

2022 Summer Newsletter

Published by the Indian Four Cylinder Club, for it's members
Volume 57, Number 2

Indian 4 Club

"America's Most Beautiful Motorcycles"



The 1927 Ace Motorcycle

Indian 4 Club

“America’s Most Beautiful Motorcycles”

2022 Summer Newsletter, Volume 57, Number 2

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Front cover: This 1927 Ace Motorcycle was shown at the 2021 Indian Four Cylinder Club meet by Dave Holzerland. A rare beauty, in a rare color.

A Note from the President



I'm sitting near the fan waiting for my new handlebars (long story..., ask me at Tiffin) which are supposed to come today, watched pot and all that... Seems like the perfect time to get this written. Lots to cover, but I'll do my best to be concise. (I heard that laughter!)

First, As I'm writing it's just 5-6 short weeks until Tiffin – **August 11-14, 2022, Seneca County Fairgrounds, Tiffin, Ohio**. The Club has a block of rooms reserved at the Holiday Inn Express in Tiffin. The details are elsewhere in this issue.

We learned at the Board Meeting in April that having a Road Run really jacks up our insurance for the meet. After a lot of good discussion, the Board voted unanimously *not* to have an official, 'organized' (using the term very loosely) Road Run this year. In reality this will only affect the handful of folks who usually go on the run. So - there will be no pleading for someone to lead and no herding of the cats to get it on the way. I, for one, am relieved. Let me be clear – folks can get together with their friends and go on a ride any time they want. But the Club will not be responsible for any mishaps.

We agreed to have a tent, tables and chairs on the grounds again, and to have at least one food truck on site for meals. Field Games will take place Saturday morning and promise to be entertaining if nothing else! Most were disappointed in the arrangements for the Thursday evening gathering. We will publish the venue on the Club Facebook page when it is finalized and do our best to spread the word for those who don't do Social Media.

The Board also discussed the upcoming Club election. All of our terms expire at the end of this year, so *the election will be for the entire Board, plus 1 Trustee*. The current Board members are: President, Jim Walther; Vice-president, Brian Riegel; Treasurer, Beverly Corsmeier; Secretary, Drew Crafton; Chief Judge, Robin Markey; Sargent-at-Arms, Dave Panella; and Referee, Black Horse.

All of the above-named have agreed to serve another 2-year term *if elected*, and will be nominated by the Sargent-at-Arms at the appropriate time in the Business Meeting Saturday after dinner. ***The floor will then be open for nominations.*** This procedure will be explained in detail before the election process begins. If you plan to nominate someone from the floor, please make certain they are willing to serve in the position for which they are being nominated.

Check the Minutes from the meeting elsewhere in this issue in case I forgot anything important...

I hear the delivery truck stopping at my driveway, so that's going to do it for me. May all your deliveries arrive on time and intact, be safe!

Hope to see many of you soon,

Jim Walther
President, Indian Four Cylinder Club

Secretary's Report



Minutes of the Indian 4 Cylinder Club Board Meeting April 22nd, 2022

Meeting in Oley, PA was called to order by Jim Walther at 12:30 PM

Board Members:

President Jim Walther; Vice President Brian Riegel, Secretary Drew Crafton; Trustees: Elmer Lower & Kim Markey; Sergeant-at-Arms Dave Panella were present as were members Tom Covill and Ed Morinho. Treasurer Beverly Corsmeier joined by phone. A *quorum* was present.

A moment of silence was observed to lift thoughts and prayers for Walt Curro.

Treasurer's Report: The treasury balance was \$8145 in March with 58 members still unpaid. Will obtain meet insurance through the AMA.

President's Report:

The dates for the 2022 meet are August 11th to 14th, call the fair board to confirm.

New Business:

Slate for Election of officers for election at Tiffin in 2022

The slate of current serving officers was presented for nomination to re-election.

President: Jim Walther	Sergeant-at-Arms: Dave Panella
VP: Brian Riegel	Chief Judge: Robin Markey
Secretary: Drew Crafton	Referee: Black Horse
Treasurer: Beverly Corsmeier	

Trustees: Ted Bortner & Kim Markey are up for re-election (a 4 year term).
(Elmer Lower and Rocky Corsmeier's terms continue until 2024).

Awards for displayed motorcycle categories to be certificates, Special awards for the Wickham, Pearce, Markey and Watson to receive trophies.

Games to be held on Friday. Black Horse to coordinate. Need to have 4 games.
Suggestions of economy run, tire toss, and a poker run.

Merchandise: Some sizes of shirts need to be ordered. Beverly to provide the inventory list and cost. Other merchandise suggestions included do rags, shot glass, coffee cups.

Food: Elmer to look for a venue to gather for dinner on Thursday evening. Pizza on the grounds Friday night and a food truck for Saturday. Tent, tables and chairs for banquet.

Motion to dispense with the road run for 2022. Road run captain is needed to plan. Coordinate and lead the run. The road run requires a distinct insurance endorsement which will be waived this year. –Approved.

Adjournment: Meeting adjourned at 1:01 PM

Treasurer's Report

Summer 2022

Previous balance: **\$8,787.27**

Current Bank Balance: **\$6,976.87**

Spring publication cost including postage was: **\$2463.59**

20 copies re-printed of fall magazine per board: **\$351.70**

Postage for publications to new members: **\$25.12**

Flowers were sent for funeral of Walt Curro **\$127.84**

Website hosting monthly expense **\$22.36**

Stamps.com for club merchandise mailing monthly expense **\$17.99**

Bank statements and club PayPal account (website transactions) are sent to entire board

PLEASE PAY YOUR DUES IN JANUARY EACH YEAR AND IF AT ALL POSSIBLE, PAY ONLINE THROUGH THE WEBSITE. (I am happy to help you create or login to your account)

Summer Magazine Estimated Cost including Postage: **\$2,603.81**

Beverly Corsmeier, Treasurer and All things to keep the club running
5958 Shallow Creek Drive
Milford, Ohio 45150
513-623-7756 cell



AMA Club Affiliate Program

WE NEED MEMBERS TO JOIN THE AMA!!

When our club was founded by John Wickham in 1961, it was a requirement to join the AMA to be an Indian 4 Cylinder member. This has not held true for many years now. However, our Club's Charter and Liability Insurance which protects us at any club sanctioned meet we hold depends on members of our club joining the AMA. If we can have a minimum of 25 of our members join, we get a discount on our Charter. If you already have an AMA (NOT AMCA) membership please use this link to renew when their dues are due. If you are not an AMA member and would be willing to join, please also use this link. The Indian 4 Cylinder Club gets credit for every member that joins!!

www.amajoin.com/ind4cy



Indian 4 Club Annual Meet Agenda – Thursday, August 11 – Sunday, August 14

HOTELS:

Hampton Inn -2492 South State Route 231, Tiffin 44883 (419) 443-5300

Holiday Inn Express – 78 Shaffer Park Drive, Tiffin 44883 (419) 443-5100

CAMPING AT THE FAIRGROUNDS \$20 per night with electric hookup, \$10 no electric. Showers onsite. Please pay at the table in the barn where the club merchandise is.

MembershipIndian4Club@gmail.com or text/call my cell 513-623-7756

WEEKEND AGENDA

Thursday 6:00 pm – *The Renaissance of Tiffin/Barrel 51: 129 S. Washington St., Tiffin, OH 44883.*

A local Roarin' 20s-themed bourbon bar exclusive to downtown Tiffin. 21+ We will be gathering in Barrel 51 which is the bourbon bar section with an outdoor patio. Plenty of space to visit, mingle grab a bit to eat, have a few of your favorite libations and just enjoy each other's company the first night of the Meet. Arrangements have been made for special reserved parking for our beautiful machines (please vintage bikes only) right in front of the restaurant. **NOTE: 2.5 miles from Holiday Inn Express and 1.5 miles from Fairgrounds.**

Friday morning tent is set up at the Tiffin Fairgrounds and members begin to roll-in. Tent includes table and chairs so you don't have to drag these with you to the meet. The day is spent visiting, helping roll machines out of trailers, a few vendors and trading/selling of parts by various members.

Friday afternoon FIELD GAMES!!

Friday evening, Pizza (including gluten free), soft drinks/water are served at the fairgrounds so all members can continue to just enjoy themselves and hangout in the barn for the evening. If you haven't experienced this yet, I promise you won't be disappointed! A lot of antique little beauties with grown men (and women) taking pictures, laying on the floor looking at the bikes from all angles, crowds around the "newest barn finds" – possibly a group working on breathing life back into one of them and the sounds of an engine running for the first time in many years. This is a hands on - river of knowledge. The evening can go well after midnight. You are welcome to bring your own libations.

Bikes are locked up and under guard in the barn!

Saturday morning – Most members eat breakfast at their hotel and then head to the fairgrounds around 8:30 am

Something different this year!! It's going to be a POKER RUN on the fairgrounds!! Information provided at the meet.

Saturday 11:30-1:00* (approximate time)

Food truck will be on-site for you to get your lunch.
Judging of bikes – Serious judging and some fun stuff

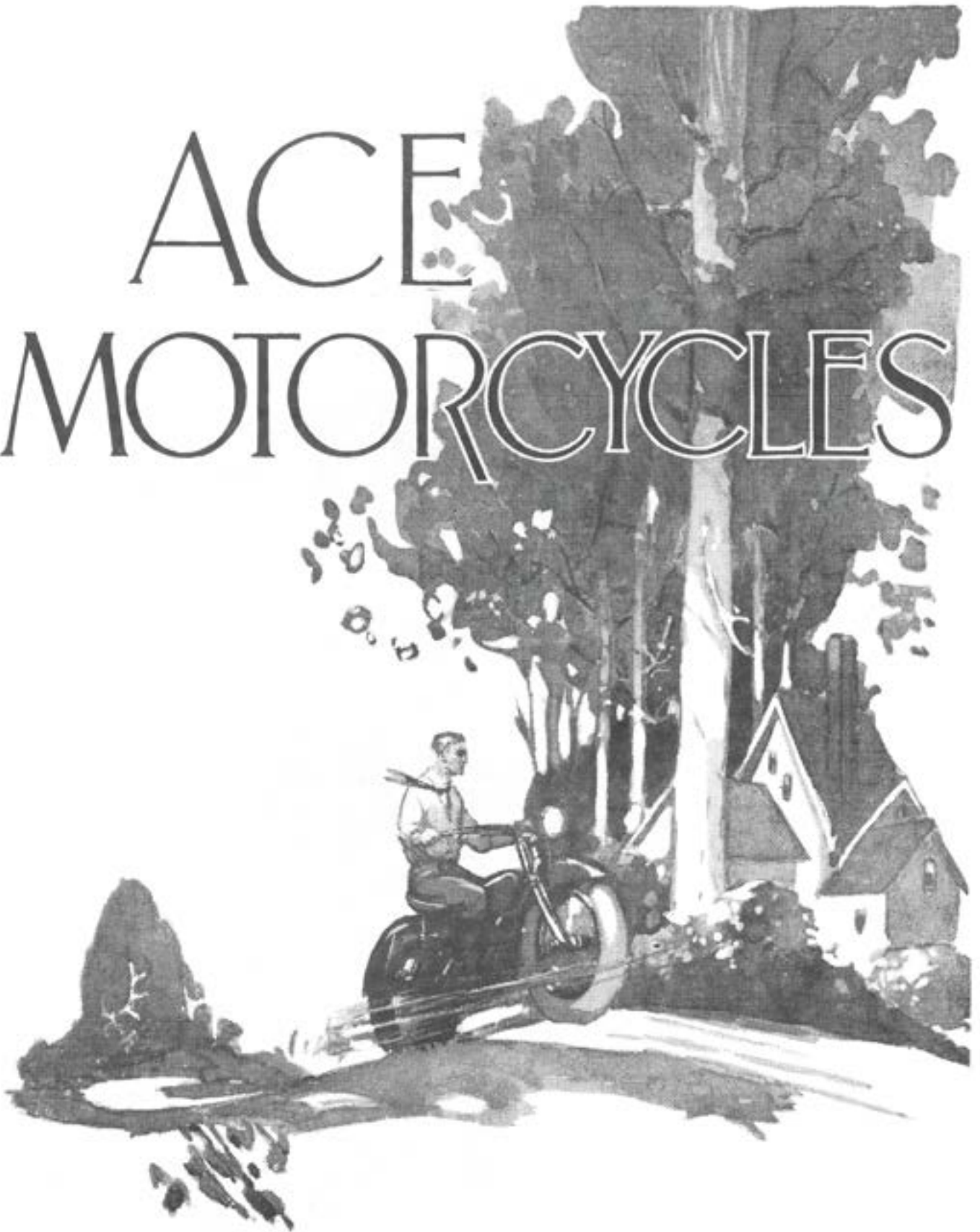
Saturday – 5:00 pm into the wee hours

Local Food Truck, Awards & Banquet/Very short Business Meeting held under the tent.
Back to the Barn for our last evening together until next year!

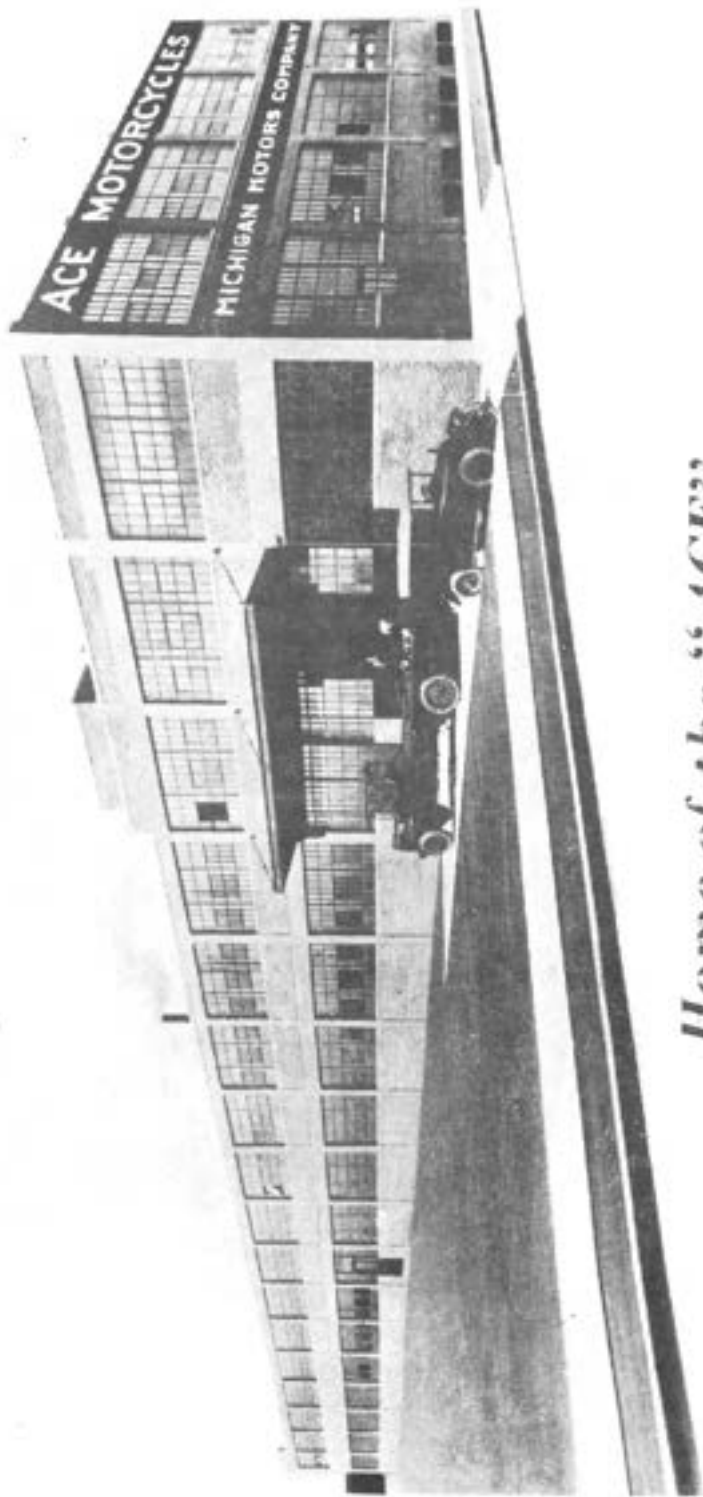
Sunday morning - Everyone packs up and heads home first thing in the AM ☺



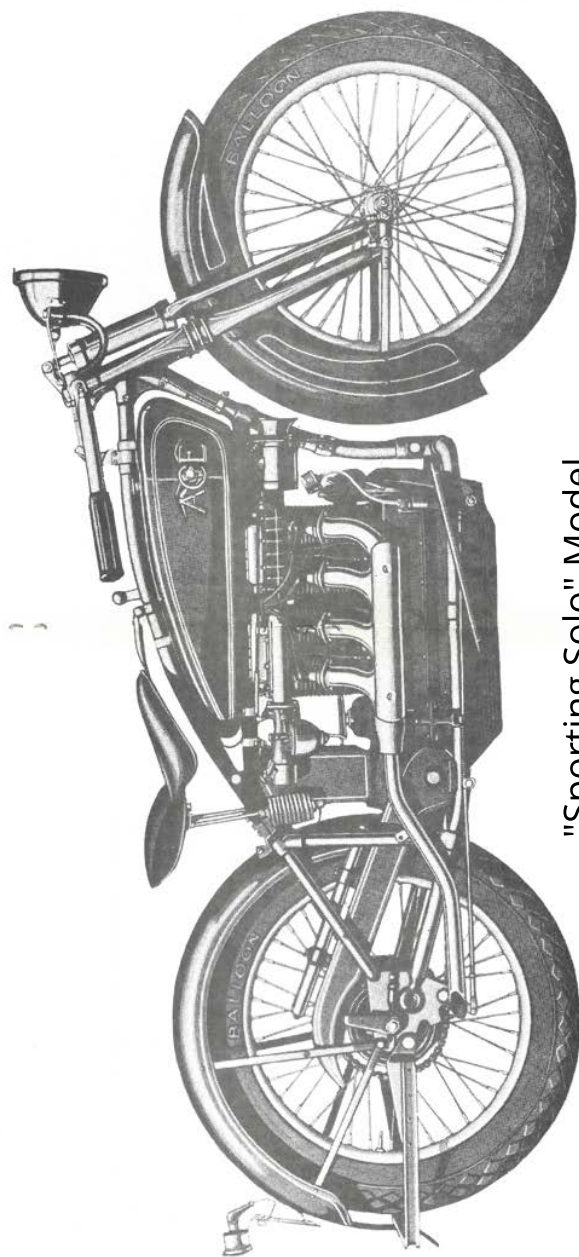
ACE MOTORCYCLES



MICHIGAN MOTORS COMPANY
DETROIT MICHIGAN

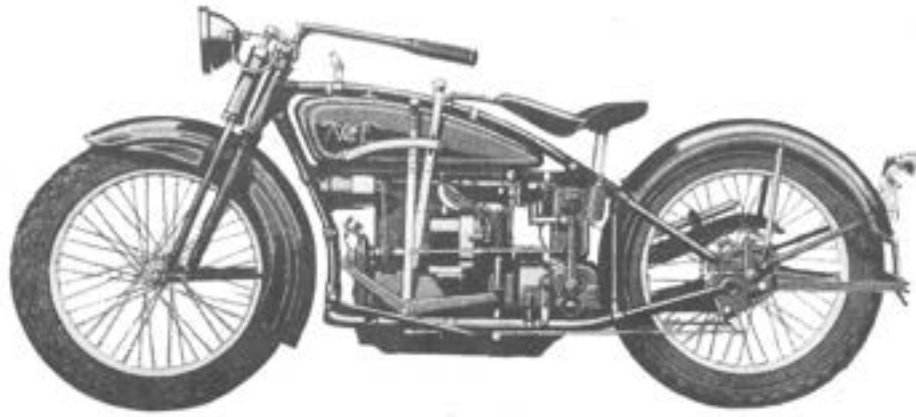


Home of the "ACE"



"Sporting Solo" Model

Complete with electrical equipment



Left side of standard electrically-equipped Ace motorcycle. Gear-shift and clutch hand levers shown at left side of tank. Clutch foot lever located beside left foot-board. Service brake operated by foot lever beside right foot-board: Emergency brake by lever operated by heel of left foot. Bucket seal of new design. Force feed oil pressure gauge on bracket attached to right side gear case.

Fifteen years of practical performance on the road have demonstrated the capabilities of four-cylinder motorcycle construction. Performance is more convincing than argument. Ace motorcycles sell themselves by what they do in the hands of owners. The Ace Sporting Solo is preferred by red-blooded sportsmen who relish the zest of life in the open and who exercise in the choice of their mounts the same accurate judgment of values that has made them successful in their daily business activities.

The original designer of the Ace, W.G. Henderson, was the pioneer of the four-cylinder idea among American motorcycle engineers. He manufactured this country's first successful four-cylinder motorcycle in 1911, and from that time until his death in 1922 he was engaged continuously in the production and refinement of this type of machine. The Ace was his masterpiece, embodying the ripened judgment and seasoned knowledge gained by ten years of making and selling and riding high-grade four cylinder motorcycles, and into its design he concentrated all that was best and soundest as proved by the test of time and actual road service.

In the new Ace "Four" the fundamental principles worked out by Mr. Henderson are retained at full value, and are intensified and augmented by important refinements perfected during recent years by Arthur Lemon, present Ace engineer, and his staff.

The Ace has won its high standing among motorcyclists by sheer merit of actual performance. There is a thrill to the eager responsiveness of its lively four-cylinder motor which nothing less highly developed can equal. There is solid satisfaction in the security given by the steadfast reliability of this machine, its abundant strength for every emergency, its dependable readiness for every requirement.

The Ace is now built in a plant ample in size for all production requirements and equipped with all manufacturing facilities essential to precision of workmanship, accuracy of component parts and economy of costs. It is built by men who know the art of four-cylinder motorcycle construction from long experience and careful training, for most of the department heads in the present Ace factory in Detroit were in the original Ace organization in Philadelphia.



The company is now soundly financed, free from debt, and buys materials in large quantities for cash so as to effect economies that keep costs low and quality high.

The qualities that distinguish the four-cylinder Ace win quick approval from the type of rider who insists on the very best. The Ace is a really *quiet* motorcycle – the exhaust is merely a soft whisper without any annoying clicks, rattles or other mechanical noises to irritate critical listeners. It is truly *clean* and pleasing to the eye – no leakage of oil or grease to soil the exterior. Ace design keeps all the oil inside the engine, where it belongs, and presents no joints or openings through which it can seep or gather dirt and cause unsightly appearance.

With an Ace the motorcyclist can ride well dressed, secure in the knowledge that his clothes will not be soiled by the machine – a fact which appeals particularly to the discriminating class of riders who take pride in appearing in their best wherever they go.

The Ace is simple and accessible, with every detail arranged for the convenience and utility of the rider.

A single brief experience with the Ace is sufficient to bring appreciation of the supremacy of four-cylinder power. Its fluid smoothness is an unwearying delight. Its dignified silence is a source of pride in any company. Its instant acceleration and quick pick-up, which have proved of such practical value in motorcycle police service, arouse cordial enthusiasm in the ordinary private owner.

Its beauty of line and handsome appearance win warm admiration. The grace of line and proportion that marks the Ace is the natural accompaniment of its perfected development and refinement. The rider is justified in feeling proud of his handsome machine, for its attractive outer display is the true expression of superior built-in qualities that only careful study, conscientious development and long experience can produce.

The low-hung weight of the four-cylinder motor results in exceptionally fine balance that makes the machine surprisingly easy to handle and responsive to control. It is steady, sure and safe at high speeds or when negotiating rough or slippery surfaces.

The absence of jerk or jar in the smooth-running four-cylinder motor does away with much wear and tear that ordinary motorcycle mechanisms are subject to. Drive chains last longer and give far more satisfactory service on this four-cylinder machine because the pull is so smooth and uniform. For the same reason riders find that tires wear longer and that many minor mechanical difficulties such as loosening of fittings and adjustments, are practically done away with by the elimination of vibration.

The more completely the true principles and construction of the four-cylinder Ace are understood, the more clearly its advantages will be perceived. The following data, therefore, is presented as definitely and concisely as possible, without exaggeration or bias, to enable the reader to grasp the facts accurately and judge value soundly:

Detail Specifications

POWER PLANT – Four-cylinder unit power plant the design of which has been proved right by years of satisfying service. Transmission and clutch housed in rear of motor base and running in oil that, same as in many fine automobiles.

MOTOR – Long-stroke four-cylinder engine of 78 cubic inches piston displacements that combine high efficiency with cool, quiet running bore 2.750", stroke 3.250". Steady pulling, quick in acceleration, clean, silent. A motorcycle engine that is truly accessible. The cylinders maybe removed for cleaning out carbon without taking motor out of frame. By removing the gear case cover the ignition-timing gears, the cam gear and oil pump are open for inspection.

CYLINDERS – F-head type with inlet over exhaust, so that cold incoming gas passes over surface of exhaust valve to assist in keeping the latter cool under sustained hard driving. One-piece casting of close-grained grey iron. Spark plug located in valve pocket, where spark occurs in center of fresh, live gas so as to insure quick and thorough combustion with freedom from fouling. New honing process finishes cylinder bore to one-half thousandth limits.

VALVES – 1 1/4" diameter, 1/4" lift, giving free movement of gases, inlet valve 30 degree seat, exhaust 45 degree. Both inlet and exhaust tappets easily adjustable without removing from base, and thoroughly lubricated by carefully-designed oil-returns which keep lubricant inside the motor and prevent leakage.

VALVE MECHANISM – Inlet rocker arms operate on hardened steel pivot pins centered for each pair. Tappet guides generous in size and length, and provided with efficient oil returns which insure cleanliness of the motor. Also special finish of bearing surface guarantees quietness and long life. Inlet cap turned from bar stock and hardened prevents tipping of valve springs. Complete inlet valve mechanism enclosed in dirt-proof pressed steel bonnets, with neat snap-covers for case of oiling, thus guarding against wear and at the same time maintaining silence of operation.

INLET MANIFOLD AND VALVE GAUGES – case in one piece and provided with deep, thin cooling fins that add largely to the effective radiating surface, and assists in producing cool running and high efficiency even on long, hard pulls. The gas passages are warm at all times, aiding thorough vaporization and adding to economy of gasoline consumption. 1927 improvements insure better gas flow and proper seating of valves.

CRANKSHAFT – One-piece drop-forging, case-hardened 1/16" deep. Three big main bearings ground to size. Front bearing 1 1/8" diameter, 1 1/2" long. Center 1 1/8" x 1 1/2". Rear 1 1/8" x 1 1/2". Drilled to allow passage of oil to all bearings under thirty pound pressure.

BEARINGS – Bronze babbitt-lined, on crankshaft, connecting rods and countershafts, adjusting to take up wear. Clutch bearing 1 1/2" diameter, 15/16" long. Pilot bushing 3/4" diameter, 1 1/2" long.

CAMSHAFT – Finest quality pure aluminum, light and strong. Upper half strongly reinforced by powerful webs. Lower half generously webbed inside and out to give great strength and immunity against road shocks. Three drain plugs located in horizontal positions for protection from damage.

ROAD CLEARANCE – Full 4 1/2" at lowest point of motor base. Frame cradle clearance, 7 1/2".

CONNECTING RODS – Drop-forged, I-beam section, combining lightness with strength. Heat-treated and quenched in oil, giving great toughness and endurance. Split at crankpin for take-up. Improved to perfect operation with new type floating wrist pin 11/16" diameter. **PISTONS** – Standard model fitted with close-grained grey iron pistons, very light and perfectly balanced, provided with oil returns to insure correct lubrication. Three rings per piston, with light pressure on cylinder walls and narrow faces on rings to reduce friction to minimum and produce high motor efficiency. Sporting Solo Model equipped with three ring long-skirt aluminum-alloy pistons, very light and cool running, adding to smoothness of operation and rapidity of pick-up. Lower ring groove in all pistons drilled for special oil return rings.

TIMING GEARS – Usually fine in material and workmanship, insuring quiet and efficient motor operation. All gears are case-hardened and run in oil bath, reducing wear to minimum.

LUBRICATION – High pressure force feed system distributing oil to all bearings, through drilled crankshaft, under thirty pound pressure. Oil pump assembled with suction pipe and pan, thoroughly tested, assuring tight connections and perfect operation at all times. Oil pump and pipes enclosed in crankcase, insuring against possible damage to system through flying stones or extreme cold.

Oil pan easily removed for repairs without disturbing suction pipe or other connection. Strainer removed and cleaned independent of all other oil connections. Absence of baffle plates allows oil to be forced unrestricted to cylinder walls in generous quantities, providing ample lubrication at all speeds with oil consumption reduced to minimum. Oil control ring in lower piston groove returns oil to crankcase. Pressure gauge supported by bracket located on right side of gear case in clear vision of rider. Oil pressure adjustment accessible and simple. Gauge with notched rod extending into sump shows amount of oil in motor base. Capacity of reservoir one gallon.

BREATHER – Breather and oil filler combined, with baffle to avoid spilling oil, bolted on left side of crankcase. Long breather pipe extends well down side of motor base. T-head filler cap for easy removal by hand.

MUFFLER – Aluminum muffler and exhaust manifold in one unit, with 1 1/4" gas passages arranged in sweeping lines having no sharp bends or corners to slow down movement of gases or cause back pressure. Generous expansion chamber, 2 1/2" diameter, in which gases cool and lose velocity before passing into large tail pipe leading to rear of machine. Silent, cool and efficient. Neat and positive cutout operated by foot lever that does not jar out of place or rattle. Gives pleasant bass hum when opened.

CARBURETOR – Ace-Schebler, special model designed to meet the particular requirements of this motor. Adjustments for high and low speed. Located in convenient position for easy adjustment while riding. Easy starting, smooth running, economical and dependable.

IGNITION – Waterproof high-tension magneto. Ignition wires enclosed in black fiber tube for protection. Spark plugs, metric.

LIGHTING GENERATOR – Electrically-equipped Ace motorcycles use the regular high-tension magneto for motor ignition and are equipped with an entirely separate unit to provide current for lights and horn, so that no derangement of the lighting circuit can have any effect on the operation of the power plant. Lighting current produced by standard Splitdorf generator mounted on frame under left side of tank, protected from weather or accident. Driven by belt and black fiber sheave wheel, split and clamped on magneto shaft.

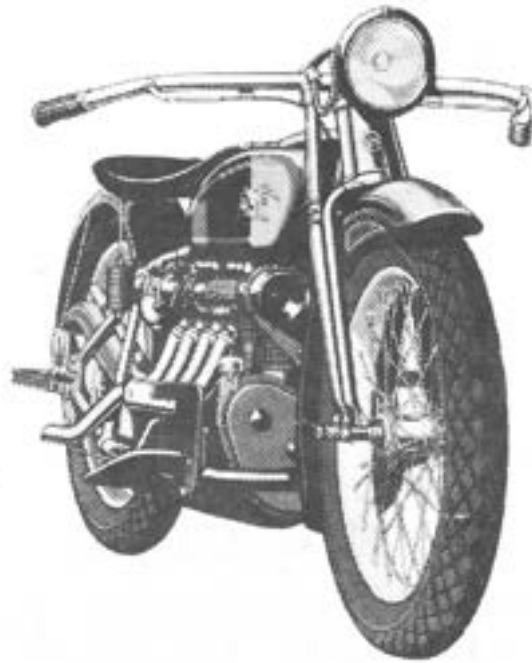
ELECTRICAL EQUIPMENT – Power accumulated in Wico storage batter mounted in box suspended from frame under saddle. Readily accessible by turning a thumbscrew to remove lid for refilling without removing batter terminals. Located to give best balance. Powerful headlight mounted on strongly braced brackets with parabolic reflector and dimmer. Tail light. Motor-driven electric horn securely clamped to frame in inconspicuous position below tank. Horn button ahead of left grip.

LIGHT SWITCH – Conveniently located on left side of batter box, easily operated while riding.

MOTOR CONTROLS – Spark advanced or retarded by turning left handlebar grip. Throttle operated by turning right grip. Simple and positive mechanism that does not rattle or develop lost motion. Controls remain where set when hands are removed from bars; do not jar open or shut. Smooth in action, dependable and secure.

STARTER – Step starter with engaging mechanism completely enclosed. Ratchet dogs and flat-face tooth to prevent chipping. Large and powerful drop-forged foot lever with solid knurled pedal. Motion down and back. Lever returned to top position by spring at end of down stroke. Folds back out of way when not in use.

TRANSMISSION – Three speed progressive type, housed in rear of motor base and running in oil bath. Lubricant automatically supplied and requires no attention from rider. Gears of hardened nickel steel, 8-10 pitch, stub tooth, face 5/8" wide. Gearshift locking mechanism inside crankcase eliminates need of locks on operating lever quadrants. Drive through spiral bevel gears gives silence of operation and absence of wear. Gearshift controlled by lever on left side of tank.



The Ace Sporting Solo showing wide nickle-plated sport handlebars

FINAL DRIVE – One heavy roller chain 5/8" pitch, 3/8" wide, from transmission to rear wheel. Ace design eliminates the usual short chain from engine to countershaft and thus provides improved efficiency of service and silent running without jerk or rattle.

CLUTCH – Multiple steel disc seven-plate clutch, built into flywheel and running in oil bath. Abundant friction surface gives tremendous pulling power for heavy loads and high speeds. Discs held in engagement by fourteen large, carefully-tempered coil springs, each 5/8" diameter and 2 1/2" long. Full range of action compresses spring only small fraction of its length, so that its strength is not affected by long service, and tension remains constant. Pressure distributed over all springs so as to place no material strain on any one of them. No adjustment or other attention required from rider. Three sets of large chrome steel ball bearings to carry thrust. Controlled by hand lever on left side of tank or foot lever by left footboard. New type clutch cone insures permanent adjustment.

FOOT CONTROLS – Clutch actuated by foot lever beside left foot-board. Service brake operated by lever at right footboard. Emergency brake operated by lever located so as to be pressed down by heel of left foot when additional holding power is desired. Clutch may be operated by hand lever when desired.

BRAKES – Two entirely independent brakes and powerful double-acting external bands acting on large drums on each side of hub. All parts of each brake interchangeable. Special grade of long-wearing asbestos composition lining.

HUBS – Rear hub, one-piece steel shell with Timken adjustable taper roller bearings; cups and cones of chromium steel. Knockout axle 7/8" diameter. 4 1/4" between spoke flanges. Extra heavy and strong for sidecar use. Front hub, one-piece steel shell with Timken roller bearings; knockout axle 1/2" diameter.

WHEELS – 27" diameter, using heavy CC steel rims; strongest and most rugged type of wheel used on motorcycles. Forty spokes front and rear.

TIRES – 27" x 3.85" non-skid balloon tires. Large air capacity of this size tire is unusually effective in cushioning rider and machine from road shocks and vibrations, while the large diameter provides augmented steadiness and



security when riding sand and mud or crossing car tracks and ruts.

FENDERS – Very wide full-crown mudguards with generous clearance to allow use of tire chains. Extension aprons on sides of front guard.

FRAME – Suspension cradle type giving great strength and low distribution of weight. Made of 1 1/4" 13-gauge seamless steel tubing. Front bar 1 3/8" 11-gauge with powerful internal reinforcements. Head frame and fittings are solid drop forgings. Reinforcing brace bars from rear fork crown to cradle bar relieve all strain on rear fork connections and give great strength and durability. Side members of frame protect motor, transmission, control mechanisms and all vital parts from injury by fall.

WHEELBASE – 59 inches, just the right length to combine smooth riding qualities and road comfort with ease of control, ready responsiveness and ability to turn quickly.

SADDLE – Ace special integral design, built in as part of the motorcycle. Bucket seat top scientifically shaped for comfort.

TANK – Pressed-steel two-piece construction, beveled front and rear with all corners rounded. Capacity 3 3/4 gallons. Provided with efficient gasoline strainer, sediment trap and reserve cock. Large filler opening to accommodate hose nozzles on gasoline pumps at filling stations.

TOOL BOX – Tool compartment with bottom heavily padded to avoid rattle. Waterproof, neat and convenient.

HANDLEBARS – Standard model low and very wide, giving comfortable position for arms and wrists. Brace by crossbar. 15/16" steel tubing heavily enameled. *Sporting Solo*, 1 1/8" tubing 13 gauge, no cross bar, heavily copper-plated and nicked. Extension cushion rubber grips, deeply corrugated.

SPRING FORK – Double fork with straight sides. Springs and plunger completely enclosed. Angle and leverage of rocker arms designed to absorb both small vibration and heavy shocks; motion of wheel back and up. Hardened steel bushings in rockers. Studs of large diameter, hardened, give exceptional strength at point where shocks are met.

FOOTBOARDS – Hinged to fold up so as to avoid damage in case of fall. Roomy and comfortable. Substantial steel plates with drop-forged arms, covering with high-grade rubber mat, deeply corrugated to prevent slipping.

WEIGHT – The lightness of the new Ace is a pleasant surprise to many riders who naturally think that because of its great power and strength it must be of more than ordinary weight. As a matter of fact the Ace is the lightest high-power motorcycle made in America, due to the high efficiency of perfected four-cylinder design. This lightness combines with its low center of gravity and excellent balance to make the Ace so easy to handle as a solo mount and so capable under all road conditions. Weight of Ace magneto-model four-cylinder motorcycle complete, only 365 pounds.

STAND – U-shaped with extra-long side braces. Special rattle-proof spring washers. Attached independently of rear axle to facilitate adjustment of chain tension.

FINISH – Lacquer. Rolls-Royce Blue with fine Orange stripe on tank, fork and mudguard; gold Ace emblem on tank.

Prices

Standard electronically-quipped four-cylinder Ace Motorcycle with magneto ignition, separate lighting generator, storage batter, headlight, tail light, electric horn and ammeter.....\$400.00

Sporting Solo Model, built as its name implies, from hub to hub a light, competent, swift and easy-handling outfit that gives the utmost of that sense of freedom and power that is found in no other form of recreation. An accented and emphasized super-edition of the standard machine rather than a smaller and less powerful type. Ideal riding position, with low saddle and handlebar shape placing the grips just right for lively solo traveling – a slight lean forward against the surge of speed from an opened throttle; positive control of steering due to the wide spread of the bars. Save, fast and attractive, with the snappiest lines and most business like appearance of any machine on the road. Motor fitted with special aluminum-alloy pistons, light cool-running, fast. Price of Sporting Solo Model, fitted with high-speed high-compression motor, nickel plated sport bars and equipment same as standard model.....\$420.00

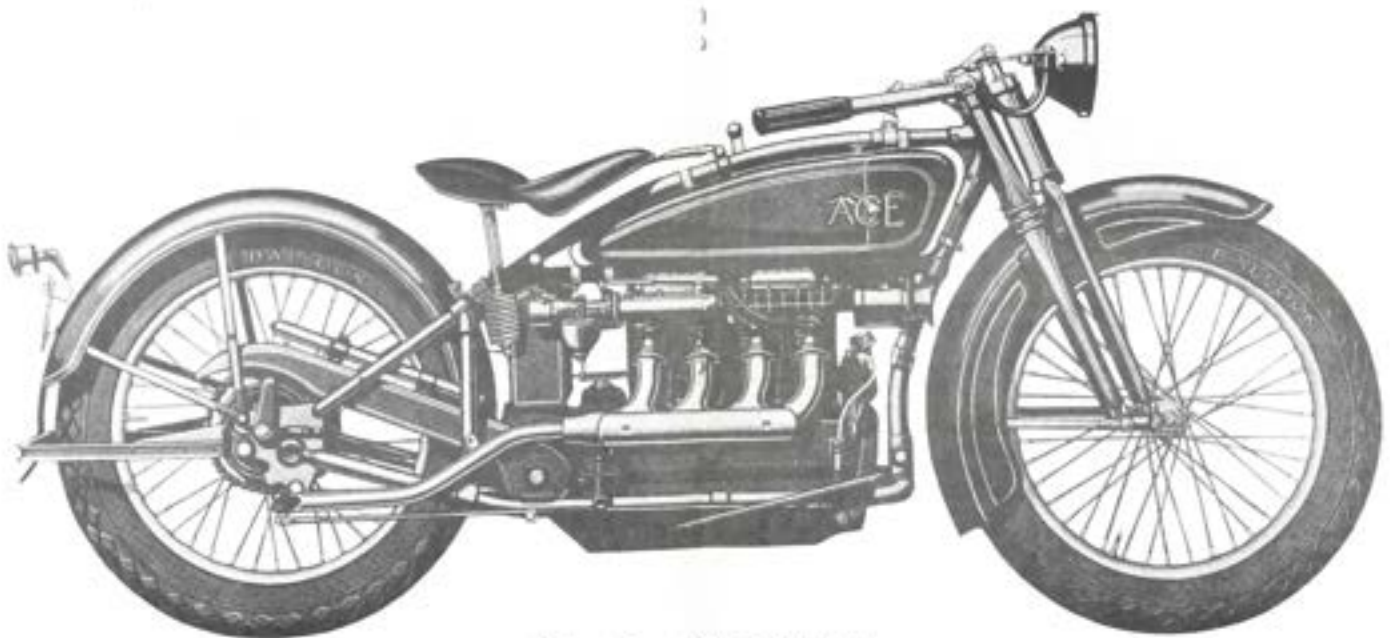
Observer Sidecar, complete with tire and all fittings for attachment to motorcycle.....\$110.00

All quotations f. o. b. factory and subject to Federal tax.

Guarantee

Every Ace Motorcycle is fully covered by the guarantee of the Michigan Motors Company, which is the standard form of warranty endorsed by the Motorcycle and Allied Trades Association.

The Manufacturers of Ace Motorcycles reserve the right to make improvements or changes in design or construction without notice, at any time they consider it advisable. All quotations are subject to change without notice in case of fire, strikes, fluctuations in prices of materials or other unforeseen causes, and in the event of such changes or improvements no liability shall attach to this company.



"Sporting Solo" Model
Complete with Electrical Equipment



CABLE ADDRESS
"AUTOCYCLE"
WESTERN UNION CODE
PHONE BELMONT 5167

EXCELSIOR MOTOR MFG. & SUPPLY CO.

EXCELSIOR AND HENDERSON
MOTORCYCLES

3700 CORTLAND STREET
CHICAGO, ILL.



June 7th, 1923.

Mr. Jesse Ferguson,
R.#5, Port Byron, New York.

Dear Sir:-

We naturally assume that it is your intention to purchase a new motoroycle at a very early date, as you have made a request recently for catalogs covering our motoroycles.

We are particularly anxious to have you study the merits of the Henderson DeLuxe model as set forth in the catalog. Further, if you are interested and desire to make the request, we can supply you with other information which no doubt will convince you of the superiority of this machine.

The oiling system of the DeLuxe puts it in a class by itself, as there is no other twin or four cylinder machine oiled as efficiently as is this motor. Also, we guarantee 75 miles an hour on a cast iron piston DeLuxe, but can supply an alloy piston DeLuxe at an extra cost of \$25.00 which is far superior in speed.

If you are interested to the extent of purchasing, kindly let us know and we will go into detail with you.

Very truly yours,

EXCELSIOR MOTOR MFG. & SUPPLY CO.

Sales Department.

CJP/W

The Four Cylinder **MOTORCYCLE**

The day of the "four" is at hand. The past history and more recent developments in the motorcycle field proclaim this fact in terms that are undeniable.

Many of us saw the birth of the single cylinder, and its withdrawal to give place to the "twin". In like manner most of us recall the appearance of the "twin". For years the two cylinder has held sway, answering, in a commendable manner, the motorcycle requirements of the day.

But time is inexorable with machines as with man. The human craves advancement – improvement. For the same reason that the "twin" replaced the single, so is the "four" replacing the "twin".

This development is not the work of designers or manufacturers; rather it is the answer to the incessant cry of the motorcycle rider for more controllable power – more comfortable speed.

To the value of service which any good motorcycle should render, the Ace adds an intensified satisfaction through the greater scope and wider range of performance gained by exceptional development of the four-cylinder design. The fleetness and power of the Ace motor make the rider master of time and distance. The benefits and pleasures of the great outdoors both far and near are at his command – the country club, golf links, tennis court, baseball diamond or swimming pool for a few hours' recreation in the afternoon; quiet out-of-the-way streams or secluded lakes where fishing is really good, or woods and fields where game abounds, for week-end trips with rod or gun; or the majestic mountains, the unfrequented wilderness, the seashore or other scenes a thousand miles away that beckon when vacation time gives opportunity to travel afar and see new sights and strange localities.

The Ace is so economical to operate that expense of any trip becomes negligible.

Its steadfast dependability insures the prompt and satisfactory performance of every undertaking. Its capability under changing conditions and varied requirements insures success in unexpected emergencies and trying circumstances. It will go anywhere that wheels can travel, is ready at a moment's notice, and never grows weary.

The critical observer notes in the Ace motorcycle a finished relationship of lines and uniform harmony of proportion such as only time and experience can evolve. For this machine is the product of ten years' experience in manufacturing four-cylinder motorcycles by Mr. W. G. Henderson, designer of the Ace and pioneer in this field.

Ten years in which all his efforts were concentrated toward the perfection of this one type. Ten years of building and studying and riding four-cylinder motorcycles. Ten years in which motorcycle riders all over the world have proved the value of his ideas by actual experience that has established the supremacy of four-cylinder power beyond question.

Mr. Henderson was engaged continuously in manufacturing four-cylinder motorcycles from 1911 until his unfortunate death in December 1922, and had a specialized knowledge and expert grasp of this subject that only such practical experience could produce. The benefits of his extensive research and exhaustive labor with power plants of this type are concentrated at their highest worth in the new four-cylinder Ace – the masterpiece of a master engineer.

Not how each detail shows the perfection of a finished product.

A single brief experience with the new Ace is sufficient to demonstrate the supremacy of four-cylinder power. Its fluid smoothness is an unwearying delight. Its dignified silence of operation is a source of pride in any company. Its instant acceleration and quick pick-up, which have proved of such practical value in motorcycle police service, arouse enthusiastic appreciation in the ordinary private owner as well.

With the four-cylinder Ace, the rider learns to drive almost entirely by throttle, for its power is so flexible and answers so readily to every twitch of the grip, that use of clutch or gearshift is called for much less frequently than when driving the older and less advanced types of motors.

Its beauty of line and handsome appearance win warm admiration.

The low-hung weight of the four-cylinder motor results in exceptional balance that makes the machine surprisingly easy to handle and responsive to control. Steady, sure and safe at high speeds or when negotiating rough or slippery surfaces. Practical proof of the value of its wonderful riding qualities was supplied by the success of the Ace in the foremost endurance runs of the season, when it won such signal success in spite of the difficulties imposed by rainstorms, wet highways, treacherous clay mud and rough, rutted roads.

Wear is noticeably reduced by the absence of jerk and jar. Drive chains last longer and give far more satisfactory service on this four-cylinder machine because the pull is so smooth and uniform. For the same reason, Ace riders find that tires wear longer, while minor mechanical difficulties, such as loosening of fittings and parts shaking out of proper adjustment, are practically done away with by eliminating the vibration.



Detail Specifications 1926 "Ace" Motorcycle

BRAKES: Two entirely independent brakes; two powerful double-acting external bands acting on large drums on each side of hub. All parts of each brake interchangeable. Special grade of long wearing asbestos composition brake lining.

HUBS: Rear hub, one-piece steel shell with Timken adjustable taper roller bearings, cups and cones of chromium steel. Knockout axle, 7/8" diameter; 4 1/4" between spoke flanges, extra large and strong for sidecar use. Front hub, one-piece steel shell with Timken roller bearings. Knockout axle 1/2" diameter.

WHEELS: 27" x 3 1/2" Firestone non-skid, or Balloon tires, optional. Large air capacity of this size tire is unusually effective in cushioning rider and machine from road shocks or vibrations, while the increased diameter provides augmented steadiness and security in riding sand and mud or crossing car tracks.

GUARDS: Very wide, full crown mud guards that protect rider and machine from mud or road dirt. Generous clearance to allow use of tire chains. Extension aprons on sides of front guard.

FRAME: Suspension cradle type, giving great strength and low distribution of weight. Made of 1 1/4", 13-gauge seamless steel tubing. Front bar, 1 3/8" 11-gauge, with powerful internal reinforcements. Head frame and fittings are solid drop forgings. Reinforcing brace bars from rear fork crown to cradle bar relieve all strain on rear fork connections and give great strength and durability. Side members of frame protect motor, transmission, control mechanism, and all vital parts from injury by fall.

WHEEL BASE: 59 inches, combining smooth riding qualities and road comfort with ease of control, ready responsiveness and ability to turn quickly.

SADDLE: Ace special integral design, built in as part of the motorcycle. Bucket seat top scientifically shaped for comfort.

TANK: Pressed steel two-piece construction, beveled front and rear, with all corners rounded. Capacity 3 3/4 gallons. Provided with efficient gasoline strainer and sediment trap, and reserve cock. Large filler opening to accommodate hose nozzles on gasoline pumps at filling stations.

TOOL BOX: Built flush inside gasoline tank, out of sight. Lid at top. Tool compartment deep and narrow, with bottom heavily padded to avoid rattle. Water proof, neat and convenient.

HANDLE BARS: Standard model, low and wide, giving comfortable position for arms and wrists. Braced by cross bar. 15/16" steel tubing. Sporting solo, 1 1/8" tubing, 13-gauge, no cross bar, heavily copper-plated and nicked. Extension cushion rubber grips, deeply corrugated.

SPRING FORK: Double fork with straight sides. Springs and plunger completely enclosed. Angle and leverage of rocker arms designed so as to absorb both small vibrations and severe road shocks; motion of axle back and up. Hardened steel bushing in rockers. Studs of large diameter, hardened, give exceptional strength at point where shocks are met.

FINISH: Ace Blue with fine gold stripe on tank, fork and mud guard; gold Ace emblem on tank.

POWER PLANT: The four cylinder unit power plant was originally designed and perfected by the late Mr. W. G. Henderson and later improvements designed and applied by Mr. E. M. DeLong. The Motor, clutch and transmission form a complete unit, all being housed in a single crank case and running in an oil bath.

MOTOR: Long-stroke four-cylinder engine of 79 cubic inches piston displacement and combines high efficiency with cool, quiet running, great flexibility and ease of control. Bore, 2.750"; stroke, 3.250". Smooth pulling, quick in acceleration, clean, silent.

CYLINDERS: F-head type, with inlet over exhaust, causing cold incoming gas to pass over surface of exhaust valve to assist in keeping the latter cool under sustained hard driving. One piece casting of close-grained gray iron. Spark plug located in valve pocket where spark occurs in center of fresh, live gas, insuring quick and thorough combustion with no change of fouling. High head fins give maximum radiating surface.

VALVE CAGES: and Intake Manifold are cast in one casting and are provided with deep thin cooling fins that add largely to the effective radiating surface and produce cool running and high efficiency even under long hard pulls. The gas passages are warm at all times, thereby making vaporization easy and affording gasoline economy.

VALVES: 1/2" diameter, 1/4" lift, giving free unobstructed flow of gases. Inlet valve, 30 seat; exhaust, 45. Both intake and exhaust tappets easily adjustable without removing from base. Tappets thoroughly lubricated by carefully designed oil returns which keep lubricant inside motor and prevent leakage.

VALVE MECHANISM: Inlet rocker arms operate on hardened steel pivot pins centered for each pair. Tappet guides generous in size and provided with oil returns which insure cleanliness of motor. Complete inlet valve mechanism enclosed in dirt-proof pressed steel bonnets, with neat snap cover for ease of oiling, thus insuring absence of wear and silence of operation.

CRANK SHAFT: One-piece drop forging, case hardened 1/16" deep. Three big bearings, ground to size. Front bearing, 1 1/8" diameter; 1 1/4" long. Center, 1 1/8" x 1 1/2". Rear, 1 1/8" x 1 1/2".

BEARINGS: Bronze, babbitt-lined on crank shaft, connecting rods and counter shaft, adjustable to take up wear. Clutch bearings, 1 1/2" diameter; 15/16" long. Pilot bushing, 3/4" diameter; 1 1/2" long.

CRANK CASE: Finest quality pure aluminum, light and strong. Upper half strongly reinforced by heavy webs. Lower half generously webbed inside and out to give great strength and immunity against road shocks. Three drain plugs, located in horizontal positions so as to be protected from damage.

ROAD CLEARANCE: Full 4 1/2" at lowest point of motor base. Frame cradle clearance 7 1/2".

CONNECTING RODS: Drop-forged, 1-beam section, with holes drilled through web to provide lightness combines with maximum strength. Heat-treated and quenched in oil, giving great toughness and endurance. Split at crank pin for take-up. Oil dipper on lower end.

PISTONS: Standard model fitted with close-grained gray iron pistons, very light and perfectly balance, provided with oil returns to insure correct lubrication. Three rings to each piston, with light pressure on cylinder walls and narrow faces on rights, to reduce friction to minimum while preserving proper compression and high motor efficiency. Sporting Solo Model provided with long skirt aluminum alloy pistons.

WRIST PINS: Wrist Pins are free in connecting rod and locked in piston within set screw.

LUBRICATION: Entirely automatic and trouble-proof. Constant level circulating splash system of type used on fine automobiles. Oil carried in reservoir in motor base supplied in constant streams to splash troughs under the connecting rods by positive gear pump.

OIL GAUGE: Oil gauge, with notched rod dipping into sump. Shows amount of lubricant in oil sump. Capacity of oil reservoir. 1 gallon.

BREATHER: Breather incorporating oil filler, with baffling device to avoid loss of oil. Bolted on left crank case. Long air pipe extends well down side of motor base. T-head filler cap for easy removal by hand.

MUFFLER: Muffler and exhaust manifold in one unit, with 1 1/4" gas passages arranged in sweeping lines, having no sharp bends or corners to obstruct free movement of cause back pressure. Generous expansion chamber, 2 1/2" diameter, permits gases to cool and lose velocity before passing into large tail pipe leading to rear of machine. Silent, cool and efficient cutout of improved pattern operated by foot; produces pleasant bass hum when open.

IGNITION: Split-dorf high tension magneto. Ignition wires enclosed in black fibre tube for protection. Spark-plugs 0 metric.

LIGHTING GENERATOR: Electronically equipped Ace motorcycles use the regular high tension magneto for motor ignition and are equipped with an entirely separate unit to provide current for lights, so that no derangement of the lighting circuit has any effect on the operation of the power plant. Lighting current produced by standard Splitdorf generator. Mounted underneath tank on left side. Protected from weather or accident. Driven by black fibre sheave wheel, split and clamped on magneto shaft.

ELECTRICAL EQUIPMENT: Power accumulated in Wico storage battery mounted in box suspended from frame under the saddle, readily accessible and located so as to give best balance. Lid can be removed and battery refilled without removing terminals. Powerful headlight mounted on strongly braced bracket, with parabolic reflector and dimmer controlled by switch. Tail light. Motor-driven electric horn securely clamped to frame in inconspicuous position below tank. Horn button ahead of left grip.

LIGHT SWITCH: Lights may be operated singly or together by means of switch conveniently located on side of battery box.

MOTOR CONTROLS: Spark advanced or retarded by turning the left grip on handle bar. Throttle operated by turning right grip. Simple and positive mechanism that does not rattle or develop lost motion. Controls remain where set when hands are removed from bars; do not jar open or shut. Smooth in action dependable and secure.

STARTER: Step starter with engaging mechanism completely enclosed. Ratchet dogs with flat face tooth to prevent chipping. Large and powerful drop-forged foot lever. Solid knurled pedal. Motion down and back. Lever returns to top position by spring at end of down stroke. Folds back out of the way when not in use.

TRANSMISSION: Three-speed progressive type, houses in rear of motor base and running in oil bath. Lubricant automatically supplied by splash and requires no attention from rider. Gears of hardened nickel steel, 8-10 pitch, stub tooth, face 3/8" wide. Gear shift locking mechanism inside crank case eliminates need of locks on operating lever quadrants. Drive thru spiral bevel gears gives silence of operation and absence of wear. Gear shift controlled by lever on left side of tank.

CLUTCH: Multiple steel disc seven-plate clutch built into fly wheel and running in oil bath. Abundant friction surface gives tremendous pulling power for heavy loads or high speed. Discs held in engagement by fourteen large, carefully tempered coil springs, each 5/8" diameter and 2 1/2" long. Full range of action compresses spring only small fraction of its length, so that its strength is not affected by long service and tension remains constant. Pressure distributed over all springs, so that none is subject to material strain. Requires no adjustment or other attention from rider. Three sets of large chromium steel ball bearings to carry thrust. Controlled by hand lever on left side of tank or foot lever by left foot board.

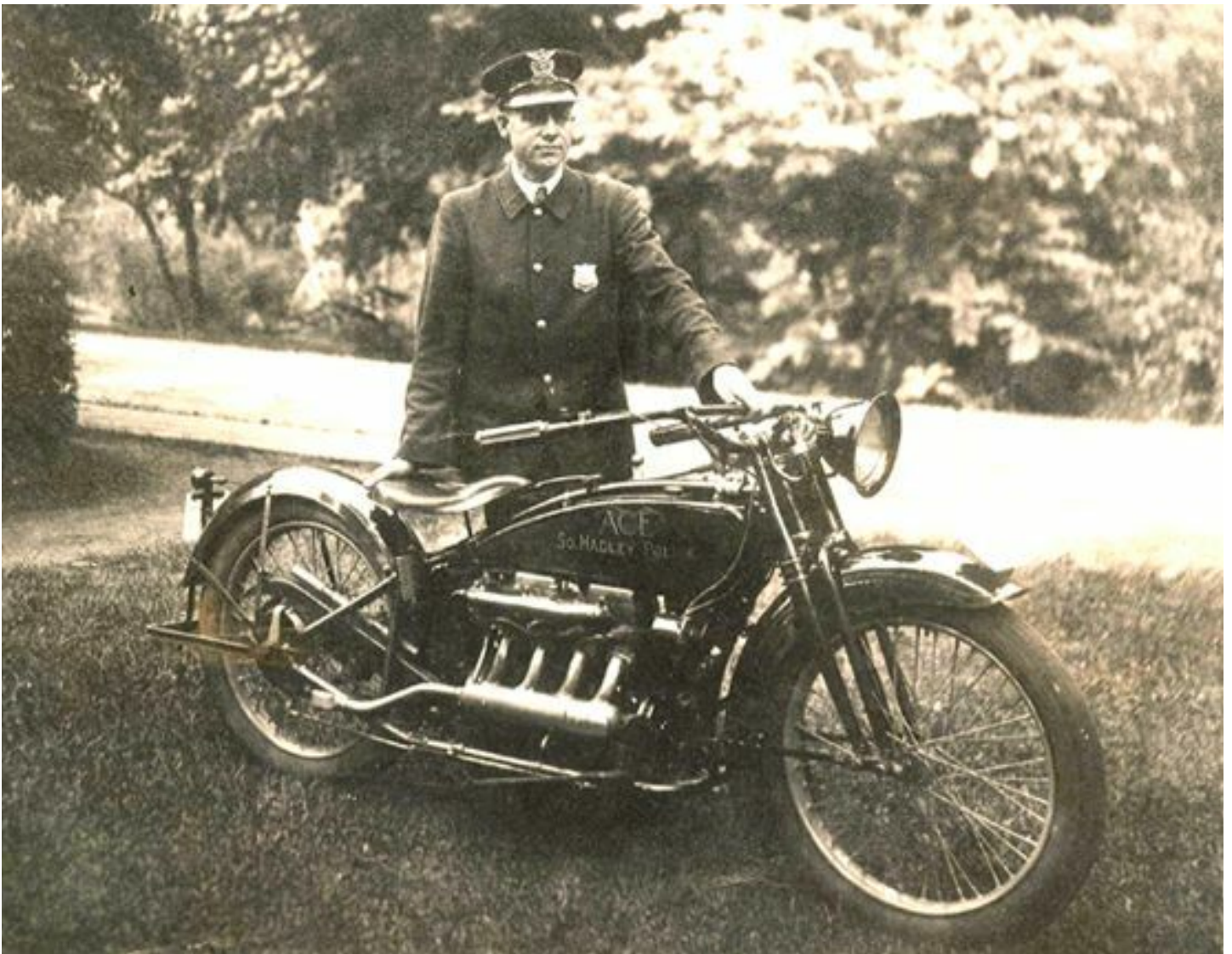
FINAL DRIVE: One heavy roller chain, 5/8" pitch. 3/8" wide, from transmission to rear wheel. Ace design eliminates the usual engine-to-counter-shaft short chain, and thus provides improved efficiency of service and silent running without jerk or rattle.

FOOT CONTROLS: Clutch actuated by foot lever at left foot board. Service brake operated by lever at right foot board. Emergency brake operated by lever located so as to be pressed down by heel of left foot when additional holding power is desired. Clutch may be operated by hand lever when desired.

THE ACE MOTORCYCLE CORPORATION

**521 Fisk Building, 57th Street and Broadway,
NEW YORK**

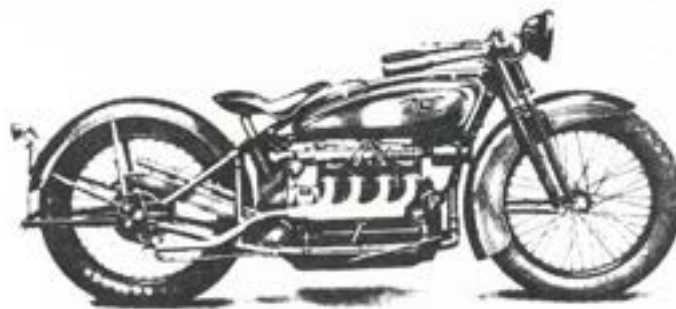
Factory: The Blossburg Corporation, Blossburg, Tioga Co., Penna.



THE NEW HOME of the ACE



*Indian Motorcycle Company
Springfield Mass. U.S.A.*



1927 ACE

IMPROVEMENTS

NEW FORCE FEED OIL SYSTEM: Oil pump assembled with suction pipe and pan and thoroughly tested, assuring tight connections and perfect operation at all times. Pump and pipes enclosed in crank case, preventing any damage to system through flying stones or extreme cold. Oil pan can be removed without disturbing suction pipe or other connections. Oil strainer can be removed and cleaned independent of all connections. Crankshaft drilled to allow oil to be forced to all bearings under 40-pound pressure. Absence of baffle plates allows oil to be forced unrestricted to cylinder walls, providing ample lubrication at all speeds. Oil control ring in lower groove of piston returns surplus oil to crankcase and reduces oil consumption to minimum. Oil pressure adjustment, simple and accessible. Oil pressure gauge support by bracket located on right side of gear case in clear vision of rider. Oil gauge with notched rod extending into sump shows amount of oil in motor base. Capacity of oil reservoir, one gallon.

IMPROVED FRONT FORK: Very steady at high speeds. New angle to rocker arms causes all shocks to be absorbed by fork springs and increases stability. Both main and recoil springs redesigned to give greater action and free movement. Tops of rigid fork member strengthened by collars, which also provide a solid seat for handlebars.

NEW LOW SADDLE POSITION: Saddle position now only 27 1/2 inches above ground. This low riding position is accomplished without sacrificing any of the saddle action, which has a full 4 1/2 inches of travel.

NEW SADDLE SPRING SUPPORT: allows saddle to travel all way down to frame without interference, with greater spread of saddle yoke. This bracket also holds rear guard and batter-box bracket.

NEW BRAKE ACTION AND LINING: Brake efficiency improved 100% by means of new thicker 3-16" Johns-Mansville linings and new straight line brake lever. Longer clevis permits greater brake adjustment.

IMPROVED INLET MANIFOLD AND CAGE: New type insures better gas flow, with better seating of valves, and induces slow, even running.

NEW ALLOY PISTONS:

New type three-ring piston, very light, with lower ring of oil control type.

NEW PISTON PIN:

Piston pins increased to 11-16" diameter with unique and positive device insuring location of pin in center of connecting rod at all times.

NEW CAMSHAFT: New design three-bearing camshaft ground to closer limits insures more accurate timing and uniform tappet adjustment.

NEW TAPPET GUIDE: New type, lengthened with specially finished bearing surface, greatly increases the life of both tappet and guide.

NEW INLET VALVE CAP: Turned from bar stock and hardened, insuring proper position of valve spring.

NEW CLUTCH CONE: New type, one-piece, combines cone and nut. This new type cone and collar are turned from bar stock, with special heat treatment to insure proper degree of hardness.

VANADIUM EXHAUST VALVE SPRINGS

NEW FOOT PEDALS: New and longer foot pedals give greater leverage and are milled parallel to render firm foot grip.

IMPROVED ACCESSIBILITY:

Spacers supplied around front fork rockers to permit adjustment of stud nuts with ordinary wrench.

Bosses for stand and mudguard braces eliminate inside nuts, thus simplifying rear wheel removal.

Rugged new chain adjusting screws securely fastened in place.

New breather makes magneto breaker box easily accessible.

New oil filler cap is removable with fingers.

Improved tail pipe clip is integral with pipe and holds pipe firmly in place with a single cap-screw.

SPECIAL HEAT TREATING: of cylinders prevents warping or distortion after grinding. Cylinders now ground to half-thousandths limits by new process. Finished dull nickel on the outside.

NEW ACE COLOR: Tank, guards, motor, and other principal parts finished in beautiful Rolls-Royce blue, baked on enamel with gold hairline striping. Wheels and other small parts finished in black. Sport bars heavily nickel plated.

IMPROVED WORKMANSHIP THROUGHOUT: The quality which is characteristic of all Indian products is now reflected in the appearance, performance and general value of the Ace.

INDIAN MOTORCYCLE COMPANY

SPRINGFIELD, MASSACHUSETTS



NEW CLUB MERCHANDISE PAGE ON THE WEBSITE: Indian4Club.org

YOU MUST LOGIN! Only paid members who have logged into the website have access to the **MEMBERS ONLY** drop-down menu on the website.

Under the Members only drop-down list you will find **"CLUB MERCHANDISE"** this is the only place you can order shirts, hats etc. from the club store. We do not have the ability or time to take credit cards over the phone.

All prices include shipping. The Board will need to decide when to replenish inventory. We will deal with inventory size shortage after we see how well the online store is working and being used.

AVAILABLE MERCHANDISE:

Embroidered Baseball Hats: \$20

Silk Screen Grey Pocket T-Shirt 1939 World's Fair: \$15

Black Embroidered Pocket T-Shirt: \$25

Men's Black Embroidered Polo Shirts: \$35

Men's White Embroidered Polo Shirts: \$35

Men's Long Sleeve Denim Shirts: \$45

Men's Short Sleeve Denim Shirts: \$40

Men's Grey Hoodie: \$50

Women's Black Embroidered Polo Shirts: \$35

Women's White Embroidered Polo Shirts: \$35

Women's Fitted Long Sleeve Denim Shirts: \$45

Women's Fitted Short Sleeve Denim Shirts: \$40

Women's Grey Hoodie: \$50



NOTE! An additional \$10 will be added to each item for shipping outside the the United States. Hate to do this but postage has become atrocious.

The New Indian Police-Car

The police-car equipped officer can mark tires or tag cars without dismounting and where only tire marking is concerned, can cruise slowly past lines of cars without even stopping, chalking the tire as he passes with the special 24" Indian tire marking rod.

You can cut your parking patrol expense to the bone the way other departments have done.

Radio equipped, this new police-car can become an invaluable "cruiser" in the heavy traffic district where more cumbersome vehicles would be handicapped in carrying out your orders.

Powered by a 45 cubic inch "economy" motorcycle engine of commercial design for steady cruising rather than for speed.

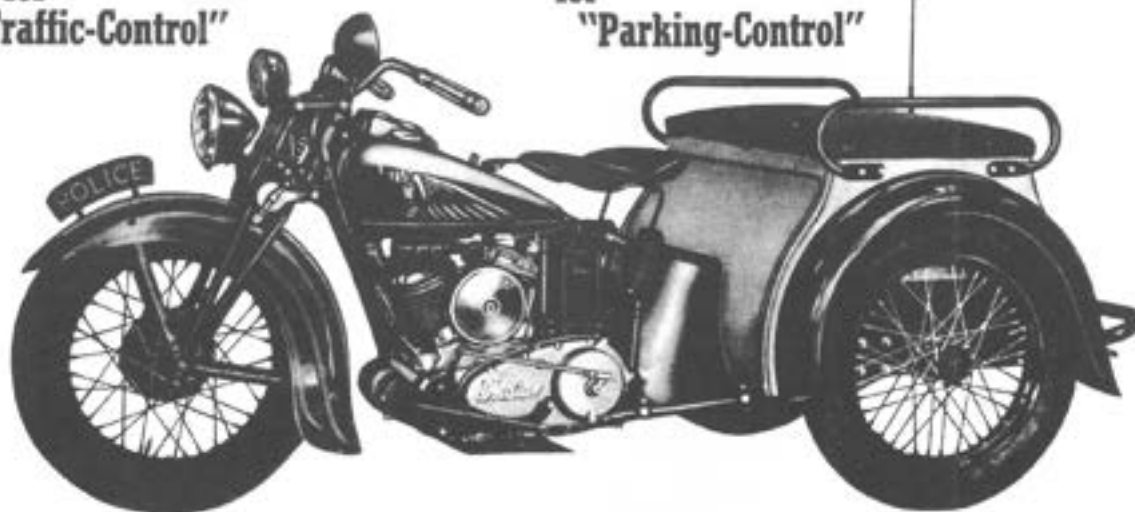
A new innovation for police department use, the new three-wheeled Indian Police-Car — to more effectively enable you to control your parking problem with less men — AT LESS EXPENSE.

Foot patrolmen now engaged in controlling this expensive parking problem can be released for other more important police duties the day you put this equipment to work in your department.

One police officer mounted on this new three-wheeled motorcycle unit, with its built-in safety features that enable anyone at all familiar with motor vehicles to operate — can effectively patrol a larger area than several foot patrolmen — a feature readily proven by test and demonstration.

for
"Traffic-Control"

for
"Parking-Control"



SPECIFICATIONS

BRAKES: Internal Expanding, front. External, rear.
CLUTCH: Multiple disc, operating in oil.
DIFFERENTIAL: Standard automotive differential, fully enclosed, six bearings on axle, shafts, chain completely outside differential housing.
DRIVE: Primary drive, $\frac{3}{8}$ " pitch, three row chain in oil bath. Final drive $\frac{3}{8}$ " pitch, $\frac{3}{8}$ " wide roller chain.
ELECTRIC AND IGNITION SYSTEM: Autolite generator, Willard 6 volt 29 ampere hour battery. Distributor ignition standard. Splittorf magneto ignition available at extra cost. Twin filament headlight with beam control on handlebar. Stop light standard.
FINISH: duPont DuLux.
FORK: Indian truss type. Coil spring suspension. Steering damper and shock absorbers standard.
FRAME: Welded seamless tubular steel reinforced. Rear frame enclosed by apron.
INSTRUMENTS: Corbin lighted speedometer. Ammeter. Switch mounted in instrument panel.
LUBRICATION: Indian patented dry sump with new dual oil pump drive. Hydraulic chassis lubrication fittings.

MOTOR: Two cylinder, 42" "V" type, air-cooled. Bore $2\frac{3}{8}$ ". Stroke $3\frac{1}{2}$ ". 45.44 cu. in. displacement. "L" head. Cam ground "T" slot Lynite pistons. Main bearings, roller. Aluminum cylinder heads.
REAR AXLE: Seamless tubular construction supporting differential and axles.
REAR SPRINGS: Semi-elliptical. Double action body shackles. Friction snubbers.
SADDLE: Compression spring type. Large rubber cushioned leather top seat.
TANK: Main and reserve tanks. Capacity 3.5 gallons of gas. 3 quarts of oil.
TRANSMISSION: Three speed standard, reverse gear available at extra cost.
TREAD: 40".
WHEELBASE: 61 $\frac{1}{2}$ ".
WHEELS — TIRES: 18" wire wheels, drop center rims. 18" x 4.00" Goodyear or Firestone tires.
BODY: Composite wood and steel construction, deeply upholstered leather top seat. Hand rails, tubular steel rear bumper.
DIMENSIONS: (Inside) Width 33", length 32 $\frac{1}{2}$ ", depth 9 $\frac{1}{4}$ ".

SOLD BY:

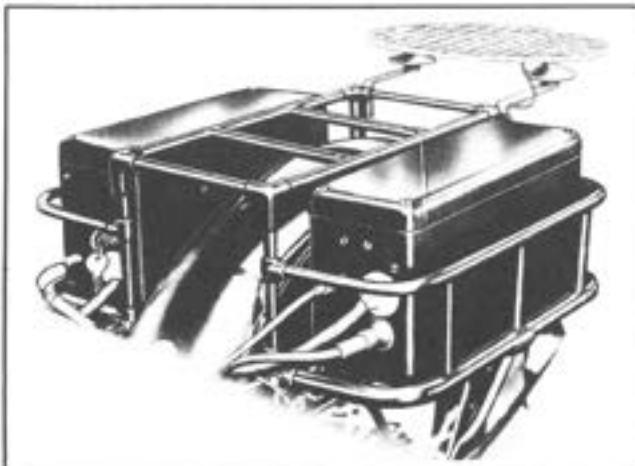
TWO OUTSTANDING RECEIVERS



MEDIUM HI-FREQUENCY RADIO

MI-7815A

1600 to 1720 kc or 2300 to 2500 kc



Sturdily constructed Indian RCA police motorcycle radio with a medium hi-frequency range of either 1600 to 1720 kc or 2300 to 2500 kc. Fixed tuning is employed and can be tuned to the frequency of your broadcast equipment at the time of installation. Receiver construction provides unusual accessibility of parts and permits rapid adjustments and checks, ordinarily without removing the set from the motorcycle.

The complete equipment operates entirely from the motorcycle storage battery with a maximum drain of 2.5 amperes. When installed as original equipment on new motorcycles at the factory, heavy duty generator equipment is included. This generator equipment is available for motorcycles already in use on an exchange basis at slight extra cost.

ELECTRICAL

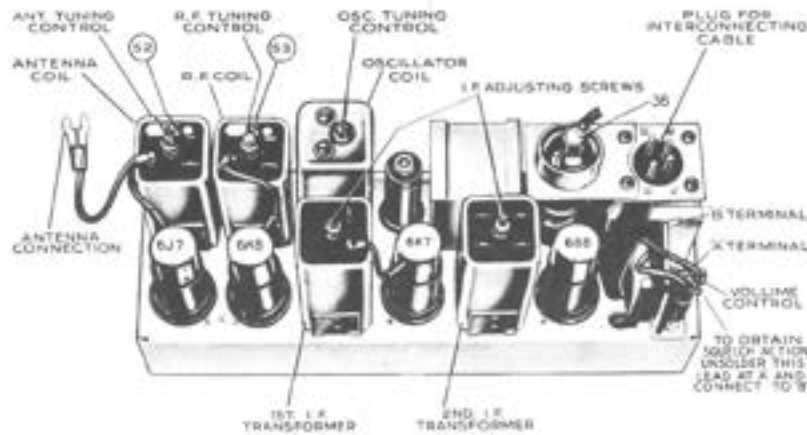
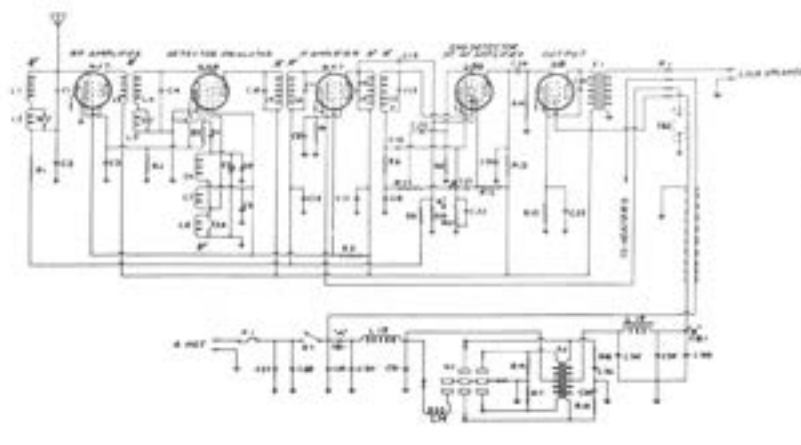


Figure 1 - Receiver Chassis (Top View)

Type of Circuit: Super-heterodyne
 Tuning range: 1600 to 1720 kc
 2300 to 2500 kc
 Tubes:
 RCA 6J7 — R.F. Amplifier
 RCA 6K8 — Detector Oscillator
 RCA 6K7 — I.F. Amplifier
 RCA 6B8 — 2nd Detector, A.V.C. and 1st A.F. Amplifier
 RCA 38 — Power Output
 Tuned Circuits: 2 R.F.
 (adjustable) 1 Oscillator
 4 — I.F.
 Intermediate Frequency — 260 K.C.
 Loudspeaker: Magnetic
 Max. Power Output: 500 m.w.
 Power Supply: 6 volts
 Current Drain: 2.5 amp.



Schematic diagram of Indian RCA medium hi-frequency receiver. All power required, supplied by 6 volt battery. Synchronous type vibrator with step-up transformer supplies necessary plate and screen voltages. Vibrator unit shielded and filtered to prevent noise entering circuit.

YOU CAN DEPEND ON



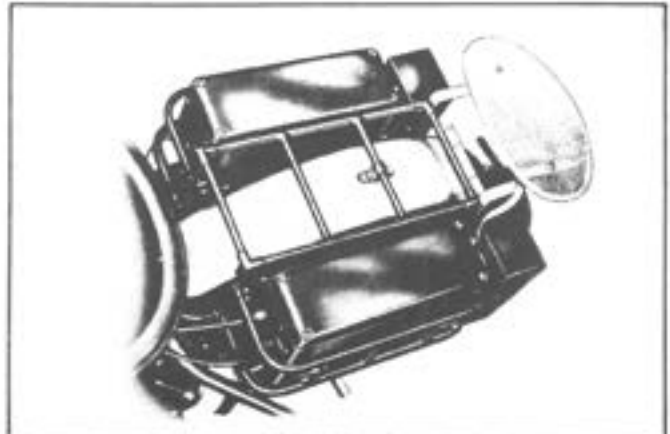
ULTRA HI-FREQUENCY RADIO

4S R1A2
30 to 42 MEGACYCLES

Indian General Electric ultra hi-frequency police motorcycle radio with a tuning range of 30 to 42 megacycles. Fixed tuning is employed and can be tuned to the frequency of your broadcast equipment at the time of installation.

Receiver construction allows ready accessibility to permit rapid checks and adjustments without taking set from the motorcycle.

Complete equipment operates from the regular 6 volt motorcycle storage battery with a maximum drain of 2.8 amperes. When installed as original equipment on new motorcycles at the factory, heavy duty generator equipment is included. This generator equipment is also available for motorcycles already in use on an exchange basis at slight extra cost.



SPECIFICATIONS

Type of Circuit: Superregenerative

Tuning Range: 30 to 42 megacycles

Tubes:

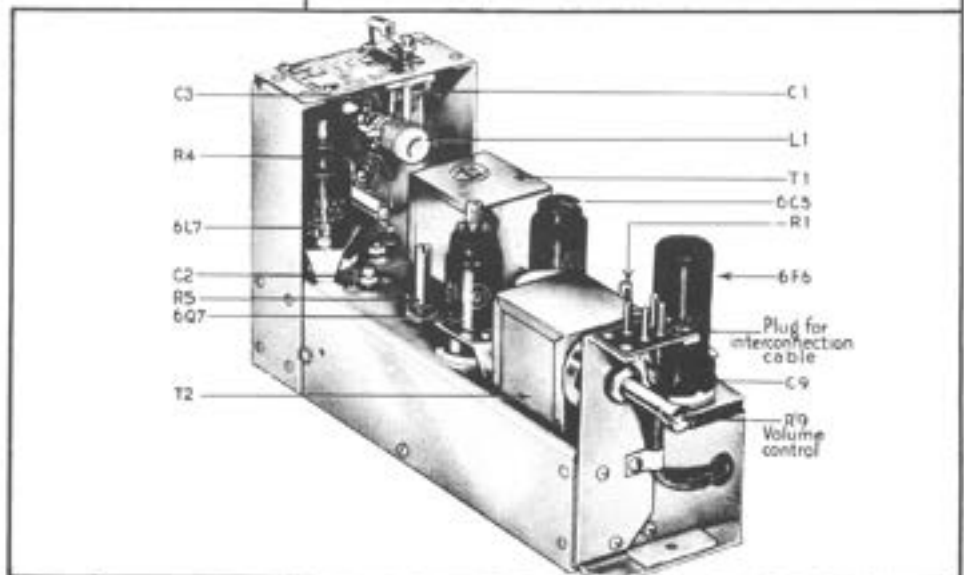
- GE 6L7 — Detector & R.F. Amp.
- GE 6Q7 — A.F. & Carrier-off noise suppression
- GE 6F6 — Power Output
- GE 6C5 — Quench Oscillator

Loudspeaker: Magnetic

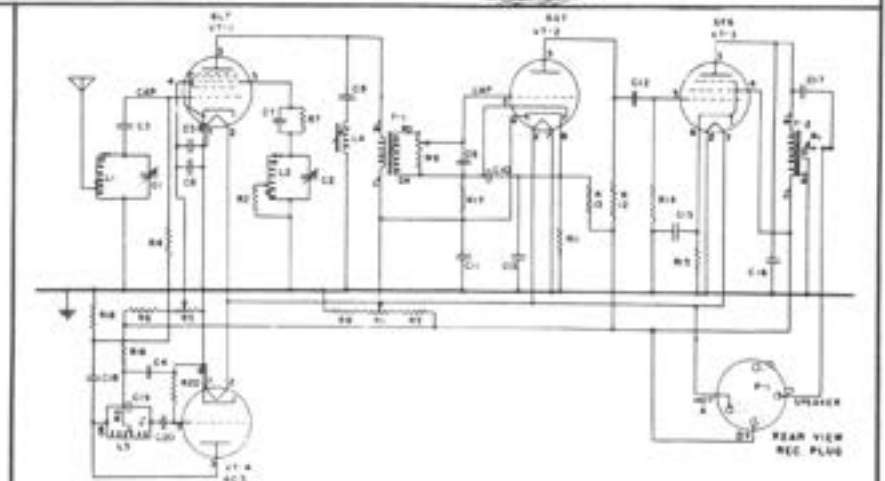
Max. Power Output: 700 m.w.

Power Supply: 6 volts

Current Drain: 2.8 amp.

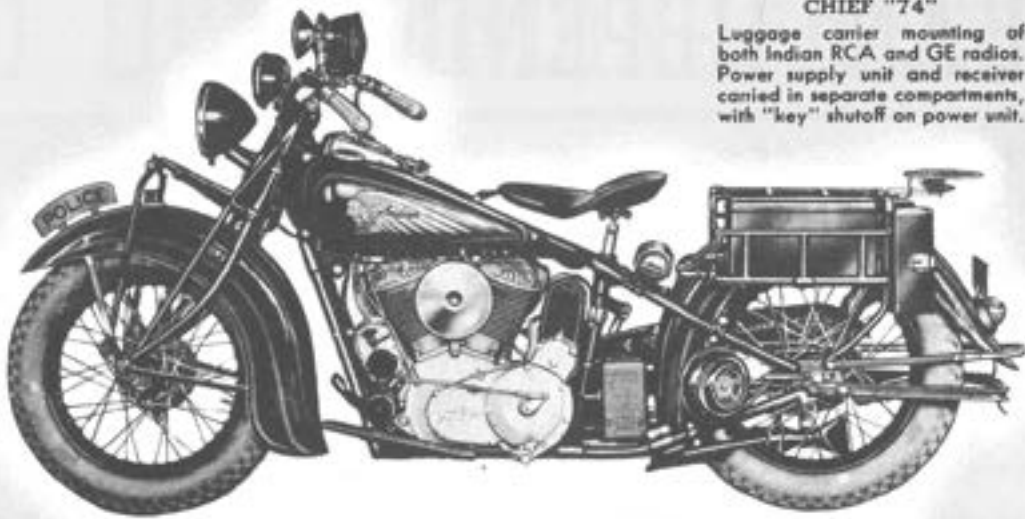


Schematic diagram of Indian GE ultra hi-frequency receiver. All power required, supplied by 6 volt battery. Synchronous type vibrator with step-up transformer supplies necessary plate and screen voltages. Vibrator unit shielded and filtered to prevent noise entering circuit.

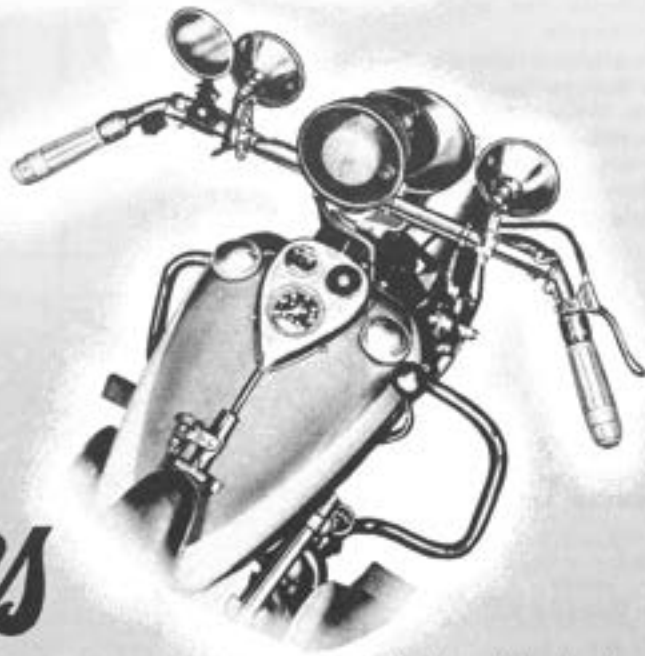


**INDIAN POLICE SPECIAL
CHIEF "74"**

Luggage carrier mounting of both Indian RCA and GE radios. Power supply unit and receiver carried in separate compartments, with "key" shutoff on power unit.



**Installation on
the two most
popular**

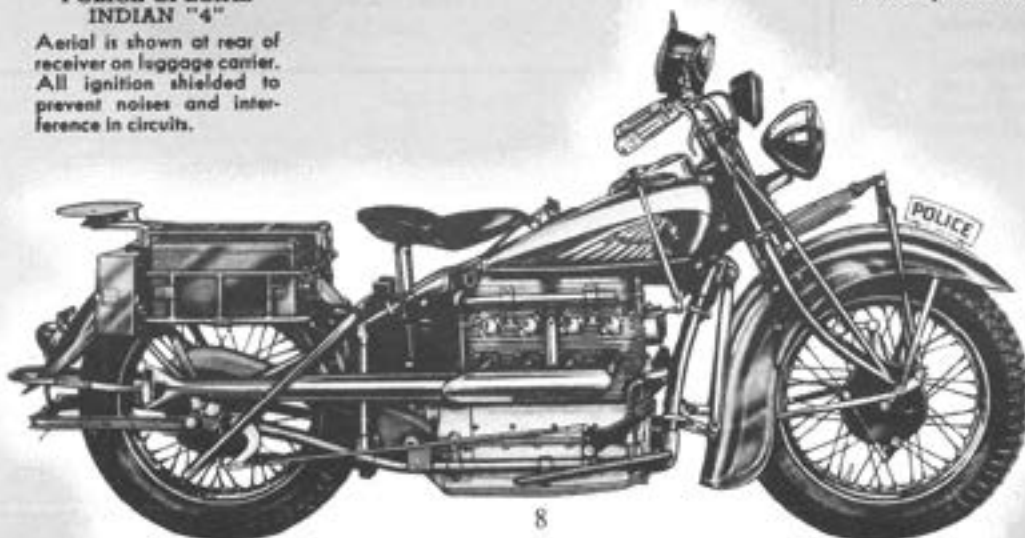


Indians

Weatherproof loudspeaker and mounting from rider's position. Volume control on tank in front of saddle is in easy reach for officer.

**POLICE SPECIAL
INDIAN "4"**

Aerial is shown at rear of receiver on luggage carrier. All ignition shielded to prevent noises and interference in circuits.



For Sale/Wanted to Buy & Services

For Sale: 1932-1935 and 1938-1942 exhaust manifolds is now \$750.00. I had to use a different foundry for the castings and the costs are more. The aluminum manifolds are still \$475.00. Tom Wilcock - manifolds - castings - (905) 263-2557 or twilcock@hotmail.ca

For Sale: 1940 Indian Four Cylinder upper and lower engine cases. VIN number is original and both cases need some repair. If interested we can email pictures. \$5,000.00 for the pair. Please call Dave Pempeit at (734) 287-8509.

For Sale: 1940 Indian 4. One owner bike. Was owned by a policeman from new. Bike has documented history. Very nice bike that runs excellent with no issues. 70K. Call Andy Tarnik (724) 747-5319

For Sale: 1940-45 Chief and 4 cylinder #42596 rear shock upper springs 2 for \$ 20.00. And 1946-53 chief # 809015 rear shock upper springs 2 for \$ 20.00 plus shipping. All parts are repro. Contact: Wally Krzyzanowski (574) 896-2695 or email: wjkindian@hughes.net

For Sale: Complete rebuilt generator and distributor including generator mounting bracket, a new correct drive bushing and coupler. Fits 1938 to 1942. Pictures and spec's available by email. Contact: Myke Staton email: mykemoto@outlook.com

For Sale: 1930-1936 Indian 4 cylinder Simms magneto freshly rebuilt by Marks. Contact: Mike Tillotson, Omaha, NE (402) 453-8185

For Sale: Bikes pictured below. Call or email Robin Markey for more information (more pictures available by email) Call (717) 938-2556 or email: bobsindiansales@aol.com

37 Chief is a project motorcycle - Straight frame and fork - Almost everything correct for 1937. Check website for more pictures at www.bobsindiansales.com (go to For Sale, Honda and Indian Motorcycles For Sale).

1957/58 Indian Enfield Trailblazer - Very Complete - asking \$6,500



1937 Indian Chief - asking \$28,000



For Sale: 1941 Indian Four - DDA-144 - Asking price \$95,000. Call Joe Jensen, cell: 203-838-9802



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For Sale:

1937 Jr Scout 30.50 with matching numbers mostly all complete but needs a transmission.

1941 45 c.i. SPORT SCOUT with matching numbers.

These have been stored for over 25 years and need a few parts and to be restored.

1976 CHANG with side car brought back from Vietnam, has been stored for 3 years.

1935 Indian motor.

RARE 1909 & 1911 single cylinder Indian motor complete.

1929 v twin Indian motor,

1928 v twin Harley motor.

Several carburetors.

One side car with hardware not sure what year it fits.

Several small parts for Indians in 30's & 40's.

COUPLE SETS of Indian fenders one full set and a smaller set.

New pair of knucklehead tanks with the side shifter and emblem & trim, new in box,

A couple of Indian front ends.

Contact: RJ Warren (425) 327-4818 email: w454rj@yahoo.com



Graphite: die-cut from Graph-Lock 3125TC and are available in two thicknesses:
.060" @ \$45/set or .120" @ \$55/set
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<http://www.garlock.com/en/product/graph-lock-3125tc>.

**For more information
email Jim Walther indianfourrider@yahoo.com**

For Sale: Set of cylinders for upside down Indian Four, exhaust mufflers for upside down Indian Four, and (3) cylinder heads for Indian Four. Martin Demeyere Email: martindemeyere4@hotmail.com



For Sale: 1935 Indian 4 basket case. Contact: Steve Geiger (646) 645-1582 email: s_geiger@earthlink.net

For Sale/Trade: Two Pierce 4 cylinder engines 1909 and 1910, or will trade either for front spring fork (larger spring) for a 1912 Pierce 4 cylinder motorcycle. Contact: Steve Geiger (646) 645-1582 email: s_geiger@earthlink.net

Wanted: Looking for a 438 and up running bike. Anybody bringing a bike to the meet to sell? Thanks. Brian Scharff (419) 722-3720 or email: brianscharff62@gmail.com

Wanted: New Jersey license plates, 1918, 1929, 1938, any condition considered. Also looking for an original, correct horn for a 1929 Indian 402. Sean. Call or text (973) 652-9794 or email: thefatmanllc@yahoo.com

Wanted: New member hoping to purchase my first 4 cylinder. I am looking for a 40 – 42 Indian 4. If anyone has one for sale or knows of one that might be coming up for sale. Contact: Bruce Coutant at (309) 737-9627 email: bwcoutant@frontier.com

Wanted: Correct amp meter, speedo, carb, horn and headlamp for 38 Indian four. Please call or text John Coombs (724) 888-6517 or email: jcoombs1957@gmail.com

Wanted: Looking for a right side tank badge for my 1940 4 cyl. Email Miles at: plstkr00@yahoo.com

For Sale: Replica Autolite for Distributor Fours made in Australia. It is actually a 12v 14A alternator that features a built in solid state regulator rectifier. We can also supply the dummy cutout as shown in the picture. It bolts right up to the existing brackets the only thing you need to do it run an extra wire to a switched pole on the ignition switch to excite the regulator. The charging parts are Nippon-Denso and we have been using them to make alternators for Chiefs and Scouts for nearly 4 years with great success. The price is \$1795 AUD (approx \$1350 USD) postage is around \$75.

Contact: Mark Barthelmie email: sales@zorros.net.au www.crazyhorseindian.com



For Sale: Indian Sweetheart Sidecar. All hardware and mountings included. As seen in photos, all correct hardware. Serial number DSG1004. Only a few known to be around. Best Offer. Any Questions please call (201) 704-6679. Jimmy Sabino



For Sale or Wanted:

For sale: 31 Indian Four restored and running.

For sale: Ace engine.

For sale: 41 Indian Four engine.

For sale: 44 or 47 Indian Chief engine.

For sale: New issues

"The Golden Age of the Fours".

Wanted: DLX-25, 64, 77, & 97.

Wanted: (3) Corbin speedometer heads from 1930's.

Wanted: (2) horns from the 30's.

Wanted: 32 Four frame/chassis.

Wanted: 31, 32, and 38 Indian Four engines.

Al in Tulare, California. Call (559) 631-0804 or (559) 688-8844.



Wanted: Good heads for '34, '35 Sport Scout with decent fins. Have many Indian parts to trade (nothing before 1930) or pay cash. jackwoolum@earthlink.net

Wanted: 401-402 Gear Shifter lever (part # AA2330X) - any condition - Contact: Bret Yeager email: coryangee@comcast.net

Wanted: 1928-1929 Headlight - original (not repro) - any condition - Contact: Bret Yeager email: coryangee@comcast.net

Wanted: Corbin speedo for a 1938 Indian Four. I believe that model should have a trip meter as well as the mileage. Contact: Russell Ellis 0418 823733 email: russell@sturtstumpcutters.com.au

Wanted:

1929, 1936, & 1937 Washington state Motorcycle License Plates.

1940 Indian 4 frame and any other parts.

Front and rear crash bars for a 1929 Indian 4.

Contact: RJ Warren (425) 327-4818 email: w454rj@yahoo.com

Wanted: I am looking for a 1930-1935 Indian for sale. Thank you, Jimmy Sabino (201) 704-6679 email: jimmysabino62@gmail.com

Wanted: Looking for a tire pump for a 1931 Indian 402. Please contact: Lincoln McIlravy email: lmcilravy@southslope.net

Wanted: 1933-1935 cylinders. Will purchase outright or trade for earlier cylinders. Also looking for 1926 Ace upper crankcase. Tom Wilcock (905) 263-2557 or email: twilcock@hotmail.ca

Wanted: Complete Indian steering damper for 38 to 42 leaf spring front end.

Contact Bruce at email: bwcoutant@frontier.com or (309) 737-9627

Wanted: Would like to buy an Ace or Cleveland that is complete and in good running order. Want a bike that I can experience the ride. Have a very nice 440 Indian that can be offered to a deal if needed. Will consider a USA bike only Andy Tarnik (724) 747-5319 or email: AndrewTarnik@yahoo.com

Wanted: Klaxon11 horn as well as 1918, 1929, & 1938 New Jersey MC license plates.

Contact Sean Mulligan email: thefatmanllc@yahoo.com

For Sale: M441 carburetor and intake manifold. \$1,900.00 USD or trade for FN parts.

Contact Martin Demeyere email: martindemeyere4@hotmail.com



Wanted: I am looking for the following (2) items for my 1942 Indian Four:

Battery box and Fuse box cover

Call Scot Harlan (703) 906-6942

Wanted: I am in need of a set of fork bearing races for a 1931 Henderson KJ. I really only need the upper and lower frame races, but if someone has a full set that works too.

Contact A. Chris Gans Email: chrisgans1957@gmail.com

Wanted: Greetings from Germany. I am looking for a good frame for a 1936 Indian Chief.

Please send your offer to Peter Beckert. Thanks a lot for your help. Email: superbrain.peter@web.de

Wanted: 1940 or 1941 Indian Four Frame/Forks and/or engine to build a rider. If able to help, please call Andrew Meislin at (808) 990-2710 or email: asmeislin@hotmail.com

Wanted: Good day fellow Indian 4 members. I am looking for a Schebler DLX 65 carburetor for a restoration I am working on. Please email: halaburawayne@gmail.com or call (306) 221-7835, ask for Wayne. Thanks for your consideration.

An Upcoming Event!!

The Curtiss Museum has announced the date for the upcoming celebration. They call it "The Birth of a Legacy". It starts August 5th of 2022 and officially ends August 30th 2023. They are celebrating the 120th year of Curtiss motorcycles and products. The Main focus is on Curtiss motorcycles made from 1902- 1912. Most of the Curtiss motorcycle products will be represented, he made 5 different brands. Evans, Meco, Hercules, Curtiss, and Marvel. But all of the airplane history is there also. This information was shared by Dale Stoner, researcher, builder, and owner of the Curtiss Tripple shown at the 2021 Indian Four Cylinder Meet.

Indian  **FOUR
CYLINDER NEWS**

5958 Shallow Creek Drive
Milford, Ohio 45150

From the

Indian 4 Club

TO:

