Owner's Operation and Maintenance Manual

Supine Bath Tub IH6300 Fixed Height IH6300ADH Adjustable Height



AFTER INSTALLATION, PLEASE CALL CUSTOMER SERVICE AT I-800-668-2337 TO ARRANGE FOR AN IN-SERVICE ON THE TUB

DEALER: This manual MUST be given to the user of the tub.

USER: BEFORE using this tub, read this manual and save for future reference.

For more information regarding Invacare products, parts, and services, please visit www.invacare-ccg.com



CONTINUING CARE GROUP

DO NOT USE THIS PRODUCT OR ANY AVAILABLE OPTIONAL EQUIPMENT WITHOUT FIRST COMPLETELY READING AND UNDERSTANDING THESE INSTRUCTIONS AND ANY ADDITIONAL INSTRUCTIONAL MATERIAL SUCH AS OWNER'S MANUALS, SERVICE MANUALS OR INSTRUCTION SHEETS SUPPLIED WITH THIS PRODUCT OR OPTIONAL EQUIPMENT. IF YOU ARE UNABLE TO UNDERSTAND THE WARNINGS, CAUTIONS OR INSTRUCTIONS, CONTACT A HEALTHCARE PROFESSIONAL, DEALER OR TECHNICAL PERSONNEL BEFORE ATTEMPTING TO USE THIS EQUIPMENT -OTHERWISE, INJURY OR DAMAGE MAY OCCUR.

THE INITIAL SET UP OF THIS TUB MUST BE PERFORMED BY A QUALIFIED TECHNICIAN.

PROCEDURES OTHER THAN THOSE DESCRIBED IN THIS MANUAL <u>MUST</u> BE PERFORMED BY A QUALIFIED TECHNICIAN.

Invacare products are specifically designed and manufactured for use in conjunction with Invacare accessories. Accessories designed by other manufacturers have not been tested by Invacare and are not recommended for use with Invacare products.

For further information on this product, please call the following:

Customer Service - 1-800-668-2337

Technical Support - 1-800-668-2337

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SPECIAL NOTES

Signal words are used in this manual and apply to hazards or unsafe practices which could result in personal injury or property damage. Refer to the table below for definitions of the signal words.

SIGNAL WORD	MEANING
DANGER	Danger indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
WARNING	Warning indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	Caution indicates a potentially hazardous situation which, if not avoided, may result in property damage or minor injury or both.

NOTICE

THE INFORMATION CONTAINED IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.

RADIO FREQUENCY INTERFERENCE

Most electronic equipment is influenced by Radio Frequency Interference (RFI). CAUTION should be exercised with regard to the use of portable communication equipment in the area around such equipment. If RFI causes erratic behavior, PUSH the Red Power Switch OFF IMMEDIATELY. DO NOT turn the Power Switch ON while transmission is in progress.

MAINTENANCE

Maintenance MUST be performed ONLY by qualified personnel.

Information on maintenance and adjustment of the thermoscopic mixing valve (RADA) is in the RADA Owner's Manual which is included with this product.



TYPICAL PRODUCT PARAMETERS

	IH6300	IH6300ADH
	FIXED HEIGHT	ADJUSTABLE HEIGHT
Height		
Tub Rim	32 inches (813 mm)	
Raised	N/A	41 inches (1041 mm)
Lowered	N/A	27 inches (686 mm)
Overall Tub Height	56 inches (1422 mm)	
Raised	N/A	65 inches (1651 mm)
Lowered	N/A	51 inches (1295 mm)
Width		
Tub Exterior	38 inches (965 mm)	38 inches (965 mm)
Tub Interior at Shoulder	30 inches (762 mm)	30 inches (762 mm)
Tub Interior at Hip	25 inches (635 mm)	25 inches (635 mm)
Tub Interior at Foot	22 inches (559 mm)	22 inches (559 mm)
Length		
Overall Tub Length	94 inches (2388 mm)	94 inches (2388 mm)
Tub Interior	69 inches (1753 mm)	69 inches (1753 mm)
Frame Base	49 inches (1245 mm)	49 inches (1245 mm)
Weight		
Tub (shipping weight)	725 lbs (329 kg)	725 lbs (329 kg)
Tub (empty)	700 lbs (318 kg)	700 lbs (318 kg)
Tub w/ 103 gal of water (max water capacity)	1575 lbs (714 kg)	1575 lbs (714 kg)
Floor Load Capacity	66 PSI (45 n/cm ²)	66 PSI (45 n/cm ²)
Water Capacity		
Maximum	103 gal (390 I)	103 gal (390 I)
w/ Tub Occupied (average usage)	70-77 gal maximum (265-292 l)	70-77 gal maximum (265-292 l)
Water Fill Rate	24 gal per min (91 l/min)	24 gal per min (91 l/min)
Water Pressure	65 PSI maximum (448 kPa)	65 PSI maximum (448 kPa)
Water Drain Rate	25 gal per min (95 l/min)	25 gal per min (95 l/min)
Hydromassage System		
Pump Motor	3/4 HP	3/4 HP
Flow Rate	70 gal per min (265 l/min)	70 gal per min (265 l/min)
Electrical		
Classification	Class I, Type B	Class I, Type B
Ingress Protection	IPX5	IPX5
Power	115 VAC; 50/60 Hz	115 VAC; 50/60 Hz
Current Rating	II amp continuous, maximum	13 amp continuous, maximum

FEATURES

CONTROL PANEL



NOTE: Model IH6300ADH Adjustable Height Tub Shown.

SECTION I — GENERAL GUIDELINES

SECTION I - GENERAL GUIDELINES contains important information for the safe operation and use of this product.

Check all parts for shipping damage before using. In case of damage, DO NOT use the equipment. Contact the ICCG dealer for further instructions.

Installation

ICCG assumes no responsibility for code infractions or damage to components due to improper installation.

Use extreme care during installation.

The installation area MUST be able to support the 66 pounds per square inch load capacity of the Supine Tub.

After installation and before use ensure all parts are properly and securely installed.

Ensure bathroom floor is dry and free of obstructions before transporting or assembling unit.

Be certain ALL electrical work is performed by a qualified electrician and is in compliance with local electrical codes.

Electrical

Grounding Instructions

Model IH6300 Supine Tub MUST be direct wired to wall using hot, neutral and ground wires in accordance with the National Electrical Code. External wiring MUST be grounded through a 15 amp breaker and GFCI receptacle.

Model IH6300ADH Supine Tub MUST be plugged into a hospital grade GFCI receptacle with a 15 AMP breaker.

Plumbing

Be certain ALL plumbing work is performed by a qualified plumber.

Some state and local plumbing codes require the installation of a "reduced pressure zone" (RPZ) assembly on both the incoming hot and cold supply lines to prevent back flow contamination into the potable water system. Invacare recommends you check local plumbing code requirements to determine if RPZs are required on your tub installation. RPZs are NOT supplied by Invacare and are to be provided by the customer if required.

The hot water supply to the tub MUST NOT exceed 110° F (43° C) to protect the user from scalding.

When operating water pressure exceeds 55 p.s.i., pressure regulators (similar to the ³/₄-inch Watts U5) MUST be installed.

Maintenance and Inspection

If any part of the system is NOT functioning properly, DO NOT use the system. Have the system serviced to correct the problem.

The system MUST be maintained on a regular basis to ensure it is functioning properly.

Electrical Shock Hazard

All disassembly and maintenance of the tub MUST be done by a qualified technician, certified electrician or plumber. Disconnect electrical supply or turn Off circuit breaker before performing any maintenance to the tub.

Disinfecting

Disinfect the tub after initial set up and ALWAYS disinfect the tub AFTER each use to avoid resident infection and contamination of the tub.

DO NOT disinfect the tub when it is occupied otherwise injury may occur.

ALWAYS wear gloves, protective apron, and face shield protection when disinfecting or cleaning your tub.

ALWAYS handle disinfectants, cleaning compounds, and powdered sanitizers with extreme care. Physical or mechanical damage caused by improper handling or usage of such products will not be the responsibility of ICCG.

DO NOT attempt to turn on whirlpool pump during the disinfectant cycle. Doing so could result in skin or eye contact with the disinfectant, which is corrosive. If contact is made, rinse IMMEDIATELY with water. If irritation occurs, consult a physician.

ALWAYS read and follow disinfectant label directions carefully.

NEVER use abrasive cleaners like scouring powder or liquid cleaners containing pumice stone. The use of these types of cleaners will make the gel-coat finish of your tub scratched and dull. NEVER use cleaners containing iodine, bromine, Betadine[®] or methylene blue. The use of these types of cleaners will cause the tub to stain. Never use cleaners containing bleach. Use of these types of cleaners will dry out the rubber seals and gaskets and the tub will not function properly.

Operation

A DANGER

Keep hair and body away from suction guard when pump is running.

The Supine Tub is specifically designed to be used with a bath lift. ICCG recommends use of the Traverse Lift Model 1200 ONLY. Bath lifts designed by other manufacturers are NOT to be utilized with the Supine Tub. Use of these products is prohibited and will void ICCG's Supine Tub warranty. Use ONLY Traverse Lift Model 1200 to maintain resident safety and product utility. Refer to the lift owner's manual for complete life operating and safety instructions.

NEVER operate whirlpool without water level above the whirlpool jets. Severe pump damage will result.

DO NOT operate this unit without the guard over the (water intake) suction fitting. The guard is a safety device that reduces the potential hazard of hair or body entrapment.

To reduce the risk of injury, DO NOT permit children or infirm persons to use this unit unless they are supervised at all times.

Recommended length of a bath is 5 to 10 minutes. However, if you become nauseous or dizzy or develop a headache, get out at once and cool down. Get medical attention if symptoms persist. Also, check with a physician before using this unit again.

Anyone under a doctor's supervision, pregnant, or with poor health, should check with a physician before using this unit.

DO NOT use directly after eating or while under the influence of alcohol or drugs.

SECTION 2—DISINFECTING THE TUB

A WARNING

Disinfect the tub after EACH use to avoid resident infection and contamination of the tub.

DO NOT disinfect the tub when it is occupied otherwise injury may occur.

Read and understand all information on Invacare brand disinfectant before use.

ALWAYS wear rubber gloves, an apron and a face shield when using disinfectant. In case of eye or skin contact, follow procedures on disinfectant container.

The disinfectant dispensing system has been factory tested and calibrated for use with Invacare disinfectant. The use of any disinfectant with a dilution ratio ($\frac{1}{2}$ oz. per gallon) or viscosity level different than that of Invacare disinfectant will result in an improper mixture of disinfectant and water. This may cause your system to be improperly disinfected - or in some instances, not disinfected at all. If using any disinfectant with a dilution ratio or viscosity level different than that of Invacare disinfectant or if switching from one type of disinfectant to another type, the disinfectant flowmeter MUST be calibrated before performing this procedure. Refer to <u>Calibrating the Disinfectant Flowmeter</u> on page 28.

DO NOT use the disinfectant wand for showering. The disinfectant wand is to be used for disinfecting ONLY.

CAUTION

NEVER use abrasive cleaners like scouring powder or liquid cleaners containing pumice stone. The use of these types of cleaners will make the gel-coat finish of your tub scratched and dull. NEVER use cleaners containing iodine, bromine, Betadine or methylene blue. The use of these types of cleaners will cause the tub to stain. Never use cleaners containing bleach. Use of these types of cleaners will dry out the rubber seals and gaskets and the tub will not function properly.

Disinfecting the Tub Using the Closed Loop System

NOTE: For this procedure, refer to FIGURE 2.1.

NOTE: Ensure that the whirlpool jets and whirlpool inlet fitting are closed before starting this procedure.

- 1. Clean the entire tub surface to remove visible tissue residue and fluid.
- 2. Depending on the type of whirlpool jets that are in your tub, close all jets by performing one of the following:
 - Turn the center of the jet clockwise to a full stop.
 - Push the center of the jet in.
- 3. Close the whirlpool inlet by gently pulling the plug in the center of the inlet cover outward until it stops.
- 4. Open aerator by rotating aerator knob two turns counter-clockwise.
- 5. Open disinfectant cabinet on the top of the tub.
- 6. Ensure that disinfectant siphon tube is placed in disinfectant container.
- 7. Hold the disinfectant wand over the interior of the tub.
- 8. Adjust water temperature to 105°F (40°C).
- 9. Turn disinfectant On/Off valve to the On position.

NOTE: Liquid will begin flowing from the disinfectant wand into the tub.

10. Turn the adjustment knob on the flow meter until the floating ball rises to a level of 35 cc/min.

NOTE: At 35 cc/min., disinfectant is being mixed with water at the proper ratio.

11. Continue to hold the disinfectant wand over the interior of the tub.

NOTE: When disinfectant has totally filled the interior plumbing, liquid will begin to flow from the disinfectant wand. NOTE: Invacare recommends that you thoroughly scrub all interior surfaces of the tub with disinfectant. The use of a longhandled brush will make this operation easier.

- Spray the interior surfaces of the tub, including the whirlpool jets, overflow fitting and whirlpool inlet fitting with disinfectant. Scrub all interior surfaces.
- Turn the disinfectant On/Off valve to the Off position.
- 14. Return disinfectant wand to its holder.
- 15. After scrubbing the interior surfaces, leave the disinfectant in the loop and on the tub surfaces for ten minutes.
- 16. Use the shower/massage wand on the pulse setting and direct the spray into both whirlpool jets to back flush until the water discharging from the whirlpool inlet is clear.
- 17. Rinse all interior tub surfaces.
- 18. Reverse STEPS 2 and 3 to open the whirlpool jets and whirlpool inlet.



SECTION 3—OPERATION

Overview

The tub is designed to improve the efficiency and environmental safety of your facility's operation. However, if the tub is not operated or maintained properly, the benefits designed into the system will not be realized. The purpose of this manual is to provide you with recommended procedures to help you obtain the maximum efficiency and safety while using your tub.

When using the tub, perform these procedures in the following order:

- 1. Preparing the tub for use
- 2. Transferring the resident into the tub
- 3. Bathing
- 4. Transferring the resident from the tub

Preparing the Tub for Use

NOTE: For this procedure, refer to FIGURE 3.1. NOTE: Make sure that your tub has been disinfected before preparing the tub for use.

NOTE: This procedure must be performed after disinfecting the tub to finalize the disinfecting process.

- 1. Open the whirlpool inlet by pushing the inlet plug in the center of the inlet cover in until it stops.
- 2. Open all whirlpool jets by performing one of the following:
 - Turn the center jet counter- clockwise to a full stop.
 - Pull the center of the jet out.
- 3. Using shower/massage wand on Pulse setting, direct water spray into the whirlpool jets to back-flush the system until water coming from the whirlpool inlet is clear. Refer to <u>Operating Shower/</u><u>Massage Wand</u> on page 15.
- 4. Rinse all interior tub surfaces with shower/massage wand on Spray setting.
- 5. Visually inspect tub for damage and to ensure that all tub surfaces are clean and that no visible disinfectant residue remains.



FIGURE 3.1 Preparing the Tub for Use

Operating the Tub

A WARNING

DO NOT stand in tub. Tub surfaces are slippery when wet. Serious injury may occur.

DO NOT stand on tub frame. Frame is slippery when wet.

BEFORE immersing the resident or operating the shower/massage wand, check that the water temperature is between 95° F and 105° F (35° C and 41° C) to avoid scalding the resident.

Disinfect the tub after EACH use to avoid resident contamination.

NOTE: For this procedure, refer to FIGURE 3.2.

Using Water Temperature Setting

Flow Water Thermometer - Measures the temperature of water coming from the tub fill spout or shower/massage wand.

Water Temperature Control Valve - Sets and maintains constant temperature for all incoming water.

ALWAYS hand test the incoming water temperature and the water temperature in the tub BEFORE immersing the resident. Failure to do so may result in a scalding injury.



FIGURE 3.2 Using Water Temperature Setting

Operating Shower/Massage Wand

NOTE: STEPS 1 - 3 are to be performed while holding the shower/massage wand over the tub. Refer to *Features* on page 8 for additional illustrations.

- 1. Turn shower/massage wand on to desired flow by rotating knob.
- 2. Adjust water temperature while watching thermometer.
- 3. Adjust shower spray by rotating shower wand head.

NOTE: Refer to the following chart for shower head adjustment settings.

•	Stream
л	Shower Spray
A	Mixture of Spray and Pulse Massage
	Pulse Massage

4. Turn shower On/Off knob to Off position when finished.

Filling the Tub

- 1. Close the drain.
- 2. Turn tub fill On/Off valve to On position by rotating knob.
- 3. Adjust water temperature while watching thermometer.
- 4. Turn tub fill On/Off valve to Off position when water reaches desired level.

NOTE: If hydromassage use is anticipated, water level MUST be completely above whirlpool jets.

NOTE: Before starting hydromassage, open the whirlpool inlet and whirlpool jets.

Using Hydromassage

CAUTION

Before starting hydromassage, water level MUST be completely above whirlpool jets otherwise damage to the motor/pump will result.

- 1. Open the whirlpool inlet by pushing in on the plug in the whirlpool inlet fitting.
- 2. Open all whirlpool jets by performing one of the following:
 - Turn the center of the jet counter-clockwise to a full stop.
 - Pull the center of the jet out.
- 3. Add Invacare Defoamer to bath water. Refer to Defoamer bottle for directions.
- 4. Push whirlpool On/Off button to start whirlpool jets.
- 5. Adjust the whirlpool aerator for desired water agitation by rotating the knob.
- 6. After use, push whirlpool On/Off button to stop whirlpool jets.
- 7. Drain the tub.

Adjusting Tub Height - Model IH6300ADH ONLY

A WARNING

DO NOT stand on tub frame. Frame is slippery when wet. Foot injury is possible when adjusting tub height.

CAUTION

DO NOT adjust height more than three cycles (up and down) within a ten minute period. Damage to the actuator may result.

NOTE: The supine tub stops automatically when maximum height adjustment Up or Down is reached.

Raising the Supine Tub

- 1. Press and hold tub control Up button.
- 2. Release tub control Up button when desired height is reached.

Lowering the Supine Tub

- 1. Press and hold tub control Down button.
- 2. Release tub control Down button when desired height is reached.

SECTION 4—INSTALLATION

Preparing the Work Area

NOTE: For this procedure, refer to FIGURE 4.1.

1. Determine location for the supine bath tub installation.

NOTE: Follow recommended floor plan when installing tub.

- 2. Carefully remove the tub from carton.
- 3. Remove tub from shipping pallet by removing screws from leg mounting pads.
- 4. Model IH6300 ONLY Remove the screws that secure the rear access panel to access the pump electrical connections (Detail "A" of FIGURE 4.1).



FIGURE 4.1 Preparing the Work Area

Securing the Tub

NOTE: For this procedure, refer to FIGURE 4.1 on page 17 and FIGURE 4.2.

- 1. Set the tub in place.
- 2. Mark location of anchor holes, using pre-drilled holes in leg mounting pads as a template (Detail "A" of FIGURE 4.1).
- 3. Move tub away from mounting area.

A WARNING

Protective eye wear MUST be worn when drilling to avoid possible eye injury.

- 4. Drill anchor holes in floor. Use a jack-drill with a carbide bit for concrete floors or a wood bit for wood floors.
- 5. Reposition the tub in mounting area, aligning the holes in the leg mounting pads with the holes drilled in STEP 4.

A WARNING

DO NOT adjust height of legs more than 1 inch (25.4 mm); leg will disassemble from leg mounting pad and serious injury may occur.

- 6. Level the tub by adjusting the telescopic legs either up or down, using a wrench, to achieve the desired height.
- 7. Check to make sure tub is level by placing a level on the front and sides of the tub (Detail "A" of FIGURE 4.2).
- 8. Repeat STEPS 6 and 7 until tub is level.
- 9. Secure legs to floor using fasteners appropriate for the floor material and in keeping with local codes (Detail "B" of FIGURE 4.2).





Electrical Hook-up

Be certain ALL electrical work is performed by a qualified electrician and is in compliance with local electrical codes.

Before installing and connecting the tub, make certain that the electric power source is SHUT OFF to avoid electrical shock.

NOTE: For this procedure, refer to FIGURE 4.3 on page 20.

NOTE: For installation details refer to on page 20.

1. Install the electrical hook-ups per FIGURE 4.3.





Electrical Installation

A DANGER

The National Electric Code requires the use of a ground fault circuit interrupter on all therapeutic pools and tubs (hydrotherapeutic tanks). Failure to follow this requirement could result in serious or fatal injury.

ELECTRICAL SHOCK HAZARD. All disassembly and maintenance of the tub MUST be done by a qualified technician, certified electrician or plumber. Disconnect electrical supply or turn OFF circuit breaker before performing any maintenance to the tub.

Be certain ALL electrical work is performed by a qualified electrician and is in compliance with local electrical codes.

All electrical conduit, fittings and wire to unit are to be supplied and installed by a professional electrician in accordance with the National electrical code as a minimum requirement, including the supply and installation of a Ground Fault Circuit Interrupter (GFCI).

Before installing and connecting the tub, make certain that the electrical power source is shut off to avoid electrical shock.

NOTE: For this procedure, refer to FIGURE 4.4.

- 1. Install a 115V electrical hook-up per local electrical codes.
- 2. For Model IH6300, perform the following:
 - A. Remove the screws that attach the rear access panel to the tub.
 - B. Route electrical line through electrical line routing hole in tub frame.
 - C. Connect ground, neutral and hot wires from wall directly to motor through the electrical line routing hole.

A DANGER

Model IH6300ADH - Electric shock hazard. Use only with hospital grade GFCI receptacle. Failure to do so may result in an electrical shock and/or serious or fatal injury.

3. For Model IH6300ADH - Plug hospital grade plug into pre-installed GFCI protected hospital grade receptacle (Detail "B" of FIGURE 4.4).



DETAIL "B" - MODEL IH6300ADH





Plumbing Hook-Up

A WARNING

Be certain ALL plumbing work is performed by a qualified plumber and is in compliance with local codes.

NOTE: For this procedure, refer to Refer to FIGURE 4.5.

NOTE: For installation details refer to **Plumbing Installation** on page 23.

CAUTION

The 2 inch PVC stub MUST be recessed into the floor to make the elbow flush with the floor. For Model IH6300ADH, this will allow smooth up and down movement of the hose. Otherwise, drain tubing and fittings could be crushed at low point of operation.

1. Install the plumbing hook-ups per FIGURE 4.5.





Plumbing Installation

A WARNING

Be certain ALL plumbing work is performed by a qualified plumber.

Some state and local plumbing codes require the installation of a "reduced pressure zone" (RPZ) assembly on both the incoming hot and cold supply lines to prevent back flow contamination into the potable water system. Invacare recommends you check local plumbing code requirements to determine if RPZs are required on your tub installation. RPZs are NOT supplied by Invacare and are to be provided by the customer if required.

The hot water supply to the tub MUST NOT exceed 110° F (43° C) to protect the user from scalding.

CAUTION

Purge water lines. Hot and cold lines MUST be purged (blown down) to clear lines of debris prior to connection. Valves and spray heads may become inoperable and/ or damaged if lines are not properly cleared. Items damaged in this way are not covered under the warranty.

When operating water pressure exceeds 55 PSI, pressure regulators (similar to the ³/₄-inch Watts U5) MUST be installed.

NOTE: For this procedure, refer to FIGURE 4.6 on page 24.

- 1. Purge water lines. Hot and cold lines MUST be purged (blown down) prior to connection, to clear lines of debris.
- 2. Connect hot and cold supply lines to appropriate copper stubs found on back of tub (Detail "A" of FIGURE 4.6).
- 3. Install On/Off valves at wall and use unions between valves and stubs.
- 4. Connect drains in accordance with local plumbing codes.
- 5. Assemble hand held shower and disinfectant wands.
- 6. Check operation of tub according to operating instructions.

NOTE: Check local codes regarding maximum water temperature allowed at hot water outlets for facility type.



FIGURE 4.6 Plumbing Installation and Schematic

SECTION 5-MAINTENANCE

Before performing any maintenance to the tub, make certain that the electric power source is shut off to avoid electrical shock.

Be certain ALL electrical work is performed by a qualified electrician and is in compliance with local codes.

If any part of the system is **NOT** functioning properly, **DO NOT** use the system. Have the system serviced to correct the problem.

The system MUST be maintained on a regular basis to ensure it is functioning properly.

ELECTRICAL SHOCK HAZARD. All disassembly and maintenance of the tub MUST be done by a qualified technician, certified electrician or plumber. Disconnect electrical supply or turn OFF circuit breaker before performing any maintenance to the tub.

Parts Information

NOTE: For parts information, please contact Invacare Continuing Care Group Technical Service at (866) 616-2631.

NOTE: Every six months or as necessary, have a qualified technician perform a thorough inspection and servicing. Routine maintenance will extend the life and efficiency of your tub.

Safety Inspection Checklists

Initially

- □ Ensure that the maximum water supply temperature does not exceed 110° F (43°C).
- □ Ensure that the maximum water pressure does not exceed 65 PSI.
- □ Verify the water flow temperature with a separate thermometer.
- □ Visually inspect for cracks in the tub surface.
- □ Check that all labels are present and legible. Replace if necessary.

Before Each Use

- □ Disinfect the tub.
- \Box Ensure that the maximum water supply temperature does not exceed 110° F (43°C).
- □ Ensure that the maximum water pressure does not exceed 65 PSI.
- □ Visually inspect for cracks in the tub surface.

Every 80-150 Baths

□ Perform the heavy duty cleaning procedure on the tub. Refer to <u>Heavy Duty Cleaning</u> <u>Procedure</u> on page 27.

Every Six Months

- □ Verify the water flow temperature with a separate thermometer.
- □ Visually inspect plumbing for leaks.
- □ Check that all labels are present and legible. Replace if necessary.
- □ IH6300ADH ONLY Re-apply white lithium grease. Refer to <u>Maintenance for</u> <u>IH6300ADH Adjustable Height ONLY Glide Pads</u> on page 26.

Maintenance for IH6300ADH Adjustable Height ONLY Glide Pads

NOTE: For this procedure, refer to FIGURE 5.1.

NOTE: Glide pads require white lithium grease applied twice a year.

- 1. Remove side panel to access glide pads.
- 2. Generously apply white lithium grease to stainless steel rub panel.
- 3. Repeat STEPS 1-2 for the opposite side.
- 4. Replace side panels.



FIGURE 5.1 Maintenance for IH6300ADH Adjustable Height ONLY Glide Pads

Removing Soap Film and Hard Water Deposits

Use a commercially available cleaner such as Invacare's Heavy Duty Cleaner to thoroughly spray the exposed surfaces, including the openings of the tub jets and tub suction fitting. Use a long handled soft brush or similar product to wipe down all surfaces and allow the heavy duty cleaner to remain in contact with the exposed surfaces for approximately ten minutes. Rinse off surfaces using the shower wand, adjusted to spray position.

Removing Calcium Deposits, Scale and Lime Build-up

Spray a commercially available cleaner (full strength) for the intended application on all surfaces to be cleaned. Allow the cleaner to remain in contact with surfaces for at least five minutes to as long as 12 hours. Rinse off surfaces using the shower wand, adjusted to the spray position. Use the cleaner according to the manufacturer's instructions.

Heavy Duty Cleaning Procedure

DO NOT use this product or any available optional equipment without first completely reading and understanding these instructions and any additional instructional material such as owner's manuals, service manuals or instruction sheets supplied with this product or optional equipment. If you are unable to understand the warnings, cautions or instructions, contact a healthcare professional, dealer or technical personnel before attempting to use this equipment - otherwise, injury or damage may occur.

The disinfectant dispensing system has been factory tested and calibrated for use with Invacare disinfectant. The use of any disinfectant with a dilution ratio ($\frac{1}{2}$ oz per gallon) or viscosity level different than that of Invacare disinfectant will result in an improper mixture of disinfectant and water. This may cause your system to be improperly disinfected - or in some instances, not disinfected at all. If using any disinfectant with a dilution ratio or viscosity level different than that of Invacare disinfectant with a dilution ratio or viscosity level different than that of Invacare disinfectant with a dilution ratio or viscosity level different than that of Invacare disinfectant or if switching from one type of disinfectant to another type, the disinfectant flowmeter must be calibrated before performing this procedure. Refer to the tub owner's manual or to the calibration instruction sheet, part number 1154272, for the calibration procedure.

ALWAYS wear rubber gloves, an apron and face shield protection during disinfecting, cleaning and rinsing procedures. In case of eye or skin contact, follow procedures on disinfectant container.

CAUTION

NEVER use abrasive cleaners like scouring powder or liquid cleaners containing pumice stone. The use of these types of cleaners will make the gel-coat finish of your tub scratched and dull. NEVER use cleaners containing iodine, bromine, Betadine or methylene blue. The use of these types of cleaners will cause the tub to stain. Never use cleaners containing bleach. Use of these types of cleaners will dry out the rubber seals and gaskets and the tub will not function properly.

Before starting the whirlpool pump, the water level must be completely above the whirlpool jets. Otherwise damage to the motor/pump will result.

In addition to disinfecting your tub after every use, you will need to perform this procedure approximately once every 80-150 baths.

- 1. Clean the entire surface of the tub to remove visible tissue residue and fluid.
- 2. Rinse the inside surface of the tub with the shower/massage wand on the spray setting.
- 3. Rotate the water temperature valve to adjust the water temperature to 105° F.

NOTE: This will maximize the cleaning solution's ability to clean and disinfect the system.

- 4. Close the drain.
- 5. Make sure the whirlpool jets are open.

NOTE: The required amount of water to cover the whirlpool jets is 50 gallons.

6. Fill the tub above the whirlpool jets.

NOTE: The required amount of Invacare Heavy Duty Cleaner is 200 ounces.

- 7. Add the Invacare Heavy Duty Cleaner to the water in the tub.
- 8. Spray pre-mixed Invacare Heavy Duty Cleaner on the remaining surfaces.
- 9. Press the whirlpool on/off button to turn on the whirlpool pump and let the pump run for 60 seconds.
- 10. Turn off the pump and allow the heavy duty cleaner/water solution to remain in the tub for 10 minutes.
- 11. During this ten-minute waiting time, take a long handled brush and thoroughly scrub all interior surfaces of the tub.
- 12. Open the drain to allow the heavy duty/water solution to drain from the tub.
- 13. Use the shower/massage wand on the pulse setting and direct the spray into both whirlpool jets to back flush until the water discharging from the whirlpool inlet is clear.
- 14. Rinse the tub thoroughly with the shower wand on the spray setting.
- 15. Check the tub for damage and to ensure all surfaces of the tub are clean and that no visible residuals remain. If residuals are found, repeat STEPS 13 and 14.

Calibrating the Disinfectant Flowmeter

▲ WARNING

DO NOT use this product or any available optional equipment without first completely reading and understanding these instructions and any additional instructional material such as owner's manuals, service manuals or instruction sheets supplied with this product or optional equipment. If you are unable to understand the warnings, cautions or instructions, contact a healthcare professional, dealer or technical personnel before attempting to use this equipment - otherwise, injury or damage may occur.

The disinfectant dispensing system has been factory tested and calibrated for use with Invacare disinfectant. The use of any disinfectant with a dilution ratio ($\frac{1}{2}$ oz. per gallon) or viscosity level different than that of Invacare disinfectant will result in an improper mixture of disinfectant and water. This may cause your system to be improperly disinfected - or in some instances, not disinfected at all. If using any disinfectant with a dilution ratio or viscosity level different than that of Invacare disinfectant or if switching from one type of disinfectant to another type, the disinfectant flowmeter MUST be calibrated using this procedure before disinfecting the tub.

This procedure should only be attempted by qualified maintenance personnel. Failure to heed these precautions could result in injury to the tub operator or resident.

ALWAYS wear rubber gloves, an apron and face shield protection during disinfecting, cleaning and rinsing procedures. In case of eye or skin contact, follow procedures on disinfectant container.

NOTE: For this procedure, refer to FIGURE 5.2 on page 29.

NOTE: Equipment needed:

- Bucket or Pail, at least 1 Gallon
- *Graduated plastic bottle, at least 16 ounces*
- Felt Tip Pen
- 1. Open the whirlpool aerator by rotating two turns counterclockwise.
- 2. If the tub is equipped with a disinfectant wand, hold the wand over the interior of the tub.
- 3. Pour exactly one gallon of water into the bucket/pail.
- 4. Mark the bucket/pail at the gallon level using the felt tip pen.
- 5. Empty the bucket/pail.
- 6. Pour a whole number of ounces of disinfectant into the graduated plastic bottle.

NOTE: For example, pour 2 or 3 ounces, but not 2¹/₂ ounces, otherwise the results will be skewed.

NOTE: DO NOT use water instead of disinfectant. This would cause a false reading.

- 7. Note the number of ounces in the graduated plastic bottle.
- 8. Open the service access cabinet door.
- 9. Insert the disinfectant draw tube into the graduated plastic bottle.
- 10. Turn the black knob on the flow meter valve five turns counterclockwise to open the metering valve.
- 11. Close all jets by pushing the center of each jet in or turning the center of the jet clockwise.
- 12. Close the whirlpool inlet by pulling the inlet plug out.
- 13. Turn the disinfectant valve to the on position.

NOTE: Liquid will be heard filling the interior plumbing of the tub.

14. Note the position of the floating ball in the flow meter.

- 15. Adjust the injector by performing one of the following:
 - Bottom of Floating Ball Reads Greater Than 35 Less disinfectant needs to be added to the mixture. Loosen the screw on the injector to draw less disinfectant into the solution.
 - Bottom of Floating Ball Reads Less Than 35 More disinfectant needs to be added to the mixture. Tighten the screw on the injector to draw more disinfectant into the solution.
- 16. When the bottom of the floating ball is near 35, turn the black adjustment knob on the flow meter until the bottom of the floating ball is at 35.
- 17. Place the bucket/pail under the burp fitting to collect the disinfectant. Use a funnel if necessary.
- 18. Note the number of ounces in the graduated plastic bottle.
- 19. Let the bucket/pail fill to one gallon.
- 20. Turn the disinfectant valve to the off position.
- 21. Remove the disinfectant draw tube from the plastic bottle.
- 22. Examine the amount of disinfectant remaining in the plastic bottle.
- 23. Subtract the amount of disinfectant remaining from the amount noted in STEP 18.
- 24. Perform one of the following:
 - Approximately ¹/₂-ounce of disinfectant has been used Proceed to STEP 23.
 - Much more or much less than ½-ounce of disinfectant has been used repeat STEPS 1-18.
- 25. Position the disinfectant draw tube into the disinfectant solution.
- 26. Disinfect the tub. Refer to Disinfecting the Tub Using the Closed Loop System on page 12.





Maintenance Record

DATE	MAINTENANCE PERSON	TYPE OF MAINTENANCE PERFORMED	NOTES

SECTION 6—TROUBLESHOOTING

SYSTEM/OPERATION	SYMPTOMS	FAULTS	SOLUTION
Adjustable Height Model IH6300ADH	Tub will not raise or lower	Glide pads not greased	Grease glide pads. Refer to <u>Maintenance for</u> IH6300ADH Adjustable Height ONLY Glide Pads on page 26.
		Bad electrical connections	Check electrical connections at the control box.
		Actuator overloaded	Wait 5 minutes and try adjusting height again.
		Actuator burned out	Contact an Invacare Dealer.
		Obstacle in tub path	Inspect and remove obstacle.
		No electrical power to tub	Check and reset breaker or GFCI.
Hydromassage System	System will not start	No electrical power to tub	Check and reset breaker or GFCI.
		System not prepared	Be sure water level is above jets.
			Check that inlet plug on tub is depressed.
		Switch hose disconnected	Reconnect hose to switch and motor.
	System is ineffective	Water deposits in whirlpool jets	Disassemble and clean whirlpool jets.
		Whirlpool jets closed	Open whirlpool jets.
		Aerator closed	Open aerator.
		Whirlpool intake clogged	Inspect intake and remove obstruction.
Disinfecting System	No discharge from disinfectant wand	Whirlpool jets open	Close whirlpool jets.
		Whirlpool intake open	Close whirlpool intake.
		Hose kinked	Inspect hose and unkink.
		Disinfectant siphon tube kinked	Inspect siphon tube and unkink.
		Flow meter adjustment knob turned off	Turn flow meter adjustment knob to proper setting.
Tub Operation	No water flow	Water supply turned off	Turn on water supply.
	Restricted water flow	RADA valve. Refer to RADA owner's manual.	Inspect and clean RADA valve.

NOTE: If problems are not remedied by the suggested means above, contact an Invacare Dealer.

LIMITED WARRANTY

PLEASE NOTE: THE WARRANTY BELOW HAS BEEN DRAFTED TO COMPLY WITH FEDERAL LAW APPLICABLE TO PRODUCTS MANUFACTURED AFTER JULY 4, 1975.

This warranty is extended only to the original purchaser/user of our products.

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

Invacare Continuing Care Group (ICCG) warrants its bathing/whirlpool products to be free from defects in materials and workmanship for a period of three years from the date of purchase. Warranty obligation is limited to parts replacement only. Warranty replacement parts are only covered for the duration of the warranty period. All purchased replacement parts will carry a 30-day warranty from the date of shipment. If within such warranty period any such product shall be proven to be defective, such product shall be repaired or replaced, at ICCG's option. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. ICCG's sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.

For warranty service, please contact the dealer from whom you purchased your ICCG product. In the event you do not receive satisfactory warranty service, please write directly to ICCG at the address below. Provide dealer's name, address, model number, date of purchase, indicate nature of the defect and, if the product is serialized, indicate the serial number.

ICCG will issue a return authorization. The defective unit or parts must be returned for warranty inspection using the serial number, when applicable, as identification within thirty days of return authorization date. DO NOT return products to our factory without our prior consent. C.O.D. shipments will be refused; please prepay shipping charges.

LIMITATIONS AND EXCLUSIONS: THE WARRANTY SHALL NOT APPLY TO PROBLEMS ARISING FROM NORMAL WEAR OR FAILURE TO ADHERE TO THE ENCLOSED INSTRUCTIONS. LABOR; EXPENDABLE ITEMS, I.E. SHOWER HOSES, VALVES, "O" RINGS, SEALS; PARTS BROKEN DUE TO ABUSE OR IMPROPER USE, ITEMS THAT BECOME INOPERABLE DUE TO LACK OF MAINTENANCE, OR NON COMPATIBLE CHEMICALS; STAINS DUE TO HARD WATER, IODINE SOLUTIONS, OR OTHER UNAPPROVED CHEMICALS; "SPIDER" CRACKS OR "CRACKING" DUE TO MISHANDLING OR ABUSE. IN ADDITION, THE FOREGOING WARRANTY SHALL NOT APPLY TO SERIAL NUMBERED PRODUCTS IF THE SERIAL NUMBER HAS BEEN REMOVED OR DEFACED; PRODUCTS SUBJECTED TO NEGLIGENCE, ACCIDENT, IMPROPER OPERATION, MAINTENANCE OR STORAGE; OR PRODUCTS MODIFIED WITHOUT ICCG'S EXPRESS WRITTEN CONSENT INCLUDING, BUT NOT LIMITED TO: MODIFICATION THROUGH THE USE OF UNAUTHORIZED PARTS OR ATTACHMENTS: PRODUCTS DAMAGED BY REASON OF REPAIRS MADE TO ANY COMPONENT WITHOUT THE SPECIFIC CONSENT OF ICCG; PRODUCTS DAMAGED BY CIRCUMSTANCES BEYOND ICCG'S CONTROL; PRODUCTS REPAIRED BY ANYONE OTHER THAN AN ICCG DEALER, SUCH EVALUATION SHALL BE SOLELY DETERMINED BY ICCG.

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THIS WARRANTY SHALL BE EXTENDED TO COMPLY WITH STATE/PROVINCIAL LAWS AND **REQUIREMENTS.**

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