# LUBRICATION MORRIS EIGHT 1934-38

# A few observations following recent discussions and findings based on period recommendations by Morris Motors for my Series II 8, and my own experiences.

# PART ONE.

### Pre-war recommendations for Series II 8.

For Home Market cars; Tropical/Temperate Climate specification has been assumed.

With the exception of the correct Armstrong Fluid for the shock absorbers, Lockheed Fluid for the hydraulic brakes and Vaseline for the dynamo lubricator, Morris Motors recommended Morrisol Sirrom Lubricants (manufactured by Alexander Duckham) for all applications on the Morris 8.

The Lucas recommendation for the starter pinion/spiral and spring was for it to be dry and clean and to be lubricated if necessary using graphite powder.

Lubrication to all Enots oiling points by oil gun using Sirrom Brand Transmission Oil (no SAE viscosity stated).

Lubrication to engine and distributor bob weights using Sirrom Brand Engine Oil (no SAE viscosity stated).

Lubrication to gearbox using Sirrom Brand Synchro Gear Oil (no SAE viscosity stated).

Lubrication to rear axle using Sirrom Brand XS-Press Oil (no SAE viscosity stated).

Lubrication by oilcan to external locks hinges etc. (no type or SAE viscosity stated).

Oil to carburettor dashpot to be thin 'sewing machine' oil. (no SAE viscosity stated).

Without firm written documentation (maybe this will be forthcoming in due course) there does not appear to be confirmation of the SAE viscosity ratings (if these existed at the time) for the Sirrom Brand Oils. They could even have been available in a variety of viscosities.

Some publications and oil manufacturers appear to suggest that SAE 30 applied to the engine; and SAE 90 applied to the Transmission Oil, Synchro Gear Oil and XS-Press Oil. Others (including Morris Motors I believe) recommended SAE 140/ SAE 140 EP instead of SAE 90.

Whilst the Society of Automobile Engineers (SAE) had been in existence since about 1905, I have been unable to find out when SAE viscosity ratings became the norm. I feel that the lack of any reference to the SAE ratings in Morris Motors publications or on their Sirrom Brand products in pre-war years, suggests that either the SAE ratings had not been established pre-war or that Morris Motors did not take account of them.

Regarding lubrication to road spring leaves, a Practical Motorist Data Sheet No6 dated January 1938 recommends 'spraying with penetrating oil every 10,000 miles'. But keep away from the rubber Silentbloc bushes.



Lubrication Chart from 1938 Morris 8 Series II Operation Manual. Home Market. (Morris-Oxford Press).



# PART TWO.

#### Post-war recommendations for Series II 8.

With the exception of the correct Armstrong Fluid for the shock absorbers and Lockheed Fluid for the hydraulic brakes, Morris Motors post-war recommendations all changed. Sirrom Brand oils were no longer manufactured and SAE oil viscosities together with greases for certain applications were recommended instead.

The Lucas recommendation for the starter pinion/spiral and spring was for it to be dry and clean and to be lubricated if necessary using graphite powder.

Lubrication to dynamo lubricator using grease to Specification D.

Lubrication to all Enots points except wheel hubs by gun using grease to Specification D.

Lubrication to all Enots points on wheel hubs by gun using grease to Specification C.

Lubrication to cables and control points using grease to specification E.

Lubrication to engine using oil to Specification A.

Lubrication to gearbox, rear axle and steering box using oil to Specification B.

Lubrication by oilcan to distributor oiler/rotor arm shaft/bob weights, general use etc. using oil to Specification F.

Lubrication to carburettor dashpot using oil to Specification F.

(For Specifications A-F inc. see chart below).

Regarding road spring lubrication the Morris Motors Series E Workshop Manual recommendation was 'periodic brushing with penetrating oil keeping it away from rubber bushes'; this could therefore apply to the 1934 to 38 cars too.



# Lubrication Chart from Morris 8 Series II Operation Manual. Home Market. Re-print Version 1952. (Nuffield Press).

	A			В		С	D	Е	F
Component	Engine and Air Cleaner			Gearbox, Steering Gearbox and Rear Axle		Wheel Hub and Fan Bearings	Chassis Greas- ing Nipples and Springs	Cables and Control Joints	Oilcan and Carburetter
Climatic Conditions	Tropical and temperate down to 32° F. (0° C.)	Cold and extreme cold down to 0° F. (-18° C.)	Arctic below 0° F. (-18° C.)	Tropical and temperate down to 10° F. (-12° C.)	Extreme cold below 10° F. (-12° C.)	All conditions	All conditions	All conditions	All conditions
"ESSOLUBE " (Esso Petroleum Co. Ltd.)	" Essolube " 30	" Essolube " 20	" Essolube " 10	" Esso " Expee Compound I40	" Esso " Expee Compound 80	Esso- grease	" Esso " Pressure Gun Grease	" Esso " Pressure Gun Grease	" Essolube " 20
"MOBILOIL" (Vacuum Oil Co. Ltd.)	Mobiloil '' A ''	Mobiloil " Arctic "	Mobiloil " Arctic " Special	Mobilube "G.X." 140	Mobilube "G.X." 80	Mobil Hub Grease	Mobilgrease No. 2 or 4	Mobilgrease No. 2 or 4	Mobiloil "Arctic "
"ENERGOL " (Price's Lubricants Ltd.)	"Energol " S.A.E. 30	"Energol " S.A.E. 20	" Energol " S.A.E. 10	"Energol " E.P. S.A.E. 140	"Energol" E.P. S.A.E. 80	"Energrease " C.3	"Energrease " C.1	"Energrease " C.1	"Energol " S.A.E. 20
"SHELL" (Shell Mex & B.P. Ltd.)	" Shell " X100 S.A.E. 30	" Shell " X-100 S.A.E. 20	" Shell " X100 S.A.E. 10	" Shell " Spirax 140 E.P.	" Shell " Spirax 80 E.P.	" Shell " Retinax R.B.	" Shell " Retinax C	" Shell " Retinax C	"Shell " X-100 S.A.E. 20
"FILTRATE " (Edward Joy & Sons Ltd.)	Medium '' Filtrate ''	Zero " Filtrate "	Sub-Zero "Filtrate"	E.P. "Filtrate" 140	E.P. "Filtrate" 80	"Filtrate" R.B. Grease	H.P. "Filtrate" Solidified	"Filtrate" A.F. Grease	Zero "Filtrate "
"STERNOL " (Sternol Ltd.)	" Sternol " W.W. 30	" Sternol " W.W. 20	"Sternol " W.W. IO	"Sternol " Ambroleum E.P. 140	"Sternol " Ambroleum E.P. 80	"Ambroline " R.B. Grease	"Ambroline " M.M. Grease	"Ambroline " A.F. Grease	"Sternol " W.W. 20
"DUCKHAM'S " (Alexander Duckham & Co. Ltd.)	Duckham's N.O.L. '' Thirty ''	Duckham's N.O.L. " Twenty "	Duckham's N.O.L. "Ten"	Duckham's N.O.L. E.P. Transmission 140	Duckham's N.O.L. E.P. Transmission 80	Duckham's H.B.B. Grease	Duckham's H.P.G. Grease	Duckham's '' Keenol '' K.G. 16 Grease	Duckham's N.O.L, "Twenty"
"CASTROL" (C. C. Wakefield & Co. Ltd.)	" Castrol " X.L.	" Castrolite "	" Castrol " Z	" Castrol " Hi-Press	" Castrol " Hypoy 80	" Castrolease " Heavy	" Castrolease " Medium	"Castrolease" Brake Cable Grease	" Castrolite "

#### **KEY TO RECOMMENDED LUBRICANTS**



## PART THREE.

#### Current recommendations and observations.

As I see it, it would be correct to follow in general the recommendations of the post-war Morris Motors chart above, particularly with reference to the SAE Viscosity Ratings. However in most cases the makes and trade names of the lubricants are no longer available. I have changed all Enots fittings on my car (except front hubs which have integral oilers) to snap-on type and use a Wanner gun.

I have since 1966 used SAE 140 lubricants as these had always been used on my car, were recommended by John Wrigley (a Morris 8 expert from the past) and in addition had been used on the late Geoff Creese's car, and many others, for as long as I can remember.

There exists however a chart in the 'Pitmans Book of the Morris Eight and the Morris Minor...All models up to 1956' which refers to SAE 90 lubricants.

I am not happy with this chart as it is not specific to our cars and includes the overhead valve 'A' Series engined Series II Minors which I know used different lubricants to our older models. Users of SAE 90 lubricants in our cars (having very basic oil sealing methods) have reported serious oil leaks from the rear axle, gearbox and steering box which is considered to be unsatisfactory.

I feel that it should be emphasised that although there is some ambiguity surrounding the modern day equivalent of Sirrom Brand Synchro gear oil, reliable post-war sources including the Castrol Lubrication Charts and others previously mentioned, suggest that SAE 140 EP should be used in the gearbox. No mention is made on Morris Motors lubrication charts of the Hardy Spicer joints; I treat mine in the same way as the other chassis lubrication points.

Most of us have our own choices and preferences, but I list the lubricants that I am happy to use as follows:-

Castrol D140 Oil to all lubrication points.

Castrol EP140 Hi-Press Oil to gearbox, rear axle and steering box.

Castrol XL 20w/50 oil to engine, and in oil can for general use including distributor oiler, rotor shaft and bob-weights etc.

Castrol LM grease to dynamo.

Castrol CL grease to cables etc.

SU Dashpot oil (thinner viscosity version for early undamped carburettor piston).

Automec Silicone Fluid (installed with a completely re-newed braking system). (top up with the same fluid that is already in of course)

Penrite No 1 fluid, Armstrong 624 (recommended by Stevson Motors) or SAE20 Mineral Oil has been suggested to me as suitable for for DAS 8 shock absorbers.

I have been informed that SAE 140 Mineral Oil is suitable for the Pear-shaped shock absorbers. However, Stevson Motors (acknowledged experts in this field) say that it should be Armstrong 624 for both types.

Regarding lubricating the road-spring leaves, I spray mine annually with a '3in1' aerosol, wiping off surplus and keeping it away from the 'Silentbloc' rubber bushes as necessary.

If grease is preferred for chassis lubrication, I personally would still use SAE 140 oil on the kingpins.

<u>Please note that the Pre-Series and Series I cars have an additional lubrication point at the front</u> of each rear spring, accessed through swivel plates in the rear floorboards.

Later Series I and Series II cars had an access hole in the front section of the transmission tunnel (closed by large rubber plug) to facilitate lubrication of the prop-shaft sliding joint from above.

Your considered comments and additional information would be of interest!

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