

Accordion-concertina Repair and Technicians' School (ARTS)

Under the direction of

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Announces

Accordion Tuning Weekend Workshop

February 18-20, 2005

\$200.00

An Uncommon Opportunity Study at the only Research and Specialty Center in the USA

Tuning is one of the most important elements contributing to the value of an accordion.

It is also an expensive issue when you need a repair technician.

Begin/improve your do-it-yourself experience at this workshop event.

No prior experience is required.

This is an introductory/review workshop

Many people have unclear or mistaken ideas concerning tuning and reeds, and appropriate terminology. Students of the workshop discover many factors that are involved in reed-quality classifications and how they affect the instrument and the player. Reed systems (internal organization), "Dry" (concert) and "Wet" (Continental and Musette) tuning are topics that will be studied in actual hands-on procedures. Students will be encouraged to learn tuning by ear, but will also have opportunity to use a variety of tuners available at the school.

You'll have all the advantages:

- Experienced Instructor
- Tuning Equipment of various kinds
- Reeds, reed-blocks, complete instruments
- Criteria Handouts
- Procedural Handouts
- Supervised help

Basic tuning procedures: Sharping and flattening the pitch

Basic tuning techniques, power and hand tools
Learning instrument standards
Finding the right pitch by “ear” and with help of tuners

Instruments of ARTS for your use: complete instruments
Bring your own, optional (but not your best)

Focus will be on Chromatic Instruments*: Piano- and Chromatic Button Accordions
(made 1960s or later)
(* English concertinas are excluded from this workshop)

Diatonic Instruments Permitted: Button Diatonic Accordions (One-row only)
Hex Anglo Concertinas (*Modern instruments only)

Schedule*

(*Approximate only. Depending on the experience of class members, time allotted to projects may vary.)

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|----------------------|----------------|---|
| Friday (February 18) | 10:00 AM-11:00 | Set-up and Get Acquainted |
| | 11:00-12:00 | Quick tour of A World of Accordions Museum |
| | 12:00-1:00 | Lunch Break (Bring your own, or eat out) |
| | 1:00PM | Reed qualities and consistency issues “There is no perfect instrument Tuning requires practice Establishing expectations Loose-reeds work: Chromatic (Duraluminum with steel tongues) You will: Sort by pitch You will: Sort treble and bass reeds Start with a clean reed Naptha wash |
| | 2:00 | Basic Tuning Techniques (handout) Hand tools identified You will: Sharp and flat a reed We will: Observe errors in working a reed tongue You may opt to repeat the exercise using power tools (Dremel) Understanding tuning problems Pre-existing conditions that affect tuning Air-flow and dynamics affect tuning Distinguishing tuning , waxing, leathers issues You will: alter the given pitches of a double-tongue reed Sharp and flat a reed by 4 and 5 pitches Extreme sharpening and flattening |

4:00 You will: tune to a predetermined pitch
Concert Standard
Frequencies Chart (handout)
About nomenclature
Using a tuner

6:00 Session ends
Homework assigned: repeat or complete projects

Saturday (February 19) 9:00AM

Questions
Homework check
Do you understand octave-couplings: shifts?

10:00-12:00 Tuning to a related pitch in the standard of a particular instrument
You will: tune Unisons or Octaves on Provino table
You may: Use a tuner

12:00-1:00 Lunch Break (bring your own or eat out)

1:00- Listening for Upper Partial Frequency
You will: Tune at the Octave, loose reeds
Tuning without a “beat”
Tuning in Equal Temperament

2:00 Tuning for a Reed block
Inside vs. outside tongue
You will: tune double-tongue reeds
Tuning a Unison
Tuning an Octave

4:00 Waxing loose reeds onto a reed block
Preliminary waxing instructions
Preliminary leathering/releathering instructions
You will: observe differences in pitch:
Loose reeds
Waxed on the block
Installed in the instrument
By temperature, after “resting”

6:00 Session ends
Homework assigned: making a simple reed holder

Sunday (February 20) 9:00AM

Questions, observations
You may try tuning a 7-tone scale
Observing “beats” of P5, P4

| | |
|------------|--|
| 11:00 | Tremolo Tuning (double middle) Uniform vs. Proportional |
| | OR (class-majority choice) |
| | Diatonic reeds Finding the correct diatonic reed tongue Tuning a 7-tone scale |
| 12:00-1:00 | Lunch break |
| 1:00 | What to look for if your tuning efforts don't work Tapping the rivet Consider cracked reed-tongue |
| 2:00 | Rebluing tongues after tuning Don't be shocked when you recheck pitches Completing your projects* (*You may not be able to finish all projects) |
| 4:00PM | Session ends Collect your materials Clean-up |

We will not cover: long plate reeds
Zinc plates, brass tongues, or any materials other than Duraluminum/steel
Extended-range, quint reeds

You should bring the following items, if you have them:

- Work-apron or smock
- Gloves: white cotton, latex diagnostic
- Goggles or eye-protectors
- Tuning tools set
- Swiss-pattern files set (small and inexpensive)
- Basic tools kit
- Dremel power tool with green and /or pink grinder wheels
- Tuners
- The instrument you wish to work on (optional): one only
- Soldering (waxing) iron with rheostat (wood-burning tool may be used)
- Reed holding device (we will make a simple one)
- Writing supplies, loose-leaf organizer
- Tape recorder to document your work

Items you can purchase at ARTS:
Goggles

Gloves

Tuning kits

Swiss-pattern files set

Tuning Standards book

Suggestions:

Work as quickly as possible, but be as precise as possible

Repeat exercises as time permits, to develop a “practiced hand”

Take short “breaks” (we provide coffee and tea) to refresh perception