

<b>Instrument</b>	<b>Daily Maintenance</b>	<b>Periodic Maintenance</b>	<b>Supplies (Cost)</b>	<b>Projected Time</b>
<b>Marimbas</b>				
5.0 Grand Marimbas				
		Cover instrument, fill humidifier, dust bars, frame, and resonators		
			Water jug, Handi Wipes	.25 hr. daily
		Retie suspension cord as needed		.25 hr.
		Identify and report cracked bars or other damage		
		Straighten pins weekly		
			Insulated pliers	.25 hr. weekly
		Inspect resonator screws and bolts, frame nuts and bolts		
			Screwdriver, pliers or wrench..	.25 hr. weekly
		Inspect rails: center screws, spreaders, drum key screws,		
		rubber insulation		.25 hr. weekly
		Clean bars at beginning of each semester and before summer		
			Lemon oil, (\$), cheesecloth (\$)	2 hrs.
		Replace felt insulation on pins yearly		
			Felt tubing, (\$) cutting pliers, spreading pliers	2 hrs.
		Replace suspension cord each semester		
			Proper cord (\$)	1 hr.

<b>Instrument</b>	<b>Daily Maintenance</b>	<b>Periodic Maintenance</b>	<b>Supplies (Cost)</b>	<b>Projected Time</b>
4.3 Marimbas		Cover instrument, dust bars, frame, and resonators		
			Water jug, Handi Wipes	.25 hr. daily
		Retie suspension cord as needed		.25 hr.
	Identify and report cracked bars or other damage			
		Straighten pins weekly		
			Insulated pliers	.25 hr. weekly
		Inspect resonator screws and bolts, frame nuts and bolts		
			Screwdriver, pliers or wrench.	.25 hr. weekly
		Inspect rails: center screws, spreaders, drum key screws,		
		rubber insulation		.25 hr. weekly
		Clean bars at beginning of each semester and before summer		
			Lemon oil, (\$), cheesecloth (\$)	2 hrs.
		Replace rubber insulation on pins yearly		
			Latex tubing, (\$) cutting pliers, spreading pliers	2 hrs.
		Replace suspension cord each semester		
			Proper cord (\$)	1 hr.
	Special Notes:	Replace cracked bars @ approx. \$100-\$120 as needed		
		Shipping (\$)		
		Tune instrument @ approx. \$450 once every 5 years depending on age of keyboard.		

Instrument	Daily Maintenance	Periodic Maintenance	Supplies (Cost)	Projected Time
Other Marimba		Cover instrument, dust bars, frame, and resonators		
			Water jug, Handi Wipes	.25 hr. daily
		Retie suspension cord as needed		.25 hr.
	Identify and report cracked bars or other damage			
		Straighten pins weekly.	Insulated pliers	.25 hr. weekly
		Inspect resonator rivets	Ballpeen hammer, backing plate, or silicon caulk (\$)	.25 hr. weekly
		Inspect rails: center screws, spreaders, rubber insulation		.25 hr. weekly
		Clean bars at beginning of each semester and before summer		
			Lemon oil, (\$), cheesecloth (\$)	2 hrs.
		Replace rubber insulation on pins yearly		
			Latex tubing, (\$) cutting pliers, spreading pliers	2 hrs.
		Replace suspension cord each semester		
			Proper cord (\$)	1 hr.
	Special Notes:	Replace cracked bars @ approx. \$100-\$120 as needed		
			Shipping (\$)	
		Replace frame possibly in 2004 (\$308 in 2001)		2 hrs.
		Tune instrument @ approx. \$450 once every 5 years depending on age of keyboard.		
		Resonators need painting (\$)		2 hrs.

Instrument	Daily Maintenance	Periodic Maintenance	Supplies (Cost)	Projected Time
Other Marimba		Cover instrument, dust bars, frame, and resonators		
			Water jug, Handi Wipes	.25 hr. daily
		Retie suspension cord as needed		.25 hr.
	Identify and report cracked bars or other damage			
		Straighten pins weekly		
			Insulated pliers	.25 hr. weekly
		Inspect resonator rivets		
			Ballpeen hammer, backing plate, or silicon caulk (\$)	.25 hr. weekly
		Inspect rails: center screws, spreaders, rubber insulation		.25 hr. weekly
		Clean bars at beginning of each semester and before summer		
			Lemon oil, (\$), cheesecloth (\$)	2 hrs.
		Replace rubber insulation on pins yearly		
			Latex tubing, (\$) cutting pliers, spreading pliers	2 hrs.
		Replace suspension cord each semester		
			Proper cord (\$)	1 hr.
	Special Notes:	Replace cracked bars @ approx. \$100-\$120 as needed		
		Shipping (\$)		
		Tune instrument @ approx. \$450 once every 5 years depending on age of keyboard.		
		Frame replaced 11/01 \$308		actual time: 2 hrs.
		Rails and cradle will have to be overhauled:		
		no estimate on cost of materials.		
		Resonators need painting (\$)		2 hrs.

Instrument	Daily Maintenance	Periodic Maintenance	Supplies (Cost)	Projected Time
<b>Vibraphones</b>				
Musser Gold Bar ProVibe				
	Cover instrument, dust bars, frame, and resonators		Handi Wipes	.25 hr. daily
	Retie suspension cord as needed			.25 hr.
	Identify and report damage			
		Straighten pins weekly		
			Insulated pliers	.25 hr. weekly
		Inspect resonator rivets		
			Ballpeen hammer, backing plate, or silicon caulk (\$)	
				.25 hr. weekly
		Inspect rails: spreaders, rubber insulation		.25 hr. weekly
		Inspect pedal linkage, damper bar, motor, belt		.25 hr. weekly
		Inspect frame and wheels weekly		.25 hr. weekly
		Clean bars at beginning of each semester and before summer		
			Generic cleaner, (\$), cleaning sponge (\$)	2 hrs.
		Replace rubber insulation on pins yearly		
			Latex tubing, (\$) cutting pliers, spreading pliers	2 hrs.
		Replace suspension cord each semester		
			Proper cord (\$)	1 hr.
	Special Notes:	Dampening bar needs straightening, may need new felt (\$)		1 hr.
		Frame replaced 11/01 \$308		actual time: 2 hrs.
		Motor and belt need replacing (\$)		2 hrs.
		Resonators need painting (\$)		2 hrs.
		Needs new cover \$37.75		

<b>Instrument</b>	<b>Daily Maintenance</b>	<b>Periodic Maintenance</b>	<b>Supplies (Cost)</b>	<b>Projected Time</b>
Adams Silver Bar ProVibes		Cover instrument, dust bars, frame, and resonators		
			Handi Wipes	.25 hr. daily
	Retie suspension cord as needed			.25 hr.
	Identify and report damage			
		Straighten pins weekly	Insulated pliers	.25 hr. weekly
		Inspect resonator rivets		
			Ballpeen hammer, backing plate, or silicon caulk (\$)	.25 hr. weekly
		Inspect rails: spreaders, rubber insulation		.25 hr. weekly
		Inspect pedal linkage, damper bar, motor, belt		.25 hr. weekly
		Inspect frame and wheels weekly		.25 hr. weekly
		Clean bars at beginning of each semester and before summer		
			Generic cleaner, (\$), cleaning sponge (\$)	2 hrs.
		Replace rubber insulation on pins yearly		
			Latex tubing, (\$) cutting pliers, spreading pliers	2 hrs.
		Replace suspension cord each semester		
			Proper cord (\$)	1 hr.
	Special Notes:	Dampening bar needs straightening, may need new felt (\$)		1 hr.
		Frame replaced 11/01 \$308		actual time: 2 hrs.
		Motor and belt need replacing (\$)		2 hrs.
		Resonators need painting (\$)		2 hrs.

<b>Instrument</b>	<b>Daily Maintenance</b>	<b>Periodic Maintenance</b>	<b>Supplies (Cost)</b>	<b>Projected Time</b>
Silver Bar ProVibes		Cover instrument, dust bars, frame, and resonators		
			Handi Wipes	.25 hr. daily
	Retie suspension cord as needed			.25 hr.
	Identify and report damage			
		Straighten pins weekly	Insulated pliers	.25 hr. weekly
		Inspect resonator rivets		
			Ballpeen hammer, backing plate, or silicon caulk (\$)	.25 hr. weekly
		Inspect rails: spreaders, rubber insulation		.25 hr. weekly
		Inspect pedal linkage, damper bar, motor, belt		.25 hr. weekly
		Inspect frame and wheels weekly		.25 hr. weekly
		Clean bars at beginning of each semester and before summer		
			Generic cleaner, (\$), cleaning sponge (\$)	2 hrs.
		Replace rubber insulation on pins yearly		
			Latex tubing, (\$) cutting pliers, spreading pliers	2 hrs.
		Replace suspension cord each semester		
			Proper cord (\$)	1 hr.
	Special Notes:	Motor and belt need replacing (\$)		2 hrs.

Instrument	Daily Maintenance	Periodic Maintenance	Supplies (Cost)	Projected Time
<b>Xylophones</b>				
Adams Xylophone				
	Cover, dust frame and resonators			
		Handi Wipes (\$)	.25 hr. daily	
	Retie suspension cord as needed		.25 hr.	
	Identify and report cracked bars or other damage			
	Straighten pins weekly			
		Insulated pliers		.25 hr. weekly
	Inspect resonator rivets			
	Inspect frame nuts and bolts			
		Screwdriver, pliers or wrench.		.25 hr. weekly
	Inspect rails: spreaders, rubber insulation			.25 hr. weekly
	Clean bars at beginning of each semester and before summer			
		Lemon oil, (\$), cheesecloth (\$)		2 hrs.
	Replace rubber insulation on pins yearly			
		Latex tubing, (\$) cutting pliers, spreading pliers		2 hrs.
	Replace suspension cord each semester			
		Proper cord (\$)		1 hr.
	Special Notes:	Replace cracked or damaged bars @ approx. \$80-100 as needed		
		Shipping (\$)		
		Tune instrument @ approx. \$450 once every 5 years depending on age of keyboard.		

Instrument	Daily Maintenance	Periodic Maintenance	Supplies (Cost)	Projected Time
Adams Xylophone		Cover, dust frame and resonators		
		Handi Wipes (\$)	.25 hr. daily	
		Retie suspension cord as needed	.25 hr.	
		Identify and report cracked bars or other damage		
		Straighten pins weekly		
			Insulated pliers	.25 hr. weekly
		Inspect resonator rivets		
		Inspect frame nuts and bolts		
			Screwdriver, pliers or wrench.	.25 hr. weekly
		Inspect rails: spreaders, rubber insulation		.25 hr. weekly
		Clean bars at beginning of each semester and before summer		
			Lemon oil, (\$), cheesecloth (\$)	2 hrs.
		Replace rubber insulation on pins yearly		
			Latex tubing, (\$) cutting pliers, spreading pliers	2 hrs.
		Replace suspension cord each semester		
			Proper cord (\$)	1 hr.
	Special Notes:	Replace cracked or damaged bars @ approx. \$80-100 as needed		
		Shipping (\$)		
		Tune instrument @ approx. \$450 once every 5 years depending on age of keyboard.		

Instrument	Daily Maintenance	Periodic Maintenance	Supplies (Cost)	Projected Time
------------	-------------------	----------------------	-----------------	----------------

### Glockenspiels

Yamaha Glockenspiel

Identify and report damage

Straighten pins weekly

Insulated pliers .25 hr. weekly

Inspect suspension washers, replace as needed (\$) .25 hr. weekly

Clean bars at beginning of each semester and before summer

Generic cleaner, (\$), cleaning sponge (\$) 1 hr.

Check and Replace fishing line

Special Notes:

Instrument needs permanent stand (\$)

Musser Glockenspiel

Identify and report damage

Straighten pins weekly Insulated pliers .25 hr. weekly

Inspect suspension rails, replace felt as needed (\$) .25 hr. weekly

Clean bars at beginning of each semester and before summer

Generic cleaner, (\$), cleaning sponge (\$) 1 hr.

Special Notes:

Bars need are pitted

Case needs rebuilding (\$)

Instrument needs permanent stand (\$)

<b>Instrument</b>	<b>Daily Maintenance</b>	<b>Periodic Maintenance</b>	<b>Supplies (Cost)</b>	<b>Projected Time</b>
-------------------	------------------------------	---------------------------------	------------------------	-----------------------

**Chimes**

Premier chrome chimes

Identify and report damage				
Wipe down		Chrome polish cloth (\$)		
Straighten frame weekly		Hex wrenches		.25 hr. weekly
		Inspect suspension cable, replace as needed (\$)		.25-.5 hr. weekly
		Inspect frame and wheels weekly		.25 hr. weekly
		Clean tubes at beginning of each semester and before summer		
		Generic chrome polish, (\$), rags		2 hrs.
		Inspect pedal linkage and damper lock, service as needed		.25-.5 hr.

Musser chimes

Identify and report damage				
Wipe down		Lacquer polish cloth (\$)		.25 hr. weekly
		Inspect suspension cable, replace as needed (\$)		.25-.5 hr. weekly
		Inspect frame and wheels weekly		.25 hr. weekly
		Clean tubes at beginning of each semester and before summer		
		Generic lacquer polish, (\$), rags		2 hrs.
		Inspect pedal linkage and damper lock, service as needed		.25-.5 hr.

Instrument	Daily Maintenance	Periodic Maintenance	Supplies (Cost)	Projected Time
Timpani				
Fiberglass Timpani (4)	set of 4 heads (\$)	(studio)		
	Cover, dust base, adjust pedals for storage, inspect heads			
			Handi Wipes (\$)	.25 hr. 3 times weekly
	Align heads and tune before each use		Tuning key	.25 hr. 3 times weekly
	Adjust tuning gauges as needed		Hex key	.25 hr.
	Identify and report damage			
		Replace heads yearly, clean and service all moving parts, inspect rims and bowls		
			Tuning key, lubricant (\$), rags	4 hrs.
		Inspect base screws and wheels weekly		.25 hr. weekly
	Special Notes:	Need 20" drum to complete set (\$)		
		Need 4 covers \$322		

<b>Instrument</b>	<b>Daily Maintenance</b>	<b>Periodic Maintenance</b>	<b>Supplies (Cost)</b>	<b>Projected Time</b>
Ludwig Hand Hammered Symphonic Model (4) set of 4 heads (\$)				
	Cover, dust base, adjust pedals for storage, inspect heads			
			Handi Wipes (\$)	.25 hr. 3 times weekly
	Tune before each use		Tuning key	.25 hr. 3 times weekly
	Identify and report damage			
		Replace heads yearly, adjust balance screw, clean and service all moving parts, inspect rims and bowls		
			Tuning key, lubricant (\$), rags	4 hrs.
		Inspect wheels weekly		.25 hr. weekly
	Special Notes:	Need 20" drum to complete set (\$)		
		Need 4 covers \$322		
		Remove dents from bowls (must remove heads)		
			Rubber mallet	4 hrs.
		Need new wheels (\$)		

<b>Instrument</b>	<b>Daily Maintenance</b>	<b>Periodic Maintenance</b>	<b>Supplies (Cost)</b>	<b>Projected Time</b>
Ludwig Symphonic Model (4) (practice room timpani) set of 4 heads (\$)	Cover, dust base, adjust pedals for storage, inspect heads		Handi Wipes (\$)	.25 hr. daily
	Tune before each use		Tuning key	.25 hr. daily
	Identify and report damage	Replace heads yearly, adjust balance screw, clean and service all moving parts, inspect rims and bowls	Tuning key, lubricant (\$), rags	4 hrs.

<b>Instrument</b>	<b>Daily Maintenance</b>	<b>Periodic Maintenance</b>	<b>Supplies (Cost)</b>	<b>Projected Time</b>
<b>Snare Drums</b>				
Pearl Symphonic Wood Snare	Batter head (\$)	Snare head (\$)		
	Store batter head down, snares on, inspect heads and hardware			
	Tune as needed		Tuning key	as needed
	Identify and report damage			
		Replace heads each semester: clean and lubricate lugs...		.5 hr.
			Tuning key, lubricant (\$), 00 steel wool	
		Inspect snare strainer, clean and service(replace string if necessary)		
			Screwdriver	.25 hr. weekly
		Inspect rims and shells, clean hoops		
			(remove heads then replace and tune)	
			Tuning key, 00 steel wool, screwdriver, wrenches	
				1 hr. each semester
Cleveland Concert Snare	Batter head (\$)	Snare head (\$)		
	Store batter head down, snares on, inspect heads and hardware			
	Tune as needed		Tuning key	as needed
	Identify and report damage			
		Replace heads each semester: clean and lubricate lugs...		.5 hr.
			Tuning key, lubricant (\$), 00 steel wool	
		Inspect snare strainer, clean and service(replace string if necessary)		
			Screwdriver	.25 hr. weekly
		Inspect rims and shells, clean hoops		
			(remove heads then replace and tune)	
			Tuning key, 00 steel wool, screwdriver, wrenches	
				1 hr. each semester
	Special Notes:		Replace hoop (\$)	.5 hr.

<b>Instrument</b>	<b>Daily Maintenance</b>	<b>Periodic Maintenance</b>	<b>Supplies (Cost)</b>	<b>Projected Time</b>
Yamaha 4" Concert Snare	Batter head (\$)	Snare head (\$)		
	Store batter head down, snares on, inspect heads and hardware			
	Tune as needed		Tuning key	as needed
	Identify and report damage			
		Replace heads each semester: clean and lubricate lugs...		.5 hr.
			Tuning key, lubricant (\$), 00 steel wool	
		Inspect snare strainer, clean and service(replace string if necessary)		
			Screwdriver	.25 hr. weekly
		Inspect rims and shells, clean hoops		
			(remove heads then replace and tune)	
			Tuning key, 00 steel wool, screwdriver, wrenches	
				1 hr. each semester
Pearl 12" Field Snare	Batter head (\$)	Snare head (\$)		
	Store batter head down, snares on, inspect heads and hardware			
	Tune as needed		Tuning key	as needed
	Identify and report damage			
		Replace heads each semester: clean and lubricate lugs...		.5 hr.
			Tuning key, lubricant (\$), 00 steel wool	
		Inspect snare strainer, clean and service(replace string if necessary)		
			Screwdriver	.25 hr. weekly
		Inspect rims and shells, clean hoops		
			(remove heads then replace and tune)	
			Tuning key, 00 steel wool, screwdriver, wrenches	
				1 hr. each semester

Instrument	Daily Maintenance	Periodic Maintenance	Supplies (Cost)	Projected Time
	Special Notes:	Replaced snare mechanism 10/01 (\$) removed muffler 9/01 This drum will generally be confined to practice area.		1 hr.
Premier Field Drum	Batter head (\$) Store batter head down, snares on, inspect heads and hardware Tune as needed Identify and report damage	Snare head (\$) Replace heads each semester: clean and lubricate lugs... Tuning key, lubricant (\$), 00 steel wool Inspect snare strainer, clean and service(replace string if necessary) realign gut snares Screwdriver Inspect rims and shells, clean hoops (remove heads then replace and tune) Tuning key, 00 steel wool, screwdriver, wrenches		as needed .5 hr. .25 hr. weekly 1 hr. each semester

Instrument	Daily Maintenance	Periodic Maintenance	Supplies (Cost)	Projected Time
Steel Drums				

Store all pans with playing surface down after each use.

Store all stands assembled. Check for loose or missing bolts

Screwdriver, pliers each use

Inspect hangers on lead, dbl. tenors, dbl. seconds, guitars each use

Make list of pans with special tuning needs .25 hr. weekly

Inspect condition of rubber feet on large pans each use

Touch up paint (\$) (see special notes)

Tune pans @ \$110 per instrument (\$770)

Special Notes: Pans tuned spring 04, will need touch up spring 06- get price.  
Pans will need paint touch up spring 06.  
All rubber feet in need of replacement- get price and log  
installation time.

<b>Instrument</b>	<b>Daily Maintenance</b>	<b>Periodic Maintenance</b>	<b>Supplies (Cost)</b>	<b>Projected Time</b>
<b>Bass Drums</b>				
40" Ludwig	Tune each use Inspect tension rods	Replace heads (5 year schedule, last: fall '98) Dust bass drum and stand Inspect stand, tighten joints as necessary		.2 hr
		Hex wrenches		.25 hr. weekly
		Inspect suspension cords on stand		.2 hr. weekly
	Special Notes:	Patched hoop needs replacing (\$)		
36" Ludwig	Tune each use Inspect tension rods	Replace heads as needed Dust bass drum and stand Inspect stand, tighten joints as necessary		.2 hr
		Hex wrenches		.25 hr. weekly
		Inspect suspension cords on stand		.2 hr. weekly
	Special Notes:	Missing tension rod and lug assembly (\$) Calf heads are in need of replacement (\$196) log installation time.		

<b>Instrument</b>	<b>Daily Maintenance</b>	<b>Periodic Maintenance</b>	<b>Supplies (Cost)</b>	<b>Projected Time</b>
<b>Toms and miscellaneous drums</b>				
Yamaha rack toms (8)				
	Tune as needed		Drum key	5 minutes each drum
	Store with mounting arm pointing up			each use
	Inspect mounting hardware			each use
		Replace batter heads (\$) (3 year schedule, last: fall '00)		1.5 hrs.
		Replace bottom heads as needed (\$)		.2 hr. each drum
		Clean shells	moist cloth	.5 hr. each year
		Clean hoops and lubricate tension rods each semester		
			00 steel wool, lug lubricant	1 hr. each year
Ludwig toms (8)				
	Tune as needed		Drum key	5 minutes each drum
	Store with batter heads down			each use
	Inspect mounting hardware, replace nuts and bolts as needed			each use
		Replace batter heads (3 year schedule, last: fall '99)		1.5 hrs.
		Clean shells	moist cloth	.5 hr. each year
		Clean hoops and lubricate tension rods each semester		
			00 steel wool, lug lubricant (\$)	1 hr. each year
	Special Notes:	Rims are split on three drums, must pin and glue		1 hr. each drum
		Heads scheduled to be replaced fall '02. (\$)		
		See Special Notes under hardware. (Stands need repair or replacing).		
Miscellaneous drums, toms, and bass drums				
		Same maintenance as above, replace heads as needed (\$)		

<b>Instrument</b>	<b>Daily Maintenance</b>	<b>Periodic Maintenance</b>	<b>Supplies (Cost)</b>	<b>Projected Time</b>
<b>Congas and Bongos</b>				
	LP fiberglass quinto and conga			
	Tune as needed		Tuning wrench	5 minutes each drum
	Store upright			each use
	Inspect mounting hardware and tension screws		each use	
		Replace heads (\$) (synthetic heads, no schedule yet)		.5 hr. each drum
	Special Notes:	Need wood Tumba, Conga, and Quinto with cradles (\$)		
	All Bongos chrome hardware			
	Tune as needed		Tuning wrench	5 minutes each drum
	Store head down on shelf			each use
	Inspect mounting hardware and tension screws		each use	
		Replace heads (\$) (synthetic heads, no schedule yet)		.25 hr. each drum
	Special Notes:	See Special Notes under hardware (stand needs repair) (\$)		
<b>Stands and Hardware</b>				
	Check for all stands to be complete		replacement felts/sleeves	.30 hr.
	Be sure all cymbal stands have felts and sleeves			
<b>Crotales</b>				
	Straighten Pins			
	Clean bars			
	Check and/replace rubber sleeves and tops			
<b>Woodblocks/log drums</b>	Check for cracks and re-glue if needed			

<b>Instrument</b>	<b>Daily Maintenance</b>	<b>Periodic Maintenance</b>	<b>Supplies (Cost)</b>	<b>Projected Time</b>
<b>Tambourines/Frame Drums</b>	Check and replace head/tacks as needed Dry heads as needed			
<b>Triangles</b>	Check clips for string replacement Should be 1 clip per triangle			
<b>Chinese Toms (11)</b>	Check that heads have no holes Be sure rings are taped down		replacement heads	.15 per use
<b>Cymbals/Gongs</b>	Orchestral – Check and replace Straps as needed All – check for cracks – drill if needed Check Gong strings and replace if needed			
	Special Notes – for Chinese Toms drums must be sent off to replace heads			
<b>Drumsets</b>	Check Heads and Hardware Tuning as needed			