

CHRYSLER

FLUID DRIVE



WHY SHIFT GEARS





Pioneered and Developed by Chrysler

You Get The Good Things First

From Chrysler

NOW IN ITS THIRD YEAR

Why Shift Gears ?

Remember the thrill of your first car? . . . That sense of power when you first felt the surge of the motor, alert for the open road . . . That indefinable joy of following an endless ribbon of highway across the great plains . . . That elation of cresting that mighty hill . . . The indescribable lift of your spirit of commanding motion as you never had before . . . ?

Wait! Perhaps those memories of your early motoring adventures are marred a bit by recollections of laboring up the hills in a groaning "low"; toiling through traffic in a motor-racing "second"; shifting gears again and again.

It's not like that today. Imagine stopping at traffic lights by simply releasing the throttle and putting on the brake! And standing right there in high gear without touching the clutch! And then starting off again by releasing the brake and stepping on the gas! That's just one of the amazing things you can do with Chrysler Fluid Drive.

You can recapture the joy of your first day behind the wheel of your first car. You can enjoy this new glorious fun of Fluid Driving . . . this new ease and freedom. No more clutching and declutching in city traffic; no more tiresome, never-ending gear shifting. Chrysler brings you the miracle mechanism, the luxurious driving ease of Fluid Drive. Now you can pull away from the curb or in traffic with the smooth glide of a racing sloop running free before the wind, or take the hills as they come with nothing but the extra pressure of the accelerator pedal.

Chrysler Fluid Drive is not a mere performance improvement. It's an utterly different, strikingly new, motoring development which eliminates all shocks and jerks, which substitutes the gentle but powerful action of fluid against fluid—oil against oil—to propel your car with cushioned ease.

Gone are the neck-jerking jumps, the bucking, pitching and lunging, the effort of shifting through gears. Oil, whirling faster and faster in the Fluid Drive coupling, drives the car forward as smoothly as a plane glides through space. There's no need to pump the clutch pedal . . . no need for tiresome gear shifting. With Fluid Drive you press the accelerator when you want to *go* and use the brake pedal when you want to *stop*. That's all there is to it. Just relax and drive this new EASY way.

Why shift gears?

Chrysler Fluid Drive means that once you have selected the original gear you don't shift gears unless you wish to . . . it just isn't necessary, except on the most unusual occasions. The fluid coupling permits you to start and stop in High Gear Position . . . allows the engine to idle freely, even though the car be in gear.

In Fluid Drive so far as transmission of engine power is concerned, there is no metal-to-metal contact between engine and rear wheels. Fluid Drive transmits power through a liquid-filled flywheel. Cushioning oil permits an amazing flexibility of operation. Under circumstances which render cars with conventional drive completely inoperative, Chrysler Fluid Drive pulls away smoothly . . . without shifting gears . . . without even touching the clutch pedal.

Combine Fluid Drive with Vacamatic Transmission—the new, simplified transmission which takes full advantage of the cushioning characteristics of oil—and you can drive all day, just steering . . . stepping on the accelerator pedal to go—and the brake to stop. In all your driving experience, you've never tried anything like it—so easy—so simple—so completely effortless.

Starting Is Like An Airplane's Take-off

With Fluid Drive, starting is like the smooth, swift rush of an airplane take-off. The plane starts with deceptive ease, and a few split-seconds later it is climbing swiftly at a speed of more than 150 miles an hour. The next thing to an airplane take-off is to start in "High" in a Chrysler with Fluid Drive. There is the same unhurried smoothness at the beginning, followed by a steadily increasing surge of *swift* power, unhampered by the mechanical limitations of shifting through the gears.



You start the car exactly as you always have, with one exception. Instead of shifting into conventional low gear, you shift into "High Gear Position" right away. And you can stay in "High" all day long, without touching the gearshift lever or the Safety Clutch Pedal. The sensation of starting is like *floating* . . . without the slightest falter or hesitation . . . smooth as oil itself.

No Jerk or Jar

This elimination of disagreeable jars and jumps adds a miracle to driving pleasure . . . to lessened effort . . . smoother operation . . . and to *safety* under the most dangerous driving conditions. Fluid smoothness is in control . . . not only in starting up, but in slowing down. The famous Chrysler Floating Ride wafts you, feather-like, silently on your way.

Nothing New to Learn

There's nothing new to learn with Fluid Drive—*nor anything to unlearn*. You drive as you always have driven, but with a new sense of ease and smoothness, a new sense of security and safety. If anything, driving is simpler, because you have less to do. There's no nerve-wracking period of readjusting your driving habits. No special training is required. Members of your family and your friends can drive your Chrysler without special instruction. You won't hesitate to loan your car; nor will you fear what will happen to it in a parking lot when a strange attendant drives it away.

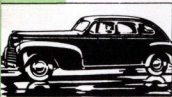
Simplifies Motoring



Driving is easier . . . simpler, with Chrysler Fluid Drive. You don't have to synchronize the clutch, gear shift and accelerator. You don't have fifteen mad movements to go through every time you shift from "Low" to "High" because you don't have to shift, unless you want to.

It is utterly impossible, no matter how you tramp on the accelerator, to make the car buck, plunge, or dash wildly forward with a clashing grind of gears. A smooth flow of power sends the car silkily, safely on its way. Many women who never drove a car before because of nerve-tearing gear shifting, are now driving and enjoying the experience. And no woman—or man either, for that matter—who has ever found out how much easier motoring is with Chrysler Fluid Drive will ever again be satisfied with a car having conventional drive!

Unequaled Surefootedness and Safety



Ice

The most treacherous roads—highways impassable to cars with ordinary drive—do not stop Chrysler Fluid Drive. They'll walk right through sand, mud, snow or any other condition where an ordinary car would tend to skid, spin the wheels, or dig itself in. Glare ice, mountain roads and stiff grades won't stop them. Chrysler Fluid Drive will take hills that even cars equipped with chains cannot negotiate.



Snow

That's because of even, smooth application of power—not sudden, shattering jerks. Momentum

is gathered as smoothly and easily as a toboggan starting down a slope. No matter how icy the roadway, Chrysler with Fluid Drive is able to get traction. Going down a slippery hill, or around curves, the engine, with the clutch engaged, acts as a brake and keeps the wheels turning evenly. The whole driving mechanism accommodates itself to road conditions at all times.

Power goes to the rear wheels as smoothly as though the car were electrically propelled. And the best part of it is that you are always in Fluid Drive; the engine is always doing its work through the whirling oil that transmits the energy and supplies the greater flexibility. *There is no need to shift gears.* We cannot emphasize that fact too strongly.



Mud



Sand

City Driving Becomes A Pleasure

One of the most constant satisfactions in driving a Chrysler with Fluid Drive is the ease with which it handles in city traffic. You can creep along at a snail's pace behind a truck or a slow-moving car without gear-shifting . . . without putting your foot on the clutch pedal . . . or taking your hands off the steering wheel. You drive with your accelerator pedal . . . and your brake. You can ease your car along in slow traffic or sweep to cruising speed on the boulevards—without shifting gears—without touching the clutch pedal—without nervous strain.

Not only is starting up smoother, but stops are steadier and safer. There's less danger of skidding during a quick emergency stop, because the liquid coupling acts as an oil cushion, permitting you to come to a smooth, straight-line stop, even on slippery pavements.



Engine Cannot Be Stalled



No matter how you drive—whether you come to a full stop in "High"—or cram the accelerator to the floor—the engine if properly tuned cannot be stalled. The fluid coupling cushions the shocks, relieves the engine of stresses, and only a sure, swift flow of power results.

Will Hold On Hills

Fluid Drive will hold your Chrysler without danger of slipping backward, if you have to come to a stop on a hill. The engine, revolving slowly, will provide sufficient propulsion to the rear wheels to hold the car still. You stay in "High"—you keep your hands on the steering wheel—your foot on the accelerator—



and when you want to go you merely press down on the accelerator pedal. Here's a feature women like. They do not have to shift; there is no danger of stalling the motor—no honking horns behind you urging you to hurry up—no anxious moments because you have rolled backward and bumped the car following you. It is not necessary to hold the car with the brake and then race the engine, or

use the hand brake to keep the car from rolling backward. You control the car with the accelerator pedal!

Engine Acts As Brake On Down Grades

When going down a mountain road, or a steep grade, the engine of a Chrysler Fluid Drive may be used as a brake to slow down the car, just as on the conventional car by shifting to the Low Gear Position. The function of the "driver" unit and the



"runner" in the Fluid Drive housing becomes reversed, the "runner" actuating the "driver" and being held back by the engine, thus holding progress to the rate of engine speed. In other words, at speeds above 18 M.P.H. the "driver" and "runner" are rotating together as governed by the centrifugal whirl of the oil. The engine slows down the "runner," and controls progress of car.

You Choose The Starting Gear

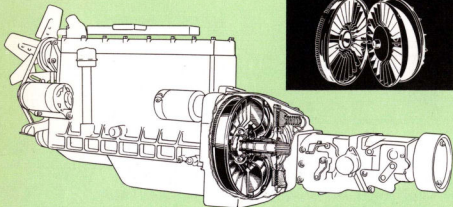
There are times when it is of advantage to select the gear you're driving in. Under some road conditions, or where extra power is needed, as in pulling out of holes, or through sand and mud, it may be advisable to keep the car in "Low." Chrysler permits the driver to select the gear to suit driving conditions.



When Additional Power Is Needed

Only when you desire a swift surge of power for exceptionally quick get-away is it necessary to shift. A clutch and transmission have been provided, as in the conventional car, to obtain maximum acceleration by going through the gears when starting, when going up a steep grade, for getting out of chuck holes, to provide an acceleration gear for normal driving, and for flashing performance when quick acceleration is desired.

Certainly, Chrysler has a clutch pedal—for your safety. Even though you drive 99 per cent of the time in "High," there are occasions when you wish to disengage the power. That means you have personal control of the car at all times. Chrysler has *one* clutch for safety; not four *concealed* clutches, such as some so-called "automatic" transmissions where the clutches are beneath the floor board, where you can't get at them. Chrysler Fluid Drive does not take the place of anything. It supplants the flywheel of conventional cars with a fluid coupling, but the clutch and the transmission are still there—to give the driver absolute control of the car under all road and traffic conditions.



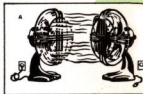
Smooth Flow Of Power



Simplicity of design and construction is one of the great advantages of Fluid Drive. Basically it consists of two shallow vaned discs, which look like the halves of a split grapefruit. These discs are set up facing each other in a sealed housing which is filled with a special oil to about 80 per cent of its capacity. The front disc, (toward the engine), called the "driver," is connected to the crankshaft and is, in reality, a centrifugal pump. The rear disc, or "runner," is connected to the driveshaft and is a centrifugal motor. When the engine is idling, the enclosed fluid is churned lazily about by the driving vanes. When the engine is speeded up, the "driver" throws whirling oil from its vanes onto those of the "runner," causing it to revolve. There is no metal

connection between the two discs. The energy is transmitted solely by the oil.

To understand how Fluid Drive operates is simple if two ordinary electric fans are substituted for the "driver" and "runner" of the fluid coupling. Fan "A" is plugged into the electric current. Fan "B" is *not* plugged in. Fan "A" represents the driving member of the Fluid Drive—in other words, the part directly connected with the engine. Fan "B" is the driven member through which power will be transmitted to the rear axle.



When Fan "A" is turned on, the air blast from its blades rushes against the blades of Fan "B," causing them to rotate. Thus, Fan "B" is receiving energy from Fan "A"—not because of any mechanical connection but through the medium of air alone, with the air becoming an energy carrier. If the speed of Fan "A" is either increased or decreased, then the speed at which Fan "B" is revolving will increase or decrease likewise. The same principle applies to Fluid Drive, except that the energy is transmitted through *oil* instead of air.

Fan "A" continues to rotate, even though Fan "B" remains stationary, if held by the hand. This is analogous to the action of Chrysler Fluid Drive when the engine is idling, but the car is held immovable because the brakes are on.

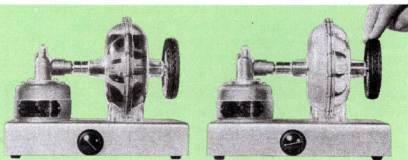
Movement of the oil inside the Fluid Drive unit is illustrated in the sketches at the right. The sketches represent the shape of the oil columns in each individual vane. In normal operation, when the engine is turning slowly, oil moves outward in the vanes of the driving member and inward in the driven member, as indicated in Figure 1. The path of the oil is like a whirlpool—similar to a coil spring bent into a hoop. Figure 2 shows that when both driving and driven members are rotating at the same speed, oil circulation practically ceases because centrifugal force is the same in both driving and driven vanes. In other words, at speeds above approximately 18 miles an hour, the vanes of the driver and





driven unit are rotating together in a column of oil which is held immovable by centrifugal force.

For centuries, the action of falling water has been utilized to turn water wheels or hydro-electric turbines. Similarly, liquid is forced against the turbine-like vanes in Fluid Drive. The action is not new. Fluid couplings have been used for years. As far back as thirty years ago a European automobile manufacturer utilized a fluid flywheel. The basic principle is by no means new or untried. Chrysler introduced Fluid Drive in American automobiles in 1938. Millions of miles of smooth, service-free operation attest to its efficiency. It establishes new standards of performance and handling ease. Now, improved mechanically and with a greater efficiency than ever, it is available on *all* Chrysler 1941 models.

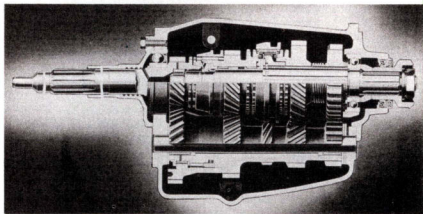


Graphically illustrating the principle of Fluid Drive in action, a motor-driven demonstrator unit has been developed. Inside a plastic housing are two vaned discs similar to a Chrysler Fluid Drive unit. One disc is attached to the motor; the other is motivated by bubbles of oil beating against it. The fluid between the two units provides the only connection between the motor and the turning tire (the engine and the rear wheels)—there is *no* metal-to-metal contact. In the illustration at the right, when the "runner" is held motionless—as when the brakes are applied—the engine still continues to turn. This explains why a Chrysler will not stall, when it comes to a dead stop in "High."

Fluid Drive With Vacamatic Transmission

Fluid Drive is available either with standard transmission or Vacamatic Transmission (the startlingly simple system which provides automatically an Acceleration Gear and a Cruising Gear in either "High" or "Low," eliminating practically all use of the clutch pedal and gearshift lever).

Vacamatic Transmission differs from standard transmis-

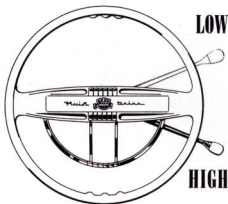


sions in having only three positions of the gearshift lever, instead of four . . . a "Low" Gear Position, a "High" Gear Position, and "Reverse." Both "Low" and "High" have *two* gear ratios; there are *four* forward speeds instead of the conventional three.

The "High" Gear Position is the normal driving range. It has an Acceleration Gear and a Cruising Gear, both controlled automatically from the accelerator pedal—not the clutch or the gearshift lever. When you start in "High," you're

Drive 99% Of the Time In High Gear

or 25 to 28 miles an hour on 8-cylinder models, you let up on the accelerator pedal momentarily and the Vacamatic Transmission automatically shifts into the Cruising Gear, in which the engine speed is materially reduced, with a consequent saving in gasoline and wear and tear on the engine.



in the Acceleration Gear. When the car reaches a speed of 15 to 17 miles an hour on 6-cylinder models,

To stop, you step on the brake. To start again, you step on the gas. When you regain speed, you let up on the accelerator pedal for an instant and Vacamatic Transmission automatically shifts into the Cruising Gear. When you want a burst of speed, to pass another car, for instance, you press the accelerator pedal down quickly and the Acceleration Gear automatically engages. When you have passed the car, let up

on the accelerator pedal and automatically you're back in Cruising Gear for normal driving.

Only under extraordinary conditions, when you want extra ability for starting on steep grades, for instance, is the "Low" Gear Position used. For all normal driving you use nothing but the "High" Gear Position.

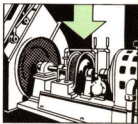
The driver has complete control over the gear desired. He selects it, and controls its action at all times.

Fluid Drive Has Many Uses

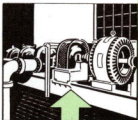
Fluid Drive, which many think of as being confined to automobiles alone, and of being among the newest developments in motoring comfort and safety, is at work day and night in many fields other than automotive.

The Fluid Drive principle is used to keep city lights burning; for pumping water for the needs of millions of persons; and for performing hundreds of useful tasks in industrial plants. Hydraulic couplings are used on mechanical draft fans, as regulators on centrifugal pumps, on motor drives, and wherever a uniform flow of power is required. Steam shovels, buses, tractors and trucks are being equipped with Fluid Drive. They are used on mine pulleys, on the main drive shafts of ocean-going liners, and in connection with huge power generators.

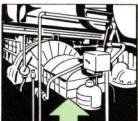
The trend is to Fluid Drive. Today there are 172 seagoing vessels equipped with Fluid Drive, where in 1934 there were but seven. Today, there are more new Diesel powered ships being equipped with Fluid Drive than ever before. Engineers, both marine and industrial, regard fluid couplings as the ideal method of obtaining variable speed control.



Hydraulic Coupling Driving an Induction Fan



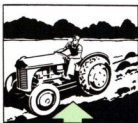
Fluid Drive in a Water Works



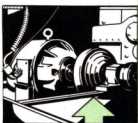
Fluid Coupling on the Main Drive Shaft of an Ocean Liner



Fluid Drive is used in Buses



Fluid Drive is Being Adapted to Tractors

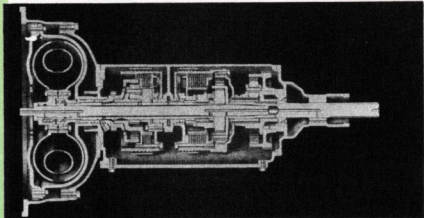


Fluid Drive installation in a Factory

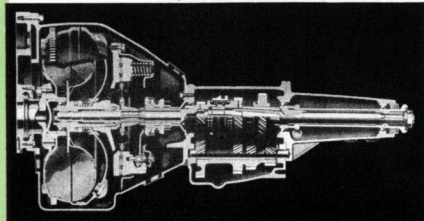
Chrysler Fluid Drive Is Superior to Other Types of Hydraulic Drive

Since the introduction of Fluid Drive for automotive use by Chrysler, several varieties of hydraulic couplings and so-called "automatic" transmissions have been introduced by competitive automobile manufacturers. It is necessary to understand the simplicity of Chrysler design and the efficiency of its operation to realize Chrysler Fluid Drive is superior to other types of hydraulic couplings.

Competitive Type :



Chrysler Fluid Drive



Chrysler Fluid Drive does not take the place of anything. It is not a part of a complicated transmission set-up, but is a separate unit. The clutch and transmission are still there. The standard Chrysler Syncro-Silent Transmission or Vacamatic Transmission (which takes full advantage of the cushioning effects of Fluid Drive) may be used with the unit. Operation of the car is the same as always if anything, far easier because gear shifting and declutching are practically eliminated.

Extremely simple in design and having a minimum of moving parts, Chrysler Fluid Drive cannot be compared with the complicated mechanisms of multiple sets of planetary gears which comprise the true "clutches" of one type of hydraulic coupling and transmission now on the market.

In a Chrysler the driver always has complete control over the gear ratios desired. He does not have to wait until the engine speed slows down or speeds up to shift the gears "automatically." The Safety Clutch is still there, as there are many times when it is of advantage to select the gear you wish to drive in. Certain driving operations, such as parking, backing up, or getting out of tight places in traffic, require the use of a clutch. The clutch enables you to disengage the engine power at will—without depending on any mechanism to adjust itself according to the engine speeds.

You can keep a Chrysler with Fluid Drive in Low Gear or Second, if you wish extraordinary power. The transmission will not shift you to some other gear ratio, unless you voluntarily make the change. You can select the gear ratio best suited to driving conditions. If you wish to back up, you do not have to stop and deliberate where you'll place a control lever; you just go ahead and shift into Reverse, as you always did.

Chrysler Fluid Drive permits smooth noiseless acceleration with no gear shifting (automatic or otherwise). You can come to a stop in "High," and start up again without need for touching the gearshift lever or the Safety Clutch Pedal. There is always a swift, smooth flow of power, without any grinding, shifting gears. Starting in "High," acceleration and momentum pick up tremendously fast, without any pause for changing of gears.

With Chrysler Fluid Drive you have full assurance the drive is always through oil, one hundred per cent of the time. There

is never a time when the drive is only partially through whirling oil, as on competitive types. There is no division of power of the engine; no speed ratio where approximately 60 per cent of the power is transmitted mechanically through planetary gears and only 40 per cent through the fluid medium.

Chrysler has only one Safety Clutch, not four clutches—two band clutches gripping planetary drums (as in the old Model T Ford)—and two multi-disc clutches of very intricate design.

There's nothing to adjust on a Chrysler Fluid Drive—no gears, bands or clutches to become loose, or through wear, lose their efficiency. With Chrysler Fluid Drive, there is practically no maintenance problem or service cost. It is not necessary to change the oil, as Fluid Drive has a special oil which does not gum and will not freeze except at extremely low temperatures—an oil different from the transmission oil, such as some competitive fluid couplings use. The only thing a service man does with Fluid Drive is to check the level of the oil in the unit, and perhaps add a very small amount once a year. He can't overfill it, and the oil level is thus always readjustable to the right level.

With Fluid Drive, wear on the Chrysler transmission is even less than usual, because of the cushioning effect of the oil reducing sudden strains and driving shocks. The same is true of the engine. Less wear means longer life. Less to wear out means less maintenance cost.

Chrysler Fluid Drive is standard on eight-cylinder models and is offered at a nominal figure on six-cylinder models. It does not bear two prices, as does a competitive type of coupling, which sells for \$90.00 extra in one make of car and \$125.00 extra in another, larger make, although they are, to all practical purposes, the same unit, at least in name.

Chrysler Fluid Drive is superior, by all engineering tests. Insist on Chrysler Fluid Drive. You won't need special instruction in handling your car; you won't have to park it in parking lots yourself, for fear some uninstructed attendant will ruin it; you can loan a Chrysler to a friend, without giving him elaborate directions. You drive as you always have driven—if anything, driving is far simpler, because you don't have to shift.

The Clutch Is There for Your Safety

Even though gear shifting is virtually eliminated with Fluid Drive the clutch is retained—for your safety. There are certain operations in driving any car which require the use of a clutch, such as in parking, backing up, getting out of tight places, and the like. "Feathering" the clutch—using it when you wish to disengage the power—enables these maneuvers to be accomplished more safely and easily than would be possible in any other way.

The clutch permits you to maneuver faster than if you had to wait until an "automatic" mechanism adjusted itself, according to engine speeds. It permits you to hold your car in "Low" gear for sustained periods, where the traction is very heavy, or where the maximum acceleration of a lower gear ratio is desired. And when you want to shift, you can do so immediately, using the Safety Clutch Pedal and the gearshift lever.

In a Chrysler with Fluid Drive you do not have to stop and think where you must put an indicator lever in order to make the car go. You drive as you always have.

Any stranger, given permission to drive your Chrysler, can handle it with the clutch and gearshift as he has been accustomed to doing in other cars. In a car without a "clutch"—that is, without a clutch pedal—he would be unable to drive without special instructions. You do not have to hesitate to loan a Chrysler Fluid Drive to a friend, because if he can drive the standard car, he can drive a Chrysler. The clutch gives the "Safety Control" that is so essential in handling a car under all conditions.

Surely, Chrysler has a clutch pedal! The only thing different about the Chrysler Safety Clutch is that it is used only about one-hundredth as often in a Fluid Drive car as in one not so equipped.



Questions and Answers

Protects Motor Against Overloading

Q. I want to be sure of a lot of mileage. How will Fluid Drive stand up?

A. In the first place, Fluid Drive is not new. It's more than 25 years old, on automobiles, and has been highly successful in many industrial uses for years. Chrysler began experimenting with it nine years ago, introducing it in perfected form in 1938 on the Chrysler Custom Imperial. From the start Fluid Drive

was a complete success, and it was made optional on several other models in 1939. The fine reception and enthusiastic owner response led to making it available on three additional higher priced models in 1940. Thousands of owners now testify to the time-proven advantage of Fluid Drive. Millions of miles of use under every type of road condition attest to its practicality.

Q. With no mechanical connection between the engine and rear wheels, can you start the car by pushing, if required?

A. Yes. Fluid Drive is as efficient in either direction of drive, whether the power is coming from the wheels or from the engine. It is merely necessary to lock up the overdrive unit and start the car by pushing at the same or slightly greater speed than the standard car.

Q. Doesn't Fluid Drive generate heat and cause the unit to become very hot?

A. Under all ordinary driving conditions the oil in the Fluid Drive becomes no hotter than the oil in the crankcase of the engine. Circulation of air over the unit for cooling is accomplished by fan blades attached to the front and back faces of the unit. The circulating air carries away heat and prevents the unit from overheating.

Q. How fast does the oil in the Fluid Drive unit flow?

A. Strangely, the faster the car goes, the slower the oil flows, as once

the "driver" and the "runner" of the unit are revolving in unison, a solid mass of fluid exists between the two. While the oil is whirling at a tremendous speed around the inside of the housing, the relative position of individual molecules of the oil is comparatively still. The oil circulates fastest when the car is standing still, in gear, with the clutch engaged, and the throttle wide open. Under these conditions the engine speed is 910 R.P.M. and there are nine tons of oil flowing through the Fluid Drive unit every minute—nine tons of pressure exerted by the oil on the vanes of the "runner." The velocity of oil under such conditions is approximately 21 feet per second, or 14.3 miles an hour.

Q. Will Fluid Drive work when the temperature goes below zero?

A. The Fluid Drive will function satisfactorily at all anticipated extremes of temperature. A special fluid is used—a very fine oil—which will not freeze except at extremely low sub-zero temperatures.

Q. How often do you have to change the oil in the Fluid Drive unit?

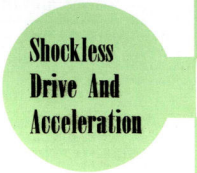
A. After hundreds of thousands of miles of operation in Chrysler engineering test cars it has never been found necessary to change the oil. A periodic inspection of the oil level is all that is necessary, to check on the very slight seepage. Ordinarily the unit will require less than half a pint after a year of hard service.

Q. Will the oil sludge and form varnish when the unit gets warm?

A. No. It takes the combined effects of heat and oxygen to cause a breakdown of an oil, and since the Fluid Drive unit is completely sealed, no oxygen can get to the oil. The slight amount of air in the unit when originally filled does not contain sufficient oxygen to cause deterioration of the oil.

Q. Isn't there a marked increase in gasoline consumption over the standard car?

A. No. Exhaustive comparative tests under all conceivable driving conditions have shown that the over-all difference in economy between cars equipped with



**Shockless
Drive And
Acceleration**

Cushions Torsional Vibration

actually operating slower, with a subsequent saving in gasoline consumption.

Fluid Drive and the standard car is so slight as to be negligible. The difference is less than the variation in fuel consumption on the same car with different drivers. Fluid Drive cars do not race their motors when started in traffic. With Vacamatic Transmission, when the car is in Cruising Gear the engine is

Q. How does the Fluid Drive unit operate when the car is in reverse?

A. There is no difference in operation of the Fluid Drive in reverse or forward gear. The Fluid Drive always turns in one direction. Reverse drive is obtained through the transmission behind the Fluid Drive unit.

Q. Why is driving with a Fluid Drive safer on slippery ice than the ordinary car?

A. On slippery surfaces the traction of the wheels is greatly decreased. In the conventional car the engine applies more power to the rear wheels than the wheels can use, resulting in the wheels spinning. As soon as the wheels start spinning, traction decreases still further. With Fluid Drive, power is applied gradually and smoothly, so that the wheels grip the road and move the car ahead at an ever increasing acceleration. When slowing down or accelerating under slippery driving conditions, the Fluid Drive, furthermore, eliminates the shocks to the rear wheels which would have a tendency to throw the car into a skid or spin the wheels.

Q. Is Fluid Drive slow on acceleration from a standing start?

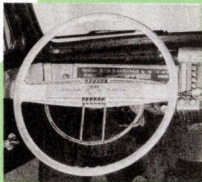
A. No. A Chrysler Fluid Drive will accelerate as fast as any car on the road. While the actual start may seem slow, the engine responds quickly and Chrysler will be rolling silkily at top speed before a competitive car can shift through the gears, mechanically or manually.

What Fluid Drive Means to the Owner

1. Because the engine may continue running, without stalling, when the car is brought to rest in gear, it is not necessary to touch the Safety Clutch pedal. For all normal driving, you can leave the gearshift lever in the High Gear Position all day, without shifting.
2. Greater ease and smoothness of operation, due to elimination of jerk or jar in starting and rapid acceleration. Because of Fluid Drive, the engine is allowed to build up torque or turning effort to a high level before power is applied, so that the car is rapidly and silkily pulled up to engine speed.
3. Operation is simplicity itself. There's nothing new to learn or unlearn.
4. The greater ease of car driving means the elimination of some 15 movements of hands and feet when shifting from low to high, as in conventional cars.
5. Under slippery driving conditions, such as on ice, snow, mud, loose gravel, or sand, the Fluid Drive allows the power to be applied to the rear wheels so gently that the car pulls away from a standstill without any of the usual skidding or spinning of the rear wheels.
6. Absence of gear shifting makes driving in traffic no longer a difficult task. Women drivers especially appreciate this feature.
7. Fluid Drive has a natural cushioning effect between the engine and the drive train to the rear wheels, greatly reducing annoying jerks, lurches, and shocks through inexpert manipulation of the controls by an inexperienced driver.
8. Because of the cushioning effect of Fluid Drive, the life of all parts in the drive train to the rear wheels is lengthened. This means higher trade-in value in years to come.
9. The possibility of stalling the engine, often dangerous in heavy traffic, is greatly minimized because of Fluid Drive. The engine may continue running regardless of car speed or whether the Safety Clutch Pedal is used or not.
10. Greater safety of control on hills is provided because it is not necessary to declutch when coming to a stop on an upgrade. The car may be held motionless by simply depressing the accelerator pedal to a point where the engine will hold the car. To start up again, it is only necessary to press the accelerator pedal down gradually.

HERE IS THE PLACE TO FIND OUT HOW MARVELOUS

Fluid Driving REALLY IS



It is difficult to describe the beauty of the orchid. You must see it. You cannot read about Beethoven's Symphonies. You must hear them to un-

derstand and appreciate their incomparable beauty. Try to describe the taste of an olive, a lobster, or an avocado pear. You must taste them. And the same is true in describing Chrysler Fluid Drive.

You must experience it before you can possibly realize and appreciate what a remarkable development and driving improvement it is. And the only way to do it, is for you to get behind the wheel and take Fluid Drive through its paces—in traffic—on the hills—and on the open road—drive all day, without shifting the gearshift lever or touching the clutch pedal.

We urge you to try it out. There's a Chrysler ready for your demonstration—ready for the asking. We'll be glad to arrange it. And we're betting you'll enjoy the experience—immensely.