



The nations #1 manufacturer of hospital cribs

DOERNBECHER CRITICAL CARE CRIB SERVICE MANUAL



MODELS 741-CPGP & 752-KPGP



1-800-873-4273 ~ parts@hardmfg.com

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GENERAL INFORMATION

- ◆ Hard Manufacturing cribs and youth beds are intended for use by patients up to 150lbs. It is strongly recommended to discourage parents or caregivers from getting into the crib or bed with the patient as it may cause premature wear or damage to various components.
- ◆ The expected service life of all cribs and beds made by Hard Manufacturing is 9 years when preventative maintenance guidelines are followed.
- ◆ Hard Manufacturing recommends the preventative maintenance checklist found at the end of this manual be performed at least once per year on each crib or bed in your facility. Cribs not meeting the criteria listed on the preventative maintenance checklist should be removed from service until they can be repaired as per the recommended guidelines.
- ◆ Hard Manufacturing will support parts on our cribs and beds for up to 12 years from the date of manufacture as long as we still make the part or can obtain it from our vendors.
- ◆ Cleaning instructions for all Hard Manufacturing cribs and beds can be found at the end of this manual. ***Failure to follow the proper cleaning instructions can result in premature rust and corrosion of the parts on your cribs.***

To request a quote on replacement parts- please have either the serial # from the silver sticker located on the mattress platform, or the crib or bed model # and date of manufacture from the sticker on the bottom left side of the foot end available. Contact info is as follows:

Parts Manager
800-873-4273 x216
parts@hardmfg.com

Please email or fax all parts orders to 716-896-2579 or parts@hardmfg.com. If you do not receive an order confirmation within one (1) business day, please resend the order until a confirmation is received.

****Confidential document for customer/end user only****

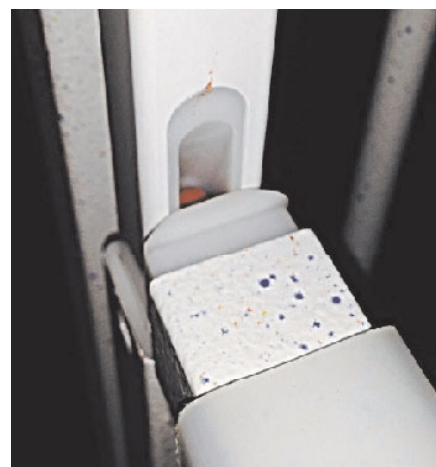
SIDE RAIL OPERATION & SAFETY

Crib rails are raised and lowered with a Johns Hopkins Handle.



The side rail or end rails have “trigger” mechanisms that must lock into place to hold up the rail safely. The red tips of the triggers must be securely seated in the notches of the slide rods on both ends, and you should barely be able to see the red tip if at all. Grasp the rail and tug to be certain the rail is in place firmly and properly.

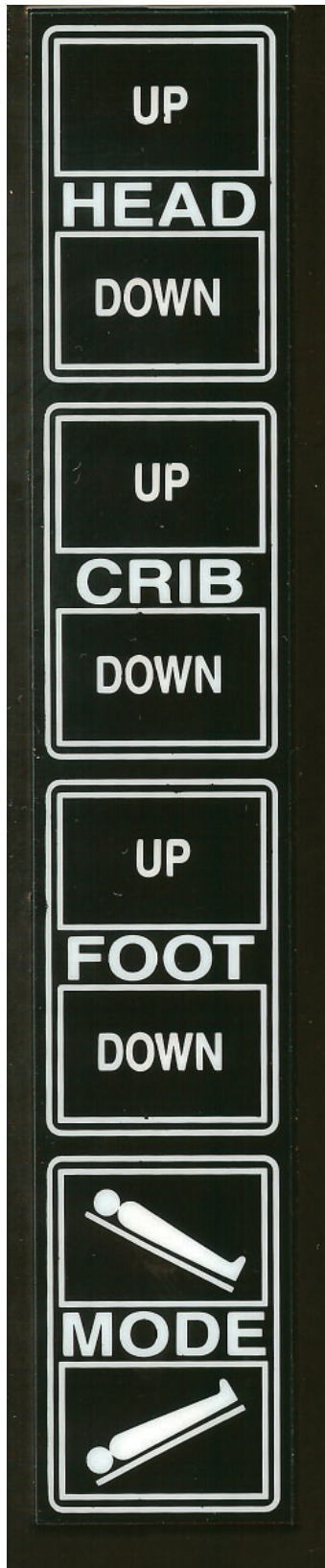
To prolong the life of the trigger assembly in the side rail, continue to squeeze the trigger mechanism as you lower the rail to the desired height and not release until that time. Letting the red tips of the trigger mechanism drag up and down the slide rods by releasing the trigger mechanism too early will cause the trigger assembly to wear prematurely and break.



*****If the trigger mechanism for the side rails fail to lock into place properly, remove the crib from service until the mechanism can be replaced.*****

STAFF CONTROL INSTRUCTIONS

Plug in the power cord to the wall outlet .



To raise or lower the head section to desired position press the touch pad button “HEAD”, “UP” or “DOWN”.



To raise or lower the crib spring to desired position press the touch pad button “CRIB”, “UP” or “DOWN”.



To raise or lower the foot section to desired position press the touch pad button “FOOT”, “UP” or “DOWN”.



To use Trendelenberg or Reverse Trendelenberg, spring should be flat. Then press the touch pad for desired position.

CAUTION! DO NOT USE HEAD OR FOOT CONTROLS IN TRENDELENBERG MODE.

PLEASE NOTE THE MATTRESS PLATFORM SHOULD BE IN THE LOWEST POSITION TO PERFORM CPR.

WEIGHSAFE SCALE OPERATING INSTRUCTIONS

Turning on the WeighSafe Scale:

Turn the scale on by pressing the “ON/OFF” button once.

The “HARD Manufacturing” logo will appear on the display screen followed by the current weight.

The WeighSafe Scale may be used with the crib in any position. The head elevation, foot elevation and Hi-Lo adjustment will not affect the accuracy of the WeighSafe Scale.

The scale is designed to be left on at all times and will always display the current weight. There is no need to turn the scale off.

To weigh a patient:

Follow your hospital protocol to weigh a patient. You must ZERO out for an accurate weight reading.

Remove the child from the crib.

Press the “ZERO” button.

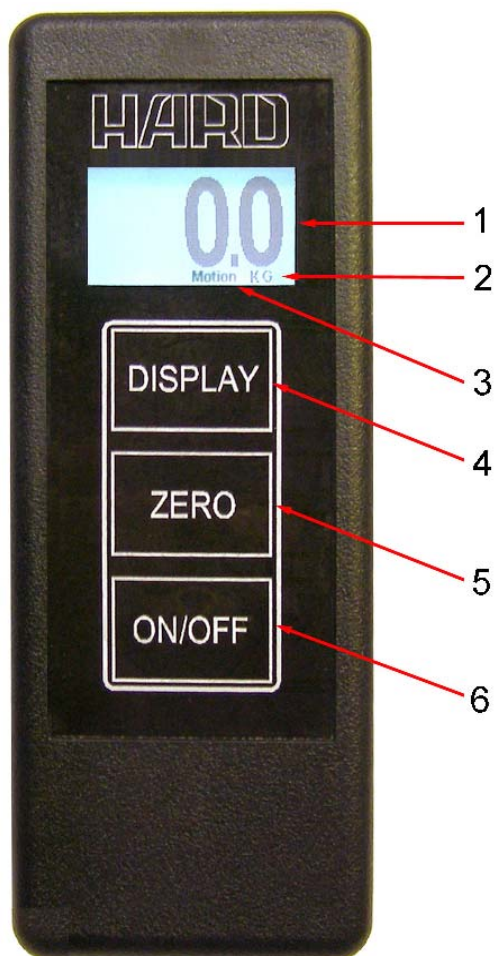
Place the child back in the crib.

The current weight of the patient will immediately be displayed in kilograms. The WeighSafe Scale operates only in kilograms.

If the word “Motion” appears on the display, wait a few seconds for the crib to stabilize. The crib must be stable to weigh accurately.

Display Light:

The display backlight will go off after 60 seconds. Press the “DISPLAY” button to illuminate the backlight again.



1. Weight Display
2. KG indicator
3. Motion Indicator
4. DISPLAY button
5. ZERO button
6. ON/OFF button

WEIGHSAFE SCALE QUESTIONS OR PROBLEMS

Please contact:

HARD Manufacturing Co., Inc.

Parts Department

800-873-4273 or parts@hardmfg.com

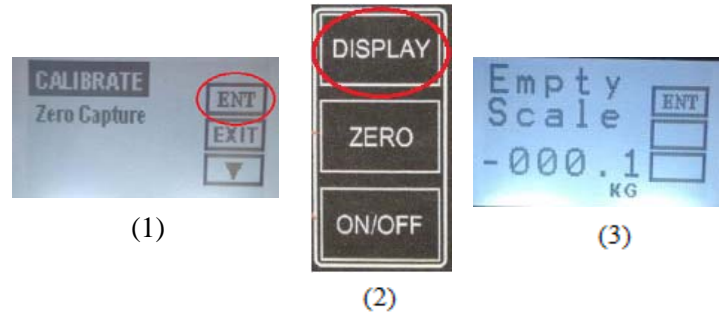
****Any attempt to disassemble or repair the scale will void the warranty.****

SCALE CALIBRATION INSTRUCTIONS

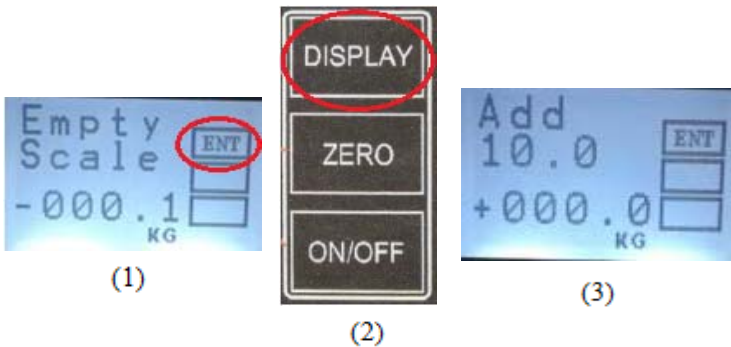
Your HARD Manufacturing crib will arrive with the scale calibrated and ready for use. You typically should not need to perform a calibration, however in the event there is a need to do so, use only a **certified 10kg weight** to do so and follow the instructions below.



1. Press and hold the “Zero” button and “ON” button at the same time until display turns on.



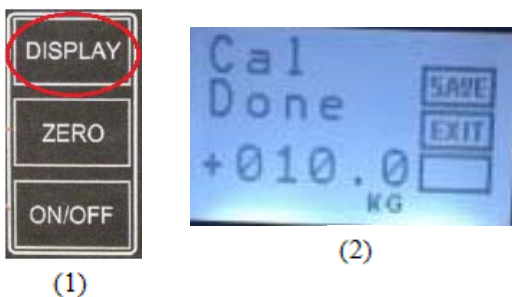
2. Select the enter option on the display screen by pressing the “Display” button. If done correctly, “Empty Scale” should appear on the display screen.



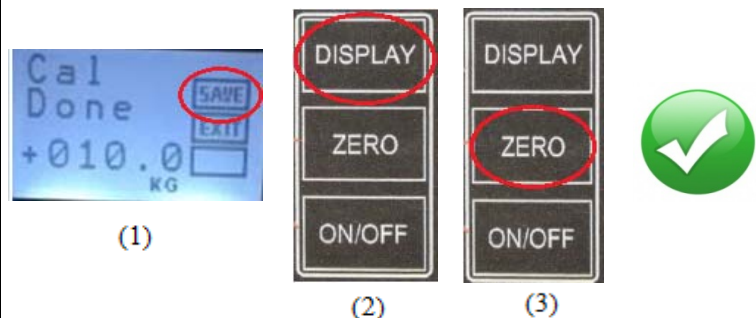
3. Select the enter option on the display screen once again by pressing the “Display” button. If done correctly, “Add 10.0 kg.” should appear on display screen.



4. Place the 10 kg. weight onto the surface of the crib.

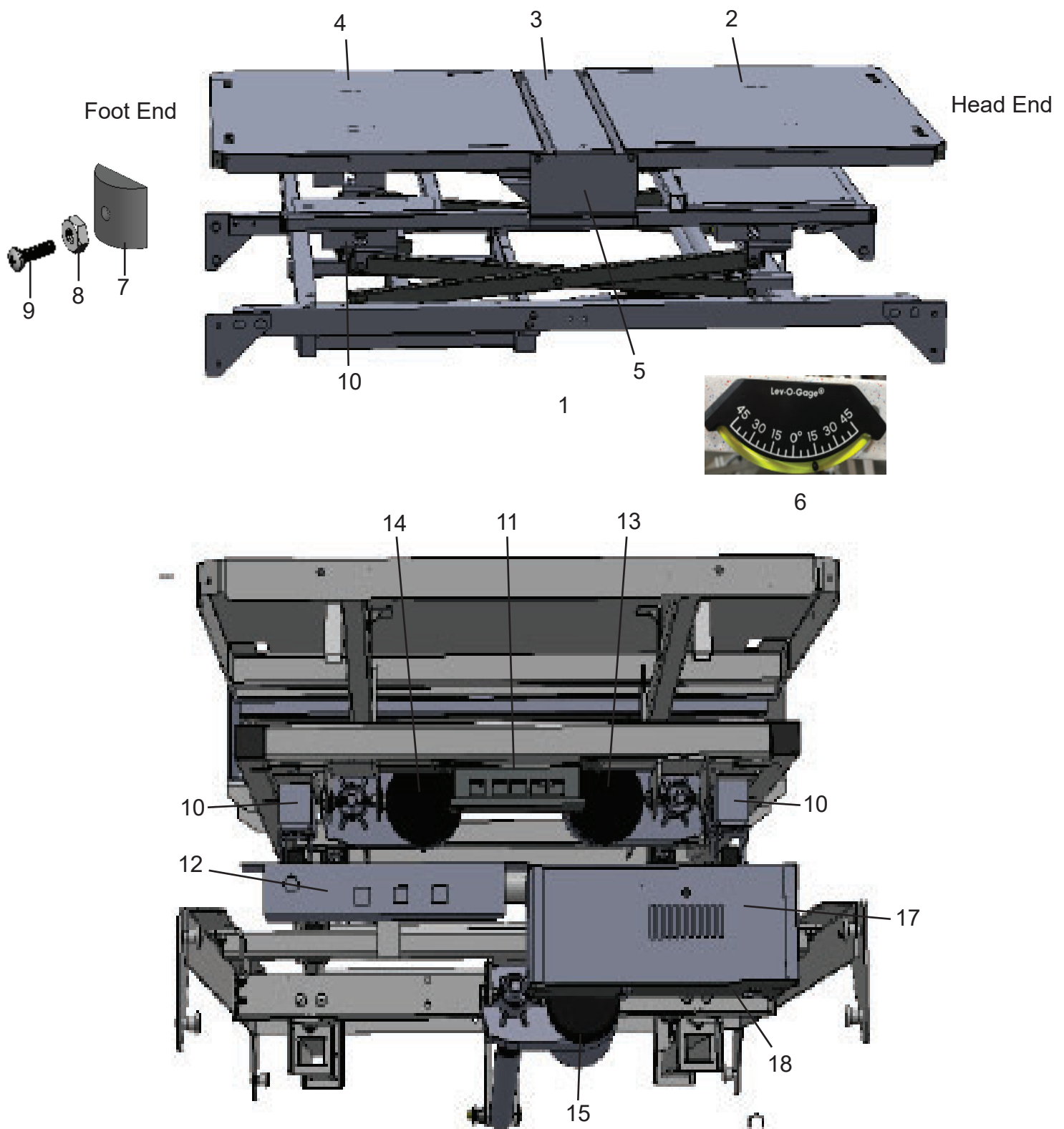


5. With the 10 kg. weight still on the crib, select the enter option on the display screen by pressing the “Display” button. If done correctly, “Cal done” should appear on display screen.



6. Select the save option on the display screen by pressing the “Display” button. Calibration is now complete. Press “Zero” button to exit the calibration setup.

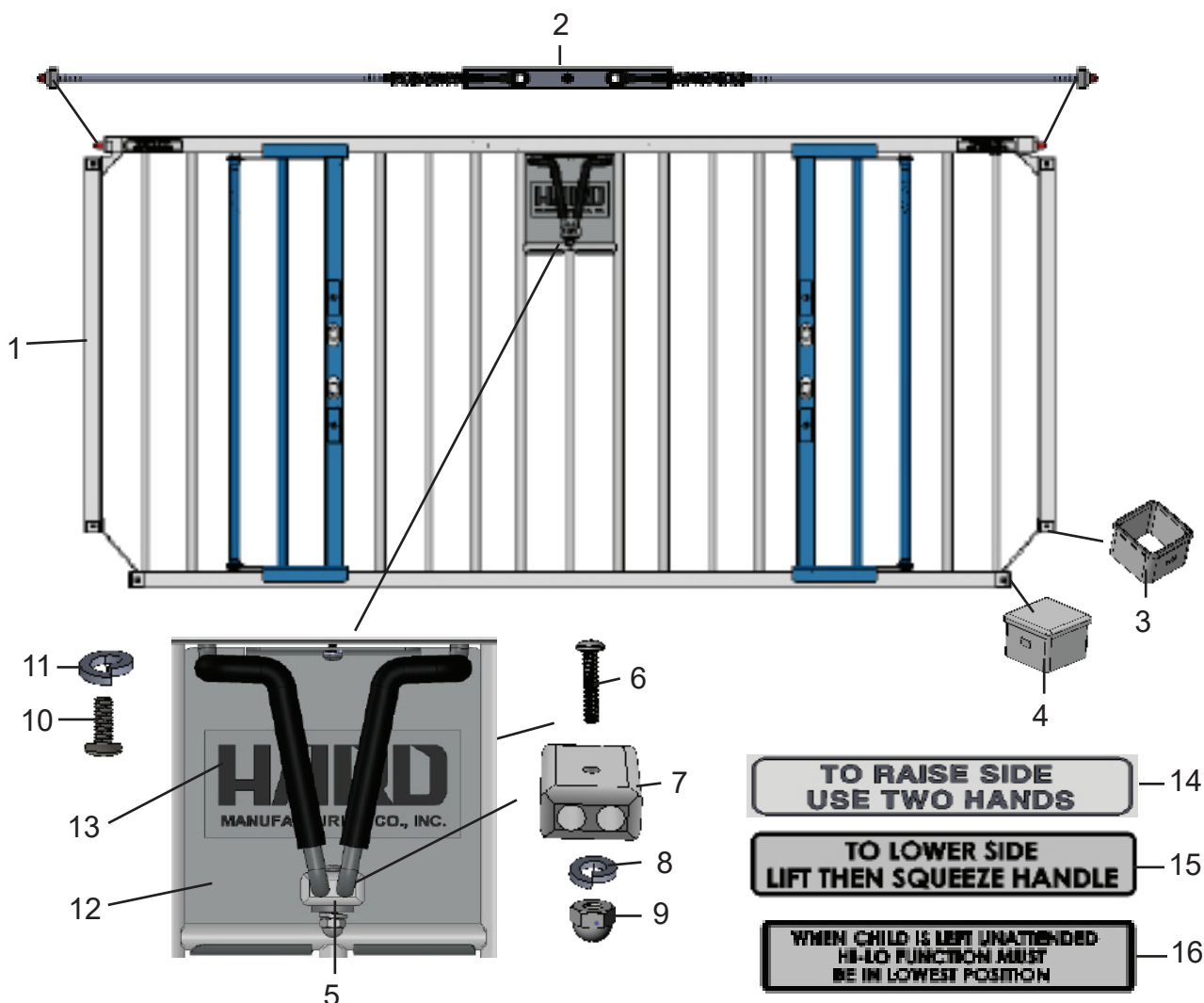
MATTRESS PLATFORM DIAGRAM



MATTRESS PLATFORM PARTS LIST

#	Part Description	Part #	Notes
1	Mattress Platform Assembly- 741	91692	Complete mattress platform with all electrical
	Mattress Platform Assembly- 752	91690	
2	Head Pan Assembly- 741	12410	
	Head Pan Assembly- 752	84159	
3	Center Pan Assembly- 741	12548	
	Center Pan Assembly- 752	12547	
4	Foot Pan Assembly- 741	12410	
	Foot Pan Assembly- 752	84159	
5	Seat Support Bracket- 741 or 752	12544	
6	Tilt Indicator	63237	Level for determining angle of elevation
7	Corner Cover	11558	
8	Hex Nut 10-32	63402	For Corner Covers
9	Screw 10-32x3/4"	62048	
10	Load cell for scales	N/A	Please contact us regarding scale components
11	Summing Box	N/A	
12	Control Box	63162	
13	Head Motor Assembly	90062	Motor with painted pull tube.
14	Foot Motor Assembly	90063	
15	Hi-Lo Motor Assembly	90064	
16	Transformer	63901	

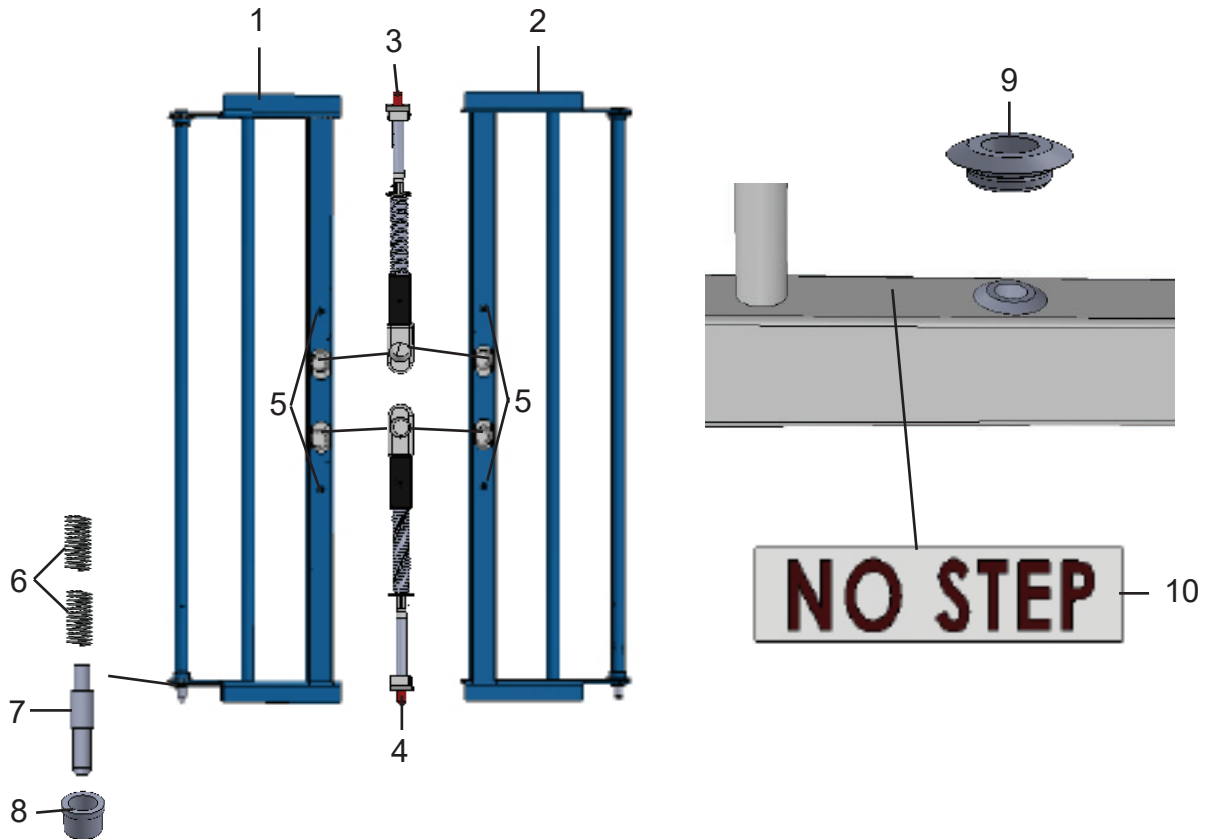
SIDE RAIL ASSEMBLY & PARTS LIST



#	Part Description	Part #	Notes
1	Side Trim Assembly- 741 & 752	83647	Complete Side Rail
2	Side Trigger Assembly- 741& 752	89117	
	Teething Bars- 30" wide crib	*942 TB	Set of 4- not shown.
	Teething Bars- 36" wide crib	*752 TB	Protective covering for the tops of the rails
3	Glide Slide Bushing	11571	Nylon bushing with cutout
4	Bushing	11518	Solid nylon bushing
5	Johns Hopkins Handle Assembly	72115	Complete Handle Assembly
6	Screw 10-32x1 RH PH MS	63375	Components at the bottom of the Johns Hopkins Handle
7	Retainer Block	11525	
8	Split Lockwasher	63454	
9	Acorn Nut C/P 10-32	63411	
10	Screw	60148	Top of Shield Plate
11	Split Washer	63457	
12	Shield Plate Assembly	81216	Plate behind JH Handle
13	"HARD" Sticker	62177	Position: behind JH Handle Assembly
14	"To Raise Sides...." Sticker	63650	Position: left side of each rail
15	"To Lower Sides...." Sticker	63651	Position: On the Shield Plate behind JH Handle
16	"When Child is Left...." Sticker	62184	Position: above JH Handle in the middle of the rail

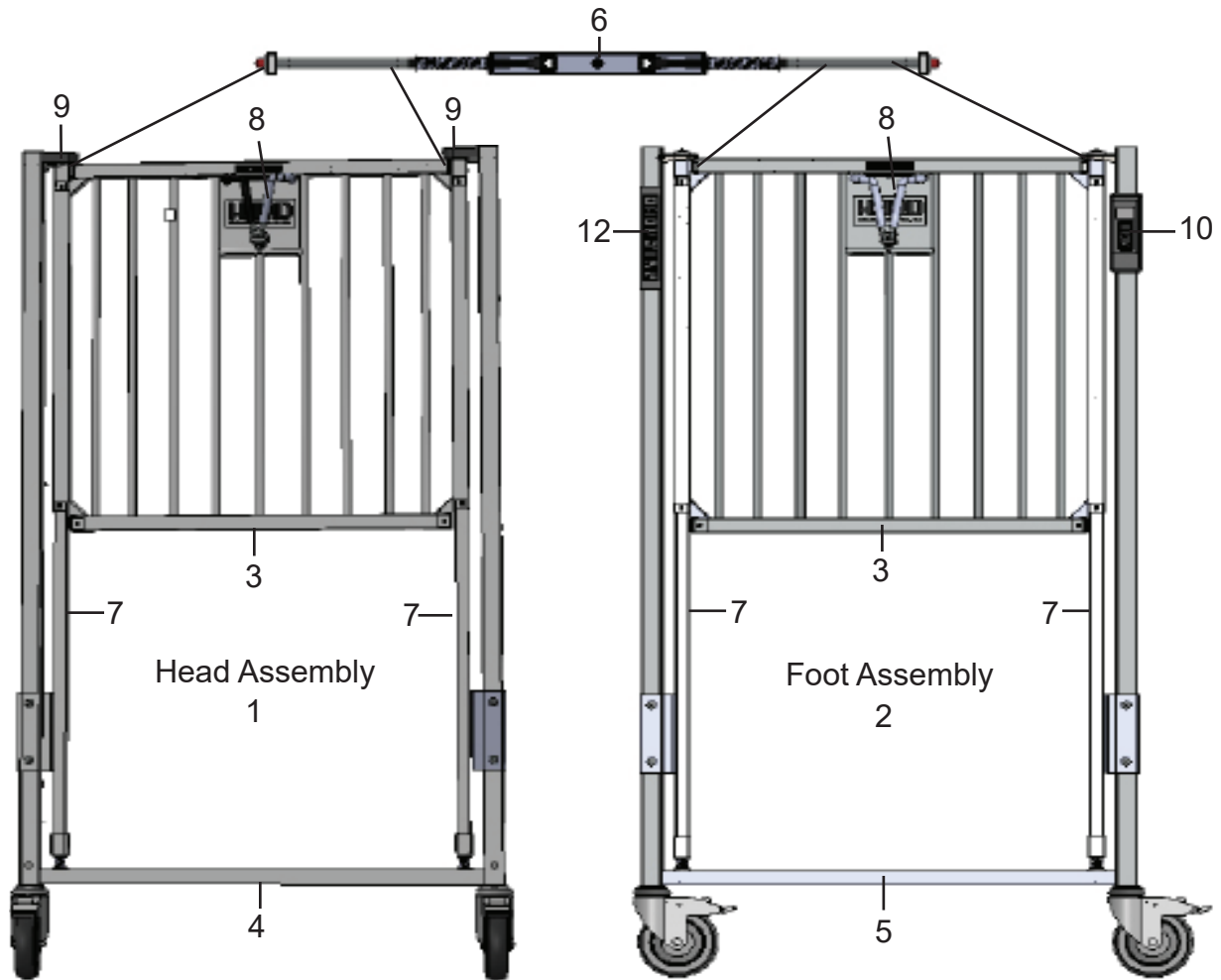
SIDE RAIL ASSEMBLY & PARTS LIST CONTINUED

PORTLAND GATE ASSEMBLY & PARTS



#	Part Description	Part #	Qty Per Gate	Notes
1	Portland Gate LH (left hand)	83630	1	741 or 752
2	Portland Gate RH (right hand)	83631	1	
3	Trigger Assembly-Top of Portland Gate	84219	1	Top or bottom trigger- Need 2 per side
4	Trigger Assembly-Bottom of Portland Gate	84220	1	
5	Screw C/P 6-1/2"	63792	2	For Portland Trigger- Need 2 per side
	Lockwasher (not shown)	63457	2	
6	Portland Spring	63229	2	Components available in hardware bag 72112- parts for one Portland Gate
7	Hinge Pin	17214-S	1	
8	Plastic Bushing	11520	1	
9	Plastic Grommet	17065	1	Placed on bottom of side rail for hinge pin
10	"NO STEP" Sticker	62180	1	Put on the bottom of the side rail inside each Portland Gate.

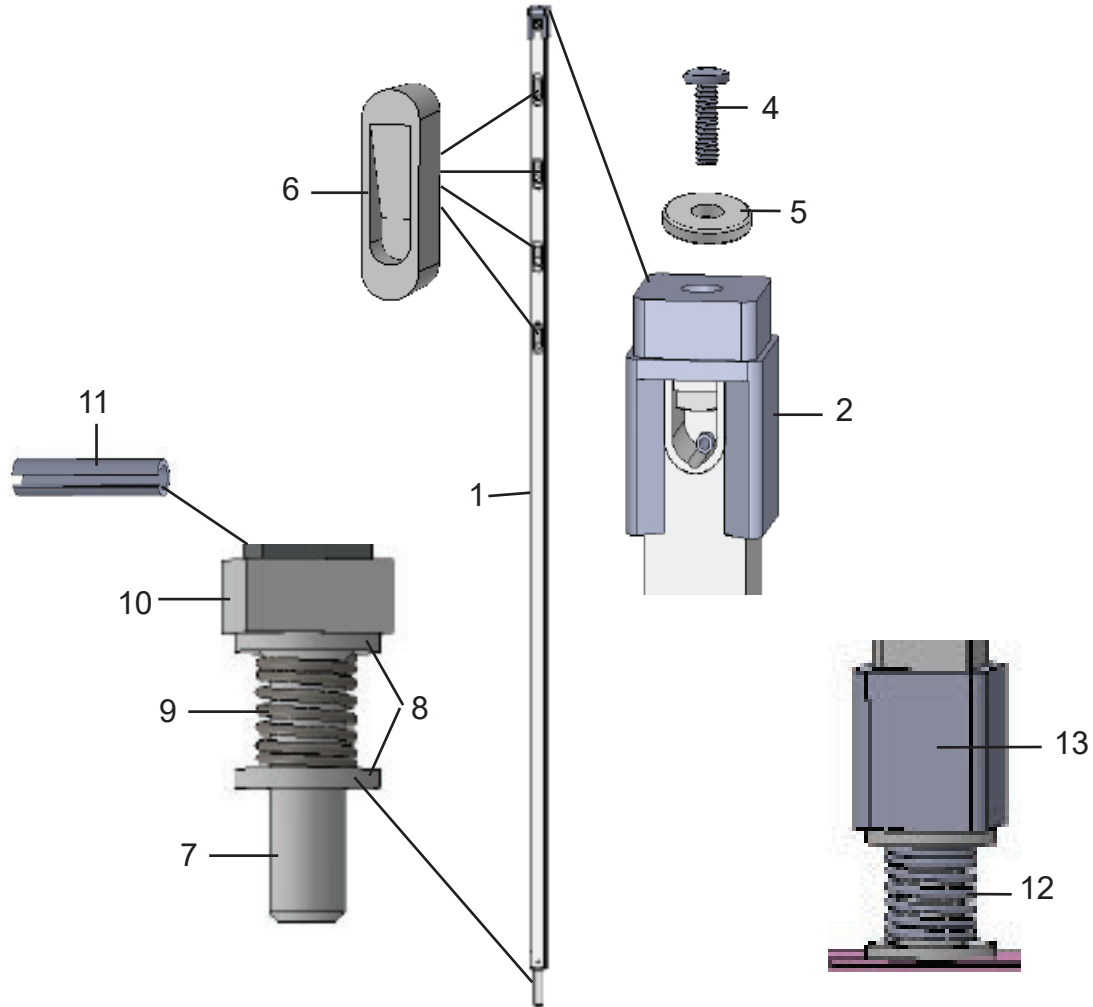
HEAD & FOOT END ASSEMBLY DIAGRAM & PARTS LIST



#	Part Description	Part #	Notes
1	Head Assembly- 30" wide crib	90754	Complete Head Assembly with Gate and Slide Rods
	Head Assembly- 36" wide crib	90274	
2	Foot Assembly- 30" wide crib	90053	Complete Foot Assembly with Gate and Slide Rods
	Foot Assembly- 36" wide crib	90290	
	Teething Bars- 30" wide crib	*942 TB	Set of 4- not shown. Protective snap-on covering for the tops of the rails
	Teething Bars- 36" wide crib	*752 TB	
3	Gate only- 30" crib, head or foot	90791	
	Gate only- 36" crib, head or foot	90061	
4	Weld assembly- 30" head end	82893	U Shaped Frame- No Gate or Slide Rods
	Weld assembly- 36" head end	82898	
5	Weld assembly- 30" foot end	82892	U Shaped Frame- No Gate or Slide Rods
	Weld assembly- 36" foot end	82899	
6	Gate Trigger Assembly- 30" end	89267	
	Gate Trigger Assembly- 36" end	89132	
7	Slide Rod	89197	See slide rod assembly for all components
8	Johns Hopkins Handle Assembly	72115	See side rail assembly for all components
9	Dual Crib Eye Covers	60299	
10	Scale Control	63202	
11	Scale Control Guard	13306	Not visible due to angle of diagram
12	Staff Control	63258	

Note: End Rails have same sticker configuration as the Side Rails.

SLIDE ROD ASSEMBLY DIAGRAM & PARTS LIST



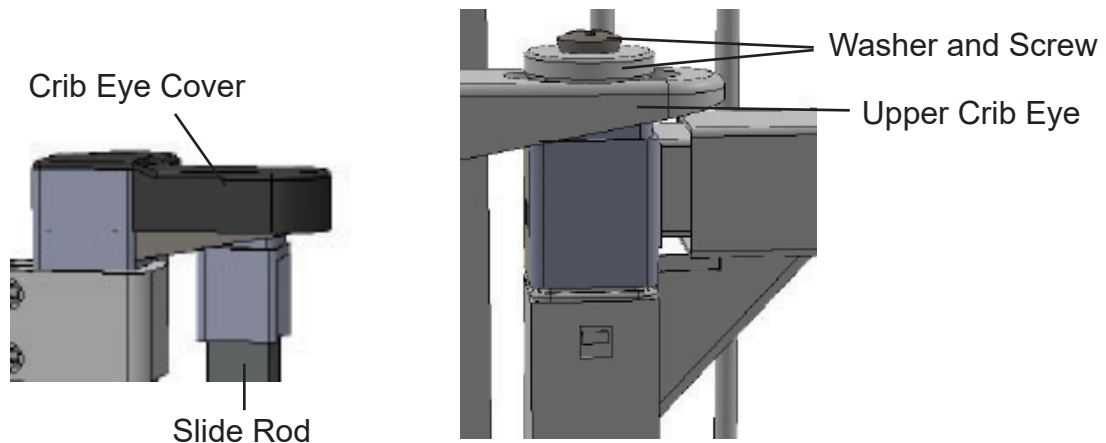
#	Part Description	Part #	Notes
1	Slide Rod	89197	Complete slide rod assembly as shown
2	Slide Rod Cup	N/A	Not sold separately. If this part breaks, please order a new slide rod. Part is riveted on.
3	Rivet- not shown	N/A	
4	Screw	63392	
5	Nylon Washer	11531	For top of slide rod
6	Slide Rod Inserts	11567	
7	Slide Rod Adaptor	11576	Parts also available in hardware bag 72078. Parts for one slide rod.
8	Plastic Washer 1"x.545"x1/8"	11545	
9	Bumper Spring- 60" sides	63403	
10	Plastic Spacer- 60" sides	11750	
11	1/8" Spring Pin- to fasten slide rod adaptor	63834	
12	Bumper Spring- 30" or 36" gate	63845	Parts also available in hardware bag 72080 including #7-9. Parts for one slide rod.
13	Plastic Spacer- 30" or 36" gate	11593	

SLIDE ROD OR SIDE RAIL/END RAIL REPLACEMENT

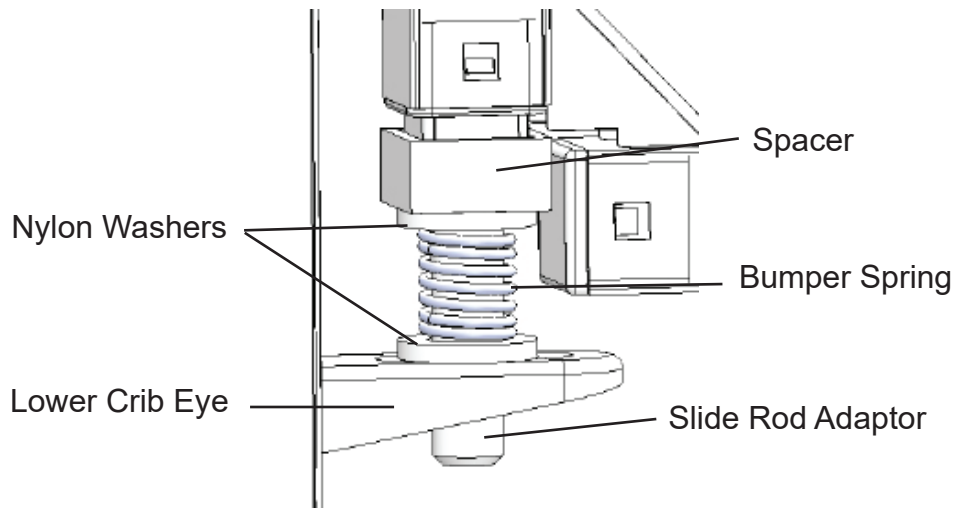
To disassemble the crib and replace a side rail, end rail or a slide rod:

****We recommend this be done with 2 people****

1. At the top of one of the Slide Rods, first lift the portion of the black plastic crib eye cover that is over the Upper Crib Eye to expose the screw and washer underneath, then loosen and remove the screw and washer. Repeat at the opposite side of the rail.



2. Push down on both slide rods until they are clear of the upper crib eye, then lean the entire side assembly outwards. Lift the assembly up and off of the lower crib eyes being careful not to lose any of the small parts at the bottom of the slide rods as the spring, washers and spacer will fall off.



3. Lastly, squeeze the Johns Hopkins handle or the Fingertip Release mechanisms on the rail to disengage the trigger mechanisms while lifting the slide rod(s) up and out of the rail.

Disassembly is now complete.

SLIDE ROD OR SIDE RAIL/END RAIL REPLACEMENT CONT.

To reassemble the crib or bed with the new rail or slide rod:

1. Take the rail making sure the Johns Hopkins handle or the Fingertip Release mechanisms are facing outwards and at the top of the rail. Insert the slide rod(s) down into each end of the side rail. Again be sure that one person is squeezing the Johns Hopkins handle or the Fingertip Release mechanism of the new rail to disengage the trigger mechanisms as you do this. Raise the rail up until it is at the highest position and then release the Johns Hopkins handle or Fingertip Release to lock the rail in place.
2. At the bottom of both of the slide rods, put the spacer back on first, then a washer, the bumper spring, and the other washer as shown on the previous page. While holding those parts in place, lift the side assembly up and position it on the lower crib eye.
3. Lean the side assembly in towards the crib and then press down at both ends to get the assembly under upper crib eyes and then release. Reinstall the hardware back on the top of the slide rods. Do not overtighten the screw.

Reassembly is now complete.

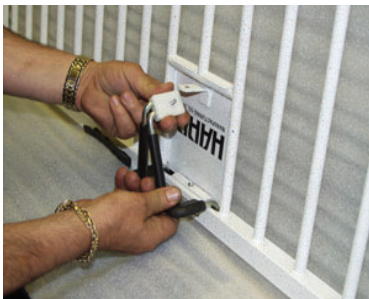
Please be sure all hardware is securely fastened prior to putting the crib or bed back in service.

TRIGGER ASSEMBLY FOR SIDE RAILS OR JOHNS HOPKINS HANDLE REPLACEMENT

It is necessary to remove the rail from the crib prior to the steps listed below. Please follow the instructions on the prior pages to remove the rail and the slide rods prior to beginning the repair. Reference the page for Side Rail Assembly Diagram if needed to identify parts.



1. Turn rail upside down and remove acorn nut and lock washer from the retainer block.



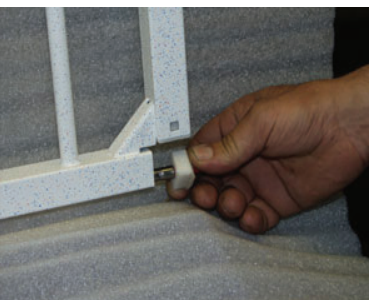
2. Push retainer block down and twist to one side as shown to disengage the screw from the metal bracket on the shield plate.



3. Lift to remove handles from the trigger bracket inside the rail tube. ***If only the Johns Hopkins Handle assembly is being replaced, skip to Step #9 next.***

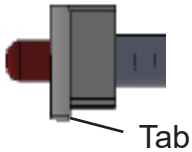


4. Remove screw holding the shield plate and center trigger bracket. Remove the shield plate.



5. Remove the entire trigger assembly by pulling it out one side of the rail. ***If you are unfamiliar with changing a trigger on one of our cribs or beds, note how the components lock together for reassembly.***

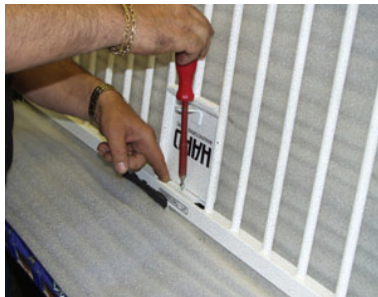
SIDE TRIGGER ASSEMBLY OR JOHNS HOPKINS HANDLE REPLACEMENT CONTINUED



6. Slide one half of the trigger assembly barrel 3/4 of the way into the rail making sure the red tip goes in first. The white plastic bushing attached to the red trigger tip has a tab on one edge, be sure it faces downwards as shown. The opposite end of the trigger should be in the upright position as shown to the left.

Opposite end in upright position

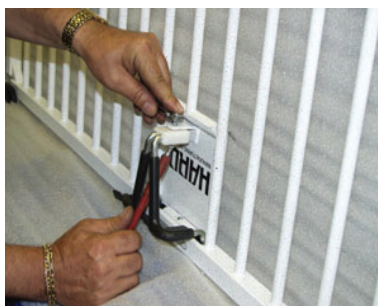
7. Take the black plastic center trigger bracket, and hook it onto the trigger barrel making sure the tabs on the bracket face downwards. Push the completed portion into the rail tube leaving half the bracket exposed for the other trigger barrel. With the red trigger tip now facing the opposite direction, hook the second trigger barrel into the bracket again making sure the tab on the white bushing at the tip is facing downwards. Push the completed assembly fully into the side rail.



8. Prior to putting the shield plate back on, be sure the holes in the black bracket for the triggers line up with the openings in the side rail as well as the hole for the screw. Reinstall the shield plate, and insert the screw to fasten the shield plate and bracket.



9. The trigger barrels are spring loaded, so to line up the hole in the trigger barrel with the hole in the bracket and opening in the rail, push in on the white plastic bushing on the end of the trigger until the holes line up on one side, then insert one half of the handle. Repeat on the other side and insert the second half of the handle.



10. To insert screw in the retaining block through the metal bracket in the shield plate, twist the retaining block and screw up into the hole from an angle and secure with lock washer and acorn nut.

Reassembly is now complete.

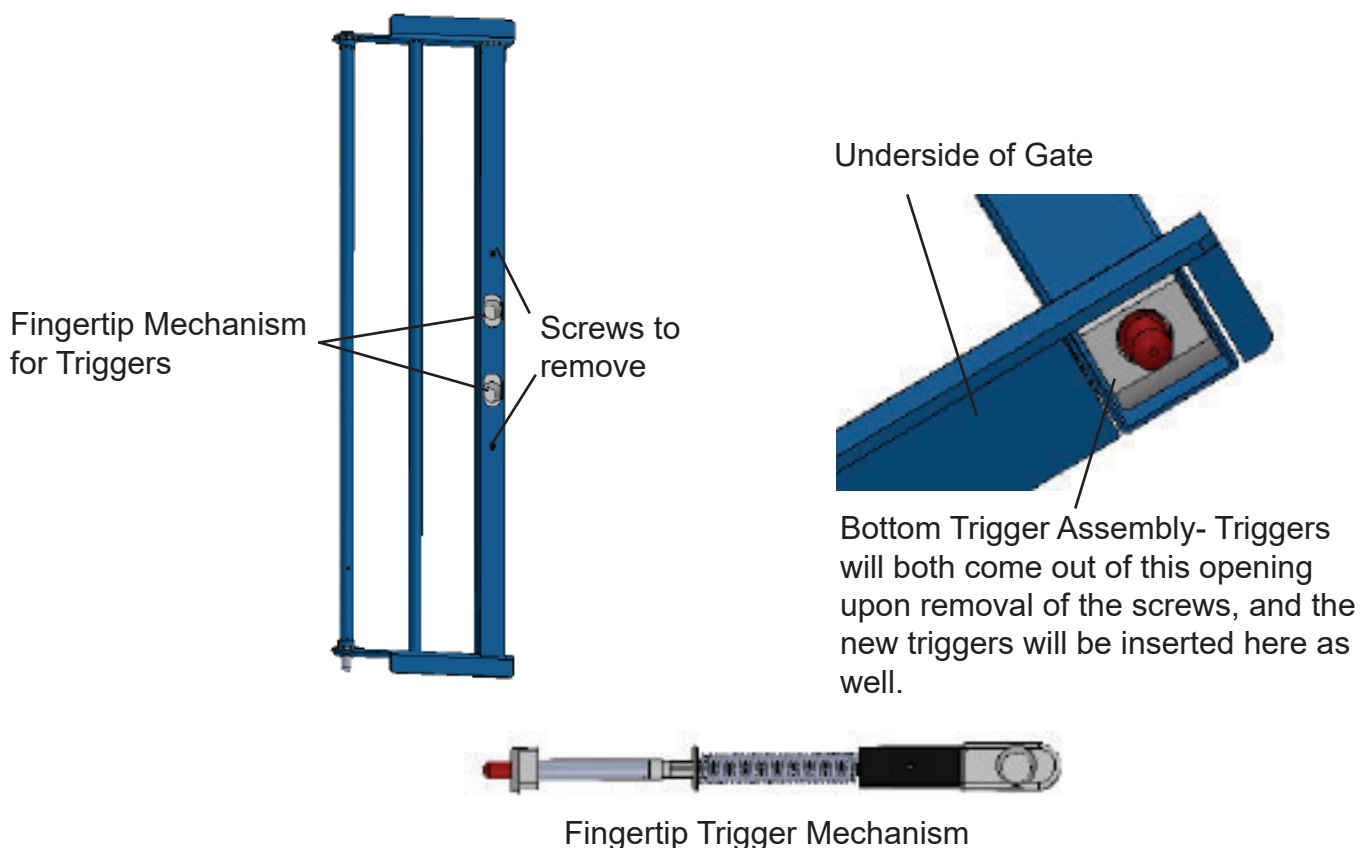
TRIGGER REPLACEMENT FOR PORTLAND OR DIALYSIS GATES

When replacing the trigger mechanisms on a Portland or Dialysis Gates, it is not necessary to remove the gate from the crib.

*On Springfield Cribs, Doernbecher II and Critical Care II Cribs, the top and bottom trigger mechanisms are the same size.

*On the Doernbecher, Critical Care, Movesafe or Standard Cribs, the trigger mechanism on top is shorter than the mechanism on the bottom

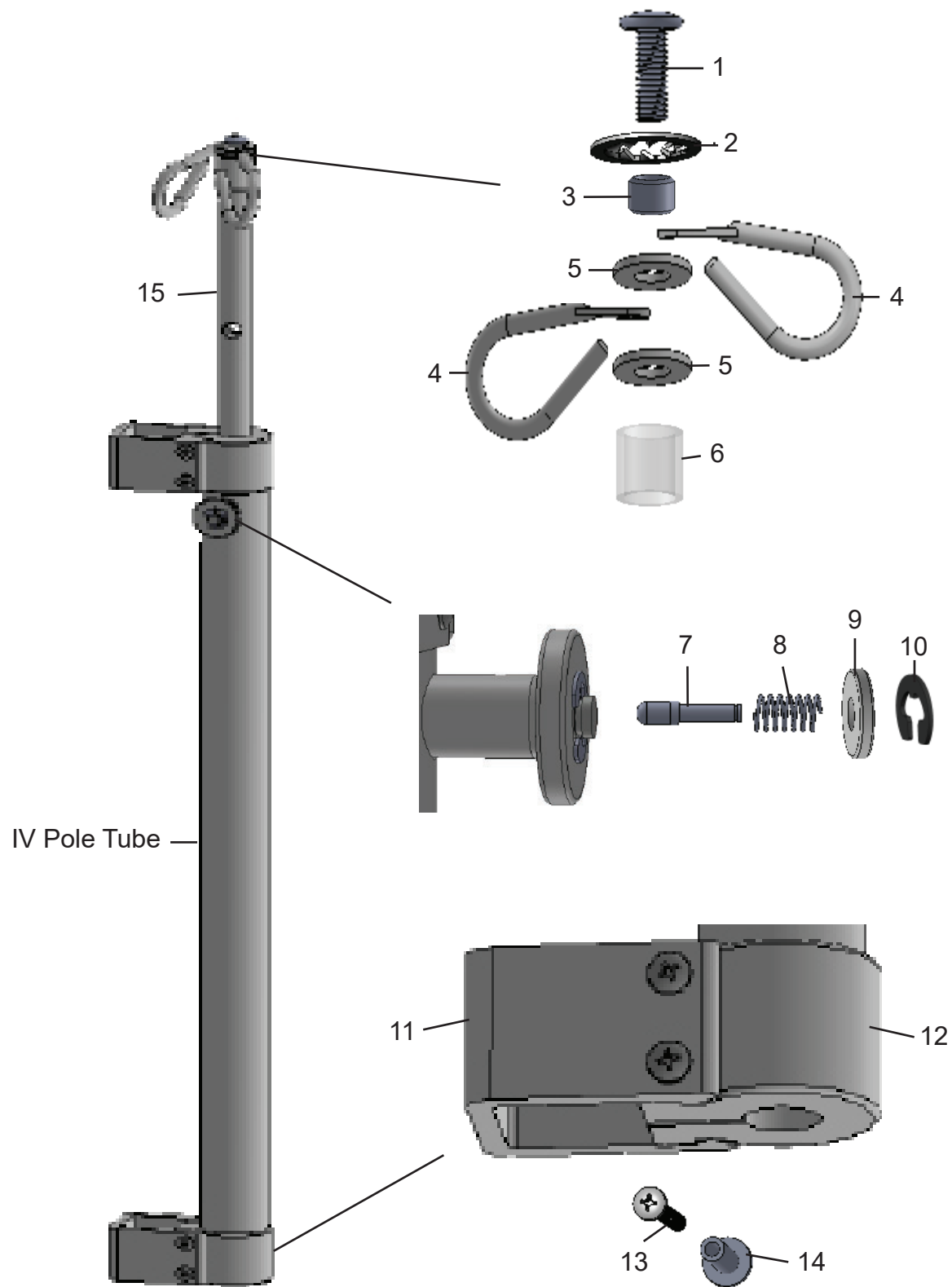
To remove the broken triggers from the crib, remove the two screws noted in the photo below and the trigger mechanisms will fall out the bottom of the gate.



Once the broken triggers have been removed from the gate, simply insert the first trigger into the opening at the bottom making sure the red tip is facing upwards and the fingertip release mechanism is showing in the opening at the front of the gate. To push the top trigger into position, then use an object such as a dowel rod to push it up into the top of the gate into position. Insert the screw to hold the top trigger in place.

Next, insert the second trigger with the red tip facing downwards. Again be sure the fingertip mechanism is visible in the opening of the gate and not backwards. Insert the screw to hold the bottom trigger in place. The repair is complete. Test the triggers to be sure they retract and release properly by using the fingertip mechanisms.

***1904 IV POLE COMPONENT DIAGRAMS**



**Corresponding parts list is on the following page.*

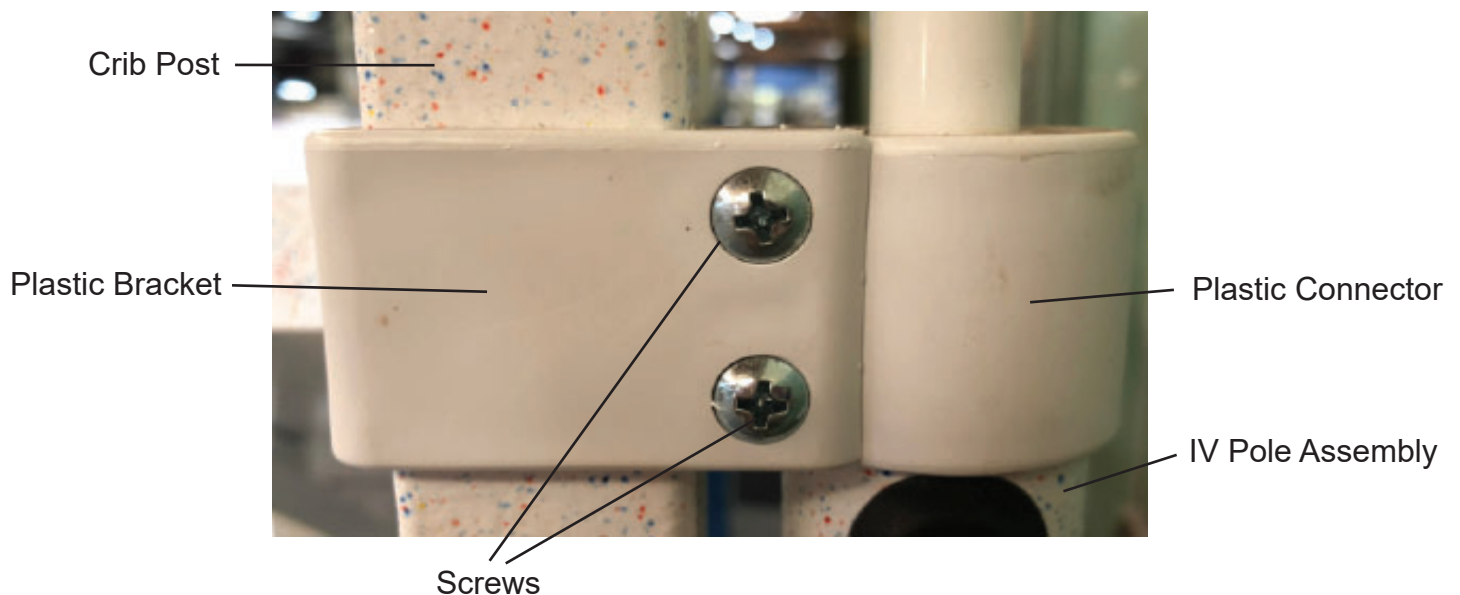
***1904 IV POLE PARTS LIST**

#	Part Description	Qty.	Part #	Notes
	*1904 IV Pole	1	*1904	Complete IV Pole Assembly
1	Screw	1	63392	
2	Lock Washer	1	63458	
3	Spacer	1	11628	
4	Hook	2	11627	Specify color when ordering
5	Washer	2	11555	
6	Plastic Spacer	1	62083	
7	Release Pin	1	11852	
8	Compression Spring	1	63006	
9	Plastic Washer	1	11531	Used as release knob
10	Retaining Ring	1	63034	
11	Plastic Bracket	2	11553	Available also as a set in hardware bag 72079
12	Plastic Connector	2	11552	
13	Screw	4	62047	
14	Connector Nut	4	60319	
15	Inside Tube ass'y	1	81550	Inside tube- no hardware included
	Plug	1	63452	Not shown
	Stop Ring	1	81080	Not shown-internal component
	Hardware Bag	1	72081	Includes everything listed above excluding #15

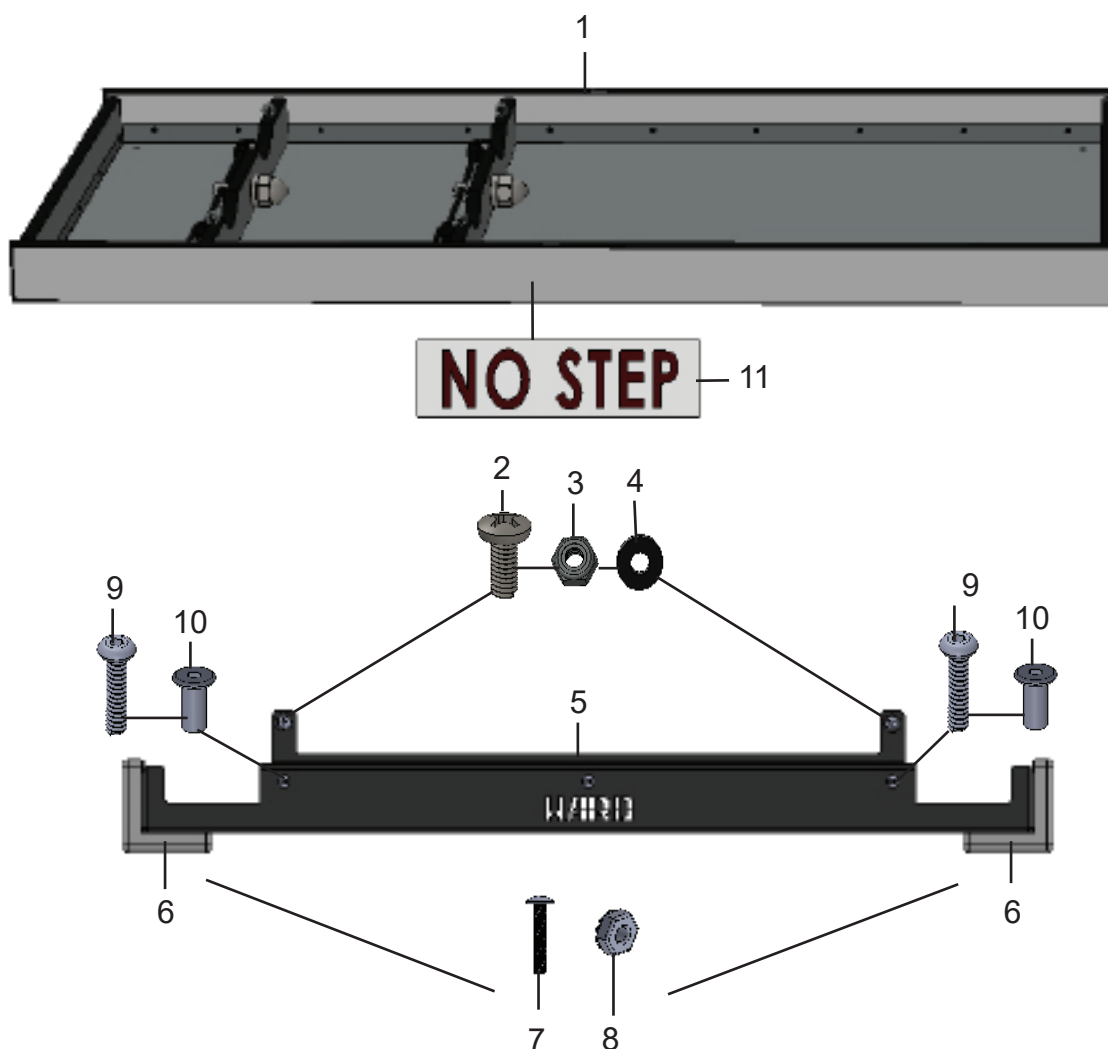
The *1904 IV Pole is a standard feature on all of HARD Manufacturing cribs that do not have a safety top.

ASSEMBLY INSTRUCTIONS

1. Remove all parts from packaging.
 2. Place plastic brackets (11) on the inside of the desired crib corner post and press end of brackets outward around the post.
 3. Place a plastic connector (12) around the IV pole tube at the top just above the release pin (7), and another at the bottom of the IV pole tube.
 4. Holding the IV pole assembly with the release pin (7) facing outwards away from the crib, turn the plastic connectors (12) to face the open ends of the plastic brackets (11), then press plastic connectors into the plastic brackets until they lock together.
 5. Align the holes in the bracket and connector, then tap in the two connector nuts (14) into the holes in both the top and bottom brackets/connectors.
 6. Insert the two screws (13) into the two connector nuts in the top bracket/connector and begin to fasten but do not completely tighten them at this time. Repeat with the bottom bracket and then go back and finish tightening the parts at the top.
- *Do not overtighten the bracket/connector or the plastic may break prematurely as a result.***
7. Assembly is complete. Check the inside tube assembly to be sure it raises and lowers freely when release pin (7) is pulled back and should lock in several positions when released.



SHELF & BUMPERS



#	Part Description	Part #	Qty	Notes
1	Under Crib Shelf with O2 cut outs- 30" crib	88164	1	Shelf with hardware- no bumpers included
	Under Crib Shelf with O2 cut outs- 36" crib	88165	1	
2	Screw 1/4-20x5/8	63392	4	Used to attach Shelf to Bumper
3	Jam Nylon Locknut 1/4-20	63413	4	
4	Washer 1/4	63443	4	
5	Bumper Assembly- 30" crib	84126	2	Assembly includes #6, 7 & 8 only with bumper plate
	Bumper Assembly- 36" crib	84127	2	
6	Grey Corner Bumpers	63896	4	
7	Screw 8-32x7/8	60129	8	For Grey Corner Bumper
8	K-Nut 8-32	60139	8	
9	Button Socket Cap Screw 1/4-20x7/8	60242	6	Used to attach Bumper to the crib
10	Connector Nut 1/4-20	60245	6	
11	"NO STEP" Sticker	62180	2	Position: middle of both of the long shelf sides

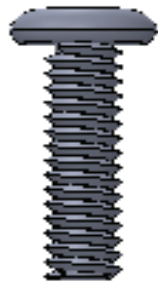
REPLACING OR INSTALLING AN UNDER CRIB SHELF OR BUMPER SYSTEM

HARDWARE IDENTIFICATION

Note: If the crib or bed does not have a bumper system, the under crib shelf will attach in a different manner. Please contact us for instructions in that situation.

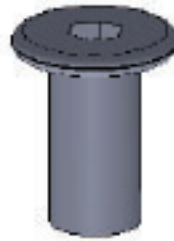
Suggested Tools:

1. 5/32" Allen Wrench
2. 3/16" Allen Wrench
3. #2 Phillips Screwdriver
4. 7/16 Wrench



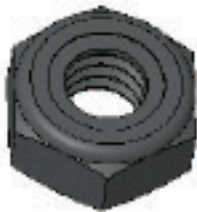
#60242 x 6

1/4 - 20 x 7/8 button socket cap screw



#60245 x 6

1/4 - 20 connector nut



#63413 x 4

Jam Nylon Locknut



Washer 1/4

#63443 x 4



#63392 x 4

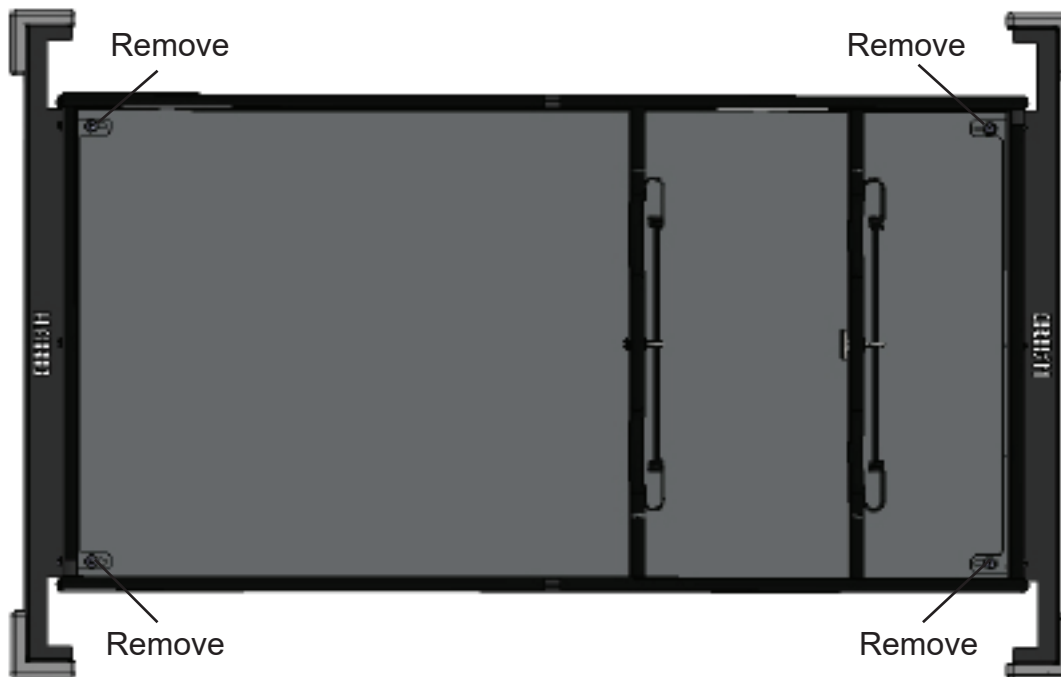
Screw 1/4-20x5/8



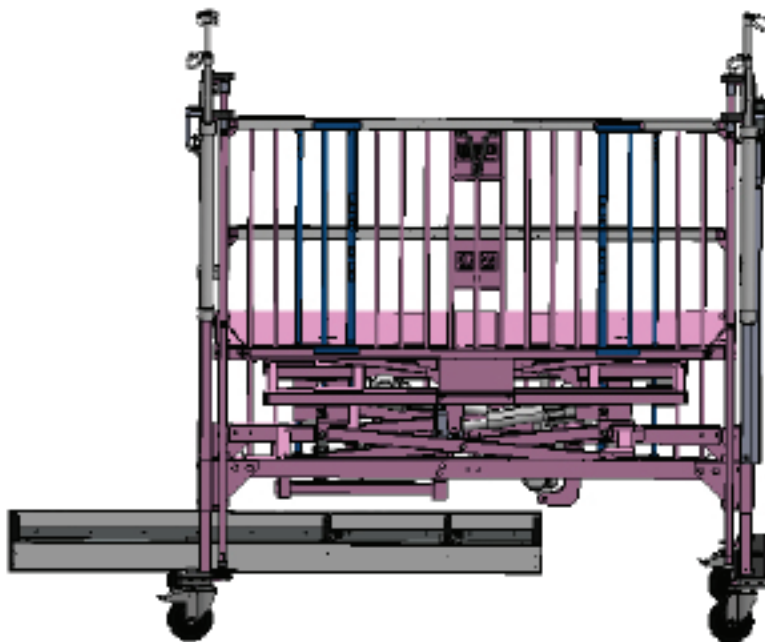
Bumper Assembly- Part numbers vary based on crib size. Consult parts list for the correct part#.

REPLACING OR INSTALLING AN UNDER CRIB SHELF OR BUMPER SYSTEM

1. To begin removal of a damaged shelf or bumpers, first remove the 4 screws #63392, 4 locknuts 63413 and washers 63443 located in the 4 corners of the shelf as shown.



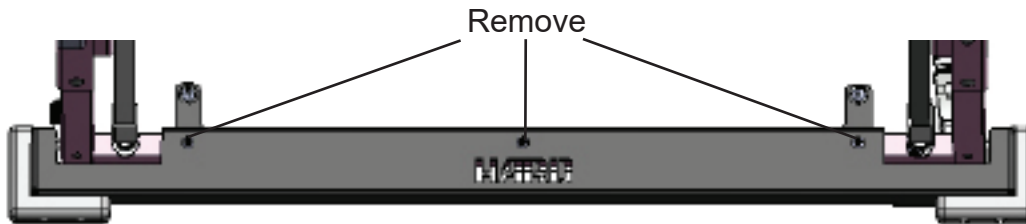
2. Slide the shelf out of the crib through one of the ends as shown.



REPLACING OR INSTALLING AN UNDER CRIB SHELF OR BUMPER SYSTEM

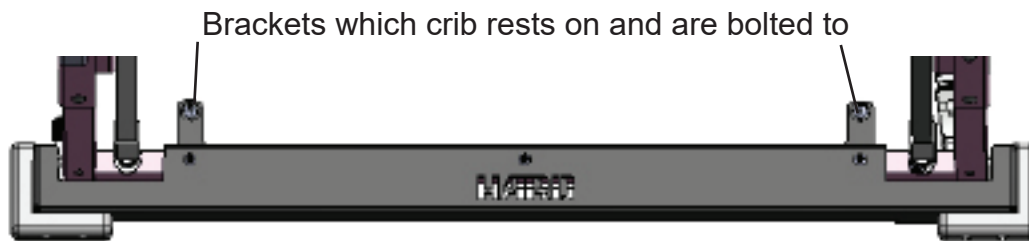
If only the shelf is being replaced, simply slide the new shelf through one of the crib ends. Line up the holes in the 4 corners of the shelf with the holes in the brackets on the bumper plates as shown below, and reinstall the 4 screws #63392, the 4 locknuts #63413 and the 4 washers #63443 and re-assembly will be complete.

3. To remove a damaged bumper, remove the 3 cap screws 60242 and 3 connector nuts 60245 as shown, then remove the damaged bumper. Disassembly is complete.



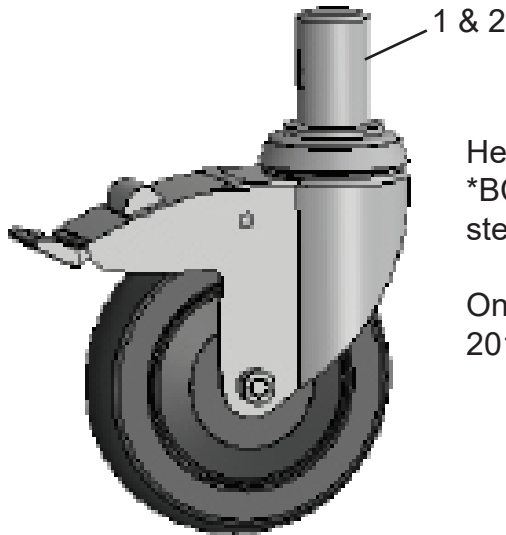
4. Install the new bumper plate(s) by aligning the holes in the plate with the holes in the crib cross bar, and install 3 cap screws 60242 and the 3 connector nuts 60245 in each bumper plate.

5. If a new shelf is being installed as well, there will be brackets on which the shelf rests on and is bolted to as shown below. Slide the shelf through one of the ends of the crib as shown in Step #2. Align the holes in the shelf with the holes in the bumper plate brackets and install the 4 screws #63392 from the top, and the 4 locknuts #63413 and 4 washers #63443 from the bottom.



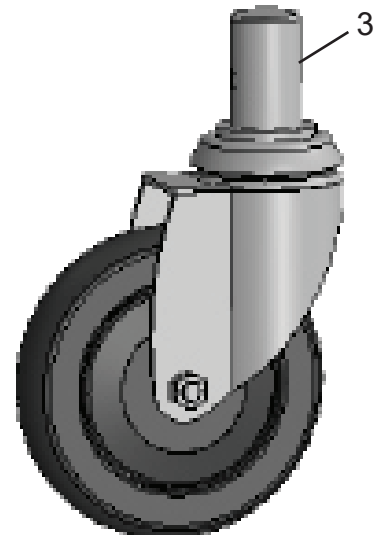
Assembly is complete.

CASTERS & MISC



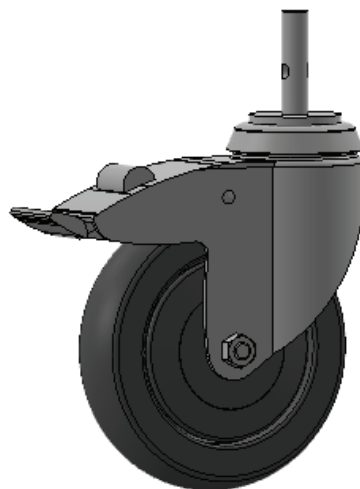
Heavy duty casters
*BC-65 with large bolt in stem.

On cribs and beds made 2015 to present.



#	Part Description	Part #	Notes
	5" Heavy Duty Casters- 2015 to present	*BC-65	Full set with hardware- 1 Steer, 2 Brake, 1 Swivel & Hardware
1	Steer Caster	72100	Located at head end right side
2	Brake Caster	72101	Located at head end left side and foot end right side
3	Swivel Caster	72102	Located at foot end left side
4	Bolt- 8-8x10mm	61007	2 per caster
	5" Casters- Full set includes: 1 Steer, 2 Brake, 1 Swivel & 3 Caster Sockets	*BC-40	Not shown. This set of casters is on all hospital cribs manufactured prior to 2015.
	Steer Caster	72103	
	Brake Caster	72104	
	Swivel Caster	72105	
	Caster Socket	60606	Enamel based paint
	Bright White Touch Up Paint- 1/4 pint	00564	
	Antique White Touch Up Paint- 1/4 pint	00562	

Position of the casters is determined by standing at the foot end of the crib.



Old style brake caster
72104 with narrow stem
used with a black plastic
caster socket.

On cribs and beds made
prior to 2015.



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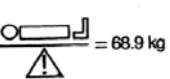
CAUTION SHEET

All bolts and other fasteners must be securely tightened and maintained when crib is put into service.

Before each usage or assembly, inspect crib for damaged hardware, loose joints, missing parts or sharp edges.

Symbology Definitions / Technical Labels

The following designations of symbols which are found on various labels on the bed and discussed in the Manual.

 Consult Accompanying Documents	 Alternating Current, Single Phase
 Attention, Consult Accompanying Documents	 Type B Applied Part
 Warning Dangerous: Voltage	 Protective Earth (Ground)
 Atmospheric Pressure Limits	 Humidity Limits
 Temperature Transportation Conditions	 = 68.9 kg = 51.8 kg Weight Limits

Technical parameters of these beds place them in the following categories:

- a) Class 1 equipment
- b) Type B equipment
- c) IPX4 ingress of water (ordinary equipment)
- d) Equipment not suitable for use in the presence of flammable anaesthetic mixture with air or oxygen or nitrous oxide
- e) Mode of operations continuous with intermittent loading

To avoid overheating the motor after raising and lowering the bed three full times in successions, HARD Manufacturing Company requires a fifteen minute break before repeating the same

ELECTRICAL WARNINGS

Intended Use

An AC-powered adjustable hospital bed is a device intended for medical purposes that consists of a bed with a built-in electric motor and remote controls that can be operated by the patient to adjust the height and surface contour of the bed. The device includes movable and latchable side rails. This crib is intended to be used with hospital grade bedding. This device is intended for juveniles with a maximum weight of 150 lbs.

General Description

An AC-powered adjustable hospital bed is a device intended for medical purposes that consists of a bed with a built-in electric motor and controls that can be operated by the health care provider or patient (optional) to adjust the height and surface contour of the bed. The device includes movable and latchable side rails.

Applied Parts

Part of medical equipment that in normal use necessarily comes in to physical contact with the patient for a medical system to perform its function. Patient connection: individual point on the applied part through which current can flow between the patient and the medical equipment in normal condition or single fault condition. Identified as Type B parts, Side Rails, Head Rail and Foot Rail.

Disposal: At end of product and accessories service life, this unit should be disposed of in accordance with current facility approved practices and local municipal codes.

Application Environments:

Intensive/critical care provided in a hospital where 24 hour medical supervision and constant monitoring is required and provision of life support system/equipment used in medical procedures is essential to maintain or improve the vital functions of the patient...or, acute care provided in a hospital or other medical facility where medical supervision and monitoring is required and equipment used in medical procedures is often provided to help maintain or improve the condition of the patient.

WARNING: To avoid risk of electric shock, this equipment must only be connected to a supply main with protective earth.

Do not position the equipment where it is difficult to reach the mains plug. The main plug is to be used to disconnect power from the device.

Inappropriate handling of the power supply cord e.g. by kinking, shearing, or other mechanical damages may create unacceptable risks and hazards. Routing cables from other equipment in the medical bed requires precautions to be taken to avoid squeezing those cables between parts of the medical bed. No hoists shall be used with this medical bed because of the limited space underneath the medical bed.

The manufacturer will provide instructions and/or assistance for the correct replacement of interchangeable or detachable parts by service personnel

The manufacturer will provide or assist with circuit diagrams of any serviceable parts, component parts lists, descriptions, or calibration instructions to assist service personnel in parts repair. **WARNING: No modification of this equipment is allowed. Doing so will void any applicable remaining warranty of parts.**

Caution: Based on the results of EMC testing investigations conclude the product tested **complies** with the requirements of the standard(s) indicated. The results obtained in the test report are based on standards IEC 60601-1-2 ed3.0 (2007-03) with EMC Deviations per IEC 60601-2-52 ed1.0 (2009-12). Additional information concerning this specific testing and method how to avoid or minimize the potential for electromagnetic and reciprocal interference.

Electrical Ratings:

100-240v~, 50/60Hz or 220v-240v~, 50/60Hz

IP4X

10% duty cycle, 2 minutes on 18 minutes off

Type B Applied Part





The nations #1 manufacturer of hospital cribs

CLEANING INSTRUCTIONS FOR HARD MANUFACTURING CRIBS, BEDS & MATTRESSES

CRIBS OR BEDS

- ◆ HARD Manufacturing recommends the cribs and beds be washed by hand with a non-abrasive cleaner of your facility's choice and then thoroughly dried with a soft cloth or towel. Our equipment should never be placed in a machine for cleaning or subject to steam guns or pressure washers of any kind. Do not allow the crib or bed to air dry as pools of water left on the mattress pan surface or near bolt holes may eventually lead to premature corrosion.
- ◆ We suggest the use of a cleaner such as one that contains Quaternary Ammonium Chloride (Quats). Quats will both clean the crib or bed as well as disinfect it without oxidizing the epoxy coating.
- ◆ Any type of cleaner containing ammonia, alcohol, bleach or any other chemical that is abrasive should never be used on our cribs or beds for any reason.

MATTRESSES

- ◆ For mattresses, HARD Manufacturing recommends they be wiped down with a cleaner/disinfectant of the facility's choice. Our mattresses should not be subjected to any type of power washing. Bleach should never be used on our mattress as it may discolor the fabric.
- ◆ Mattresses should never be put back on the crib if the cover is not thoroughly dry. Failure to do so may cause premature corrosion on the pan mattress surface.
- ◆ Mattresses should always be allowed to dry in a flat position, never in an upright position. Failure to keep the mattress flat during the drying process could lead to the foam inside the cover to shift, creating permanent damage/lumps in the mattress.

VINYL CURTAINS

- ◆ Vinyl curtains and the vinyl top/ceiling covers on Springfield Cribs, Critical Care II Cribs and Monroe Beds can be cleaned with a non-caustic, non-alkaline emulsified detergent to remove oil, dirt, grease, etc. The detergent should be sprayed on or applied with a rag and immediately wiped off. Be sure to dilute the detergent as per the manufacturer's instructions prior to use.

Please note failure to follow the recommended cleaning guidelines stated by HARD Manufacturing can cause permanent damage to the crib/bed and/or mattress which will not be covered under warranty.





PREVENTATIVE MAINTENANCE GUIDE **FOR ELECTRIC HOSPITAL CRIBS**

The intent of this document is to provide health care facility engineers, maintenance personnel and other health care professionals involved in the operation and maintenance of electric cribs made by Hard Manufacturing the comprehensive information needed to achieve their expected 9 year service life.

We recommend the preventative maintenance checklist provided be performed once per year per crib at minimum.

If a crib is damaged in any way that poses a safety issue to either the patient or staff utilizing it, we recommend that it be removed from service and subjected to a complete preventative maintenance inspection. A checklist of suggested items can be found below and the following pages.

1.0 General Operation

CAUTION

1.1 Please refer to the caution pages earlier in this manual for information on the safe operation of one of our electric cribs.

1.2 If a crib is damaged in any way that poses a safety issue to either the patient or staff utilizing it, we recommend that it be removed from service and subjected to a complete preventive maintenance inspection. A checklist of suggested items to review is on the following pages of this document.

1.3 General overall cleaning with mild non-abrasive detergent should be applied at least once (1) per year or at the discretion of your facility. See more detailed cleaning instructions on a separate page of this manual.

2.0 Crib Safety Audit

2.1 Filler Bar Spacing – Examine the spacing between bars of all cribs in service. If a crib has railing spaces that exceed 2-3/8", remove it from service.

2.2 Entrapment in cribs – Examine the spaces between the mattress support and head, foot and side rails, with the mattress both flat and in a raised position. If the opening exceeds 4", remove the crib from service.

2.3 Mattress Fit – Inspect your crib mattresses to determine whether they are of adequate size. The mattress should fit snug within the rails and there should not be any sizeable gaps between the mattress and the rails.

2.4 Crib Weld Assemblies– Thoroughly inspect head and foot ends, side rails, the mattress platform and any other metal components of the crib frame for bent components, cracks or breaks. Remove from service immediately if any of this type of damage is found.



PREVENTATIVE MAINTENANCE GUIDE **FOR ELECTRIC HOSPITAL CRIBS**

HARD Serial # of Inspected Unit: _____ Facility Serial # of Inspected Unit _____

3.0 Physical Inspection of Crib Components

YES	NO	Side Rails, End Assemblies & Slide Rods
_____	_____	3.1 Do Any of the rails on the crib have bent filler bars, or damaged or broken welds?
_____	_____	3.2 On both the head and foot ends, check the weld assemblies paying special attention to the upper and lower crib eyes. Are the welds free of damage or breaks?
_____	_____	3.3 Do all trigger assemblies firmly latch in place to secure the rails, and retract & release properly when the Johns Hopkins handle is utilized?
_____	_____	3.4 Does the Johns Hopkins handle operate properly on all rails?
_____	_____	3.5 Raise and lower the side rails and end rails to verify they operate in a smooth motion.
_____	_____	3.6 Are the bushings present in the rail openings at the top and bottom? These are the plastic bushings that help the rail glide up and down on the slide rods.
_____	_____	3.7 Are the components at the top and bottom of the slide rods intact and free of damage?
_____	_____	3.8 Check the staff control and the scale control if present. Are the panels free of damage?
_____	_____	3.9 Are the protective teething bar covers present on the top of the side rails?
_____	_____	3.10 If the crib has Portland or Dialysis Gates in the side rails, do the trigger assemblies retract and release? Do the gates remain securely closed when tugged on?

IV Pole(s)

_____	_____	3.11 Are the brackets and connectors present and free of damage on all IV poles?
_____	_____	3.12 At the top of the IV pole, are all the components present, free of damage and securely fastened?
_____	_____	3.13 On the upper portion of the IV pole, are the components present that are used as the release knob?
_____	_____	3.14 Raise and lower the IV pole to be sure it operates in a smooth, east manner and locks in place properly when raised.

Continued on next page...



PREVENTATIVE MAINTENANCE GUIDE **FOR ELECTRIC HOSPITAL CRIBS**

3.0 Physical Inspection of Crib Components, Continued

YES NO

Mattress & Mattress Platform Assembly

- ____ 3.15 Do any of the components of the scissor lift or remainder of the mattress
____ platform have any breaks in the welds or any bent or damaged parts?
- ____ 3.16 Are the mattress pans showing any signs of rust? If so, refer to the cleaning
____ instructions on the prior pages of this manual. Replacement of those rusted
components will be necessary.
- ____ 3.17 Are all nuts and bolts on the mattress platform securely fastened? *Note-*
____ *nuts and bolts at the center of the scissor brackets and at the ends of the motors*
should not be over-tightened or it may impede the smooth movement of the crib
functions.
- ____ 3.18 Inspect the cords from all motors, the staff control and the control box.
____ Are all cords intact, plugged in securely and free of damage or any fraying?
- ____ 3.19 Is the mattress cover completely intact with no tears in the fabric or the trim?

Casters, Under Crib Shelf and Bumper System

- ____ 3.20 Is the crib able to be moved easily/do the wheels roll smoothly.
- ____ 3.21 Do the casters show any sign of being bent or not in proper alignment?
- ____ 3.22 Do the wheels have any flat spots indicating they may have been pushed with
____ brakes on?
- ____ 3.23 If the crib has heavy duty casters, are the bolts present in all 4 casters and
____ securely fastened? If the crib has the black plastic caster sockets, do they appear
to be intact/unbroken?
- ____ 3.24 Do the locking mechanisms on the steer and brake casters function properly?
- ____ 3.25 Check the under crib shelf thoroughly. Is it free from any cracks or other
____ damage?
- ____ 3.26 Is the under crib shelf securely fastened to the bumper system?
- ____ 3.27 Inspect the bumpers on both ends of the crib. Are the grey corner bumpers
____ present? Are the other portions of the bumpers free of breaks, bends or other
damage?
- ____ 3.28 Are the bumpers both securely fastened to the ends of the crib?

Continued on next page...



PREVENTATIVE MAINTENANCE GUIDE **FOR ELECTRIC HOSPITAL CRIBS**

3.0 Physical Inspection of Crib Components, Continued

YES	NO	Curtains, Curtain Assemblies & Vinyl Top Covers- Springfield and Doernbecher II Cribs only
_____	_____	3.29 Inspect all vinyl curtains. Are the fabric loops, curtain trim and the vinyl itself clean and free of tears or other damage? Is the vinyl top (if present) free of damage?
_____	_____	3.30 Inspect all curtain lift bars. Do the fingertip trigger mechanisms squeeze and retract properly?
_____	_____	3.31 Are the plastic lift bar glides at either end of each lift bar present and free of damage?
_____	_____	3.32 Are the curtain rods at both the top of the curtains and on the vinyl top cover (if one is present) intact and unbent? Are the plastic end pieces present and unbroken?
_____	_____	3.33 Check the stop rings that hold the curtains up to be sure they are tight and secure.
_____	_____	3.34 If a vinyl top cover is installed, are all 4 hitch pins to secure the cover present?
_____	_____	3.35 Raise and lower all curtain lift bars to be sure they operate in a smooth, easy manner.



PREVENTATIVE MAINTENANCE GUIDE FOR ELECTRIC HOSPITAL CRIBS

4.0 Performance Testing

Staff Control, Transformer, Scale and Motors

Plug the crib into an electrical outlet if unplugged.

YES NO

- | | | |
|-------|-------|---|
| _____ | _____ | 4.1 Is the green light on the under crib control box lit showing it is getting power? |
| _____ | _____ | 4.2 Press the head up/down buttons allowing the head to travel to the top of its range prior to pressing the down button. Is it functioning correctly and getting full range of motion? |
| _____ | _____ | 4.3 Press the foot up/down buttons allowing the foot/knee section to travel to the top of its range prior to pressing the down button. Is it functioning correctly and getting full range of motion? |
| _____ | _____ | 4.4 Press the Hi-Lo up/down buttons allowing the mattress platform to travel to the top of its range prior to pressing the down button. Is it functioning correctly and getting full range of motion? |

Scale Control if present

- | | | |
|-------|-------|---|
| _____ | _____ | 4.5 Does the scale power up and display the current weight (which may be zero)? |
| _____ | _____ | 4.6 When a certified 10kg weight is placed on the crib, does the scale appear to weigh correctly? <i>Note- this is the only unit of measure that can be used to calibrate or test a scale.</i> |

Inspection completed by _____ Date of Inspection _____



The nations #1 manufacturer of hospital cribs
Domestic Hospital Warranty

Five (5) year warranty

HARD Manufacturing will replace at no cost to the purchaser any non-expendable component such as the head and foot end assemblies, side assemblies, mattress platform or any electrical component with the exception of battery backup units, found to have a defect in materials or workmanship within five (5) years from the date of purchase at our discretion.

One (1) year warranty

HARD Manufacturing will replace at no cost to the purchaser any expendable component such as, but not limited to, mattresses, trigger assemblies, slide rods or slide rod components, crank handles, Johns Hopkins handles, battery backup units, vinyl curtains, curtain rods, or IV components found to have a defect in materials or workmanship within one (1) year from the date of purchase at our discretion.

Terms and Conditions of the Warranty Period

The warranty covers normal use of our cribs or youth beds. It does not cover damage or defects that occur due to any of the following:

1. Abuse, misuse, mishandling and excessive wear by staff, patients or parents/caregivers.
2. Modifications of the equipment including the electrical equipment. The covers should never be removed on the motors, transformers, control boxes, scale or staff controls. Doing any type of modification to our cribs or youth beds will void the warranty.

Replacement of any part under warranty is contingent upon the following:

1. The customer is to provide the serial number of the crib or bed as well as the serial number of the defective or damaged part(s) if one exists. If the part is a mattress, the customer must supply the serial number of the mattress as well as photos of both tags on the mattress.
2. The customer is to provide photos of the defective or damaged part.
3. The customer must, if requested by HARD Manufacturing, return the defective or damaged item for inspection prepaid within 30 days of reporting the issue.

Return Policy

Acceptance of returns on all new and unused equipment and parts is at the discretion of HARD Manufacturing. The purchaser will be responsible for a restocking fee and the freight costs associated with returning the equipment or item.

Maintenance

Placing cribs and youth beds in cart washers and/or the use of steam spray guns for disinfecting is not recommended. Use a non-abrasive cleaning solution such as a mild detergent and thoroughly dry all components of crib or bed prior to replacing the mattress on the unit. Solvents containing alcohol, ammonia or other abrasives should be avoided. Failure to follow the suggested cleaning/drying instructions could lead to premature corrosion and require replacement of the mattress.

Expected Service Life of HARD Manufacturing Cribs or Beds is 9 years.



**13485:2016
CERTIFIED**



1-800-873-4273 ~ parts@hardmfg.com