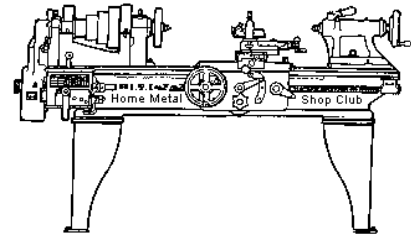




July 2019

Newsletter

Volume 24 - Number 07



<http://www.homemetalshopclub.org/>

The Home Metal Shop Club has brought together metal workers from all over the Southeast Texas area since its founding by John Korman in 1996.

Our members' interests include Model Engineering, Casting, Blacksmithing, Gunsmithing, Sheet Metal Fabrication, Robotics, CNC, Welding, Metal Art, and others. Members enjoy getting together and talking about their craft and shops. Shops range from full machine shops to those limited to a bench vise and hacksaw.

If you like to make things, run metal working machines, or just talk about tools, this is your place. Meetings generally consist of **general announcements**, an **extended presentation** with Q&A, a **safety moment**, **show and tell** where attendees share their work and experiences, and **problems and solutions** where attendees can get answers to their questions or describe how they approached a problem. The meeting ends with **free discussion** and a **novice group** activity, where metal working techniques are demonstrated on a small lathe, grinders, and other metal shop equipment.

President <i>Brian Alley</i>	Vice President <i>Ray Thompson</i>	Secretary <i>Joe Sybille</i>	Treasurer <i>Emmett Carstens</i>	Librarian <i>Ray Thompson</i>
Webmaster/Editor <i>Dick Kostelnicek</i>	Photographer <i>Jan Rowland</i>	CNC SIG <i>Martin Kennedy</i>	Casting SIG <i>Tom Moore</i>	Novice SIG <i>John Cooper</i>

This newsletter is available as an electronic subscription from the front page of our [website](#). We currently have over 1027 subscribers located all over the world.

About the Upcoming 17 August 2019 Meeting

The next general meeting will be held on 17 August at 1:00 P. M. at the [Bayland Community Center](#), 6400 Bissonnet Street, Houston, Texas 77074. **Note that this the 3-rd Saturday of the month and is for one time only.** *Norm Berls* will give a presentation "A Fancy Tool Grinding Jig".

Visit our [website](#) for up-to-the-minute details, date, location maps, and presentation topic for the next meeting.

General Announcements

[Videos of recent meetings](#) can be viewed on the HMSC website.

The HMSC has a large library of metal shop related books and videos available for members to check out at each meeting. These books can be quite costly and are not usually available at local public libraries. Access to the library is one of the many benefits of club membership. The club has funds to purchase new books for the library. If you have suggestions, contact the [Librarian Ray Thompson](#).

We need more articles for the monthly newsletter! If you would like to write an article, or would like to discuss writing an article, please contact the [Webmaster Dick Kostelnicek](#). Think about your last project. Was it a success, with perhaps a few 'uh ohs' along the way? If so, others would like to read about it. And, as a reward for providing an article, you'll receive a free year's membership the next renewal cycle!

Ideas for programs at our monthly meeting are always welcomed. If you have an idea for a meeting topic, or if you know someone that could make a presentation, please contact Vice-President Ray Thompson.

Recap of the 13 July 2019 General Meeting

By Dick Kostelnicek, with photos by Jan Rowland



15 members attended the 1:00 P.M. meeting at the Bayland Community Center, 6400 Bissonnet Street, Houston, Texas 77074. There was 1 guest in attendance, Brian Sande. There are 33 members in good standing with the club.



Brian Alley (right photo) conducted the meeting and filled in as club secretary.

Emmett Carstens voiced his desire to be relieved of his long standing treasurer position. *Gary Toll* voiced his interest.

Presentation



John Hoff (club member) showed several of his tool and die projects. John explained how to provide just the right amount of clearance between male and female die parts in order to cut or alternatively stretch the metal. He also showed a video on one of his flying cutoff dies used to



separate individual pieces of metal sheet used as step roofing flashing from a continuous roll of stock.

Safety Moment

A graphic safety video depicted the types of accidents that occur when a partner is not in synchrony with the activities of fellow worker.

Show and Tell



Richard Douglas showed some tooling that he bought on Amazon's web site at fantastically low prices (left photo). He also described his experience attending a developer's show in California where many [Youtube presenters were assembled](#).

Brian Alley described the use of a safety jack (right photo) that he plans to replicate. They are used to reinforce nitrogen operated raising piston when racing cars are being serviced during pit stops.



Martin Kennedy showed a passenger foot rest (left photo) that he made for his Vespa ET4 motor scooter. He described the operation of a push button puzzle that he made. The puzzle is a challenge to machine since it includes precision parts. Plans for the puzzle are at the end of this newsletter. He showed a video of wood handles and ends that were turned on his CNC metal lathe (right photo). The parts will be used to make campfire biscuit



cookers for a Brownie Troop.

Dean Eicher showed a terminal crimping fixture (right photo) that he recovered from industrial disposal and only needed minor adjustment.



Problems and Solutions

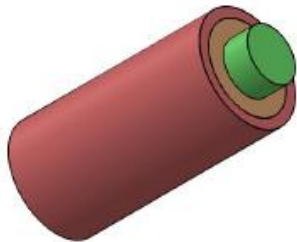


Ray Thompson asked how to re-magnetize the split end of a tack hammer (left photo). *Dick Kostelnicek* suggested wrapping as many turns as possible of #12 or so of copper wire around just one tang of the split tack hammer's pickup end and momentarily connect the wire to a 12 volt car battery. Caution: hydrogen and oxygen can surround an over charged car battery and an electrical spark could ignite these gasses. Do this operation wearing proper safety equipment, and keep your head well away from the battery.

Articles

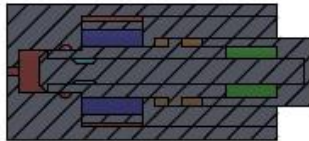
Push Button Puzzle

By Martin Kennedy



Puzzle based on mechanism of ball lock pin

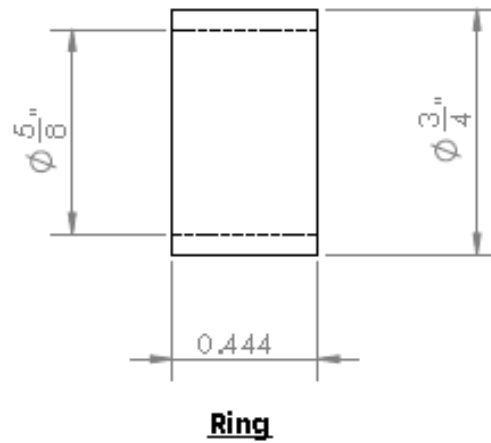
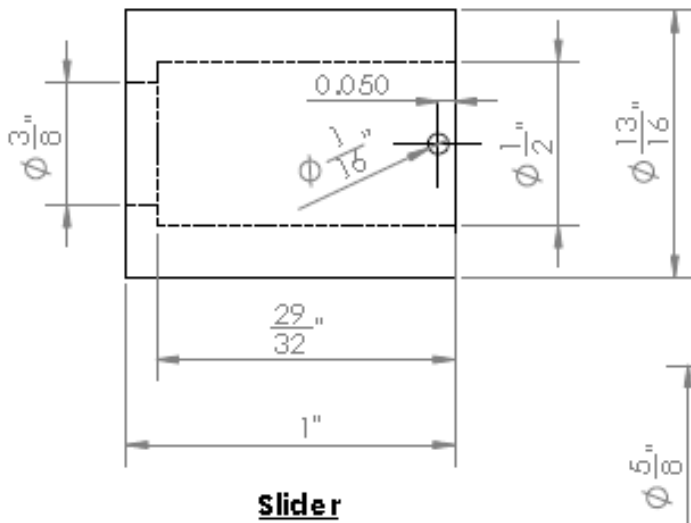
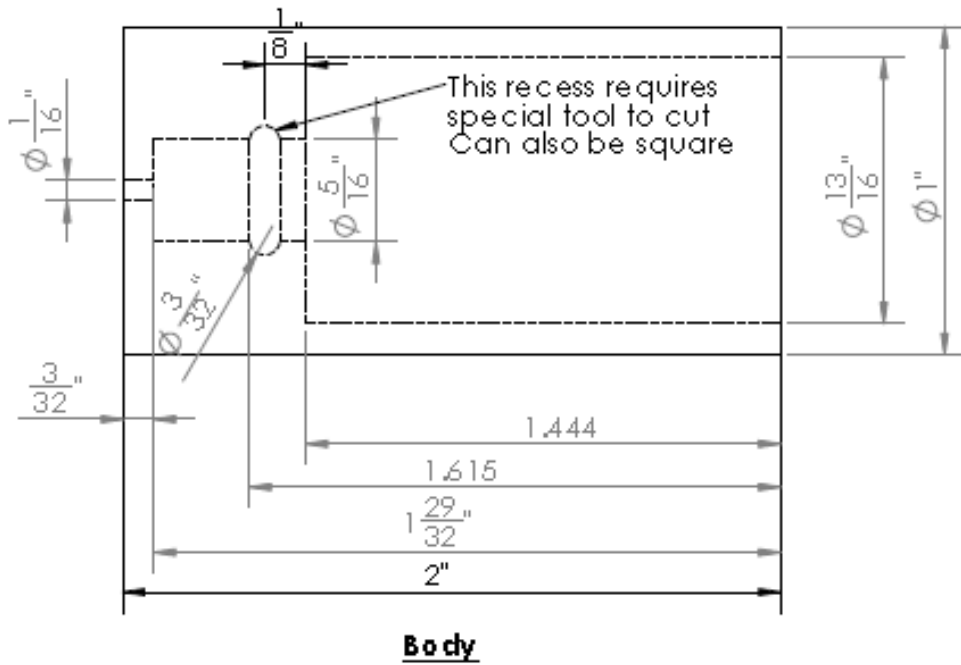
Precision machining is required. Making working ball lock pin is challenging!



**** SPOILER WARNING ****

To open, shake to move slider out (0.100") and use paper clip in small hole on slider. Pull slider out with paper clip while pushing button.





Note: Allow 0.001" clearance between parts

