

DECEMBER 1968

2/6d

MOTORCYCLE

SCOOTER & THREE-WHEELER

MECHANICS

LARGEST SALE

ALF HAGON TALKS!

- ▶ Breakdown analysis
- ▶ Lambretta service
- ▶ Triumph 650 overhaul

BSA

3-POT

TEST

SAC
341G

● KNOW YOUR WIRING GEN!





3-POT



**Charles Deane
rides and
reports this
new 130 mph
Triumph**

▶ **What a fantastic machine!**
From a standing start to 100 mph and back in approximately 600 yards, plus a top speed of 130 mph through the electronic timing gear!

For sheer performance, I can think of only one other standard, over-the-counter bike to approach the long-awaited three-cylinder Triumph.

My first introduction to the Trident was on a high-speed test strip. I watched the works' test rider burble through the timing trap at 129 mph in one direction and 124.8 the other way. He then reeled off two standing quarter-miles with terminal speeds of 105.6 and 102.6 mph.

Then, it was my turn. Having never ridden this giant of a machine, I nervously swung a leg across the saddle. A gentle push on the kick-start and the three cylinders burbled into life.

"Take her to 8000 in the gears and just let her go in top. By the way, you'll have to stop pretty smartly at the end of the strip,

once you are through the lights!"

Pulling in the surprisingly light clutch, I snicked the bike into first gear. The movement was so easy and clonk-free that I had to check to make sure it was in gear.

As I slowly rode away with the motor barely ticking over, I carried out a quick check of all controls for adjustment and positioning. Satisfied that everything was working properly, I rode to the end of the test strip, quickly getting the feel of the Trident.

The gearchanges were smooth and positive and the three carburetors were very responsive to the throttle.

Steering was light and once on the move, the 460 lb. of machinery appeared no greater burden on the rider than any other big bike. It could be trickled along at walking pace with perfect balance and under complete control.

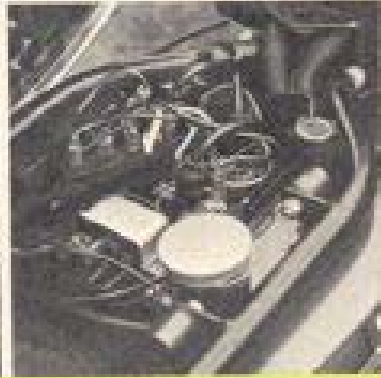
The riding position was comfortable with the wide bars giving



Neat and uncluttered, the tachometer and speedometer units with ammeter, main beam and ignition warning lights. Note steering lock.



The oil cooler is necessary to keep the 3-cylinder motor cool. In fact, it is so efficient, the temperature is lower than twist



Triple coils, condensers and the relay for the twin-windstone horns are situated neatly beneath the dual seat alongside oil filler cap.



The triple Amal concentric carbs are close-coupled with rubber mountings to the cylinder heads. Note the single large air filter.

TRIDENT



an almost armchair position on the well-upholstered dual-seat. Even my 29 in. inside leg could easily reach the ground without trouble.

The brakes had been tested to their limits on the previous high-speed runs and before I blasted down the timing strip, I made a quick adjustment of the front twin-leading-shoe stopper at the handlebar lever.

The thin ribbon of tarmac stretched before me with the electronic timing gear just visible almost three-quarters of a mile away.

Winding up the motor to about 4000 rpm, I dropped the clutch in first gear with a minimum of slip. As the revs dropped briefly and the power came in at about 3000 rpm, the brute of a machine rapidly surged forward.

Hanging desperately on to the handlebars and with knees slipping from their grip on the fuel tank, I struggled to reach the clutch lever and hook my toes under the gear change lever

as the revs rapidly built up to the 8000 mark.

At about 50 in. first, I lifted the gear lever into second and dropped the clutch with full throttle on all three carbs. With crash helmet pulling my head back and still struggling to retain my hold on the tank with my knees, the bike hurtled towards the 80 mark on the speedometer.

With such vivid acceleration, the most difficult thing was reaching for the clutch and hooking a toe under the gear lever. It felt as though an invisible giant was trying to lift you backwards off the bike!

With power coming in hard in the middle of the power band, I changed into third and, once again, just hung on till I saw the needle on the rev counter reading a rapid 8000.

Then, with relief, I hooted the gear lever into top, put my feet on the pillion footrests, wrapped myself around the tank and screamed towards the timing lights.



Jet-styling for the silencers give the three-cylinder a distinctive appearance. Exhaust note was very subdued, even at high engine speed.

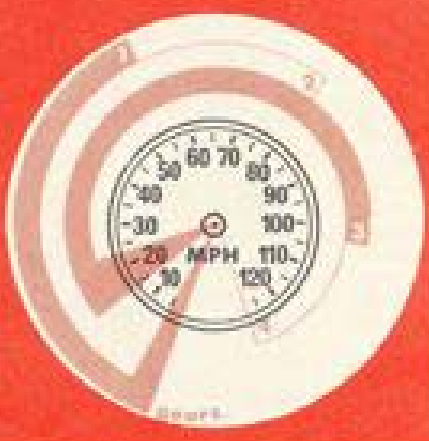
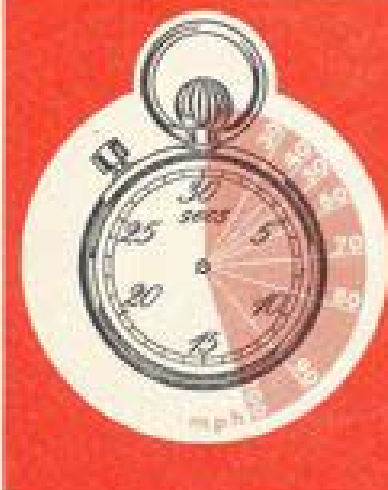
The view which most other cars and bikes will have of the new Trident. The Dunlop K51 was the tyre especially designed for Trident.



TRIUMPH TRIDENT



TRIUMPH TRIDENT 750



Performance

Speeds in gears:

	Minimum	Maximum
1st	2	55
2nd	6	80
3rd	14	104
4th	22	129

Acceleration:

0-30	2.4 sec.	0-40	3.4 sec.
0-50	4.2 sec.	0-60	5.4 sec.
0-70	7.0 sec.	0-80	8.8 sec.
0-90	11.6 sec.	0-100	13.4 sec.

Specifications

Engine:

740 cc (bore and stroke—67 x 70 mm) overhead valve, transverse three-cylinder. Maximum claimed output, 58 bhp at 7500 rpm. Compression ratio 9 to 1. Dry sump lubrication. Bearings: ball on driving side, roller on timing, with two plain main inner bearings; plain big ends.

Carburation:

Three Amal concentric 826 with 27 mm diameter chokes; air slides operated by hand-lever lever. Also, single large felt-and-mesh air filter.

Transmission:

Primary: $\frac{1}{2}$ in. triple chain in oil-bath case with adjustable tensioner. Secondary: single $\frac{1}{2}$ x $\frac{1}{2}$ in. chain. Four-speed foot operated gearbox, ratios: 11.95, 8.3, 5.83 and 4.87 to 1. Clutch: single plate Borg and Beck diaphragm unit.

Electrical Equipment:

Ignition: battery, triple contact breaker

and coils. Charging: Lucas 110 watt alternator through rectifier and zener diode to 8 amp-hour battery. Lighting: Lucas 7 in. headlamp with rear stoplight operated by both front and rear brake.

Fuel consumption:

High speed motorcycling	34 mpg
Touring with 70 limit	54 mpg
About town riding	50 mpg
Average	46 mpg

Braking:

Braking from 30 mph on dry tarmac—32 ft. 6 in. (11-stone rider).

Suspension:

Telescopic front fork with two-way damping. Swinging arm rear with three-position Giring suspension units.

Brakes:

8 in. twin-leading-shoe front and 7 in. single-leading-shoe rear.

Capacities:

Oil—5 $\frac{1}{2}$ pints, including oil cooler.
Fuel—4 $\frac{1}{2}$ gallons.

Dimensions:

Wheelbase, 58 in. Saddle height, 32 in. Ground clearance, 6 $\frac{1}{2}$ in. Weight, 488 lb.

Price: To be announced.

Manufacturers: Triumph Engineering Co Ltd, Meriden, Coventry, Warks.

3-POT POWER

I watched the rev counter climb up to 8000 and then beyond! It was showing just on 8400 as I flashed through the speed trap—a speed of 125.7 mph.

I then discovered why one had to stop rapidly after the trap—with almost 7 cwt. of man and machine hurtling along at almost 130 mph, 300 yards are soon covered in braking.

Standing and pulling on both front and rear brakes, I just managed to stop the mighty Trident before the end of the strip.

I must admit, I was very thankful for those new twin-leading-shoe Triumph brakes and the effective, fade-free results they achieve.

A repeat performance in the opposite direction and then a standing-quarter with a terminal speed of 102 mph proved to me that this new three-cylinder Triumph is the fastest standard roadster yet produced by the BSA/Triumph group.

At the end of this hard day's testing, the Triumph wasn't any the worse for wear and not a sign of oil leaked from the 58 bhp motor. It ticked over smoothly and gave no impression that it had just completed a series of racing speed tests.

The only vibration felt at the handlebars was between 5500 and 6400 rpm and this was no more than a tremor. Throughout the rest of the rev range, the motor was incredibly smooth.

Fuel consumption figures for these top speed tests were pretty shattering with a mere 32 to 34 mpg being registered.

But, on the road, after a brief overnight run to London and then back to the Meriden Triumph factory, I averaged a more respectable 52 to 56 mpg.

Cruising down the motorway at 70 mph was virtually a doddle, with the engine ticking over at approximately 4500 rpm. On the test circuit, the Trident is one of the few bikes I have ridden where, at 80 mph you open the throttle and still get "hit in the back" with the acceleration.

Handling up to the 70 legal limit is perfect, but I found that there is still a sign of the rear-end weaving when on full bore in a straight line and also, when you shut off on long, fast bends.

About town the Trident was impeccable with its docile, tractable motor. A mere whiff of throttle kept the well-silenced three-cylinder waffling along at 30 mph in top, although it is better to ride in third gear for rapid overtaking.

With triple-coil ignition, the three-cylinder was never any problem to start. A simple flooding of the outside two carbs and with ignition on, it only required the slightest of prods on the kick-start to set the motor in motion.

The electrics are all 12-volt and lighting is perfectly adequate for normal touring speeds at night.

There's no doubt that the Triumph 3-pot is the machine I would like to have as my high-speed tourer. But with a proposed price of around £550, it's certainly an expensive lot for the average rider. ●