



MATCHLESS



My father turned me loose with the bike when I was 14. I spent the whole summer riding the Matchless in the woods with my friends. It was one of those wonderful childhood summers", recalled Jim Bollingmo, Jr.

Matchless, organized by Harry and Charlie Collier, started producing motocy-

cles in 1899 in a factory in southeast London. The Collier brothers were interested in racing, and Charles Collier won the single cylinder class (A Norton won the twin cylinder class) at the first Isle of Man TT race in 1907 on a Matchless. At first the company bought engines from DeDion, JAP and MAG, among others, but eventually produced their own powerplants.

In 1931, Matchless bought out AJS, another old British company. At first, the model lines were separate, but as the years passed, they began to look more and more like each other. Eventually, the only difference between most Matchlesses and Ajays was the name on the cases. After World War II, the holding company for Matchless, Associated Motorcycles Limited, continued



Photography by David Dewhurst

its acquisition program, buying the Norton, Francis-Barnett, and James companies in England and Indian in the United States.

The ancestor of Matchless' 350 and 500 cc postwar singles was a long stroke overhead valve single cylinder engine first marketed in 1935. This machine was developed into a 347 cc model used extensively by the British Army during World War Two. It

came in two versions, one of which, the G3L, had telescopic forks. After V-E day, Matchless converted its Army design to civilian production.

The first civilian Matchless/AJS road motorcycles reached the public in 1945. Although Matchless/AJS began to make machines for trials and other off road uses in addition to the road machinery early in 1946, at first the differences between the on road and off road bikes were minor.

All 1940's Matchless/AJS had telescopic forks and an all iron engine with coil valve springs. The crankshaft of the converted military engine had ball races on the drive side and caged roller bearings between the crankpin and the connecting rod. Flywheels were cast iron.

The main difference between AJS and Matchless at this point was that the AJS magneto was in front of the engine and the Matchless magneto was in back. Postwar AJays and Matchlesses were not known for high speed, but the single downtube frame allowed reasonably good handling and the finish of the machine was outstanding. Matchless singles gained a reputation as reliable (for the time) simple, easy to repair, machines. According to a period Motor Cycle test, the singles were comfortable to ride at speeds under 60, when they started to vibrate.

The good handling of Matchless singles and the torque from the heavy flywheels led to the popularity of Matchlesses and Ajays for trials. Trials is a peculiarly British form of off road competition, where the object is to get around a course over difficult terrain without stalling the bike or putting a foot down. It was extremely popular in the Forties and Fifties and many manufacturers produced specially designed trials machinery.

Both the Matchless on and off road machinery slowly evolved during the late Forties and Fifties. The trials models were given an all-aluminum alloy engine starting in 1950, while the road engines spent another year with the all iron engines and then had only their iron cylinder heads replaced with alloy.

The first postwar models used a Burman gearbox, which was replaced in 1957 by a superior gearbox used by many of the marques within the Associated Motor Cycles Ltd (AMC) group. Carburetion was updated in 1955 to the Amal Monobloc.

Up through 1957, AJS/Matchless were fired by magnetos and had separate dynamos

for the lights on the road models. The last real difference between the brands was eliminated in 1952, when the Matchless magneto was moved to the front of the engine. Both brands changed to coil ignition for the road machines in 1958, although the off road machines continued to use a magneto for spark.

The first off road ("competition") frame,



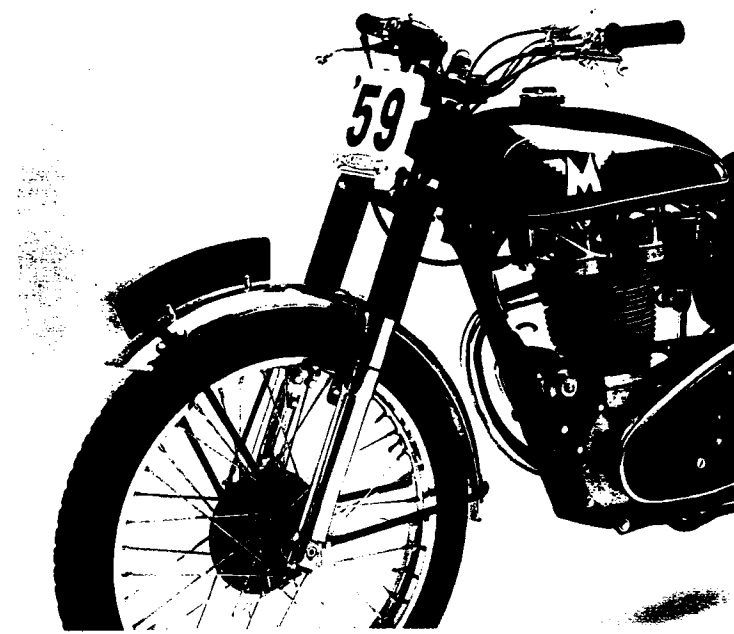
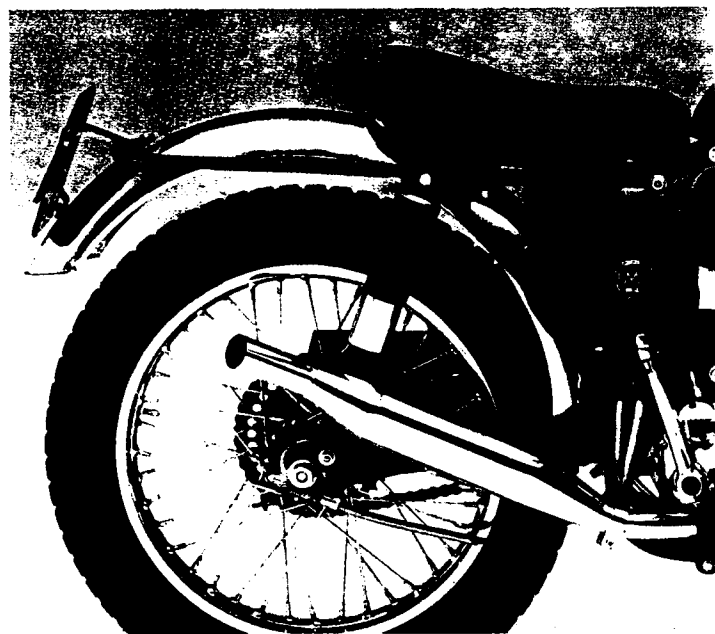
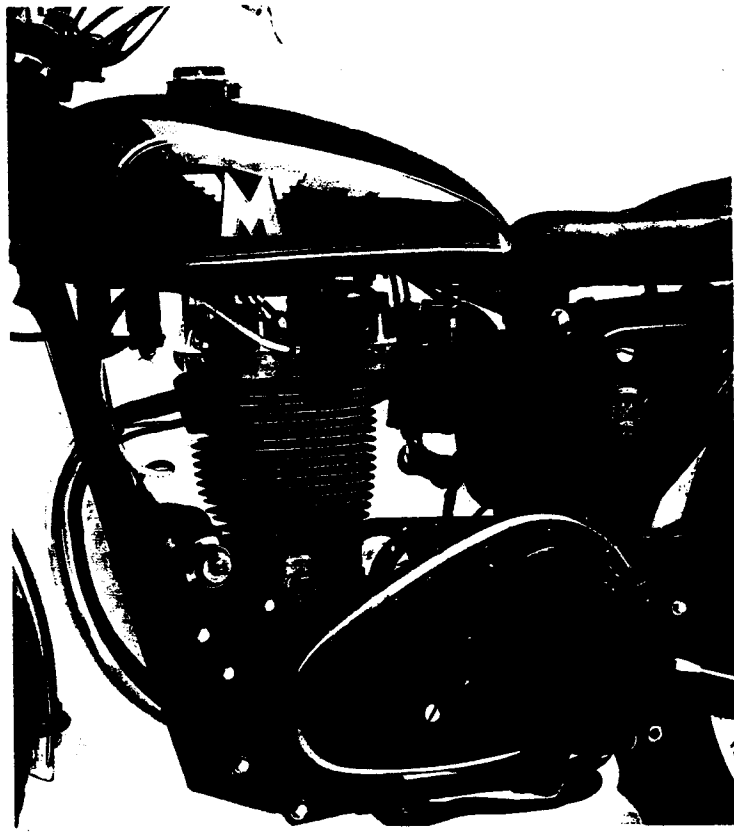
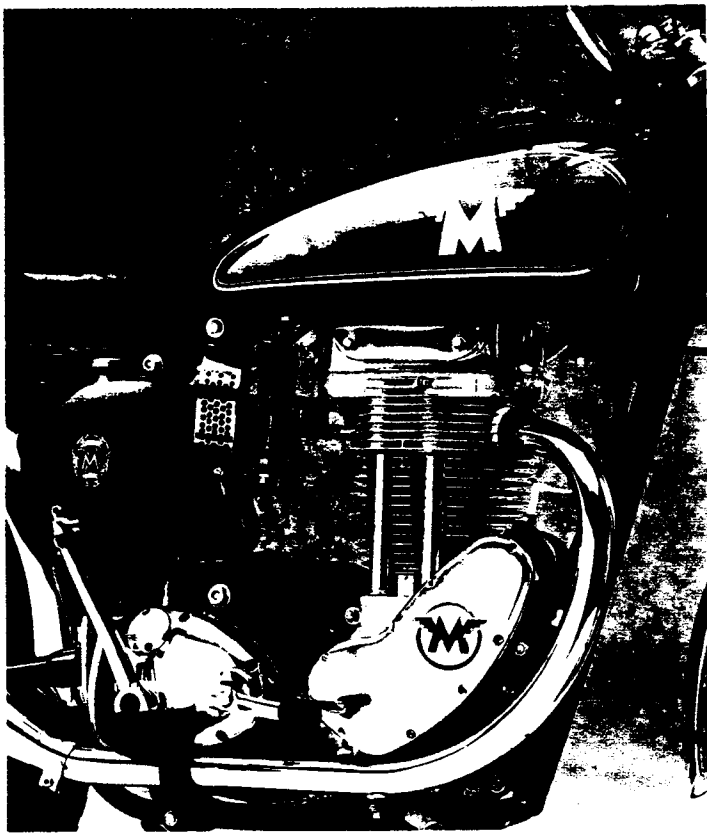
produced in 1948, had a different wheelbase and head angle from the road model. The 1950's saw continual minor changes to the trials frame to improve handling and lessen weight. Trials pipes were swept up for ground clearance. In 1959, the off road production models were given the factory competition frame, with a smaller sub-frame and a redesigned swingarm.

Although all of the postwar civilian Matchlesses and AJS's had telescopic front forks, patented as "Teledraulics," up until 1956, rear suspension was an optional extra. The fat shocks on the swingarm model were known as Jampots, which were replaced in 1957 by superior Girling units.

Jim Bollingmo Jr. was born into a family of motorcycle enthusiasts. His great-grandfather was A. F. Van Order, a motorcycle enthusiast, race official and historian. (Van Order's photo collection have been a running feature in this magazine for the past few months.) His father, Jim Bollingmo Senior, raced flat tracks and TT's in Southern California in 1953. Jim Junior had his first motorcycle ride when he was six weeks old.

While Jim Junior was growing up, Jim Bollingmo Sr. earned (and still earns) his living as a teacher of oceanography. In 1964, he had an opportunity to work in England for a year in an exchange program. While in England, Mr. Bollingmo was bit by the trials bug and decided to try competing in the sport. His search for a suitable mount ended when he found a 1959 348 cc Matchless G3C, in well used condition.

Paying the equivalent of \$400 for this



The Bollingmo's G3C is stock except for padded seat and tool box.

bike, Mr. Bollingmo cleaned it up, did some minor repairs and spent a year competing in the area around his English home. He offered a trials class at the school for a while, using the Matchless as a demonstrator.

When the family packed up to return to the United States, the Matchless went along in the luggage. Mr. Bollingmo found a small group of trials enthusiasts in the United States and resumed competing. He won the 1969 California State Trials Championship in the

Expert category. "I have a big tall trophy to prove it," he said.

By the late Sixties, trials and off road enthusiasts were replacing their British iron with lighter Spanish Bultaco two strokes. In 1971 the Matchless engine was damaged when Mr. Bollingmo tried to start it "wet sumped," a condition where worn oil return valves allow all the oil in the tank to seep back into the crankcase. Needing repairs and no longer competitive, the Matchless sat for

many years.

Vintage trials gained popularity in the United States in the late Eighties and Mr. Bollingmo decided to again compete on the Matchless. He decided to restore it for competition in 1990, with the enthusiastic support of his son. Mr. Bollingmo had taught Jim Junior to ride in England and the Matchless was the first motorcycle he had ever ridden by himself. "I have a lot of memories around that bike," Jim reminisces.

MATCHLESS

The first step in the restoration project was to take the machine apart and see what it needed. Although the piston was broken and the lower end bearings were worn, most of the engine parts were in good condition. As the Matchless was an English machine and not an export model, the Bollingmos were able to rely on the extensive and excellent British literature available on Matchless. United States export models were often significantly different, adding one more headache for the restorer.

The Bollingmos sent the engine out to Malcolm Milligan of British Parts New and Used. Milligan replaced the bearings, rebored the cylinder, put in a new piston and rings. He sent the powerplant back with a fresh valve job. As far as Bollingmo knows, Milligan had no problem obtaining any of the parts.

British Marketing rebuilt the gearbox, which needed bearings, seals and one gear. Mr. Bollingmo straightened the primary case and replaced the primary chain. He sent the primary case out to be powdercoated, along with the frame, which, despite all the abuse it had suffered, was straight.

One point of interest is that this frame is number 8490, which was the first production frame with the 1959 trials frame modifications.

Mr. Bollingmo rebuilt the Amal Monobloc Type 376/59 carburetor. The plate clutch was in good shape. The Lucas Wader magneto was rebuilt by a specialist.

The original front wheel used on the machine was 21 inches. Bollingmo had an 19 inch wheel laced on in the 1960's, a common practice of the time. When the Bollingmos undertook the restoration, they decided to return to the original 21 inch unit. Wheelworks was able to provide a new rim and rebuild it with stainless spokes. The Bollingmos had the hub powdercoated and found new brake shoes to fit. The front tire is a Bridgestone, which was the closest they could find to the original tread pattern. The rear is an Avon Trials Universal found in England.

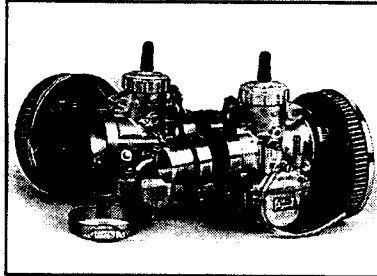
The fork tubes were badly pitted. Joe Francis Motors in England was able to supply bushings and seals for the fork sliders. Forking by Frank, an American firm specializing in custom front ends, machined new fork tubes. The rearshocks were in good shape except for the need of a coat of paint.

Joe Francis Motors was also able to supply the alloy fenders, a new pipe and muffler and all the cables. Bud Ekins assisted the father/son team with advice and some hard to find parts such as the bolt that goes through the frame and holds the footrests.

new tricks for Old dogs

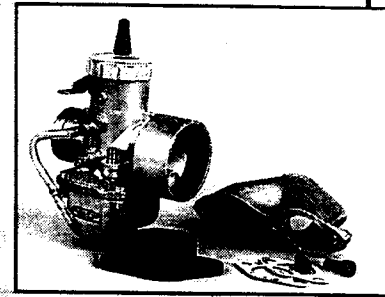
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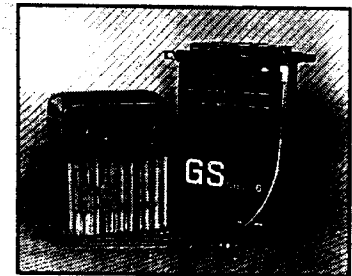
Above: Dual Mikuni VM34mm Carburetor Kit with adaptors for Triumph TR6, TR7 and Bonneville.

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Above: Single Mikuni VM36mm Carburetor Kit with manifold for Norton 750 & 850.

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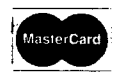
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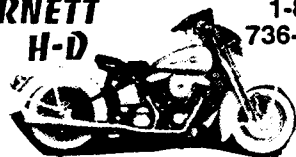
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MATCHLESS

There are two nonstandard items on this Matchless. The original seat was replaced before Bollingmo purchased it with a board seat and the original small toolbox was replaced with a larger toolbox from a Matchless twin. These were common modifications for trials competition. The board seat lowered the rider's center of gravity and allowed more maneuverability over the tank and the larger toolbox enabled the rider to carry more bits and pieces on the trail. As these modifications are authentic for the period, the Bollingmos decided to leave these nonstock parts on the bike. According to Jim, "no racer stays stock for long."

Amazingly, the fuel tank was in good shape. A local painter painted it, the toolbox and the oil tank. Mr. Bollingmo Senior found wire that matched the original wiring and rewired the machine. The G3C and other Matchless/AJS trials machines did not come with head or taillights.

The handlebars are the originals, rechromed. All the levers were rechromed and Bollingmo reinstalled the Amal choke lever, which he had taken off the bike when he was campaigning it.

Although the Bollingmo's original plan was to enter the Matchless in vintage trials events, as the machine evolved, they decided it was too pretty to use in competition. Jim Bollingmo Junior rides it around the local area about once a week. The Bollingmos have shown the machine at a concours competition, where it won second in class.

Starting procedure is similar to any British single. Jim remembers that as a kid he harassed his father to let him ride the Matchless and was told that if he could start it, he could ride it. He ran right out to the garage and after several kicks, the engine backfired. Jim ended up on his nose on the garage floor.

To do it right, you tickle the carburetor, tap the kickstarter until you get to top dead center, use the compression release to help you get over the top and then kick. Jim says that he can start the bike almost every time by yanking on the kickstart with his hand.

The heavy flywheels and long stroke add up to loads of torque and easy low speed running. "I can count the plug every time it fires." The throttle response is excellent.

Jim Bollingmo Junior says that the machine is very well balanced and steering is neutral and very precise. It is easy to guide over obstacles. First and second gears are close together, then there is a jump to third. "It is heavy compared to a modern bike, but it's a pleasure to ride, especially slow."

Margie Siegal is a freelance writer from Oakland, Ca. She is a regular contributor to Motorcycle Collector Magazine and has also written numerous articles about antique and vintage motorcycles for Classic Bike, Iron Trader, Motorcyclist and other magazines.

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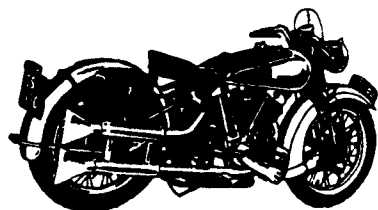
MATCHLESS LORE

If you live in a largeish town, you may have a local British bike shop. Although Matchless and AJS motorcycles are less common than the Nortons, BSA's and Triumphs that form the majority of the Britbike shop's stock in trade, the proprietor may have parts that you need. The local Britbike shop will definitely have Whitworth size wrenches, Lucas parts, Amal parts, and good advice. Patronizing the local store will ensure you will always have a place to go and benchrace.

The AJS/Matchless Owners Club, 7401 South Blvd, Charlotte NC 28273, prints a club magazine packed with enthusiasm, tips, tea and sympathy. The club will help you locate fellow enthusiasts in your area, sources of parts and people who can offer services that you need.

Trials (at least on the amateur level) is one of the safest forms of motorcycle competition. It emphasizes balance and skill rather than speed and it is almost as much fun to watch as to take part. The American Historic Racing Motorcycle Association can be reached at 4000 Mountain Lane, P. O. Box 882, Wausau, WI 54402-0882 and organizes vintage trials in all parts of the country.

Recommended reading for further Matchless information are two books published by Osprey and written by Roy Bacon: AJS and Matchless - The Postwar Years and Matchless and AJS Restoration. Matchless and AJS Restoration is particularly valuable for the restorer, with its clear explanations of how to get your machine apart and back together again.



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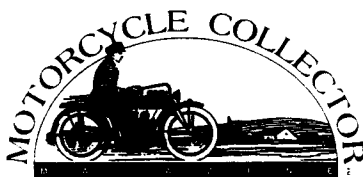
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