

Marusho / Lilac Motorcycle Serial Numbers
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(this is document MarushoLilacSerials.pdf)

The products of the Lilac Motorcycle Co. are the Lilac and the Marusho. Technically, the Marusho bikes are Lilacs and, in fact, were given the name 'Lilac' when produced for sale outside North America.

The most important models built for export to the West are covered here. These include 125cc - 300cc shaft-drive, transverse V-twins and 500cc shaft-drive boxers.

In all cases, the frame number is found on the RH side of the downtube. V-twin motor numbers 250cc-300cc are found on the top of the motor, on the timing case, and are sometimes difficult to read without a good light. 125cc V-twin motor numbers are found below the RH cylinder. Boxer motor numbers are found on the RH side of the crankcase, just above the cylinder. In most cases half of the official model designation is encoded in the frame number and half in the motor number. The year of manufacture (not the model year) is often found in the middle of the frame number.

The V-twins

NOTE: The motor sequence number and frame sequence number of a Lilac V-twin almost never match.

Model CF-40: 125cc, built only in 1961. Frame number is of the format 'F4-61-9999' where '61' is the date of manufacture and '9999' represents a sequence number. Motor number is of the format 'C0-9999', where '9999' represents a sequence number. This is a scarce model with the total number being unknown, but certainly less than a few hundred. This model is found in about equal numbers in Japan and the US. There are two other 125cc V-twin models which are not covered in this document.

NOTE: You will see that the first two characters of the frame number and the motor number yield 'F4C0', which is derived from the model designation 'CF-40'.

Model LS-18/1: 250cc, built in 1959-1960. Frame number is of the format 'F1-9-9999' or 'F1-0-9999', where the year of manufacture is found between the hyphens, and '9999' represents a sequence number. The 4-digit sequence number indicates a model /1, rather than one of the later models below. Motor number is of the format 'E1-9999', where '9999' represents a sequence number. No original motors for this model are known with serials > 8100, though the cutoff point between this model and the /2 is not known. Note that there was no official factory designation of '/1', just as there would be no one named 'Senior' until a 'Junior' was born. It is necessary to differentiate between the '/1' and later models because many parts are not interchangeable. This model was sold domestically and exported in large numbers to Australia and in smaller numbers to the US.

NOTE: The model designation of 'LS-18' is not encoded into the prefixes of the serials. This is unfortunate as the LS-18 line was Lilac's most plentiful product.

Model LS-18/2: 250cc, built in 1960-1961. Again, this designation of '/2' is one of convenience and not an official one. The factory referred to this and the later model (below) as 'LS-18 Improved'. Frame number is of the format 'F1-0-99999' or 'F1-61-99999', where the date of manufacture is encoded, somewhat inconsistently, between the hyphens, and '99999' represents a sequence number > 10000 and < 18000. Motor number is of the format 'E1-9999' or 'E1-99999', where the nines represent a sequence number. No original motors for this model are known with serials < 9800, though the cutoff point between this model and the /1 is not known.

Model LS-18/3: 250cc, built 1961-1964. Again, the '/3' designation is one of convenience and is not official. However, some parts, especially the tank, are not interchangeable with earlier LS-18s. The Lilac Co. was bankrupt from 1961-1963. Only a handful of V-twins were built after May of 1961, and these were assembled from remaining parts by a skeleton staff. There was no export agent during this period so these bikes were sold primarily on the domestic market, though some have migrated to other Asian countries and the Pacific islands, with a few in Africa and South America. Most frame numbers are of the formats 'F1-YY-99999', where 'YY' represents the year of manufacture (61, 62, 63 or 64) and '99999' represents a sequence number > 18000 and < 45000. An effort was made to increase the sequence number to '20000' in 1962, to '30000' in 1963 and to '40000' in 1963, though this is not entirely consistent. Further, at least one 1964 model is without the center year designation altogether. Motor numbers are of the format 'E1-99999', where '99999' represents a sequence number of *approximately* 15000-45000, though the date is not encoded here. These motors are essentially unchanged from the /2 model and many of the crankcases were apparently already cast and numbered before the company's bankruptcy. Additionally, the same crankcase was used for several other V-twin models, so there is much less consistency in the motor numbering than in the frame numbering. However, it is usually possible to consult the database of known frame/motor number combinations and make a determination about whether the motor is the original one.

NOTE: Taken as a series, the three models of LS-18 were produced in a relatively large number, possibly more than 10,000. No other Lilac product enjoyed anything close to this success.

Model LS-38 'Lancer Mark V': 250cc, built 1959-1964. This sport model, along with almost identical 300cc export model MF-39 (below) are much less plentiful and more desirable than the other V-twin models. Frame numbers are of the format 'F3-9-9999', 'F3-0-9999', 'F3-61-9999', 'F3-62-9999', 'F3-63-9999' and 'F3-64-9999', with dates encoded between the hyphens and a sequence number beginning with 0-4, corresponding to the five years of manufacture. Motor numbers have been reported in the formats 'E8-9999' and 'L8-9999'. Only one original motor is known with a sequence number > 1400. As with the LS-18/3, bikes built during Lilac's bankruptcy were few in number, though it is assumed that no more than a few hundred LS-38s were built. All of the known extant examples are in Japan.

Model MF-39 'Lancer Mark V': 300cc, built 1960-1963. This is the largest Lilac V-twin and, as sport model and being quite scarce, is the most desirable V-twin. Frame numbers are of the format 'MF3-0-9999', 'MF3-61-9999', 'MF3-62-9999' and 'MF3-63-9999', with the date of manufacture between the hyphens and '9999' representing a sequence number. Sequence numbers beginning with '0' were used in 1960-1961. Sequence numbers beginning with '2' and '3' were apparently used in 1962 and 1963, respectively, though the number of examples available for analysis is too small to make this determination reliable. Motor numbers are of the format 'M9-9999', where '9999' represents a sequence number < 0800. Most examples are found in the US and Australia, the 300cc size, due to registration considerations, not having been suitable for the Japanese market.

Model MF-19: This 300cc model, known to have been produced only in 1960 and 1964, is extremely scarce and is included in this document only for completeness, since all of its parts can be found on the other large V-twin models. As with the MF-39, the 300cc size was not practical for the domestic market, but the slow, 1-carburetor design was unsuitable for the export market. Only four examples are known and I will simply list the four, inconsistent frame and motor number combinations. Note that all four characters of the model designation can be found in the frame and motor prefixes, so there is no chance of mis-identifying this model. Three of these are found in Japan and one in the US.

MF1-60-0227	M9-0503
MF19-64-44024	M9-44017
MF1-4-44002	M9-44007
MF1-64-44014	M9-44014

Note: This is the only Lilac V-twin known to have matching frame and motor sequence numbers.

FINAL V-TWIN NOTE: All 250cc-300cc motors and transmissions are interchangeable, so caution should be taken when examining the more desirable sport models LS-38 and MF-39 to assure that the original motor has not been replaced with one from an LS-18, as has happened several times. Also, there are very pronounced differences between motors for the same model (1-piece vs 2-piece crankcase, presence or absence of oil filter system, large vs small dynastarter). When purchasing spares it is essential that these differences be understood.

500cc Boxer Models

These bikes, built for the 1965-1967 model years, were designed for the American market, and most examples were sold in North America and badged as 'Marushos'. A small number were sold in Japan and other countries, and were badged as 'Lilac Model R92s'. In fact, the official model designation for all 500cc bikes is 'R92'.

Because all Marusho motors are interchangeable, you will often find bikes with an incorrect motor.

For various reasons, many Marushos were not titled in their model year, some having been first titled 5 or more years later. Thus it is common for owners to mis-identify their model when selling. It is common for the less desirable model 1966 Magnum to be advertised as a very desirable 1967 model.

More than half of all R92 frames and motors have been recorded in the Marusho/Lilac Motorcycle Register, so there is a high degree of confidence in the numbering scheme below.

1965 Model Marusho ST: Naturally many of this model year were actually built during calendar year 1964. Frame numbers are of the format 'F9-0999', where '999' represents a sequence number < 600. Motor numbers are of the format '2-0999', where '999' represents a sequence number < 600. Very few frame numbers match the original motor numbers.

1966 Model Marusho Magnum: Frame and motor numbers follow the same scheme as with the 1965 model, being > 600 but < 800. Again, there were few matching number sets.

1967 Model Marusho Magnum Electra: Frame numbers are of the format 'F9-9999', where '9999' represents a sequence number between '1001' and '1123'. Motor numbers are of the format '2-9999', with the sequence number matching the frame number. It is of course possible that there is a higher sequence number than '1123', but it is very unlikely that any were built higher than '1123'. To my knowledge, Electra F9-1123 was the last motorcycle built by the Lilac Motorcycle Co.

1965-1967 Model Lilac R92: A few of each of the three Marusho models above were badged as 'Lilacs' for the non-North American market. The frame number may be of the format described above or may have a date of manufacture of '4' within it, as in 'F9-4-0025'. Motor numbers are of the format described above, but usually have an 'R' prefix, as in 'R2-0025'. Interestingly, in these Lilac-badged examples, the official model designation of 'R92' can be found in the frame and motor number prefixes, just as with some V-twins.

Other Lilac models

Lilac built over thirty models between 1951 and 1967. There is very little difficulty identifying those which are not described above, with or without serial numbers. Most of these models were built prior to 1960 and exist in very small numbers, but I have gathered what serial numbers can be had. They generally follow the schemes outlined above, with the official model designation split between the frame and motor number, followed by a sequence number. Details on the serial numbers for these models are available on