From the Editor

Hi Builders,

With the 2014 Christmas and the 2015 New Year’s holidays behind us, most builders have already begun to plan and visualize a new HCR build for the building season. Although the HCR Newsletter featured issues on the completion of Mike Chambers “1904 Oldsmobile Light Delivery” replica and Ray Puser’s “1905 Reo” replica, there are still many HCR Builders carriages we never hear of except for a few pictures in the HCRB Group’s “Photo” section. More of you should show the world your build’s in “Special Issues” of the Newsletter, it is FREE to all Builders.

It is wonderful to hear from someone who is just getting into the HCR Hobby. The excitement I feel when I receive an E-Mail or regular mail from the writer is fascinating. It usually begins with the chance finding of our HCRB Group or of the HCR website from a web search. Occasionally, a phone call from a potential builder will result in an exchange of questions from yours truly, mainly to determine the building level of the caller and suggest a starting point based on their ability.

The HCR Hobby has certainly improved tremendously in the past few years mainly through the exchange of information and ideas of the HCR hobbyists’ through our own HCRB Group and publications as this one and “Engines & Wheels”. All have contributed to our present hobby...
Often the search of finding that just right set of headlamps for use on our builds can be quite challenging and sometimes also very costly. Even when you have found the pair you were searching for, you question if they can be effectively used “as is”, or will they be bright enough. Next, comes the decision, do I really want to modify these and ruin the originality and value of the lamp?

These and other decisions should be entirely left up to the present owner although most purist’s will challenge any decision made along these lines as a “no no”, but wait, what if the modifications needed do not change anything that would permanently ruin the originality or value of the lamp?

I asked myself these same questions concerning two Dietz lamps I had purchased but soon realized after adding fuel oil and lighting the lamp, that a brighter light was needed to drive after dark. As we all know, very often parades do not always end where they start, so an extra step is needed in the way of a trailer waiting at the finish of the parade to transport HCR’s back home safely, as most are not licensed for use on public roads.
To add another factor to the mix, night parades are gaining popularity each year. Many smaller towns allow parade vehicles (both licensed and non licensed) to return to the original staging area of the parade by using back streets with less traffic, providing enough traffic control officers are available and strict rules are followed for safety.

I recently participated in one such night parade and posted this picture on the HCRB Group blog. Interestingly, a member asked about the lamps and that prompted me to do this article on how I electrified the lamps while not ruining the originality.

The lights in the picture are Dietz Union Driving Lamps of the 1900’s. I purchased these on E-Bay. Although not much was paid for the pair (less than $50 each) I really did not want to ruin them by cutting or drilling on the lamp body at all. At last year’s Pre War Swap Meet held in Chickasha, OK each March, I was able to purchase two lamp (fuel reservoir and burner) burner assemblies. Both reservoirs were rusted through with several pinholes, so I got them real cheap (about two bucks each).

Upon returning home from the trip, I dissembled the assemblies to see how I could modify them to suit the purpose. Through the use of the following drawings, I will attempt to explain the procedure. Perhaps a lamp of your choice could be done in a similar way without ruining the overall lamp...These available parts were used in the modifications made ...
For my application I also needed to have a low intensity light for appearance while running a night time parade. This was accomplished with the use of a smaller bulb and socket, also attached to the reservoir hood and would be hidden behind the hood (diagram) and shown is a universal three position headlamp switch.

One position (for parade lighting) would be for providing power to a lower intensity (amber) bulb providing the look of a gas lamp or oil lamp while the second position would provide power to both filaments of the halogen bulb giving the lamp a extremely brighter light for regular night driving.

Using the Lamp body as a ground through the lamp mounting bracket if grounded to frame, allows the use of two wires to the control switch for both systems.

With a bit of change on the driving light circuit and the addition of one more wire to the light, a dimmer switch could be added to the system providing a hi/low beam much like today’s automobiles.

The 2014 night parade gave me the opportunity to test each system, park lamps and headlamps. I am very pleased as the park lamp system emits a dim light as would a gas or oil lamp, while the headlight system emits more than enough street driving light……😊
Buying a MIG Welder

By

Len Casabura

Hi Guys,

I have been welding and fabricating for about 35 plus years, I am not a true expert nor am I college educated in welding but for what I know I might be able to help someone else. I see people in our group and not in our group asking questions about purchasing a welder. What kind is best for them is the first question that comes about. So I did some research, compiled info ( yup I stole some off the web ), and added some of my knowledge to write this article.

Buying a cheap welder vs. an expensive one, sure you see welders a Harbor Freight, Tractor Supply, and on E-bay. Yes they will weld and you can get good results with them. However to obtain a really good weld on thicker metal makes it more difficult for the beginner welder, They are great for the once in a while hobbyist but for people who are building frames for vehicles that are ridden on the highest quality welds a necessity. I guess what I’m saying is don’t buy a machine because it’s cheap. Manufacturer’s claims may vary on what they can weld. They usually claim they can weld greater thicknesses.

Here is a chart to help determine the size machine you might want to purchase.

(This is based on chamfering the material or making a V joint which should be done but that is another article )

<table>
<thead>
<tr>
<th>Max amps</th>
<th>90</th>
<th>110</th>
<th>130</th>
<th>150</th>
<th>180</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness millimeters</td>
<td>2</td>
<td>4</td>
<td>4.5</td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>

For welding sheet metal up to 16 Gauge a small welder should do the trick. Welding on a full frame chassis 130 amp machine should be fine. For parts 6mm and greater you should use 150 amps or more.
Look at what a Machines Minimum Amps are. Most small MIGs have a minimum of 20 amps which would be more usable for say 22 gauge steel. Any welder with minimum of 30 amps could not be used on sheet metal. Some really cheapo units have like 80 amps minimum which could be a real problem doing light work. Some expensive machines will not produce amps under 40 amps they are designed for high production.

When looking at a quality welder Yep the price goes up. And the ease of use gets better. They are a lot more forgiving to use than a cheapo unit. The better the welder the better the working components are including the electronics. The more you spend the nicer the welder gets. I prefer a welder that can do more than what I usually work on. This way I do have to upgrade constantly, and I still have the same welders 20 years later. Both of my machines are 250 amp, Miller Syncrowave, TIG runner 250 and Lincoln Wire Matic 250 MIG.

The importance of a duty cycle which is the percentage of 5 to 10 minute period that you can weld before the welder over heats. For example if a welder has a 60 % duty cycle @ 100 amps over 10 minutes the machine can be operated without stopping (for a Beer) at 100 amps for 6 minutes before it will need to take a break (for a Beer) for 4 minutes. Usually duty cycle is not important for doing small repair work as the amperage tends to be low, (high duty cycle at low amps) most of your time is spent setting up than actually welding. Cheaper welders without cooling fans tend to have low duty cycles which can be really annoying when the over heat and cut out.

Gas or no Gas

Welds need a shielding gas to displace the oxygen around the weld process. Flux core burns the flux that’s inside it to create the inert gas to shield the weld. This creates a dirtier weld which makes it harder to see the weld puddle also making more slag to clean up afterwards . The upside is it is a better wire for outside use being the wind has less of a chance of blowing the inert gas away for the weld. And it’s also cheaper.

Welding with a shielding gas is a great deal cleaner a cleaner burn less slag and bb’s around the weld and best of all it is easier to see the weld puddle which will make it less of a chance of producing BIRD TERDS. The gas is more expensive to operate and becomes a little tricky outside in the wind.
These are a few things to consider when purchasing a welder. Most of this may seem like a bunch of BS and I probably bored the Crap out of you so I will end this article with always use the proper SAFETY equipment. Seriously look at what you are buying, don’t impulse shop, put some effort into your purchase, do some research, shop around.

I hope this boring article helps you.

HAPPY BUILDING

Len C Highland NY

X Word

Across
1 Everything
2 carriage build
4 Ought to
6 When stopped
7 stop pedal

Down
3 cars we build
5 To possess is to _ _ _ _

Make sentence using words…

Answers on last page
Tanning Hides

By

Judith Smith

The following instructions are for Indian tanning hides.

Yes, I know this is about building cars, but I thought that a hand tanned hide would go well with the HCR cars. I do not like the chemical way leather is processed today, so…..

This is the way I tanned my deer hide!!

The fresh skin is immediately soaked in water for several days, usually from 3 to 6. The hair is cut off, or at least as much as possible. A lye made of wood ashes is used for removing the hair from the pelts of elk, moose and cow (not necessary on deer, which was my choice).

The next step is to take the skin from the water and put it over a graining log. This is a log from which the bark has been removed. Note: Cottonwood is the best and should be cut during the winter. It should be 8' long by 10 - 12" in diameter, seasoned for 6 months before removing bark and cut to a finished length of 6'. I compromised and used a 14" PVC pipe. One end is on the ground and the other end is propped up to waist height. It is stuck obliquely into the ground so that its upper end is waist high. Once draped over this beam the particles of flesh, fat and sinew are scraped off. An implement specially designed for this purpose is used. In olden days it was a heavy handle of elk horn with an end like a small hoe. To this a flint scraper was tied, but in later times a steel blade was substituted, a lawnmower blade sharpened on one side to a 90-degree angle with the ends taped so it won't cut you. I happen to have some old DRAW SAWS, so I used those. When this had been done the skin was reversed and the hair removed with a beaming tool. This was once made from the cannon bone of a deer, and it had two sharp edges. When the stone and bone age vanished, as the settlers came in, this tool was made of wood and a long iron blade. When the hair stuck, it was wet with moist ashes which loosened it so that in a short time it could be removed. Most skin workers took the hair off and then turned the hide over for the fleshing process but whichever way used, great care was taken not to work a thin spot in the skin.
A good skin is of uniform thickness, though perhaps we should say thinness, for soft skins were considered the best. When the skin is thoroughly scraped, de-haired and clean, it is washed in clear water, wrung out and then stretched on a wooden frame, being laced to it by leather thongs or bark cords. The skin should be almost as tight as a drum head. Now comes the trick of mixing brains with this tanning business,--and the old Indian actually thought it took brains to do it right (and yes I did do it right. GROSS). A batter of brains is now rubbed into the skin until it is thoroughly saturated. If the skin has been worked and twisted before "framed" the process does not take long. NOTE: Each animal's brain is just enough to tan the hide. Brain paste is prepared by splitting the skull, removing its contents and then dissolving them in warm water. Sometimes the water is quite hot, but at all events the mass is crushed in the fingers and worked into a fluid paste. If brains are lacking, liver paste is added; the two go well together. Once the brains were in the skin and the hide was removed from the frame, it was soaked again and wrung out.

The wringing process is IMPORTANT, and it consists of twisting the skin length wise and then looping it about a tree only to twist it again by means of a stick thrust through the loop. When dry it is stretched out, pulled in all directions thrown back in the water, wrung again, twisted again, pulled again, only to be thrown in more water to have the process repeated. (Note: do this SEVERAL times!!) The work applied to the skin is necessary for removing the cellular filling, and to produce a clean sheet of pelt fiber. When this is achieved, and the skin is soft, pliable and white, it is seamed up in the form of an irregular bag with crossed sticks thrust in the mouth to keep it open.

If you know any tobacco farmers, the smoking process is much easier but alas, I had to do it the hard way. A smoke pit is now dug and in it a fire is built. Rotten wood, punk, cobs, chips of oak, beech or com cobs are thrown in upon the coals and a smudge is started. The bag is now inverted over this. A cord holds the bottom of the bag to a limb or a pole. Care must now be taken that the fire underneath does NOT blaze, and that the smoke fills the bag evenly. To guard against an uneven flow of smoke, ALL holes must be sewn up. Inspection must be constant, and when the pelt is of the right color, yellow, tan or brown, it is taken from the smudge and laid away, the smoked surface being folded upon itself. A few days of this sets the color and finishes.
This is the so-called "Indian Tan", though more properly it is simply "Indian Worked", as no tanning solution such as is used in leather making having been employed. Buckskin is warm and pleasant to wear, and it outlasts any cloth ever made. It is the ideal material in the wilderness for it does not tear or allow thorns to puncture it. It's one drawback is that it wets easily, but even so it is soon dried and with a little rubbing, is restored completely.

The only drawback to these instructions is that it takes SEVERAL days to complete a hide, but if you follow them, you will have a beautiful piece of buckskin that will look great and it took nearly two weeks to do it right. The more the hide is worked the better.

Robert and I decided to dye this hide black. We will use it as seat upholstery.

I have taken only one picture. The hide is still incomplete but I am still working at it…

Judy

Picture from the Past
Below you will find the information for the Pre War Swap Meet in Chickasha, OK in March, 2015 and a link to a cute video on the Swap Meet

25th Annual International Pre-War Swap Meet
Grady County Fairgrounds, Chickasha, Oklahoma
"Where the East meets the West"

Chickasha, Oklahoma is located in the center of the U.S. on I-44 just off of I-40 & I-35, only 35 miles SW of Will Rogers World Airport in Oklahoma City. It is easily accessible from anywhere in the world. From Oklahoma City, take I-44 (H. E. Bailey Turnpike) west to the 1st Chickasha exit (Exit 83), turn right (west) to the Grady County Fairgrounds (about a mile on your left).

The meet has the largest selection of brass era parts anywhere. It is limited to automobiles, parts, transportation items pre-1945. There is plenty of free parking, and admission is free.

Next year the meet will be held on Thursday, March 19th and Friday, March 20th, 2015.

The Fairgrounds underwent a multi-million dollar renovation in recent years. The North & South Buildings were totally remodeled with all new restroom facilities. Plans were approved for a new phase of expansion that began this year. Buildings are to be built in the rodeo grounds area east of the swap meet, along with parking lots. We are uncertain as to the completion date of these new buildings and grounds renovation. This new expansion of the facilities will continue to enhance the meet, but with the construction, we are uncertain of the time line. We will strive to keep everyone informed on the progress.

The success of the meet has been a joint effort of Joe, Mike, Susie & Ryan Erdland. Joe had collected antique cars for over 60 years and started the Chickasha Antique Auto Club with the 1st meeting in his living room. His swap meet experience went back to the 1960’s with his involvement with the Lawton Antique Car Club, and their Swap Meet in Apache, Ok. He was an instigator in starting the 1st swap meet ever in Chickasha in 1969.

The Chickasha Pre-War Swap Meet is sponsored by The Old Pueblo Touring Association and is not affiliated with any other swap meet. The swap meet is an annual event that will always begin the 3rd Thursday in March.

https://www.youtube.com/watch?v=ThytHKXOYI8

E-Mail

The January/February 2015 “New Years Issue” featured a new approach on HCR building in Alan Manning’s CDO build. It featured the use of a hydraulic powered rear end and the adaptation of dirt bike wheels to his powered rear axles. Not much was said at the time simply because the work was “in progress”. Recently I received an E Mail containing more information on Alan’s really innovative approach. On the following page Alan further explains his unique differential adaptation to his CDO build…
Hi Lee,

I have just received the HCR newsletter, thanks for including my contribution. I will try and explain how I reworked the front Honda dirt bike wheel hubs to fit the small diff. I don't know what the diff came off, maybe a golf buggy or one of those airport buggies, my brother got years ago from a bike shop that was closing down. I lengthened the housing and axles by 6.5 inches on each side to fit the C.D.O. The ratio is 2:1.

The differential is a “full floating” type, in that the hubs are running directly on the wheel bearings, the axle passes through the center and is splined to a flanged cap on the outside. This is similar in miniature to large trucks. The idea is that the axle shaft does not carry any of the vehicle weight. The differential has 4 wheel lug bolts as part of the hub and brake drum.

To attach the motorbike wheels, I removed the m/c bearings and “gutted” the material inside the hub that had supported the inner bearing. This was so as to clear the axle drive flange on the outside of the differential. I then made up a steel sleeve that just press fitted inside the motorcycle brake drum with a 1/2 inch thick flange that matched to the diff wheel studs.

This was all machined on the lathe to retain accuracy. I then drilled radially from the motorbike hub through into my sleeve to fit 9 X 6mm setscrews and nuts. These will provide positive drive and retain the wheel to the sleeve.
I am using an 11 horsepower Briggs & Stratton engine, this is fitted with a bell housing to adapt to a small gear pump. The control valve is mounted on the right side of the body beneath the seat area. This allows the forward / reverse lever to be in about the same position as the original car. The valve has a forward detent, a neutral detent and reverse is spring return to neutral once the handle is released, reverse will probably be at reduced speed.

There will also be a “neutral safety switch” in the starter circuit so the engine can only be started with the lever in neutral. The drive motor is a Char Lynn model #101 1035 009, made by Eaton. These motors are an amazing, small package with great torque and performance. We use many at work, mainly on conveyor belt drives on hydraulic equipment. The differential came with a sprocket that I machined down to a flange, this mates up to another flange on the motor shaft with an UHMWPE plastic spacer. The motor is mounted on a simple torque arm welded to the diff housing. The only other parts are a return filter and 5 gallon hydraulic oil tank, once that is fitted I will take the car into town and get the hoses made.

Kind Regards,
Alan Manning

Alan, Thanks for your most detailed reports on your ongoing build. Please keep us posted on your progress…

Lee
TOON

Jars, Jars and more Jars

While desperately trying to forge another HCR out West; Phoenix, Arizona to be exact, Member Ray Puser finally admitted to this editor that while the amount of “Get A Way’s” he took in 2014 was without a doubt very enjoyable but he is completely out of money. “No more” he stated, “I even went back and looked again, but the can was empty”. In his own words with his head hanging he stated “The well Is dry, there just is no more”…

In order to fund the new build, Ray’s faithful wife Tina, has graciously agreed to put their massive jar collection up for sale. The collection consists of “Ball” jars, “various colored” jars and other “just plain jars”. Ray disclosed that any money received for the jars would only go towards the build of the new HCR and not to another “Get A Way”…

He went on to say “Any reasonable amount will be accepted, shipping is not a problem as it is perfectly fine if the jars sold be picked up here”. Extra savings if more that 200 are purchased at one time and I will even help to load. Please look at the quality shown in the pictures below and bid…

Please make checks payable to Ray’s Build Funds…

Thank you for your gracious support…Ray

😊
In Closing

Not much more to report this time except this is an anniversary issue of the HCR News. Going back to July 4, 2009, seems like yesterday but time moves on as we all know. I am looking forward to the Pre-War Swap Meet taking place in Chickasha, Oklahoma March 19th & 20, 2015. Those of you within the driving area that have never attended this meet are really missing out on this annual event. This will be my sixth year attending and have enjoyed them all.

Hopefully I’ll see you there this year,

Lee

All HCR carriages should have parking brakes