Cylie Holder Road-Holder

BEIMING BEIMING BEIMING

This book has been issued as a guide to discriminating motor cyclists in their choice of model. The record of achievement described is absolutely without equal, either for its comprehensive nature or for the brilliance of results.



A SUMMARY OF 1937

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N AGAIN placing before the motor cycling public the worldfamous "Road-Holder" range, the NORTON Company do so with the satisfaction of knowing that they offer machines of proved reliability, proved design, proved craftsmanship and proved performance.

Nothing that has not been tested to the uttermost degree and found to be absolutely perfect finds a place in the NORTON specification. NORTON machines, it is evident, are not altered to pander to fashion—merely altered for alteration sake—merely to enumerate a lot of details of just minor improvements meaning nothing but looking a lot on a paper specification. Many details of basic design have therefore remained the same in principle and it is a tribute to the brilliance of this design that in spite of faithfulness to well tried ideas the machines are so modern as to lead contemporary thought, and place the greatest value before the prospective purchaser. To seek the reason for this preponderating excellence is to examine the wonderful record of successes gained by the NORTON machines in the foremost Reliability Trials and Classic Road Races. It is a well-known fact that the NORTON Company has always used such events to prove to the public the superlative nature of their products whilst at the same time accumulating invaluable data for the improvement of machines. Thus road racing and trials work have always formed a background to the Company's policy and the many important successes listed in this catalogue, including as they do the winning of the Senior and Junior T.T., important International road races, both continental and colonial, premier honours in the Scottish Six Days and outstanding success in the International Six Days' Trial—form a record that no serious minded or experienced rider could afford to overlook when deciding on his choice of new mount.

The cumulative result of these successes guarantees your satisfaction when choosing a NORTON.

And if you want a final word of recommendation ask the man who owns a NORTON. **He** will confirm the magnificent performance and speedy reliability that characterise "The Road-Holder."

Page Two







- Mr. M. Cann at Braddan in the Junior Manx G.P.
- 2. At Speed on Bray Hill.
- The Junior Manx G.P. winner, Mr M. Cann at Quarter Bridge.

Photos by courtesy of "The Motor Cycle"





INTERNATIONAL 6 DAYS' AND SCOTTISH 6 DAYS' TRIAL

HE INTERNATIONAL SIX DAYS' TRIAL brings together the most expert riders and finest machines of the world's foremost motor cycling nations in competition for the International Trophy. Naturally the Selection Committees of the various competing nations are very careful in their nomination for places in the team. The International Trophy is a much sought after award and is of great national importance. To Vic Brittain riding a 348 c.c. camshaft NORTON fell the honour of filling one of the places in Great Britain's winning Trophy Team, whilst Jack Williams also riding a NORTON, was a member of the English Vase Team. V. N. Brittain has been chosen five times to ride in the British Trophy team and has never lost a single mark.

It is a condition of the Trial that before the start, major components such as wheels, frames, gearbox, magneto, engine and so on, are sealed in order to prevent replacements being made either during the Trial or before the final test at Donington. The course, which radiated from Llandrindod Wells, is one of the most difficult that these Islands can provide. As everyone knows the British team won the International Trophy—so that NORTON played its part in securing the greatest honour in the Reliability Trials world. In addition, the NORTON official Team consisting of V. N. Brittain, J. Williams and H. J. Flook, proved successful in winning the F.I.C.M. Gold Medal, being the only British manufacturers' team to gain such award—the only team to complete the course without loss of marks.

THE SCOTTISH SIX DAYS' TRIAL ranks next in importance to the "International" and is supported by all the well known trials riders in the country. The NORTON Team consisted of J. Williams, H. J. Flook and V. N. Brittain and throughout the week their brilliant performance gave evidence of the superlative quality of the Unapproachable Norton. The centre of the "Scottish" was Fort William and each day's route of what was considered one of the most difficult of the whole series, included steep sections of boulder-strewn hills with the acutest of hair-pin bends and often there was "glue-pot" mud to negotiate as well. It is difficult for those who have not been over the route to appreciate the enormous stresses that such a course entails, especially when it is continued for six days. The Castle Challenge Trophy for the best individual performance of the Trial and a Coronation Cup were won by J. Williams, whilst H. J. Flook won the McNaughton Trophy for the best sidecar performance of the Trial and also a Coronation Cup, and V. N. Brittain won a Coronation Cup.

The performance of NORTON machines in reliability trials enhances their record in international road races. In both types of events—differing so widely in many respects—reliability is an essential factor. It is equally necessary to the ordinary user.



RELIABILITY TRIALS

EMROSE TROPHY TRIAL. Run over the most severe hills and difficult Derbyshire moorland tracks, the 1937 Bemrose was rendered more exacting a test by reason of the fact that the course

bore very obvious evidence of severe blizzards. J. Williams made the best 350 c.c. solo performance and won the Alan Smith Cup whilst D. K. Mansell won the Syston Cup for second best sidecar performance.

WYE VALLEY TRIAL. The course goes over and around the Black Mountains, giving ample scope for testing the capabilities of any machine. Best sidecar performance of the day was put up by D. K. Mansell who won the Wye Valley Traders' Cup for the second successive year. Best 350 c.c. performance was put up by J. Williams who won the Millar Cup, whilst the NORTON Team—J. Williams, V. N. Brittain and D. K. Mansell secured the Stewart Team Trophy for the best manufacturer's team.

TRAVERS TROPHY TRIAL. The Premier Awards went to NORTON riders, the Travers Trophy being won by V. N. Brittain who covered the difficult course without loss of marks. This is the fourth time that this important trophy has been won by a NORTON rider. H. J. Flook put up the best sidecar performance of the day and won the White Eagle Trophy whilst the NORTON Team—J. Williams, V. N. Brittain and H. J. Flook won the Team prize.

ALAN TROPHY TRIAL. Again NORTON riders were responsible for such consistency of performance that provided evidence of the superiority of the world's best road holder. Both J. Williams and V. N. Brittain retained their clean sheets to the end of the Trial to win with H. J. Flook the Team Prize, whilst H. J. Flook also gained the Barron Trophy for the best sidecar performance. V. N. Brittain made the best 500 c.c. solo performance.

SOUTHERN TRIAL. Organized on different lines from most trials, this event run at Alton, Hampshire, gives more attention to easy starting, flexibility, braking and manoeuvreability, such qualities being equal in importance to hill climbing. Under such conditions NORTON gave a sweeping demonstration of its superiority by winning the Team Prize in addition to the best 350 c.c. solo performance and best 500 c.c. side car performance.

KICKHAM MEMORIAL TRIAL. The Wessex Centre's big trial provided a 39 mile course with eight observed sections, stop-and-restart and brake tests. The best sidecar performance was made by D. K. Mansell who won the Tytherleigh Cup whilst the Speed Cup (best amateur sidecar) was won by Mr. F. G. Smale riding a NORTON.

SUNBEAM "200" TRIAL run in the Minehead district included Cloutsham, Beggar's Roost, Lyn and Yascombe and other testing west country hills. J. Williams won the 350 Cup with a clean sheet whilst the NORTON Team—J. Williams, V. N. Brittain and H. J. Flook won the Team Prize.

BRITISH EXPERTS TRIAL promoted by the Birmingham Motor Cycle Club and open only to riders who have won Premier Awards in open A.C.U. events. The Palmer Trophy for the best sidecar performance was awarded to D. K. Mansell, who thus becomes the British Sidecar champion. His performance was regarded as a brilliant one over an acknowledged difficult course.

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RELIABILITY TRIALS—cont.

OLMORE CUP TRIAL is one of the most important one-day trials held in England and as befits such an important event always creates the utmost interest. Starting from

Stratford-on-Avon, competitors have to negotiate some of the hills of the Cotswold range, the observed sections of which are acknowledged

to be equal to some of the most difficult in the country. D. K. Mansell won the William Watson Shield for the best sidecar performance by the substantial margin of 23 marks and was the only sidecar outfit to climb Warren Hill and Camp Hill. The NORTON Team—D. K. Mansell, H. J. Flook (First class award) and J. Williams (First class award)—won the Team Prize. COTSWOLD CUP TRIAL starting from Stroud embraces many of the hills used in the famous "British Experts Trial" and provides a very severe test. Once again, however, NORTON machines distinguished themselves, their superior qualities proving more than equal to the glutinous mud and rocks that formed the chief obstacles. Not only was the NORTON Team successful in winning the White Team Award but the individual members, J. Williams, V. N. Brittain and D. K. Mansell won respectively the Cotton Trophy (Best "350" performance), Clark Cup and Gloucestershire Cup (Best "500" sidecar).

MITCHELL MEMORIAL TRIAL is the premier South Wales Trial and attracts considerable attention from the experts on this account. The course is planned to cover some of the trickiest and most difficult sections round Newport (Mon.) and heavy rain before the Trial added to the organizer's work by increasing the difficulties of some of the sections for the competitors. The Mitchell Memorial Sidecar Trophy for the best sidecar performance was won by H. J. Flook whilst the 500 Sidecar Cup was won by D. K. Mansell. First class awards were won by

J. Williams and V. N. Brittain.

WEST OF ENGLAND TRIAL traverses parts of Dartmoor around Chudleigh (Devon) and proved one of the roughest trials of 1937, in every way a most exacting test of both men and machines. Again NORTON stamina and reliability proved superior to the difficulties of the Trial by winning two Premier Awards—the Motor Cycle Trophy (sidecar) won by H. J. Flook who put up the best sidecar performance whilst the Dart Cup was won by D. K. Mansell for the

best 500 Sideca, po: formance.

STROUD TEAM TRIAL is the only open Team Trial held in England and by reason of its nature is an extremely keenly contested event. In this, as in other reliability trials, the Unapproachable NORTON put up a remarkable performance in again winning the Team Award—the National Trophy. NORTON Team successes demonstrate much more than an individual award possibly can, the sheer reliability built into the NORTON machine. The best individual performance of the day was made by V. N. Brittain for which he won the Hilleslie Cup.

JOHN DOUGLAS OPEN TRIAL. This Trial was run for the first time in 1937 and included a difficult course in the Bristol district and resulted in a sweeping NORTON success. The John Douglas Memorial Trophy (solo) for the best performance of the day was won by J. Williams, whilst the John Douglas Memorial Trophy for best sidecar performance was won by H. J. Flook. V. N. Brittain won the unlimited cup whilst D. K. Mansell won the Sidecar Cup and the NORTON Team—J. Williams, V. N. Brittain and W. R. Latchem, won the Manufacturer's Team Prize.

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SENIOR TOURIST TROPHY RACE

N SEVERAL occasions the events surrounding the winning of the world's most coveted road race have been termed "sensational" but looking back, it is certain that no race more richly deserved the epithet than the 1937 Senior. The cause of this enthusiasm was the brilliance of "The Road-Holder"—nine times winner of the I.O.M. Senior T.T. combined with a last lap that will be for ever memorable.

The entrants for the 1937 Senior were international in character, all the racing stars of first magnitude being included, together with several of the "hottest" foreign machines reputed to be very fast and capable of breaking the marvellous NORTON Senior "monopoly." This remained to be proved and the first lap gave no indication that NORTON brilliance of design and performance had yet been matched or even approached. At the end of the first lap two NORTONS were already in the lead and two others well placed in fifth and sixth places. Fast as the first lap speed of the leading NORTONS had been—I. Guthrie's was an unofficial record and he wa the first rider to lap in less than 26 minutes—the second lap produced even greater speed. Jimmy completed two laps at the record average speed of 88.11 m.p.h. with F. Frith close behind at a speed of 87.17 m.p.h. And so the race proceeded, faster than any previous Senior but it was the Unapproachable NORTON that set the pace. As the race progressed so the excitement of the onlookers grew and when it became known that Jimmy Guthrie had retired on the mountain and was unluckily out of the race, a stir was indeed created. But this was nothing compared with the feverish excitement aroused by the riding of young Freddy Frith, for although there appeared nothing very spectacular about his methods the sixth lap times showed 25m. 17 secs. against his name as proof of the wonderful speed and efficiency of his NORTON. But an even greater effort was to come, for on the last lap F. Frith put all previous T.T. rides and records completely in the shade by an achievement that will remain vividly in the mind of all motor cycling enthusiasts for many a day. His last lap was completed at the incredible record speed of 90.27 m.p.h.—thus to NORTON fell the honour of being the first machine to lap the hazardous Island course at over ninety, as it had been the first to lap at over eighty m.p.h. Thus the truly sensational 1937 Senior T.T. saw yet another NORTON victory at the record speed of 88.21 m.p.h.—the sixth in seven years—with J. H. White third at 83.97 m.p.h.; H. L. Daniell fifth at 83.61 m.p.h. and J. C. Galway, the South African private owner, seventh at 80.26 m.p.h. —once again a convincing exhibition of NORTON proverbial reliability-cum-speed and quality of workmanship. Further proof is added to this statement by the fact that during the last seven years NORTON machines have filled no less than seventeen of the twenty-one first three "Senior" places. NORTON machines provided 7 of the 13 finishers—two of the NORTONS were 350 c.c. models—and gained 4 of the only 7 first class replicas awarded.

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JUNIOR TOURIST TROPHY RACE

ORTON supremacy in the Junior T.T., based on the unequalled efficiency of performance, traditional reliability and faultless design, has been remarkably demonstrated by a record of six previous consecutive wins. Naturally there were many people who before the 1937 Junior was run, were confident that at last the amazing NORTON winning sequence must come to an end. They backed their opinion by the strength of the entry, and the quality of the opposition; nevertheless it left the official NORTON team undaunted and within half-an-hour of the start NORTON machines had established a 1-2-3 lead. History was being again repeated. Guthrie from a standing start had broken all records with a lap of 83.97—an amazing speed for a 350 c.c. machine. Laps two and three found the invincible NORTON team still leading, with the opposition still unable to make any effective impression against the brilliant performance and consistent reliability of "The Road-Holders." Guthrie had raised the lap record to 84.65 m.p.h. and F. Frith, 2nd, had so far averaged 82.59 m.p.h. and J. H. White, 3rd, 82.40 m.p.h. When White came in to fill up, the time occupied lost him his third place, but only temporarily for on lap six he again appeared amongst the three leaders. This was the only alteration to the place men during the whole of the Junior race. Meanwhile Guthrie had been at work on the lap record again, with the result that the astonishing new time of 26 minutes 35 seconds was set up, equal to a speed of 85.18 m.p.h. The supremacy asserted by NORTON machines was so overwhelming that they received the "go easy" signal from the pits—but even so Freddy Frith equalled the lap record set up by his team mate of 85.18 m.p.h. And so the end came as expected. NORTON brilliance and consistency was not to be denied and the final positions were 1st, J. Guthrie, 84.43, record average speed more than 4 miles an hour faster than 1936. 2nd, F. L. Frith, 83.29 m.p.h. 3rd, J. H. White, 82.54 m.p.h. These riders also won the Manufacturers' Team Prize for the third successive year and the Club Team Prize for the second successive year.

Thus for the seventh successive year NORTON had won the Junior and had been the only machine during that period to create record laps or record average speeds. It was also the only 350 c.c. machine to lap in less than 27 minutes. Remember, no machine other than NORTON had led the Junior T.T. since 1931—equal to 49 laps at record average speed with NORTON in the lead.

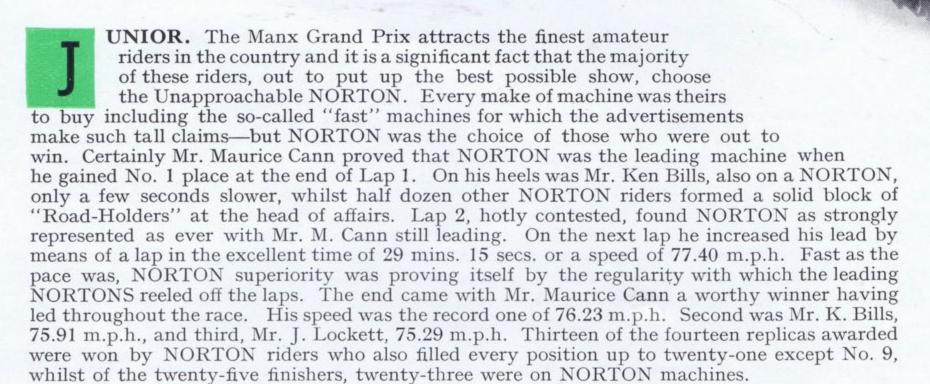
Privately owned NORTONS also finished 5th, 9th, 10th, 13th, 14th, 15th, 16th, 17th and 18th, an unequalled exhibition of consistency of performance—amazing speeds and clockwork reliability. The successful 1-2-3 machines when stripped for examination at the end of the race, were in perfect order, "The Motor Cycle" reporting "All the machines finished in tip-top order. Valves, chains, tyres and all items that are liable to wilt and wear were excellent."

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. J. W. Forbes in the Junior.



MANX GRAND PRIX



SENIOR. As in the Junior, NORTON machines were the popular choice of the amateurs hoping for a win or a place. From the start Mr. McEwan on a NORTON electrified the crowd around the course by his superb riding and completed an initial lap at the record-shattering speed of 83.10 m.p.h. leading a procession of a dozen NORTONS. On the second lap the Scotsman increased his speed still further and completed the lap in 26 mins. 59 secs., equal to a speed of 83.92 m.p.h. which was to stand as the new Senior lap record. But misfortune overtook him during the next lap in the form of a spill at Laurel Bank, to let the Junior hero, Maurice Cann, into the lead. It was proving an extraordinary keen contest up to the best "Manx" traditions—the hot pace so enthusiastically set imposing tremendous stresses on the machines concerned whether they were striving to maintain a lead or being urged to overtake those in front. Once in the lead Mr. Cann proved his prowess by maintaining the No. 1 position but he was very closely followed by Mr. K. Bills in 2nd place, with Mr. W. A. Rowell 3rd also in very close attendance. The question was freely echoed—"Will Cann do it?" The race finished with the riders in the order given above, each beating the previous record average speed—the speeds being 81.65 m.p.h., 81.10 m.p.h. and 80.97 m.p.h. respectively—a wonderful double for Maurice Cann. A remarkable feature of the list of finishers was that it was headed by no less than twelve NORTON riders, whilst the Peveril Club, all NORTONS, won the Team Award. Of the thirteen replicas awarded, twelve were won by NORTON riders. The result of this race taken in conjunction with the Junior provides the most convincing testimony to NORTON superiority and one that must influence the opinion of every discriminating rider.

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- Mr. Lockett at Brandish Corner in the Senior Manx G.P.
- 2. From left to right: Mr. K. Bills, Mr. M. Cann (the winner), and Sir Montagu Butler.
- 3. Mr. Cann crossing the finishing line.

Photos by courtesy of "The Motor Cycle"





GRAND PRIX DE L'EUROPE

(Swiss Grand Prix)

UNIOR. To decide who the road racing champions of Europe in the various classes are to be, one of the important International road races is selected each year. The honour of setting the stage for the 1937 championship fell to Switzerland so that the Swiss Grand Prix became also the Grand Prix de l'Europe and with the added impetus of championship status greater keenness was naturally given to the racing. It was rumoured in some quarters that the strength of the opposition would be too much for NORTON and certainly on paper, the men and machines matched against the "Road-Holders" made it seem certain that victory would be won only with difficulty. However, theory and fact again proved to be very different propositions. From the start of the 350 c.c. race Jimmy Guthrie and F. Frith, the only NORTON works riders were in the lead. Forty-five laps of the course had to be covered and whilst each lap was short, it was also tricky so that the race called for skilful riding and a machine that provided perfect braking and cornering with very fast "flat-out" speed and the ability to accelerate to this speed in quick time—a perfect course for full demonstration of "The Road-Holder." As the Junior race proceeded so NORTON supremacy became ever more marked. Together J. Guthrie and F. Frith swept round the course—with the rest hardly in the chase! Such speedy reliability, demonstrated many times before in similar circumstances was proving the master of the best "Junior" mounts and riders that Europe could muster for the Championship and the race finished with J. Guthrie the winner at 82.79 m.p.h.—a record average speed which included a record lap of 86.25 m.p.h. achieved by both NORTON official riders! Second in the race was F. Frith a mere one-fifth second behind his team rider Guthrie.

SENIOR. The 500 c.c. Championship was held on the day following the Junior and J. Guthrie and F. Frith were again the official NORTON riders. In the Senior class the opposition was even more formidable than that produced by the three-fifties. It was not until the second lap that J. Guthrie was able to find a way through the score or so of competitors to secure the lead. F. Frith was on his tail so that early in the race, NORTON was placed first and second. From that time onwards the NORTON pair progressed with regularity that has been likened to riding with "an invisible tow rope!" In the 31st lap Freddy Frith set up a new lap record for the course at a speed of 91.49 m.p.h.—a truly wonderful effort, but even so Guthrie maintained his position in the lead by tremendously fast laps reeled off with almost monotonous regularity. No one could catch him. All the might of foreign factories and ability of riders were as nought against NORTON brilliance of performance and Guthrie's great skill. For the third successive year he recorded a Swiss Senior win and thus became undisputed Junior and Senior European Champion. Guthrie's winning time was a record, equal to a speed of 88.34 m.p.h. with his team mate, Fred Frith, 2nd. A significant fact of the 1937 NORTON double success in the Swiss Grand Prix was that it had been achieved for the seventh successive occasion.

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BELGIAN GRAND PRIX

ENERALLY considered one of the most difficult Continental courses, and one that is not easy to master, the Francorchamps Circuit was the scene of Belgium's most important 1937 motor cycle road races. Again NORTON machines and riders were pitted against strong opposition of a quality that would mean a really noteworthy performance if victory was to be

secured in either Junior or Senior race. In the "Belgian," the competitors in the whole four classes from 500 c.c. to 175 c.c. make a massed start, a method that tends to make for a crowded course, handicapping the faster men. However, J. Guthrie and F. Frith soon established a lead in the 500 c.c. class and J. H. White, the only official NORTON 350 c.c. rider, did likewise in his class. J. H. White passed several of the Senior machines in his early laps and was soon actually lying fifth in the whole race—magnificent effort for a 350 c.c. machine. Guthrie and Frith were, in the meantime, repeating their brilliant riding of the Swiss Grand Prix a week before. In the Senior class they had built up a considerable lead and were signalled from the pits to "go slow." NORTON superiority, rapid acceleration, safe brakes and roadholding qualities were proving more than equal to the Francorchamps course, the surface of which was rendered very treacherous later in the race owing to intermittent showers. There were few incidents to mark the progress of the NORTON riders at the head of affairs. A record lap of 93.93 m.p.h. was set up during the race by J. Guthrie and he was the first to finish at the speed of 86.68 m.p.h. with F. L. Frith close behind at 85.22 m.p.h., both riders being two laps in front of the next Senior finisher. What a tribute to men and machines!—and what testimony to the NORTON-British supremacy combination. J. H. White was equally successful in the Junior class. Significantly it is added that the Senior win was the seventh consecutive NORTON victory in this race and the Junior win was the sixth in seven years, a further remarkable demonstration of the consistent brilliance that has earned for NORTON the apt description—"The World's best Road-Holder."

The finish of these races did not see the end of NORTON Belgian successes however, for in the two-lap International Handicap staged after the Grand Prix, J. H. White was first at 86.70 m.p.h. and J. Guthrie, who gave 5 mins. 44 secs. to the limit man, put up a remarkably fine performance to gain third place in so short a race.

The moral of such victories as the winning of the Belgian Grand Prix is an obvious one to all experienced riders. The stresses of 250 miles covered at speeds infinitely faster than the ordinary rider ever touches, coupled with the need for constant braking and acceleration provide a test under practical conditions of every part of the machine, that is far more severe than any bench test could ever be. The machine that successfully survives such a tremendous test must be reliable indeed and NORTON with its long list of successes, not isolated successes, remember, but one of six or seven successive wins, is proved the finest all round machine indeed. There can be no question about the value of the NORTON victories as they are gained in the face of the fiercest competition that the finest riders and machines can create—proving that NORTON is "Unapproachable."

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- 1. J. H. White, winner of the 350 c.c. event.
- 2. Rock steady cornering by J. H. White.
- 3. J. Guthrie winning the Senior race.

Photos 1 & 3 by courtesy of "Motor Cycling."

No. 2 by courtesy of "The Motor Cycle."





IN IRELAND AND HOLLAND

HE LEINSTER "200" is the first important race of the season and is always keenly contested both by local riders and the "star" racing men anxious to establish the reputation of their mounts by an initial success. Each year entries

are made in this event to try out new racing machines and Leinster successes are often pointers to subsequent race winners. Chief interest in the 1937 event was centred round the 350 c.c. race in which J. Guthrie was the official NORTON entrant. No official NORTON rider competed in the 500 c.c. event. As was expected, J. Guthrie established an early lead in his class and by magnificent riding broke the course record no fewer than five times in raising it to 80.38 m.p.h. and in the face of such riding it was not surprising that the first honour of the season fell to J. Guthrie and NORTON at the record speed of 78.07 m.p.h. whilst R. Pennycock won the Handicap on a NORTON.

In the IRELAND (North-West) "200"—the second of the important road races of the season—NORTON was officially represented in the Senior class by J. Guthrie and F. L. Frith and in the Junior by J. H. White. These riders soon demonstrated that the NORTON success in the Leinster was again to be the forerunner of record-breaking wins. NORTON machines were soon in the lead, J. H. White putting up a remarkable record lap time of 8 mins 25 secs. and the end of the race proved J. Guthrie winner of the 500 c.c. event at the record speed of 82.17 m.p.h. with F. L. Frith second, nearly 14 m.p.h. faster than the third man! J. H. White won the 350 c.c. class and so for the fifth successive year NORTON was successful in this classic event, another record of amazing consistency in one of the most keenly contested races of the season.

THE DUTCH T.T. is one of the important Continental Road Races and one in which NORTON machines have had a consistent record of success against the most formidable of foreign competitors for years past. The official NORTON riders in the Junior were J. H. White and F. L. Frith, competing against strong opposition representative of no less than seven nationalities. Early in the race NORTON superiority was asserted when White and Frith secured the lead and set an extremely hot pace. Many were the retirements due to the type of course and the speed at which the race was led, only eleven competitors being left in the race—the fastest motor cycle road race in Europe. J. H. White was the winner at record speed of 85.07 m.p.h. with F. L. Frith second at 85.06 m.p.h. During the race record laps were established by J. H. White at 87.3 m.p.h. and then by F. L. Frith at 87.86 m.p.h. This NORTON success was the seventh in succession and the fourteenth Dutch victory. P. van Wijngaarden, NORTON agent in The Hague, was successful in winning the Dutch National Championship.

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EMPIRE SUCCESSES

USTRALIAN T.T., held at Cowes, Philip Island. In the Senior event of this, the most important road race in the Antipodes, NORTON riders scored a 1-2 win against very strong opposition. J. Pringle won at the record speed of 85.3 m.p.h. after leading from the fourth lap—his second successive victory in this race.

SOUTH AFRICAN T.T. JUNIOR. The most important motor cycling event in the continent naturally attracts all the foremost riders and the 1937 event was particularly hard-fought. Of the complete entry only four finished—significantly enough, all NORTONS. A. Reeve was 1st at 77.99 m.p.h., H. G. Welsh 2nd and A. Bertenshaw 3rd.

SOUTH AFTICAN T.T. SENIOR. Run in the afternoon of the same day as the Junior, NORTON riders again gave amazing demonstration of speedy reliability when they annexed first three places. D. Hall was 1st at 83.65 m.p.h., a record speed, which included a record lap at 87.9 m.p.h. As has often been the case, NORTON riders led the race from start to finish—a tribute to NORTON speed and acceleration.

NEW ZEALAND GRAND PRIX. Another outstanding Empire success for the Unapproachable NORTON, A. Currie winning at 61.8 m.p.h., five miles per hour faster than the previous year's winning speed.

AUSTRALIAN SENIOR GRAND PRIX run at Hartley provided another demonstration of NORTON superiority. L. Tobin was 1st and B. Byrnes was 3rd.

PORT ELIZABETH (S.A.) "200." In this South African road race, internationally-known riders competed, several of whom have competed in the I.O.M., T.T. The result provided a sweeping NORTON victory, J. Strydon being first at 84.7 m.p.h. and J. Galway second with record lap of 87.23 m.p.h., whilst other NORTON riders filled third, fifth, sixth and seventh places.

SOUTH AUSTRALIAN CENTENARY T.T. This road event provided the Unapproachable NORTON with yet another chance of demonstrating speed, utter reliability and roadholding qualities under racing conditions vastly different from those of the I.O.M., but none the less severe and practical and a sound basis for judging the relative merit of competing machines. In the Senior event Clem Foster was first on a NORTON and also won the Senior Handicap, whilst M. Coombe won the Junior Handicap.

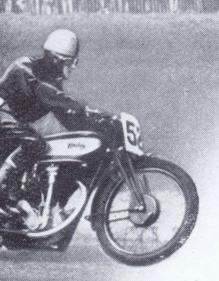
GROSVENOR GRAND PRIX. Another of South Africa's famous events was won this year by the Unapproachable NORTON, J. Galway being first with J. Sarkis second. The consistency with which the major road events in all parts of the world are won by NORTON-mounted riders is convincing proof of the inherent qualities of the "Road-Holder." Whatever the conditions—whatever the type of event, NORTON design, materials and workmanship are supreme.

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- 1. J. Galway (6), J. Sarkis (12), 1st and 2nd in the Grosvenor
- 2. J. Pringle on his record lap in the 5th Australian Centenary T.T.
- 3. A. Currie, winner of the New Zealand G.P.





DONINGTON 1937 MEETINGS

Sweeping NORTON victories marked ASTER MEETING. the opening meeting of the season which was contested under good weather conditions and attracted a record crowd. day's racing was obviously to be keen. In the 350 c.c. event the performance of the NORTON riders, M. Cann, H. L. Daniell and J. B. Moss, was being watched with the utmost interest. They soon gained a lead over the rest of the field and after an exciting race M. Cann was the winner at 64.36 m.p.h. with H. L. Daniell and J. B. Moss, 2nd and 3rd respectively. In the 500 c.c. class the same riders were again successful in their heats and in the final H. L. Daniell was successful with M. Cann 2nd and J. B. Moss 3rd—the winner's speed being 66.86 m.p.h. In the race for sidecars, L. W. Taylor on a NORTON, led throughout to win with W. Bibby. also on a NORTON, 3rd. The unlimited c.c. race provided yet another win for H. L. Daniell and NORTON whilst M. Cann and J. B. Mosson NORTONS, were 2nd and 3rd. Thus NORTON riders won every event in which they were eligible to compete and filled eleven places out of a possible twelve at the meeting.

CORONATION MEETING. As at the Easter Meeting, NORTON riders again demonstrated their superiority and provided the first three places in the 350 c.c. race, M. Cann winning at 65.34 m.p.h., with H. L. Daniell second and J. Lockett third. In the 500 c.c. race it was H. L. Daniell's turn to record a win which he did after a hard race with M. Cann (2nd). The last race was a 50-mile event for solo machines for the Coronation Trophy, a contest that attracted a strong field. From the start H. L. Daniell was quickly away and, taking the lead, he led throughout the race to win at the fast speed of 66.71 m.p.h. J. B. Moss was third on a NORTON and once again the tale of NORTON superiority is told by the fact that "The Unapproachable" filled eight out of a possible twelve places.

AUGUST BANK HOLIDAY MEETING. This was notable for the largest entry ever known, record crowds and record speeds—the latter being chiefly the result of NORTON brilliance. In the 350 c.c., M. Cann won a hard race from J. B. Moss, also mounted on a NORTON, M. Cann's winning speed being 65.92 m.p.h. L. W. Taylor (Norton sidecar), after a particularly fine ride in the 1,100 c.c. class, won at 57.76 m.p.h. In the 500 c.c. solo event, a NORTON again proved a winning machine, ridden by the redoubtable Maurice Cann with C. F. Burton 2nd and J. B. Moss 3rd, the winner's speed being 66.27 m.p.h. In the afternoon the 500 c.c. Grand Prix was run, the racing being outstanding for the fast work of H. L. Daniell who won at the record speed of 67.68 m.p.h., J. Moore being 2nd and M. Cann 3rd, all being mounted on NORTONS. In the 10-lap sidecar and three-wheeler Grand Prix, NORTON riders were again in evidence, L. W. Taylor proving the winner at 57.74 m.p.h., with A. H. Horton 3rd. The last race of the day was the 350 c.c. Grand Prix and once again H. L. Daniell on a NORTON proved outstandingly fast and eventually won at the record speed of 66.59 m.p.h. M. Cann was 2nd, J. W. Forbes 3rd and J. B. Moss 4th, all on NORTONS. At this meeting NORTON competitors filled fifteen of the possible eighteen places, a remarkable demonstration of consistent brilliance and speedy reliability. Thus, whatever the type of event, NORTON supreme qualities prove master of the situation.

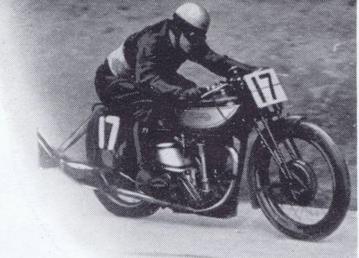
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- 1. A. Riefstahl (56) and E. R. Taylor (51) competing at Donington.
- 2. H. T. Bailey (68), J. Morgan (71) and A. Riefstahl (60) during the Donington August Bank Holiday Meeting.

Photos by courtesy of "The Motor Cycle"

Photos by Courtesy of "The Motor Cycl

OTHER RACING SUCCESSES



ROOKLANDS. The Norton motor cycle from earliest days has always shown its prowess on this famous track and on the new course known as the Campbell Circuit used first on the B.M.C.R.C.'s day, Norton competitors maintained their fame and reputation. H. L. Daniell proved the winner of the Junior Road Championship with J. B. Moss (NORTON) third. H. L. Daniell repeated his success in the Senior Road Championship with N. B. Pope (NORTON) third. E. J. Cashman won the Third Long Handicap whilst the Invitation Challenge Race was won by the Derby and D.M.C. Team which included M. Cann, H. L. Daniell and N. B. Pope on NORTONS. Hutchinson Hundred. This popular Brooklands meeting provided further NORTON successes including that of R. Harris, who put up fastest time of the day at 101.43 m.p.h. The Ten-lap Mountain Handicap was won by W. G. Wright on a NORTON, with A. J. Rawlance second, also on a NORTON. The Three-lap Short Handicap fell to J. B. Moss, N. Cox being second, both on NORTONS, the winner's speed being 100.21 m.p.h. The fastest 500 c.c. machine in the Hutchinson "100" was M. O. Klein (NORTON) at 97.65 m.p.h. CRYSTAL PALACE. The circuit laid out in the Crystal Palace grounds provided the first

created reach within the Metropolis and for the Coronation Meeting, which was the first occasion on which it was used, NORTON riders provided the "fireworks" and swept the board. The event attracted past T.T. winners and Manx Grand Prix stars so that the quality of the opposition was of the best. In the Junior Coronation Grand Prix, Maurice Cann was the winner with H. L. Daniell, second. In the Sidecar event each of the first three men rode a NORTON, the winner being A. H. Horton, B. Ducker second, and F. E. G. Ratcliff, third. In the Senior Grand Prix, H. L. Daniell was the winner, whilst the record lap for the meeting was put up by M. Cann at 55.13 m.p.h. NORTON riders achieved six out of a possible eight

places.

Special Sidecar Event promoted during the London Grand Prix car race was won by A. H.

Horton on a NORTON against a strong field of south country riders.

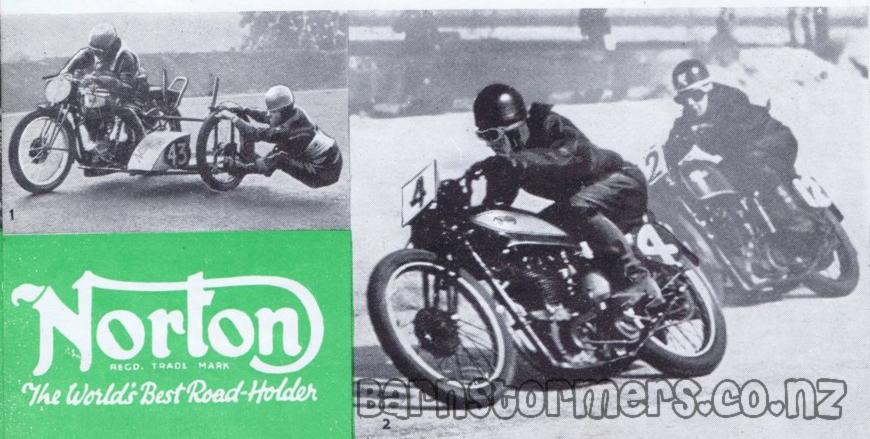
SOUTHPORT. The big 100-mile race held on Southport's famous stretch of sand was supported by many of the best known riders, as usual. Again NORTON superiority was strikingly demonstrated and the brilliant riding of J. B. Moss, the winner, on a 490 c.c. NORTON was a feature of the day. He won the "Southport Visiter" Coronation Cup. Second, J. Moore, 490 c.c. NORTON. Third, J. A. McLachlan, 348 c.c. NORTON.

SCOTTISH SPEED CHAMPIONSHIPS. This is Scotland's premier speed event and this year again provided NORTON riders with sweeping successes—every race in which a NORTON was eligible to compete, being won by a "Road-Holder." The medium weight (600 c.c.) was won by T. McEwan. In the Lightweight (350 c.c.) winner was D. B. Lindsay, A. S. Thomson being second. Heavyweight (unlimited c.c.) T. McEwan again proved a winner, A. Marr being third. All these were Scottish Championship Classes and in addition the following Straight Mile Races were won—

350 c.c. class, 1st, D. B. Lindsay, 2nd, A. S. Thomson, 3rd, M. Ness. Unlimited c.c., 1st, T. McEwan, 3rd, M. J. Morgan. Unlimited c.c. (6 miles) 1st, A. J. Morgan, 2nd, J.S. Thomson. Open one-lap races, 350 c.c. class, 1st, D. B. Lindsay, 2nd, A. S. Thomson, 3rd, M. Ness.

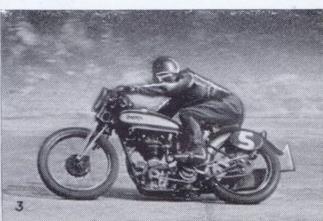
Unlimited c.c. class, 1st, T. McEwan, 3rd, A. A. Elliot.

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- 1. A. H. Horton in the Crystal Palace Composite Meeting.
- 2. N. B. Pope in the Junior Mountain Championship, Brooklands.
- 3. B.M.C.R.C. Mountain Championship Day (N. B. Pope).

Photos 1 & 3 by courtesy of "Motor Cycling."
No. 2 by courtesy of "The Motor Cycle."





A RECORD OF ACHIEVEMENT

JUNIOR T.T. I.O.M.
1st, 2nd, 3rd, 5th. Record
speed 84.43 m.p.h. Record lap
85.18 m.p.h. Manufacturers' Team
Prize won for third successive year.
Club Team Prize. Seventh successive Junior win.

SENIOR T.T. I.O.M. 1st, 3rd, 5th.
Record speed 88.21 m.p.h., Record lap 90.27 m.p.h.
First and only time 90 m.p.h has been achieved on the I.O.M. course. NORTON have now won 18 T.T. Races.
JUNIOR MANX GRAND PRIX. 1st. Record speed 76.23 m.p.h. Norton, first 8 places.

SENIOR MANX GRAND PRIX. 1st. Record speed 81.65 m.p.h. Record lap 83.92 m.p.h. Norton first 12 places. GRAND PRIX de l'EUROPE (Swiss G.P.) Junior. 1st, 2nd. Record speed 82.79 m.p.h. Record lap 86.25 m.p.h. GRAND PRIX de l'EUROPE (Swiss G.P.) Senior. 1st, 2nd. Record speed 88.4 m.p.h. Record lap 91.49 m.p.h. SOUTH AFRICAN SENIOR T.T. 1st, 2nd, 3rd. Record

SOUTH AFRICAN SENIOR T.T. 1st, 2nd, 3rd. Record lap 87.9 m.p.h. JUNIOR T.T. 1st, 2nd, 3rd. SOUTH AFRICA. Kimberley "100." J. C. Galway, 1st

at record speed of 77.41 m.p.h. Record lap 83 m.p.h. AUSTRALIAN SENIOR T.T. 1st, 2nd. Record speed 85.3 m.p.h.

SOUTH AUSTRALIAN CENTENARY T.T. 1st. AUSTRALIAN SENIOR GRAND PRIX. 1st, 3rd. DUTCH JUNIOR T.T. 1st (Record speed). 2nd (Record

lap). FOURTEENTH Dutch victory.

BELGIAN GRAND PRIX Senior. 1st 2nd Record lan

BELGIAN GRAND PRIX, Senior. 1st, 2nd. Record lap 93.93 m.p.h.

BELGIAN GRAND PRIX, Junior. 1st.
PORT ELIZABETH (SOUTH AFRICAN) 200 MILES
RACE. 1st 2nd 3rd 5th 6th 7th

RACE. 1st, 2nd, 3rd, 5th, 6th, 7th.

IRELAND (North West ''200'').

(Record speed 81.28 m.p.h.), 2nd.
(Record speed 76.7 m.p.h.).

Senior Race 1st
Junior Race 1st

LEINSTER "200." 350 c.c. 1st Record speed 78.07 m.p.h. DONINGTON. Easter Meeting. Norton successful in every race they were eligible to enter.

Whitsun (Coronation) Meeting. 350 c.c. 1st, 2nd, 3rd. 500 c.c. 1st, 2nd. Coronation Trophy 50 miles. 1st, 3rd, 4th.

August Bank Holiday Meeting. 350 c.c. 1st, 2nd, 4th (new lap record). Sidecar. 1st. 500 c.c. 1st, 2nd, 3rd, 5th. 500 c.c. Grand Prix. 1st, 2nd, 3rd, 5th (Record speed). Unlimited Class Grand Prix. 1st, 3rd. 350 c.c. 1st, 2nd, 3rd, 4th (Record speed).

CRYSTAL PALACE. Coronation Meeting. Junior Coronation G.P. 1st, 2nd, Coronation Sidecar Race. 1st, 2nd, 3rd. Senior Coronation G.P. 1st and lap record. NEW ZEALAND GRAND PRIX. 1st. 61.8 m.p.h. BOL D'OR. 24 hour race Montlhery Track. 1st all classes. 500 c.c. NORTON. Also class record for all machines.

GERMAN GRAND PRIX, Junior. 1st, 2nd Record speed and Record lap.

INTERNATIONAL SIX DAYS. V. N. Brittain, member of Gt. Britain's winning Trophy Team. J. Williams, member of Gt. Britain's Vase Team. NORTON, only British Team to gain F.I.C.M. Gold Medal. 3 official NORTON entries—3 gold medals.

SCOTTISH SIX DAYS' TRIAL. Best solo performance.

Best sidecar performance. 3 entries. 3 silver cups.

TRAVERS TROPHY TRIAL. Travers Trophy. Best performance. White Eagle Trophy. Best sidecar. Team prize.

LISTER OPEN A.C.U. TRIAL. Beeches Trophy. Ravenfield Trophy. Coronation Trophy. Team Prize. TOTTENHAM AND DISTRICT M.C.C. Open Centre Trial. Coronation Cup, sidecar. Coronation Cup, solo. COLMORE CUP TRIAL. William Watson Shield.

Best sidecar performance. Team prize. 1st class awards.

KICKHAM MEMORIAL TRIAL. Tytherleigh Cup.

Best sidecar performance. Speed Cup. 1st class awards.

VICTORY CUP TRIAL. 350 c.c. Solo Cup. 500 c.c.

Solo Cup. NORTON awarded Team Prize.

2nd MIDLAND CENTRE GROUP TRIAL. Second best performance.

RELIANCE TRIAL. Horsman Trophy for best sidecar performance for third successive year. Team Prize. STROUD OPEN TEAM TRIAL. National Trophy for the best team performance. Hillside Cup for best individual performance.

SOUTHERN TRIAL. Norton awarded Team Prize. Also 500 c.c. Sidecar Trophy.

SOUTH LIVERPOOL M.C. TRIAL. Mansfield Trophy.
MITCHELL MEMORIAL TRIAL. Mitchell Memorial
Trophy (Sidecar) 500 c.c. Sidecar Cup

Trophy (Sidecar). 500 c.c. Sidecar Cup.
1st MIDLAND GROUP TRIAL. Second best performance.
COTSWOLD CUP TRIAL. Cotton Trophy. Gloucestershire Cup. Clark Cup. White Team Trophy.

BEMROSE TROPHY TRIAL. Syston Cup. Alan Smith Cup.

GLANFIELD LAWRENCE TROPHY TRIAL. 500 c.c. Solo Cup.

WYE VALLEY TRIAL. Traders' Cup. Best sidecar performance. Miller Cup. Best 350 c.c. performance. Stewart Team Trophy.

JOHN DOUGLAS OPEN TRIAL. John Douglas Memorial Trophy (solo), best solo performance. John Douglas Memorial Trophy (sidecar), Best sidecar performance. Unlimited Cup. Sidecar Cup. Team Prize. BIRMINGHAM M.C.C. FREAK HILL CLIMB. NORTON won every eligible award.

CARSHALTON EASTER TRIAL. Easter Sidecar Cup. THAMES VALLEY PANTHER TRIAL. Novice Cup. FOURTH MIDLAND GROUP TRIAL. Wharton Cup. NORTH YORK GROUP TRIAL. Alfred Foster Trophy. LANGMAID CUP TRIAL. Blossom Jervis Cup. SUNBEAM "200." 500 c.c. Sidecar Cup. 350 c.c. Solo Cup. Team Prize, NORTON.

BRITISH EXPERTS' TRIAL. Palmer Trophy. Best sidecar performance, D. K. Mansell.

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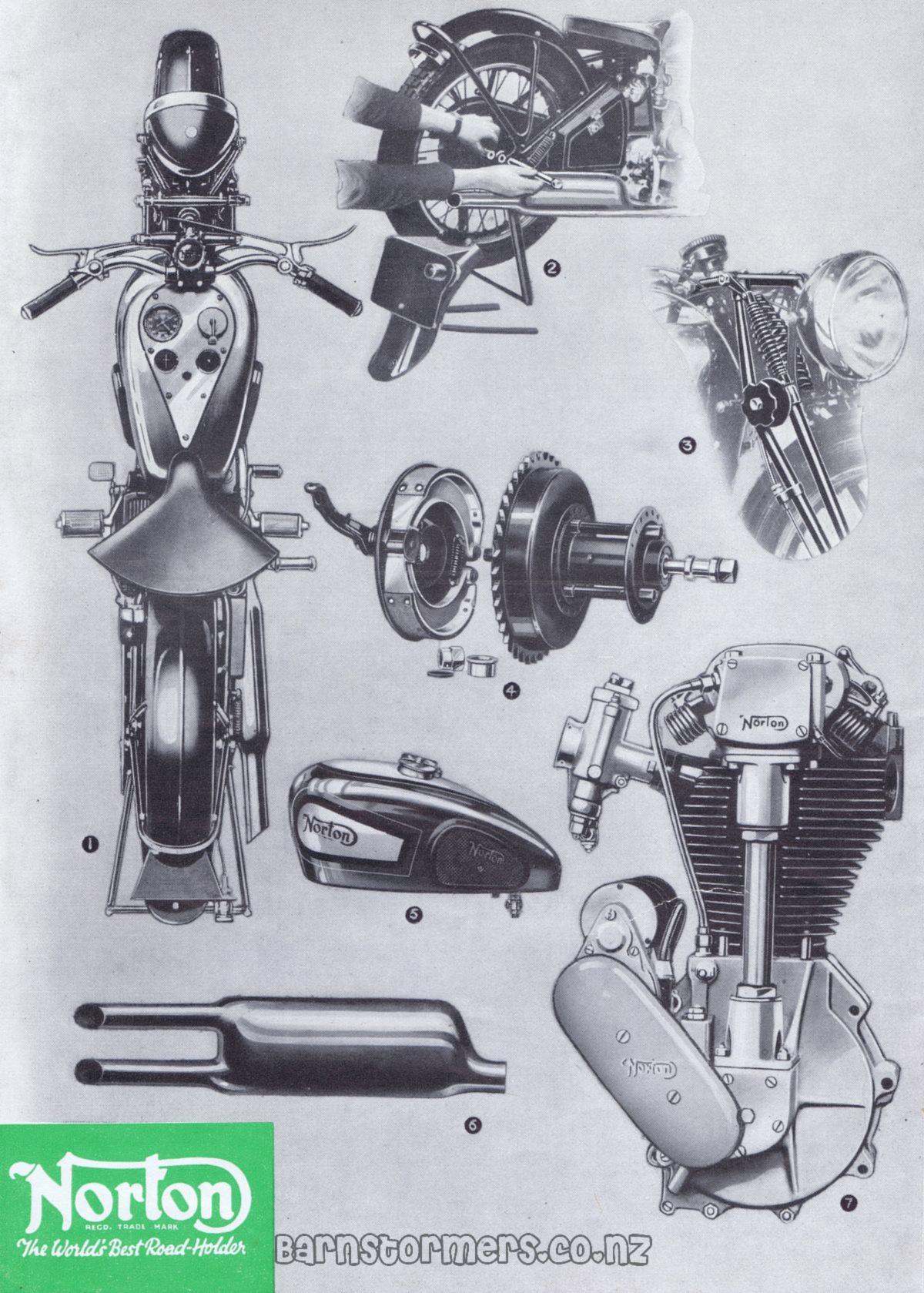


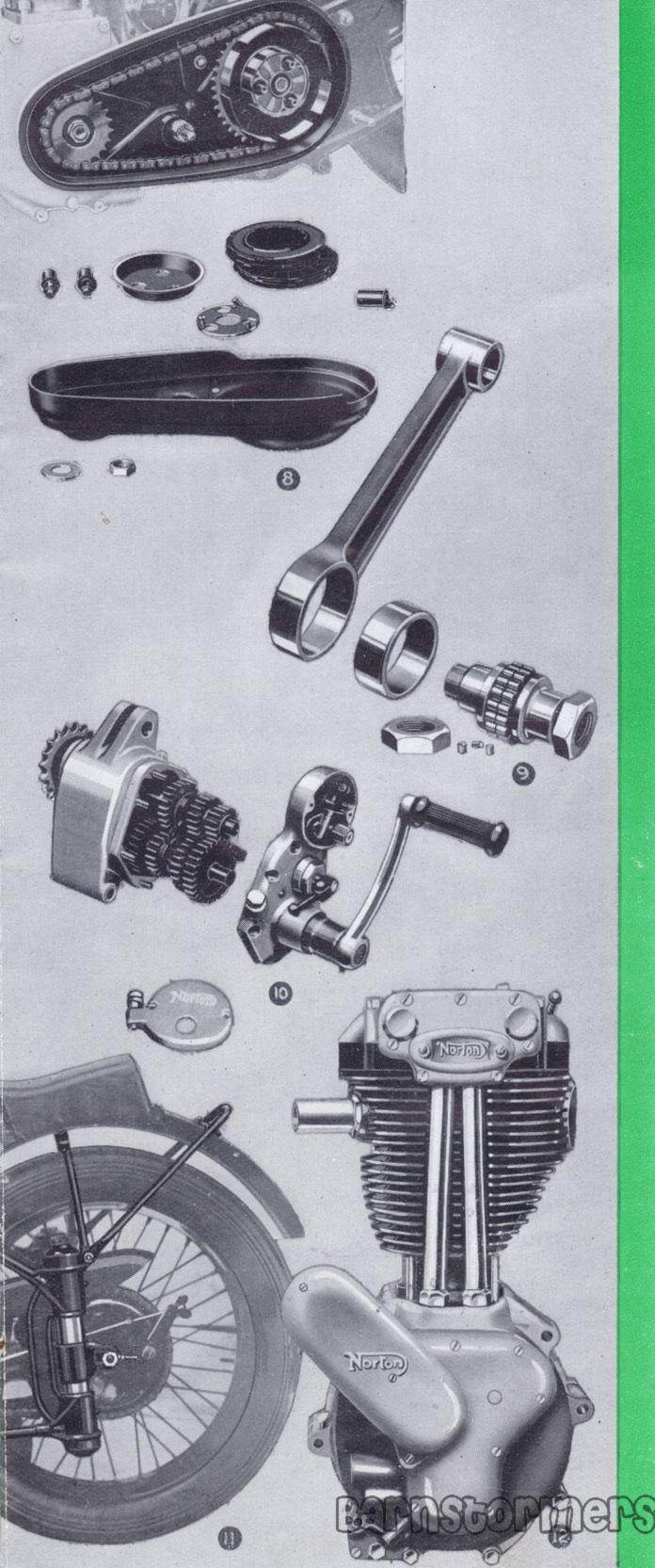
2. V. N. Brittain on Hagg's
Mine in the Travers
TrophyTrial in which he
won the premier award.

3. V. N. Brittain in the International 6 Days on Dolwyn Bridge.

Photo 1 by courtesy of S. R. Keig, Douglas.
Photos 2 & 3 by courtesy of "Motor Cycling."







PLAN OF MACHINE.—This shows the general layout of the machine: the riding position, the grouping of the controls, the brake pedal in close proximity to the footrest on the near side and on the off side, the conveniently placed positive foot change lever. The insulated handlebar is rubber mounted in an extension of the head clip, but rigidly attached to it by a flexible steel plate, which ensures positive steering. A panel tank is shown which can be fitted at extra cost to all models except 30 and 40. It is flush fitting, dull chromium plated and lacquered and houses speedometer, ammeter and switch and is illuminated internally.

2. REAR MUDGUARD ATTACHMENT.—This illustration shows the simple method of rear wheel removal. All models except International are fitted with quickly detachable and interchangeable wheels. The tail piece of the guard is attached by means of a strip inside the guard incorporating two tapped holes to carry fixing pins, the end of the guard being lipped to give additional support to the inner fixing strip.

3. No. 387,550 as developed and used in road racing and incorporating hand adjustable shock absorber and steering damper. Built of first-grade high tensile steel tube this fork is largely responsible for the famous road-holding qualities for which Norton machines are renowned.

BRAKES AND HUBS.—Efficient and safe braking is a Norton feature assured by the progressive action of the 7" dia. × 1\{\}" wide brakes. Detachable and interchangeable wheels fitted to all models except International.

5 PETROL TANK.—This illustration shows the 3½ gallon tank which is available as an extra throughout the range with the exception of the International Models. All Norton tanks are heavily chromium plated and suitably lined.

6 SILENCER.—The pleasing appearance of the very efficient silencer which is fitted to all models is evident from this illustration. The design is based on proved acoustic principles and the twin outlet pipes ensure a minimum of power loss.

7 INTERNATIONAL MODEL ENGINE.—This illustration shows an International Model engine, renowned the World over for its performance. It is of first class design, built of the finest quality material procurable and has that real craftsmanship embodied in it found in all NORTON products.

8 CHAINCASE AND CLUTCH.—An Oil Bath Chaincase Patent No. 406,599, hermetically sealed with an oil resisting rubber band, and held by only one bolt, is fitted to all models. The illustration shows the multi-plate clutch partially dismantled. Special Ferodo inserts having a high frictional co-efficient when immersed in oil, are used. Smooth transmission is ensured by the vane type shock absorber in the clutch centre.

9. The rigidity of the flywheel assembly controls the smoothness of an engine. The massive proportions of the Norton Crankpin are evident from this illustration. The large dimensions of the big end housing and the deep H section of the high tensile nickel chrome steel connecting rod will be noticed.

10. GEARBOX.—This shows an exploded view of the gearbox and illustrates the large diameter of the nickel chrome steel shafts and the generous proportions of the finely finished gear wheels. A built-in positive foot control Patent No. 424,154, is fitted as standard. The mechanism is totally enclosed, free from idle movement, light and frictionless, allowing a quick and easy change. A tank mounted, hand gear change lever may be fitted if specified when ordering.

SPRING FRAME.—This illustration shows the NORTON Spring Frame which has been developed in the World's International Road Races, now available as an extra on International Models. The arrangement consists of a sliding hardened steel plunger housed in the rear frame member, supported top and bottom by coil springs, so balanced as to make the use of any frictional type of shock absorber unnecessary, and yet so flexible as to efficiently eliminate all road shocks. By this means the rear tyre is constantly in contact with the road under all conditions of road surfaces and lateral rigidity of the frame is maintained.

12 PUSH ROD ENGINE.—This type of engine has totally enclosed and automatically lubricated valve mechanism and large bearing surfaces throughout the timing gear. An oil cushion is incorporated at the meshing point of the gears whose teeth are ground to ensure silent operation. The clean, modern lines of the unit make it as pleasing in appearance as in performance.



FRAME.—Of immense strength. Jig built throughout with first grade high tensile steel tube and graduated section lugs.

GENERAL SPECIFICATION

FORKS.—Girder type, incorporating rebound springs, Patent No. 387,550 with hand

adjustable shock absorber and steering damper.

WHEELS —Ouickly detachable and interchangeable

WHEELS.—Quickly detachable and interchangeable, employing journal bearings. Rims chromium plated with black centres, lined out in red.

PETROL TANK.—Heavily chromium plated with suitably enamelled panels and large resilient knee grips. Mounted on rubber insulation. Illuminated Instrument Panel, housing speedometer and electrical gear, Registered Design No. 773,858, can be fitted at an extra cost to all models except 30 and 40. This reduces the tank capacity by approximately one quart.

STANDS.—Front and rear stands and central prop stand are fitted, the latter two being of the spring-up type.

SILENCER.—Of large capacity and pleasing design having twin outlet pipes and effectively silencing the exhaust note at all speeds.

CARBURETTER.—Amal needle jet, semi-automatic, twist grip control.

ENGINE LUBRICATION.—Full dry sump with gear pump, pressure feed to bearings and piston. Automatic and efficient lubrication of totally enclosed valve gear with oil cushion in timing gears and sludge trap in crankcase.

MAGNETO.—High tension waterproof, situated at rear of engine.

OIL TANK.—Chromium plated and suitably lined. Accessibly mounted on seat tube.

SADDLE.—Flexible top incorporating forward pivotal mounting

and providing low and exceptionally comfortable position.

FRONT CHAIN CASE.—Patented, hermetically sealed oil bath chaincase of unique design, with single bolt fixing.

CLUTCH.—Multi plate with dual action vane type shock absorber integral. Housed within oil bath chain case.

GEARBOX.—NORTON four-speed with built-in positive foot operation, Patent No. 424,154. Hand control available if specified when ordering.

HANDLEBARS.—Resiliently mounted, Patent No. 419,336, yet retaining rigid steering. Of pleasing appearance with grips and controls naturally positioned.

PILLION FOOTREST LUGS built into every frame for attachment of NORTON pillion footrests.

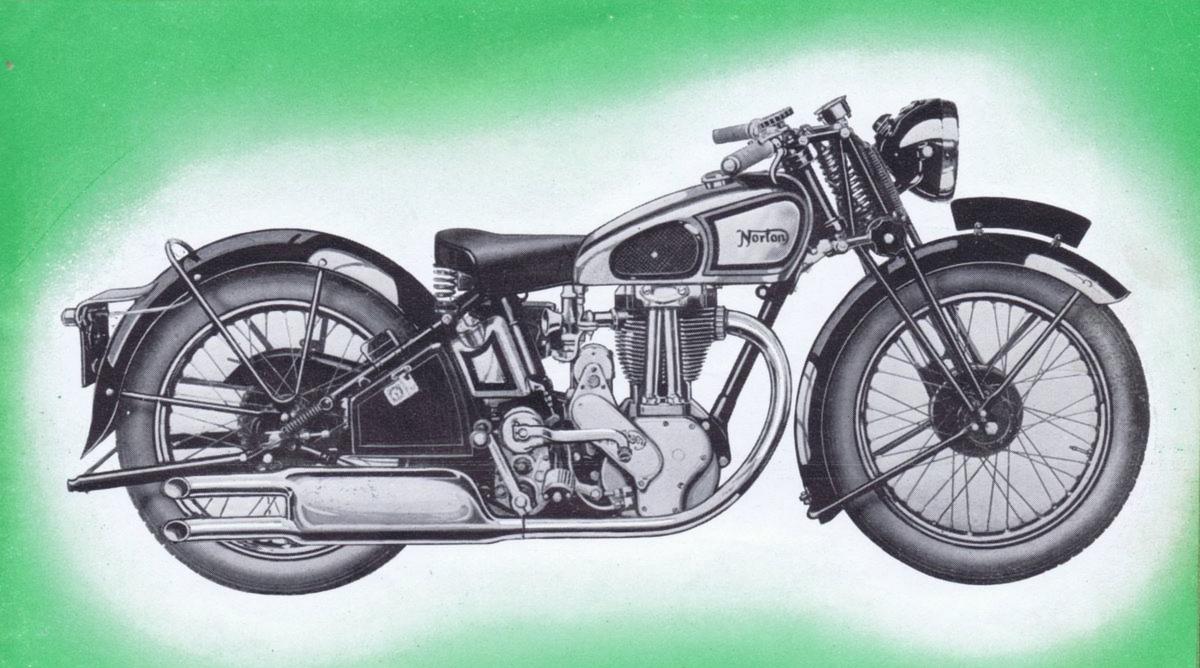
MUDGUARDS.—Heavy car type with mud channel, affording excellent protection. Detachable, flared tail piece to rear guard. Narrow sporting mudguards fitted to International Models.

EXHAUST PIPES.—Heavily chromium plated, of pleasing shape, downswept or high ground clearance as ordered.

TOOL BOX.—All metal with comprehensive kit including grease gun, grease and $15'' \times \frac{7}{8}''$ inflator.

1	abu	late	d	Spe	cific	catio	on c	of th	e "	Roa	d-H	olde	er"	ran	ge
Models				16 H	Big 4	18	19	20	50	55	E.S.2	C.S.I	C.J.	30	40
Bore and Stroke				79×100	82×120	79×100	82×113	79×100	71×88	71×88	79×100	79×100	71×88	79×100	71×88
Cylinder Capacity				490	633	490	596	490	348	348	490	490	348	490	348
Compression Ratio				4.9	4.5	6.5	5.75	6.5	7	7	6.5	7	7.4	7.5	7.8
GEAR RATIOS	Solo	Тор		4.89	4.89	4.64	4.64	4.64	5.16	5.16	4.64	4.64	5.16	4.64	5.16
	,,	Third		5.92	5.92	5.61	5.61	5.61	6.25	6.25	5.61	5.61	6.25	5.1	5.67
	,,	Second		8.65	8.65	8.2	8.2	8.2	9.14	9.14	8.2	8.2	9.14	6.16	6.87
	,,	Bottom		14.5	14.5	13.76	13.76	13.76	15.35	15.35	13.76	13.76	15.35	10.8	12.4
				Sidecar gear ratios are used as standard on Model "Big Four" and Model 19 machines unless otherwise											
	Sidecar	Тор		5.46	5.46	5.16	5.16	cified who	en orderin 5.8	ng. 5.8	5.16	5.16	5.8	5.16	5.8
	**	Third		6.6	6.6	6.25	6.25	6.25	7	7	6.25	6.25	7	5.67	6.38
	,,	Second		9.65	9.65	9.14	9.14	9.14	10.26	10.26	9.14	9.14	10.26	6.86	7.7
	,,	Bottom		16.2	16.2	15.35	15.35	15.35	17.25	17.25	15.35	15.35	17.25	12.18	13.5
Prin	nary Chai	n: REN	OLD	½" Pi	ch × .305"	Wide.		F	lear Chair	: RENG	OLD	§" Pitch	×.25" Wid	le	
Brake Dimensions— Front and Rear				7"×14"	7"×14"	7"×11"	7"×14"	7"×1¼"	7"×14"	7"×1¼"	7"×14"	7"×1¼"	7"×14"	7"×14"	7"×1;
Tyres Front and Rear				Dunlop 26"×3.25"									Front 27"×3" Rear 27"×3.25'		
Saddle Height				27½"	27½"	27½"	271"	27½"	27"	27"	27½"	27½"	27½"	28½"	281
Wheel Base				541/2"	54½"	541/2"	541/2"	541″	54"	54"	543"	543"	54"	543"	54"
Overall Length				841″	841″	841/2"	841″	841″	82"	82"	843"	843"	84"	843″	84"
Overall Width				30"	30"	30"	30"	30"	30"	30"	30"	30"	30"	29"	29"
Ground Clearance				41"	41"	41/	41"	41/	41/2"	41/	41"	41/1	41"	33"	334
Petrol Tank				23 galls.	23/4 galls.	2 ³ / ₄ galls.	23 galls.	23 galls.	23 galls.	23/4 galls.	23 galls.	23 galls.	23 galls.	3 ³ / ₄ galls.	3½ gal
Oil Tank				4 pts.	4 pts.	4 pts.	4 pts.	4 pts.	3½ pts.	3½ pts.	3½ pts.	3½ pts.	3½ pts.	3 qts.	3 qts

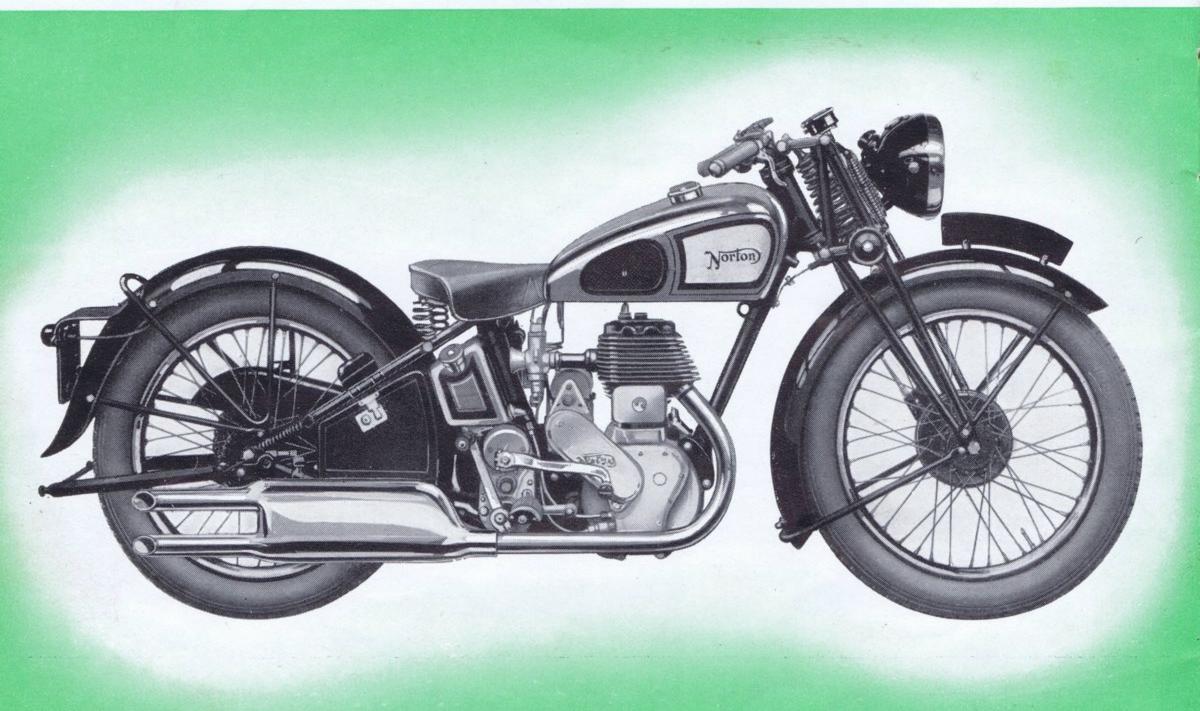
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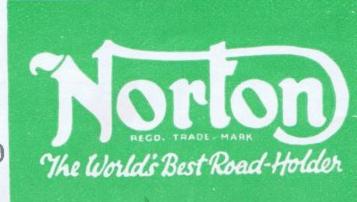
4.90 h.p. O.H.V.



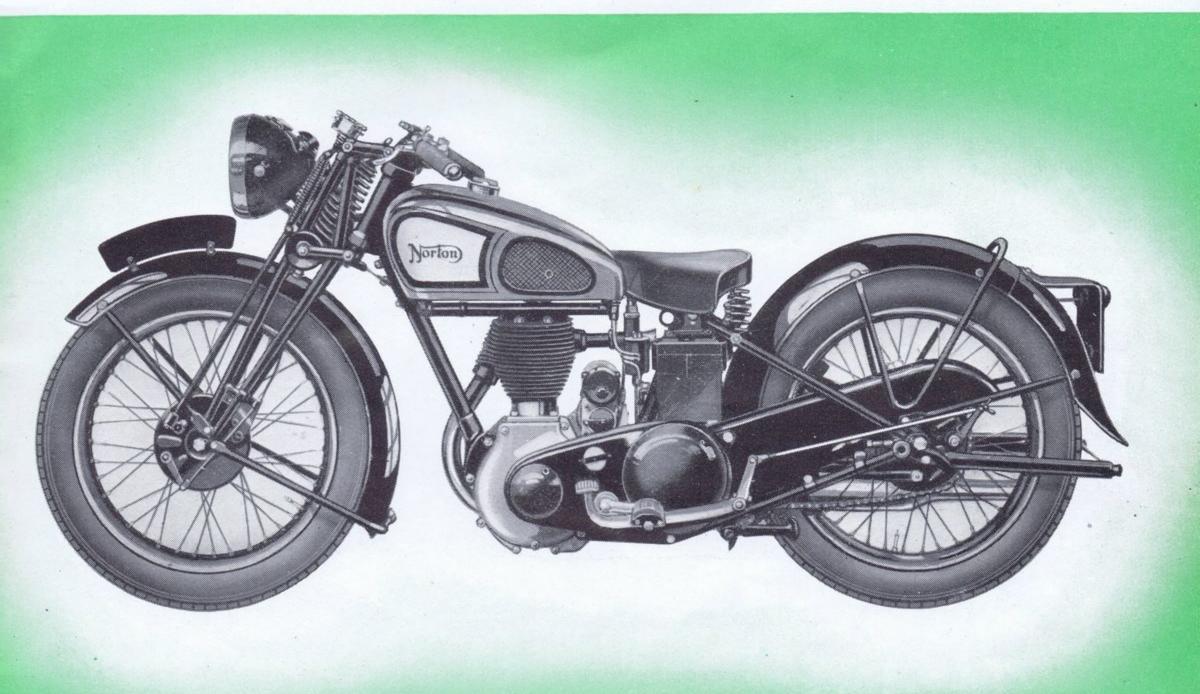
MODEL No. 16 H



4.90 h.p. S.V. Code Word: ACTON

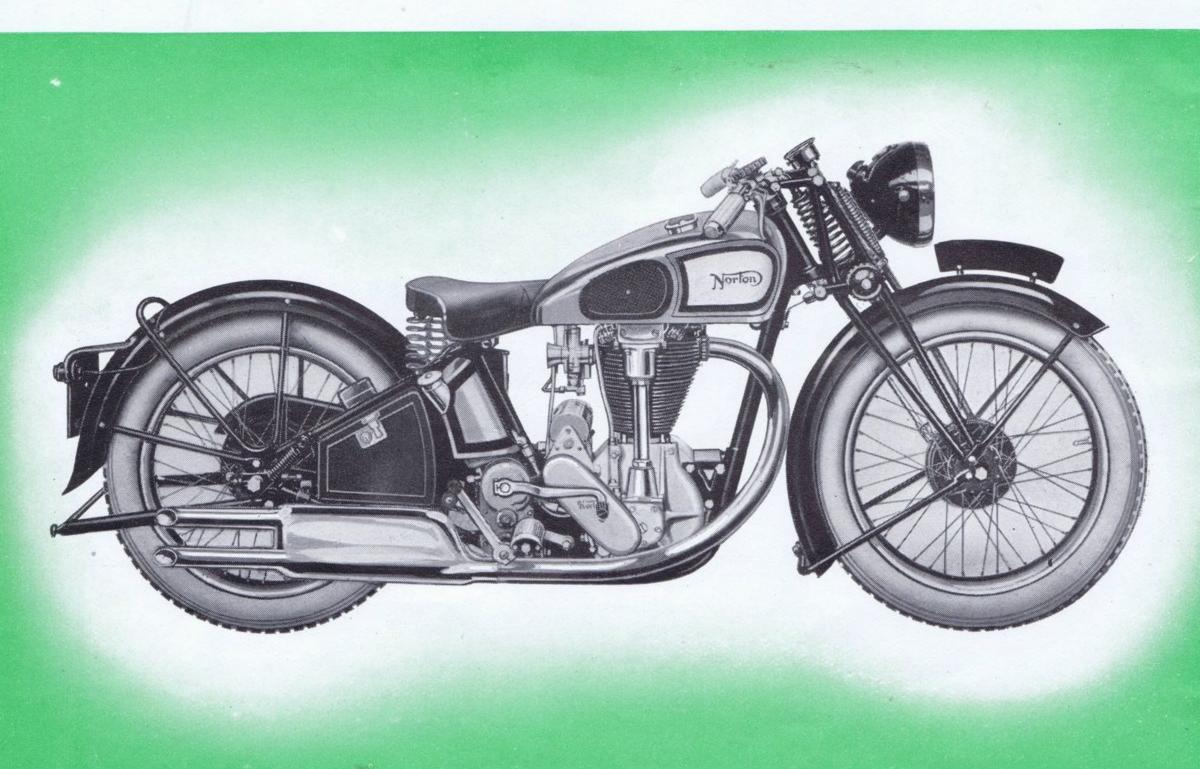


MODEL No. 1 "BIG FOUR"



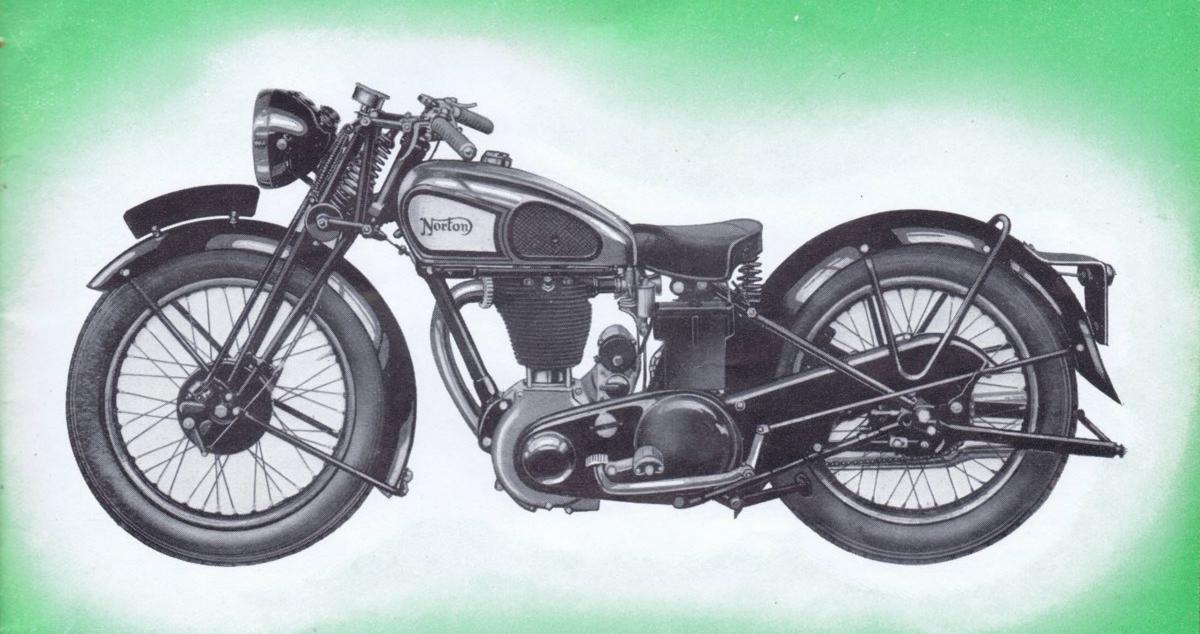
6.33 h.p. S.V. Code Word: AVOCA

MODEL No. C.S.1



4.90 h.p. O.H.C.

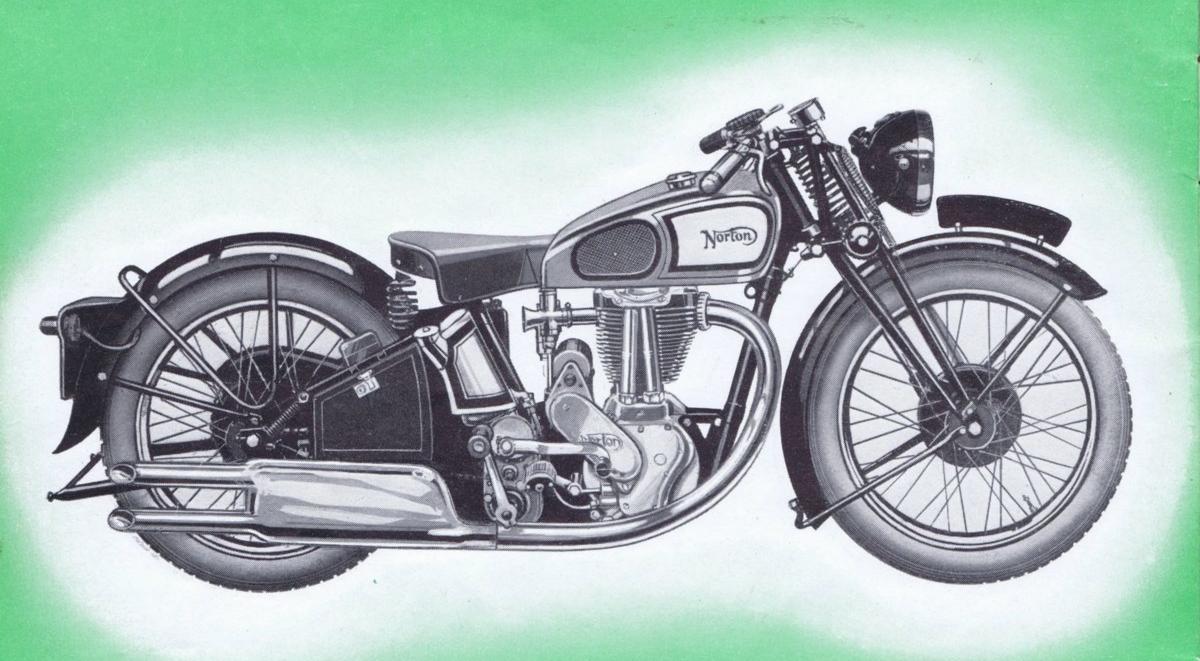
MODEL No. 19



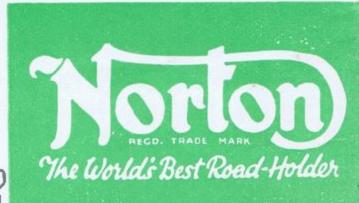
5.96 h.p. O.H.V.



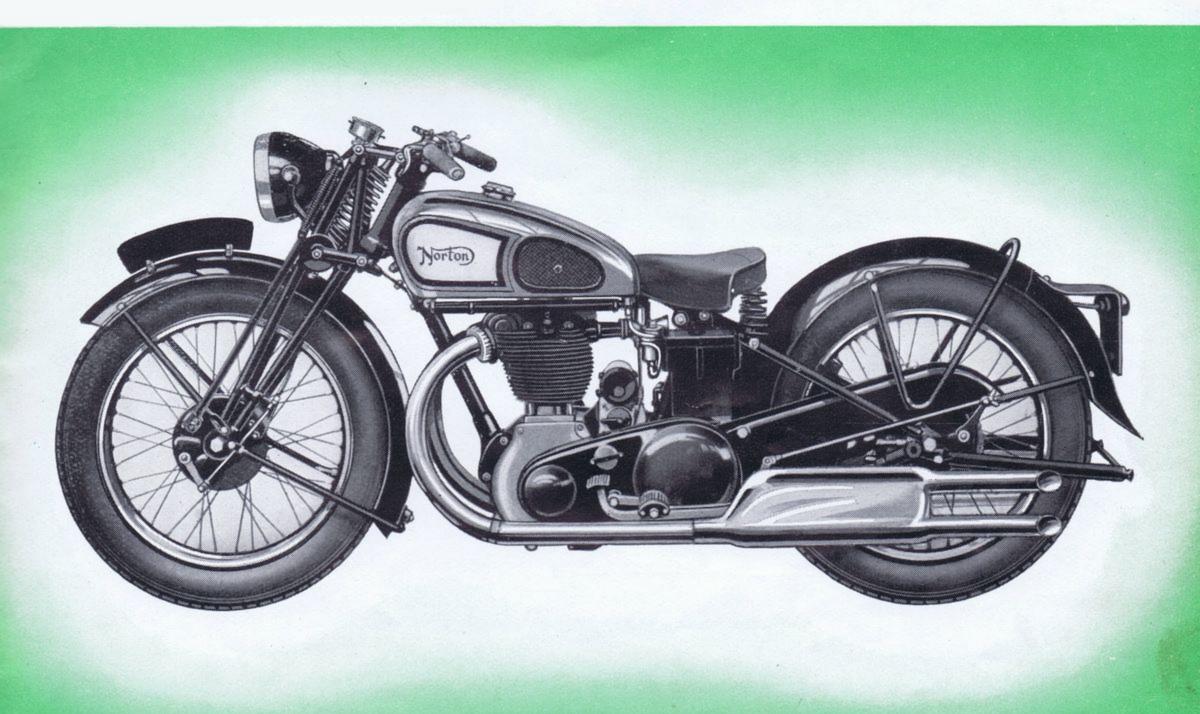
MODEL No. E.S.2



4.90 h.p. O.H.V.

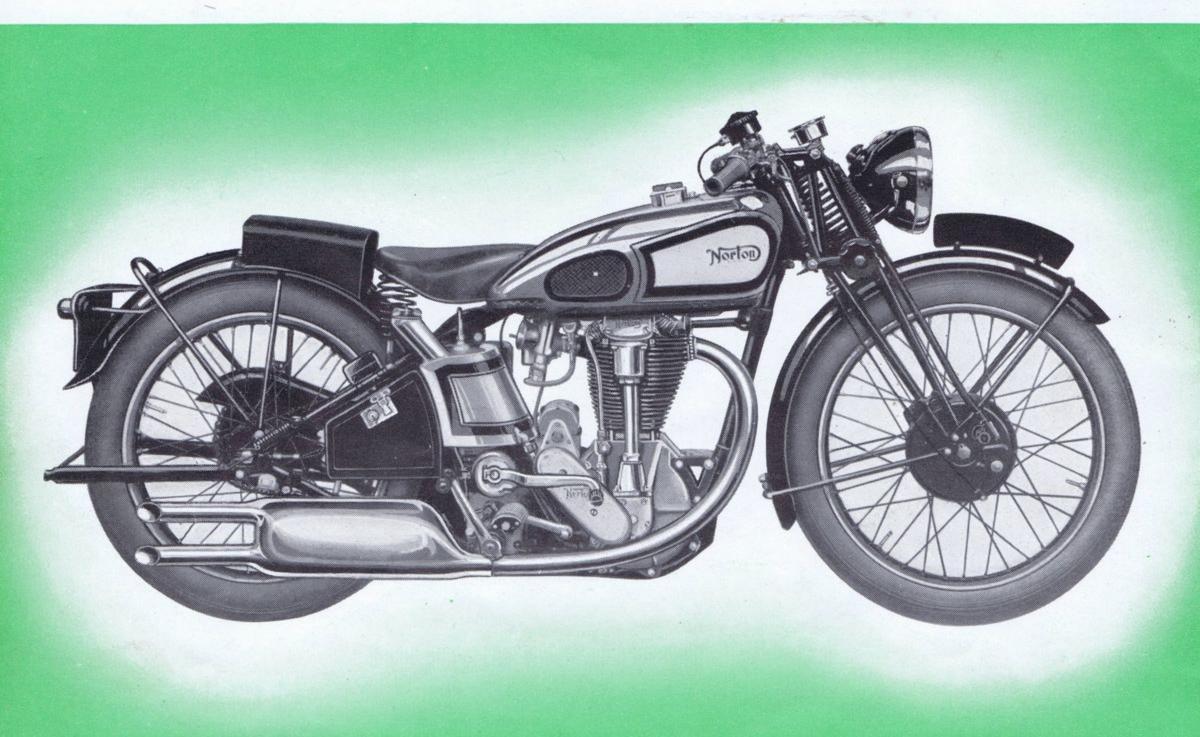


MODEL No. 20



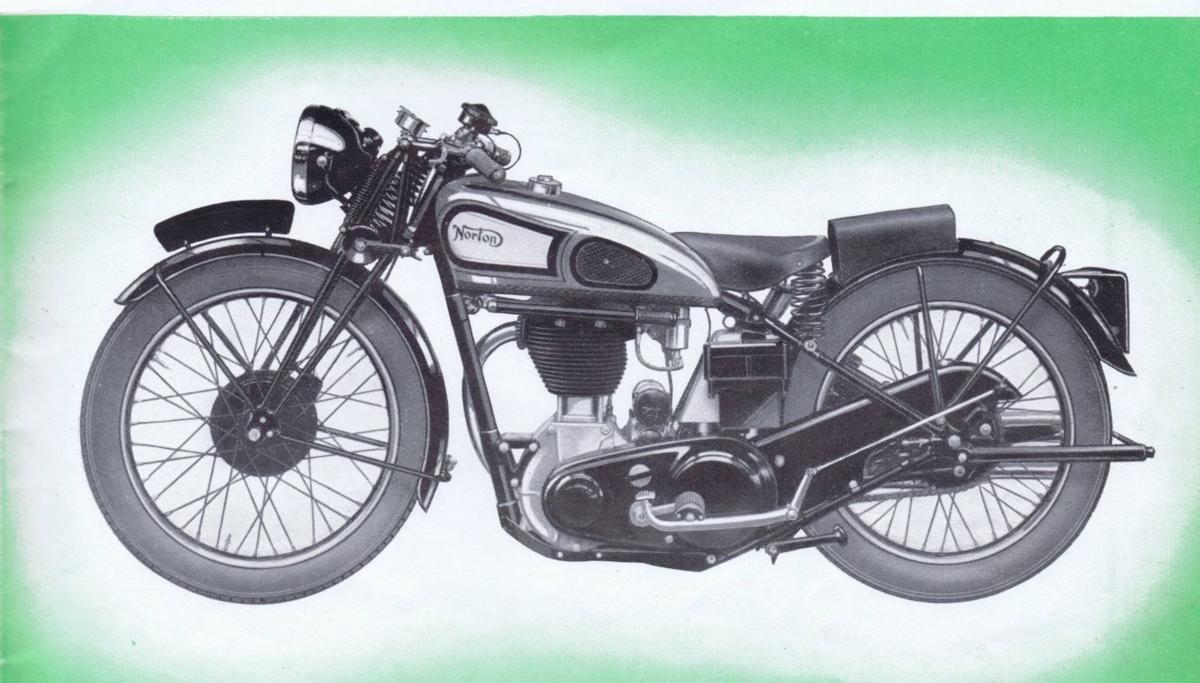
4.90 h.p. O.H.V.

MODEL No. 40 INTERNATIONAL

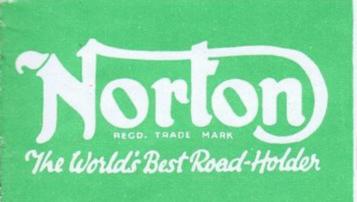


3.48 h.p. O.H.C.

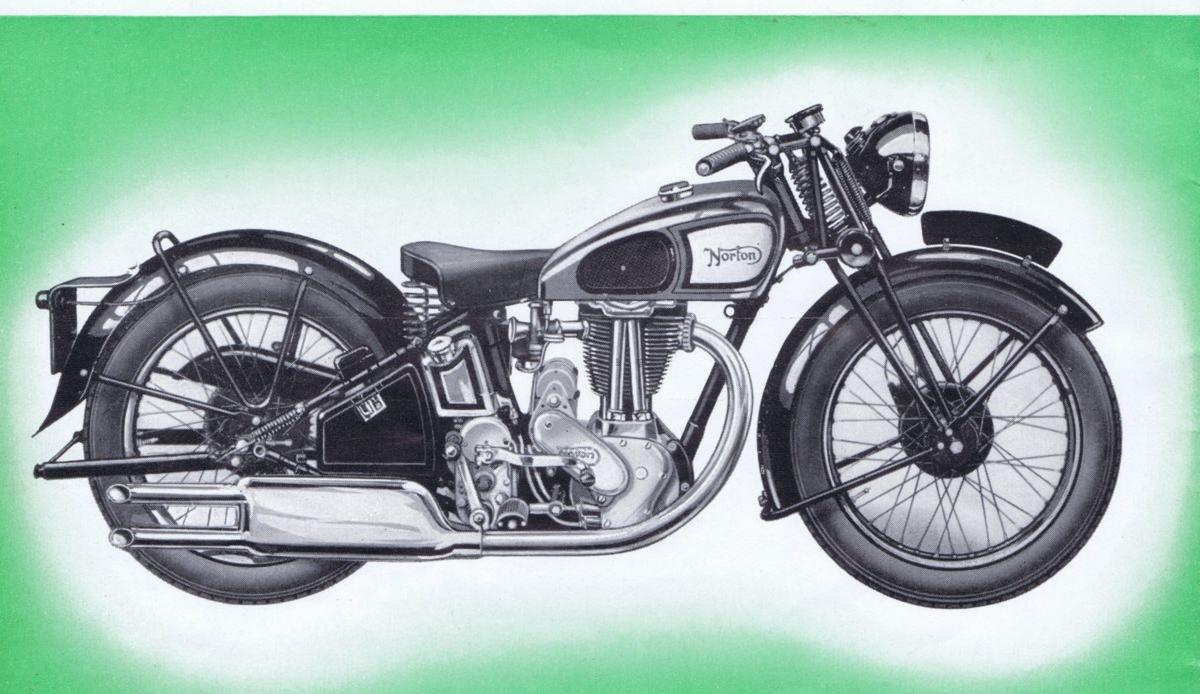
MODEL No. 30 INTERNATIONAL



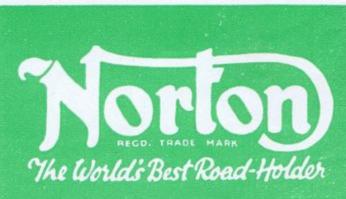
4.90 h.p. O.H.C.



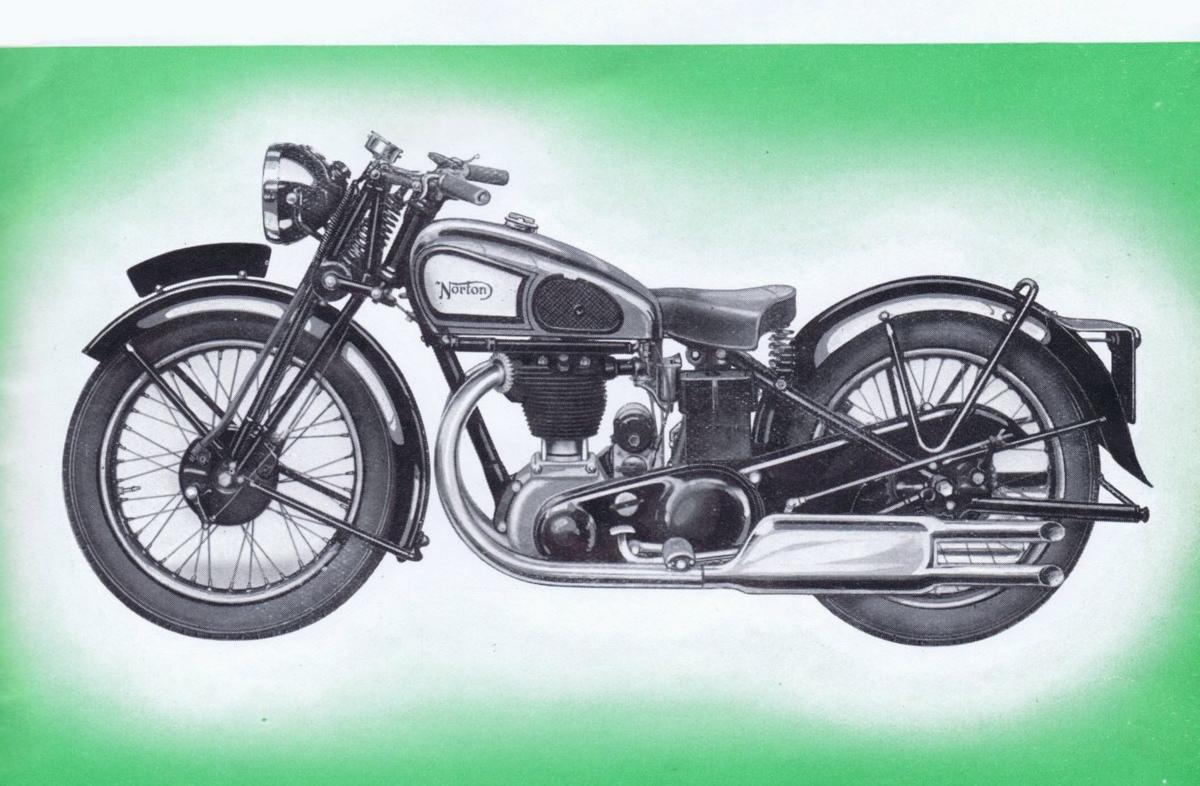
MODEL No. 50



3.48 h.p. O.H.V.

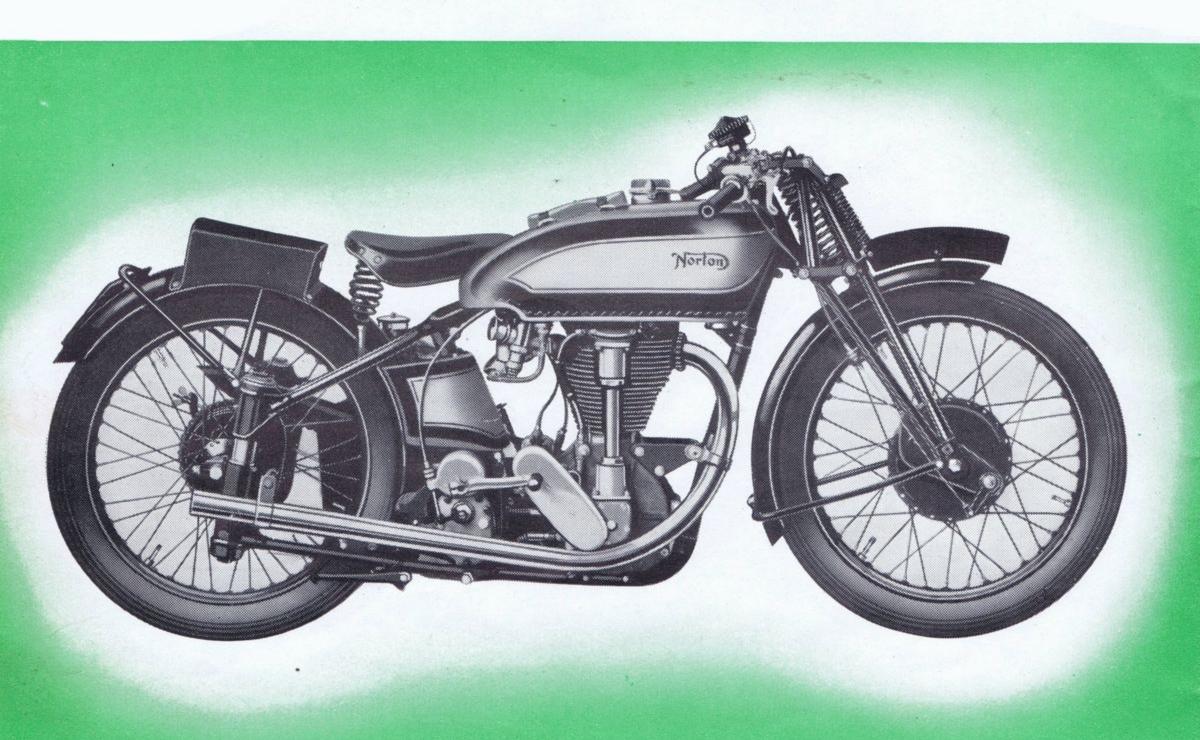


MODEL No. 55



3.48 h.p. O.H.V.

INTERNATIONAL NORTON MODEL To Racing Specification

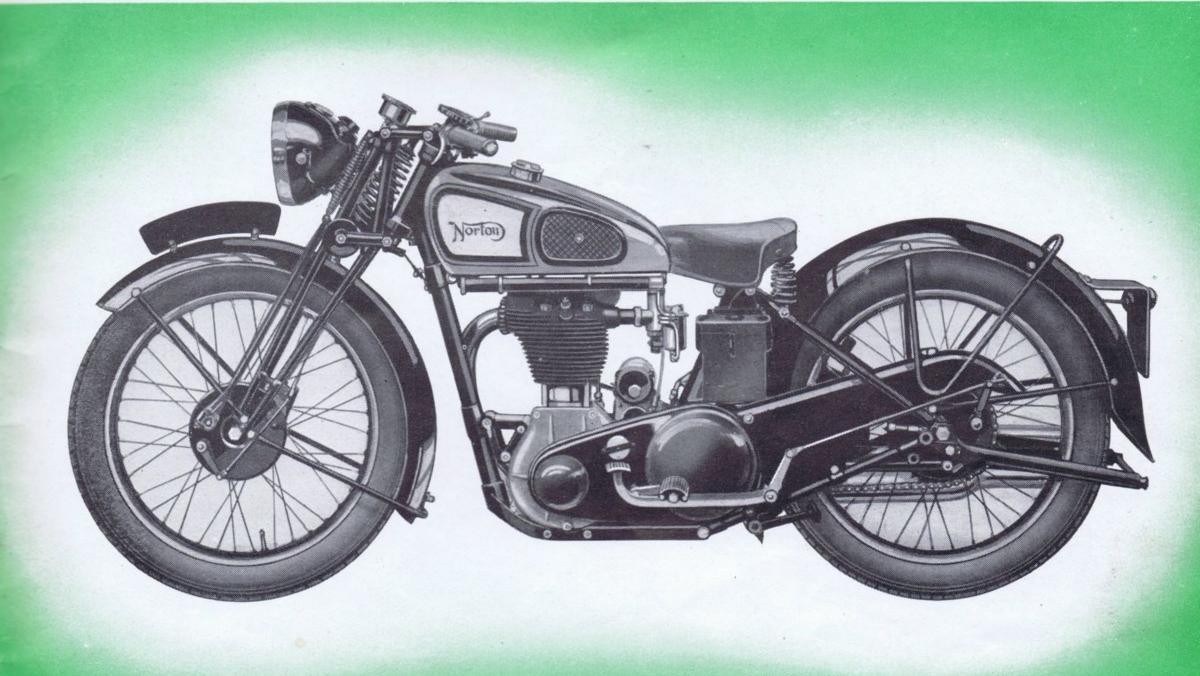


Extras available as follows:

Special Tuning	Racing Tyres					
Aluminium Alloy Cylinder Head and Barrel	Long type Clutch Lever Chin Pad					
Dull-plated Petrol Tank, with quick lift filler cap. (Capacity approx. 4½ gallons in the case of the 490 c.c. model, approx. 3¾ gallons in the case of 348 c.c. model)	Central Oil Feed to Rocker Box Short Front Mudguard 35 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					

(See page 20 for complete specification). Owing to the considerable demand for a machine for use under actual racing conditions, these details are provided as the recommended specification.

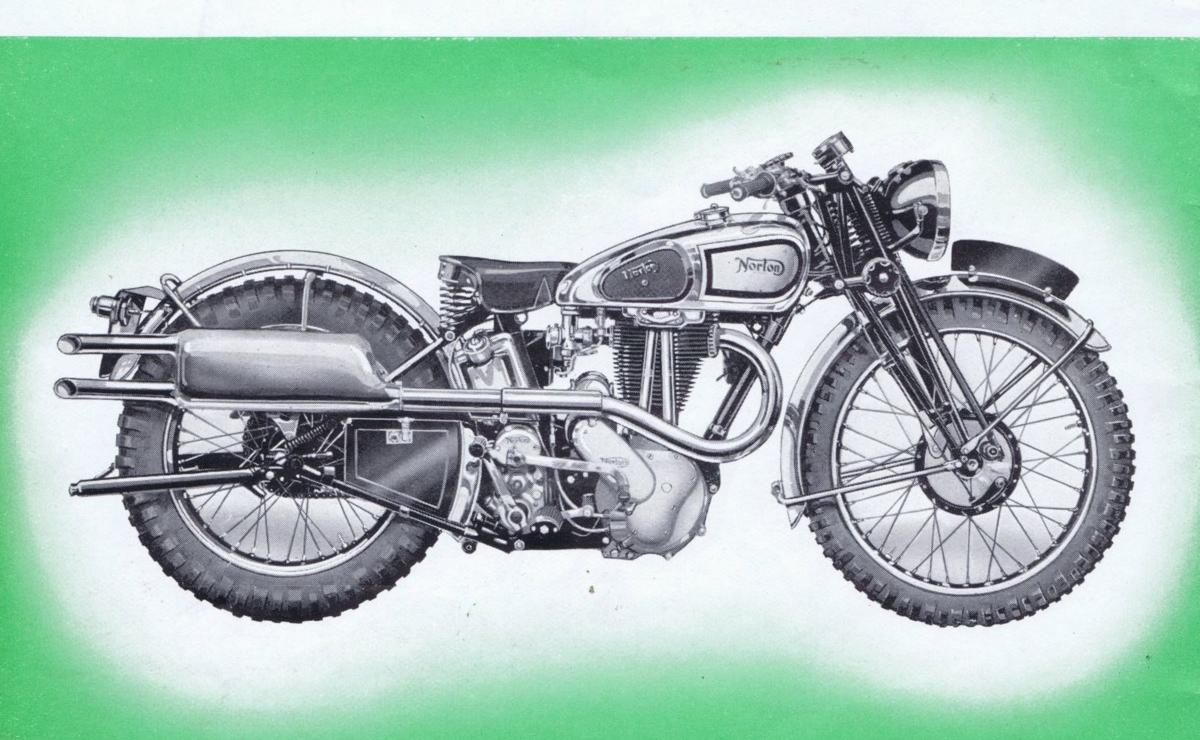
MODEL No. C.J.



3.48 h.p. O.H.C. Code Word: DERBY



TRIALS SPECIFICATION

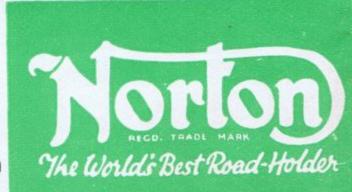


EVERY MODEL OF THE NORTON RANGE CAN BE HAD AS A TRIALS MACHINE, AS ILLUSTRATED ABOVE to the SPECIFICATION which includes the following:—

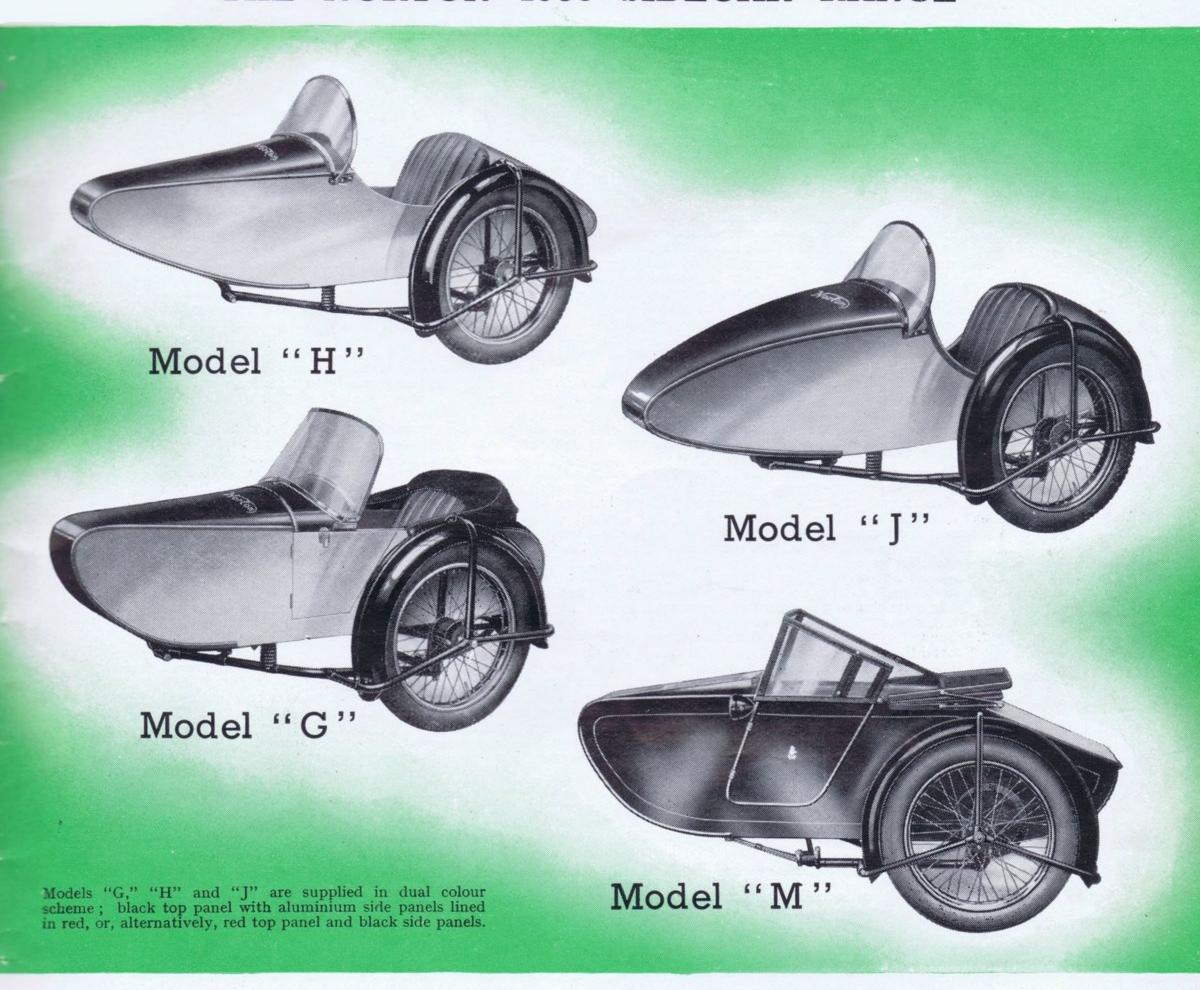
High ground clearance frame; Raised sports type exhaust system; Folding kick-starter; Competition tyres (Nobblies); Narrow front fork and integral hub shell and brake drum to front wheel; Outside long levers; Trials ratio gearbox; Chromium plated chaincase; Chromium plated chainguard; Chromium plated mudguards. All other details are in accordance with standard catalogue specifications.

The price is

extra on any model



THE NORTON 1938 SIDECAR RANGE



Model "H" Code Word "ISLAY"

A fine light sporting sidecar with coach-built body. Sports type windscreen comfortably situated at an angle close to passenger. Overall length 7ft. 2ins.; length inside from back squab to toe board, 3ft. 7ins.; width, 19¾ins; height at front, 32¼ins.

Body mounted on double triangulated chassis ...

Body mounted on single triangulated chassis ...

EXTRAS:

Chromium-plated Hand Rail ... Step for fixing to chassis Chromium-plated Luggage Grid ... Special Side Screens ...

Model "G" Code Word "ARRAN"

Sports touring coach-built sidecar having deeply sprung upholstery in finest rexine. Water-tight hinged scuttle is fitted, whilst large rear locker with hinged lid is incorporated at rear. Quick-lift hood and screen operated by passenger is also included.

Body mounted on double triangulated chassis ...

Body mounted on single triangulated chassis ...

Model "J"

Code Word "SANDA"

A streamlined model having cut-away sides, deeply upholstered. Overall length, 76 ins.; length inside from back squab to toe board, 43ins.; width 20ins.; height in front, 34ins. A metal framed windscreen is fitted of extremely smart appearance.

Body mounted on double triangulated chassis ...

Body mounted on single triangulated chassis ...

EXTRAS:

Hood ... Special Side Screens ... Hand Rail ... Chromium-plated Luggage Grid ...

Model "M"

Code Word : "LAXEY"

Coach-built body with sprung back and laced sprung seat, screen with side members, collapsible hood, spacious rear luggage boot with lid that makes convenient carrier. Body mounted on 4-leaf springs. Dimensions: Overall length of body, 6ft. 6ins.; Overall width 25ins. × 16ins.; depth of seat 21ins. (Child's Dickey Seat for rear locker can be supplied at an extra cost of if specified when ordering).

Fitted with double triangulated chassis

The immense strength of the famous NORTON double triangulated chassis is achieved by ingenious design which reduces weight to the minimum and is recognized as the finest sidecar chassis available on the British market. The cradle wheel is incorporated on both types of chassis as shown. Sidecar wheel is interchangeable with machine wheels, being quickly detachable. Four point fitting is provided without extra charge. This popular chassis is but another example of NORTON thoroughness.

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Copy of Guarantee given by Norton Motors Ltd. to their Dealers

E do not appoint agents for the sale on our behalf of our motor cycles, but we assign to motor cycle dealers distributing rights. No such dealer is authorised to transact any business, give any warranty or make any representation, or incur any liability on our behalf.

Conditions of Sale and Guarantee

We give the following guarantee with our motor cycles, motor cycle combinations and sidecars, including all accessories and component parts other than tyres, saddles, chains and lighting and electrical equipment and other accessories and component parts supplied to the order of the purchaser and differing from those comprised in the standard specifications supplied with our motor cycles, motor cycle combinations and sidecars, but including accessories and parts supplied by way of exchange as hereinafter provided. This guarantee is given in place of any implied conditions or warranties or any liabilities whatsoever statutory or otherwise; no guarantee except that hereinafter contained and no condition or warranty whatsoever statutory or otherwise is given or is to be implied, nor are we to be under any liability whatsoever except under the guarantee hereinafter contained. Any statement, description, condition or representation contained in any catalogue, advertisement, leaflet or other publication shall not be construed as enlarging, varying or over-riding anything herein contained. In the case of machines (a) which have been used for "hiring out" purposes, or (b) any motor cycle and/or sidecar used for any dirt track, cinder track or grass track racing or competitions (or any competition of any kind within an enclosure for which a charge is made for admission to take part in or view the competition), or (c) machines from which the trade mark, name or manufacturing number has been altered or removed, or (d) any machines in which parts have been used not supplied by or approved by the motor cycle manufacturer, or (e) any machine from which the silencing system as fitted by the manufacturer has been partially or wholly removed or interfered with, no guarantee, condition or warranty of any kind statutory or otherwise is given or is to be implied, nor are we to be under any liability whatsoever in respect of any such machine.

We guarantee, subject to the conditions mentioned below, that all precautions which are usual and reasonable have been taken by us to secure excellence of materials and workmanship, but this guarantee is to extend and be in force for six months only from date of purchase, or date of exchange in case of any accessory or part supplied by way of exchange as hereinafter provided, and damages for which we make ourselves responsible under this guarantee are limited to the free repair of or supply of a new part or accessory in exchange for the part of the motor cycle, motor cycle combination or sidecar or accessory which may have proved defective. We undertake, subject to the conditions mentioned below, to make good in manner aforesaid any part or accessory covered by this guarantee which has proved defective within the said period of six months. We do not undertake to replace or refix, or bear the cost of replacing or refixing any such new part or accessory in the motor cycle, motor cycle combination or sidecar. As motor cycles, motor cycle combinations and sidecars are easily liable to derangement by neglect or misuse, this motors apply to defects caused by wear and tear misuse, or perfect.

guarantee does not apply to defects caused by wear and tear, misuse or neglect. The term "misuse" shall include amongst others the following acts:—

1. The attaching of a sidecar to a motor cycle in such a manner as to cause damage or calculated to render the latter unsafe when ridden.

2. The use of a motor cycle or of a motor cycle and sidecar combined, when carrying more persons or a greater

weight than that for which the machine was designed by the manufacturers.

The attaching of a sidecar to a motor cycle by any form of attachment not provided, supplied, or approved by the manufacturers, or to a motor cycle which is not designed for such use.

We do not guarantee tyres, saddles, chains or lighting and electrical equipment, or any accessories or component parts supplied to the order of the purchaser differing from those comprised in the standard specifications supplied with our motor cycles, motor cycle combinations or sidecars. As regards all such tyres, saddles, chains, lighting and electrical equipment, accessories and component parts, no guarantee, condition or warranty of any kind statutory or otherwise is given or is to be implied, and we are to be under no liability whatsoever in respect thereof.

Conditions of Guarantee

If a defective part or accessory should be found in our motor cycles, motor cycle combinations or sidecars, or in any part or accessory supplied by way of exchange as before provided, it must be sent to us **carriage paid**, and accompanied by an intimation from the owner that he desires to have it repaired or exchanged free of charge under our guarantee, and he must also furnish us at the same time with the number of the machine, the date of the purchase or the date when the alleged defective part or accessory was exchanged as the case may be.

Failing compliance with the above, such articles will lie here at the risk of the owner, and this guarantee and any implied guarantee, warranty or condition shall not be enforceable.

Repairs

Any motor cycle, motor cycle combination or sidecar sent to us to be plated, enamelled or repaired will be repaired upon the following conditions, i.e., we guarantee that all precautions which are usual and reasonable have been taken by us to secure excellence of materials and workmanship, such guarantee to extend and be in force for three months only from the time such work shall have been executed, and this guarantee is in lieu and in exclusion of all conditions and warranties statutory or otherwise and all liabilities whatsoever and the damages recoverable are limited to the cost of any further work which may be necessary to amend and make good the work found to be defective.

No exchange or replacement whatever will be considered until parts have been presented to us for examination—carriage paid.

Prices are subject to increase without notice

We reserve the right to alter the specifications contained in this catalogue without previous notice.

List of Extras

Lucas Magdyno Lighting Set— Solo Combination	Leg Shields $3\frac{1}{2}$ gallon Petrol Tank 26×3.50 Dunlop tyres (per machine)
Lucas No. 1140 Electric Horn	27×4 Dunlop tyres (per machine)
Lucas HF 934 Electric Horn, reduced from £1 5 6 to	AMAL Air Cleaner Pillion Seat
Lucas No. 60 Bulb Horn	NORTON Pillion Footrests, per pair Competition Pipes NO EXTRA
Lucas "Stop" Light	Spare Wheel with Tyre
Tank Instrument Panel (flush fitting) not available on International models	Special Tuning Light alloy cylinder barrel and head
NIFE Battery Smith Trip Speedometer—	(available on International Models only)
80 m.p.ĥ	Petro-flex Oil and Petrol Pipes
120 m.p.h	Spring Frame available on International
Carrier	Models only, at an extra charge of

Norton Motors Ltd., Bracebridge St., Birmingham 6

Telephone: Aston Cross 0776-8 (Private Branch Exchange) Telegraphie Address: "Nortomo, BIRMINGHAM"