
For 1939, scores of additional improvements and refinements have been made in the Chrysler Custom Imperial. The great length and litheness of this car lend themselves perfectly to the most advanced expression of streamlined styling. Built on a wheelbase of 144 inches and with an over-all length of 224 $\frac{7}{8}$  inches, the Custom Imperial is easily one of the most commanding cars on the highway. Naturally, with so long a spring base and body, a maximum of riding comfort and interior spaciousness is assured.

The luxury note is dominant in the interior treatment of both five- and seven-passenger models. And to this is added the priceless asset of greater safety, for this car is unique among custom-built models because it offers the armored protection of an all-steel body.

The owner of a Chrysler Custom Imperial truly possesses a car of uncompromising quality—for Chrysler's finest deserves its leadership among motordom's finest by every standard of comparison.



THE CHRYSLER CUSTOM IMPERIAL

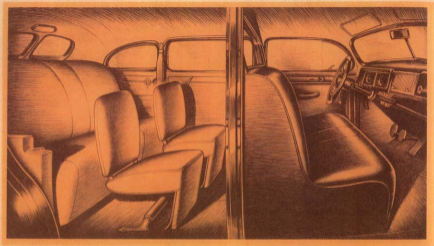


## INTERIOR OF SEVEN PASSENGER SEDAN

Usefulness is the keynote of this incomparable example of modern coachwork and interior planning. Nothing has been slighted or forgotten that helps to create an atmosphere of supreme comfort and luxury. Here is a car of such extra-

ordinary roominess that eight passengers may be carried without any crowding. Deep, yielding cushions, built up to average chair height, insure equated fatigue. In the driver's compartment, an overhead gearshift lever creates floor space,

for this control is mounted on the steering column. The instrument panel takes on new beauty through the use of modern plastic material which frames the conveniently placed dials, and also forms the door of the large glove compartment.

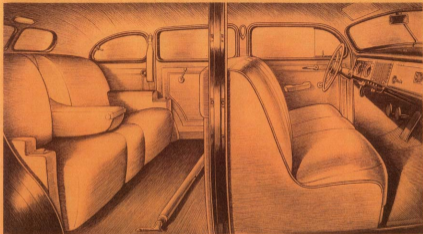


## I N T E R I O R   O F   S E V E N   P A S S E N G E R   S E D A N   L I M O U S I N E

Intended for families whose cars inevitably are chauffeur-driven, the Custom Imperial Sedan Limousine presents an interior divided into two distinctive compartments by means of a sliding glass partition behind the front seat. The passenger

compartment creates an impression of beauty and luxury that is impossible to put into words, and its rich promise of complete comfort and security is borne out the moment one steps into the car. Auxiliary folding seats are provided for extra pas-

sengers, and a center section of the rear seat back lowers to form an arm rest. The driving compartment is upholstered in fine leather, and the glass partition panel is raised or lowered from the passenger compartment by means of a window lift.



## I N T E R I O R   O F   F I V E   P A S S E N G E R   S E D A N

In response to a very definite demand, the Custom Imperial now has been made available as a five-passenger model. Entering the rear compartment of this car is like walking into a driving room, and the first impression of unusual spacious-

ness is confirmed, at once, by actual dimensions. Elimination of the auxiliary folding chains makes possible the provision of additional storage space behind the front seat. At floor level is a locker extending the full width of the body, large enough,

in fact, to hold a golf bag. Above this are two smaller compartments which provide a convenient space for light wraps and small packages. The driver's compartment is identical in all details with that of the seven-passenger sedan.

# CUSTOM IMPERIAL REFINEMENTS



The Custom Imperial instrument panel is notable for its beauty and functional design. Instruments are grouped directly in front of the driver against a background of plastic accented with slender aluminum trim. Provision is made for mounting a radio behind the center gauge. The glove compartment door also is of plastic, in which is mounted an electric clock. With the exception of the radio switch and volume control, all knobs are recessed into the panel to safeguard passengers who might be thrown against the dash in an emergency.

The first impression of any passenger in a Chrysler Custom Imperial is one of admiration for the thought and effort that have been given to every detail that contributes to beauty, utility and comfort. True luxury demands roominess, in length, in width and in headroom. Passengers must have room to relax . . . room to change position . . . shoulder room . . . elbow room . . . and leg room. There is no lack of these attributes in the Custom Imperial, for this car is planned on a really magnificent scale. There's ample room for luggage, too, in the spacious trunk, extra lockers and glove compartment.

The chair-height seats are as wide as a divan, with high, softly cushioned backs that support even an unusually tall person in restful and lasting comfort. The finest upholstery materials avail-



A spacious pocket is provided on the inside of each seat and rear seat.

the whole interior.

A most attractive touch is added by the use of plastic material on the instrument panel, where it surrounds the dials and serves as a door for the glove compartment. Dash fittings include an electric clock and cigar lighter as well as a handy ash receiver. Each rear seat arm rest also is fitted with a covered ash receiver.



Rear-seat seats in the 3-passenger Sedan and 4-door Coupe are held out of sight into a recess behind the front seat.

means precisely what is implied—an automobile designed and built to satisfy the personal requirements of a very discriminating few, to whom cost is a secondary consideration.

able are tailored by skilled hands over deep resilient springs. Even auxiliary seats are deep and soft to insure all-day riding comfort.

Instead of the old-fashioned dome light, there is a reading lamp, above and behind the rear seat, which sheds a powerful, diffused light that illuminates



The center section of the rear seat folds down to form a wide arm rest, which adds greatly to comfort when only two passengers are carried.



In the 5-passenger sedan, these lockers are built into the back of the front seat. The lower compartment is large enough for a golf bag, and the two above it are reserved for various packages.



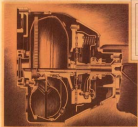
Each rear quarter window may be adjusted quickly and easily to give proper ventilation without drafts.



A reading lamp is placed just above and behind the rear seat to shed a bright and well-diffused light.



# A NEW ERA DAWNS IN MOTORCAR PROPULSION



The enclosed view shows the fluid coupling, intermediate gear-shaft drive of Fluid Drive, and the planetary gear set and planetary shaft, which are connected with the output shaft through an output shaft. These components have numerous internal splines to aid in assembly. The Fluid Drive is located in the center of the car, between the front and rear seats.

## THE CHRYSLER FLUID DRIVE

LEADING IN PRINCIPLE, REVOLUTIONARY  
IN PERFORMANCE

The operation of Fluid Drive closed gears is explained in the simplest terms, but to make the reader at once be aware that a new era dawns behind the wheel of a Chrysler Imperial is worth some of the most famous of illustrations. These drawings as portrayed the operating effects of Fluid Drive on the normal operation and performance characteristics of the car, it will not seem so important to understand exactly how the wheels in motion.

All these engines the driving power is an illustration showing how single gear-shaft drive is a 4-cylinder gear set of Fluid Drive. Note particularly that three gear-shafts are mounted independently, with no mechanical connection of any kind between them. Fluid Drive is located in the center and extends out to Fluid Drive is connected to a separate shaft.

supported by a bearing with a suitable seal to prevent leakage. When the engine is started, the rotation of Fluid Drive will cause the fluid to exert pressure on the casing and Fluid Drive will begin to turn. As fluid pressure is applied to Fluid Drive is connected to Fluid Drive through the fluid shaft.

Now examine the illustration of the right, showing a view of the Fluid Drive coupling mechanism. Note the position of the fluid in the planetary gear-shaft set of different sizes, but that these two are not necessarily in such close contact as you would be surprised about. The drive shaft will be moving in the center, with fluid through the fluid shaft, which is in the center. Then, the power of the engine is transmitted to the front shaft and transmitted down to the illustration in driving power and there is the new era of wheels.

### Advantages of Fluid Drive

The chief advantage of Fluid Drive is that it enables you to drive the car under all ordinary conditions without using the clutch or gear-shaft lever. Complete control of the car is obtained through the two master-slave and brake pedal, except when necessary combination is desired. This is obtained when driving on an incline or steep grade, or when getting the car out of a ditch or deep slush hole. These conditions, in fact, many will experience driving down. However, better stops, slower gear

shifts, smoother stoppage, and smooth going over rough stretches of road may be experienced without ever using the gear-shaft lever.

The outstanding characteristic of the Fluid Drive is that the engine will not stall when the car is stopped with clutch engaged and gear in high, second, low or reverse. Moreover, it is almost impossible to cause any jerky movement of the car, or make any possible combination more for road. Even when the pedal is pushed suddenly against the floorboard, the car will continue to operate as smoothly as if it stopped on a gradual slope.

There is nothing more obvious to know about the operation of a conventional and Fluid Drive, except to driving the Fluid Drive, which is the most and gear-shaft lever, which are separate.

Fluid Drive Drive, which is an independent one, the engine may be used as a brake on long, steep hills, and it may be started by leaving the car, whenever necessary. Fluid Drive has no effect on gear-shaft mechanism—the car is self-lubricating and requires no attention beyond an occasional check to see that the fluid fills the casing to 80% capacity.

It is difficult to find the space available here to be full notice to an experience of the construction and operating principle of the Fluid Drive. The driver who wish to know more about it, there is available a special booklet which may be obtained through our Chrysler dealer.

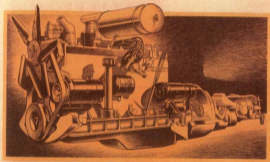


The planetary gear set, which is the main drive of Fluid Drive, is shown in this illustration. The gear set is shown in a cutaway view, showing the arrangement of the gears and shafts.



The Fluid Drive is shown in this illustration, showing the internal components and the arrangement of the gears and shafts.

# AN ENGINE BEPFITTING THE CAR



Power, flexibility, smoothness and economy always have been dominant characteristics of the Custom Imperial power plant—and they are more than ever outstanding in the engine that powers this great car for 1939.

Carrying an aluminum head of 6.8 to 1 compression ratio

as standard equipment, this eight cylinder engine develops 137 horsepower, and because of its advanced design, precise balance and Chrysler's famous Floating Power engine mountings, this great power is released without a sound or tremor to make passengers aware of it.

Moreover, this engine will carry on, mile after mile and month after month, without perceptible wear—for at practically every point where metal-to-metal friction is present, there now is the added protection of Superfinish—a recent development of Chrysler Corporation production engineers which makes possible surfaces accurate to limits of two-millionths of an inch.

Exhaust valve seats are inserts of heat- and wear-resisting chromium tungsten steel. Anodic coated, aluminum alloy pistons have sapphire-hard surfaces to resist wear. Precision bearings support the counterweighted crankshaft in perfect and permanent alignment, and full-pressure lubrication is used throughout.

There is a crankcase ventilator to prevent accumulation of injurious gases—an oil filter to insure clean oil—and an air filter to trap dust that otherwise would be carried into the combustion chambers.

There are, in addition, many automatic devices to aid and simplify starting and driving under all conditions of

# SPECIAL FEATURES

OF THE

CHRYSLER

CUSTOM IMPERIAL

weather and altitude—such as the manifold heat control, automatic choke and thermostatic control of water circulation. And to provide for maximum performance, there is provision for manual control of the spark, on the instrument panel.

The combination of this smooth, powerful and efficient power plant with Fluid Drive truly endows the Chrysler Custom Imperial with a capacity for performance that will be a revelation and a delight to every owner of "Chrysler's Finest"—the Custom Imperial for 1939.



Double-acting, hydraulic shock absorbers control both upward and downward movements of the coil type front springs and long, tapering leaf rear springs to insure the maximum of riding comfort.



There is no self-wiping, or wiper, action, in Chrysler's equal pressure hydraulic brakes. Braking pressure depends upon pedal pressure—not upon air resistance, which often results in sliding stops.



The locke booster, energized by engine vacuum, automatically exerts extra pressure on the brake pedal, so that the car is brought to a safe, sure stop with only a light foot pressure.



In addition to the chrome treatment, which gives piston a sapphire-hard surface, they are "superfinished" by a new and exclusive Chrysler process which imparts the greatest possible surface smoothness.

# S P E C I F I C A T I O N S

**SUSPENSION (Front)**—Individually sprung wheels. Adjustable taper roller wheel bearings.

**AXLE (Rear)**—Hypoid, semi-floating pressed steel housing. Hypoid "Amole" or axial-rod-end steel drive gear and piston gear.

**SEATERS**—Chrysler designed. Safety oil steel, reinforced with steel, insulated against noise and shocks. Chrysler projected dash has ventilation in front windows and rear quarter windows of sedan models, also cool ventilator.

**SHOCKS (Rear)**—Chrysler torsion hydraulic, integral expanding with shock absorbers damp and vacuum power booster. Total contact area per car 225.6 square inches.

**BRAKE (Parking)**—Independent external contracting on cast iron drum on propeller shaft.

**CLUTCH**—Single dry plate type fully ventilated. Drives disc with asbestos facing. Torque sustained by special spring.

**COOLING SYSTEM**—Water circulated by centrifugal pump. Fan and hose radiator with detachable steel. Five-blade (Rear) water-cooled fan driven by V-belt with adjustment provided. Thermostatic water control. Dash head indicator.

**CHASSIS/FRAME**—Balanced and counterweighted. Supported on five ball-bearing steel main bearings. Rearing axle 241 inches. Total bearing area 82.1 square inches. Rubber mounted impure condition.

**ENGINE**—"L" head, water cooled, eight cylinder, four-cycle. Bore 3 1/2 inches, stroke 4 1/2 inches, A.M.A. horsepower 20.00. Developed horsepower 20.1, with aluminum head and standard compression ratio of 8.0 to 1. With special aluminum head and compression ratio of 7.45 to 1, developed horsepower is 24.1, peak displacement 322.5 cubic inches, compression. Running Power—spark and transmission on a cast, cradled in rubber, torque reaction taken by the two rubber cushioned rear floorings. Power engine mountings located on each side of the transmission case. Ring order 1-6-3-5-4-2-7-8. Five bearing crankshaft; 6 bearing piston drives crankshaft. Exhaust valve and intake of aluminum tungsten steel. Full pressure lubrication to all crankshaft, camshaft and connecting rod bearings. All other working parts lubricated by positive spray under pressure from ball metered hole in upper half of each connecting rod bearing, also from crankshaft and camshaft. Timing chain lubricated by direct oil feeds. Pump located on right side of crankcase, driven by timing shaft from axial gear on camshaft. Oil capacity, six quarts. Pressure gauge on dash. Level indicator on left side of crankcase toward the rear from the filter.

**ELECTRICAL SYSTEM**—Shunt type generator, vibrator type current and voltage regulator shunt type. Starter six volt solenoid shunt type. Battery, 17 plates, 6-volt, 136 ampere-hour capacity, Single-wire system. Solar spark system. Automatic spark advance, speed and vacuum control.

**SHOCK ABSORBERS**—Hydraulic, double acting non-type. Standard on all body styles.

**FLUID DRIVE**—Power is transmitted from the engine by means of a coupling which operates on hydraulic principles, making it possible to drive the car, under all ordinary conditions, without using the clutch or gearshift.

**FRAME**—Exceptionally rigid, double-drop X-girder-truss type.

**FUEL SYSTEM**—Carburetor. Dash down-draft type, provided with fixed jet, covering all necessary ranges for variations of altitude, peak summer and winter conditions, with idle control and accelerator pump. Equipped with automatic manifold heat control and air cleaner, integral with intake valve, automatic choke. Fuel pump; Throttle from camshaft, fuel meter trap. Fuel supply tank; Rustproof frame plate, 20-gallon G.E.T. imperial gallon. Electrical fuel gauge on instrument panel.

**OVERDRIVE**—All helical planetary gears—silent operation providing slower engine speed at higher car speed. Located at rear of transmission. Standard equipment.

**PISTONS**—Aluminum alloy U-slot type—four rings per piston, two compression, two oil.

**SPRINGS**—Front Independent "Amole" steel coil. Rear: New tapered leaf, semi-elastic, length 55 1/2 inches. Spring covers. About "U" forward-type shock absorber on rear of rear springs. Rubber bushings at front and rear springs.

**STEERING GEAR**—Semi-reversible worm and roller type.

**TIRES**—Arched, mounted front on all wheels, size 7.60 x 16—single with Lifeguard tubes.

**TRANSMISSION**—Synchromesh transmission, helical-type gears throughout, first speed and reverse operating on specially cut splines, second speed operates on constant mesh helically cut gear.

**WHEELBASE**—104 inches. Overall length with bumpers 224 1/2 inches.

**STANDARD EQUIPMENT**—Bumpers, front and rear. Cruise and Climb Transmission. Lifeguard tubes, two electric windshield wipers, clock in instrument panel, dual horns—dual stop and tail lamps, rear view mirror, two oil indicator and vacuum drive lights three signal lights, ash receiver in dash and arm rest of rear compartment, foot rest, radio, coin rest, coin rest cords De Luxe steering wheel, safety beam headlights, aluminum head, fender, two wheels with tires and tubes.

**SPECIAL EQUIPMENT**—Rear wheel shields—radio—heater. Heavy duty air cleaner, hoodwell equipment. Special colors and upholstery, also other items of special equipment and accessories are available on special order basis.

**NOTE:** The manufacturer reserves the right to correct, change or modify the construction of Chrysler Motor Vehicles on any part thereof, as he may see fit, without incurring any obligation to make like changes on vehicles previously sold.