

# Motor Cycle

HOLIDAYS on the  
NORTH-EAST  
COAST

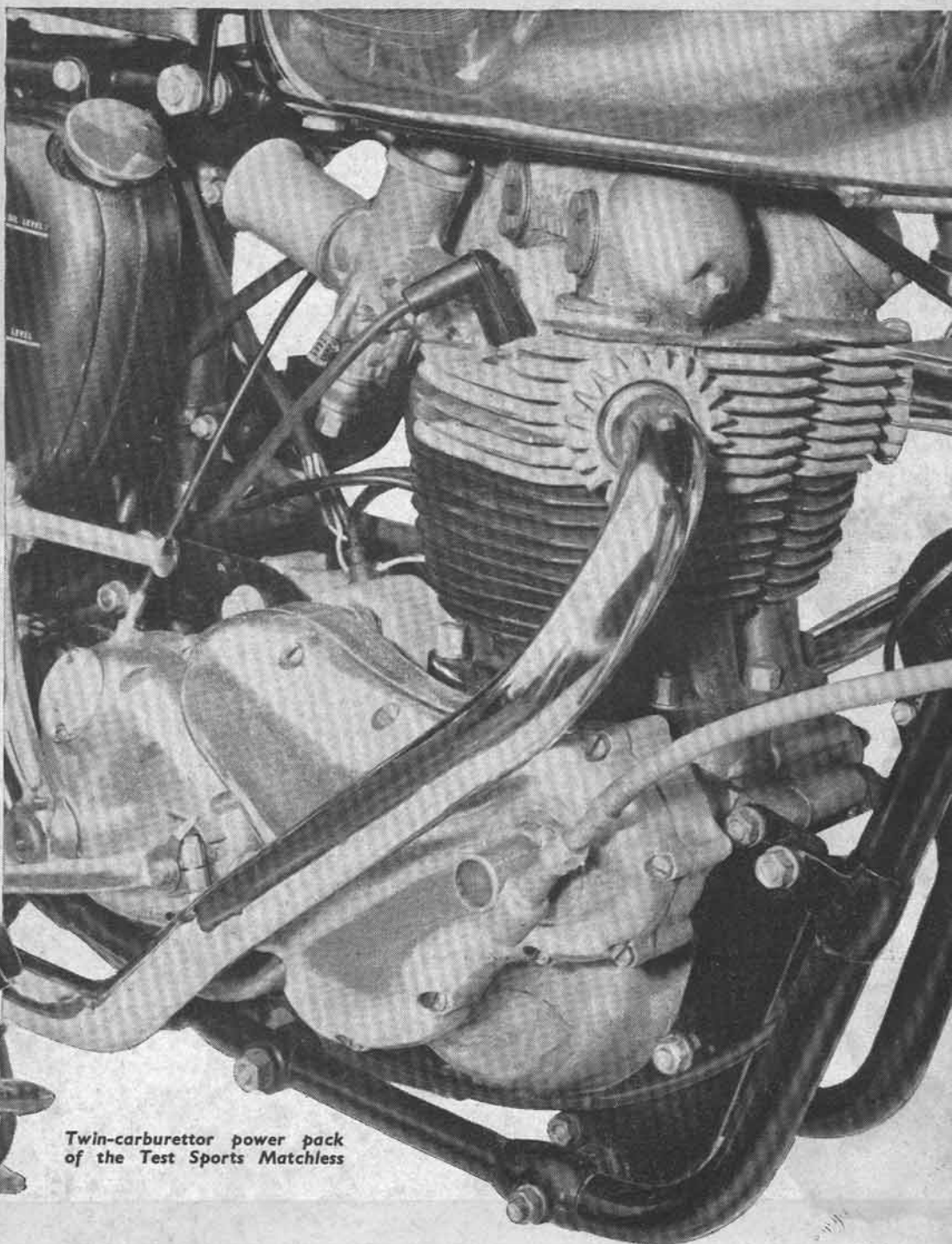
**Johnny Brittain  
Discusses the  
International**

**TEST:**

**Matchless**

**745 cc**

**CSR Twin**

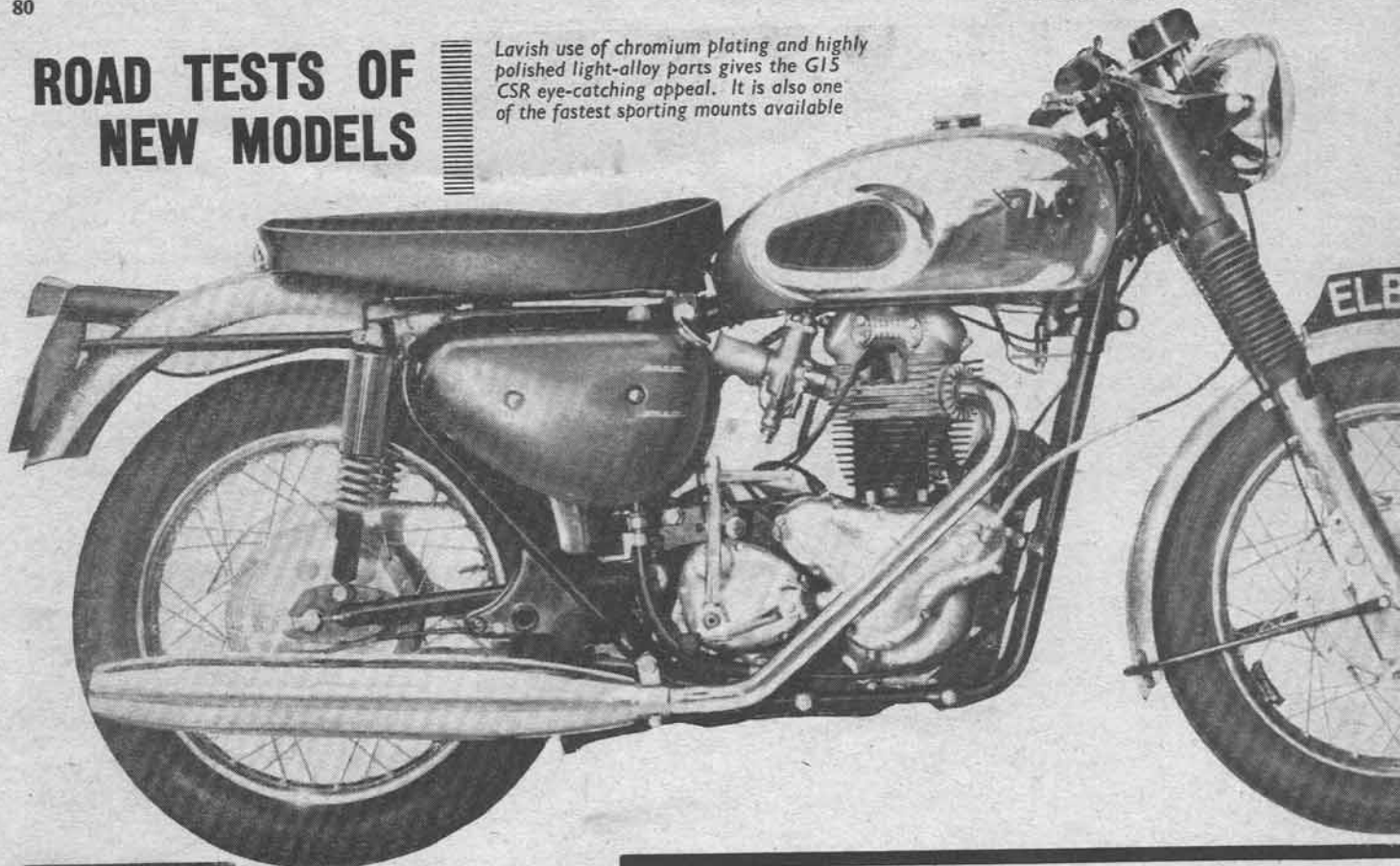


*Twin-carburettor power pack  
of the Test Sports Matchless*

**Motor  
Cycle**

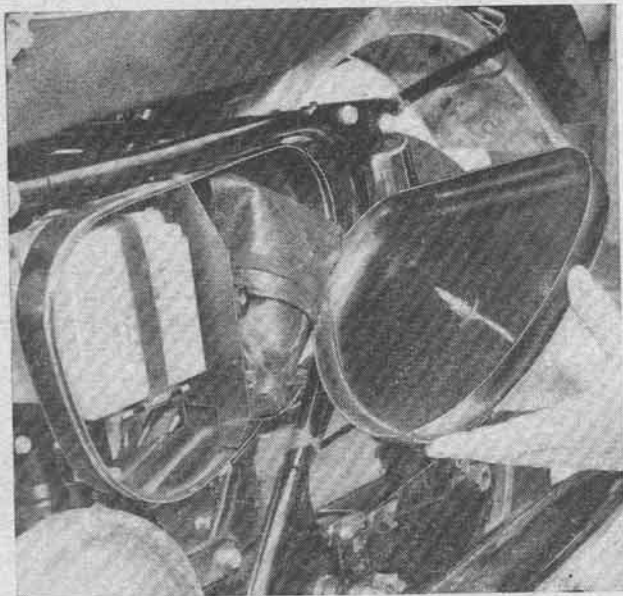
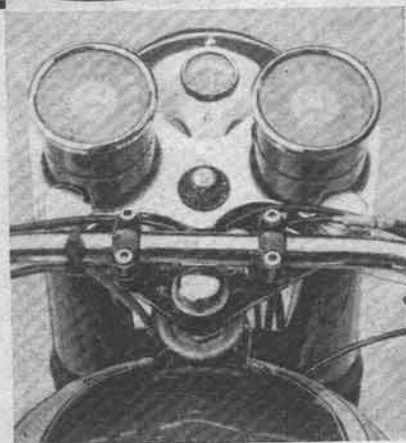
## ROAD TESTS OF NEW MODELS

Lavish use of chromium plating and highly polished light-alloy parts gives the G15 CSR eye-catching appeal. It is also one of the fastest sporting mounts available



Below: Twin six-volt batteries are housed in the forward section of the tool box; back of the box is cut away to accommodate the second battery.

Right: Matching speedometer and revmeter dominate the handlebar layout; light switch is between the instruments



**TO** the true enthusiast, there is no greater joy than piloting a big, beefy solo with oodles of reserve and a wide spread of power that makes buzzing through the gear box unnecessary.

Power that takes 80 to 90 mph cruising in its stride, flattens the steepest of gradients as if they were molehills and annihilates a standing-start quarter-mile in a time fit to make an E type blink.

This is the sort of urge you get from the Matchless G15 CSR. Why CSR? Well, the standard G15, which we tested last October, is for the rider who wants an orthodox but ultra-powerful roadster.

The CSR version meets the demands of those who insist on rear-set footrests, narrow, sporty, light-alloy mudguards and racy exhaust system—a bike that looks every inch capable of its 114 mph maximum.

For those who prefer a low handlebar, this is also available.

Although the Atlas engine is identical to that used in the G15, the CSR proved appreciably faster than its stablemate, giving 12 mph more at

maximum and knocking 0.5s off the quarter-mile time.

Apart from this, the main difference is in the riding position. The footrests are mounted about 5in forward of the normal pillion-rest position; pillion rests are not fitted. The rear-brake pedal is shortened to suit and the gear-change pedal is reversed.

As the gear-box mechanism has also been modified, gear selection is normal—one up, three down.

On the test machine, the

# 745 cc Matchless G15 CSR



Handling on tight corners is light, belying the size of the model

flat, almost straight, 27in-wide handlebar was fitted. This gives the best compromise in riding position with a marked forward lean, which proved comfortable for a 6ft rider.

At 33in, the seat level is a little too high for short riders but, in combination with the handlebar and footrest layout, it was decidedly comfortable. Gear and rear-brake pedals could be operated without moving the feet from the footrests.

For kick-starting, the right

footrest is hinged; to match up, the left rest also folds.

That the machine is essentially a man's mount was evident when starting. Two or three really hefty swings were required to bring the engine to life.

Because of the steeply inclined carburetors, flooding had to be avoided; for a cold start, one merely had to close the air slides and allow a minute or two for the float chambers to fill.

Except for slight piston slap

when the engine was cold, mechanical noise was limited to no more than a slight rattle from the valve gear and the twin large-capacity silencers muted the exhaust note to a deep, well-mannered throatiness, even at high revs.

For high-speed cruising, hard sparking plugs—KLG FE 220—were fitted and proved ideal.

At the bottom end of the scale, lumpy running made the tick-over relatively fast at 1,200 rpm and minimum non-

snatch speed in top gear was rather high at 24 mph. Low-speed snap acceleration figures were also affected.

Bottom-end power was so beefy that upward gear changes could be made at 3,000 rpm, but occasionally the engine pinked when pulling hard in a high gear, in spite of 100-octane petrol.

On the open road, though, the model was in a class of its own.

Peak power is developed at 6,800 rpm, yet the spread is so

## SPECIFICATION

**ENGINE:** Atlas 745 cc (73 × 89mm) overhead-valve twin. Crankshaft supported in ball and roller bearings; plain big-end bearings. Light-alloy cylinder head, compression ratio 7.5 to 1. Dry-sump lubrication; oil-tank capacity, 4½ pints.

**CARBURETTORS:** Twin Amal Monoblocs; air slides operated by handlebar lever.

**ELECTRICAL EQUIPMENT:** Lucas magneto with auto-advance. Lucas 12-volt, RM19 alternator, with rotor on drive-side crankshaft, charging twin Lucas six-volt, 13-amp-hour batteries, through rectifier; automatic voltage control. Lucas 7in-diameter prefocus light unit with 50/40-watt main bulb.

**TRANSMISSION:** AMC four-speed, foot-change gear box. Gear ratios: Bottom, 11.55; second, 7.68; third, 5.51; top, 4.51 to 1. Multi-plate clutch with bonded friction facings. Primary chain, ½ × 0.305in in light-alloy, oilbath case. Rear chain ½ × ½in with guard over top run. Engine rpm at 30 mph in top gear, 1,800.

**FUEL CAPACITY:** 3½ gallons.

**TYRES:** Dunlop; front, 3.25 × 18in ribbed; rear, 3.50 × 18in K70 Gold Seal.

**BRAKES:** 8in-diameter front; 7in-diameter rear, both 1½in wide and with finger adjusters.

**SUSPENSION:** Roadholder front fork with hydraulic damping. Pivoted rear fork controlled by Girling spring-and-hydraulic units with three-position adjustment for load.

**DIMENSIONS:** Wheelbase, 56½in. Ground clearance, 5½in. Seat height, 33in. All unladen.

**WEIGHT:** 398 lb fully equipped, with full oil tank and approximately one gallon of petrol.

**PRICE:** £366 3s 7d, including British purchase tax.

**ROAD TAX:** £8 a year; £2 19s for four months.

**MAKERS:** Matchless Motor Cycles, Plumstead Road, London, SE18.

## PERFORMANCE

(Obtained at the Motor Industry Research Association's proving ground at Lindley, Leicestershire).

**MEAN MAXIMUM SPEEDS:** \*Bottom, 44 mph; \*second, 66 mph; \*third, 92 mph; top, 114 mph.

\*Equivalent to peak power at 6,800 rpm.

**HIGHEST ONE-WAY SPEED:** 115 mph (conditions: still air, 12½-stone rider wearing one-piece leathers).

**MEAN ACCELERATION:**

	10-30 mph	20-40 mph	30-50 mph
Bottom	2.4 sec	2.6 sec	—
Second	3.4 sec	3 sec	3.6 sec
Third	—	4.4 sec	4 sec
Top	—	—	5 sec

Mean speed at end of quarter-mile from rest: 95 mph.

Mean time to cover standing quarter-mile: 13.8s.

**PETROL CONSUMPTION:** At 40 mph, 64 mpg; at 50 mph, 59 mpg; at 60 mph, 55 mpg; at 70 mph, 52 mpg.

**BRAKING:** From 30 mph to rest, 36 ft (surface, dry tarmac).

**TURNING CIRCLE:** 18ft 9in.

**MINIMUM NON-SNATCH SPEED:** 24 mph in top gear.

**WEIGHT PER CC:** 0.53 lb.

wide that it is unnecessary to exceed 5,500 rpm in the gears when even the fastest motorway expresses were being left trailing far behind.

Acceleration to an indicated 100 mph (a true 92 mph) was shattering. And 13.8s for the standing quarter-mile makes this model one of the fastest production mounts yet tested by *Motor Cycle*.

The engine was at its best when cruising from 45 mph to twice that gait, and the semi-crouched riding position ensured that there was no undue drag on the arms at 90-mph-plus speeds.

Moderately smooth to 4,300 rpm, the engine then entered a spell of vibration, felt through the handlebar and seat, but became smooth again at 5,500 rpm.

An 80-mph range in top gear makes the choice of gear ratios uncritical. Nevertheless, those on the G15 CSR are well chosen.

Bottom is low enough for easy restarts on the 1-in-3 test hill at MIRA, while third is ideal for regaining 90-plus speeds.

Heavier in operation than on the G15, the clutch had a very slight tendency to drag. This took the edge off the pluperfect gear change normally associated with AMC boxes.

Only indication the clutch gave of six full-throttle standing starts was some extra play at the lever. Adjustment returned to normal when the plates cooled.

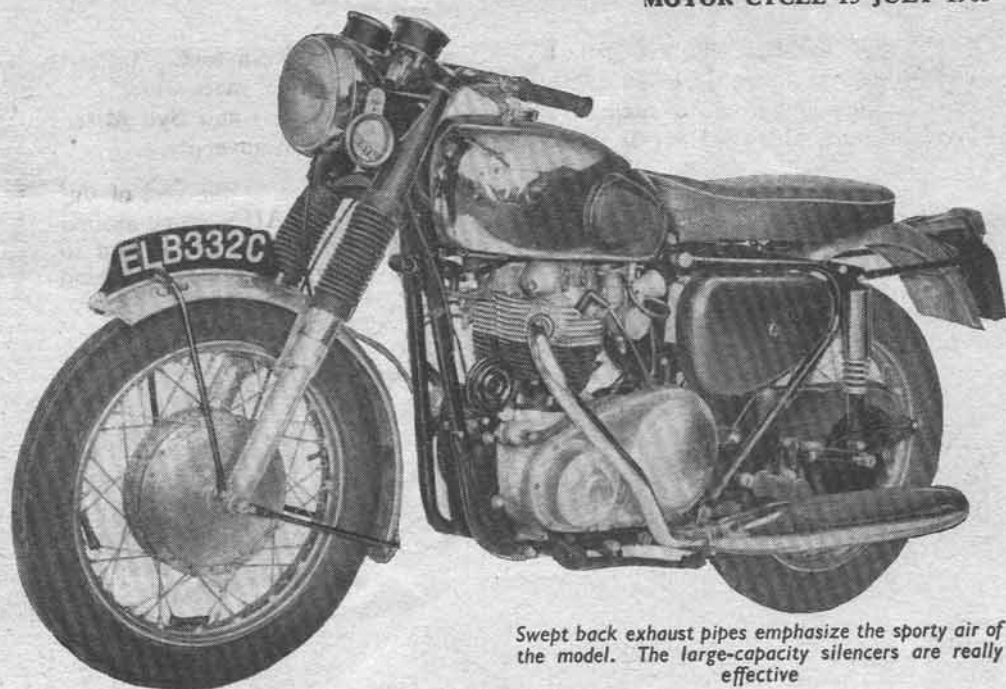
A big bike, the model belied its size when bend swinging. On only the slowest corners was there any noticeable top hamper.

Medium and fast bends called for slight effort when leaning. If the bike was banked over excessively on left-handers the stub of the centre stand grounded, but on similar right-side leans, nothing touched.

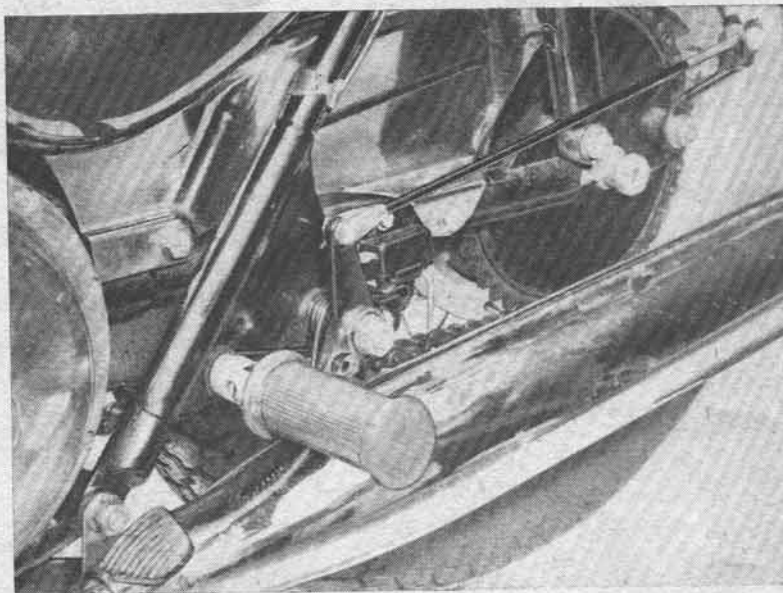
Front and rear suspensions are well matched and absorb road shocks satisfactorily at all speeds. Light at low speeds and therefore effortless when threading traffic, the steering became even lighter at high speeds and, above 85 mph, weaving was noticeable.

This was felt also when taking roughly surfaced bends at reasonably high speed.

On the test model, the brakes were not quite up to the extremely high standard usual on AMC models. Main fault was lack of bite in the



Swept back exhaust pipes emphasize the sporty air of the model. The large-capacity silencers are really effective



Both footrests are hinged—the left one, here, also acts as a stop for the rear-brake pedal. The brake warning light switch is directly behind the arm of the pedal

front. Insufficient leverage made rear operation insensitive.

However, neither was affected by an hour-long, high-speed drenching on the M1.

Although headlamp diameter has remained constant at 7in, one big advantage of the 12-volt system is a more intense beam. On the CSR this allowed 70 mph cruising and the dip beam cut-off prevented dazzle.

The horn note, too, was above average but could still be improved with advantage.

Throughout the test, the engine remained commendably oil-tight. Overall petrol consumption, including very fast riding on motorways and

performance testing, averaged 48 mpg. Petrol-tank reserve gave about six miles. One pint of engine oil was required in 400 miles.

Only maintenance needed was adjustment of the rear chain after a dash up the water-sodden M1. Normal spanner work is straightforward and the tool kit is adequate for routine jobs. However, the tool-box lid on the test model was a poor fit.

For normal parking the prop stand is convenient to use without danger of flooding the carburettors. Pulling the machine on to the centre stand involved a fair amount of muscle power.

Appreciated rider's features are the paired speedometer

and revmeter—both well positioned and easy to read—the combined horn button and dip-switch convenient to the left thumb, a cut-out button by the twistgrip, and rubber handlebar grips instead of smooth plastic grips normally fitted.

Liberal use of chromium plating on the usual parts and on the headlamp shell, rear chainguard and instrument panel is nicely balanced by polished light-alloy mudguards.

Finished in an attractive cherry red; the tank top, tool box and oil tank blend well with the bright metal, making the model extremely eyeable.

And it performs even better than it looks.