

Rule change for AHRMA 2014

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submitted via email to dwlamberth@comcast.net

Discipline & Current Rule # Roadrace - FRAMES 9.7.3 f)

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Current Rule: **FRAMES** 9.7.3 f) Frames and swingarms must be made in the same type (tubing style) and manner as original or period. An eligibility request must be submitted for any frame or swingarm redesign or modification. A diagram of an approved tubular reinforced swingarm eligible for Formula and Sportsman machines is shown below. This swingarm was documented as having been constructed by Big D Cycle in 1971.

Proposed Changes: 1) rewrite the first sentence to read "Frames and swingarms must be of a period style". 2) Delete the second sentence or clearly define "redesign or modification". The last two sentences are not changed. The new version of the rule would be:

Frames and swingarms must be of a period style. A diagram of an approved tubular reinforced swingarm eligible for Formula and Sportsman machines is shown below. This swingarm was documented as having been constructed by Big D Cycle in 1971.

Discussion part 1): "original" and "period" are connected with "or" meaning that either is acceptable. The original frame or swingarm on a period vehicle are by definition of a period style making "original" redundant.

The clause "must be made in the same type (tubing style) and manner " covers such a wide range of period construction techniques that it does not add clarity to the rule. A survey of the period prior to 1970 shows frames/swingarms constructed with ferrous (cast iron, steel) and/or non-ferrous (aluminum, magnesium) materials using:

³⁵₁₇ round, square, rectangular and oval tubing,
³⁵₁₇ tapered rectangular and round tubing,
³⁵₁₇ pressed or formed sheet metal and
³⁵₁₇ castings or forgings.

These frames were conventional single or twin loop cradle frames, beam or monocoque frames, triangulated space frames, and/or engines as a structural member. Different engines were used in a variety of styles of frame. For example Villiers engines appeared in frames with cast aluminum sections, round steel tube frames, square steel tube frames, round tube beam frames and fabricated sheet steel beam/monocoque frames. Engines were swapped between different existing frames/swingarms and at times entirely new chassis were constructed.

Discussion part 2): As the rule exists welding anything to the frame or swingarm or removal of any metal from either (other than any OEM tabs that may be specifically allowed) would be a modification that requires an eligibility request be submitted. Adding brackets/tubing for mounting a component (fender, steering damper, tank mount, foot rests), modifying fork stops, trimming a rear seat loop, boxing in an axle plate (as was commonly done on Aermacchi singles and other bikes), extending/shortening a swing arm, relocation or strengthening of rear damper mounts, drilling lightening holes in a gusset plate, changing steering head angle, adding bracing tubes etc would all require submission of an eligibility request.

The above modifications are commonly done (and were commonly done in the period) and I suspect that hardly anyone submits an eligibility request for them. After all, why submit a request for something that was obviously a common period practice? If the rule were enforced as written there could conceivably be hundreds of eligibility requests submitted each year, and every additional change would require a new eligibility request.

If the intent of the rule is to prevent anachronistic modifications then the modified version of the existing rule and the current provision for

competitors to file a protest will suffice and not require that every motorcycle that isn't totally stock on the frame and swing arm be inspected and passed by the roadrace eligibility committee before it is allowed on the track.

The burden of proof for "period style" in the event of a protest rests with the entrant. Anyone who is unsure of the acceptability of a component or modification may still request an advance eligibility ruling from the committee.

Check here if additional material is enclosed: YES

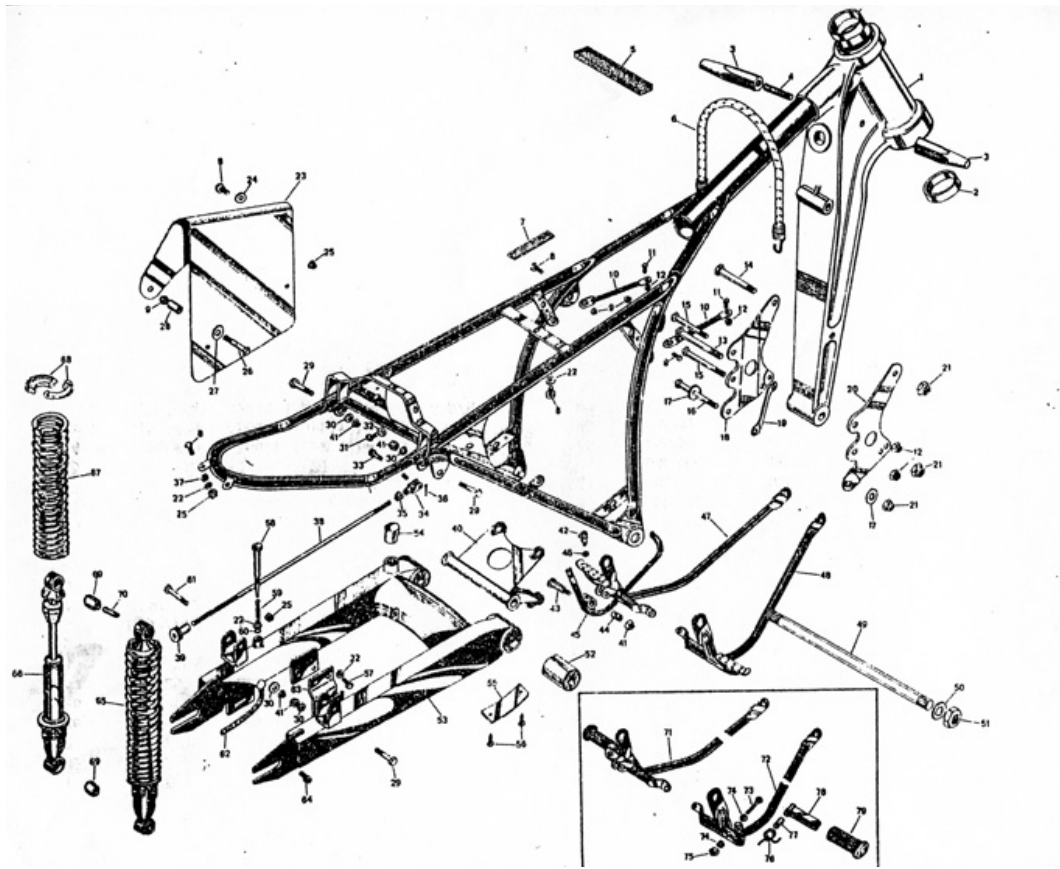
Examples of different construction techniques and materials used prior to 1970 appear below:

CHRIS BUTLER, the fairing builder, is also a motorcycle builder, and entered the Six Days with his own Triumph-powered Butler.

The single loop mainframe is constructed from square section tubing and performs double duty by carrying engine oil. Ceriani forks are used on the front. ■



Square steel tubing: Butler Triumph circa 1966, source either Motorcycle Sport or one of the UK weekly papers.



Aluminum casting front down tube and tapered rectangular section steel swingarm welded from two folded or pressed sides: Greeves Challenger. I think the cross tube on the swingarm is also of an oval cross-section.



Tapered round tube: Velocette



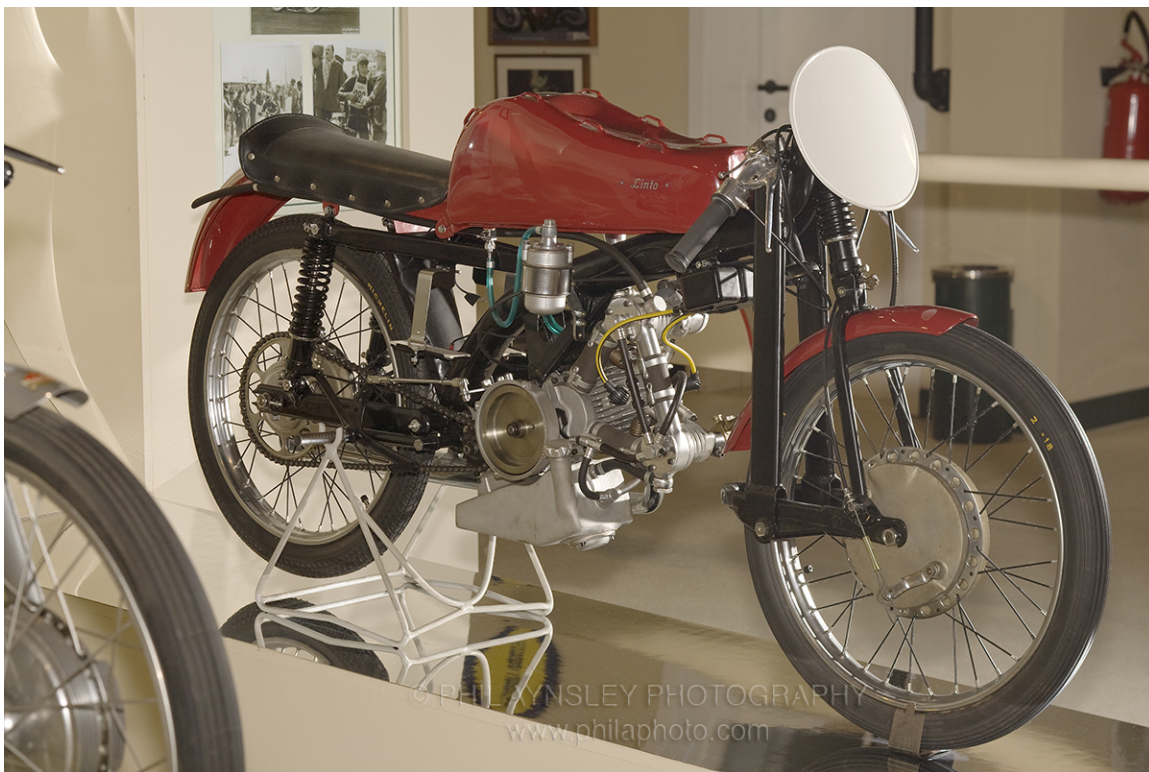
Folded/pressed steel sheet frame: Velocette LE



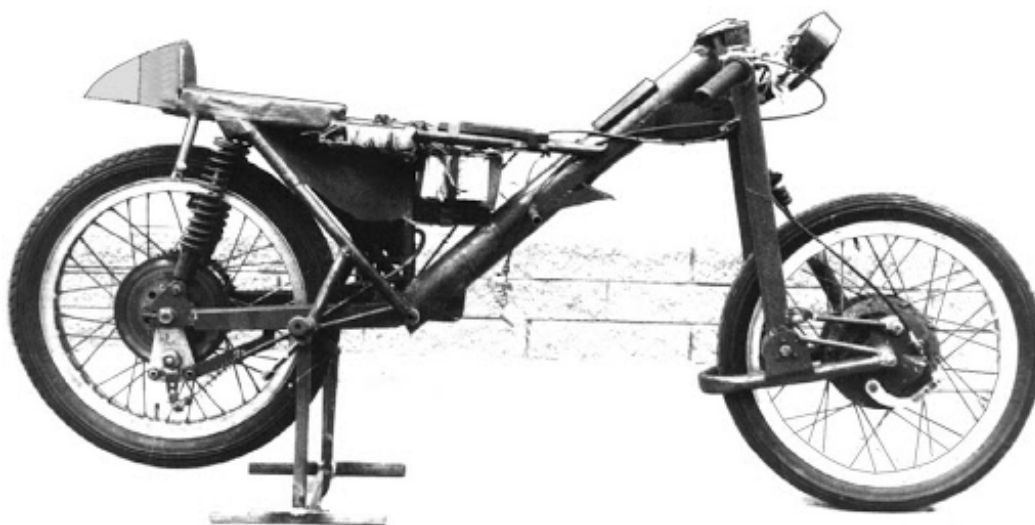
Folded steel sheet beam/monocoque frame: Scorpion 1965



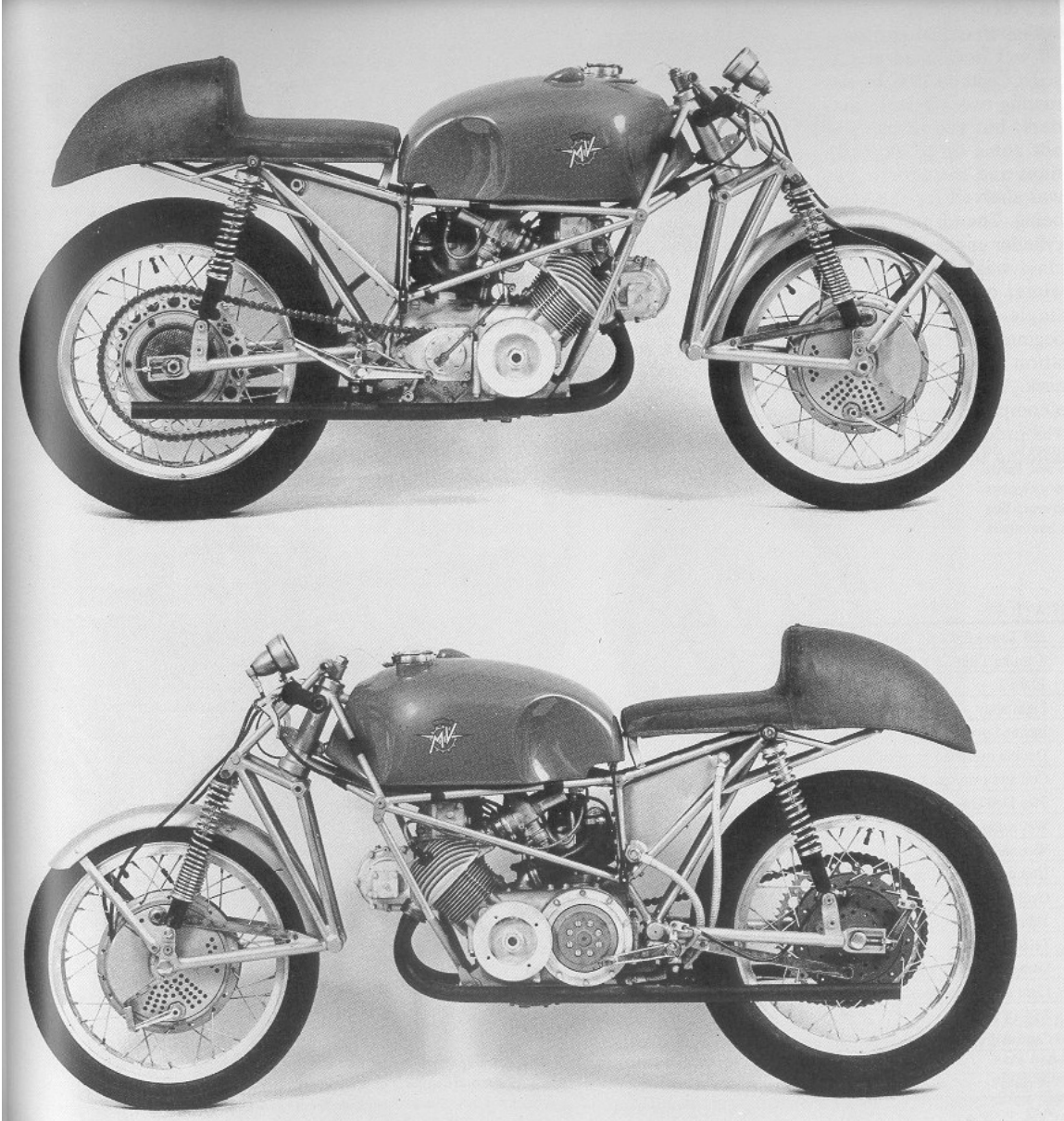
**Fabricated aluminum sheet beam/monocoque frame: Ossa
250GP 1968**



Round steel tube beam frame and rectangular tube leading link fork (note that only one damper is used on the fork): Linto 75cc circa 1956, Phil Ansley photo from the Morbidelli museum



Round steel tube beam frame and rectangular tube leading link fork built by Tony Foale in the early 1960s.



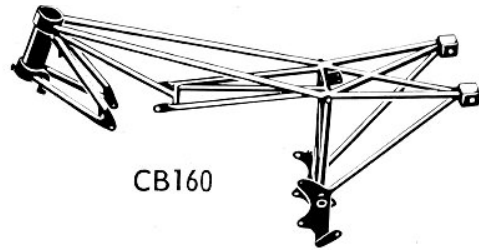
Round steel tube space frame and leading link fork: 1957 MV Agusta 350cc GP

YETMAN SPACEFRAME FOR HONDA CB160

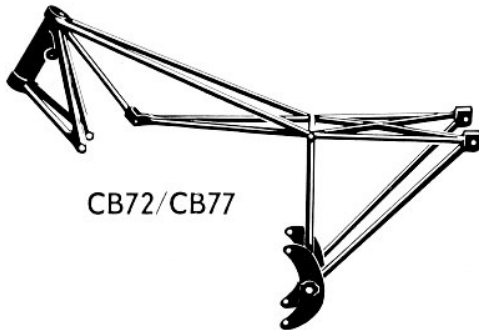
An extremely strong basis for an ultra-lightweight machine. Accepts engine, front forks, swing-arm, rear shocks, steering damper, center stand and rear brake mechanism from standard CB160. Frame also has fuel tank mounting studs. Designed for street use, but easily converted for racing by the addition of Honda Hawk foot controls.

Total weight: 9.5 pounds.

\$155.00



CB160



CB72/CB77

YETMAN SPACEFRAME FOR HONDA CB72/CB77 HAWKS

This is the spaceframe that built the YETMAN reputation! Stock engine, front forks, swing-arm, rear shocks and steering damper bolt on without modification. Also equipped with tank mounting studs. Street version will accept stock Hawk fuel tank.

COMPETITION FRAME 9 pounds.

\$145.00

STREET FRAME 9.5 pounds.

\$145.00

YETMAN ULTRA-LIGHT FRAME FOR HONDA CB450

A conventionally constructed frame with the lightness that YETMAN is famous for. Accepts stock CB450 engine, front fork, rear swing-arm and shocks, and standard steering damper. Equipped with mounting points for fuel tank. Street version has mountings for standard center stand and rear brake pedal. Weighs 50% less than standard CB450 frame.

Total weight: 19 pounds.

COMPETITION FRAME

\$190.00

STREET FRAME

\$195.00



CB450
and
UNIVERSAL

Round steel tube triangulated space frame: Yetman circa 1966/67

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Type of rule Processing: Normal or Expedited

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Referred to _____ **Committee**

Date comments received from committee: _____

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Outcome of Board action: _____

Date withdrawn : _____