



# ***CAM-UNI Universal Camera User Guide***

PL 698 Rev A  
(12/2020)

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This manual must be used in accordance with all applicable national laws. The manual shall be regarded as a part of the machine and shall be kept for reference until the final dismantling of the machine, as defined by applicable national law(s).

Updated manuals can be downloaded at:  
<https://www.stoneagetools.com/manuals>

## SYSTEM REQUIREMENTS

Power Pack input power 100-240V AC, 1.8A.

## KEY FEATURES

- The camera system has the ability to support multiple cameras with a switchable monitor to collect real-time imagery.
- The camera system does not have recording capability, WIFI, or Bluetooth, it is only intended for real-time imagery.
- The camera system is intended to be used with all StoneAge automated equipment.

## DESCRIPTION OF EQUIPMENT AND INTENDED USE

The Universal Camera system is a product designed that removes the worker(s) from the work area. Despite the remote operation of the equipment, the operator will need to see with detail the work area. The camera will be required for the operator to align flex lances with tube opening as well as monitor the area for any hazards that could damage the cleaning equipment or the equipment being cleaned. When automatic indexing technology is applied to the various flex lance cleaning equipment, it will still be necessary to have a visual of the work area for operation and safety monitoring.



## EC DECLARATION OF CONFORMITY

Manufacturer:

StoneAge Incorporated  
466 South Skylane Drive  
Durango, CO 81303  
USA



Authorized Representative:

StoneAge Netherlands BV  
Reedijk 7Q  
3274 KE Heinenoord  
Netherlands  
Bob Van Wordragen, Operations Manager StoneAge NL

Declare that:

### Universal Camera System (CAM-UNI)

is a video device designed to be used with multiple types of waterblasting systems.

### Is compliant with the following Directives and Standards:

EN/IEC 62368-1 CB project- Product Safety testing standard for "Information Technology Equipment" & Audio Video Equipment

EU - RoHS Directive (2011/65/EU)

FCC 15B - Unintentional Radiators

ICES-003 Class A- Limits radio noise for non-residential operation

EN 55024 Class A - European immunity requirements for information technology equipment

EN 55032- Electromagnetic compatibility of multimedia equipment - Emission requirements

EN 55035- Electromagnetic Compatibility of Multimedia Equipment - Information Technology Equipment

EN 61000-3-2 Harmonics Current Emission, EN 61000-3-3 Voltage Fluctuation Flicker, EN 61000-4-2 ESD, EN 61000-4-3 RF Immunity, EN 61000-4-4 EFT,

EN 61000-4-5 Surge, EN 61000-4-6 Conducted RF Immunity, EN 61000-4-8 Magnetic Field, EN 61000-4-11 Voltage Dips and Interruption

**The Technical File** for Universal Camera System (CAM-UNI) is maintained at:

StoneAge Incorporated, 466 South Skylane Drive, Durango, CO 81303, USA and was compiled by the Engineering Manager. The Technical File is available through the Authorized Representative. This Declaration of Conformity is issued under the exclusive responsibility of StoneAge Incorporated.

StoneAge Incorporated, Durango, CO, USA

Adam Markham, Director of Engineering and Technology

12/15/20  
Date



## OPERATOR TRAINING

Managers, Supervisors, and Operators **MUST** be trained in Health and Safety Awareness of High-pressure Water Jetting and hold a copy the Water Jetting Association (WJA) Code of Practice, or equivalent (see [www.waterjetting.org.uk](http://www.waterjetting.org.uk)).

Operators **MUST** be trained to identify and understand all applicable standards for the equipment supplied.

Operators should be trained in manual handling techniques to prevent bodily injury.

StoneAge has designed and manufactured this equipment considering all hazards associated with its operation. StoneAge assessed these risks and incorporated safety features in the design. StoneAge **WILL NOT** accept responsibility for the results of misuse. **IT IS THE RESPONSIBILITY OF THE INSTALLER/ OPERATOR** to conduct a job specific risk assessment prior to use. Job specific risk assessment **MUST** be repeated for each different set up, material, and location. The risk assessment **MUST** conform to the Health and Safety at Work Act 1974 and other relevant Health and Safety legislation.

Operators **MUST** read, understand, and follow the Operational and Training Requirements (Section 7.0) of WJTA-IMCA's Recommended Practices For The Use Of High-pressure Waterjetting Equipment, or equivalent. Operators **MUST** read, understand and follow the Warnings, Safety Information, Assembly, Installation, Connection, Operation, Transport, Handling, Storage, and Maintenance Instructions detailed in this manual.

The risk assessment **MUST** consider potential material or substance hazards including:

- Aerosols
- Biological and microbiological (viral or bacterial) agents
- Combustible materials
- Dusts
- Explosion
- Fibers
- Flammable substances
- Fluids
- Fumes
- Gases
- Mists
- Oxidizing Agents

## PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS

Use of Personal Protective Equipment (PPE) is dependent on the working pressure of water and the cleaning application. Managers, Supervisors, and Operators **MUST** carry out a job specific risk assessment to define the exact requirements for PPE. See Protective Equipment for Personnel (Section 6) of WJTA-IMCA's Recommended Practices For The Use Of High-pressure Waterjetting Equipment for additional information.

Hygiene - Operators are advised to wash thoroughly after all waterjetting operations to remove any waterblast residue which may contain traces of harmful substances.

First aid provision - users **MUST** be provided with suitable first aid facilities at the operation site.

**PPE** may include:

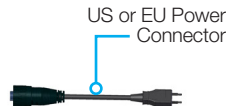
- Eye protection: Full face visor
- Foot protection: Kevlar® brand or steel toe capped, waterproof, non-slip safety boots
- Hand protection: Waterproof gloves
- Ear protection: Ear protection for a minimum of 85 dBA
- Head protection: Hard hat that accepts a full face visor and ear protection
- Body protection: Multi-layer waterproof clothing approved for waterjetting
- Hose protection: Hose shroud
- Respiratory protection: May be required; refer to job specific risk assessment

### WARNING

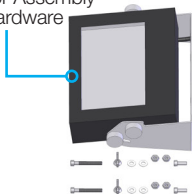
Operations with this equipment can be potentially hazardous. Caution **MUST** be exercised prior to and during equipment and water jet tool use. Please read and follow all of these instructions, in addition to the guidelines in the WJTA Recommended Practices handbook, available online at [www.wjta.org](http://www.wjta.org). Deviating from safety instructions and recommended practices can lead to severe injury and/or death.

Refer to WJTA-IMCA's, Recommended Practices For The Use Of High-pressure Waterjetting Equipment and/or The Water Jetting Association's, WJA Code of Practice for additional safety information.

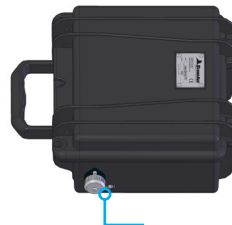
# **UNIVERSAL CAMERA (CAM-UNI-PKG)** UNIVERSAL CAMERA PACKAGE CONTENTS



Monitor Assembly  
and Hardware

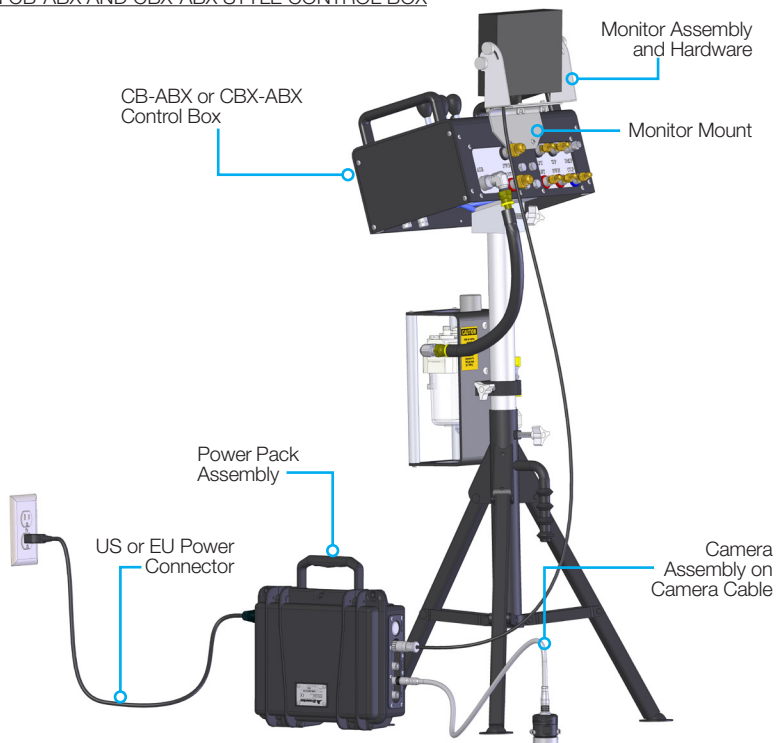


Camera Case

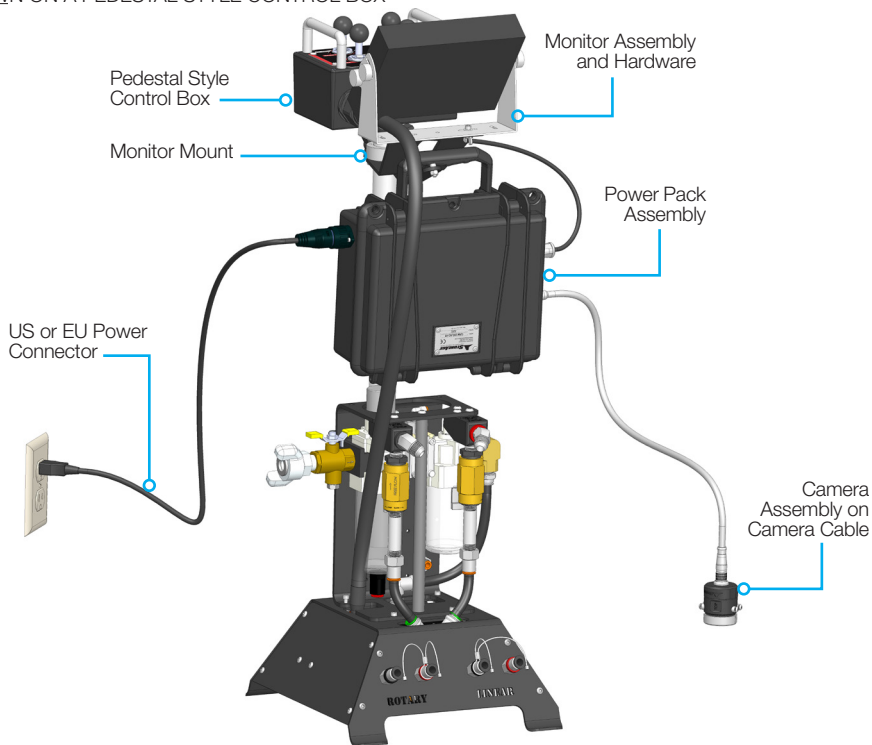




# **UNIVERSAL CAMERA PACKAGE CONTENTS** SHOWN ON CB-ABX AND CBX-ABX STYLE CONTROL BOX

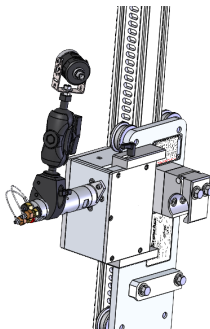
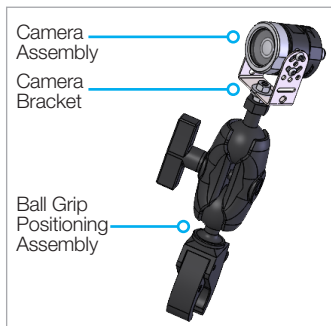


## UNIVERSAL CAMERA PACKAGE CONTENTS SHOWN ON A PEDESTAL STYLE CONTROL BOX

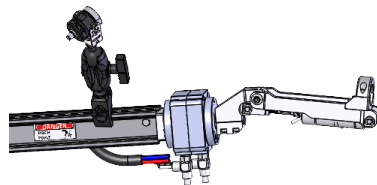


## UNIVERSAL CAMERA MOUNTING OPTIONS

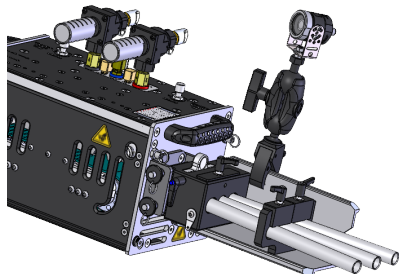
SHOWN WITH THE BALL GRIP POSITIONING ASSEMBLY



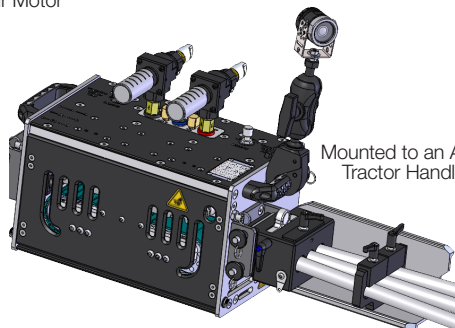
Mounted to Positioner  
Air Motor



Mounted to a Striker Arm



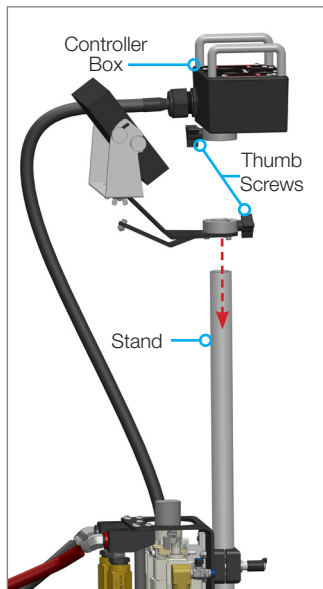
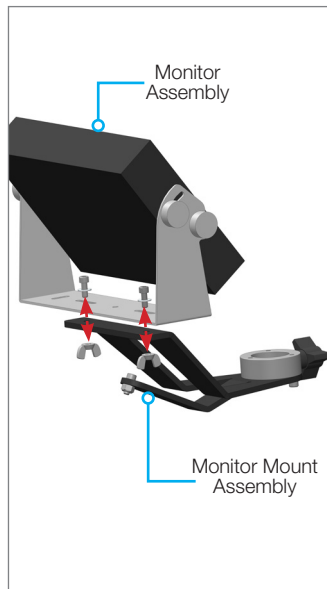
Mounted to an ABX  
Hose Guide



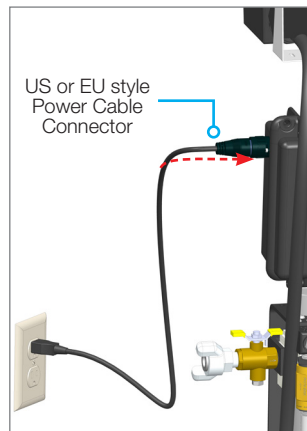
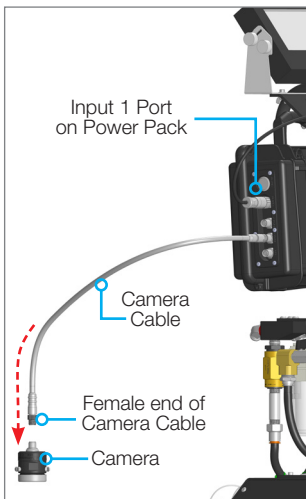
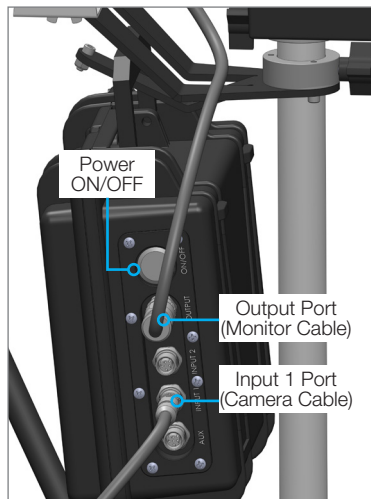
Mounted to an ABX  
Tractor Handle

## CAMERA SYSTEM HOOK UP TO PEDESTAL STYLE STONEAGE CONTROL BOXES

1. Attach the Monitor to the Monitor Mount Assembly with the supplied screws, washers, and wing nuts as shown in the figure below. Tighten by hand.
2. Loosen the thumb screws on the Controller box and Monitor Mount. Remove the Controller Box from the stand and slide the Monitor Mount onto the Stand. Return the Controller Box to the Stand and tighten the Thumb Screw. The Monitor Mount collar should sit just under the Controller Box Collar.
3. Hang the Power Pack by the handle from the Monitor Mount.

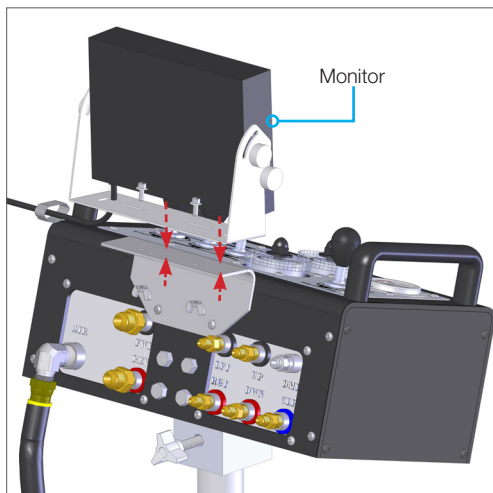
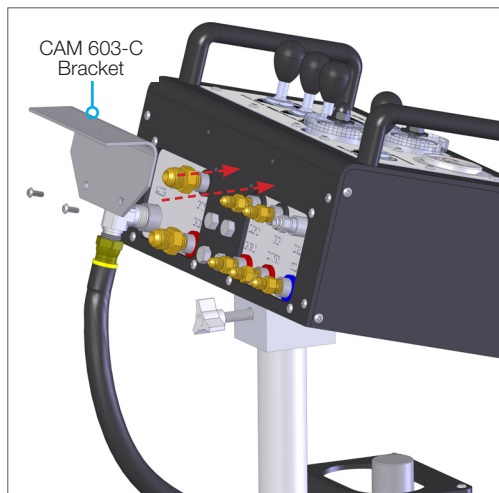


4. Plug the cable coming from the Monitor into the "OUTPUT" port.
5. Plug the female end of the Camera Cable into the "INPUT 1" port on the side of the Power Pack. *(INPUT 2 would be for an additional camera.)*
6. Screw the Camera onto the male end of the Camera Cable. The Camera can be mounted in a variety of ways. *(See StoneAge user manuals for the correct mounting procedures related to StoneAge equipment.)*
7. Plug the US or EU power cable connector into the opposite side of the Power Pack.
8. Plug the unit into the appropriate outlet.
9. Press the ON/OFF button to power the unit on.

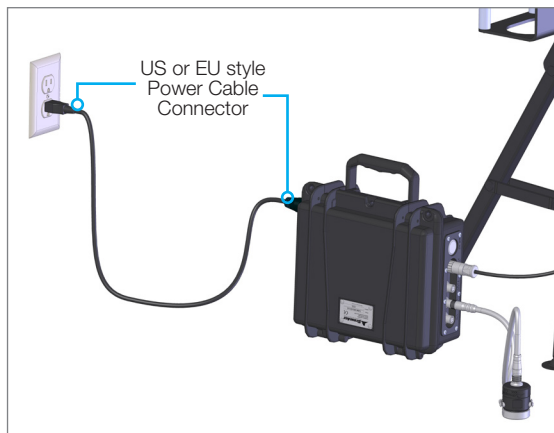
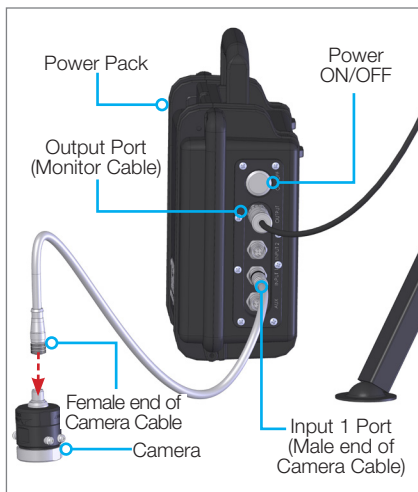


## CAMERA SYSTEM HOOK UP TO CB-ABX OR CBX-ABX STYLE STONEAGE CONTROL BOXES

1. Remove the two Torx screws from the back of the Control Box.
2. Position the CAM 603-C Bracket as shown and attach with the two Torx Screws previously removed from the Control Box.
3. Fasten the Monitor to the Bracket with the included fasteners. Secure with the wing nuts as shown.

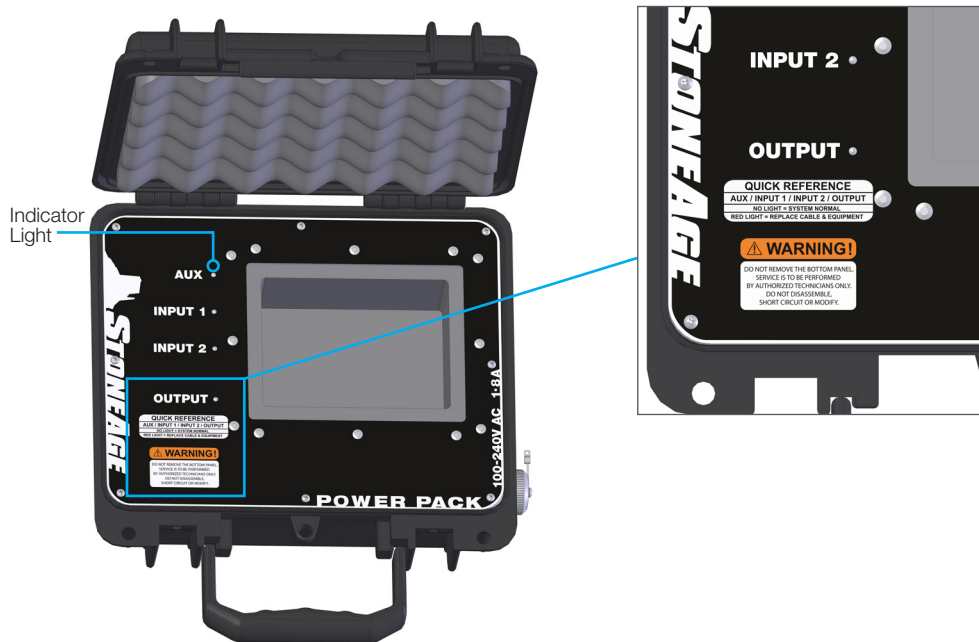


4. The Power Pack can be set on the ground.
5. Plug the cable coming from the Monitor into the "OUTPUT" port.
6. Plug the male end of the Camera Cable into the "INPUT 1" port on the side of the Power Pack. (*INPUT 2 would be for an additional camera.*)
7. Screw the Camera onto the female end of the Camera Cable. The Camera can be mounted in a variety of ways. (*See StoneAge user manuals for the correct mounting procedures related to StoneAge equipment.*)
8. Plug the US or EU power cable connector into the opposite side of the Power Pack and the other end into the appropriate outlet.
9. Press the ON/OFF button to power the unit on.



## TROUBLESHOOTING

1. Each label has an indicator light next to it, as shown below.
2. When the indicator light turns red, it means the cable and/or equipment on that port has a fault and is damaged and requires replacement.





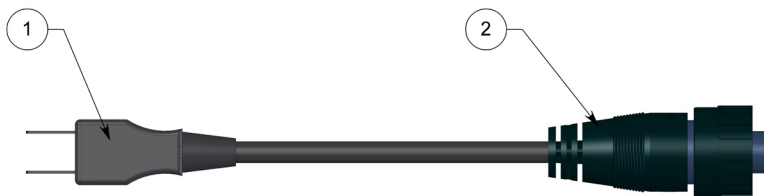
**UNIVERSAL CAMERA (CAM-UNI-PKG)**

UNIVERSAL CAMERA PACKAGE



#	PART NUMBER	QTY
1	CAM 327-??? POWER CONNECTOR ASSEMBLY	1
2	CAM 603-P PEDESTAL MONITOR MOUNT	1
3	CAM-UNI UNIVERSAL CAMERA SYSTEM	1

**UNIVERSAL CAMERA (CAM 327-??)**  
POWER CONNECTOR ASSEMBLY US OR EU

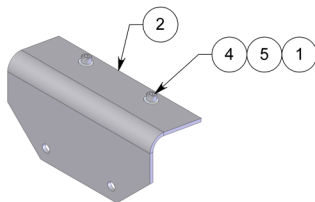


#	-EU PART NUMBERS	QTY
1	CAM 298-001 AC EUROPEAN PLUG	1
2	CAM 320.1 CIRCULAR CONNECTOR 2 PIN	1

#	-US PART NUMBERS	QTY
1	CAM 217-002 AC CORD PIGTAIL	1
2	CAM 320.1 CIRCULAR CONNECTOR 2 PIN	1

**UNIVERSAL CAMERA (CAM 603-X)**

PEDESTAL MONITOR MOUNT

**CAM 603-C****CBX MONITOR MOUNTING BRACKET****CAM 603-P****PEDESTAL MONITOR MOUNT**

#	PART NUMBER	CAM 603-C	CAM 603-P
1	CAM 149 10-24 WING NUT	2	-
2	CAM 331 CBX MONITOR MOUNT	1	-
3	CB 488 MONITOR MOUNT ASSY	-	1
4	GS 319-02 SHCS 10-24 x .50 SS	2	-
5	GW 319-F WASHER, FLAT #10 SS	2	-
6	PROP 440-24 CAMERA MOUNT ASSY FOR DBP	-	1

**UNIVERSAL CAMERA (CB 488)**

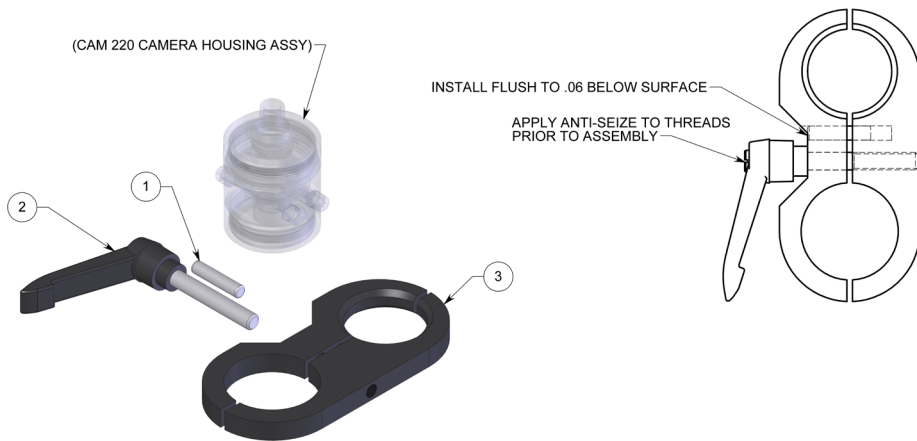
## MONITOR MOUNT ASSEMBLY



#	PART NUMBER	QTY			
1	CAM 149 10-24 WING NUT	2	5	CB 726 THREE LOBE KNOB, .25-20	1
2	CB 489 MONITOR BRACKET	1	6	GN 319-L-32 NUT, NYLOK 10-32 SS	1
3	CB 724 MODIFIED COLLAR	1	7	GS 319-02 SHCS 10-24 X .50 SS	2
4	CB 725 THREAD LOCKING SLOTTED INSERT, 1/4-20 X 3/8-16	1	8	GS 319-02-32 SHCS 10-32 X .50 SS	4
			9	GW 319-F WASHER, FLAT #10 SS	2

**UNIVERSAL CAMERA (PROP 440-24)**

CAMERA MOUNT ASSEMBLY FOR DBP



#	PART NUMBER	-24/QTY
1	DB 242 DOWEL PIN, .25 OD x 1.125 LENGTH	1
2	HRS 530 HANDLE, ADJUSTABLE	1
3	PROP 441-24 PLATE, CAMERA CLAMP 1.5 INCH	1

**UNIVERSAL CAMERA (CAM-UNI)**

UNIVERSAL CAMERA SYSTEM



\*The CAM 246 Camera Cable is a 1 meter cable that is very flexible.

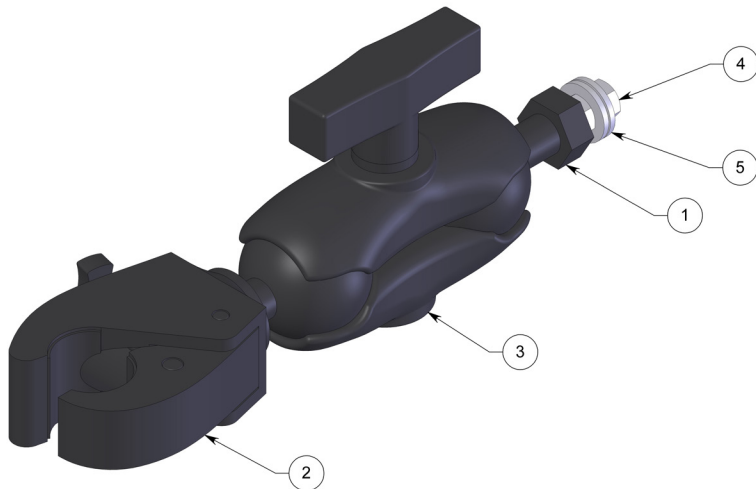
\*The CAM 248 Camera Cable is a 10 meter, more robust, less flexible cable

#	PART NUMBER	QTY
1	CAM 083-K STUD, BALL GRIP POSITIONING ASSY	1
2	CAM 102-V2 MONITOR ASSEMBLY	1
3	CAM 200-AC-V2 POWER PACK ASSEMBLY	1
4	CAM 220 CAMERA HOUSING ASSEMBLY	1

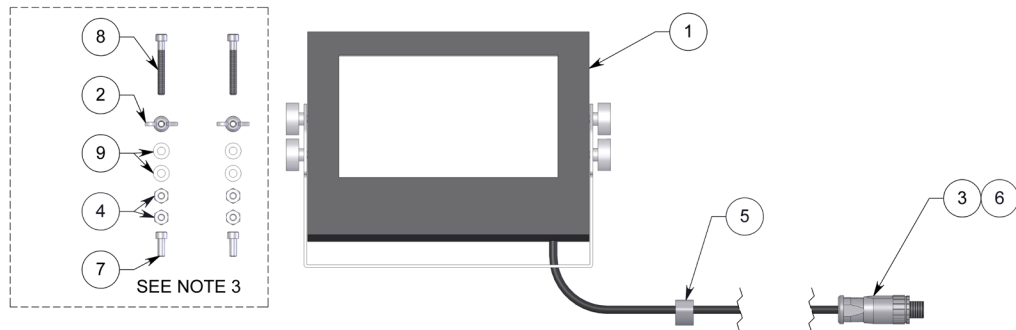
5	CAM 231 UNIVERSAL CAMERA BRACKET	1
6	*CAM 246 CAMERA CABLE 4 PIN 1 METER	1
7	*CAM 248 CAMERA CABLE, 10M, M12-MALE, M12 FEMALE	1
8	CAM 330 CAMERA CASE ASSEMBLY	1
9	GPCT 100-18-05-8.0-BK CABLE TIE, NYLON 12 PLASTIC, .18W X .05T X 8.0 OAL -BLACK	1

**UNIVERSAL CAMERA (CAM 083-K)**

## BALL GRIP POSITIONING ASSEMBLY



#	PART NUMBER	QTY
1	CAM 082 1/4"-20 THREADED STUD BASE FOR BALL GRIP	1
2	CAM 085 BALL GRIP POSITION ARM, PIPE MOUNT CLAMP 1.5 O.D.	1
3	CAM 087 BALL-GRIP POSITIONING ARM	1
4	GN 525-H NUT, HEX .25-20	2
5	GW 525-F WASHER, FLAT .25	2

**UNIVERSAL CAMERA (CAM 102-V2)**  
 MONITOR ASSEMBLY


#	PART NUMBER	QTY
1	CAM 102.1 MONITOR	1
2	CAM 149 10-24 WING NUT	2
3	CAM 199 CONEC M12 SCREW TERMINAL MALE 8 POS	1
4	GN 319-H NUT, HEX 10-24 SS	4

5	CAM 283 VELCRO	1
6	GPHS 0125-OLE-A-BK-0500 HEAT SHRINK, .125 ID X .500 LG BLACK	4
7	GS 319-02 SHCS 10-24 X .50 SS	2
8	GS 319-06 SHCS 10-24 X 1.50 SS	2
9	GW 319-F WASHER, FLAT #10 SS	4



**UNIVERSAL CAMERA (CAM 220)**

CAMERA ASSEMBLY PAGE 1

## NOTES:

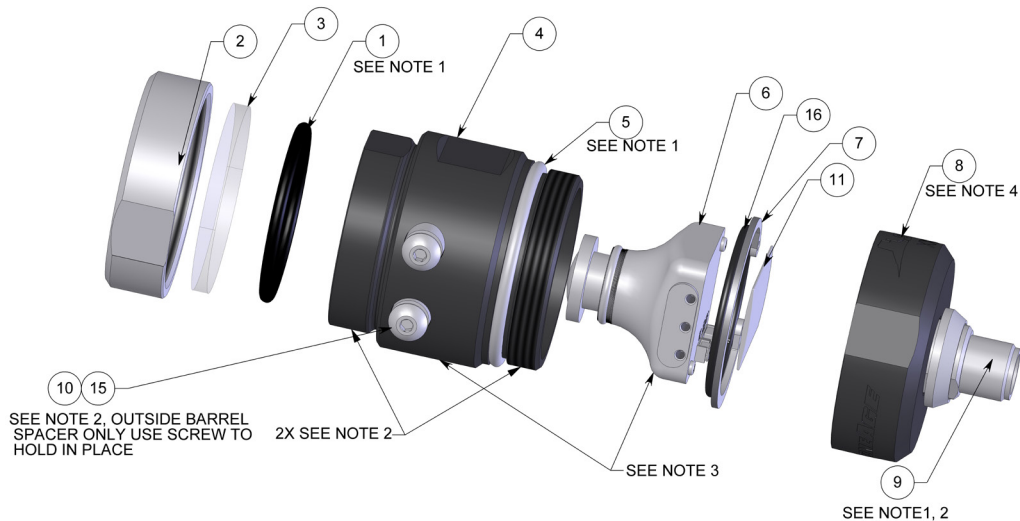
1. APPLY TO O-RINGS DURING ASSEMBLY: MOLYKOTE
2. APPLY GREEN RETAINING COMPOUND, LOCTITE PN:290 OR EQUIVALENT TO COMPONENTS AS NOTED.
3. ENSURE HOUSING ENGRAVING "TOP" AND CAMERA LABELS ARE CLOCKED UPWARDS.
4. ENSURE WIRES DO NOT TWIST WHILE INSTALLING CAP.
5. ENSURE CAMERA IS PROGRAMMEED PER ASSEMBLY INSTRUCTIONS

#	PART NUMBER	QTY.
1	BJK 072 O-RING	1
2	CAM 221 LENS CAP	1
3	CAM 222-001-C LENS, CLEAR	1
4	CAM 224 CAMERA HOUSING	1
5	CAM 225 O-RING	1
6	CAM 226 OWL CAMERA	1
7	CAM 228 INTERNAL RETAINING RING	1
8	CAM 229 CONNECTOR HOUSING CAP	1

9	CAM 230 CIRCUIT BOARD CONNECTOR ASSEMBLY	1
10	CAM 232 LDPE UNTHREADED SPACER	4
11	CAM 233 SILICA GEL DESICCANT BAGS	1
12	CAM 234 CABLE ASSEMBLY	1
13	CAM 235 CABLE ASSEMBLY	1
14	CAM 255 O-RING	1
15	GSB 316-0175 BHCS 8-32 X .44 SS	4
16	RJ 008 O-RING	1

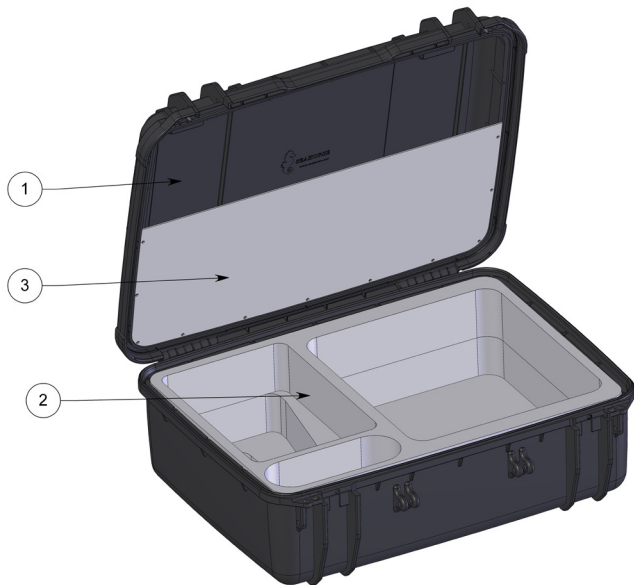
**UNIVERSAL CAMERA (CAM 220)**

CAMERA ASSEMBLY PAGE 2



**UNIVERSAL CAMERA (CAM 330)**

CAMERA CASE ASSEMBLY



#	PART NUMBER	QTY
1	CAM 330.1 CAMERA ASSEMBLY CASE	1
2	CAM 330.4 UCS FOAM	1
3	CAM 330.3 HALF PANEL	1

**1. Acceptance of Terms and Conditions.** Receipt of these Terms and Conditions of Sale ("Terms and Conditions") shall operate as the acceptance by StoneAge, Inc. ("Seller") of the order submitted by the purchaser ("Buyer"). Such acceptance is made expressly conditional on assent by Buyer to these Terms and Conditions. Such assent shall be deemed to have been given unless written notice of objection to any of these Terms and Conditions (including inconsistencies between Buyer's purchase order and this acceptance) is given by Buyer to Seller promptly on receipt hereof.

Seller desires to provide Buyer with prompt and efficient service. However, to individually negotiate the terms of each sales contract would substantially impair Seller's ability to provide such service. Accordingly, the product(s) furnished by Seller are sold only according to the terms and conditions stated herein and with the terms and conditions stated in any effective StoneAge Dealer Agreement or StoneAge Reseller Agreement, if applicable. Notwithstanding any terms and conditions on Buyer's order, Seller's performance of any contract is expressly made conditional on Buyer's agreement to these Terms and Conditions unless otherwise specifically agreed to in writing by Seller. In the absence of such agreement, commencement of performance, shipment and/or delivery shall be for Buyer's convenience only and shall not be deemed or construed to be an acceptance of Buyer's terms and conditions.

**2. Payment/Prices.** Unless other arrangements have been made in writing between Seller and Buyer, payment for the product(s) shall be made upon receipt of invoice. The prices shown on the face hereof are those currently in effect. Prices invoiced shall be per pricelist in effect at the time of shipment. Prices are subject to increase for inclusion of any and all taxes which are applicable and which arise from the sale, delivery or use of the product(s), and the collection of which Seller is or may be responsible to provide to any governmental authority, unless acceptable exemption certificates are

provided by Buyer in accordance with applicable law. Buyer shall pay all charges for transportation and delivery and all excise, order, occupation, use or similar taxes, duties, levies, charges or surcharges applicable to the product(s) being purchased, whether now in effect or hereafter imposed by any governmental authority, foreign or domestic.

**3. Warranty.** SELLER MAKES NO WARRANTIES OR REPRESENTATIONS AS TO THE PERFORMANCE OF ANY PRODUCT EXCEPT AS SET FORTH IN THE STONEAGE LIMITED WARRANTY PROVIDED WITH THE PRODUCT.

**4. Delivery.** Seller is not obligated to make delivery by a specified date, but will always use its best efforts to make delivery within the time requested. The proposed shipment date is an estimate. Seller will notify Buyer promptly of any material delay and will specify the revised delivery date as soon as practicable. UNDER NO CIRCUMSTANCES SHALL SELLER HAVE ANY LIABILITY WHATSOEVER FOR LOSS OF USE OR FOR ANY DIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM DELAY REGARDLESS OF THE REASON(S).

All product(s) will be shipped F.O.B. point of origin, unless specifically agreed otherwise, and Buyer shall pay all shipping costs and insurance costs from that point. Seller, in its sole discretion, will determine and arrange the means and manner of transportation of the product(s). Buyer shall bear all risk of loss commencing with the shipment or distribution of the product(s) from Seller's warehouse. Order shortages or errors must be reported within fifteen (15) business days from receipt of shipment to secure adjustment. No product(s) may be returned without securing written approval from Seller.

**5. Modification.** These Terms and Conditions are intended by Seller and Buyer to constitute a final, complete and exclusive expression of agreement relating to the subject matter hereof and cannot be supplemented or amended without Seller's prior written approval.

**6. Omission.** Seller's waiver of any breach or Seller's failure to enforce any of these Terms and Conditions at any time, shall not in any way affect, limit or waive Seller's right thereafter to enforce and compel strict compliance with every term and condition hereof.

**7. Severability.** If any provision of these Terms and Conditions is held to be invalid or unenforceable, such invalidity or unenforceability shall not affect the validity or enforceability of the other portions hereof.

**8. Disputes.** Seller and Buyer shall attempt in good faith to promptly resolve any dispute arising under these Terms and Conditions by negotiations between representatives who have authority to settle the controversy. If unsuccessful, Seller and Buyer shall further attempt in good faith to settle the dispute by nonbinding third-party mediation, with fees and expenses of such mediation apportioned equally to each side. Any dispute not so resolved by negotiation or mediation may then be submitted to a court of competent jurisdiction in accordance with the terms hereof. These procedures are the exclusive procedures for the resolution of all such disputes between the Seller and Buyer.

**9. Governing Law.** All sales, agreements for sale, offers to sell, proposals, acknowledgments and contracts of sale, including, but not limited to, purchase orders accepted by Seller, shall be considered a contract under the laws of the State of Colorado and the rights and duties of all persons, and the construction and effect of all provisions hereof shall be governed by and construed according to the laws of such state.

**10. Jurisdiction and Venue.** Seller and Buyer agree that the state or federal courts located within the City and County of Denver, Colorado shall have sole and exclusive jurisdiction over any litigation concerning any dispute arising under these Terms and Conditions not otherwise resolved pursuant to Section 9 as well as any alleged defects of any Products or damages sustained as a result of such alleged defects. Seller and Buyer further agree that should any litigation be commenced in connection with such a dispute, it shall only be commenced in such courts. Seller and Buyer agree to the exclusive jurisdiction of such courts and neither will raise any objection to the jurisdiction and venue of such courts, including as a result of inconvenience.

**11. Attorney's Fees.** If any litigation is commenced between Seller and Buyer, or their personal representatives, concerning any provision hereof, the party prevailing in the litigation shall be entitled, in addition to such other relief that is granted, to a reasonable sum as and for their attorneys' fees and costs in such litigation or mediation.

#### STONEAGE TRADEMARK LIST

View the list of StoneAge's trademarks and service marks and learn how the trademarks should be used. Use of StoneAge trademarks may be prohibited, unless expressly authorized.

<http://www.StoneAgeTools.com/trademark-list/>

#### STONEAGE PATENT DATA

View the list of StoneAge's current U.S. patent numbers and descriptions

<http://www.sapatents.com>

#### STONEAGE TERMS AND WARRANTY

View StoneAge's Terms and Warranty Conditions online.

<http://www.stoneagetools.com/terms>

<http://www.stoneagetools.com/warranty>

Warranties set forth herein extend only to End-Users, meaning customers acquiring, or that have previously acquired, a product manufactured by StoneAge ("Product") for their own use and not for resale, either directly from StoneAge Inc. ("StoneAge") or from a StoneAge Authorized Dealer or Reseller ("Dealer"). No warranty of any kind or nature is made by StoneAge beyond those expressly stated herein.

**1. LIMITED WARRANTY PERIOD.** Subject to the limitations and conditions hereinafter set forth, StoneAge warrants its Product to be free from defects in workmanship and material for a period of one (1) year from the date of purchase by the End-User, provided that the end of the limited warranty period shall not be later than eighteen (18) months from the date of shipment of the Product to the Dealer or the End-User by StoneAge ("Limited Warranty Period"). All replacement parts which are furnished under this Limited Warranty and properly installed shall be warranted to the same extent as the original Product under this Limited Warranty if, and only if, the original parts were found to be defective within the original Limited Warranty Period covering the original Product. Replacement parts are warranted for the remainder of the original Limited Warranty Period. This Limited Warranty does not cover any component part of any Product not manufactured by StoneAge. Any such component part is subject exclusively to the component manufacturer's warranty terms and conditions.

**2. LIMITED WARRANTY COVERAGE.** StoneAge's sole obligation under this Limited Warranty shall be, at StoneAge's option and upon StoneAge's inspection, to repair, replace or issue a credit for any Product which is determined by StoneAge to be defective in material or workmanship. StoneAge reserves the right to examine the alleged defective Product to determine whether this Limited Warranty is applicable, and final determination of limited warranty coverage lies solely with StoneAge. No statement or recommendation made by a StoneAge representative, Dealer or agent to End-User shall constitute a warranty by StoneAge or a waiver or modification to any of the provisions hereof or create any liability for StoneAge.

**3. WARRANTY SERVICE PROVIDERS.** Service and repair of the Product is to be performed only by StoneAge authorized service representatives, including Dealers who are authorized repair centers, with StoneAge approved parts. Information about StoneAge authorized service representatives can be obtained through the StoneAge website at [www.stoneagetools.com/service](http://www.stoneagetools.com/service). Unauthorized service, repair or modification of the Product or use of parts not approved by StoneAge will void this Limited Warranty. StoneAge reserves the right to change or improve the material and design of the Product at any time without notice to End-User, and StoneAge is not obligated to make the same improvements during warranty service to any Product previously manufactured.

**4. WARRANTY EXCLUSIONS.** This Limited Warranty does not cover, and StoneAge shall not be responsible for the following, or damage caused by the following: (1) any Product that has been altered or modified in any way not approved by StoneAge in advance in writing; (2) any Product that has been operated under more severe conditions or beyond the rated capacity specified for that Product; (3) depreciation or damage caused by normal wear and tear, failure to follow operation or installation instructions, misuse, negligence or lack of proper protection during storage; (4) exposure to fire, moisture, water intrusion, electrical stress, insects, explosions, extraordinary weather and/or environmental conditions including, but not limited to lightning, natural disasters, storms, windstorms, hail, earthquakes, acts of God or any other force majeure event; (5) damage to any Product caused by any attempt to repair, replace, or service the Product by persons other than StoneAge authorized service representatives; (6) costs of normal maintenance parts and services; (7) damage sustained during unloading, shipment or transit of the Product; or (8) failure to perform the recommended periodic maintenance procedures listed in the Operator's Manual accompanying the Product.

**5. REQUIRED WARRANTY PROCEDURES.** To be eligible for warranty service, the End-User must: (1) report the Product defect to the entity where the Product was purchased (i.e. StoneAge or the Dealer) within the Limited Warranty Period specified in this Limited Warranty; (2) submit the original invoice to establish ownership and date of purchase; and (3) make the

Product available to a StoneAge authorized service representative for inspection to determine eligibility for coverage under this Limited Warranty. This Limited Warranty shall not extend to any person or entity who fails to provide proof of original purchase from StoneAge or a Dealer. No Product may be returned for credit or adjustment without prior written permission from StoneAge.

**6. DISCLAIMER OF IMPLIED WARRANTIES AND OTHER REMEDIES.** EXCEPT AS EXPRESSLY STATED HEREIN (AND TO THE FULLEST EXTENT ALLOWED UNDER APPLICABLE LAW), STONEAGE HEREBY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY AND ALL WARRANTIES, REPRESENTATIONS OR PROMISES AS TO THE QUALITY, PERFORMANCE OR FREEDOM FROM DEFECT OF THE PRODUCT COVERED BY THIS LIMITED WARRANTY. STONEAGE FURTHER DISCLAIMS ALL IMPLIED INDEMNITIES.

**7. LIMITATION OF LIABILITY.** End-User specifically acknowledges that the Product may be operated at high speeds and/or pressures, and that as such it may be inherently dangerous if not used correctly. End-User shall familiarize itself with all operation materials provided by StoneAge and shall at all times use and require its agents, employees and contractors to use all necessary and appropriate safety devices, guards and proper safe operating procedures. In no event shall StoneAge be responsible for any injuries to persons or property caused directly or indirectly by the operation of the Product if End-User or any agent, employee, or contractor of End-User: (1) fails to use all necessary and appropriate safety devices, guards and proper safe operating procedures; (2) fails to maintain in good working order such safety devices and guards; (3) alters or modifies the Product in any way not approved by StoneAge in advance in writing; (4) allows the Product to be operated under more severe conditions or beyond the rated capacity specified for the Product; or (5) otherwise negligently operates the Product. End-User shall indemnify and hold StoneAge harmless from any and all liability or obligation incurred by or against StoneAge, including costs and attorneys' fees, to or by any person so injured.

TO THE FULL EXTENT ALLOWED BY APPLICABLE LAW, STONEAGE SHALL NOT BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES (INCLUDING WITHOUT LIMITATION, LOSS OF PROFITS, LOSS OF GOODWILL, DIMINUTION OF VALUE, WORK STOPPAGE, INTERRUPTION OF BUSINESS, RENTAL OF SUBSTITUTE PRODUCT, OR OTHER COMMERCIAL LOSS EVEN TO THE EXTENT SUCH DAMAGES WOULD CONSTITUTE DIRECT DAMAGES), WITH RESPECT TO THE COVERED STONEAGE PRODUCT, OR OTHERWISE IN CONNECTION WITH THIS LIMITED WARRANTY, REGARDLESS OF WHETHER STONEAGE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

IT IS UNDERSTOOD THAT STONEAGE'S LIABILITY, WHETHER IN CONTRACT, IN TORT, UNDER ANY WARRANTY, IN NEGLIGENCE, OR OTHERWISE SHALL NOT EXCEED THE AMOUNT OF THE PURCHASE PRICE PAID BY THE END-USER FOR THE PRODUCT. STONEAGE'S MAXIMUM LIABILITY SHALL NOT EXCEED, AND END-USER'S REMEDY IS LIMITED TO EITHER (1) REPAIR OR REPLACEMENT OF THE DEFECTIVE WORKMANSHIP OR MATERIAL OR, AT STONEAGE'S OPTION, (2) REFUND OF THE PURCHASE PRICE, OR (3) ISSUANCE OF A CREDIT FOR THE PURCHASE PRICE, AND SUCH REMEDIES SHALL BE END-USER'S ENTIRE AND EXCLUSIVE REMEDY. YOU, THE END-USER, UNDERSTAND AND EXPRESSLY AGREE THAT THE FOREGOING LIMITATIONS ON LIABILITY ARE PART OF THE CONSIDERATION IN THE PRICE OF THE STONEAGE PRODUCT YOU PURCHASED.

Some jurisdictions do not allow the limitation or exclusion of liability for certain damages, so the above limitations and exclusions may not apply to you. This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from jurisdiction to jurisdiction. If any provisions of this Limited Warranty is held to be invalid or unenforceable, such invalidity or unenforceability shall not affect the validity or enforceability of the other portions hereof.



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