

Audi-Larm™ Audible Alarm

MAINTENANCE AND REPAIR

For More Information, call 1-800-MSA-2222 or Visit Our Website at www.MSAnet.com



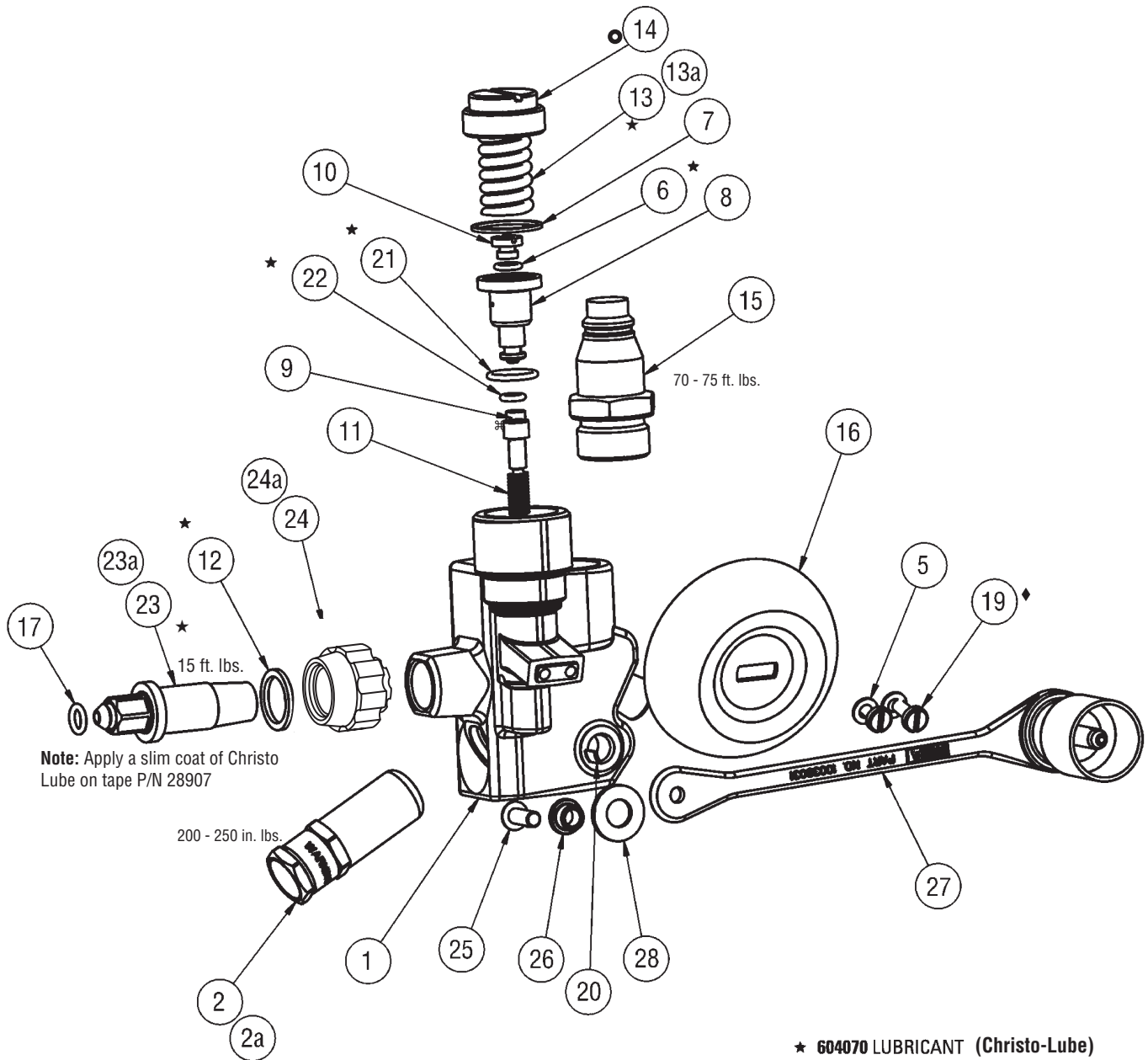
MINE SAFETY APPLIANCES COMPANY
CRANBERRY TWP., PENNSYLVANIA, U.S.A. 16066

AUDI-LARM COMPONENTS		
Item	Part No.	Description
1	10038417	Audi-Larm Body, 2002 NFPA MMR
2	10036291	Valve, Relief, Pressure LP w/O-Ring — 200 - 250 in. lbs.
2a	10036292	Valve, Relief, Pressure HP w/O-Ring — 200 - 250 in. lbs.
3	28907	Tape, Thread
4	29787	Sealant, Thread Locking
5	54197	Lock Washer (2)
6	66395	O-Ring, Piston Plug
7	68523	Retaining Ring
8	85049	Piston Assembly
9	10044574	Striker/w Pellet
10	85052	Piston Plug
11	85055	Striker Spring
12	93031	Washer, CGA Nut
13	455941	Spring LP
13a	474352	Spring HP
14	474369	Screw, Adjusting
15	485070	URC Adapter w/O-Ring — 70 - 75 ft. lbs.
16	485829	Bell
17	633553	O-Ring, Nipple
18	604070	Lubricant, Christo-Lube
19	635245	Screw, #8-32 x 7/16 LG (2)
20	635825	Cap-Plug (see note)
21	635953	O-Ring, Piston Bore
22	635954	O-Ring, Piston Nose
23	10062086	Fitting, Nipple, Hex Type, LP
23a	10062087	Fitting, Nipple, HP
24	10120808	Coupling Nut, LP
24a	10120809	Coupling Nut, HP
25	10037952	Screw
26	10037953	Bushing, Dust Cover, Audi-Larm 2002
27	10038031	Dust Cover Ass'y, 2002 NFPA Audi-Larm
28	10041011	Washer, Flat, Stainless Steel

Note: Cap Plug (P/N 635813) is used to protect threads of port.

Audi-Larm Assembly

Low Pressure Part Number 10037310
 High Pressure Part Number 10037312



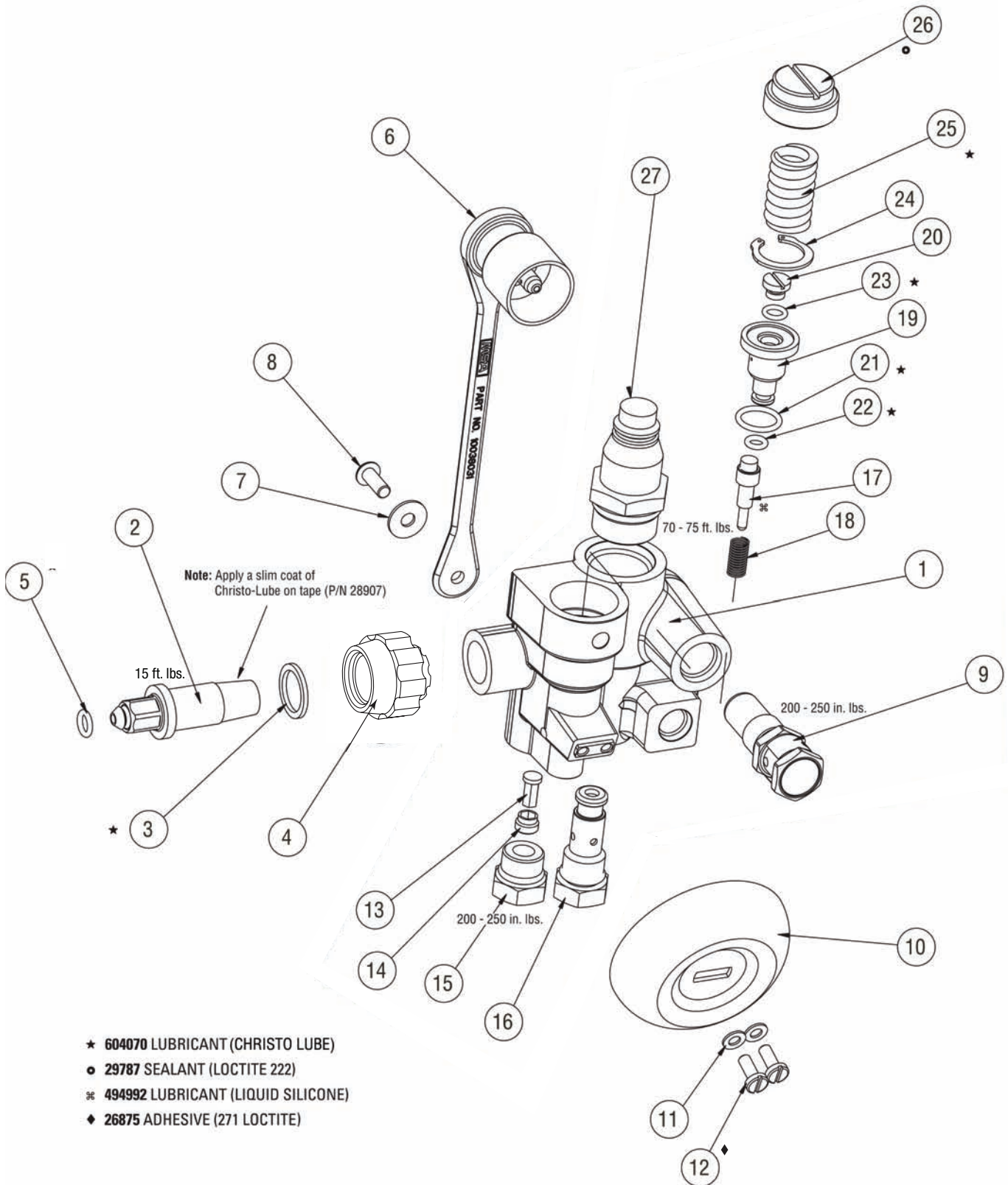
- ★ 604070 LUBRICANT (Christo-Lube)
- 29787 SEALANT (LOCTITE 222)
- ※ 494992 LUBRICANT (LIQUID SILICONE)
- ◆ 26875 ADHESIVE (271 LOCTITE)

3000 PSI AUDI-LARM COMPONENTS		
Item	Part No.	Description
1	10045593	Audi-Larm Housing, MMR
2	10062086	Fitting, Nipple, LP
3	93031	Washer, CGA Nut
4	10120808	Handwheel, LP
5	633553	O-Ring, Nipple
6	10038031	Dust Cover Ass'y, 2002 NFPA Audi-Larm
7	10041962	Washer, Flat, SST
8	10037952	Screw, 10-32 UNF, SST
9	10036291	Valve, Relief, Pressure, LP w/O-Ring
10	485829	Bell
11	54197	Washer, Lock, #8
12	635245	Screw, #8-32 x 7/16 LG
13	476441	Filter, Bronze, Sintered
14	80495	Holder, Screen
15	10043943	SAE Plug, Size 6 w/O-Ring
16	10043945	Valve, Check w/O-Rings and Backup Rings
17	10044574	Striker/w Pellet
18	85055	Spring, Striker
19	85049	Piston Assembly
20	85052	Plug, Piston
21	635953	O-Ring, Piston Bore
22	635954	O-Ring, Piston Nose
23	66395	O-Ring, Piston Plug
24	68523	Ring, Retaining
25	474352	Spring, Compression, Audi-Larm
26	474369	Screw, Adjusting
27	485070	Quick-Fill Adapter

Note: Item No. (9) Valve, Relief, Pressure is **NOT** adjustable. Replace only.

3000 PSI Audi-Larm Assembly

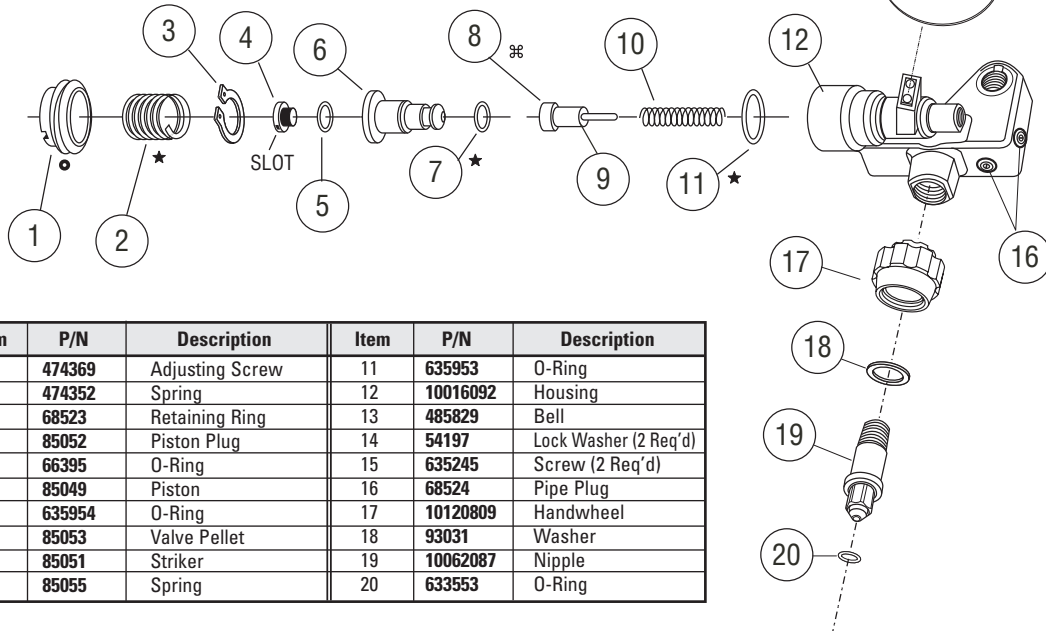
Part Number 10043947 MMR 3000 Audi-Larm URC Ass'y



- ★ 604070 LUBRICANT (CHRISTO LUBE)
- 29787 SEALANT (LOCTITE 222)
- ⌘ 494992 LUBRICANT (LIQUID SILICONE)
- ◆ 26875 ADHESIVE (271 LOCTITE)

Audi-Larm Assembly

part number 10012996 (4500 psig)



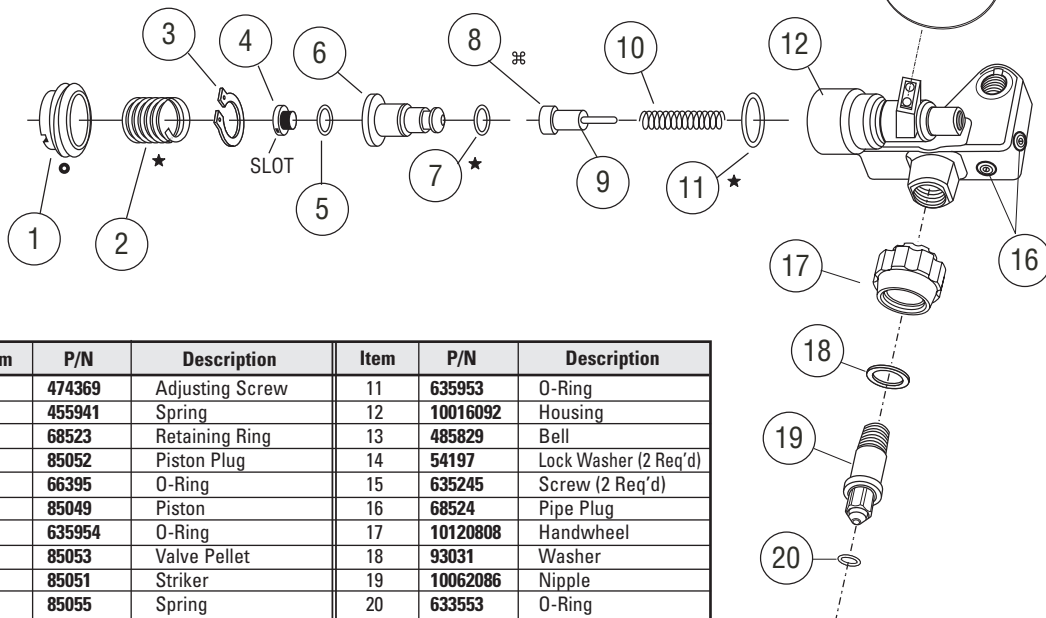
Item	P/N	Description	Item	P/N	Description
1	474369	Adjusting Screw	11	635953	O-Ring
2	474352	Spring	12	10016092	Housing
3	68523	Retaining Ring	13	485829	Bell
4	85052	Piston Plug	14	54197	Lock Washer (2 Req'd)
5	66395	O-Ring	15	635245	Screw (2 Req'd)
6	85049	Piston	16	68524	Pipe Plug
7	635954	O-Ring	17	10120809	Handwheel
8	85053	Valve Pellet	18	93031	Washer
9	85051	Striker	19	10062087	Nipple
10	85055	Spring	20	633553	O-Ring

Audi-Larm Assembly

part number 10012944 (2216 psig)
w/Relief Valve (484892)

part number 10012995 (3000 psig)
w/Plug (492089) and O-Ring (633776)

- ◊ 29787 SEALANT (LOCTITE 222)
- ★ 604070 LUBRICANT (CHRISTO LUBE)
- ◆ 26875 ADHESIVE (271 LOCTITE)
- ※ 494992 LUBRICANT (LIQUID SILICONE)



Item	P/N	Description	Item	P/N	Description
1	474369	Adjusting Screw	11	635953	O-Ring
2	455941	Spring	12	10016092	Housing
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6	85049	Piston	16	68524	Pipe Plug
7	635954	O-Ring	17	10120808	Handwheel
8	85053	Valve Pellet	18	93031	Washer
9	85051	Striker	19	10062086	Nipple
10	85055	Spring	20	633553	O-Ring

AUDI-LARM AUDIBLE ALARM

AUDI-LARM DISASSEMBLY AND REPAIR

⚠ CAUTION

Do not over-tighten parts or you may damage the Audi-Larm body or the insert threads.

Note: The Audi-Larm must be leak tested following any disassembly. Refer to the Leak Testing section in this binder. Only trained and certified personnel, authorized by MSA, are permitted to maintain and repair the apparatus beyond this point. Use replacement parts from MSA only to assure proper performance.

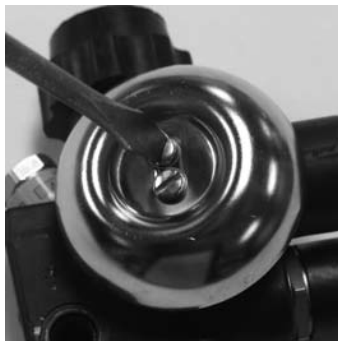
Thorough understanding of all instructions, inspection procedures, cautions, and warnings which originally accompanied your breathing apparatus is a prerequisite.

Most repairs can be accomplished with standard tools. However, certain special tools, tapes, lubricants, and a tester from MSA are required. See the Introduction section in this binder for a listing of these items. Follow the maintenance procedures exactly, and understand that any deviation from the written repair procedures is absolutely unacceptable, unless approved by MSA corporate office personnel.

MSA is changing the Audi-Larm Disassembly and Repair section to include new requirements for installation of the overhaul kit.

In addition, the procedure for setting the alarm ring point is now covered in the Audi-Larm Audible Alarm Tester Instructions.

AUDI-LARM REPAIR DUAL SCREW



1. Use a flat-blade screwdriver to unthread the existing screws and lock-washers holding the bell to the Audi-Larm housing.

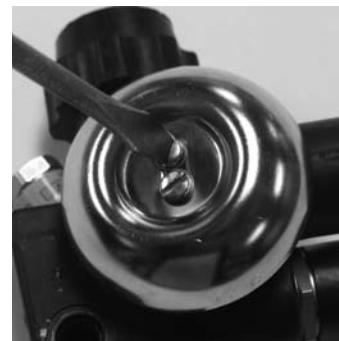
2. Discard the screws and washers.

⚠ WARNING

Do not remove the bell from the alarm housing unless the bell is damaged. If the bell is damaged replace it with a new bell. Failure to follow this warning can result in serious personal injury or death.

INSTALLING NEW BELL SCREWS AND LOCK-WASHERS

1. Ensure that the bell is aligned with the raised boss (mounting pad) on the alarm housing. The rim of the bell must not touch the alarm housing at any point.
2. Ensure that each screw hole is cleared of old Loctite.
3. Apply one drop of Loctite #271 (P/N 26875) into each screw hole of boss.



4. Use a flat-blade screwdriver to thread the screws (P/N 635245) and lock-washers (P/N 54197) into the Audi-Larm body and tighten.

5. Check the bell to ensure that it is tight. You must not be able to rotate or tilt the bell by hand.

UPGRADE KIT FOR AUDI-LARM BELL SCREW

MSA has changed its recommended procedures for the Audi-Larm bell single screw and washer.

⚠ CAUTION

An MSA certified repair technician must perform this upgrade. Improper installation may prevent the alarm from functioning properly.

SINGLE SCREW - REMOVING THE OLD BELL SCREW AND WASHER

1. Use a flat-blade screwdriver to unthread the existing screw and lock-washer holding the bell to the Audi-Larm housing.
2. Discard the screw and washer. Do not remove the bell from alarm housing.

AUDI-LARM AUDIBLE ALARM

INSTALLING NEW BELL SCREW (P/N 10040954)

1. Ensure that bell is aligned with the raised boss (mounting pad) on the alarm housing. The bell must not touch the alarm housing at any point.
2. Thread the new screw into the alarm housing by hand.
3. Use an inch-pound torque wrench and a 5/16" 6-point socket to torque the screw to 100 +/- 5 in.lbs.
4. Check the bell to ensure that it is tight. You must not be able to rotate or tilt the bell by hand. Should you encounter difficulty with this upgrade, please contact MSA Customer Service toll-free at 1-800-MSA-2222.

AUDI-LARM DISASSEMBLY

ALARM ASSEMBLY REPAIR

Nipple O-ring Replacement

⚠ WARNING

Relieve all pressure from the system. Close the cylinder valve fully. Be sure that nothing blocks the regulator outlet. Open the bypass valve fully to release any trapped air. Failure to follow this warning can result in serious personal injury or death.

1. Insert your fingernail or the O-ring removal tool (P/N 636060) under the O-ring (P/N 633553) and remove it. Be careful not to scratch the alarm O-ring groove.
2. Roll the new O-ring over the end of the insert and seat it into the O-ring groove. If the O-ring is not seated, air may leak.

Coupling Nut Replacement (Prior Design)

1. Removing the coupling nut and insert.

- a. Place a wrench on the alarm body flats to secure the body. Place a 7/16" socket wrench on the end of the insert.



- b. Turn the socket wrench counter-clockwise to loosen and remove the insert.
- c. Check the alarm housing body threads to be sure they contain no pipe-sealing tape residue.
- d. Slide the coupling nut off the threaded end of the insert.

- e. Remove the washer from inside the coupling nut.



2. Reassembling the coupling nut and insert
 - a. Apply a thin film of Christo-Lube lubricant on the new washer.
 - b. Slide the new washer onto the insert from the threaded end.

- c. Slide the coupling nut onto the insert from the threaded end.
 - Apply pipe-sealing tape to the insert threads (see General Notes).
- d. Thread the coupling nut and insert into the Audi-Larm body and tighten no more than 25 ft. lbs. Use wrenches on the insert and alarm body flats.

Coupling Nut Replacement (Current Design)

Disassembling the Coupling Nut and Nipple

1. Remove the nipple.
 - a. Secure the alarm body with a wrench or vise.

Note: Use protective sleeves on the jaws of the vise.

- b. Use a 7/16" deep-well socket to unscrew the nipple.



- c. Remove the nipple and coupling nut.

- d. Remove the washer.



- e. Clean Teflon tape residue from the thread.

Reassembling the Coupling Nut and Nipple

Coupling Nut	2216/3000 psig:	P/N 10120808
	4500 psig:	P/N 10120809
Nipple	2216/3000 psig:	P/N 10062086
	4500 psig:	P/N 10062087

AUDI-LARM DISASSEMBLY

1. Reinstall the Coupling Nut

- a. Apply Teflon tape to the nipple thread.



2. Apply a small amount of Christo-Lube lubricant to the new washer.



3. Slide the new washer onto the threaded end of the nipple.

4. Slide the coupling nut onto the threaded end of the nipple.

- a. Screw the coupling nut and nipple into the Audi-Larm body.



- b. Use a torque wrench and 7/16" deep well socket to tighten the nipple to 15 ft lbs.



ALARM DISASSEMBLY

Overhaul Kit P/N 10045831

Relieve all pressure from the system. Close the cylinder valve fully. Be sure that nothing blocks the regulator outlet. Open the bypass valve fully to release any trapped air.

1. Remove the Audi-Larm coupling nut from the cylinder valve.

Note: To remove the alarm from the high pressure hose see the High Pressure Hose and Harness Gauge section in the First Stage Regulator Repair section of this binder.

2. Use a large flat-blade screwdriver to remove the adjusting screw.



3. Lift the spring out.

4. Use retaining-ring pliers to remove the retaining ring. Apply only enough pressure on the ring to remove it from the groove.



5. Discard the retaining ring.

6. Unscrew and remove the piston plug and O-ring.



AUDI-LARM DISASSEMBLY

7. Thread the extraction tool (P/N 482426) into the back of the piston.



CAUTION

Be careful not to damage the piston valve seat on the opposite end of the piston.

8. To remove the piston, gently rock the extraction tool back and forth while pulling it out.



9. Remove the extraction tool.
10. Use the O-ring removal tool to remove piston O-ring and the piston plug O-ring.
11. Discard the O-rings.
12. Turn the alarm over to remove the striker and spring from the alarm housing.
13. Discard striker, valve pellet and spring.

14. Use the O-ring removal tool to remove O-ring beneath the alarm housing shoulder.



15. Discard the O-ring.
16. Wipe all dirt and debris from the piston.

Removing Relief Valve

WARNING

If label on relief valve is missing or damaged, the relief valve must be replaced with a new relief valve. Failure to follow this warning can result in serious personal injury or death.

1. Use an open-end wrench to loosen and remove the relief valve.



2. Discard relief valve and replace with new relief valve.

Note: Relief valve is factory set and it must be replaced with new relief valve.

Removing the Check Valve on a 3000psig System

1. Use an open-end wrench to loosen and remove the check valve.
2. Discard check valve and replace with new check valve.

Removing the Plug and Sintered Filter on a 3000psig System

1. Use an open-end wrench to loosen and remove the plug.

Note: Use a nut driver, not a socket and ratchet wrench. The filter might snap off if over-tightened.

2. Place a 3/16" nut driver over sintered filter hexes, loosen and remove the filter and filter holder.
3. Discard the filter and replace with a new filter.

CAUTION

Do not round hex's flats or snap off filter inside the alarm body.

Removing the URC Assembly Coupling

1. Place the Audi-Larm in a vise. Use protective sleeves to keep from damaging the block.
2. Use a 1" deepwell socket to loosen and remove the URC Assembly coupling from alarm body.
3. Discard URC Assembly coupling and replace with new URC Assembly coupling.

AUDI-LARM REASSEMBLY

Installing the URC Coupling in the Manifold or Quick-Fill System Block

1. Place the manifold or Quick-Fill System Block in a vise. Use protective sleeves to keep from damaging the block.
2. Wrap the coupling threads with transparent tape to prevent damage to the O-ring. Apply a thin film of Christo-Lube Lubricant to the coupling O-ring (P/N 635068). Slide the new O-ring over the coupling threads. Remove the tape.
3. Thread the coupling into the block and tighten to 70–75 ft.lbs. using a 1" deepwell socket.
4. Perform a leak test.

Installing New Relief Valve

1. Remove protective cap.

Note: Ensure O-ring is installed. Relief valve comes with the O-ring.

2. Apply a thin film of Christo-Lube lubricant to the O-ring.
3. Thread relief valve into port of the alarm body, handtighten. Be careful not to cross-thread the relief valve.
4. Use a torque wrench and socket to torque the relief valve to 200-250 in.lbs.

Installing New Check Valve

1. Remove protective cap.

Note: Ensure O-rings and back-up rings are installed. Check valve comes with the O-rings and back-up rings.

2. Apply a thin film of Christo-Lube lubricant to the O-rings and back-up rings.
3. Thread check valve into port of the alarm body, hand-tighten. Be careful not to cross-thread the check valve.
4. Use a torque wrench and socket to torque the check valve to 200-250 in.lbs.

Installing Sintered Filter and Plug

1. Hold the new filter in one hand with the filter flange (larger diameter) end down.
2. Slide the non-threaded end of filter holder on the filter.
3. Insert the filter and holder into a 3/16" nut driver so that the filter flange end is up.

Note: Use a nut driver, not a socket and ratchet wrench. If the filter is over-tightened it will snap off.

4. Insert the filter holder, filter, and nut driver into the plug port of alarm.
5. Tighten the filter holder finger-tight only.

⚠ CAUTION

Do not over tighten, round hex's flats, or snap filter off inside the alarm body.

Note: Ensure the O-ring is installed. The plug comes with O-ring.

6. Apply a thin film of Christo-Lube lubricant to the O-ring.
7. Thread plug into the port of alarm body, hand-tighten. Be careful not to cross-thread the plug.
8. Use a torque wrench and socket to torque the plug to 200-250 in.lbs.

Installing URC Assembly Coupling in the Alarm Body

1. Place the alarm in a vise. Use protective sleeves to keep from damaging the block.
2. Wrap the coupling threads with transparent tape to prevent damage to the O-ring.
3. Apply a thin film of Christo-Lube lubricant to the P/N 635068 coupling O-ring.
4. Slide the new O-ring over the coupling threads.

5. Remove the tape.



6. Thread the coupling into the alarm body by hand.
7. Tighten to 70–75 ft.lbs. using a 1" deep-well socket.

Overhaul Kit (P/N 10045831)

Note: All O-rings are to be replaced. Reusing O-rings is the most frequent cause of alarm malfunction. Apply a very light film of Christo-Lube lubricant to each O-ring before installing it.

1. Install the O-ring under the shoulder inside the alarm housing. Use the small plastic stick to push the O-ring into place.



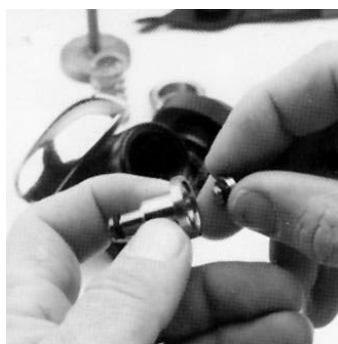
AUDI-LARM REASSEMBLY

2. Apply a very light film of Silicone Lubricant (P/N 494992) to striker shaft and pellet. Place the spring over the striker.



3. Insert the spring and striker into the alarm housing, with the rubber valve pellet side facing you.

4. Use the plastic stick to push on the striker to be sure that its tip extends through the hole so that it can touch the bell.
5. Place new O-rings on the piston and the piston plug.



6. Thread the plug into the piston and tighten.

7. Apply a very light film of Christo-Lube lubricant on the outside diameter of the piston.



8. Insert the piston into the alarm housing and press it into place.

Note: Be careful not to damage the piston seat. The striker will extend through the forward hole toward the bell.

9. Use retaining-ring pliers to install the new retaining ring.
 - a. Insert the ring with its flat side facing you.
 - b. The ring must seat in the groove located about 1/16" above the piston.

- c. Use the O-ring removal tool if necessary to push the ring into the groove. If the ring is bent, or does not fit tightly, replace it.



10. Apply a very thin film of Christo-Lube lubricant to both ends of the adjusting spring.
11. Insert the adjusting spring into the alarm housing.



12. Insert the adjusting screw into the alarm housing and tighten about 1-1/2 complete turns.

13. Verify proper Audi-Larm operation by performing Audi-Larm test on PosiChek³ Machine with SDS upgrade (recommended) optionally. (The Audi-Larm Tester is now obsolete).

Note: Upon completion of Audi-Larm assembly test procedures, perform the following step.

14. Place one drop of Loctite #222 on the adjusting screw threads.



15. Ensure cylinder valve is fully closed.
16. Open the bypass valve to release air pressure, then remove the Audi-Larm assembly from the alarm tester.

Note: When you have completed the Audi-Larm assembly repair and adjustment procedure, check the alarm for air leaks. Refer to the Audi-Larm Leak Testing section.

Note: Check that the alarm bell screws are secure (See Bell section).

ALARM TEST

MSA recommends that C.A.R.E. facilities use the upgraded Biosystems PosiChek3 SCBA Test Benches to test Audi-Larm accuracy.

Upgrades to the PosiChek3 Machine are available through Biosystems:

54-21-A12 - EP (Enhanced Precision) Upgrade Only, and
54-21-A13 - Sound Detection System Upgrade Only, and
54-21-A14 - EP and Sound Detection System Upgrade Combined.

MSA also authorizes the use of the Audi-Larm tester (P/N 10045522) to evaluate the accuracy of the Audi-Larm Audible Alarm.

Audi-Larm Audible Alarm Testing

⚠ WARNING

If upgrades have not been performed to the Biosystems PosiChek3 Test Bench, MSA requires C.A.R.E. facilities to use the Audi-Larm Tester (P/N 10045522) to check the accuracy of the Audi-Larm Audible Alarm during each flow test of the SCBA. Failure to follow this warning can cause Audi-Larm malfunction, resulting in serious personal injury or death.

Contact Biosystems (www.biosystems.com) for information regarding other necessary upgrades.

⚠ WARNING

Do not block or cover the exhaust port or relief valve in the alarm test fixture manifold. Failure to follow this warning can cause over pressurization resulting in serious personal injury or death.

2. There is no additional action from the user other than closing the cylinder valve to initiate the set point test.
3. The Audi-Larm assembly must begin ringing within the ringing pressure range indicated above.
 - If the Audi-Larm assembly starts to ring at a pressure above the allowable color code range for the model tested, turn the adjusting screw counter-clockwise about 1/8 of one turn. Repeat test.
 - If the Audi-Larm assembly starts to ring at a pressure below the minimum color code, turn the adjusting screw clockwise about 1/8 of one turn. Repeat test.
4. If the alarm does not ring or does not ring continuously once activated, refer to the Audi-Larm section of the Certified Maintenance Instructions.

Note: Upon verification of the proper set point for the Audi-Larm assembly being tested, the Audi-Larm will continue to ring and pressure will continue to fall.

RING-DOWN TEST

1. The Audi-Larm assembly must ring continuously until the alarm tester pressure gauge reading is within color code marked Ring down.
2. If the Audi-Larm assembly does not ring continuously until the alarm tester pressure gauge reading is within color code, Refer to the appropriate Audi-Larm section of the Certified Maintenance Instructions.

⚠ WARNING

The Audi-Larm assembly must ring continuously from initial activation until reaching the ringdown band, 150 psig, of the tester gauge. The Audi-Larm assembly must comply with the requirements of all three tests above. An Audi-Larm assembly not meeting any of the above requirements must be removed from service and repaired; see Audi-Larm Section of certified maintenance instructions. Failure to follow this warning can result in serious personal injury or death.

COMPLETING THE TEST

⚠ WARNING

Following the ring-down test. The system's pressure must be vented by opening the regulator by-pass valve of the air mask prior to removing the Audi-Larm from the alarm test fixture. Failure to follow this warning can result in serious personal injury or death.

1. Upon completing the Audi-Larm assembly test procedure, check the Audi-Larm assembly for leaks. Refer to Audi-Larm assembly Leak Testing section of the Certified Maintenance Instructions.
2. **Reminder:** Ensure that all required Audi-Larm maintenance is up-to-date as referenced on page 1 and outlined in PIN Article P/N 10046631. This must include verification that the Audi-Larm bell screws are secure. If the Audi-Larm is a single screw model, also see PIN Articles P/N 10041212 Rev.0 and P/N 10041213 Rev. 1.

Gauge Recommended Calibration Schedule

1. The gauge manufacturer requires that the gauge be calibrated a minimum of once a year. The gauge can be calibrated by any qualified calibration laboratory/service center.

STORAGE

Be careful not to drop the alarm tester. This could damage the calibration of the gauge. Store the alarm tester in the packaging that it was received in. Reinstall the protective caps, supplied with the audible alarm tester, on the cylinder connection and Audi-Larm connection. Store in a clean environment, free of any contaminants, and free of any heavy objects that might damage the alarm tester.

AUDI-LARM TROUBLESHOOTING

Trouble	Probable Cause	Remedy
Audi-Larm does not ring when pressurized.	Audi-Larm bell is loose	Install new screws and washers. Refer to PIN P/N 10041212 (Single Screw) and PIN P/N 10041213 (Dual Screw)
	Dirt or foreign matter may have affected the o-ring seals inside the Audi-Larm or the proper operation of the Audi-Larm striker.	Overhaul Audi-Larm.
	Internal Leak	Overhaul Audi-Larm. Overhaul Audi-Larm and replace piston.
Audi-Larm leaks	Audi-Larm insert o-ring is leaking	Try to hand tighten coupling nut further onto the cylinder valve. If this is unsuccessful, the insert o-ring may need to be replaced.
	Leakage at the pipe thread fitting	Completely leak test all fittings on the Audi-Larm assembly. Relieve pressure, and then tighten if necessary.
Audi-Larm does not fully pressurize	Cylinder pressure too low	Replace cylinder with a fully pressurized cylinder.
	Internal leak	Overhaul Audi-Larm and replace piston.
	External leak	Replace coupling nut nipple O-ring.
Audi-Larm does not start to ring at required setting	Adjustment too high	Adjustment: Turn the adjusting screw counter clockwise (out) 1/8 turn. Retest the Audi-Larm.
	Adjustment too low	Adjustment: Turn the adjusting screw clockwise (in) 1/8 turn. Retest the Audi-Larm.
Audi-Larm does not ring continually all the way down to within color code mark or lower.	Internal leak	Overhaul Audi-Larm.
		Overhaul Audi-Larm and replace piston.

Note: If after performing the *remedy*, the Audi-Larm still does not perform properly during the Audi-Larm test, it must be replaced.

Note: Overhaul Kit P/N 10045831