

DR 250/350



Truth to tell, most riders don't take 4-stroke off-road bikes very seriously. And it's no wonder: For a long time now, most 4-strokes have been built with hand-me-down technology years behind the serious 2-stroke machines. But not anymore: Introducing the all-new DR250 and DR350.

Developed and tested from the tight Michigan woods to the wide-open California desert, the 4-valve, single-cylinder DRs are designed for serious off-road riders who want the smooth, tractable performance of a 4-stroke without the usual compromises—too much weight and too little suspension.

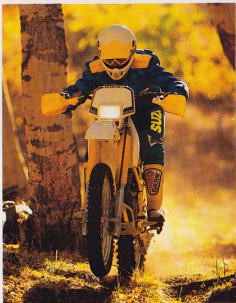
REDEFINING THE 4-STROKE CONCEPT.

Our engineers have developed the DRs to make them lighter, better handling, and more compact than ordinary 4-stroke dirt bikes.

Take the chassis, for instance. Like Suzuki's motocross machines, the DR250 and DR350 feature light and rigid frames developed with the help of Finite Element Method computer analysis.

Suzuki engineers have even applied aerospace technology to the DR250 and DR350 swingarms. Each forged aluminum alloy arm is attached to the cast aluminum pivot section using advanced aerospace adhesives and threaded fasteners. This same technique is used in aircraft landing gear and wing panel construction to achieve maximum rigidity with minimum weight.

At each end of the DR frames, you'll find dirt-serious suspension components. Up front, the DRs use cartridge forks with



large 43mm stanchion tubes. The internal cartridge design separates air and oil for smoother and quicker bump response. In back, a Full Floater® suspension system utilizes a single, remote-reservoir shock. These top-line suspension components offer externally adjustable rebound and compression damping—something you won't find on ordinary 4-stroke dirt bikes.

BALANCING POWER AND HANDLING.

We found conventional 4-stroke engines to be too massive for optimum placement within the frame, so our engineers designed all-new engines from fresh ideas.

Both the DRs are powered by single-cylinder, 4-valve, overhead camshaft engines with counter-rotating balancers to smooth vibration, and six-speed transmissions to smooth acceleration.

Unlike conventional 4-stroke singles, the DRs use a dry-sump lubrication system that increases engine cooling efficiency while reducing engine size and weight.

This system incorporates the revolutionary Suzuki Advanced Cooling System (SACS). In addition to air-cooling, SACS uses high-volume oil flow to reduce engine temperatures. Lighter and simpler than competing water-cooling systems, SACS is so efficient it allows our engineers to reduce the reciprocating mass of internal components while increasing reliability.

To further reduce mass, oil is routed to the transmission through an external line rather than internal galleys, thus reducing crankcase size and weight while increasing cooling capacity. In this dry-sump system,



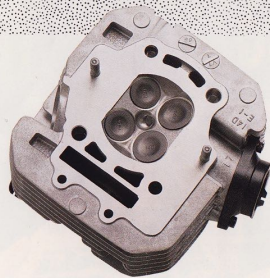
The lightweight DR frame houses a remote oil reservoir that supplies engine oil to the new dry-sump 4-stroke powerplant.



engine oil is carried in a sealed reservoir built into the frame backbone and front downtube. This reduces engine height and increases ground clearance compared to conventional wet-sump systems. And allows the compact DR engines to be positioned for optimum handling balance.

POLISHED PERFORMANCE.

For broad, easy-to-use power, the DR250 and DR350 engines are fed by



The DR's compact, 4-valve cylinder head configuration is achieved by setting the valves at a narrow 40 degree included angle.

Mikuni flat-slide carburetors. An accelerator pump, combined with a special pilot-jet circuit designed into the carbs, help give the DRs precise throttle response even over rough terrain.

And, of course, the DRs feature a digital CDI ignition system for optimum timing.

The result: Hill-flattening torque at low revs, and plenty of top-end power for those wide open spaces.

The DRs also come with powerful front and rear disc brakes. RMX-style headlight and taillight. U.S. Forest Service-approved spark-arresters. Tripmeters and quick-change rear wheels.

The 1990 DR250 and DR350. Finally, 4-stroke dirt bikes you can take seriously.



250

The new DR250 is designed to meet a simple requirement: Satisfy serious off-road enthusiasts without intimidating less experienced riders.

That's a tall order. To meet this criterion, we gave the DR250's all-new 4-valve, single-cylinder engine a wide, tractable powerband equally suited to plonking and roosting.

We gave the engine a narrow 40-degree included valve angle to keep the cylinder head compact. And designed valves and a camshaft that produce strong low and mid-range torque, and a powerful rush all the way to the DR250's 9000 rpm redline.

Then we added a compact counter-rotating engine balancer positioned in front of the crankshaft. This balancer not only reduces engine vibration, it also adds flywheel mass for even smoother power.

PERFORMANCE FEATURES YOU EXPECT FROM A SERIOUS DIRT BIKE.

The DR250's sharp throttle response is due in part to its 31mm Mikuni flat-slide carburetor. It features an accelerator pump and special pilot jet circuit for precise fuel metering in rough terrain.

We also gave the DR250 a heavy-duty clutch that doesn't demand heavy-duty lever effort. This clutch has added friction plates which permit the use of lighter springs, thus reducing lever effort and rider fatigue over the long haul.

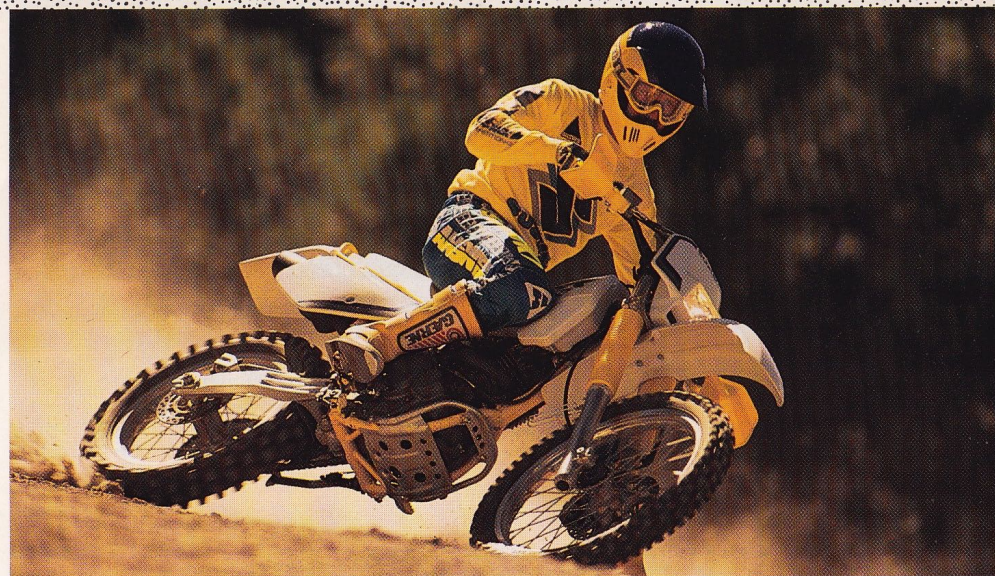
And, of course, we equipped the DR250 with a digital ignition that's resistant to temperature, humidity, and vibration. A crankcase guard for roughing it. A spark-arrester-equipped exhaust system that is U.S. Forest Service approved. And a slick-shifting six-speed transmission with ratios perfectly suited to woods and wide open spaces.

A CHASSIS BUILT TO HANDLE AMATEURS AND EXPERTS ALIKE.

A chassis able to satisfy both expert and amateur dirt riders must be light, agile, and sophisticated enough to handle the toughest off-road challenges. So that's what we gave the DR250.

The computer-designed frame combines a wheelbase that's shorter than most 125 motocross bikes with responsive steering geometry for agile handling.

To help the DR250 in all kinds of terrain, we gave it a sophisticated suspension system. Front and rear, the DR provides



11 inches of progressive suspension travel. Which means you get a ride that won't beat you up, and the kind of suspension response that won't let you down in the rough stuff.

The DR's 43mm cartridge-type front fork uses a special hydraulic bottoming control system that makes the fork progressively stiffer as it approaches maximum compression. And, of course, the fork offers spring preload and compression damping adjustments.

In back, the DR's Full Floater suspension uses progressive linkage that pivots on friction-reducing needle-bearings for smoother action. These bearings feature integrated grease-fittings for easy maintenance. The remote-reservoir rear shock features a full range of compression and rebound damping adjustments for precise suspension tuning.

GET A GRIP WITH ALL-WEATHER TIRES AND POWERFUL DISC BRAKES.

The DR's great handling is also due to its alloy wheels and Bridgestone tires. These tires, 21 inches in front and 18 inches in back, feature a special cross-ply construction for less sidewall flex and more puncture resistance, and a self-cleaning tread pattern for muddy conditions.

As you would expect, the DR's brakes are first class as well. An 9.8-inch disc and a dual-piston caliper in front. A 8.7-inch disc with a single-piston caliper in back. A thin stainless steel insulating plate reduces heat transfer in the rear caliper for better fade resistance. And a special aluminum alloy caliper guard and disc cover help prevent mud packing and rock damage.

Finally, we gave the DR250 a halogen headlight and off-road taillight.

In other words, we gave the DR250 everything you need for off-road fun. No matter how seriously you take it.







350

Of you think you're seeing double, don't be alarmed. The new DR350 is identical to the radical DR250 except for one thing. The engine.

We designed the DR350 for people who want the power of a bigger 4-stroke single with the agility of a 250. Consider this: When we added 100cc to the DR250 engine to make the 350, it added only about 1 percent to the bike's weight. That's not much. Especially when you consider that horsepower went up over 20 percent.

It doesn't take a rocket scientist to tell you what that does for the DR350's performance.

THE POWER TO MOVE MOUNTAINS.

How did we get so much power from the same basic engine? First, we bumped displacement by increasing the DR's bore and stroke from 73.0 x 59.6mm to 79.0 x 71.2mm.

Then, we took advantage of the bigger bore by fitting 2.3mm larger intake, and 2.0mm larger exhaust valves in the DR's head. These bigger valves increase flow through the combustion chamber for more power over a broad rpm range.

To keep this efficient head fed, we gave the DR350 a larger 33mm Mikuni flat-slide carburetor. Like the DR250, the 350's carb has a built-in accelerator pump, for added throttle response. And a special pilot jet system to stabilize fuel flow in rough terrain.

Of course, we also designed a new exhaust system for the DR350. Like the 250,



it meets EPA off-road sound requirements, and comes complete with an integrated spark-arrester approved by the U.S. Forest Service.

Like the 250, the DR350 engine employs a counter-balancer to smooth vibration. A dry-sump lubrication system that incorporates the light and simple Suzuki Advanced Cooling System, and a dipstick that's conveniently positioned in the frame backbone. A maintenance-free digital ignition. A heavy-duty clutch that's tough yet easy to use. And a six-speed transmission that assures the right gear for whatever terrain you ride.

A CHASSIS BUILT TO HANDLE YOU AND THE TRAIL.

The DR350, like the 250, features an extremely rugged frame. With a fully-adjustable Full Floater rear suspension system. And a rigid and responsive 43mm

leading axle front fork that also offers spring preload and compression damping adjustments. So you can set up the DR to handle precisely the way you want it to.

Up front, you'll find the same 21-inch front wheel wrapped in a special cross-ply Bridgestone tire designed to perform in both wet and dry conditions. And, of course, a 9.8-inch front disc brake and dual-piston caliper for hard stopping power.

In back, the DR350's 18-inch alloy wheel rolls on a matching Bridgestone tire, stopped by a single-piston disc brake. Like the DR250, the rear brake is protected by an alloy caliper guard and disc cover that help deflect mud and rocks.

Like the 250, the 350's swingarm uses adhesive bonding construction for lightness and rigidity. Simple, snail-cam chain adjusters work with a quick-change wheel

system to enable you to remove the DR's rear wheel in record time.

A SEATING POSITION DESIGNED TO MAKE THE LAST MILE OF THE DAY AS FUN AS THE FIRST.

Also like the 250, the DR350's ergonomic design follows that of our legendary motocross machines. The seating position is designed not only for maximum control, but also to make a long day in the saddle less tiring and more fun. The bodywork is as smooth as possible to ease rider movement. The large 2.5-gallon gas tank is positioned to lower the center of gravity, and make room for the extra long and flat seat which extends well over the fuel tank. And the flush-fitting side covers use quick-release fasteners to give quick access to the air-filter.

The DR350. Everything the DR250 is. And more.



DR250L

Engine	249cc, four-stroke, single cylinder, SOHC, 4-valve, air/oil cooled
Bore/Stroke	73×59.6mm
Compression Ratio	10.0:1
Carburetor	Mikuni TM31
Ignition	Digital/CDI
Transmission	6-speed
Final Drive	#520 chain
Overall Length	2164mm (85.2 in.)
Overall Width	912mm (35.9 in.)
Overall Height	1250mm (49.2 in.)
Seat Height	919mm (36.2 in.)
Ground Clearance	310mm (12.2 in.)
Wheelbase	1450mm (57.1 in.)
Dry Weight	112kg (247 lbs.)
Suspension: Front	Telescopic, leading axle, oil damped, adjustable compression damping and spring preload, 11 in. of travel
Rear	Suzuki Full Floater, fully adjustable spring preload, adjustable compression and rebound damping, 11 in. of travel
Brakes: Front	Single hydraulic disc
Rear	Single hydraulic disc
Tires: Front	80/100-21
Rear	110/100-18
Fuel Tank Capacity	9.5 liter (2.5 gal.)

DR350L

Engine	349cc, four-stroke, single cylinder, SOHC, 4-valve, air/oil cooled
Bore/Stroke	79×71.2mm
Compression Ratio	9.5:1
Carburetor	Mikuni TM33
Ignition	Digital/CDI
Transmission	6-speed
Final Drive	#520 chain
Overall Length	2164mm (85.2 in.)
Overall Width	912mm (35.9 in.)
Overall Height	1250mm (49.2 in.)
Seat Height	919mm (36.2 in.)
Ground Clearance	310mm (12.2 in.)
Wheelbase	1450mm (57.1 in.)
Dry Weight	113kg (249 lbs.)
Suspension: Front	Telescopic, leading axle, oil damped, adjustable compression damping and spring preload, 11 in. of travel
Rear	Suzuki Full Floater, fully adjustable spring preload, adjustable compression and rebound damping, 11 in. of travel
Brakes: Front	Single hydraulic disc
Rear	Single hydraulic disc
Tires: Front	80/100-21
Rear	110/100-18
Fuel Tank Capacity	9.5 liter (2.5 gal.)

At Suzuki we want every ride to be safe and enjoyable. So always wear a helmet, eye protection and protective clothing. Never ride under the influence of alcohol or other drugs. Study your owner's manual and always inspect your motorcycle before riding. Ride off-road only where authorized. Suzuki manufactures the DR250L and DR350L to conform to EPA off-road noise standards. Along with the U.S. Forest Service, Suzuki urges

you to "TREAD LIGHTLY." Preserve your future riding opportunities by showing respect for the environment, local laws, and the rights of others when you ride. Professional riders pictured.

Warranty: The 1990 DR250L and DR350L warranties cover the vehicles for six months, under the conditions stated in the American Suzuki Limited Warranty Policy. Units which are used in competition are expressly excluded from all warranty coverage.

Ask your participating dealer about the Suzuki Retail Finance Plan. Your dealer can also show you the full line of Suzuki off-road accessories to tailor your motor-

cycle precisely to your needs. With the Retail Finance Plan and Suzuki Credit Card, it's easy to afford and maintain the machine that's perfect for you. American Suzuki Motor Corporation makes every effort to present the most current specifications and product features when printing this literature. Because of our policy of continual improvement, changes may be made in equipment, availability, specifications and features without notice.



The Ride You've Been Waiting For™