



## A Wonderful Family Gift—Overland 4 With Three-Point Suspension Springs

As a family gift, this new Overland 4, the Four-Door Sedan will contribute smoothness of riding, usefulness and enjoyment every day

Three-Point Suspension Springs give a new kind of riding comfort—a comfort that was unknown until introduced by Overland 4.

Spring attachment at the ends of a 130-inch Springbase give this easy-to-drive, 100inch wheelbase car the ridingease and the road-steadiness of a large, heavy car of long

The wheels go up and down, of road blows. following the irregularities of the road, but car and passengers sail along smoothly.

Car and passengers are free from the ordinary jolts, vibrations and side swaying.

The light weight of the Overland 4 makes for exceptional economy. Its life is prolonged because the springs protect the car from the racking damage

This Four-Door Sedan is a quality car throughout, of graceful design, and smart appearance and conveniences.

Its equipment is complete, from Auto-Lite Starting and Lighting to U. S. L. Batteries.

Have the Overland Dealer show you this car. Overland 4, Four-Door Sedan, \$1375; Coupé, \$1325; Touring, \$845; Roadster, \$845. Prices f. o. b. Toledo.



### **Departments**

President's Message 4

From The Editors 5

New Members 6

Hershey AACA Fall Meet 16

WOKR Forum 26



Front Cover: Hermann and Nora Tratnik tour Austria in their 1912 Willys-Overland, Model

Back Cover: Larry Blatzer's 1916 Overland Model 85-4 Touring car at the Morris car show in Illinois.



### **Features**

7 A Wedding Chauffeur by Bob Jaeger

 $8 \ \ Refinishing Wood Spoke Wheels$ by Mike Roetter, Sr.

11 Newport Antique Auto Hillclimb by Larry Blatzer



## 12 Greetings from Austria

by Hermann Tratnik

20 Valve Seat Machining by Evan Meyerriecks

22 Our Stearns Story

by Paul Sagan

# 27 Still Some Spark in the Old Plugs

by Martin Jaeger

The Starter is published quarterly by the Willys-Overland-Knight Registry, Inc. Although the ideas and suggestions expressed by the authors are offered with the best possible intentions, WOKR, Inc. assumes no liability for their implementation. This publication is copyrighted by WOKR, Inc. and all rights are reserved.

### President's Message

e're home from a wet Hershey flea market. It rained off and on for 3 days, then the sun came out for the Car Show. The good part was, I sold all my Willys Knight stuff and found the parts for my 1910 Overland model 38 that I was looking for. All the impossible-to-find parts end up at Hershey. A big thanks to Judy and Dave Yeager, Joe Lucks, and Rick Nash for handling all the logistics and hosting the tent.

The club also received a very generous gift from Mark and John Hopkins. They gave the club the mold for early Overland water jackets. This is a very complicated and difficult mold to make. It's used for casting the water jackets in aluminum. Their father, Walt Hopkins, used to make these and sell them to club members. Since his passing, there are none to be had. The club plans to cast the manifolds and have them available in the club store this Spring.

Bill Gray and Rick Nash are also making the mold and will cast 1929-1933 Whippet, Willys and Willys Knight windshield regulator worm gears. These break due to the original poor quality pot metal. They plan to give the mold to the club along with the cast parts. This is another wonderful gift to the club. They should be ready in January thru the club store

If you are making parts, consider giving the mold to the club so we can continue suppling parts to future WOKR members. Contact me for any donations you wish to give to the club.

It's not too late to start planning for the 2023 International Meet and the Roadrunner Pre-tour. While at Hershey, Don Liepelt presented the plan for the Roadrunner Pre-tour which will wind through upstate New York. You will visit Seneca Falls, Watkins Glenn, Corning Glass, and the Glenn Curtiss Museum. The Pre-tour will start June 16th thru the 18th, 2023, starting and ending at the meet hotel. More info will be on the website before the 1st of the year.

The club will be issuing a new Roster after the 1st of the year. The Roster takes a lot of effort from many folks. I wanted to thank them in advance. The cut off date will be December 1st for the date extraction from the database. No changes made after that date will make it into the roster.

If you're a new member, consider joining one of the club's regional chapters. The local chapter hosts regional tours and can give hands on advice for your car. The contacts are in the Roster or contact me.



John and Mark Hopkins presenting the molds for early Overland water manifolds to WOKR.



2022-2023 Officers

President: Tom Johnson Vice President: Neil Mortensen
Secretary: John McEvoy Treasurer: Larry Icerman

Board of Directors			
David Elrich	2025	Dan Ernst	2024
Don Liepelt	2025	Joe Grima	2023
John Nikodym	2025	Tom Johnson	2023
Kelsey Walker	2025	Lynn Miller	2023
John McEvoy	2024	Neil Mortensen	2023
Tod Paisley	2024	Tammy Thompson	2023
John Dalton	2024	Larry Icerman	2022
Ed Wilson	2024		

Emeritus Directors

Bob Blair, Nick Engelman, Kathy Etheridge, Stuart Etheridge, Marty Fitch, Bob Gerdes, Norm Grant, Bill Gray, Greg Gumtow, Ed Hanish, Ed Krantz, David Liepelt, Joe Lucks, Marcia McGill, Brian Miller, Joel Mozer, Rick Nash, Duane Perrin, Roy Powers, E. Louise Pruitt, Larry Will

#### INFORMATION

New Memberships Tammy Thompson

162 Swift Rd, Binghamton, NY 13905

Tel. 678-773-8120 wokrregisrar@gmail.com

Membership Renewals, Dan Ernst

and Reinstatements 5844 Independence Ln

West Bloomfield MI 48322 tel. 248-905-1010 WOKRdues@gmail.com

Address and Marjorie Bridgham

Vehicle Changes

38 Tollgate Road, Owings Mills, MD 21117

mbridgham12@gmail.com

The Starter Editors Evan and Linda Meyerriecks

18896 Woodburn Road, Leesburg, VA 20175

Tel. 540-454-5138

linda.meyerriecks@gmail.com evan@classicmotormachine.com

Librarian John Nikodym

1010 East Bismark, Grand Island, NE 68801

jjnikodym@gmail.com

Copies of Drawings Greg Gumtow

9770 Tower Road, So. Lyon, MI 48178 Tel. 313-461-3370

gregag@aol.com

Club Merchandise Sales Greg Gumtow

9770 Tower Road, So. Lyon, MI 48178

Tel. 313-461-3370 gregag@aol.com

Newsletter Ads, Club & Bill Gray

Chapter Announcements 1425 Florence Drive, Azle, TX 76020

Tel. 817-237-9950 willyg38@charter.net

Projects Chairman Don Liepelt

315 Boston Post Rd., Madison, CT 06443

Tel. 203-245-1788 knotacres@yahoo.com

Webmaster Melanie Shellito melanie@artezen.com

Web Page

Photo Gallery

Paul Young willys1930@hotmail.com

Parts & Service List Bill Griffin Tel. 330-876-0822

ybf@aol.com



SILVER ANNIVERSARY PRESENTATION

Willys Overland

### From The Editors

rom weddings to touring Austria, this issue is filled with members having fun with their Overland and Knight cars, including the process of restoration. And to top it off, the Hershey Meet brought out many to meet members, see cars, and learn from demonstrations. Technically speaking, this issue, will show you how to machine a valve seat, refinish your wood spoke wheels, and bring some spark back in those old plugs.

Remember that the WOKR Library is huge and offers much information for any project. And The Forum offers you the chance to converse with other members about their projects. We are reminded, too, that the importance of the WOKR is keeping a registry of all Willys and Knightengined vehicles in the world, many that are hopefully still running and with which owners are having fun.

News will be coming soon for the next International Meet in Lockport, NY. We hope to see many of you in New York next June. This is our fifth issue of The Starter, and we want to thank everyone who has contributed and helped us in our first year as Editors.

We wish everyone a lovely Holiday Season!



#### **New Members**

BARBE, STEVE & LAURIE #6246 A 185 SCHOOL ST MORGANTOWN, WV 26505-3732 Phone: 304-669-8255 Email: Spbarbe@frontier.com '24 Overland 91 Sedan

#6255 A BLATZER, LARRY 2260 NORTH STATE RT 115 PIPERCITY, IL 60959 Phone: 708-295-2958 '17 Overland 85-4 Touring

COOPER, STEVE & CHRISTINE #6242 A TUTNALL MOUNT BROMSGROVE, WORCESTERSHIRE **B60 1NB UNITED KINGDOM** Phone: 0-771-222-3371 Email: tardebiggecider@gmail.com '27 Whippet 96 Touring

#6252 A

GILMAN, STEVEN & JILL 30 ALMADA DR BROOKLYN, CT 06234-2435 Phone: 860-428-0103 Email: evets1234@yahoo.com

HART, JIM & SHIREL 26620 M 60 MENDON, MI 49072-9727 Phone: 269-339-1024 '14 Overland 79 Touring

HOFFMAN, SAMANTHA & JOANNE NEU TOBIN HOFFMAN #6253 A 71895 559TH AVE **ALEXANDRIA, NE 68303-3001** Phone: 402-364-3407 Email: cummins83@diodecom.net '29 Whippet 96A Coach

JOHNSON, ALAN LEE & IVYE #6245 137 BURNS ST RENO, NV 89502-2405 Phone: 775-772-3596 Email: lee@zephyrbooks.com '26 Stearns-Knight C 5 Pass Brougham

LAUBER, SAM & JESSICA #6251 J 6928 LOUISE CIR SALEM, VA 24153-8290 Phone: 904-439-5731 '29 Whippet 96A Sedan

LEITZEL, CEYLON & KAREN #6249 A POBOX 202 MOUNT GRETNA, PA 17064-0202 Phone: 717-304-7865 Email: ceylon2xjlryr@gmail.com '14 Overland 79 Touring

#6244 A

MANIATIS, JOHN 129 GROVE LN BARRINGTON, IL 60010-4858 Phone: 847-814-1833 Email: yannimaniatis@hotmail.com '36 Willys Truck 77 Panel Delivery

MERCADO, PATRICK NASH #6250 A 3816 GRAVE RUN RD MANCHESTER, MD 21102-2216 Phone: 443-572-1858 Email: patricknashmercado@gmail.com

PARKMAN, KEN & WILMA #6243 A 8598 EIGHTH LINE HALTON HILLS, ON L7G 4S5 CANADA Phone: 647-234-4014 Email: ken.parkman@ncsonline.ca '29 Willys-Knight 70B Sedan

PHIPPS IR, GEORGE W #6248 A 9070 FAÍRBANKS LN #5 BOCA RATON, FL 33496-6654 Phone: 786-886-6224 Email: gplima14@aol.com '13 Overland 69 Touring

SCOTTO, DAVID & DAWN #6254 A 18801 POOR HOUSE RD AMELIA, VA 23002 Phone:; 804-512-9037 Email: 1934buick90@gmail.com '14 Overland 79 Speedster

TRATNIK, HERMANN #6256 A RUDOLF KATTNIGG STRASSE 1/7 9500 VILLACH, AUSTRIA Phone: +43 4242 289 364 Mobile: +43 664 89 82 110 Email: tratnik.hermann@a1.net '12 Overland 69 Touring





### **A Wedding Chauffeur** By Bob Jaeger

ome things just go together. Peanut butter and jelly, Christmas and Santa Clause... and old cars and weddings. In July, we received an invitation for the uniting of Grant and Rebecca in holy matrimony, Grant being the son of Cousin Beth and her husband Dan. My brother Martin and I both had the same thought of offering one of the Willys Knights to chauffeur the newlyweds from the church to some, at the time, unknown destination. Contacting the mother of the groom yielded an answer of yes, so we now had the task of dusting off the cobwebs and being ready for a wedding by September 10th, the old cars needed some attention, too.

The plan was to use Martin's 1925 WK66 touring car with my 1926 WK70 sedan serving as a backup in case of foul weather, and Martin's son, Caleb, as the chauffeur since he and Grant had played together as kids. Step one, teaching Caleb to drive a stick shift. I don't recommend teaching someone to drive a manual transmission with a car that predates synchromesh but Caleb took to it like a duck to water. We started with the model 70, if you've ever driven a 66 with the multiple disk clutch, you know why.

Since the pandemic we hadn't had either car out much so grease jobs and an oil change started the process. I had a leaky tire and rear axle seal. Martin had a dripping water pump and I don't know what else but both WK's were ready by the big day which turned out to be pleasantly warm and dry. A shift in the wind brought a stiff breeze and blew wild fire smoke from the southeast to give the sky a yellow haze. The only good thing that came out of it was the smoke in the air kept the temperature in the high 80's instead of the mid-90's for the afternoon.

The wedding went off with flying colors, the reception, too, until someone referred to the car as a Model T! It's apparent that we have a bigger job educating the public than I thought, so being given a microphone to tell the guests about the car, I did so gently and without extraneous comment about the uninformed guest. The car and Caleb both performed with flying colors.

All in all, a perfect day because some things just go together. Peanut butter and jelly, Christmas and Santa Clause... and Grant and Rebecca.

# Refinishing Wood Spoke Wheels By Mike Roetter, Sr.

fter what seemed like eternity, I finished stripping and repainting my 1927 Whippet model 93A sedan a few years ago. The last task was the refinishing of the wood spoke wheels. Since I wanted a pretty authentic revamping of the car as it might have appeared when new, a proper treatment of the wheels was important to me. Nicely finished wheels are critical to the overall

appearance and appeal of any automobile. Over this car's history, I found that the wheels had been painted multiple times, and I think, most recently with a broom. Something needed to be done and I wanted to do it once and never again.

Some time ago, there was discussion on the old WOKR online forum about refinishing wood spoke wheels. Fellow member Dave Mastous had some ideas that I felt

were interesting and very creditable. His suggestions were followed and embellished yielding outstanding results. Fifteen years after refinishing, the wood finish is showing no signs of cracking or peeling with appearance up to par.

To cut to the chase, a summary of the process entails:

- 1. Completely stripping of the old finish to bare wood.
- 2. Saturating the bare wood with a penetrating epoxy
- 3. Priming and painting

#### Cleaning the Wheels

For a proper job, it is essential to remove all four wheels from the car. In my case, I completed the refinishing one wheel

at a time since my garage space is limited. Tires and rims where removed to expose the end grain of the wood spokes inside the ferrule. The brake drums were removed as well. Rear wheel removal required using a hub puller to extract the wheels from the axel.

When I stripped the wheels, methylene chloride based paint

stripping materials were still available and worked extremely well for removing all paint down to bare wood. I discovered the wheels were originally black from the factory, had been painted a couple colors of blue before a very crude and thick layer of baby blue paint was applied on top of everything. The bare wood was thoroughly sanded,



solvent washed and dried.



Whippet at WOKR Marshall, Michigan, national meet.

#### Saturating the Wood

Dave Mastous recommended a product called Clear Penetrating Epoxy Sealer, or CPES. The material is as thin as water allowing for deep penetration on porous surfaces when applied. Two pints (one each resin and hardener) most recently was just shy of \$70 (not cheap!). Wood finishes frequently fail due to moisture penetrating the wood causing expansion and contraction of the fibers when the moisture is absorbed and then evaporates. This causes the finish to fail in the form of cracks and peeling allowing even more moisture absorption and greater failure of the finish. Thus, the whole purpose of the epoxy sealer is to establish an impenetrable barrier to moisture intrusion before other finishes are applied.

A word of caution – the CPES coating looks fantastic on the bare spokes when applied (much like varnish) but epoxy rapidly deteriorates in sunlight and must have a UV protective top coat. At Dave's advice, CPES is applied until the wood is saturated and will absorb no more. The end grain of the spokes inside the ferrule was also thoroughly saturated. I probably used about 1/3 of the two pints of

CPES for all four wheels. The wood spokes on my car were solid with absolutely no rot. Deteriorated spokes would have to be repaired before finishing. The dried epoxy required a very light sanding to level any roughness.

#### Priming and Painting

It was very tempting to apply varnish on the spokes as they really looked sharp cleaned up with the epoxy primer. However, from the factory, the

spokes were definitely black which seemed most appropriate for the sake of originality. Content on the Whippet Encyclopedia disk confirmed this for this car's production date. Refinishing in natural wood would require the application of a good quality exterior polyurethane or spar varnish. For me, I had a few more steps to follow. I brushed on a high-build marine sanding primer which was sanded to a very smooth finish. The primer fills many imperfections. I don't recall that I had to use any filler beyond the primer. The application of the final color coat may surprise some.

#### Where to Buy:

Clear Penetrating Epoxy Sealer (CPES) www.smithandcompany.org/CPES

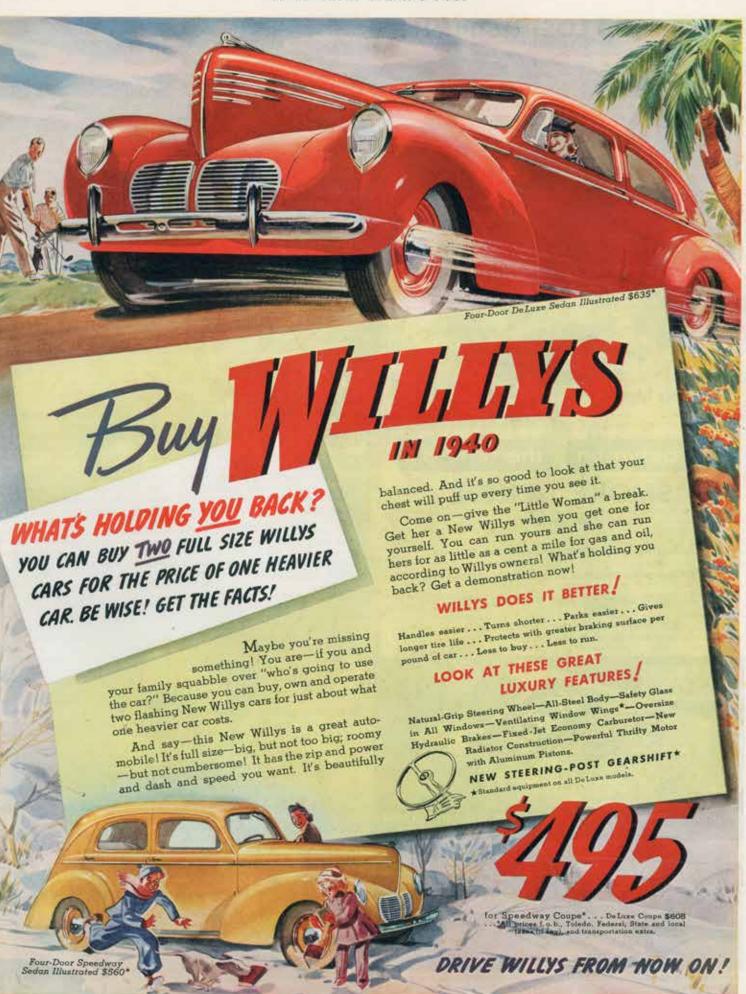
As a former sailor, I used Pettit EasyPoxy marine topside paint on my various boat projects, as it is a durable selfleveling finish designed for harsh marine environments. With a good quality brush, two coats of black paint were applied to both the ferrule and the spokes with a good sanding between coats. The finish on the final coat required no sanding and looks like the wheels were spray painted. For



Whippet Wheel Spokes after 15 years.

appearance purposes I sprayed the brake drums with high temperature black engine paint before re-installing back on the wheels. The original finish on the body of the car was pin-striped, but I couldn't find evidence that the wheels were as well. None-the-less, since I like the appearance of pin-striping on vintage wood spoke wheels, they got a gold stripe matching the body detail.

I know from time to time, the topic of how to finish wood spoke wheels comes up. My experience using the process above worked very well for me in providing a long-term durable finish. Hopefully, my comments will be useful to others.



### **The Newport Hill Climb**

By Larry Blatzer

hen I sold around 10 gas pumps from my collection, I had some money to buy another old car. I went to an

auction to buy a '36 Plymouth. After selling all the junk car (around 60 of them), the auction then moved inside to the nice cars, but the order of the sale was the 1916 Overland first. When I saw it, I bid all the cash I had, but needed more. I nudged the auctioneer and said, "I need a loan." He said he would hold my check for a week. I got a loan from a friend on Monday, and told him I just bought another old car. He said, "Ok, fine." I found a name under the seat with all the side curtains, and all the manuals. Looks like they rebuilt the motor when it was restored.

After being asked for two years to come to the Hill Climb by my friend, Mark Duncan, I finally gave in.

The Newport Hill Climb likely began as an "innocent" challenge between two owners of those new-fangled automobiles. While early autos had trouble making it up the crest of the hill, soon topping the 140-foot plus

hilltop became common, It was still a great struggle on the early gasoline engines. Then it wasn't just enough to top the hill; you had to be the fastest to climb it. I first attended in 1999 as a spectator and the first look up

the hill was awesome. I asked Mark if his car would be able to make it up the hill. To my amazement he let me drive his 1929 Plymouth up the hill in practice. That was all it took, I was hooked. I returned home and looked in several auto magazines, beginning that October, and in December I purchased a 1927 Dodge Brothers car. After fixing it up and putting on new tires it was ready to go attack that Hill. Over the years the competition was great and finally in 2007, I won my first trophy.

In 2008 I broke the rear end gears trying too hard in practice runs. 2009 was my tenth year as a competitor.

With a world-wide audience, the Hill Climb has grown into the third-largest motorsports event in the Hoosier State, trailing only the Indianapolis 500 and the NASCAR at the Brickyard race.

I drove my Overland to the Newport Hill Climb this year. It runs great, but it is

hard to shift, and needs a coupler and a top boot. So it is still not quite ready for that tough famous Newport Hill Climb. Maybe next year.



# Greetings from Austria By Hermann Tratnik

he Overland 69T Touring car was delivered to its first owner in North Carolina on July 1st, 1912. The track width of the rear axle is 60 inches and that of the front axle is 56 inches, which was common at the time. One thought that the unpaved roads would take the weight more evenly if the rear wheels were running in the track of the front wheels.

In 1913, the car was driven to New Jersey, where the owner's brother owned a Ford dealership. For some reason the Overland owner drove back south in a new Ford Model T. With the expectation that the owner would return to take their Overland back to North Carolina, the Overland was placed indoors. In the 1950's, a Mr. Lasher learned of the existence of the vehicle. which was in original mint condition except for the wheels, which were later found in an attic of a nearby building. He carried out a restoration in the late 1950's style. The Overland was then used on several trips. It was then sold to a Mr. Steen, then to Mr. Don Meyer and in 1981 to Mr. Dan Rogers. In 1989, the car was offered

for sale and 3 gentlemen, members of the "Allgemeinen Schnauferl Club" (ASC) in Germany, flew to the USA for the "1989 New England National Brass and Gas Tour" from June 25th to 30th, 1989, in Ascutney, Vermont, to take the Overland for a test drive. The car was bought and came to Schweinfurt, Germany, at the end of August 1989.

At the beginning of 2000, the car underwent a total restoration, with the wooden body remaining original and all the original body parts being installed. The leather of the rear seat backrest could also be retained. The engine was restored in a specialist workshop and the special loss lubrication and

the magneto ignition were left in the original condition, as were all other components.

In 1987, I got an original K.u.K. (Imperial and Royal). I bought the Austrian-made Praga Grand battery commander car (of the Austrian Army in World War I) from 1914 and extensively restored it in around 2000 hours. So this

car, which is still the only one in the world, represented Austrian engine history. Since the restoration of this Praga, I have been occupied with the beginning of the automobile in the Austro-Hungarian Army.

My second new hobby is now collecting the related documents, badges, and photos worth seeing.
Of course, a true-to-the-original uniform of the KK Volunteer Automobile Corps was also made which I am wearing in the photographs.

With this Praga, as a contemporary witness of Austrian military and motor history, I was invited to the Festival of Speed in Goodwood, UK,

as the first Austrian participant in 2005. The reliability of this Praga was demonstrated at some Alpine drives and rallies in Italy, Germany and Austria.

In 2019, at the age of 71, I wanted a car from the brass era again and my friends from the Schnauferl Club Germany offered me this Overland. After a short inspection and test drive I bought the car.

Many more weeks passed in my garage to rework the restoration standard and also many technical works according to my ideas true to the original. There are two oil caps for the



Mr. Tratnik, in an Austraian WWI uniform, stantding beside his restored Praga Grand, K.u.K.. Batteriekommandantenwagen 1914, at the Castle Wernberg, Austria.

> My Willys-Overland, Model 69T, Baujahr 19124 Zylinder, 3703 ccm, 30 PS Chassis Nr:69T2747; Motor Nr:14469

engine oil, one is original. The second has now been remade true to the original.

It was bought in Germany in May 2019, typed and driven 1353 ml / 1697 km until October 2020. (This is where the logbook comes in handy)

Without breakdowns and without assistance, we can enjoy beautiful trips in a well-maintained 110-year-old automobile and bring joy to us and the passers-by with such an old automobile.

Together with my friend "Kari Graf Khevenhüller Metsch" owner of Hochosterwitz Castle in Austria https://www.burghochosterwitz.com/en/, who drives a 1904 family-owned Mercedes Simplex, we celebrated

the 1000 miles with the Overland with champagne.

So, I've driven 1642 miles since the purchase until today!

It was my first American-made car and I'm thrilled that it's also possible to drive here in the south of Austria, with lots of mountains.

I would like to send my warmest regards to all friends from the Overland Registry.

If we weren't so far away then surely some brass automobiles would be at my:

9th Int.AVCA motor driver competition for the honorary award of Melanie Countess Khevenhüller-Metsch for automobiles built up to 1918 from Sunday, August 27th to Thursday, August 31st, 2023, in Velden am Wörthersee / Austria. www.avca.at



### The Hershey Region of AACA Eastern Fall Meet



WOKR Members left to right: Ernie Schultz, Duane Perrin, Evan Meyerriecks, Mary Ruth Johnson, Keitha Schultz, Kathy Etheridge, Ed Wilson, Pat Nash, Rebecca Perrin, Dave & Judy Yeager, Joe Lucks, and 2 visitors in front.



UK Member Willem Van Der Horst's 1925 Overland Model 82 with a group of about 20 high school students with their instructor who is explaining the details of the car, at the WOKR Tent.

Booths at the WOKR Tent left to right: Joe Lucks talking to Tom Johnson, event goers purusing Pat and Rick Nash's table, Judy Yeager's booth, and the Gene Potts table.





Bill Gray shows a New Jersey guest the vacuum tank display at the WOKR Tent. Bill donated the demonstrator to the club to be used at Hershey.



**WOKR Meet** Chairman Dave Yaeger (left) explains how the sleeve-valve engine works. This was the best eve catcher at the tent.



Stu Etheridge (in brown jacket) and Marty Fitch's booth.



David Liepelt stands by his 1930 Willys Knight Model 66B. This is the 10th year David has driven the car from Detroit to Hershey, going 550 miles each way with his Dad.



Member Mike Halloran and Debbie Canole at their WOKR booth with items for sale.

The Starter • October/December 2022



Resting in the WOKR tent on a chilly day are Diana Fitch (left) and Duane and Rebecca Perrin.





Hershey Committee members - Pat & Rick Nash, Joe Lucks, and Chairman Dave & Judy Yeager



Standing by the sleeve-valve engine display, Jill and Steven Gilman just joined WOKR!



Hosts of the Hot Dog Roast: Member Marty & Diana Fitch (holding hotdogs they furnished for our members) and helpers Ernie & Keitha Schultz





All Photos by Vicky Gray

October/December 2022 • The Starter 19

### **Valve Seat Machining**

REPAIRING THE VALVES ON A TIRED OVERLAND MOTOR

By Evan Meyerriecks

e've been working on getting my 1914
Overland 79R back on the roads. It has been quite a process to say the least, but I'm almost there! I've noticed that the engine has always run rough and slightly pops through the exhaust. It seems to lack in power and last week, I decided to address this.

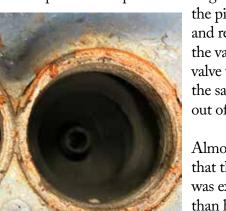
My first plan of attack was to try and diagnose which cylinders were causing this. To do this I simply would ground



out a spark plug wire with the engine running to see if there was a noticeable change. After doing this, I found cylinder 4 to not be contributing at all—basically no noticeable change when grounding out the ignition to that cylinder. I decided to remove the valves on this cylinder to inspect the quality of the valve to seat contact.

The first step is to remove the plugs at the top of each valve (one contains the spark plug, the other contains the gas primer cup). Next,

I used a block of wood as a lever against the frame and a pry bar to gently pry against the valve spring retainer, lifting it up to expose a small pin. Then using a small pen magnet, I slid



the pin out from the valve stem and released the pry bar against the valve spring retainer. The valve was now free and I used the same magnet to lift the valve out of the seat.

Almost immediately I noticed that the valve seat in the block was extremely pitted, and more than half the valve was not in contact with the seat at all! This was my misfire—and loss of compression! Upon seeing

the condition of Cylinder 4, I knew the rest couldn't be much better. There was only one thing to do at this point: remachine the valves and seats to make a proper seal.

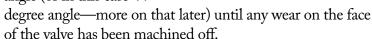
The first step in performing a "valve job" consists of media blasting all the carbon off the valves so I can accurately measure the valve stem condition as well as see what the face of the valve actually looks like. Surprisingly, the valve



stems measured true from top to bottom (I feel as though I got lucky there). With the knowledge that valves are in fact

salvageable and have been properly cleaned, it's off to the valve refacing machine.

I used a Kwik-Way SVSII valve refacer. It's a simple machine in that it uses a pneumatic chuck to hold the valve between 6 steel balls. This allows the machine to accurately (and repeatably) find and hold the valve on it's true centerline. From there you bring a grinding stone across the face of the valve at desired 45 degree angle (or in this case 44



With all the valves remachined, it's time to head back to the block and remachine the valve seat angles to match the freshly machined valves. In today's world of modern, high performance engine building we use dedicated "seat

and guide" machines with carbide insert cutters that are able to quickly machine all angles, and even radii into valve seats at one time and move on to the next seat. On a 1914 Overland; however, this is not even an option!

The reason being, the engine





would have to be completely disassembled and individual cylinders mounted in the seat and guide machine to do this.



Prior to a modern seat and guide machining center, we used seat grinding stones and drivers which we would dress the stone to a desired angle, then machine each angle individually into the valve seat using an airpowered die grinder. Using this style of seat machining is the only option that allows me to remachine the valve seats with the engine still assembled and in the car. Luckily, I kept our old Kwik-Way Seat Grinding tooling on the off chance something

like this would be needed some day! This style of valve seat machining was state-of-the-art for decades, and when setup properly, produces extremely accurate results.

First, I place a pilot in the valve guide that is a "snug" fit—no play whatsoever and tight in the guide. Next, I slide the 45 degree stone and holder over the pilot and with a light pressure use the pneumatic die grinder to spin the stone driver for a few seconds to "grind" that angle into the seat. A note on valve and seat angles: the factory valve seat angle on the Overland's engine is 45 degrees. We've found over many years of building all types of engines that an "interference fit" between the valve seat angle and the valve face angle actually improves flow and sealing longevity of the valve. What I mean by this is I actually machined the valve face at 44 degrees and the valve seat angle at 46 degrees, thus

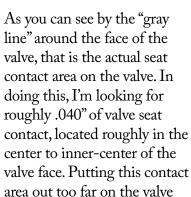
creating an interference fit between the two.

With that said, and having just machined the "45" degree valve seat angle, I next need to machine a 30 degree outside, or top, angle on the seat. This will position the actual contact of the seat on the valve so that it doesn't run off the face of the valve. This is done exactly the same way as with the 45 degree stone, by using a 30 degree stone and another stone holder.

After machining both angles on the seat, I then take a very small amount of valve lapping compound on the valve, insert the freshly machined valve back in that seat I just machined and spin the valve by hand to get the lapping compound all

the way around the valve face. Lapping compound really just shows the seat contact on the face of the valve.

I'll debunk a myth here: Lapping a valve really just shows the seat contact on the face of the valve—it does not correct or machine a valve seat that is worn or has been machined improperly!





face will cause the valve to run hot and eventually burn. Too far on the inside and you will inhibit flow and performance.

There you have it! I then repeat all this on the other 7 valves in the engine, completing the valve job. After all this was done and re-assembled, I did have to go through and readjust the valves for proper lash clearance.

Hopefully this wasn't too boring or too technical of a read! I must say, that after doing this my Overland is running smoother than I have ever known it to! It's been an absolute joy driving around our country roads this fall in Virginia in a 1914 Overland!

### **Putting All the Parts Together**

OUR STEARNS STORY

By Paul Sagan

n July 2013, my "friend" Dave Mastous told me about a 1925 Stearns Model C that he was trying to buy. The car was located near him in Bloomington, MN, and had been in the same garage, in pieces, forever. Dave sent me pictures of the car and told me that I should buy it. When I asked Dave why, he told me that they wanted too much

money for it and he knew I would be willing to pay more for the car than he would. Since I have a full-blown case of the old car disease and I was willing to take on another basket case project (my last project was a Model 91 Overland Champion that was completely disassembled when I bought it and every piece of wood was rotted), I decided I would contact the owners of the Stearns.

The car was being sold by Donna and Dan Alstrup

(the wife and son of the previous owner, Richard Alstrup, who had passed on). Dan had researched Stearns on the internet and found an eight-cylinder Stearns roadster that had just sold for a large sum of money, so he assumed his Dad's car was worth that much too. He failed to realize that his Dad's car was a sedan, a six-cylinder, and in need of a total restoration. So, I knew this was not going to be fun. With Dave's encouragement, I set up an appointment to see the car. It had been in pieces in the same garage since the 1959 when the house was built, and had never been moved. It shared the garage with a 30's vintage Chevy, a mid 20's Hupmobile, and a Harley Davidson. All of which were in some state of disassembly and their parts were comingled in the garage.

"As I bought it."

I could tell that Donna did not care for the car, since she mentioned how the garage had to be built before the house, so the Stearns could have a place to live, and that the Stearns prevented her from ever putting her car in the garage. She also mentioned that her husband had the car before they were married and he and his previous girlfriend had disassembled the car. I asked her what color the car had been

painted and she said "that color". I told her "that color" was bare metal and she replied, "it has always been like that." I asked about where the rest of the parts for the car were, and then she gave me an answer that should have made me run away. "Don't worry, none of the parts for this car have ever left this garage, so everything is here, somewhere." That statement continues to haunt me. But I was too foolish to read the signs and decided to move

forward with purchasing the car.

I put together a list of parts that I thought were missing and a second list of parts that appeared to be broken even though I had never seen a Stearns in my life.

I started doing research on the broken parts list. The biggest problem was that all the heads had been removed with a crowbar and all but one of them had pieces broken. I started calling club members who

owned Stearns to get their opinion on the car's value and the potential for getting the heads "fixed". John

Zerwick is probably sorry he ever took my first phone call because I bothered him incessantly for 5 years. Art Aseltine was very helpful too. Art was truly dedicated to the Stearns brand and the car hobby. I will never forget his son telling me that Art dictated answers to my emails from his hospital bed when he was near the end of his life. I told his son that the answers to my questions were not that important, but he said they were important to Art. After many phone calls about the heads, I was told that I needed to talk to Jerry Szostak about making new heads since the old ones couldn't be fixed. Jerry reluctantly said he would make new heads and rebuild the engine for me. I bet he regrets agreeing to that.

Knowing I could get new heads made, I negotiated a price contingent on the missing parts being found. I then headed back to Bloomington and almost half the missing parts on my list were now on the garage floor. The tension level increased because the son was not happy to be searching for parts because I hadn't paid enough for the car. In another foolish decision, I thought that since they had found half

the parts, I would pay them for the car and then they would have the rest of the parts when I came back to pick up the car. Many of the remaining parts never materialized.

Since I didn't have an enclosed trailer at the time and hauling all the loose parts on an open trailer would be a pain, I convinced my "friend" Dave Mastous to haul the project to my house in



Top to Bottom, Left to Right: The rebuilt engine back in the frame, new wood on the roof, rooted roof pieces, the stripped interior, and back from media blasting.

could have been a disaster. After we got everything unloaded, Dave left quickly so he wouldn't have to be there when my better half, Lisa, got home. Let's just say that Dave is a smart man



back to
Bloomington
and met Dave to load everything in his trailer and my truck.
Since many of the parts were still missing, I offered to search
for the remaining parts myself. It was obvious I couldn't be
trusted to search through the other treasures in the garage.
During this trip, I told Donna that when I had the car
restored, I would make sure she would get a ride in it. She
gave me the unbelieving look of someone who had dealt with

Dave hauled everything to my house and as we unloaded the chassis and body, I noticed there was no clearance between the firewall and engine. It was then we discovered that the body was just sitting on the frame and not attached. That

a car in pieces since 1959 and said "ok".

because Lisa was not impressed. She used her usual line — "it's your money". Then my Dad came over to inspect the project. He was less than impressed and wondered if I had really learned anything when I got that accounting degree years ago.

Next began the long process of further disassembly, getting parts made, finding parts, and finding people to do the things that my less than talented hands couldn't do. The car was completely stripped and documented with pictures. Then

the depression set in. What did I get myself into? I never thought I was the sharpest tack in the drawer, but this project proved that without a doubt. Since I needed a reason to go to work every day, I decided this money pit would move forward.

The first problem was getting the rest of the engine apart. Jerry told me to take the engine apart before I brought it to him. As mentioned earlier, the heads were already off and destroyed. I didn't want to do the same with the sleeves. I was told that if I soaked the block in mineral spirits and transmission fluid it would loosen the sleeves. After spending several hundred dollars to buy enough of those two products

to submerge the entire block and letting it soak for several weeks, it was time to go to plan B, since the sleeves were not budging. I should have filmed my brother-in-law Kevin, my nephew Tyler, and me holding the block in the hydraulic press to push the sleeves out. Looking back, that probably wasn't the smartest solution, but it worked, and

Donna gets her ride.

no sleeves were broken in the process. The sound of the sleeves breaking loose sent shivers up my spine.

With the engine now apart, my Dad and I loaded up all the engine parts and headed to Jerry's house near Detroit. It is a trip we will never forgot. As we came around the bottom of Lake Michigan, the freeway had an interesting shine to it. Suddenly we noticed cars around us spinning and going into the ditch. Black ice was the culprit. I think the only two things that kept my truck on the road that I noticed, were that the ice was early enough to slow down and kick in the four-wheel drive, and the weight of that Stearns engine in the bed. After many white knuckled miles we got to Jerry's house and unloaded the engine. Jerry then machined the new heads he had cast from molds that Harry Ziegler let him use and rebuilt everything else on the engine.

With the engine in good hands, I took the wood carcass to

Kip Gustavson, a local cabinet maker who made every piece of wood for my Champion project. Kip is extremely talented and replaced and/or grafted all the wood pieces that had rot.

After Kip finished the woodwork, I took the body and sheet metal to John Reimer. I don't know anyone more skilled in body work and paint than John. Once the car was painted, it was time for upholstery, and I knew that John Reimer had been using a new upholsterer, Dean Vesnefsky. Dean first did was the top on the Stearns, and after helping him install the top, I knew he was the best upholsterer I had ever seen. Dean agreed to do the interior and he did a fantastic job. To give you some insight into how much he cares about

the job he does, he was angry with me when I came to pick up the car with an open trailer. He didn't want any dust getting on his upholstery. He insisted on sealing up any air gaps before I loaded the car on the trailer.

While the engine, body, paint and interior were taking place, the years were flying by, and the rest of the mechanicals were

being worked on. I gave up on ever seeing the parts that were still missing and had them made or bought them from Mark Young.

Early on, I took a trip to Colorado to take pictures of John Zerwick's extremely original Model C. Although I took several hundred pictures, every time I needed to see a particular item, that area was cut off on the picture. I can't tell you how many times we have referred to those original pictures and the others John has sent me over the years. He even sold me his Model S Stearns that I thought would provide me with the parts I was missing. I should have realized the S and C are very different cars. Although many of the parts look the same, they are not.

I took the care to Bruce and Paul Girdauskus, owners of Vintage Vehicles, in Wautoma, WI, to work on the hydraulic brakes, but first they decided to fix the things I did wrong and get it running. When they fired the engine for the first time, they sent me a picture of two exhaust hoses smoking outside their shop and asked me what I thought this was. I responded, "your shop is on fire?" I don't think they found that funny. It was great to hear the silent Knight running in person a few weeks later. They even rebuilt one Johnson Model H carb from the two I had, so the engine has the correct carb on it. The thought that the engine was running again for the first time in almost 60 years was very satisfying.

I emailed pictures of the almost finished Stearns to Dan Alstrup to show to his Mom. He thanked me for fulfilling his dad's dream. I asked if he would consider bringing his

mom to the La Crosse meet to see the car and possibly go for a ride. To my surprise, he asked when I would be there, and said he would try to get his mother there. It was presumptuous on my part, since at that time, I hadn't even driven the car., but I really wanted to take Donna Alstrup for a ride in the car as I had promised, when I bought it.

My job in the asphalt paving business makes taking time off during the summer difficult, when I bought it. But my Dad and I loaded the car (which I had driven once around the block) into the trailer and headed to La Crosse. We got to the meet shortly before the Alstrups and got the car unloaded and hopefully ready

to take a ride. I think the Alstrups were impressed with the end product. When I suggested a ride, Donna was a little hesitant. I said I would just ride around the parking lot. When that lap was completed, I wanted to take her for a longer ride on the road, but there were too many potential issues with the new restoration which might cause the car to not make it back. So, I asked how she felt about pushing the car. At 89 years old, she said she was up for the challenge, so Donna, Dan, my dad and I hit the road. I asked Donna if she thought Richard was looking down on us and she said he probably was. I told her I agreed because the transmission had been giving me trouble on my initial test ride at home, and for some reason, it was operating like a fully synchronized transmission that day. The ride went well and Donna told me that Richard would be proud of what I did with his car. Dan agreed and then asked if I wanted to buy the Hupmobile that was still in their garage. I thanked him for the offer but told him the Stearns was enough.

Now the Model C is a car again. Friends have asked if I am excited about the car being done. To be honest, I enjoy the process of getting a car restored more than I do the finished product.

I didn't restore the Model C myself. Many other talented club members have been invaluable in this project. Jim Wynne provided pictures of his Model C. Howard Lowenthal had valuable information, especially on the Stearns hydraulic brakes. Mark Young sold me parts he bought from Art Aseltine's estate. We joke that with "friends" like Dave Mastous who talks me into buying car projects, I don't need enemies. Dave has provided a lot of moral support



On display at the Iola Car Show

and listened to a lot of whining along the way. It was one heck of a journey and I met some great people along the way. It makes me feel good to bring a car back to life.

Recently, my 1925 Stearns-Knight Model C was back at Vintage Vehicles where Bruce and Paul were correcting some issues with the car. While it was there, the executive director of the Iola Car Show and Swap Meet stopped to visit and asked them if the owner would be interested in displaying my car at the 50th anniversary event in Iola, WI. He offered a spot in their indoor display, so that was difficult to turn down. The Iola Car Show and Swap Meet is one of the largest in America. The Stearns garnered attention not only because most people had not heard of the brand, but also because of the Knight engine.

# Tell us your story!

We are always looking for content for future issues of The Starter!

Send your text and/or pictures to
evan@classicmotormachine.com and linda.meyerriecks@gmail.com.

Don't feel comfortable writing something down? We are happy to give you a call for an interview.

Thank you! Evan & Linda

### What's New on The WOKR Forum?

By Bill Griffin, WOKR Forum Administrator

he WOKR Forum is a great place to find the most current information on WOKR activities and talk with other members. It's also a place to conduct research for your restoration and talk to others that have been 'down that road' before.

Access to the forum is not automatic after joining WOKR, you must still register online.

You can access the Forum on any device by logging into www.wokr.org.

After accessing the WOKR homepage, simply click the link for the Forum and register for access.

You will need to agree to the terms of usage, create a user name, a unique 6 character password, and enter your location. If you are requesting access to the Member's Area, you must also enter your WOKR Member number. Each request is handled individually and it may take a day for your access to be approved. All of our volunteers work hard to give you the best online experience. If you have any questions, feel free to email be directly at YBF@AOL.COM

Our 2022 challenge is winding down and members will be posting photos of their cars traveling the back roads this year.

On the forum you can find past Starter Magazines and many tech tips submitted by other members. Can't find your latest newsletter? We have all the newsletters for the past 10+ years on the forum.

Look for the latest info on our 2023 International Meet as well as articles for each WOKR Meet held over the past 60+years.

The WOKR Forum has over 1550 members. One of our newest members from Canada recently purchased a 1929 WK Model 70B and is having a 'smoking problem' with it. I'm sure all Knight owners have experienced this problem at some time. Log on to the forum and navigate to the 'general discussion' area to assist Ken Parkman with his new70B Knight.

The Parts and Service Listing is a great place to see where other members found specialized parts or vendors that offer the specialized services we need for our cars.

# Still Some Spark in the Old Plugs By Martin Jaeger

hile cleaning out dad's shop one of the many treasures we unearthed was a box of vintage spark plugs. Since the size and shape of them was not in postwar Studebaker sizes I assumed they had to be of the prewar-Knight engine variety.

What do you do with a box of spark plugs that were in the corner of the shop where the roof was leaking? First you clean the grease and rust off a few of the more unusual



looking samples and then contact WOKR member Chad Windham, who debatably has the world's largest collection of vintage and collectable spark plugs, to see what you have. As expected, most were the



common garden variety worth about three bucks each, the exception was the Jupiter, had it been in better shape would have had a modest value. Then what?

Since we were not going anywhere due to the pandemic, I started sorting and found I had a full set of six Champion 0COM plugs and began to wonder if they still worked. The 0COM was introduced in the 1930's and superseded in the 1950's, and after a bit of research, I was able to confirm that they were in fact the correct spark plugs for a Knight sleeve-valve engine. I soaked the set in diesel for a few days and scrubbed them off with an old toothbrush, I changed the diesel twice while cleaning them. There was minimal pitting and the threads looked good, not bad for the age of the plugs. I scrounged up some caps and gaskets, gapped them and set them aside until I had time to install them in the car to see what happened.

The day finally arrived for the road test to see if there was still some spark in the old plugs. I started the touring car and did a short road test to be sure everything was in working order before the experiment and then allowed for a cooldown before removing the current set of plugs.

With the experimental set installed in my test vehicle, a 1925 Willys Knight Model 66 touring, I hit the starter. After a few extra cranks of the engine it fired up with a cough and sputter and



was running. I adjusted the choke a bit and it smoothed out to the usual purr I expect at idle. We took it out for about a 15-minute run and it ran great, so after more than 60 years this set of Champions lived up to their name.

October/December 2022 • The Starter 27

WOKR Inc. 1010 East Bismark Grand Island, NE 68801

CHANGE SERVICE REQUESTED

