BAABS

(Blasting Accessory & Assist Bracket System) OPERATION AND MAINTENEANCE MANUAL

August 2025



SCHMIDT®

SAVE THIS MANUAL AND MAKE AVAILABLE TO ALL USERS OF THIS EQUIPMENT!

Manual Part Number 7200-370 (Available for downloading from www.AxxiomMfg.com)









Copyright © 2025 Axxiom Manufacturing, Inc. 11927 S. Highway 6, Fresno, Texas 77545 800.231.2085 * 281.431.0581 * fax 281.431.1717

Visit us at <u>www.AxxiomMfg.com</u>

See back cover for additional BAABS links



Manual

WARNING

- 1. Any person intending to operate this equipment or any person intending to be in the vicinity during its operation must receive proper training from his/her supervisor, employer, and/or supplier. If this equipment is to be leased or rented, the supplier must assure that the lessee or renter has received proper training before the lessee or renter takes possession of the equipment. Consult Axxiom Manufacturing, Inc.
- 2. Any person authorized to operate this equipment or any person intending to be in the vicinity during its operation and who is not capable of reading and understanding this manual must be fully trained regarding the *Rules for Safer Operation* and all operating procedures, and must be made aware of all the Dangers, Warnings, and Cautions identified herein. Consult Axxiom Manufacturing, Inc.
- 3. Do Not operate any abrasive blaster or blast equipment before reading and completely understanding all the warnings, operating procedures and instructions, and the *Rules for Safer Operation* contained in this manual.
- 4. Do Not operate any abrasive blaster or blast equipment without following the *Rules for Safer Operation* and all the operating procedures and instructions. Failure to properly use blast equipment could result in severe injury or death.
- 5. Do Not perform any maintenance on any abrasive blaster or blast equipment while it is pressurized. Always depressurize the abrasive blaster vessel before loading abrasive or performing any maintenance.
- 6. Do Not use abrasives containing free silica. Silica can cause silicosis or other related respiratory damage. All operators must wear personal protective equipment for all abrasive blasting operations. Observe all applicable local, state, and federal safety regulations in conjunction with airline filters and respiratory protection. Reference OSHA 29 CFR 1910.134.
- 7. Do Not enter areas during abrasive blasting operations without breathing protection. All personnel in the vicinity of abrasive blasting operations should wear NIOSH approved air fed respirators, hoods, or helmets.
- 8. Do Not modify or alter any abrasive blaster, blast equipment or controls thereof without written consent from Axxiom Manufacturing, Inc.
- 9. Do Not use bleeder type deadman valves on any Schmidt® abrasive blaster. The use of A-BEC, Clemco or a similar bleeder type deadman valve can cause unintentional start-up without warning, which can result in serious personal injury.
- 10. Do Not sell, rent, or operate abrasive blasters without remote controls. OSHA regulations require remote controls on all blast machines. Failure to use remote controls can cause serious injury or death to the operator(s) or other personnel in the blasting area. Reference OSHA 29 CFR 1910.244(b).
- 11. Do Not repair or replace any portion of Schmidt® equipment using components that are not Schmidt® original factory replacement parts. Use of replacement components that are not Schmidt® original factory replacement parts may result in equipment failure which can result in serious personal injury and in addition will void all warranties.

0.0 INSTRUCTIONS FOR USE OF MANUAL SECTIONS

This manual contains information needed to operate and maintain a Schmidt® abrasive blaster. Read this entire operations and maintenance manual before using the abrasive blaster. Pay close attention to the *Rules for Safer Operation* (Section 1.0), and the Dangers, Warnings, and Cautions identified.

The purpose of safety symbols and explanations are to alert operators of the possible hazards and explain how to avoid them. The safety symbols and explanations alone do not eliminate any danger. However, following the instructions given and taking proper accident prevention measures will greatly lower the risk of injury to personnel. Below are the four hazard levels used in this manual.

▲ DANGER

WHITE LETTERS with RED BACKGROUND

DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations.

AWARNING

BLACK LETTERS with ORANGE BACKGROUND

WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.

▲ CAUTION

BLACK LETTERS with YELLOW BACKGROUND

CAUTION: Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices that may cause property damage.

NOTICE

WHITE LETTERS with BLUE BACKGROUND

NOTICE: Indicates that equipment could malfunction or potentially become damaged if certain instructions are not followed.

This manual contains terms that may be specific to the abrasive blast industry. Understanding these terms will help operators understand the procedures and instructions given in this manual. All operators must be familiar with the following terms and refer to them as needed while reading this manual.

Term	Definition		
Pressure Vessel	A fabricated tank (or reservoir) that is part of the abrasive blaster which is filled with compressed air and abrasive. (Also referred to as "blast vessel" or "vessel.")		
Pressurize	To manually or automatically fill the abrasive blast vessel with compressed air.		
Depressurize	To manually or automatically release all the compressed air from inside the abrasive blast vessel. (Also referred to as "blowdown.")		
Depressurized System	An abrasive blaster that is pressurized only when the deadman activates the blast operation. The blaster automatically depressurizes when the deadman is released.		
Pressurized System	An abrasive blaster that is automatically pressurized when the air inlet ball valve is opened. The blaster remains pressurized when the deadman is released.		
Blowdown	To manually or automatically release all the compressed air from inside the abrasive blast vessel. (Also referred to as "depressurize.")		
Deadman	A manually operated valve or switch that allows remote starting and stopping of the blast operation. [Also referred to as "deadman valve" (pneumatic blast controls) or "deadman switch" (electric blast controls.)]		
Popup An air pressure operated valve that seals the abrasive inlet at the top of the vessel. Its operation may be manual or automatic.			
Abrasive A granular substance used in an air blast operation that is the means for blast surface of an object. (Also referred to as abrasive blasting media.)			
Silica The crystalline chemical compound silicon dioxide (SiO2) can be found natural abrasives and other substances. Breathing silica dust can cause rediseases such as silicosis. (Also referred to as crystalline silica)			

1.0 RULES FOR SAFER OPERATION

1.1. GENERAL RULE FOR SAFER OPERATION.

SCHMIDT® ABRASIVE BLASTERS AND ACCESSORIES HAVE BEEN DESIGNED TO BE SAFER WHEN USED IN THE PROPER MANNER. ALL ABRASIVE BLASTERS AND ACCESSORIES ARE POTENTIALLY DANGEROUS IF ALL SAFETY PRECAUTIONS ARE NOT RIGOROUSLY FOLLOWED. PROPER TRAINING IS REQUIRED BEFORE OPERATION. PROPER PROCEDURES MUST BE FOLLOWED. THE ABRASIVE BLASTER, ACCESSORIES, AND ALL COMPONENTS MUST BE PROPERLY MAINTAINED. FAILURE TO OPERATE, SERVICE AND MAINTAIN THE BLAST ACCESSORY AS SET FORTH IN THIS MANUAL MAY CAUSE INJURY OR EVEN DEATH TO ANY PERSON USING, SERVICING OR IN THE VICINITY OF THE ABRASIVE BLAST OPERATION.

THIS MANUAL IDENTIFIES POTENTIAL HAZARDS BY DANGER, WARNING, AND CAUTION SYMBOLS. HOWEVER, ALL THE RULES, PROCEDURES AND RECOMMENDATIONS MUST BE FOLLOWED. FAILURE TO OPERATE PROPERLY IS VERY LIKELY TO PLACE PERSONS AND PROPERTY AT HIGH RISK OF DAMAGE, INJURY OR EVEN DEATH.

▲ DANGER

ABRASIVE BLASTERS, SAFETY ACCESSORY AND THE ABRASIVE BLAST OPERATION ARE POTENTIALLY DANGEROUS IF ALL SAFETY PRECAUTIONS ARE NOT FOLLOWED. FAILURE TO OPERATE THE ABRASIVE BLASTER WITHOUT FOLLOWING ALL THE *RULES FOR SAFER OPERATION* MAY RESULT IN SERIOUS INJURY OR DEATH TO OPERATING PERSONNEL OR PERSONS IN THE OPERATING VICINITY.

1.2 KNOW YOUR EQUIPMENT. Do Not operate this equipment in a manner other than its intended application. Do Not operate this equipment or any other Schmidt® equipment without following the *Rules for Safer Operation* and all the operating procedures and instructions. Learn the applications and limitations as well as the specific potential hazards related to this machine. Failure to do so could result in serious injury or death.

NOTE: The BAABS System is designed as an attachment to a blast hose assembly used an abrasive blast system. Operators must follow the recommended operating procedures detailed in the operating and maintenance manual provided with the abrasive blaster.

▲ DANGER

Failure to follow the procedures detailed *Abrasive Blaster Operation and Maintenance Manual* could result in severe injury or death. In addition to these procedures provided in this manual, operators must consult the manual provided with abrasive blaster that will be used with the BAABS System.

- **1.3 RECEIVE PROPER TRAINING.** Do Not operate this equipment unless you have received operational and maintenance training. Begin by thoroughly reading and understanding this operation and maintenance manual and all included information. Consult an authorized Schmidt distributor or Axxiom Manufacturing, Inc.
- **1.4 USE PROPER PERSONAL PROTECTIVE EQUIPMENT.** Do Not operate or perform maintenance on this equipment without wearing OSHA approved eye, ear, foot, and lung protection. Reference OSHA 29 CFR 1910 and refer to the operating and maintenance manual of the blast equipment to be used. **CRITICAL:** Refer to blaster operation and maintenance manual.

▲ WARNING

Failure to use personal protective equipment could result in severe injury or death. Refer to the operating and maintenance manual of the blast equipment to be used.

1.5 ADHERE TO ALL REGULATIONS. Do Not operate this equipment without observing all local, state, and federal safety regulations including, but not limited to, OSHA (Occupational Health and Safety Administration).

1.6. ELECTRICALLY GROUND EQUIPMENT.

Static electricity is generated by the abrasive flow through the blast hose. To minimize chance of static electrical shock to operating personnel only use anti-static blast hose and/or vacuum hose, properly electrically bond the blast nozzle, blast hose couplings, and the equipment, and properly install an earth ground on all blast equipment. Refer to the operating and maintenance manual of the blast equipment to be used.

1.7 ALWAYS USE CORRECT REPLACEMENT PARTS AND ACCESSORIES. Do Not use replacement parts that are not Schmidt® original factory replacement parts. Non-original parts may not fit properly and can cause equipment damage and/or failure which can result in severe injury to operating personnel. Consult Axxiom Manufacturing, Inc.

▲ WARNING

Use of replacement components that are not Schmidt® original factory replacement parts may result in equipment failure which can result in severe injury to operating personnel.

- 1.8 SAVE THIS OPERATION AND MAINTENANCE MANUAL. Refer to this operation and maintenance manual as needed as well as any additional information included from other manufacturers. Never permit anyone to operate this equipment without having him/her first read this manual and receive proper training. Make this manual readily available to all operating and maintenance personnel. If the manual becomes lost or illegible replace it immediately. Periodically re-read this operation and maintenance manual to maintain the highest skill level; it may reduce the chance of a serious accident.
- 1.9 REFERENCE BLASTER OPERATION AND MAINTENANCE MANUAL. The BAABS System is designed as an attachment to a blast hose assembly used on an abrasive blast system. Operators must follow the recommended operating procedures detailed in the operating and maintenance manual provided with the abrasive blaster. Refer to the abrasive blaster operation and maintenance manual for additional safety information.



Failure to follow the procedures detailed *Abrasive Blaster Operation and Maintenance Manual* could result in severe injury or death. In addition to these procedures provided in this manual, operators must consult the manual provided with abrasive blaster that will be used with the BAABS System.

2.0 GENERAL INFORMATION

- 2.1 The BAABS System with integrated Trigger Deadman is designed to be used in an abrasive blast control system as a device that allows remote control of the on-off function of the blast operation. Consult an authorized Axxiom Distributor for system compatibility verification.
- 2.2 The BAABS System with integrated Trigger Deadman comes in two different power configurations—pneumatic or electric. The *pneumatic* BAABS Trigger Deadman requires a clean air supply at a minimum of 78 psig for proper operation of blast system components. The *electric* BAABS Trigger Deadman operates on either 12V or 24VDC depending on the supply voltage for the electric blast controls.
- **2.3** BAABS Assembly part numbers: Refer to Section 10.0.

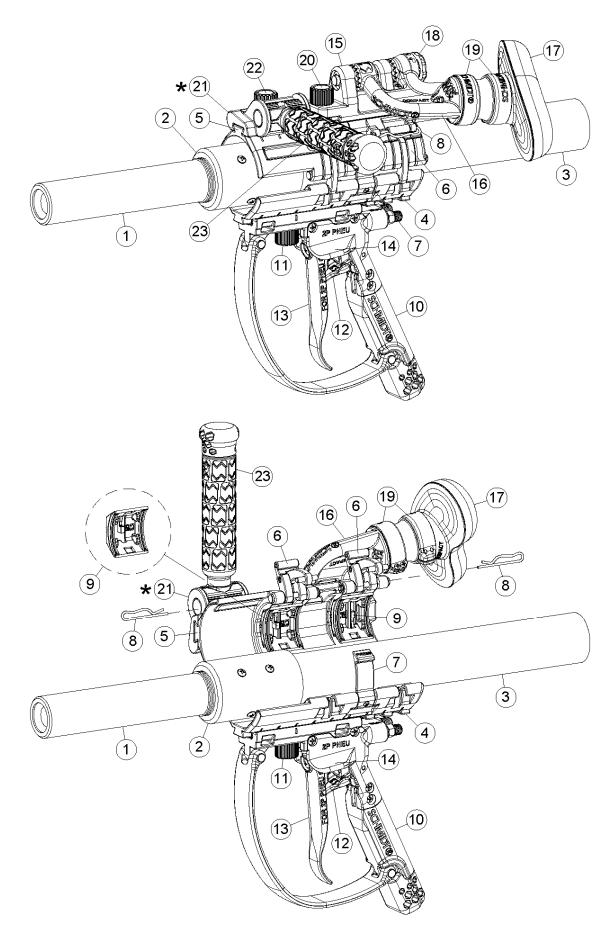


Figure 2.1 – BAABS Main Assembly (* Side Grip not included with Subcompact and Compact packages. Can be purchased separately.)

Copyright © 2025 Axxiom Manufacturing, Inc.

BAABS(Blasting Accessory & Assist Bracket System)

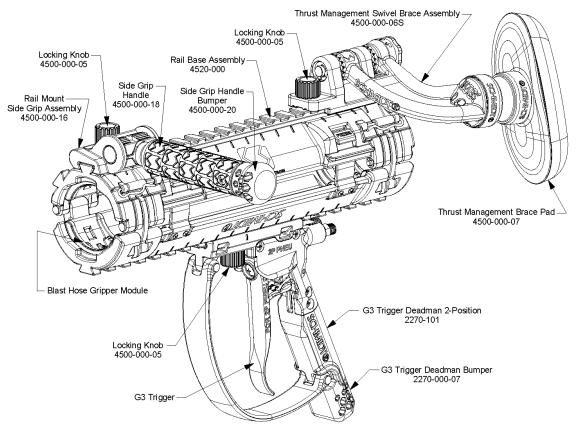
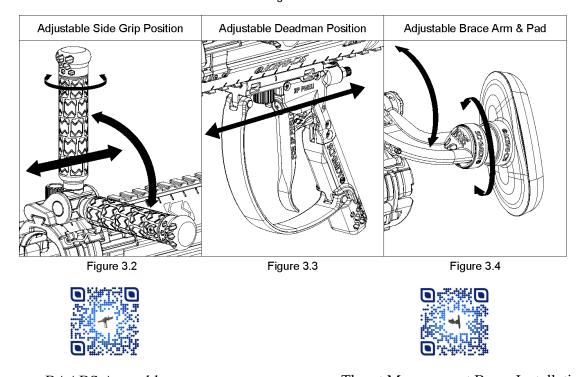


Figure 3.1



BAABS Assembly

Thrust Management Brace Installation



Do Not alter or make modifications to the BAABS System. Making alterations or modifications can cause equipment malfunction which can lead to severe injury or death.

(See Figure 2.1 for part number identification)

- 3.1 Install Thrust Management Swivel Brace Subassembly (#15)
 - 3.1.1 Unscrew locking knob (#20) until threads clear the rail slot and the brace assembly can slide back and forth.
 - 3.1.2 Line up Thrust Management Swivel Brace (#15) rail slot with upper rail (#5).
 - 3.1.3 Slide Thrust Management Brace (#15) onto upper rail (#5) until it reaches the Thrust Management Brace stop. Refer to Figure 3.5 below.
 - 3.1.4 Hand tighten locking knob (#20) to secure brace subassembly into place.

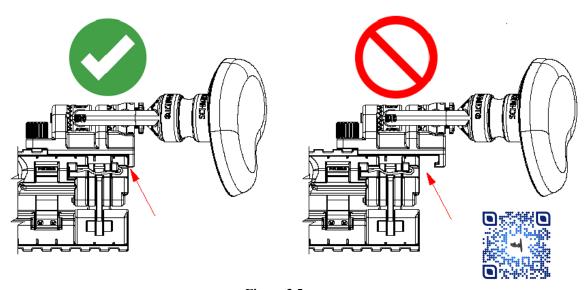


Figure 3.5

Thrust Management Brace Installation

- 3.1.5 To adjust the angle of the Thrust Management Swivel Brace Arm (#16), first make sure that the locking knob (#18) is in the unlocked position (See Figure 3.6). If the locking knob (#18) is in the locked position, push the locking knob in slightly and rotate it counterclockwise until the arrow points to the unlocked symbol.
- 3.1.6 Rotate the Thrust Management Swivel Brace Arm (#16) to the desired position. The arm can be rotated to 13 different positions within a total range of 270°, allowing it to be easily adjusted to left or right handed and any body type.
- 3.1.7 To lock the Thrust Management Swivel Brace Arm, push the locking knob (#18) in slightly and rotate it clockwise until the arrow points to the locked symbol (See Figure 3.7).

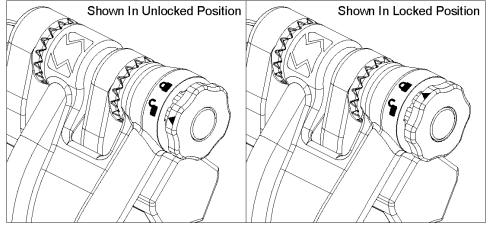


Figure 3.6 Figure 3.7 Copyright © 2025 Axxiom Manufacturing, Inc.

- 3.2 Install G3 Trigger Deadman Assembly (#10) (See Figures 15.1 15.5 for G3 Trigger Deadman options)
 - 3.2.1 Unscrew locking knob (#11) until threads clear the rail slot and the G3 Trigger Deadman assembly can slide back and forth.
 - 3.2.2 Line up G3 Trigger Deadman Assembly (#10) rail slot with lower rail (#4).
 - 3.2.3 Slide the G3 trigger deadman (#10) onto the rail (#4) until deadman is completely on the rail. (See Figure 3.8)

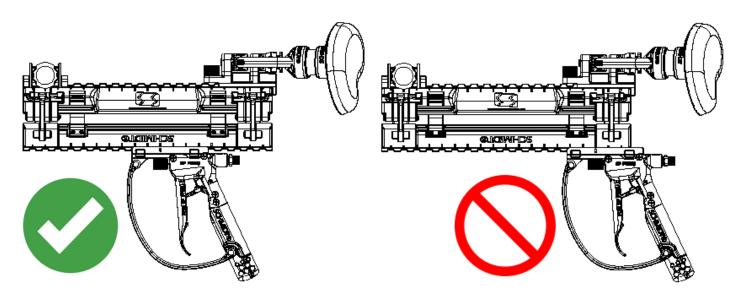


Figure 3.8

- 3.2.4 Grab G3 Trigger Deadman Assembly (#10). Position Thrust Management Brace Pad Cushion (#17) at or near the center of the right (or left) chest muscle (pectoral). Adjust pad as needed for comfort. (See Figure 3.4)
- 3.2.5 Slide the G3 Trigger Deadman (#10) to a position that is comfortable. (See Figure 3.3)
- 3.2.6 Line up the hash mark located on the side of the G3 Trigger Deadman (#10) above the locking knob (#11) with the closest hash mark on the lower rail assembly (#4). (See Figure 3.9).
- 3.2.7 Hand tighten locking knob (#11).

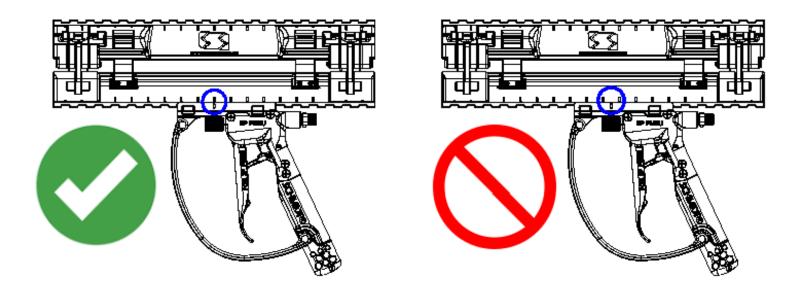
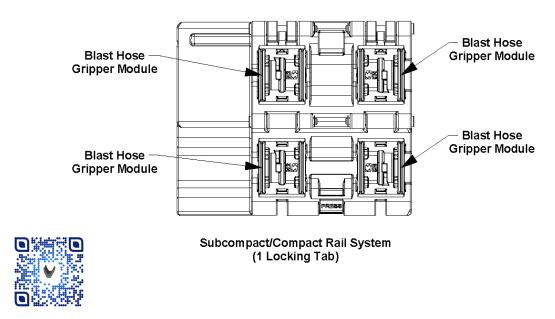


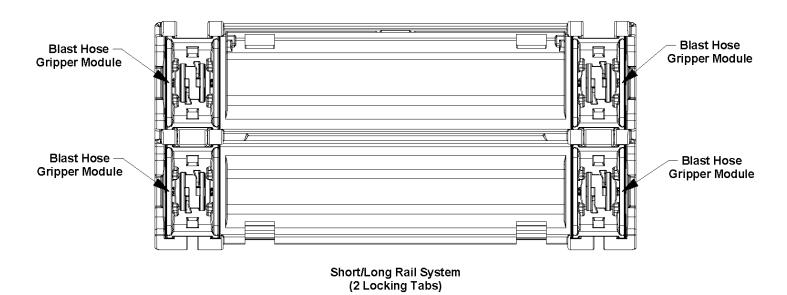
Figure 3.9

- 3.3 Optional Side Grip Subassembly Installation
 - 3.3.1 Unscrew locking knob (#22) until threads clear the rail slot and the Side Grip (#21) can slide back and forth.
 - 3.3.2 Position Side Grip (#21) on the same side as the Thrust Management Swivel Brace Arm (#16)
 - 3.3.3 Line up rail slot with upper rail (#5).
 - 3.3.4 Slide the Side Grip (#21) onto the BAABS rail until the grip is completely on BAABS rail.
 - 3.3.5 Grab G3 Trigger Deadman (#10). Position Thrust Management Brace Pad Cushion (#17) at or near the center of the right (or left) chest muscle (pectoral). Adjust pad as needed for comfort. (See Figure 3.4).
 - 3.3.6 Slide the Side Grip (#21) to a position that is comfortable.
 - 3.3.7 Line up the hash mark located on the side of the Side Grip (#21) by the locking knob (#22) with the closest hash mark on the upper rail assembly (#5).
 - 3.3.8 Hand tighten locking knob (#22).
 - 3.3.9 Adjust Side Grip Handle (#23) position by turning the Side Grip handle counterclockwise, rotate to the desired position, and tighten by turning the Side Grip Handle clockwise. (See Figure 3.2)

4.0 Installing Blast Hose Gripper Module



Blast Hose Gripper Installation



BAABS MODELS GRIPPER SUBCOMPACT COMPACT SHORT LONG **HOSE SIZE (ID) HOSE OD** SIZE ΧL 1-3/16" 1/2" (13mm) (30mm) M 1/2 Χ Χ 3/4" (19mm) 1-1/2" (38mm) Χ Χ Х Χ Χ М1 1" Thinwall (25mm) 1-1/2" (38mm) Χ Χ Х Χ Χ 1-7/8" Χ Χ Х Χ (25mm) (48mm) Х M2 1-1/4" Thinwall (32mm) 1-7/8" (48mm) Χ Χ Χ Χ Χ 1-1/4" 2-5/32" М3 Χ Χ (32mm) (55mm) Χ Χ 1-1/2" (38mm) 2-3/8" (60mm) Μ4 Χ Χ

Figure 4.1

- 4.1 If the BAABS is installed on a blast hose (#3) or in a latched position (See Figure 5.5), The steps are outlined in section 5.0 using Figures 5.6 5.9 to open and uninstall the BAABS.
- 4.2 Select Blast Hose Gripper (#9) based on hose size and wall thickness (See Figure 4.1). The grippers are marked M1 M4 on the inside of the gripper. See M2 marked on the drawing in Figure 4.2. Most manufacturers cast their part numbers on the side of the nozzle holder (#2). The letters of the part number vary between manufacturers and nozzle holder material, but the last number usually indicates the blast hose size. Match the last number of the nozzle holder part number with the number on the Blast Hose Gripper (#9) (See Figure 4.2).

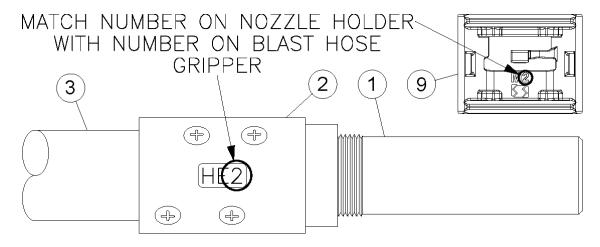
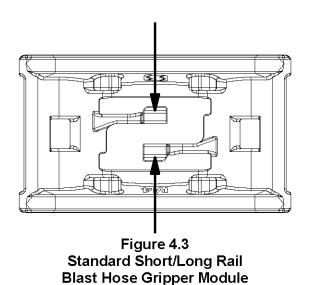
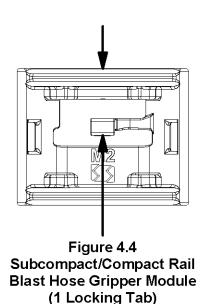


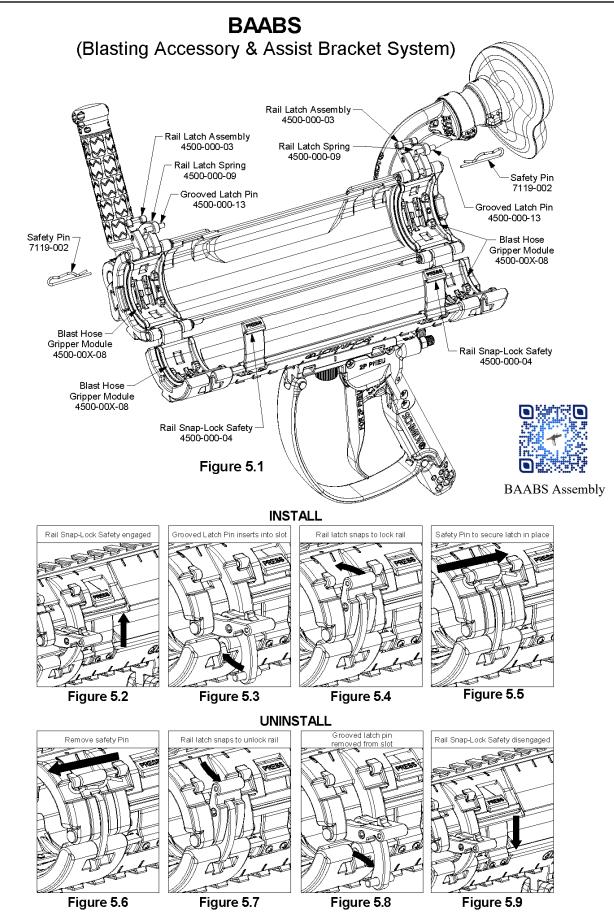
Figure 4.2

- 4.3 Snap Gripper Modules (#9) into Gripper Module slots in upper (#5) and lower (#4) rails. (See Figure 4.1) Refer to the video link in Figure 4.1.
- 4.4 On standard short and long rails, the Gripper Modules (#9) are removed by pinching the two locking tabs between your thumb and index finger, pushing them towards each other, and pulling the Gripper Modules from the Gripper Module slots (See Figure 4.3). On subcompact and compact rails, the Gripper Modules (#9) are removed by pinching the one locking tab and edge of the Gripper between your thumb and index finger, pushing them towards each other, and pulling the Gripper Modules from the Gripper Module slots (See Figure 4.4).



(2 Locking Tabs)





Copyright © 2025 Axxiom Manufacturing, Inc.



Do Not use a BAABS System with damaged or incorrect components. Using a BAABS System with damaged or incorrect components can result in equipment failure or malfunction which can cause severe injury or death. Always check the blast hose and the BAABS System for damage before each use. Repair or replace any component that shows any sign of wear or other damage.

(For Section 5, see Figure 2.1 for part numbers unless otherwise specified)

- 5.1 Install BAABS on the blast hose. Refer to video link in Figure 5.1.
 - 5.1.1 Place the blast hose (#3) into the Lower Rail (#4) (See lower drawing Figure 2.1)
 - 5.1.2 Close the Upper Rail (#5) until the Rail Snap-Lock Safety(s) (#7) clicks into the Upper Rail (#5) (See Figure 5.2). Note: The Long Rail has 2 Snap-Lock Safeties, while the Short, Subcompact and Compact Rails have 1 Snap-Lock Safety.
 - 5.1.3 Insert Grooved Latch Pin (Figure 5.1) into the slot in Lower Rail. (Figure 5.3)
 - 5.1.4 Pull up on Rail Latch Lever Assembly (#6) until it snaps into place (Figure 5.4).
 - 5.1.5 Secure with Safety Pin (#8). (Figure 5.5)
- 5.2 Remove (Uninstall) BAABS from blast hose
 - 5.2.1 Remove Safety Pin(s) (#8) to release Rail Latch Lever Assembly (#6). (Figure 5.6)
 - 5.2.2 Pull down on latch (#6) (Figure 5.7)
 - 5.2.3 Remove Grooved Latch Pin from slot (Figure 5.8)
 - 5.2.4 Open Upper Rail (#5) from Lower Rail (#4) until Rail Snap-Lock Safety (#7) contacts the upper rail. Push in the safety latch and pull up on Upper Rail to allow the Upper Rail to fully open (Figure 5.9). Note: The Long Rail has 2 Snap-Lock Safeties, while the Short, Subcompact and Compact Rails have 1 Snap-Lock Safety.
- 5.3 Installation Pneumatic Trigger Deadman. Refer to Figures 15.1, 15.2 and 15.4.
 - 5.3.1 The *pneumatic* G3 Trigger Deadman (#10) works in junction with a twinline or twinline with abrasive cutoff control line hose assembly. The **2 Position Module** uses a twinline hose assembly consisting of two color coded 3/16" air lines. The air supply line is orange, and the signal/vent line is black. Each hose contains a male flared rigid fitting on one end and a female flared swivel fitting at the other. The supply (orange) line of the twinline has 1/4" fittings, and the signal/vent (black) line has 1/8" fittings. The G3 Trigger Deadman has matching 1/8" and 1/4" male fittings. It is important that the hoses have the correct sized fittings to help mitigate the deadman valve from being installed incorrectly. Connecting the air supply to the incorrect port of the G3 Trigger Deadman will stop the signal from venting and will not allow the blast operation to stop when the deadman trigger is released.

▲ DANGER

Incorrect connection of the twinline hose to the G3 Trigger Deadman (#10) can result in the inability to stop the blast operation which can result in severe injury or death.

- 5.3.2 Disconnect the twinline or twinline with abrasive cutoff control line hose from the blast system and remove the existing deadman from the twinline or twinline with abrasive cutoff control line.
- 5.3.3 Secure the G3 Trigger Deadman (#10) to the BAABS lower rail (#4) if not previously attached. See Figures 3.8 3.9.
- 5.3.4 Connect the 1/4" swivel fitting of the twinline to the 1/4" fitting on the G3 Trigger Deadman (#10). No thread sealer is required since fittings are flared. The opposite end of the twinline connects to the blast system air supply.
- 5.3.5 **2 Position Module:** Connect the 1/8" swivel fitting of the twinline to the 1/8" fitting on the G3 Trigger Deadman (#10). No thread sealer is required since fittings are flared. The opposite end of the twinline is the signal air which starts the blast.
- 5.3.6 **2 Position Module w/ACO:** Connect the 1/8" swivel fittings of the twinline with abrasive cutoff control line to the 1/8" fittings on the G3 Trigger Deadman. The black hose attaches to the G3 1/8" fitting labeled black. The black hose is the signal air which starts the air. The green hose attaches to the 1/8" G3 fitting labeled green. The green hose provides a signal to the abrasive metering valve for abrasive. No thread sealer is required since fittings are flared.

- 5.3.7 Reconnect opposite ends of the twinline hose to the mating connections on the abrasive blast system.
- 5.3.8 To test the G3 Trigger Deadman (#10) **2 Position Module**, press down the Safety Flap (#12) and pull the Trigger (#13) to activate the deadman valve and start the blast operation. See Figures 6.1 and 6.2. Release the trigger to stop blasting.
- 5.3.9 To test the G3 Trigger Deadman **2 Position w/ACO Module**, rotate the ACO switch to the "Off" position. Press down the Safety Flap (#12) and pull the Trigger (#13) to activate the deadman valve to start the AIR ONLY operation (See Fig 6.4). Release the trigger to stop blasting. Rotate the ACO switch to the "On" position. Press down the Safety Flap (#12) and pull the Trigger (#13) to activate the deadman valve to start the blast (AIR AND ABRASIVE) operation (See Fig 6.5). Release the trigger to stop blasting.
- 5.3.10 Follow the setup and pre-operating instructions provided with the blast system, then retest the operation of the G3 Trigger Deadman (#10). Check for air leaks at all applicable connections and repair as required.
- 5.4 Installation Electric Trigger Deadman. Refer to Figure 15.1, 15.3 and 15.5.
 - 5.4.1 The *electric* G3 Trigger Deadman (#10) functions as an electric switch. When the deadman trigger (#13) is pulled it completes the electric circuit and supplies electric current to the blast controls which allows the signal air to activate the blast. When the deadman trigger (#13) is released, the electric current to the blast controls is interrupted, the signal air vents to atmosphere and ends the blast operation.



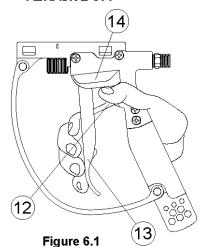
Electric shock hazard. Abrasive blasters equipped with G3 Trigger Deadman and electric blast control systems must operate on low voltage supply (12V or 24VDC). To minimize shock hazard, only use low voltage sources and use caution when connecting and disconnecting the power source to and from the abrasive blaster.

- 5.4.2 Turn off or disconnect the power source from the blast system and unplug the existing deadman from the blast controls.
- 5.4.3 Secure the G3 Trigger Deadman (#10) to the BAABS lower rail (#4) if not previously attached. See Figures 3.8 3.9
- 5.4.4 Connect the electric plug on the G3 Trigger Deadman (#10) into the mating connection on the abrasive blaster.
- 5.4.5 Turn on or reconnect the power source to the abrasive blast system.
- 5.4.6 To test the G3 Trigger Deadman (#10) **2 Position Module** (See Figure 15.2), press down the Safety Flap (#12) and pull the Trigger (#13) to activate the deadman switch and start the blast operation. See Figures 6.1 and 6.2. Release the trigger (#13) to stop blasting.
- 5.4.7 To test the G3 Trigger Deadman **2 Position w/ACO Module**, rotate the ACO switch to the "Off" position. Press down the Safety Flap (#12) and pull the Trigger (#13) to activate the deadman switch to start the AIR ONLY operation (See Fig 6.4). Release the trigger to stop blasting. Rotate the ACO switch to the "On" position. Press down the Safety Flap (#12) and pull the Trigger (#13) to activate the deadman switch to start the blast (AIR AND ABRASIVE) operation (See Fig 6.5). Release the trigger to stop blasting.
- 5.4.8 Follow the setup and pre-operating instructions provided with the blast system, then retest the operation of the G3 Trigger Deadman (#10).

6.0 Standard Operation

Two position Trigger Deadman (2PP shown)

AIR OFF ABRASIVE OFF



AIR ON ABRASIVE ON

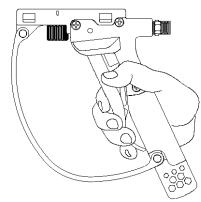
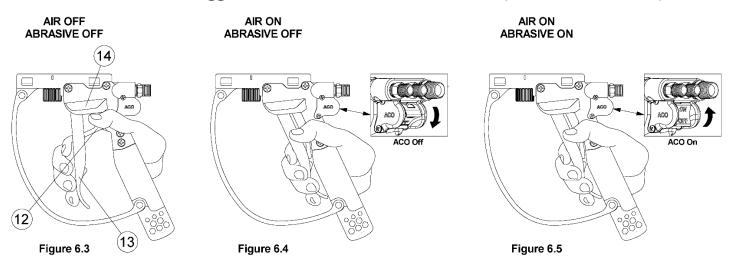


Figure 6.2

- G3 Trigger Deadman (2PP or 2PE) Operation
- 6.1 Securely grip G3 Trigger Deadman (#10)
- Place thrust pad (#17) securely and comfortably against appropriate part of the body such as the center of the right (or left) chest muscle (pectoral). Adjust pad for comfort. Refer to Section 3.0 and Figure 3.4.
- Blast hose (#3) should be on the same side as the hand that is gripping the trigger deadman, (#10) such as between arm and torso. Pull blast hose as close to the body as comfortably possible. This allows for thrust management pad to be mostly centered on the right (or left) area of the chest.
- 6.4 Use the free hand that is not operating the deadman for added control and safety.
 - 6.4.1 Place on side grip (#21) if installed.
 - 6.4.2 If side grip (#21) is not installed, place on top of BAABS upper rail or nozzle holder (#2).
- Place the thumb on top of safety flap (#12) and just under the curved safety flap guard (#14) on the trigger deadman handle. Thumb must be placed in the proper location to easily move the safety flap (#12) down to allow the trigger (#13) to move to the blast position. (See Figure 6.1) Only place thumb in ready position when ready to blast. Refer to video link below.
- Prepare for thrust before turning on blast air by activating G3 Trigger Deadman (#10). If standing with thrust pad (#17) placed on the chest:
 - 6.6.1 Take a wide stance with one foot forward and one back. Position the back foot based on operator comfort.
 - 6.6.2 Prior to activating blast, shift body weight towards front foot, leaning forward slightly. Upon activation, the nozzle (#1) thrust should push the operator back to more centered weight distribution.
 - 6.6.3 To maintain balance, always keep torso or body center of mass between feet while blasting.
 - 6.6.4 Keep hands close to the body in a comfortable position with elbows bent at about 90 degrees.
- 6.7 Activate the deadman by pushing the safety flap (#12) down and out of the trigger safety lock position with the thumb and pulling back on the deadman trigger (#13) with the fingers.
 - 6.7.1 The trigger deadman (#10) is 2-position (Blast OFF/ON: see Figures 15.1 15.3). The hand position will move from Figure 6.1 to Figure 6.2.
- 6.8 The nozzle (#1) thrust will transfer to the body through the Thrust Management Brace Assembly (#15) to the Thrust Management Brace Pad (#17) (See Figure 3.1) This allows the muscles in the hands and arms not needed to control the BAABS blasting motion, to be relaxed.
- Release deadman trigger (#13) to stop blasting. Safety flap (#12) will spring back into the safety position to guard against accidental blast activation.

G3 Trigger Deadman Hand Placement

Two Position Trigger Deadman with Abrasive Cutoff (2PP w/ACO shown)



G3 Trigger Deadman with Abrasive Cutoff (2PP w/ACO or 2PE w/ACO) Operation

An optional feature of a Thompson® Valve / Teravalve XL® blaster is abrasive cutoff. The abrasive cutoff option enables the 6.10 abrasive to be turned "on" or "off" allowing only blast air to exit the blast nozzle There are two uses for the abrasive cutoff feature. First is to allow blasting air without abrasive. This is useful for blowing off abrasive from the item blasted. The second use for the abrasive is to purge abrasive out of a long blast hose. This protects against abrasive from collecting in the blast hose when the blast operation is stopped. The abrasive at rest in the blast hose can cause surges when restarting the blast operation.

For the abrasive cutoff to work a second control valve is needed that provides a signal to the Thompson Valve / Teravalve XL® separate of the air signal to the automatic air valve.

Note: The abrasive cutoff feature is optional; however, factory conversion kits are available to upgrade Thompson Valve / Teravalve XL® blasters to include this feature. Consult Axxiom Manufacturing or an Authorized Schmidt® distributor.

- 6.11 Securely grip G3 Trigger Deadman Assembly (#10).
- 6.12 Place thrust pad (#17) securely and comfortably against appropriate part of the body such as the center of the right (or left) chest muscle (pectoral). Adjust pad for comfort. Refer to Section 3.0 and Figure 3.4.
- 6.13 Blast hose (#3) should be on the same side as the hand that is gripping the trigger deadman (#10), such as between arm and torso. Pull blast hose as close to the body as comfortably possible. This allows for thrust management pad to be mostly centered on the right (or left) area of the chest.
- 6.14 Use the free hand that is not operating the deadman for added control and safety.
 - 6.14.1 Place on side grip if installed.
 - If side grip (#21) is not installed, place on top of BAABS upper rail or nozzle holder (#2). 6.14.2
- 6.15 Place the thumb on top of safety flap (#12) and just under the curved safety flap guard (#14) on the trigger deadman handle. Thumb must be placed in the proper location to easily move the safety flap down to allow the trigger to move to the blast position. (See Figure 6.3) Only place thumb in ready position when ready to blast. Refer to video link on previous page.
- Prepare for thrust before turning on blast air by activating G3 Trigger Deadman. If standing with pad placed on the chest: 6.16
 - 6.16.1 Take a wide stance with one foot forward and one back. Position the back foot based on operator comfort.
 - 6.16.2 Prior to activating blast, shift body weight towards front foot, leaning forward slightly. Upon activation, the nozzle thrust should push the operator back to more centered weight distribution.
 - 6.16.3 To maintain balance always keep torso or body center of mass between feet during blasting.
 - 6.16.4 Keep hands close to the body in a comfortable position with elbows bent at about 90 degrees.
- 6.17 Rotate the ACO switch to the desired position.
 - Rotate the ACO switch to the "Off" position if you want AIR ONLY exiting the blast nozzle (Figure 6.4). Rotate the ACO switch to the "On" position if you want AIR AND ABRASIVE exiting the blast nozzle (Figure 6.17.1
 - 6.17.2
- Activate the deadman by pushing the safety flap (#12) down and out of the trigger safety lock position with the thumb and 6.18 pulling back on the deadman trigger (#13) with the fingers.
- 6.19 The nozzle thrust will transfer to the body through the Thrust Management Brace Assembly to the Thrust Management Brace Pad (See Figure 3.1) This allows the muscles in the hands and arms not needed to control the BAABS blasting motion, to be relaxed.
- 6.20 Release deadman trigger to stop blasting. Safety flap will spring back into the safety position to guard against accidental blast activation.



Do Not use a BAABS System with damaged or incorrect components. Using a BAABS System with damaged or incorrect components can result in equipment failure or malfunction which can cause severe injury or death. Always check the blast hose and the BAABS System for damage before each use. Repair or replace any component that shows any sign of wear or other damage.

- 7.1 Refer to Hose Inspection video link below.
 - 7.1.1 Remove BAABS from blast hose (#3) and disconnect electric or pneumatic connections daily. See Figures 5.6 5.9 for removal procedure.
 - 7.1.2 Inspect blast hose (#3). If the blast hose is frayed, replace the blast hose, or cut back to good hose. (See Figure 7.1)

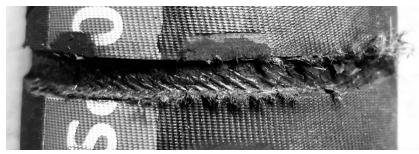


Figure 7.1

- 7.1.3 Check the grippers (#9) (See Figure 4.1) for signs of wear. Replace it if worn. See Section 4.1 for Gripper replacement.
- 7.1.4 Inspect Rail Latch Spring (#6) for wear. Replace it if worn. See Section 8.2 for Latch Spring replacement.
- 7.1.5 Blow off or clean BAABS thoroughly before installing on hose (See Figures 5.2 5.5 for installation).

BAABS: Hose Inspection



- 7.2 G3 Electric Trigger Deadman Assembly
 - 7.2.1 While electric supply to the Trigger Deadman (#10) is disconnected, push the Safety Flap (#12) down and squeeze the Trigger (#13) until it is fully engaged (See Figures 6.1 6.2). Release the Trigger. The Trigger and Safety Flap should return to off position. Squeeze the Trigger again, without moving the Safety Flap, to confirm the Safety Flap does not allow the trigger to move. If the Trigger and Safety Flap do not return to the off position, clean the Trigger and Safety Flap pivot points. Repeat until the Trigger and Safety Flap function properly. (See Figure 15.3)
 - 7.2.2 Periodically check wiring for bare spots, fraying, cuts, or cracks. Repair or replace any components that show signs of wear or damage. Damaged wires can cause abrasive system malfunctions resulting in accidental and unintentional blast startup which may result in severe injury or death to operating personnel.
 - 7.2.3 Refer to Section 16.0 for typical troubleshooting procedures regarding the G3 Trigger Deadman (#10).
- 7.3 G3 Pneumatic Trigger Deadman Assembly
 - 7.3.1 While air supply to the Trigger Deadman (#10) is disconnected, push the Safety Flap (#12) down and squeeze the Trigger (#13) until it is fully engaged (See Figures 6.1 6.2). Release the Trigger. The Trigger and Safety Flap should return to off position. Squeeze the Trigger again, without moving the Safety Flap, to confirm the Safety Flap does not allow the Trigger to move. If the Trigger and Safety Flap do not return to the off position, clean the Trigger and Safety Flap pivot points. Repeat until the Trigger and Safety Flap function properly. (See Figure 15.2)
 - 7.3.2 Dirty air supply and/or back flow situations can result in an accumulation of debris in the twinline and trigger module body which can result in malfunctions. Clean out or replace twinline. Replace Trigger Deadman Control Module Assembly if necessary. See Section 16.0 for troubleshooting procedures.

BAABS: G3 Deadman Maintenance



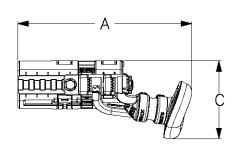
8.0 Part Replacement

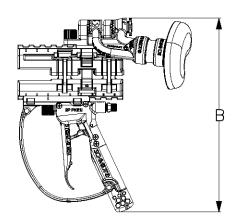
- 8.1 Grippers Module (#9) (See Figure 4.1)
- 8.2 Rail Latch Spring replacement. Refer to drawings in Section 12.0.
 - 8.2.1 Slide the Latch Slotted Spring Pin (#7), with a small screwdriver, far enough to remove the Rail Latch Spring (#6). Leaving the Latch Slotted Spring Pin in the Rail Latch Lever (#5) will make reassembly easier.
 - 8.2.2 Remove Grooved Latch Pin (#8) from the Rail Latch Spring (#6).
 - 8.2.3 Install the Grooved Latch Pin (#8) into the new Rail Latch Spring (#6).
 - 8.2.4 Line up the Rail Latch Spring (#6) with the Latch Slotted Spring Pin (#7) hole in the Rail Latch Lever (#5).
 - 8.2.5 Push the Latch Slotted Spring Pin (#7) through the Rail Latch Spring and into the hole at the opposite side of the Rail Latch Lever (#5) until the Latch Slotted Spring Pin (#7) is completely inside the Rail Latch Lever
- 8.3 Thrust Management Brace Pad Cushion replacement. Refer to drawings in Section 13.0.
 - 8.3.1 Remove clamp screws on pad side Thrust Management Brace Flexible Coupling Clamps (#7).
 - 8.3.2 Pry Thrust Management Brace Pad Cushion (#9) while holding Thrust Management Brace Flexible Coupling (#8) until the connector on the Brace Pad Cushion pops out of the Flexible Coupling.
 - 8.3.3 Install the new Thrust Management Brace Pad Cushion (#9) by placing a portion of the Brace Pad Cushion connector in the hole of the Flexible Coupling (#8) and rolling the connector into the hole.
 - 8.3.4 Tighten clamp screws on pad side Thrust Management Brace Flexible Coupling Clamps (#7).

9.0 Dimensions

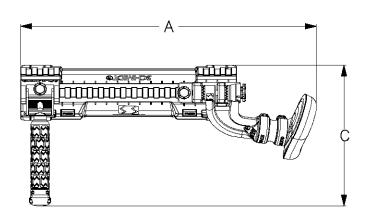
	А	В	С
Subcompact Rail System	9 5/8" / 245mm	12 7/8" / 327mm	5 3/16" / 132mm
Compact Rail System	11 3/4" / 300mm	13 1/16" / 332mm	5 5/16" / 135mm
Short Rail System	12 1/2" / 318mm	13 3/8" / 340mm	9 9/16" / 243mm
Long Rail System	20" / 508mm	13 3/8" / 340mm	9 9/16" / 243mm

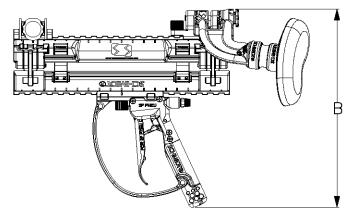
Dimensions Inches / Millimeter





Subcompact/Compact Rail System





Standard Short/Long Rail System

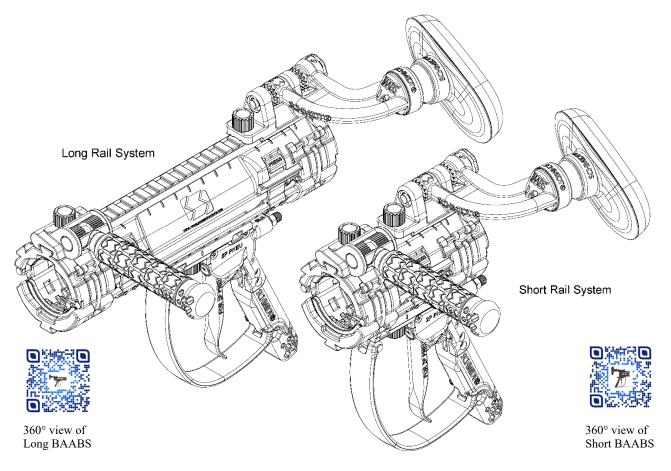
Figure 9.1





BAABS

(Blasting Accessory & Assist Bracket System)



How to order BAABS base packages

(Standard Short/Long includes the BAABS rail, G3 trigger Deadman, Side Grip and Thrust Management Brace) (Subcompact/Compact includes the BAABS rail, G3 Trigger Deadman and Thrust Management Brace)

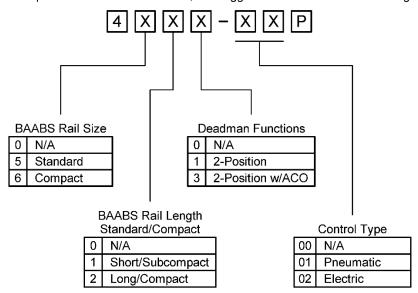


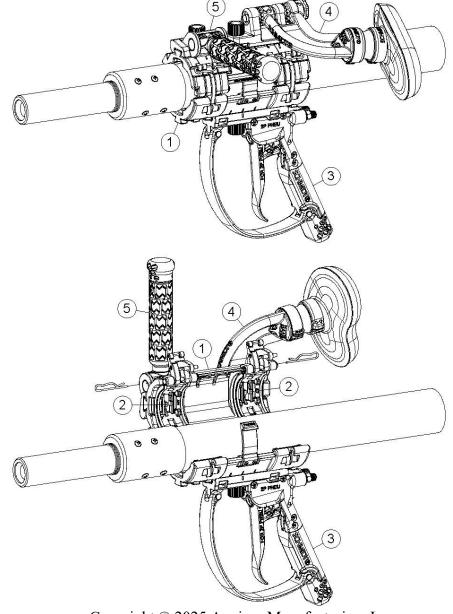
Figure 10.1

11.0 BAABS Rail Package Assemblies

Figure 11.1 BAABS Short Rail Package Assembly

	4511-01P	BAABS Short Rail Package, Blast Hose 1"-1-1/2" HW, G3 2PP (2-Position Pneu)
	4511-02P	BAABS Short Rail Package, Blast Hose 1"-1-1/2" HW, G3 2PE (2-Position Elec)
	4513-01P	BAABS Short Rail Package, Blast Hose 1"-1-1/2" HW, G3 2PP ACO (2-Position Pneu w/ACO)
	4513-02P	BAABS Short Rail Package, Blast Hose 1"-1-1/2" HW, G3 2PE ACO (2-Position Elec w/ACO)
TEM	PART NUMBER	DESCRIPTION
1	4510-000	BAABS Short Rail Base Subassembly (See Figure 12.1)
2 * 4500-005-08PKG Blast Hose Gripper Module M1 (See Chart Figure 4.1) (Package of 4)		Blast Hose Gripper Module M1 (See Chart Figure 4.1) (Package of 4)
	4500-006-08PKG	Blast Hose Gripper Module M2 (See Chart Figure 4.1) (Package of 4)
	4500-007-08PKG	Blast Hose Gripper Module M3 (See Chart Figure 4.1) (Package of 4)
	4500-008-08PKG	Blast Hose Gripper Module M4 (See Chart Figure 4.1) (Package of 4)
3	2270-101	G3 Trigger Deadman Assembly 2PP (2-Position Pneu) (See Figures 15.1 and 15.2) (Shown)
	2270-102	G3 Trigger Deadman Assembly 2PE (2-Position Elec) (See Figures 15.1 and 15.3)
	2270-301	G3 Trigger Deadman Assembly 2PP ACO (2-Position Pneu w/ACO) (See Figures 15.1 and 15.4
	2270-302	G3 Trigger Deadman Assembly 2PE ACO (2-Position Elec w/ACO) (See Figures 15.1 and 15.5)
4	4500-000-06S	Thrust Management Swivel Brace Subassembly (See Figure 13.1)
5	4500-000-16	Side Grip Subassembly (See Figure 14.1)
		NOTE THAT THE SECOND DESIGNATION AND THAT THE SECOND SECON

^{*} Not included in package. Must be purchased separately.

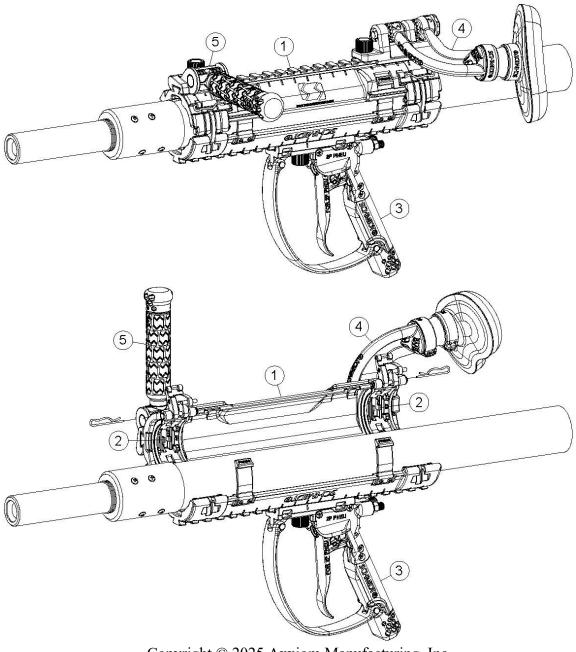


Copyright © 2025 Axxiom Manufacturing, Inc.

Figure 11.2 BAABS Long Rail Package Assembly

	4521-01P	BAABS Long Rail Package, Blast Hose 1"-1-1/2" HW, G3 2PP (2-Position Pneu)
	4521-02P	BAABS Long Rail Package, Blast Hose 1"-1-1/2" HW, G3 2PE (2-Position Elec)
	4523-01P	BAABS Long Rail Package, Blast Hose 1"-1-1/2" HW, G3 2PP ACO (2-Position Pneu w/ACO)
	4523-02P	BAABS Long Rail Package, Blast Hose 1"-1-1/2" HW, G3 2PE ACO (2-Position Elec w/ACO)
ITEM	PART NUMBER	DESCRIPTION
1	4520-000	BAABS Long Rail Base Subassembly (See Figure 12.2)
2 *4500-005-08PKG Blast Hose Gripper Module M1 (See Chart Figure 4.1) (Package of 4)		Blast Hose Gripper Module M1 (See Chart Figure 4.1) (Package of 4)
	4500-006-08PKG	Blast Hose Gripper Module M2 (See Chart Figure 4.1) (Package of 4)
	4500-007-08PKG	Blast Hose Gripper Module M3 (See Chart Figure 4.1) (Package of 4)
	4500-008-08PKG	Blast Hose Gripper Module M4 (See Chart Figure 4.1) (Package of 4)
3	2270-101	G3 Trigger Deadman Assembly 2PP (2-Position Pneu) (See Figures 15.1 and 15.2) (Shown)
	2270-102	G3 Trigger Deadman Assembly 2PE (2-Position Elec) (See Figures 15.1 and 15.3)
	2270-301	G3 Trigger Deadman Assembly 2PP ACO (2-Position Pneu w/ACO) (See Figures 15.1 and 15.4
	2270-302	G3 Trigger Deadman Assembly 2PE ACO (2-Position Elec w/ACO) (See Figures 15.1 and 15.5
4	4500-000-06S	Thrust Management Swivel Brace Subassembly (See Figure 13.1)
5	4500-000-16	Side Grip Subassembly (See Figure 14.1)

^{*} Not included in package. Must be purchased separately.

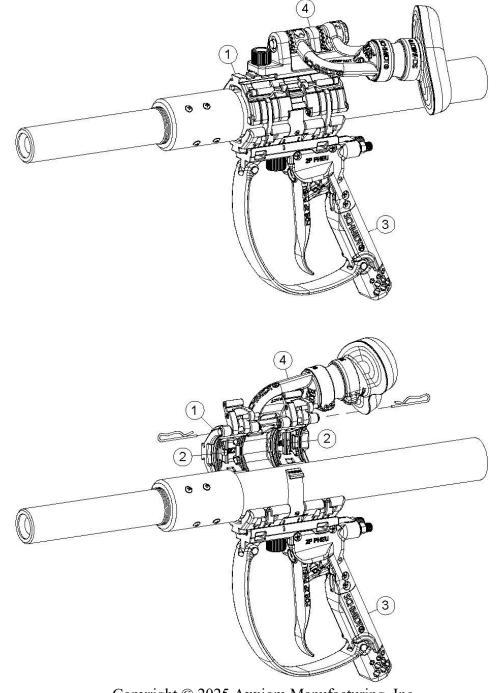


Copyright © 2025 Axxiom Manufacturing, Inc.

Figure 11.3 Subcompact BAABS Rail Package Assembly

	4611-01P	Subcompact BAABS Rail Package, Blast Hose 3/4"-1" HW, G3 2PP (2-Position Pneu)
	4611-02P	Subcompact BAABS Rail Package, Blast Hose 3/4"-1" HW, G3 2PE (2-Position Elec)
	4613-01P	Subcompact BAABS Rail Package, Blast Hose 3/4"-1" HW, G3 2PP ACO (2-Position Pneu w/ACO
	4613-02P	Subcompact BAABS Rail Package, Blast Hose 3/4"-1" HW, G3 2PE ACO (2-Position Elec w/ACO)
ITEM	PART NUMBER	DESCRIPTION
1	4610-000	Subcompact BAABS Rail Base Subassembly (See Figure 12.3)
2	* 4600-004-08PKG	Compact Blast Hose Gripper Module M1/2 (See Chart Figure 4.1) (Package of 4)
	4600-005-08PKG	Compact Blast Hose Gripper Module M1 (See Chart Figure 4.1) (Package of 4)
	4600-006-08PKG	Compact Blast Hose Gripper Module M2 (See Chart Figure 4.1) (Package of 4)
3	2270-101	G3 Trigger Deadman Assembly 2PP (2-Position Pneu) (See Figures 15.1 and 15.2) (Shown)
	2270-102	G3 Trigger Deadman Assembly 2PE (2-Position Elec) (See Figures 15.1 and 15.3)
	2270-301	G3 Trigger Deadman Assembly 2PP ACO (2-Position Pneu w/ACO) (See Figures 15.1 and 15.4)
	2270-302	G3 Trigger Deadman Assembly 2PE ACO (2-Position Elec w/ACO) (See Figures 15.1 and 15.5)
4	4600-000-06S	Compact Thrust Management Swivel Brace Subassembly (See Figure 13.2)

* Not included in package. Must be purchased separately.

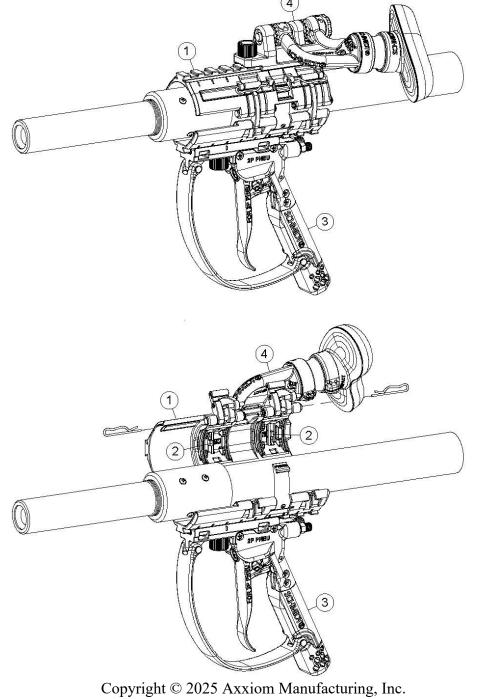


Copyright © 2025 Axxiom Manufacturing, Inc.

Figure 11.4 **Compact BAABS Rail Package Assembly**

-		
	4621-01P	Compact BAABS Rail Package, Blast Hose 3/4"-1-1/4" HW, G3 2PP (2-Position Pneu)
	4621-02P	Compact BAABS Rail Package, Blast Hose 3/4"-1-1/4" HW, G3 2PE (2-Position Elec)
	4623-01P	Compact BAABS Rail Package, Blast Hose 3/4"-1-1/4" HW, G3 2PP ACO (2-Position Pneu w/ACO
	4623-02P	Compact BAABS Rail Package, Blast Hose 3/4"-1-1/4" HW, G3 2PE ACO (2-Position Elec w/ACO)
ITEM	PART NUMBER	DESCRIPTION
1	4620-000	Compact BAABS Rail Base Subassembly (See Figure 12.4)
2	*4600-004-08PKG	Compact Blast Hose Gripper Module M1/2 (See Chart Figure 4.1) (Package of 4)
	4600-005-08PKG	Compact Blast Hose Gripper Module M1 (See Chart Figure 4.1) (Package of 4)
	4600-006-08PKG	Compact Blast Hose Gripper Module M2 (See Chart Figure 4.1) (Package of 4)
	4600-007-08PKG	Compact Blast Hose Gripper Module M3 (See Chart Figure 4.1) (Package of 4)
3	2270-101	G3 Trigger Deadman Assembly 2PP (2-Position Pneu) (See Figure 15.1 and 15.2) (Shown)
	2270-102	G3 Trigger Deadman Assembly 2PE (2-Position Elec) (See Figure 15.1 and 15.3)
	2270-301	G3 Trigger Deadman Assembly 2PP ACO (2-Position Pneu w/ACO) (See Figure 15.1 and 15.4)
	2270-302	G3 Trigger Deadman Assembly 2PE ACO (2-Position Elec w/ACO) (See Figure 15.1 and 15.5)
4	4600-000-06S	Compact Thrust Management Swivel Brace Subassembly (See Figure 13.2)

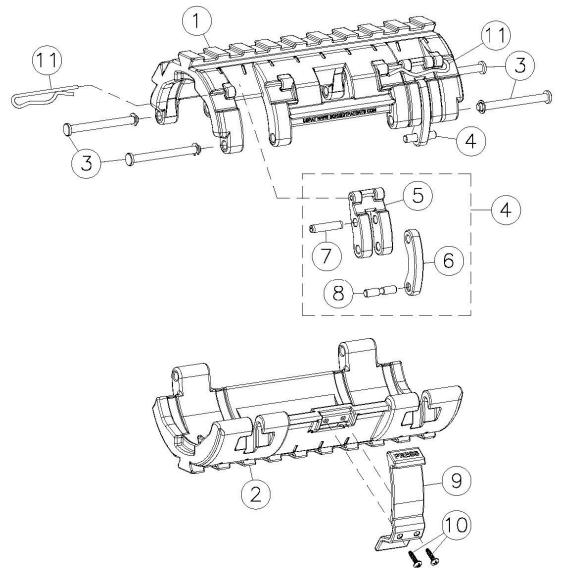
^{*} Not included in package. Must be purchased separately.



12.0 BAABS Rail Base Subassemblies

Figure 12.1 BAABS Short Rail Base Subassembly

	4510-000	BAABS Short Rail Base Subassembly
No.	Part No.	Description
1.	4510-000-01P	Upper Rail
2.	4510-000-02P	Lower Rail
3.	4500-000-11PKG	Rail Hinge Pin (Package of 20)
4.	4500-000-03	Rail Latch Lever Subassembly
5.	4500-000-03MPKG	Rail Latch Lever (Package of 2)
6.	4500-000-09PKG	Rail Latch Spring (Package of 2)
7.	4500-000-12PKG	Latch Slotted Spring Pin (Package of 20)
8.	4500-000-13PKG	Grooved Latch Pin (Package of 10)
9.	4500-000-04	Rail Snap-Lock Safety
10.	4500-000-14PKG	Thread Forming Screw, #4-20 x 7/16" (Package of 50)
11.	7119-002PKG	Safety Pin (Package of 10)



Copyright © 2025 Axxiom Manufacturing, Inc.

Figure 12.2 BAABS Long Rail Base Subassembly

	4520-000	BAABS Long Rail Base Subassembly
No.	Part No.	Description
1.	4520-000-01P	Upper Rail
2.	4520-000-02P	Lower Rail
3.	4500-000-11PKG	Rail Hinge Pin (Package of 20)
4.	4500-000-03	Rail Latch Lever Subassembly
5.	4500-000-03MPKG	Rail Latch Lever (Package of 2)
6.	4500-000-09PKG	Rail Latch Spring (Package of 2)
7.	4500-000-12PKG	Latch Slotted Spring Pin (Package of 20)
8.	4500-000-13PKG	Grooved Latch Pin (Package of 10)
9.	4500-000-04	Rail Snap-Lock Safety
10.	4500-000-14PKG	Thread Forming Screw, #4-20 x 7/16" (Package of 50)
11.	7119-002PKG	Safety Pin (Package of 10)

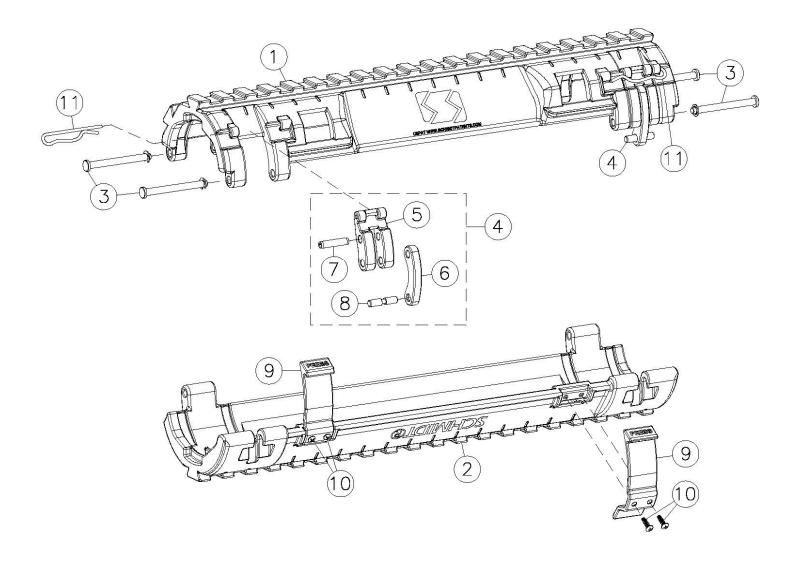


Figure 12.3 Subcompact BAABS Rail Base Subassembly

	4610-000	Subcompact BAABS Rail Base Subassembly
No.	Part No.	Description
1.	4610-000-01	Subcompact Upper Rail
2.	4610-000-02	Subcompact Lower Rail
3.	4500-000-11PKG	Rail Hinge Pin (Package of 20)
4.	4600-000-03	Compact Rail Latch Lever Subassembly
5.	4600-000-03M	Compact Rail Latch Lever
6.	4500-000-09PKG	Rail Latch Spring (Package of 2)
7.	4500-000-12PKG	Latch Slotted Spring Pin (Package of 20)
8.	4500-000-13PKG	Grooved Latch Pin (Package of 10)
9.	4600-000-04	Compact Rail Snap-Lock Safety
10.	4500-000-14PKG	Thread Forming Screw, #4-20 x 7/16" (Package of 50)
11.	7119-002PKG	Safety Pin (Package of 10)
		The state of the s

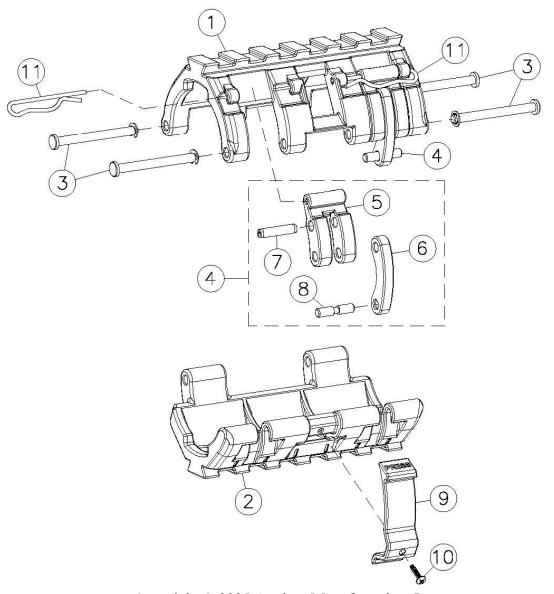
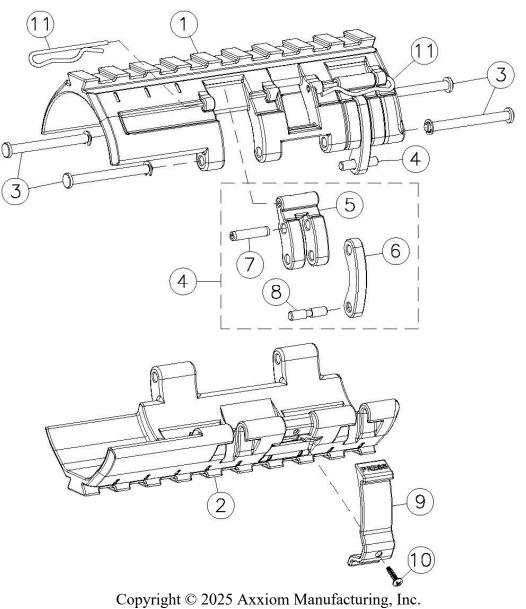


Figure 12.4 **Compact BAABS Rail Base Subassembly**

	4620-000	Compact BAABS Rail Base Subassembly
No.	Part No.	Description
1.	4620-000-01	Compact Upper Rail
2.	4620-000-02	Compact Lower Rail
3.	4500-000-11PKG	Rail Hinge Pin (Package of 20)
4.	4600-000-03	Compact Rail Latch Lever Subassembly
5.	4600-000-03M	Compact Rail Latch Lever
6.	4500-000-09PKG	Rail Latch Spring (Package of 2)
7.	4500-000-12PKG	Latch Slotted Spring Pin (Package of 20)
8.	4500-000-13PKG	Grooved Latch Pin (Package of 10)
9.	4600-000-04	Compact Rail Snap-Lock Safety
10.	4500-000-14PKG	Thread Forming Screw, #4-20 x 7/16" (Package of 50)
11.	7119-002PKG	Safety Pin (Package of 10)



13.0 Thrust Management Swivel Brace Subassemblies

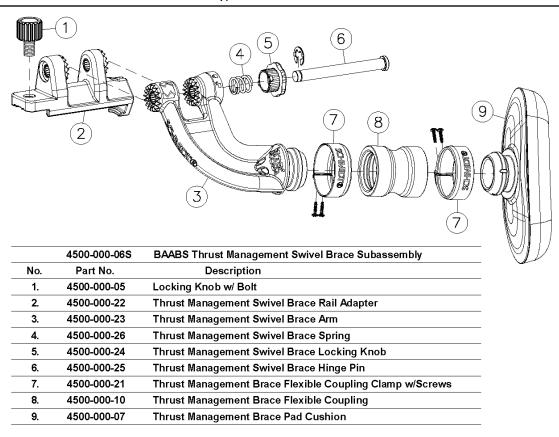
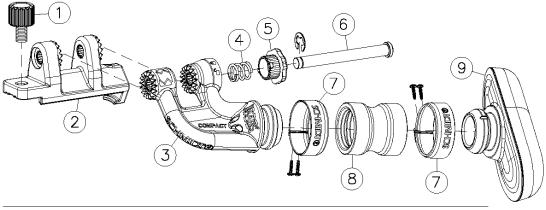


Figure 13.1 BAABS Thrust Management Swivel Brace Subassembly



	4600-000-06S	Compact BAABS Thrust Management Swivel Brace Subassembly
No.	Part No.	Description
1.	4500-000-05	Locking Knob w/ Bolt
2.	4500-000-22	Thrust Management Swivel Brace Rail Adapter
3.	4600-000-23	Compact Thrust Management Swivel Brace Arm
4.	4500-000-26	Thrust Management Swivel Brace Spring
5.	4500-000-24	Thrust Management Swivel Brace Locking Knob
6.	4500-000-25	Thrust Management Swivel Brace Hinge Pin
7.	4500-000-21	Thrust Management Brace Flexible Coupling Clamp w/Screws
8.	4500-000-10	Thrust Management Brace Flexible Coupling
9.	4600-000-07	Compact Thrust Management Brace Pad Cushion

Figure 13.2 Compact BAABS Thrust Management Swivel Brace Subassembly

Figure 14.1 BAABS Rail Mount Side Grip Subassembly

	4500-000-16	BAABS Rail Mount Side Grip Subassembly	
No.	Part No.	Description	
1.	4500-000-16M	Side Grip Rail Adapter	
2.	4500-000-19	Side Grip Handle Pivot	
3.	4500-000-17	Side Grip Handle Locking Plate	
4.	4500-000-18	Side Grip Handle w/ Bolt	
5.	4500-000-20	Side Grip Handle Bumper	
6.	4500-000-05	Locking Knob w/ Bolt	
7.	2270-000-15	Thread Forming Screw #8-16 x 3/4" Lg.	

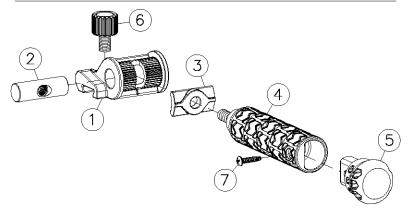
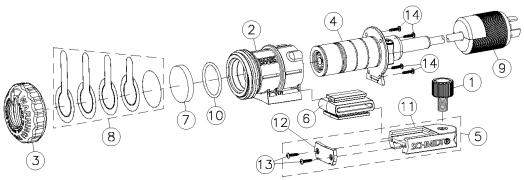


Figure 14.2 BAABS Blast Light Subassembly

	4500-000-27	BAABS Blast Light Subassembly with Twist-Lock Plug (Shown)	
	4500-000-27S	BAABS Blast Light Subssembly with Sealed Plug	
No. Part No. Description		Description	
1.	4500-000-05	Locking Knob w/ Bolt	
2. 4500-000-29 Blast Light Housing		Blast Light Housing	
3.	4500-000-30	Blast Light Lens Cover	
4.	4500-000-28	LED Blast Light Assy	
5.	4500-000-44	Blast Light Rail Adapter Assy	
6.	4500-000-35	Blast Light Shock Absorber	
7.	4500-000-36	Blast Light Protective Lens	
8. 4500-000-37 Blast Light Tear-Off Lens Pack		Blast Light Tear-Off Lens Pack	
9.	7109-301	Twist Lock 3-Prong Male Plug (Shown)	
9.	7109-301-02	Sealed 3-Prong Male Plug	
10.	4500-000-43	O-ring	
11.		Blast Light Rail Adapter	
12.		Blast Light Rail Adapter Cover	
13.		Thread Forming Screw, #4-20 x 7/16" Lg.	
14.		Thread Forming Screw, #8-16 x 3/4" Lg.	



15.0 G3 Trigger Deadman Assemblies

No.	Part No.	Description
	2270-101	G3 Trigger Deadman Assembly 2PP (2- Position Pneumatic)
	2270-102	G3 Trigger Deadman Assembly 2PE (2- Position Electric)
	2270-301	G3 Trigger Deadman Assembly 2PP ACO (2- Position Pneumatic w/ACO)
	2270-302	G3 Trigger Deadman Assembly 2PE ACO (2- Position Electric w/ACO)
		G3 Trigger Deadman Base Grip Assembly Part List
1.	2270-000-01P	Grip
2. 2270-000-02 Trigger Guard		Trigger Guard
3.	2270-000-08PKG	Trigger Guard Pin (Package of 4)
4.	2270-000-07PKG	Bumper (Package of 2)
5.	5. 4500-000-05PKG Locking Knob w/ Bolt (Package of 3)	
6. 2270-000-03APKG Safety Flap Assembly (Package of 2)		Safety Flap Assembly (Package of 2)
7.	2270-000-15PKG	Thread Forming Screw, #8-16 x 3/4" Lg. (Package of 4)
* :	See Figure 15.2 - 15.5 i	for 2-Position Trigger Deadman Control Module Subassemblies
	2270-101CM	G3 Trigger Deadman Control Module 2PP (2-Position Pneumatic)
	2270-102CM	G3 Trigger Deadman Control Module 2PE (2-Position Electric)
	2270-301CM	G3 Trigger Deadman Control Module 2PP ACO (2-Position Pneumatic w/ACO
	2270-302CM	G3 Trigger Deadman Control Module 2PE ACO (2-Position Electric w/ACO)

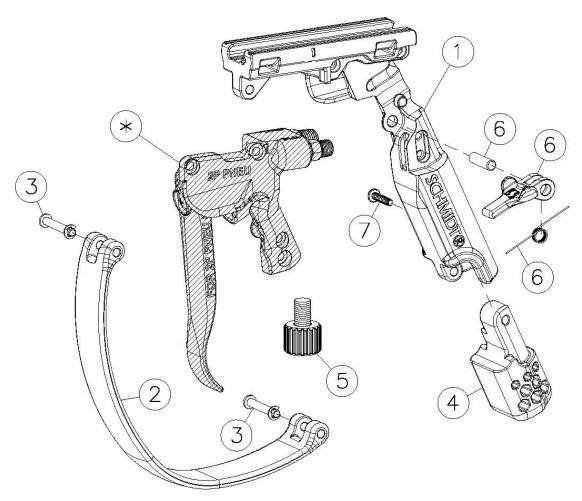


Figure 15.1 Copyright © 2025 Axxiom Manufacturing, Inc.

Figure 15.2 G3 Trigger Deadman Control Module 2PP

	2270-101CM	G3 Trigger Deadman Control Module Subassembly 2PP (2-Position Pneu)	
No.	Part No.	Description	
8.	Not Available	Deadman Control Module Body 2PP (2-Position Pneu)	
9.	2263-002-03	Cartridge Assembly	
10.	2270-101T	1T Deadman Trigger Subassembly 2PP (2-Position Pneu)	
11.	2270-000-15PKG	KG Thread Forming Screw, #8-16 x 3/4" Lg. (Package of 4)	

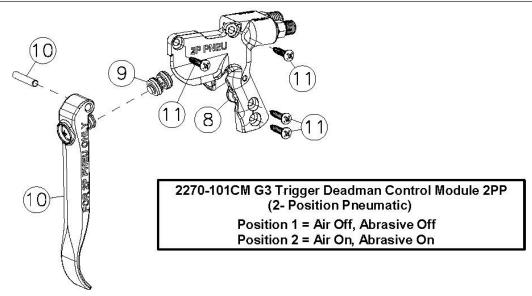


Figure 15.3 G3 Trigger Deadman Control Module 2PE

	2270-102CM	G3 Trigger Deadman Control Module Subassembly 2PE (2-Position Elec)
No.	Part No.	Description
11.	2270-000-15PKG	Thread Forming Screw, #8-16 x 3/4" Lg. (Package of 4)
12.	Not Available	Deadman Control Module 2-position Body
13.	2270-102T	Deadman Trigger 2-Position (Electric)
14.	7109-301	Electric Plug, 3- Prong Twist-Lock

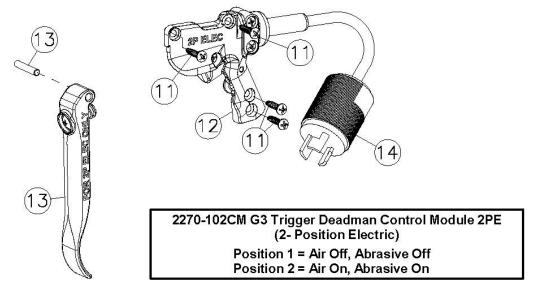


Figure 15.4 G3 Trigger Deadman Control Module 2PP w/ACO

	2270-301CM	G3 Trigger Deadman Control Module Subassembly 2PP ACO (2-Position Pneu w/ACO Switch)
No.	Part No.	Description
9.	2263-002-03	Cartridge Assembly
10.	2270-101T	Deadman Trigger Subassembly 2PP (2-Position Pneu)
11.	2270-000-15PKG	Thread Forming Screw, #8-16 x 3/4" Lg. (Package of 4)
15.	Not Available	Deadman Control Module Body 2PP ACO (2-Position Pneu w/ACO Switch)

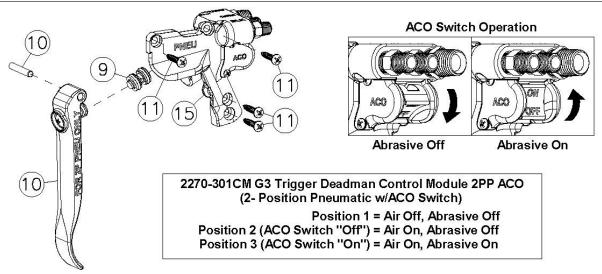
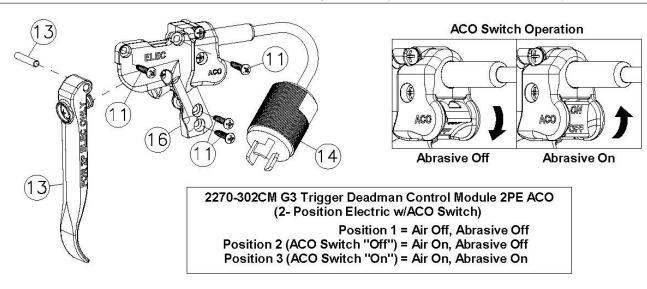


Figure 15.5 G3 Trigger Deadman Control Module 2PE w/ACO

	2270-302CM	G3 Trigger Deadman Control Module Subassembly 2PE ACO (2-Position Elec w/ACO Switch)	
No.	Part No.	Description	
11.	2270-000-15PKG	Thread Forming Screw, #8-16 x 3/4" Lg. (Package of 4)	
13.	2270-102T	Deadman Trigger 2-Position (Electric)	
14.	7109-301	Electric Plug, 3- Prong Twist-Lock	
16.	Not Available	Deadman Control Module Body 2PE ACO (2-Position Elec w/ACO Switch)	



Two position Trigger Deadman 2Px

	16.0 TROUBLESHOOTING					
	Pneumatic G3 Trigger Deadman (Refer to Figures 15.1 and 15.2)	Electric G3 Trigger Deadman (Refer to Figures 15.1 and 15.3)				
	16.1 Air Leaks from the Trigger D	eadman Control Module (2PP only):				
1.	1. Defective cartridge assembly (#9). Replace cartridge assembly. Not Applicable					
2.	Twinline hose connected incorrectly. <i>Verify air supply connection to trigger module 1/4" male fitting).</i>	ноі Аррисивіе				
	16.2 Blast Outlet Air and Abrasive Will Not Shut Off when Trigger is Released:					
1.	 Twinline hose connected incorrectly. Verify air supply connection to trigger module 1/4" male fitting. Defective control module (#12) electric push-butt or electric wiring. Check for an electric short. 					
2.	Debris blocking flow in black twinline signal/vent line. <i>Purge twinline hoses</i> .	2. Trigger (#13) and / or Safety Flap (#6) pivot point is stuck With electric supply off, move the Trigger and Safety Flap back and forth until they move freely. (See Section 7.2.1)				
3.	Cartridge assembly (#9) is stuck in the "ON" position. Defective cartridge assembly or control module (#8); inspect and/or replace as needed.	buck and form until they move freely. (See Section 7.2.1)				
4.	Trigger (#10) and / or Safety Flap (#6) pivot point is stuck. With air supply off, move the Trigger and Safety Flap back and forth until they move freely. (See Section 7.3.1)					
	16.3 Blast Outlet Starts Unintentionally:					
1.	G3 trigger (#10) is worn out. <i>Inspect and/or replace as needed.</i>	1. G3 trigger (#13) is worn out. Inspect and/or replace as needed.				
2.	Trigger spring in Trigger Assembly (#10) is worn, missing, or broken. <i>Inspect and replace springs as needed</i> .	2. Trigger spring in Trigger Assembly (#13) is worn missing or broken. <i>Inspect and replace spring as needed.</i>				
3.	Defective cartridge assembly (#9). Missing or damaged O-rings; replace cartridge assembly.	3. Defective control module (#12) electric push-button switch or electric wiring. <i>Check for an electric short.</i>				
	16.4 Blast Outlet is Slow to Turn on or Will Not Turn on When Trigger is activated:					
1.	Debris blocking flow in black twinline signal/vent line. Purge twinline hoses.	1. No power or insufficient power source. Check all electrical connections for proper mating. A power supply or				
2.	Air leaks in twinline connections. <i>Tighten connections</i> .	transformer can be used if the correct voltage is not readily available.				
3.	Debris blocking flow through cartridge assembly (#9). Purge cartridge assembly.					
	16.5 If Problems Persist, Consult the Blaster Operation and Maintenance Manual for Further Troubleshooting Procedures.					

Two Position Trigger Deadman 2Px w/ACO

	16.0 TROUBLESHO	тос	ING (continued)
	Pneumatic G3 Trigger Deadman (Refer to Figure 15.1 and 15.4)		Electric G3 Trigger Deadman (Refer to Figure 15.1 and 15.5)
	16.6 Air Leaks from the Trigger Dead	man	Control Module (pneumatic only):
	assembly.		Not Applicable
	16.7 Blast Outlet Air and Abrasive Wil	l No	t Shut Off when Trigger is Released:
2.	Twinline hose connected incorrectly. Verify air supply connection to trigger module 1/4" male fitting. Debris blocking flow in black twinline signal/vent line. Purge twinline hoses. Cartridge assembly (#9) is stuck in the "ON" position. Defective cartridge assembly or control module (#15); inspect and/or replace as needed. Trigger and / or Safety Flap pivot point is stuck. With air supply off, move the Trigger and Safety Flap back and forth	1. 2.	Defective control module (#16) electric push-button switch or electric wiring. Check for an electric short. Trigger and / or Safety Flap pivot point is stuck. With electric supply off, move the Trigger and Safety Flap back and forth until they move freely. (See Section 7.2.1)
	until they move freely. (See Section 7.3.1) 16.8 Blast Outlet St	arts	Unintentionally:
1.	G3 trigger (#10) is worn out. <i>Inspect and/or replace as needed.</i>	1.	G3 trigger (#13) is worn out. Inspect and/or replace as needed.
	Trigger spring in Trigger Assembly (#10) is worn, missing, or broken. <i>Inspect and replace spring as needed</i> . Defective cartridge assembly (#9). <i>Missing or damaged</i>	2.3.	Trigger spring in Trigger Assembly (#13) is worn missing or broken. <i>Inspect and replace spring as needed.</i> Defective control module (#16) electric push-button switch
	O-rings; replace cartridge assembly.		or electric wiring. Check for an electric short.
	16.9 Blast Outlet is Slow to Turn on or W	ill N	ot Turn on When Trigger is activated:
	Debris blocking flow in black twinline signal/vent line. Purge twinline hoses. Air leaks in twinline connections. Tighten connections. Debris blocking flow through cartridge assembly (#9). Purge cartridge assembly.	1.	No power or insufficient power source. Check all electrical connections for proper mating. A power supply or transformer can be used if the correct voltage is not readily available.
	16.10 Blast Outlet Abrasive Will Not Shut O	ff w	hen ACO Switch is in the "Off" Position:
1.	ACO switch components sticking. With air supply off, rotate the ACO switch back and forth while blowing clean air behind the ACO switch until they move freely.	1.	ACO switch components sticking. With air supply off, rotate the ACO switch back and forth while blowing clean air behind the ACO switch until they move freely.
2.	ACO Cartridge assembly is stuck in the "ON" position. Defective cartridge assembly or control module (#15); inspect and/or replace as needed.	2.	Defective control module (#16) electric push-button switch or electric wiring. <i>Check for an electric short.</i>
	16.11 If Problems Persist, Consult the Blaster Operatio	n an cedu	

17.0 Recommended Spare Parts

A) Items For Standard Short/Long BAABS			
Qty	Part Number	nber Description	
1	2270-000-01P	G3 Trigger Deadman Grip	
1	2270-000-03A	G3 Trigger Deadman Safety Flap Subassembly	
1	4500-000-03	Rail Latch Subassembly	
2	4500-000-04	Rail Snap-Lock Safety	
3	3 4500-000-05 Locking Knob w/bolt		
1 4500-000-07 Thrust Management Brace Pad Cushion		Thrust Management Brace Pad Cushion	
	B) Items For Subcompact/Compact BAABS		
1	2270-000-01P	G3 Trigger Deadman Grip	
1	2270-000-03A	G3 Trigger Deadman Safety Flap Subassembly	
1	1 4600-000-03 Compact Rail Latch Subassembly		
1	4600-000-04	-04 Compact Rail Snap-Lock Safety	
3	3 4500-000-05 Locking Knob w/bolt		
1	4600-000-07	Compact Thrust Management Brace Pad Cushion	
C) Items For Pneumatic Controls Only			
1	2270-101CM	G3 Trigger Deadman Control Module 2PP (2-Position Pneumatic)	
D) Items For Electric Controls Only			
1	2270-102CM	G3 Trigger Deadman Control Module 2PE (2-Position Elec)	

18.1 Warranty

The following section is to be used as a guide in determining warranty policies and procedures for SCHMIDT® products. It is to be used in determining whether a warranty is justified and as a procedural guide in completing a SCHMIDT warranty claim.

18.2 Warranty Policy

- 1. All SCHMIDT products are guaranteed to be free of defects in material and workmanship at time of shipment. Axxiom Manufacturing, Inc. warrants its products against defects in material and workmanship under normal and proper use for a period of ninety (90) days from the date of delivery. Such warranty is extended only to the buyer who purchases the equipment directly from Axxiom Manufacturing, Inc., or its authorized distributors. This warranty does not include expendable parts such as, but not limited to, hoses, nozzles, and seals.
- 2. The obligation under this warranty is strictly limited to the replacement or repair, at Axxiom's option, of machines and does not include the cost of transportation, loss of operating time, or normal maintenance services. Axxiom Manufacturing, Inc. shall have no liability for labor, consequential damages, freight, or special charges.
- 3. This warranty does not apply to failure occurring due to abuse, misuse, negligence, corrosion, erosion, normal wear and tear, alterations or modifications made to the machine without express written consent of Axxiom Manufacturing, Inc.
- 4. Warranty requests must be submitted in writing within thirty (30) days after failure.

- 5. Written authorization to return merchandise under warranty must first be obtained from Axxiom Manufacturing, Inc. In no case shall merchandise be returned to Axxiom for credit without authorization. At the time of authorization, Axxiom will issue a return authorization number that must be included on all packages and correspondence. Any material returned without prior authorization will remain the property of the sender and Axxiom will not be responsible for it.
- 6. All returns must be shipped with prepaid freight. All returns may be exchanged for other equipment or parts of equal dollar value. If goods are not exchanged, they are subject to a 20% restocking charge. Any cost incurred by Axxiom Manufacturing, Inc. to restore such goods to first class condition will be charged to the customer.
- 7. Axxiom Manufacturing, Inc. reserves the right to inspect and make the final decision on any merchandise returned under warranty.
- 8. Axxiom Manufacturing, Inc. offers no warranty with respect to accessories, including but not limited to, engines, motors, batteries, tires, and any other parts not manufactured by Axxiom Manufacturing, Inc., but which the original manufacturer warrants.
- 9. Axxiom Manufacturing, Inc. reserves the right to make product changes or improvements without prior notice and without imposing any obligation upon itself to install the same on its products previously sold.
- 10. The above warranty conditions can only be altered by Axxiom Manufacturing, Inc. Axxiom must confirm alterations in writing for each specific transaction.
- 11. Axxiom Manufacturing, Inc. reserves the right to establish specific warranty terms for used or demo machines on an individual transaction basis. Invoices covering such merchandise will clearly state the provisions of the applicable warranty for each specific transaction.
- 12. USE OF NON-ORIGINAL SCHMIDT® FACTORY REPLACEMENT PARTS ON ANY SCHMIDT EQUIPMENT VOIDS ALL WARRANTIES.
- 13. AXXIOM MANUFACTURING, INC. DOES NOT AUTHORIZE ANY PERSON, REPRESENTATIVE OR SERVICE OR SALES ORGANIZATION TO MAKE ANY OTHER WARRANTY OR TO ASSUME ON BEHALF OF AXXIOM MANUFACTURING, INC. ANY LIABILITY IN CONNECTION WITH THE SALE OF OUR PRODUCTS OTHER THAN THOSE CONTAINED HEREIN.
- 14. UNDER NO CIRCUMSTANCES SHALL AXXIOM MANUFACTURING, INC. BE LIABLE TO CUSTOMER OR ANY OTHER PERSON FOR ANY DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF ANY WARRANTY OR FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER, INCLUDING WITHOUT LIMITATIONS, DAMAGES FOR ANY LOSS OF GOODWILL, WORK STOPPAGE, OR ANY AND ALL OTHER COMMERCIAL DAMAGES OR LOSSES.
- 15. AXXIOM MANUFACTURING, INC. MAKES NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SCHMIDT PRODUCTS SOLD PURSUANT THERETO.

18.3 Trademarks, Patents, and Proprietary Statements

Schmidt®, the stylized "S" logo, Axxiom®, Thompson®, Microvalve®, MV2®, MV3®, Tera Valve™, Combovalve®, and Ergo-Ladder® are registered trademarks owned by Axxiom Manufacturing, Inc. Use of the Schmidt, the stylized "S" logo Axxiom, Thompson, Microvalve, MV2, MV3, Tera Valve, Combovalve, and Ergo-Ladder trademarks without the written consent of Axxiom Manufacturing is strictly prohibited.

Products manufactured and marketed by Axxiom Manufacturing, Inc. are protected by patents issued or pending in the United States and other countries.

The text, diagrams, and drawings contained in this manual are proprietary information intended solely for instruction in the operation of the specified equipment. Use of any text, diagrams, or drawings contained in this manual for any reason other than its intended purpose without the written consent of Axxiom Manufacturing, Inc. is strictly prohibited.



Additional Helpful BAABS Links



BAABS Demonstration



BAABS Products



Blasting Demonstration



Blasting Stances



Blasting in tight spaces





Visit us at www.AxxiomMfg.com