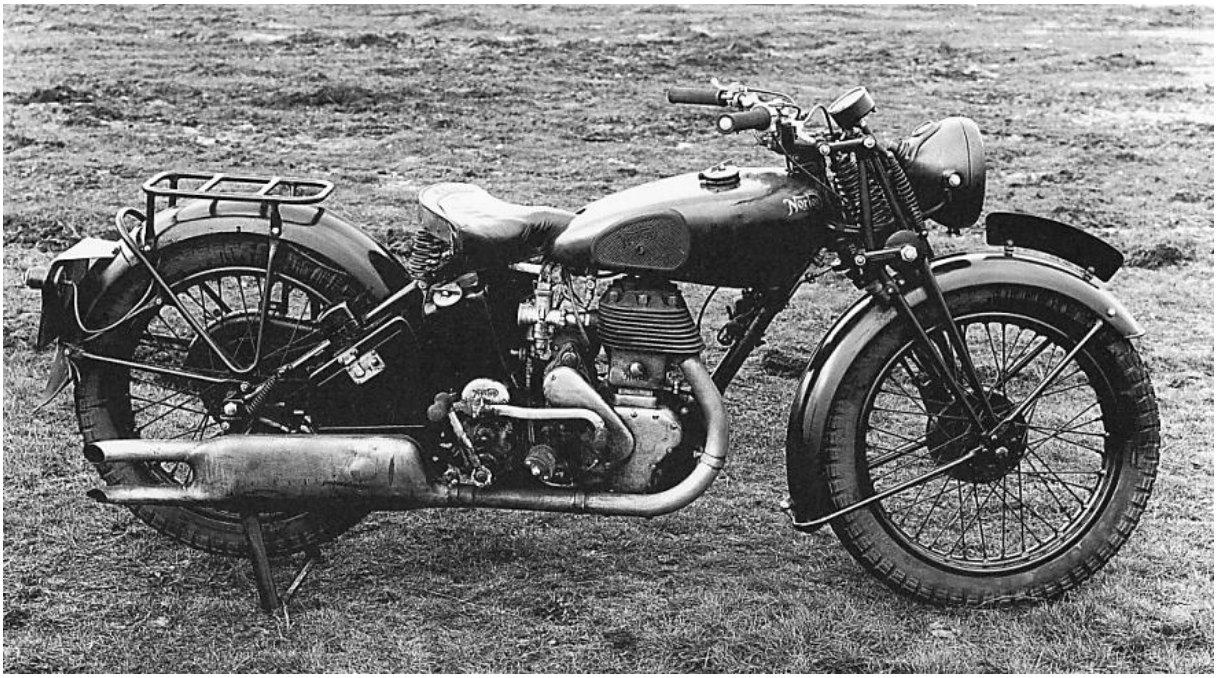
Nieuwegein, September 2026

Unfortunately, due to the hurry caused by my very uncertain physical future, a number of mistakes and omissions slipped through in the first publication of the book. Bonus time gives me the opportunity to work on those.

This document covers the most important corrections and gives some new additions.
This document does not cover all unfortunate minor mistakes, typos and missing references that can be found in subsequent prints of the book.

Improved quality picture on page 18

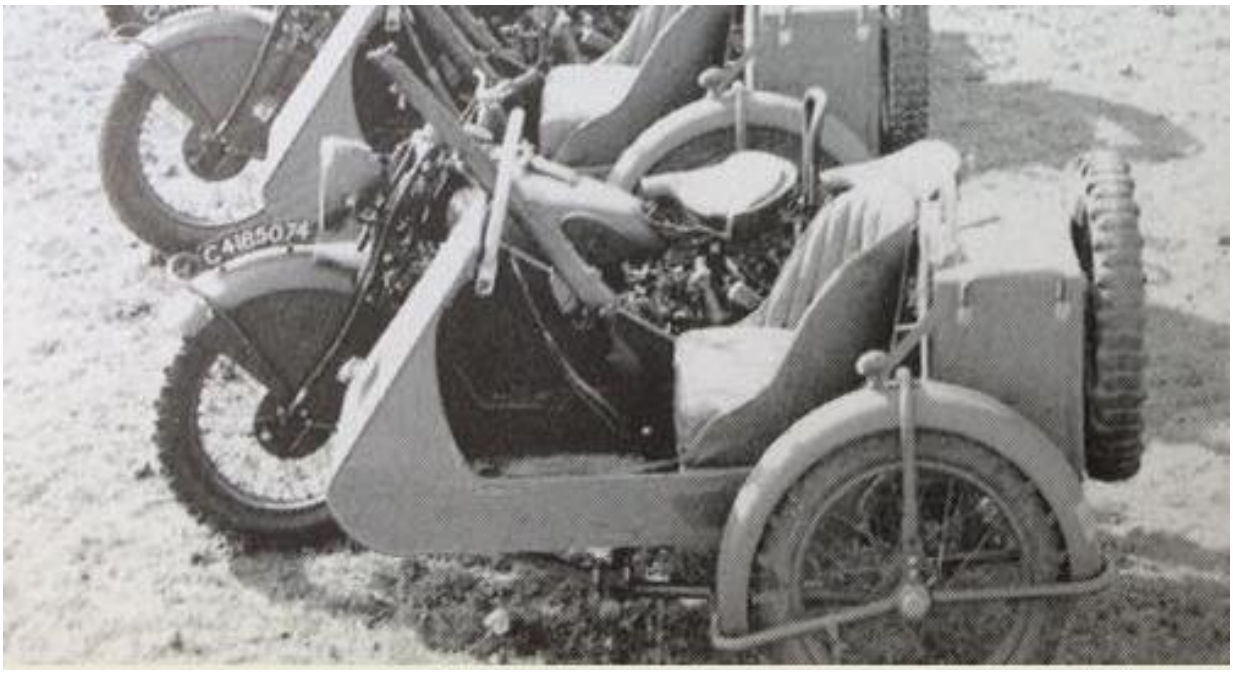


Page 29
Should show the two different configurations of the gear change indicators,

Page 97/98

Sentence starting “the numbers of spares lists already given …. ends with **(in bold)** changed to (annotated with an *). And this is valid for following contracts; **C8245*, C8496*, C8753*, C9438*, C9681*, C7371*, C9062*, C11297*** and **C/M/13056***

Page 90 and 91 pictures need to be re-arranged as follows, to assure the sequence of the pictures to be in line with the text.



Contract V3849, C4185074, S1668 initial passenger configuration, rifle loose in sidecar, spare wheel at the back

Contract V3849, C4185189, S1682, with the rifle fitment near sidecar wheel

Contract V3849, C4185289, S1782 with Motley mount and smaller ammunition boxes at rear, spare wheel at front

The Motley mount was fitted to a fair number of combinations but there is no clear proof of how many. Most pictures with the Motley mount used by Canadian troops in Engeland show a Bren light machine gun, some Home Guard machines show a Lewis light machine gun.

Page 119, old table showing contracts and census numbers to be replaced by this, an amended table now including the Big 4 and rebuilt census numbers.

Contract and census numbers 16H			
Contract	Ref.	Frame No's	Census No's
C 7641	1	57283	35801
C 8245	2	61053 - 64510	352836-353146
C 8496	3	63800-64108	361206-361514
C 8753	4	64127-64199	362679-362897
ditto	4	66000-66136	362752–362888
ditto	4	66145-66153	362889-362897
C 9438	5	73301-73406	364737-364844
C 9681	6	78000-79785	373731-375731
ditto	6	87000-87382	382717-382814
ditto	6	87383-87462	384333-384409
C 1666	8	95000-95499	386444-386943
A 9764	10	99000-99499	388449-388948
ditto	10	99500-99599	3810603-3810702
C 3139	12	101700-101949	395732-396081
C ditto	12	102500-102599	395732-396081
C 3655	13	104700-106300	3910768-3912368
C 5109	15	W 1000-2999	3932709-3934708
ditto	15	W 3000-3843	4101401-4104556
ditto	15	W 3844-6999	4145571-4105400
C 5612	18	W 7000-10999	4152168-4156167
ditto	18	W 7000-10999	4163938-4163939
C 7371	-	W 11151-11259	4191202-4191310
C 6127	19	W 14001-18000	4192303-4196302
C 6653	25	W 18001-22000	4316278-4320277
V 7353	22	W 26001-43000	4386027-4403026
C 9062	27	W 43001-44893	4490148-4492040
C 10217	28	W 45001-50000	4583129-4588128
C 11082	30	W 60001-70000	4595601-4605600
C 12426	31	W 70001-76000	4678658-4684657
S 150	34	W 76001-77250	4858001-4859250
C 14998	35	W 78001-83000	4865801-4870800
S 2602	37	W 83765-88764	5266965-5271964
S 5161	38	W 90001-96000	5484401-5490400
Contract and census numbers Big 4			
Contract	Ref.	Frame No's	Census no's
C1561	7	92872	385691
ditto	7	93460 - 93474	385692 - 385705
C2925	11	103100 - 103199	399012 - 399212
ditto	11	103700 - 103914	399213 - 399326
V3565	16	S1000 – S1344	4112258 - 4112602
C5333	17	S1345 – S1561	4148480 - 4148696
V3849	21	S1563 – S2116	4185069 - 4185622
C6831	20	S2117 – S2275	4185623 - 4185782
C7576	24	S2276 – S3396	4384906 - 4386026
ditto	24	S3397 – S3416	4427053 - 4427072
C11297	29	S3500 – S5308	4591410 - 4593218
S284	29	S5309 – S5737	--
C(M)13056	32	S5738 – S5949	4707738 - 4707949
Rebuilt motorcycles all makes			
n.a.	n.a	n.a	C1400000 - C1499999

To be added at Markings:

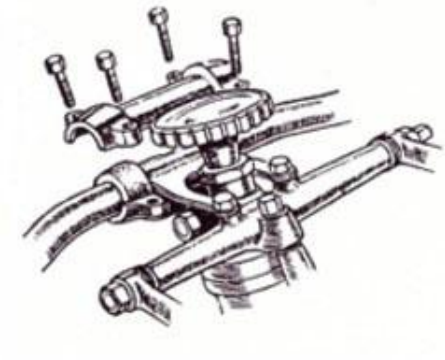
Late war machines were marked with a yellow Centre of Gravity (CoG) marking, a yellow vertical stripe, usually on the near side of the vehicle/motorcycle and app. 12-28 mm wide. The stripe should give the actual centre of gravity and was used for loading purposes for transport by air. A glider or aeroplane would have numbered bulkheads and the CoG marking would be used to position the vehicle in the loading space for correct weight distribution.

14 Handlebars and controls.

There is no single truth in relation to handlebar controls. The descriptions that follow are primarily based on spare parts lists. However, changes in the spare parts list may pre- or post-date the actual change in production.
For example, the change from combination levers to individual parts occurred during production of 16H contract C3655 based on contemporary handwritten annotations to an original spares list, but the change is first recorded in the spares list of subsequent contract C5109.
Reasonable to assume that the newer parts were used to replace earlier parts of different configuration. Pictorial evidence is scarce as details are mostly covered or hazy.

New paragraph on handlebars added
Handlebars
In 1936 the handlebars were of the 1" diameter variety for both civilian and military Norton motorcycles. Road going civilian handlebars had been mounted in rubber since 1935 and provided with a spring plate at centre fixing its position. For the military Norton, the handlebars remained fixed with clamps, and are described as "adjustable handlebars".

Commencing model year 1937 the civilian handlebars changed to 7/8" diameter but the military 16H stuck to the 1" version (pn. 3214) for most of the following production years, finally changing to 7/8" on contract S5161 (pn. LV7/BC/91-111) in either



very late 1944 or 1945 as a result of the introduction of the "Universal" handlebars to be adopted by all motorcycle manufacturers.
The WD Big4 handlebars were mounted in rubber and of the 1" version for the entire production run. WD Big 4 part number was initially pn. 2028 but changed to pn. 4131 on contract C7576. Only difference appears to have been the width of the horizontal mid-section being reduced by 1 - 1,5 inch. Overall width remained at roughly 28 1/2"
Initially the handlebars were provided with aluminium end stops but these later changed to cadmium plated steel, likely to conserve aluminium for the aircraft industry. Date of change unknown, spare parts lists kept stating aluminium but only NOS cad plated steel versions have been found.
Handlebars were painted in the prevailing WD colour of the time.

Throttle control and dummy grips

The Doherty manufactured twist grip remained physically unaltered over the years apart from the change to 7/8" handlebars. Prior to contracts C10217 (16H) and C11297 (Big4) there was no assembly part number. Starting in the spares list of these contracts assembly part number 4105 was used until being replaced with the Universal handlebar controls with part number LV7/BC/16-117C for contract S5161. The 1" control barrel was a thin-walled 1 1/32" brass rotor, the 7/8" control barrel was a thicker steel tube.

From contracts 16H C11082 and Big 4 C11297 upwards, canvas twist and dummy grips were specified in the spares lists instead of the rubber versions. The rubber grips will have been applied until rubber stock was depleted, both in production and as spares. See also remarks at contract C11082.

Rubber grips and rubber covered Doherty clip, example of canvas grip with steel rings.

Both rubber and canvas grips were open ended. The rubber grips had no clearly noticeable marking on them. They stuck to the handlebar by the friction of a tight fit. The Canvas grips were "bonded" through the application of a tar-like substance on the inside which needed to be made sticky by the application of petrol to the inside and the handlebar/twist grip rotor and to be left for a sufficient period to evaporate the petrol and secure the bonding.
Initially the end rings on canvas grips were brass but these changed later to cad plated steel likely to conserve brass. The majority of NOS grips that have surfaced have steel rings, suggesting a later manufacture. Canvas grips appear to have been waterproofed with Blanco as found on used parts.

From 1938 16H contracts A9764 to C10217 and Big 4 contracts up to and including C11297, a rubber cover was mounted over the throttle control. This cover was evaluated and reported in MWEE report 18/98 "Experimental report on motor cycle twist grip throttle control with rubber cover for excluding sand", concluding in short: "it is entirely successful and a desirable fitment to WD motorcycles". Pictorial evidence does show them still fitted on C10217 and C11297

motorcycles but also missing from many, likely because of the difficulty to replace them after repair and the rubber scarcity later in the war.

Front brake and clutch controls

For handlebar control changes per contract, see also specific chapters.
From 1936 up to 1939 the Clutch and Front Brake levers were combined with the air and ignition controls. The controls appear to be Doherty manufacture but there is no brand name on the products of this period.

Early (left) and later (right) configuration of combination lever bodies

The exhaust valve lifter body fits snugly under the ignition lever body which has a machined recess to allow this. The part numbers were 3538 for the front brake lever body and 3540 for the clutch lever body.

The clutch and brake levers were of solid metal but different in length and curvature, the clutch lever short and more curved (pn 3539), the front brake lever long and less curved (pn 3537).
The distance between pivot bolt and cable nipple is 1 1/16".

Front brake lever on the left (app. length 14,7 cm.) and clutch lever on the right (app. length 12 cm.).

In 1939, starting within 16H contract C3655, and likely Big4 contract V3565 (based on timing but first mentioned in spares list of C8631), the combination levers were replaced by individual parts. Front brake or clutch lever body (pn 3979) and front brake or clutch lever (pn 3980) became multipurpose part numbers. The new lever mostly resembles the initial front brake lever in shape and size. In production, handed levers are applied so it is believed there were also handed versions of the solid lever spares.
The shouldered pivot bolt used on combination levers changed from round slotted cheese head to a hexagon head. Pivot bolt was secured with a hexagon shouldered locking nut.
Photographic evidence shows combinations of the separate solid bodies with the earlier short and long levers. Possibly to use up old stock or the result of field repairs by replacing only a failed part using a salvageable part from a cannibalised motorcycle.

Solid body and clip, pn 3979 and multipurpose front brake and clutch lever pn 3980.

Starting with spare parts lists for contracts C10217 (16H) and C11297 (Big4) (delivered from October 1941 onwards) the replacement controls changed from solid cast metal to folded sheet metal versions. Early parts were dull chrome plated, the folded versions appear cadmium plated. Pivots changed slightly in configuration but consisted of a shouldered hexagon bolt and shouldered nut as before. The spare part number for the body changed from 3979 to 3979A, the spare levers were however still specified with the same single part number 3980 for both applications (clutch or front brake lever). Pictures of C11297 MC's do show handed solid levers on folded bodies, indicating that the MC was likely fitted as such at the factory.
Levers fitted at the factory were handed i.e. they were different, either front brake or clutch, based on the slot through which the control cable was fitted.

Folded lever assemblies for 1" handlebars part number 4101A

Confusingly, a new part number (4101A) was introduced for a complete body and lever assembly named "clutch or brake lever assy". This suggests there was a single configuration for both applications. NOS boxes found with "clutch or brake lever assy" always contained the left hand (clutch) assy. Other NOS package is found with "brake assy" labelling with same part number.

Two examples of NOS part 4101A boxes and different label contents.

This indicates that specific levers could be ordered in spite of the fact that only one part number was available, proven by NOS levers with labels naming the specific application beside the generic part number.
One anomaly on the NOS packaging is the reference that "4101A supersedes 4101". This latter part number has not been found in any listing. As the part number range 4100 to 4109 was first introduced with C10217 it has to be concluded that 4101 never existed. The "brake assy" box label does not make this supersession statement.
The sheet metal clips fixing the body to the handlebar are marked with Doherty, the folded body is marked with "pat. app for". There is no marking on the levers.
The folded levers were slightly shorter and rounder than the solid levers.

On 16H contract S5161, the only one with 7/8" handlebars, the part numbers significantly changed as example of handlebar number mentioned before already indicates.
The configuration of the pressed steel ('folded') front brake and clutch lever parts (both the actual lever as well as the pivot/bracket were made out of sheet metal, pressed into shape) were slightly different.

Again, there is only one spare part number (pn. LV7/BC/18-130) for the clutch and front brake levers, but in reality, these were also "handed" as found on basically unrestored motorcycles.
The levers and clips are marked with Doherty, the bodies are without any marking.
The distance between pivot bolt and cable nipple is 29/32" contrary to earlier levers but the apparent loss of the amount of "pull" is compensated by a larger angle of rotation. Pivot shouldered bolts reverted to slotted panheads and were secured with a spring washer and standard hexagon nut.

Folded assemblies part numbers LV7/BC/xx-xxx, for 7/8" handlebars

Ignition and Air controls

Ignition and air controls were always handed. Initially retained by the combination lever bodies but later with individual clips. In this latter case they were also mounted more centrally on the handlebar. The assemblies did not have a part number.

Distinctive feature of the Doherty made controls was the squarish front part and relatively short handles, see pictures at front brakes and clutch controls chapter. This type was usually dull chrome plated and without any marking on them.
Contracts C10217 and C11297 also seem to have been the point at which the shape of the air and ignition control bodies altered from squarish front end to a rounded cable pick up (assembly part number 4102 and 4103 respectively) and a smaller hexagon cap screw. Uncertain if these were also dull chrome plated. The caps were now marked with Doherty.
With the introduction of the Universal handlebar controls also the air and magneto controls were changed, now resembling the AMAL versions as used by BSA. Air control pn LV7/BC/12-161 and ignition control LV7/BC/12-171.
The handle was now ball ended and the screw changed from hexagon head to a rounded and slotted version. The lever caps and fixing clips were marked with Doherty on both old and new versions.

Air control pn 4102 versus Universal model air control LV7/BC/12-161

Headlamp dipper switch and horn push

The head Lamp Dipper Switch and the Horn Push Button as shown in the line drawing at the bottom of the next page are shown on pages 16 and 29. The horn push button is of a two- piece metal construction

Exhaust valve lifter lever

The exhaust valve lifter lever body was initially a slide on version with one clamping screw and fitted snugly under the ignition control body. With the introduction of the 7/8" handlebar the body fixing method followed the clutch/front brake system with a clip and 2 screws. The body and lever parts remained solid metal, the clip was identical to the clutch and front brake clip. The early parts were dull chrome plated and did not have any marking, the later parts were cad plated and show Doherty on the clip.

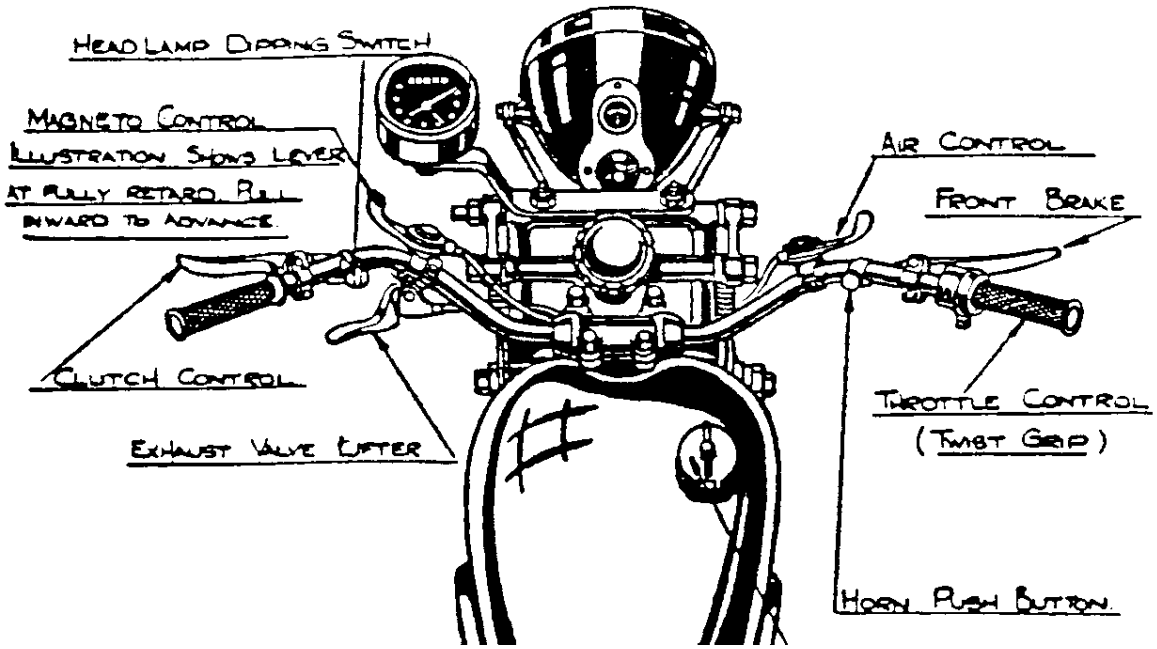
Early and late exh. valve lifter

Note:

According the spare parts lists, most screws on Doherty fittings i.e. twist grip half clips, air and ignition levers to combination bodies and clips to later clutch and front brake bodies are defined as 3/16 x 28 ths which is a dimension outside any of the normal specified threads like BA, BSC or BSF.

Measurements of actual screw diameters however show a diameter in the range of 0,195"/5,0 mm instead of 3/16 (0,188" /4,8 mm). The screws are a very tight fit on the folded bodies.

Deviating screws are the clamping screw for the early exhaust valve lifter body (3/16 x 24 ths Whit.) and the exhaust valve lifter pivot pin (3/16 x 32 ths BSF).



Top part of an illustration from the 101/NC2 Maintenance Manual and Instruction Book for Motor Cycle Solo "16H" 490c.c. S.V.

A new chapter on motorcyclists clothing is added.

18 Motorcyclist's specialised clothing

Canadian Norton rider showing the short early war rubberised canvas coat, the predecessor of the well known 'DR' coat.

He wears 'Breeches, motorcyclists', and the high laced DR boots with three straps on the top. The helmet is a cork lined helmet, made by several manufactures before the introduction of the steel 'helmet, motorcyclists'.

Canadian motorcyclist in Normandy showing breeches, motorcyclists, (these came in size 1to 18, with three widths for each length) DR boots and the long woollen socks (possibly in white), leather jerkin over his Battle Dress, and the steel helmet, motorcyclist's as introduced late

DR gauntlets came in yellow leather with separate finger and thumb.

The Coat, Rubberproofed, Motor Cyclist's was a khaki coloured garment with belt. When the weather conditions demanded it, the long 'skirt' could be draped around each leg and with press studs formed into a sort of trouser leg. The collar could be put up and a separate piece could be buttoned in between the two parts to protect the rider from snow and ice.

These coats came in size 1 to 12. Two sizes 1 and 2, 3 and 4 etc. catered for a certain length with a leaner and a more bulky fit in the waist, eg. Size 7 height of man 5'9" to 5'10".
Size 11 and 12 height of man: 6'11"to 6'12".

Post war this design was copied by the Belgian army, these were finished in a greenish khaki. The Dutch army, too, copied the design, but in khaki.

Amended contents list

Listing of used abbreviations/ acronyms:

ACI	Army Council Instructions
AMO	Air Ministry Order
AIF	Australian Imperial Forces (overseas duties)
AMF	Australian Military Forces (mostly homeland forces)
DofAC	Directorate of Army Contracts
DME	Directorate of Mechanical Engineering (documents describing maintenance and field modifications, incomplete)
ITP	Intention To Proceed/Purchase
IWM	Imperial War Museum
MEE	Mechanical Engineering Establishment
MOS	Ministry of Supply (successor of DofAC)
M&I manual	Maintenance Manual and Instruction Books
VAOS	Vocabulary Of Army Ordnance Stores (large spare parts database for all services within the British Army), supplementing the vehicles maker's parts list.

Contents:

More on military Nortons can be found on the website
https://www.wdnorton.nl