



# Schulmerich Handbells

## Care & Maintenance Manual for New Handbells Only

[www.SchulmerichBells.com](http://www.SchulmerichBells.com)

Effective June 1, 2011

# GUIDE TO YOUR NEW AMERICAN-MADE SCHULMERICH HANDBELLS

## INTRODUCTION

Welcome to the growing Schulmerich family! We put a lot of ourselves into our handbells, and it delights us to know that you will soon be using them to make beautiful music, enjoy team building and have great fun.

Your new handbells are American made, warranted for life, and the finest handbells available anywhere. Schulmerich's Lifetime Warranty covers the entire handbell, from the tuned Bell Casting and the Clapper Assembly to the Handle. We will give you the service and support you need, for as long as you own your Schulmerich handbells. No wonder Schulmerich handbells are played by more churches, schools and institutions than any other. We are the oldest existing manufacturer of English handbells in North America, having started in 1962. We are proud that you have chosen to play them, too.

— Team Schulmerich

**This manual is designed to give you all necessary information on your *new* handbells. For information on any updates, please visit us at [www.SchulmerichBells.com](http://www.SchulmerichBells.com).**

## INSPECTION UPON RECEIPT

Please take a few minutes to check your new handbells for shipping damage. It is the responsibility of the recipient to file a damage claim if such is necessary. A tool kit and a specially treated polishing cloth in a plastic container are also included, with complete sets of handbells. We suggest you review this instruction bulletin, and note pages of helpful illustrations. A parts diagram is included for your ordering convenience, should the need arise.

## CARRYING CASES

Your cases are beautifully designed to transport or store your handbells. They also provide additional storage space for maintenance tools and materials furnished with your handbells. Although your handbells are received in plastic bags, please do not use these bags for continued storage as this may harm the highly polished finish on the handbells. To maintain this jewel-like finish on the outside of the handbells, it is important to avoid contact with rough or coarse

materials, or touching them with the bare hand. If you do not own Schulmerich custom-designed carrying cases, we recommend that storage bags or pouches of soft materials, such as pacific cloth, flannels, or velvets be made for your handbells. We also recommend that your cases be aired (in a dry environment) once a year.



Innovative Ring 'N' Roll Handbell cases are now provided on the first, second, lower third, lower fourth, and lower fifth octave cases.

## GETTING TO KNOW YOUR HANDBELLS

As you examine your handbells, set a large one aside (a G4 provides good visibility of the internal parts and construction), so you can become familiar with some of its unique parts and features.

The Soft Touch™ Plastic Handle of polypropylene features inlaid enharmonic musical note designations and a campaniform (bell silhouette). The campaniform shows the strike point side of the handbell, and is also used for rapid identification for those who use uneven Restraining Spring tension adjustment. Two locating pin holes in the Yoke Block, to which the Handle is securely riveted, indicate the relationship of the Handle to the striking plane of the Clapper Head.

The striking plane of the Clapper Head (selected at the factory as the point of "best response" which, when used as the strike point, creates the clearest tone) is fixed by an Indexing Pin in the casting to a hole located in the Clapper Yoke. As each handbell is individually tuned, the optimum striking plane is permanently recorded by scribing an index mark along the inner surface of the bell casting. Schulmerich handbells provide an Indexing Pin (a

Schulmerich exclusive), inlaid enharmonic note designations with campaniform marking and Soft Touch™ durable Handle.

Note the raised crown, or bell "tang," at the top of the handbell. This Schulmerich exclusive helps produce greater amplitude.

Next examine the plastic Handguard (Master Touch™ Disc) and notice that it carries the same plastic-coated note designation as does the Handle. This permits identification of the handbell, whether the playing preference is to lay the handbells on their sides or to stand them upright on their mouths, or by reading from the Handle or Master Touch™ Disc respectively. This musical note system is in direct reference to that of the piano keyboard. (Example: Middle C is C5)

Now look into the mouth of the bell casting and notice the unique Select-A-Strike™ Clapper Head that allows you nearly unlimited freedom for voicing your handbells. (Or, you may have selected the Quick-Adjust™ Clapper Head, which can be easily hand adjusted for Soft, Medium or Hard voice settings) See page 5 for a drawing of each Clapper Head.

Select-A-Strike™ Clapper Heads are adjustable by securing the Clapper Head against the casting wall, then rotating the Clapper Screw slightly counter-clockwise until the Clapper Head is free to rotate. Rotate the Clapper Head to the desired position and secure the Clapper Head against the casting wall while retightening the Clapper Screw. Quick-Adjust™ Clapper Heads are adjustable without loosening the Clapper Screw.

On all bells C8 and below in pitch, three decidedly different impact tones (timbres) can be achieved. This permits a selection of mellow or brilliant tones to be generated in your handbells, according to your tonal preference. These options provide a soft mellow strike tone designated by the letter "S" imprinted on the Clapper Head insert, a medium tone designated by "M" on the insert, and a strong brilliant tone designated by "H" on the insert. Try it!

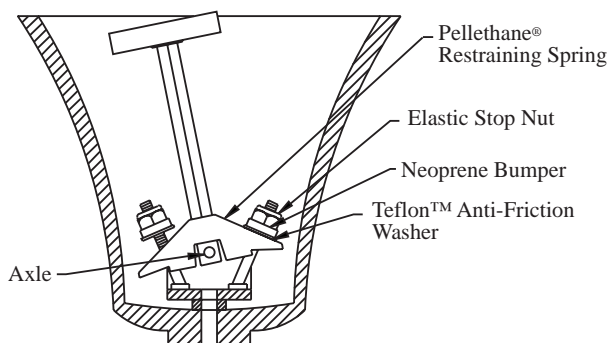
It is far better to have handbells which musically have the same timbre than to have handbells which are set on similar Clapper Head settings to achieve a special effect.

Try our Clapper Head and listen for these differences in timbre. First, with the felt material (G#4 and lower bells) ringing the bell (the "S" plane of the Clapper Head in the striking plane), ring the bell softly and then with a hard strike – while noting the low, mellow tones which result. Next, loosen the Clapper Screw which holds the Clapper Head, using the screwdriver furnished for this purpose – or just rotate it, if you have Quick-Adjust™ Clapper Heads –

and turn the Clapper Head so that the "M" plane of the Clapper Head is oriented to the strike point. Adjust the Clapper Head so that the center of the slot or hole in the "M" plane will contact with the side of the bell casting. Then tighten the Clapper Head securely and again strike the bell casting softly and then with a hard strike, and note the medium, mellow tones which result. Now, loosen the Clapper Head again, align the "H" plane to strike, tighten the Clapper Screw, and again strike the bell and note the hard, brilliant tones which will result.

Handbells higher in pitch than G#4 are equipped with Clapper Heads whose design does not include a felt striking position. As we progress higher than G#4, it is necessary to use harder impact materials to excite the higher tonal frequencies. Therefore, in ascending order, the Clappers Head contain smaller slots or holes, or none at all in bells C#8 and above, in order to generate these higher frequencies. This is opposed to that of the larger handbells where the purpose of the felt is to subdue the extraneous higher partials and thereby achieve a dominant strong fundamental and twelfth partial. Even in smaller handbells, small changes in strike tone can be achieved by striking on the thicker or thinner areas of the Clapper Head since the thicker areas, being more resilient, provide a softer striking surface.

Now, look further down into the handbell and examine the unique Micro-Adjust control at the bottom of the Clapper Shaft. Note the two Stop Nuts (a type of high-friction nut that holds the position to which it is turned) which restrict the movement of the Pellethane® Restraining Spring secured to the bottom of the Clapper Shaft.



Note: Adjusting the stop nut downward forces the Pellethane® Restraining Spring down, thereby moving the clapper further from the opposite side of the bell. Downward or upward adjustment of either or both nuts offers minute control of the clapper position.

Move the Clapper Head lightly to one side of the handbell and, using the appropriate nut driver furnished (bells G2-F#3 use 3/8", bells G3-B5 use 5/16", and bells C6-C8 use 1/4" nut drivers), turn the Stop Nut (the Stop Nut nearest you when holding the handbell in the proper ringing posi-

tion) counter-clockwise and you will notice that the Clapper Head moves closer to the side of the bell casting, thus requiring less effort to strike the handbell. Now release the Clapper Head and turn the Stop Nut clockwise (downward) and you will see the Clapper Head move away from the side of the bell. The purpose of adjustment is to permit the selection of the desired Clapper Head restraining action to suit the touch or feel of any handbell ringer. Uneven adjustment of the Stop Nuts can be utilized to give an easier forward strike, or restrict the backstroke to avoid unwanted back rings.

Obviously, excessive downward adjustment of the Stop Nuts will require excessive effort to strike the handbell since the Clapper Head is held too far from the side of the bell casting. Excessive downward positioning of the nuts can overstress the Pellethane<sup>®</sup> Restraining Spring to a point where failure could occur. Position Stop Nuts downward only as far as necessary to effect a smooth, easy and controlled strike. To achieve uniform tension settings throughout the handbell set, it is generally better to adjust for what is best for the handbells, instead of what is preferred by individual ringers. Whatever method you use, make certain that each handbell can pass the following tests:

- Check for a full dynamic range
- Check back ringing
- Check the "shake" technique (not applicable to bass bells), performed by striking the Clapper Head against both front and back casting walls
- Check that the Clapper Head strikes only once when playing a Martellato (table technique)

## CARING FOR YOUR BELLS

The following suggestions will help you get a lifetime of satisfaction from your Schulmerich bells:

Never put your handbells away after playing or handling them without first having wiped them clean with the specially treated polishing cloth furnished as part of your accessory kit. Make this a rule and a habit. If left on, finger and hand marks, due to body salts and acids, will quickly etch and mar the bright, polished finish. The handbell should be dry before using the polishing cloth. If the handbell is badly tarnished, a slight moistening of the tarnished surface by blowing on it will help. Rub the surface briskly with the outside of the polishing cloth, and then with the brown cloth, using the hands against the outside chamois section of the cloth to protect them from jeweler's rouge. Coloring on the hands is harmless and is easily washed off.

Should a handbell become so badly tarnished that it cannot be cleaned with the polishing cloth, cleaning with a polish such as Simichrome<sup>®</sup>, available from Schulmerich, will remove most stubborn tarnish. When using polish, apply with a clean soft cloth or cheesecloth. Do not allow the polish to dry. Remove immediately following application.

## DISASSEMBLY

If disassembly of a handbell is necessary or desired for some reason, the hex ball driver furnished is the only tool needed. A look at the diagram on the opposite page shows that the entire handbell assembly is held together by means of one Handle Cap Screw through the Handle Block, through the top of the Handbell, and then into a threaded hole in the Yoke. Disassembly is performed by inserting the ball driver into the socket of the Handle Cap Screw above the Handle Block and turning the Handle Cap Screw counter-clockwise until its threads are free of the threaded hole in the Yoke.

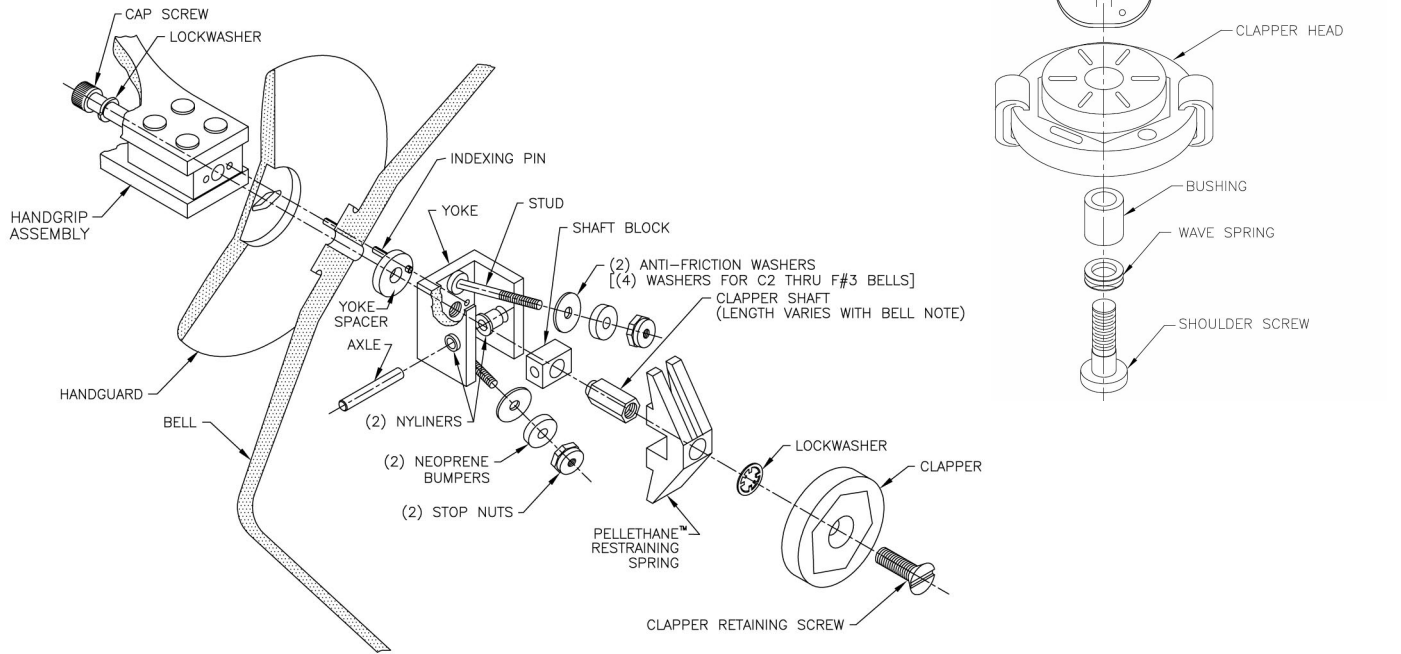
## REASSEMBLY

To reassemble (see page 5), replace the parts in the order illustrated in the diagram. Insert the Handle Cap Screw with the Clapper Lock Washer beneath its head, through the center hole in the Handle Block. Place the Yoke Spacer over the extension of the Handle Cap Screw and, holding the Yoke Assembly by its shaft, turn the Yoke Assembly clockwise, thereby drawing the screw extension into the threaded hole in the Yoke. With these parts engaged, align the hole in the yoke with the extension of the Indexing Pin beyond the inside of the bell. Push the parts together, so that the Yoke and Handle are indexed by the pin and complete the tightening of the Handle Cap Screw until it is drawn snug. Note: Over-tightening of the Handle Cap Screw may (especially in the higher range of handbells) result in a deadening of the bell tone – so draw the Handle Cap Screw up snug, but not so tight as to deaden the tone or to bind the Yoke Assembly.

Should the Handle become gummy from dirt accumulation after a time, clean with a cloth moistened with a lukewarm solution of water and mild detergent. The plastic material is unaffected by almost all strong chemicals and cleaning agents except benzene and carbon tetrachloride, which will affect the plastic only after long contact with it – avoid their use.

In addition to the type of plastic used in the Handle, your Schulmerich handbell may use as many as four additional types. Different types of plastics are more or less susceptible to reaction with different types of chemicals and to different degrees. Many of today's better products include plastic parts and assemblies for the added advantages that plastics offer, and most reliable manufacturers caution

*Typical Quick-Adjust™  
Clapper Assembly*



*Handbell Reassembly & Parts Diagram (Select-A-Strike™ Clapper Shown)*

against the use of various chemicals on their plastics. Schulmerich therefore recommends against the use of any chemicals either on its handbell assemblies or in the storage container with the handbells. In a closed container such as a carrying case, under certain conditions, a stored chemical can give off a gas that could react injuriously with one or more of the plastics. For example, the fumes given off by ordinary mothballs can have damaging effects on plastic. So, play it safe, and don't put chemicals into your handbell storage cases and follow the Schulmerich instructions for cleaning.

No special care is needed for the ruggedly built Schulmerich handbell carrying cases. The plush-lined, profiled recesses for the handbells in each of the available cases provide excellent resistance against abrasion and wear. The tough, black leatherette covering bonded to the exteriors of the cases will stand considerable abuse. Scuff marks on the finish, resulting from rough handling, can be simply touched-up with an application of one of several black self-shining liquid shoe polishes on the market.

**VOICING YOUR HANDBELLS**

*Definition of Terms:*

**Voicing:** The process of blending the tonal qualities (sound) of the bells together to bring about a consistent color or timbre.

**Voice Break:** All octaves of handbells contain a variety of clapper sizes and density. The voice break is located where the clapper size, weight, and/or design changes, producing a timbre change.

*Understanding Basic Patterns of Handbell Sound:*

1. As pitch rises, clapper get smaller and harder.
2. As identical clappers proceed up the scale, the sound tends to become softer.
3. Bells below the voice break tend to be darker/weaker in color and those above tend to be brighter/stronger. (There are some exceptions)

### *Voicing Procedures:*

All handbell mechanisms — yoke assemblies/clapper assemblies — must have proper tension settings.

1. Set all clapper heads at “Medium.”
2. Beginning at the lowest musical pitch, work your way to the right playing at least 4-5 chromatic bells up the scale and then back down and past the handbell being voiced.
3. Listen for weak or strong handbells.
4. Rotate the clapper heads accordingly. Note: Not all bells will be at the same setting.
5. For a more consistent sound and feel, use the same hand in voicing your bells.

### *Rotation of Clapper Head:*

Select-A-Strike™ Clapper Heads use the entire 360° of the Clapper Head. Even a slight adjustment to the left or right of a particular setting will make a difference.

**Caution should be used when using the older style lower 5th, 6th and 7th octave Clapper Heads. Do not play at a Clapper Head corner (apex). Large castings could crack when too much force is applied while ringing.**

For bells with Quick-Adjust™ Clapper Heads, rotate the Clapper Head clockwise as desired.

## **REPAIRING YOUR HANDBELLS**

There need be no reluctance in disassembling your handbells. They have been designed so that you, the customer, can do repair work that will have no effect on the precision tuning of the bells.

## **CHANGING RESTRAINING SPRINGS**

(for bells with Select-A-Strike™ Clapper Heads)

### *Tools Needed:*

1. Handbell toolkit provided with original set of handbells
2. Fine file or emery paper

### *Part Needed:*

New Pellethane® Restraining Spring

### *Procedure:*

1. Using the hex ball driver supplied, remove the Handle Cap Screw located at the Handle Block. This completely

disassembles the handbell. Be careful not to lose any of the parts, particularly the Yoke Spacer that goes between the Yoke Assembly and the casting. Failure to reinsert this Yoke Spacer could result in a tonally "dead" bell.

2. Using the screwdriver, remove the Clapper Head and Clapper Lockwasher and set aside.
3. Using the adjustment wrenches supplied, remove Stop Nuts, Neoprene Bumpers and Anti-Friction Washers. (rotate rather than pull)
4. Remove the damaged spring by sliding toward the Clapper end of the Shaft. (note Restraining Springs fit snugly)
5. Inspect the Clapper end of the Shaft. If there are any sharp edges or burrs, remove them with a fine file or emery paper.
6. Place the Pellethane® Restraining Spring with flat center portion on a board or other hard surface, and push down on the ends of the Restraining Spring to open up the center hole. Insert the end of the Shaft through the center hole, reverse the Yoke and continue to push the Restraining Spring down fully to straddle the Yoke Block and be parallel with the sides of the "U" channel so that the Studs are free from the sides of the slots.

For easy replacement Pellethane® Restraining Springs are numbered directly on the spring!

#8 C2 thru B2  
#7 C3 thru F#3  
#1 G3 thru C#4  
#3 D4 thru G#4  
#4 A4 thru B5  
#5 C6 thru C7  
#6 C#7 thru C8

7. Replace the Anti-Friction Washer, Neoprene Bumper and Stop Nut on each Stud. Hand tighten now and then adjust when the bell is together.
8. Bell reassembly: Please refer to Reassembly on page 4.

## **CHANGING RESTRAINING SPRINGS**

(for bells with Quick-Adjust™ Clappers)

### *Tools Needed:*

1. Small vise (if available)
2. Short Arm 5/32" hex key (bells created January 2003 and later)
3. Fine file or emery paper

*Part Needed:*

New Pellethane® Restraining Spring

*Disassembly Procedure:*

1. Remove Quick-Adjust™ Complete Assembly from bell following the directions in the Care & Maintenance Manual. (See page 5 drawings in this bulletin for reference to part names.)
2. Secure Clapper Shaft in the vise by clamping on to parallel flats.
3. **For bells with a hex head Shoulder Screw** insert the 5/32" hex key in the head of the Shoulder Screw and turn in a counter clockwise direction to remove the Shoulder Screw.

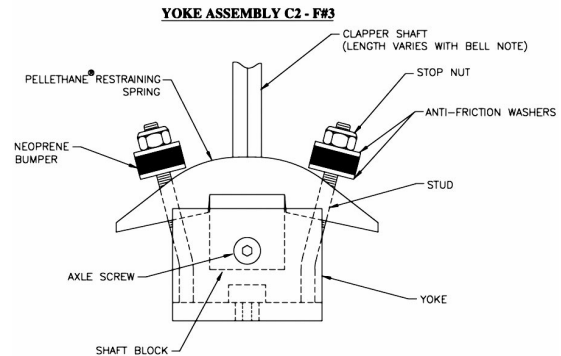
Once the Shoulder Screw is free from the Clapper Shaft, grasp the threaded portion of the Shoulder Screw, and set the Shoulder Screw with all of the clapper components head down on a flat surface. This keeps all the components together and facilitates the assembly process.

4. Remove the Detent Plate from the Clapper Shaft and place it on the Shoulder Screw.
5. Using the appropriate nut driver, remove the Stop Nuts, Neoprene Bumpers and Anti-Friction Washers.
6. Slide the old Restraining Spring off of the Clapper Shaft.

*Reassembly Procedure:*

1. Check the end of the Clapper Shaft for burrs and sharp edges and remove either or both with a fine file or emery paper.
2. Slightly rounding the sharp edges on the ends of the Clapper Shaft will facilitate installing the Detent Plate and Restraining Spring.
3. Position the new Restraining Spring on the Clapper Shaft and push it on until it bottoms on the Shaft Block.
4. Reinstall the Anti-Friction Washers, Neoprene Bumpers and Stop Nuts.
5. Carefully screw the threads of the Shoulder Screw (With the Wave Spring, Bushing, Clapper Head, and Detent Plate stacked on the Shoulder Screw) into the end of the Clapper Shaft until the three tabs on the Detent Plate touch the end of the Clapper Shaft. Then turn the Shoulder Screw another quarter turn.

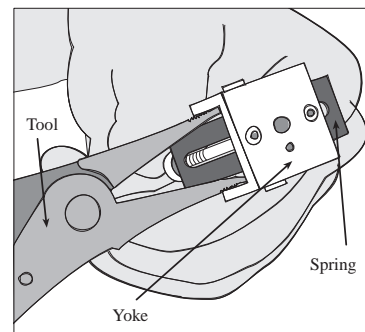
6. While holding the Clapper Shaft in hand, rotate the Clapper Head slightly back and forth until the three tabs in the Detent Plate fit over the end of the Clapper Shaft and the end of the Clapper Shaft is sitting on the bottom of the Detent Plate.
7. Turn the Shoulder Screw until it bottoms out on the Detent Plate and then use a **moderate** amount of pressure to tighten.
8. Reinstall the Quick-Adjust™ Complete Assembly into the bell and adjust the Stop Nuts for the desired clapper setting.



Note: The low 5th, 6th, and 7th octave bells have two Anti-Friction Washers per Stud as shown in the drawing. All other bells with Anti-Friction Washers only have one per Stud, which is located next to the Pellethane® Restraining Spring.

**STICKING CLAPPER SHAFTS**

If you encounter sticking Clapper Shafts on bells G3 - C8, we recommend using the Yoke Adjustment Tool available from Schulmerich Bells. It's easy to use, provides the best long term results, and is less likely to damage bell parts. The Yoke Adjustment Tool is designed to spread the inner walls of the Yoke Assembly outward, in order to free up any binding which might occur. Disassemble the handbell before attempting the following procedure



Gently insert the open ends of the Yoke Adjustment Tool into both ends of the Yoke Assembly and gently squeeze (see diagram); this applies outward pressure to the inside walls of

the yoke assembly. It should not require a great deal of force. If the Clapper Shaft does not free itself up after two attempts, you might need professional assistance. Again, disassemble the bell before attempting this procedure.

If a Yoke Adjustment Tool is not available, you may address the problem by a less preferred method. Take a thin-bladed long shaft screwdriver and place it between the Shaft Block and the Yoke Channel and apply a moderate twisting motion. If the shaft does not free itself, do not apply more force. It is recommended to follow this procedure on both sides of the Yoke Assembly. Take care not to cause damage to any parts. It is not necessary to disassemble the bell for this procedure. This method may not provide long term results and should be viewed as a "temporary fix."

## LOOSE CLAPPER SHAFTS

Loose or wobbly Clapper Shafts can be detected by a rattling sound heard when the handbell is struck. If you can hear a rattle and feel excessive side to side movement, you can take the following steps to correct it. (Remember that there must be some side movement to permit the bell to strike.)

Remove the Yoke Assembly from the bell by loosening the Handle Cap Screw. Place the Yoke Block on its side in an open vise and gently tighten vise. Now reassemble the handbell and you are ready to ring.

## REPLACING MASTER TOUCH™ DISCS

### Tools Needed:

1. Handbell toolkit provided with original set of bells
2. Small hammer

### Disassembly Procedure:

1. Insert hex key wrench into head of Handle Cap Screw located in center of Handle. Turn counter clockwise until Handle Cap Screw is disengaged from bell.
2. Remove Lockwasher and place Lockwasher on Handle Cap Screw furnished with kit.
3. Set aside Yoke Assembly, Yoke Spacer, and Handle.
4. With a small hammer, drive Indexing Pin flush with top of bell tang.
5. Place new Indexing Pin from kit above (atop) old pin. Drive new Indexing Pin in as existing pin is driven out. Stop when old pin drops out

### Reassembly Procedure:

1. Place new Master Touch™ Disc over bell tang.
2. Drive Indexing Pin further into bell until it is 1/8" above top of Master Touch™ Disc.
3. Orient bell with scribed line (inside bell lip) nearest you. Orient disc with "SCHULMERICH" to your left.
4. Put Yoke Assembly, Yoke Spacer, and Handle in place.
5. Insert new Handle Cap Screw with Lockwasher and tighten using hex key wrench or ball driver. Note: Overtightening Handle Cap Screw may deaden bell tone.
6. General Notes: Use caution so as not to scratch or damage the new disc.

## BUZZING TONE

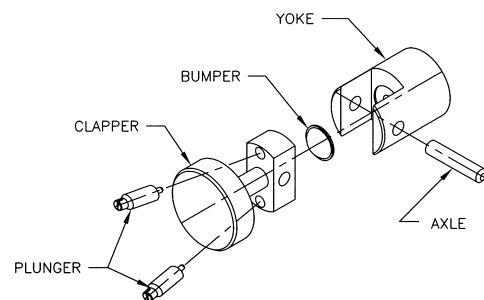
This sometimes occurs in the larger bells. After determining that the handbell is not cracked, ring the handbell and apply pressure with your thumb to the top of the Master Touch™ Disc. In most cases you will note the buzz is gone. If this is the case, simply retighten the Handle Cap Screw. If, after tightening the Handle Cap Screw, the noise still persists when you remove your thumb from the Master Touch™ Disc move Master Touch™ Disc slightly to one side and retighten the Handle Cap Screw. This should correct the problem.

## QUIETING A SQUEAKING YOKE ASSEMBLY

You may lubricate each end of the Axle with a single drop of WD-40® or Super Lube® with Syncolon® (PTFE) in tube applicator 51010. Allow penetration for several minutes and then wipe off any excess. Do not use any other method of lubrication. Do not mix lubrication products. (Super Lube® is available from Schulmerich)

## CLAPPER & YOKE ASSEMBLY

(6th & 7th octaves, high range only)



1. Remove a bumper from supplied sheet with tweezers and place in recess in slot on Yoke. Push edges to seat.
2. Install two Spring Plungers into Clapper Head with screw head toward the Clapper Head and only the white plungers extending out the bottom of the rocker end.
3. Slide Clapper Assembly into Yoke. Slide pin into side hole of yoke and line up Clapper Head with pin. Drive pin in with press until flush with side of Yoke.
4. Check Clapper Head for swing action.

### ADJUSTING UPPER 6th & 7th OCTAVE BELLS

1. When adjusting the Clapper Assembly, note that the screw on the strike side controls the strike while the screw on the backswing side controls the backswing. Make small adjustments to each with a screwdriver until the bell rings properly.

### TIGHTENING LOOSE HANDLES

(7th octave, low range only)

1. Remove the eight Handle Screws on the sides of the Handle with the 3/32" T-handle hex wrench.
2. Tighten the main Handle Cap Screw with the 1/4" T-handle hex wrench until snug and without a visible gap between the base of the Handle and the Master Touch™ Disc.
3. Replace the Handle Cap Screws securely. Note: Check the Handle Cap Screws periodically for tightness.



### POLISHING THE HANDBELLS

Polishing is necessary especially after exposure to a corrosive atmosphere such as salt air, etc., or having something spilled on the bells.

Always make sure to polish under the Master Touch™ Disc, but be careful to wipe away all polish residue. On the smaller handbells this will require disassembly. If this is not done, the handbells will continue to tarnish. If let go, the tarnish will actually etch the bronze. If anything is spilled on the handbells, clean it off immediately, as bronze is easily etched.

We recommend the use of Simichrome® Metal Polish, which can be purchased directly from Schulmerich.

Occasionally clean the inside of your bells with a clean, dry cloth.

We hope the above will aid you and help you further enjoy your Schulmerich handbells. If you have any further questions please feel free to contact us at any time; we will be glad to help you.

### INFORMATION OF INTEREST

Caution should be exercised when transporting handbells in extremely cold weather. Allow sufficient time for all parts to reach room temperature before the bells are struck.

## TROUBLESHOOTING COMMON PROBLEMS

### *Buzzing Sounds:*

- 1) Master Touch™ Disc . . . . .Loosen handle and rotate disc  
Master Touch™ Disc will require complete removal of the handle
- 2) Check Anti-Friction Washers . . . . .Replace
- 3) Check casting for cracks . . . . .Consult local handbell representative or Schulmerich
- 4) Check Handle and Cap Screw . . . . .Tighten cap screw (do not over-tighten)
- 5) Check Clapper Head Screw . . . . .Tighten clapper screw

### *Dull Tone Or Too Little Sound:*

- 1) Check Handle Cap Screw . . . . .May be too tight
- 2) Check for missing Yoke Spacer . . . . .Disassemble handbell and insert Yoke Spacer in proper location
- 3) Check Clapper Head . . . . .Rotate Clapper Head or replace

### *Pitch Changes:*

- 1) Check for cracked casting . . . . .Send to Schulmerich or contact representative
  - 2) Check room temperature . . . . .Allow handbells to reach room temperature before playing  
Store handbells in more constant environment
- (Note: Cold days will cause pitch to rise, hot days will cause pitch to lower. Temperature variation also affects human hearing.)

### *Yoke Assembly Problems:*

- 1) Inconsistent ringing . . . . .Check tension adjustments
- 2) Back ringing . . . . .Check tension adjustments
- 3) Uneven handbell shakes . . . . .Check tension adjustments
- 4) Slow moving Clapper Assembly . . . . .Spread Yoke Channel  
Check Yoke Stud & Axle Spring alignment  
Check and clean Axle  
See local Schulmerich representative

### *Broken Restraining Springs:*

- 1) Broken Restraining Springs . . . . .Replace

### *Loose Or Rotating Handles Or Clapper Assemblies:*

- 1) Check for broken or missing Indexing Pins . . . . .Replace
- 2) Check Handle Lockwasher . . . . .Replace

## CARE & MAINTENANCE SCHEDULE GUIDELINES

### Daily/Weekly

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Wipe off handbell castings after use by polishing with polishing cloth.

- Minor marks can be wiped off with outside chamois section.
- If tarnish/fingerprints are worse, use the rouge section of the outside chamois section.
- Be sure to wipe off the red rouge from the castings and bell parts.
- Do not rouge inside the castings.

Report/Note any mechanical or audible changes to your Handbell Director.

Dry wipe inside the castings with a lint-free cloth.

Store handbells in a constant room temperature if possible.

### Bi-Annually

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Polish castings with Simichrome® polish if needed.

Listen to the voicing of the clapper heads.

Check spring tension adjustments.

Clean yoke assembly parts with a brush.

Inspect all parts.

### Monthly

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Snug/Tighten handbell handle screw with hex ball driver. (Do not over-tighten.)

Snug/tighten clapper head screws on Select-A-Strike™ assemblies.

Check operation of Quick-Adjust™ clapper head and tighten the clapper screw if necessary.

Adjust spring tension, especially if temperature changes have occurred.

Spot polish excessive tarnish or marks on casting exteriors.

Inspect all parts and mechanism alignments.

### Yearly

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Open cases, remove handbells, and air out cases for 40 – 48 hours.

Inspect cases for damage, and repair as needed.

Use ArmorAll or similar product on outside of cases. Touch up scuff marks with black shoe polish.

Repair damaged locks and latches.

Vacuum all cases.

Clean handles and discs in mild solution of water and soap with damp cloth.

*Please note: Fingerprints and hand marks, if left on, will quickly etch the casting surface due to body salts and acids. This schedule is provided as a guideline. The activities undertaken may be adjusted depending on your use of the bells and the playing environment.*

## The Schulmerich Warranty

Schulmerich handbell instruments purchased after May 15, 1984 are warranted to be free from defects in material and workmanship, covering all parts, for the life of the ownership of such instruments by the original purchaser. Defective parts will be repaired or replaced, at Schulmerich's option, provided such parts are returned shipping prepaid to Schulmerich Bells, Carillon Hill, P.O. Box 903, Sellersville, PA 18960-0903. Proof of purchase (Schulmerich's invoice) may be required.

This warranty is extended solely to the original purchaser, and is non-transferable.

This warranty is VOID in the event of abuse, accident, modification to parts, or improper handling, or repairs or alterations made by the owner or third parties without Schulmerich factory written authorization. Parts will be considered abused if they have been treated contrary to Schulmerich's Care and Maintenance Instructions. Further, this warranty does not cover any damage arising from nicks, dents or scratches.

This warranty gives you specific legal rights and you may have other rights which may vary from state to state.

With the exception of warranty of title, ALL OTHER WARRANTIES ARE EXPRESSLY DISCLAIMED, THUS THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No one is authorized to change these terms.

**Schulmerich Carillons, Inc. • Carillon Hill**  
P.O. Box 903 • Sellersville, PA 18960-0903  
800/772-3557 • 215/257-2771  
[www.SchulmerichBells.com](http://www.SchulmerichBells.com)

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**Schulmerich Bells**

*Electronic Carillons • Cast Bells • Handbells  
MelodyChime® and MelodyWave® Instruments*

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**[www.MelodyWave.net](http://www.MelodyWave.net)**