

A rugged motor-cycle which is equally at home in the rough or on the smooth

SCRAMBLE ME A

The Japanese are all set to enter the trails market and have come up with a little beauty.



Story and photos by J. Van Ewyk

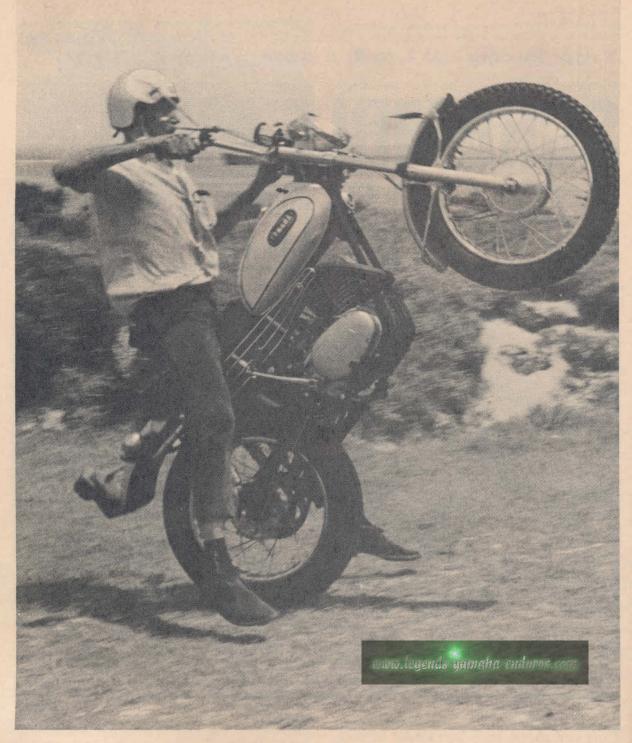
TN recent years, Japan's main claim to motor-cycle fame has centred on small-capacity machines and racy, chromy roadsters. It's only "special" dirt bikes for a long time were also small and produced as "street-scramblers". But right now Japan is hell-bent on getting on to the scrambler bandwagon and is manufacturing true scramblers and large trails machines in the 250 cc class.

One such cycle was launched on the Australian market recently - a Yamaha DT-1 250 trails, a versatile unit designed for either road or bush riding. And it can be converted to a competition scrambler

Businesslike. The Yamaha DT-1 can come through rough handling in rugged country without flinching.

with a special kit that's fairly simple to fit.

The bike with its 9½ in. ground clearance looks most impressive. It sits high and "horse-like", sporting wide, shallow, braced handlebars and huge wheels. There's almost a complete lack of chrome. The frame is made of lightweight tubular steel in a rigid double loop design. Rear suspension comprises a rugged square section swinging arm sprung on coil springs with three-stage adjustable oil dampers. Front suspension is a beautiful set of long forks modelled on the famed Ceriani principle with the internal springs and oil damping. The ride pe adjusted through



Whoops! With ample power, it's easy for the Yamaha to do a jump-up.

two air valves at the top of each fork.

In designing the DT-1, Yamaha started from scratch. The powerplant is a 246 cc single pot unit, a break from the usual trend for twins. It runs a bore of 2.756 in. and a stroke of 2.520 in. Compression is a mild 6.8:1. The maximum 21.5 bhp is developed at an easy 6000 rpm and the machine weighs only 240 lb dry. Torque is terrific, enabling the machine to climb to 35 mph in low gear. The engine has a five-port induction system, and Yamaha claims the extra ports perform the same job as the third port of the rotary valve induction system.

Lubrication is through an oil injection system, as fitted to nearly all conventional Japanese two strokes. Power is transmitted through a gear-type primary reduction system, an excellent five-speed gearbox, and through a 15/44 tooth final drive. The final drive is equipped with a slip clutch at the hub to prevent overloading. The single leading shoe brakes are excellent. When used hard they can easily give you a trip on to the tank.

Lighting is adequate. It includes a set of ostentatious trafficators, highly out of place on a machine like this. It's likely Japan is playing it safe with ever-



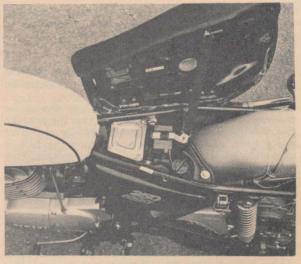
Above: Bike has long travel forks. Tacho and speedo are both mounted on rubber.

Right: Air-cleaner, battery and oil filler cap hide neatly under swing-up seat.

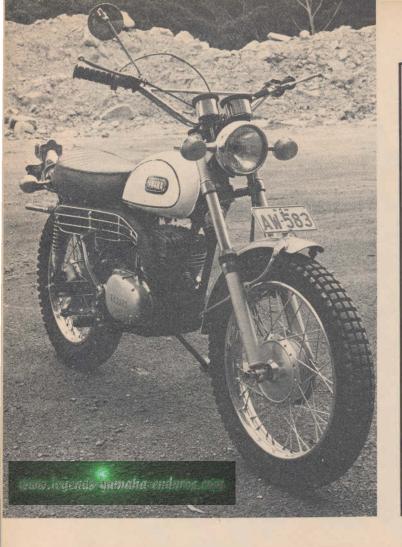
Below, right: Rear end is fitted with slip clutch between sprocket and hub. Note heavy-duty shocks.

Below: Engine has a compression ratio of 6.8:1 and develops 21.5 bhp at 6000 rpm.









SPECIFICATIONS PANEL

PERFORMANCE:

 Maximum speed
 approx 70 mph

 Min turning radius
 82.7 in.

 Min braking distance
 40 ft at 30 mph

ENGINE:

 2-stroke, 5-port single

 Lubrication
 automatic oil injection

 Bore and stroke
 2.756 in. x 2.520 in.

 Displacement
 246 cc

 Compression ratio
 6.8:1

 Max horsepower
 21.5 bhp at 6000 rpm

 Max torque
 16.8 ft/lb at 5000 rpm

 Transmission
 1st, 2.231; 2nd, 1.624; 3rd, 1.211; 4th 1.000; 5th, 0.826

DIMENSIONS:

Width overall	35.0 in.
Height	44.5 in.
Ground clearance	9.6 in.
Wheelbase	53.6 in.
Weight	240 lbs dry
Tank capacity	2.5 US gal
Tyre, front	3.25-19-4 PR
Tyre, rear	4.00-18-4 PR

Bike from Amalgamated Scooters Pty Ltd, Goulburn Street, Sydney.

Distributed by McCulloch of Aust Pty Ltd.

The machine's design is simple and highly functional. Trafficators and lights can be quickly removed so as not to get damaged while bush bashing.

changing traffic regulations in mind.

The seat is firm and broad, comfortable for solo riding but a passenger would suffer on anything more than a short trip.

Starting the machine is easy. Depress the choke lever on the carby, give two solid plugs on the primary kick starter and you're away. Occasionally the lever has a habit of coming back and belting the foot, a vice often associated with large, single potters. This can be quickly remedied by a purposeful plug on the lever.

On a road trip the machine behaved like a little gem, although not as fast as some people would want. Top speed was 70 mph, though the manufacturers claim 70 plus. At this speed the engine was working very hard and the consequent vibration was, to say the least, bearable. The terrific torque was evident when riding through the hills, flattening them out with hardly any gear bashing. It came in at just over 3000 revs and pulled steadily right to its peak at 5000 revs — even in fifth gear.

The bike cornered tremendously and beyond expectations, though road tyres would have been more comforting at high speed. The trails universals fitted occasionally felt rather dicey.

On a level six-mile section of dirt road, complete with corrugated sections, sandy patches and an occasional hairy bend, the machine was pushed along at an average of 45 mph and up into the 50s, trailing a smoke screen of dust. At times the ride provided by

the suspension seemed more like running over a sealed road. The big trails universal tyres bit hard at every corner and at no time, even in the sand, was there anxiety.

The real opportunity to see what the bike was made cf came on some moderately rough fire trails in Frenchs Forest, Sydney. Riding with a companion—also on a DT-1, at rather a quick pace—I struck trouble with my saddle bags loaded with photographic gear. A spill was immediately blamed on the bags. But the real cause was probably lack of experience in quick trail bashing. After photographing the bags were removed. The machine suffered minor damage—slightly bent handle bars—but this didn't alter the handling.

In the resulting burn with the other bike the machine got a hell of a pounding. It literally clawed its way up steep, rocky sections of the trail at a terrific pace, through deep sandy patches, bouncing through causeways and touching 40 mph on the level sections. At times the machine seemed to find its own way along the rougher tracks with no need for over exertion on the rider's part.

The Yamaha showed its true form in this type of riding and it was hard to realise it was equally at home in city traffic or on the open road. Ridden home, the bike had no rattles. No pieces had worked loose and even the street gear, normally removed for bush bashing was still intact.

Summing up, the Japanese have really provided an excellent machine in the Yamaha DT-1. Price of the bike is \$657.50 on the road and for an extra \$140 a full racing kit is supplied to convert the DT-1 into a very competitive scrambles or motocross racer. #