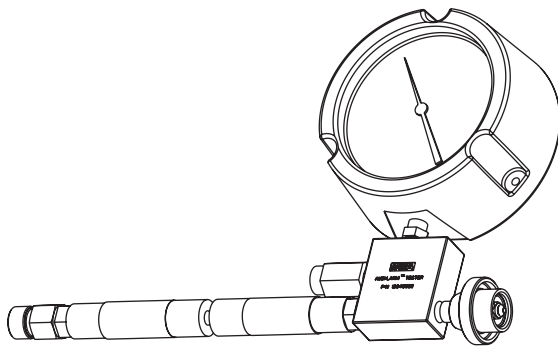


Audi-Larm™ Audible Alarm Tester

P/N 10045522

INSTRUCTIONS



⚠ WARNING

Prior to using this tester, make certain that all applicable required field retrofits identified in the Product Information News (PIN) titled *Audi-Larm™ Audible Alarm Testing (P/N 10046631)* were completed. Contact MSA for a copy of the PIN article at 1-800-MSA-2222 or visit www.MSAnet.com/care. All required Audi-Larm maintenance must be up-to-date before testing the Audi-Larm with this tester. Failure to follow this warning can cause Audi-Larm malfunction, resulting in serious personal injury or death.

The warranties made by MSA with respect to the product are voided if the product is not installed, used and serviced in accordance with the instructions in this manual. Please protect yourself and your employees by following the instructions. Please read and observe the WARNINGS inside. We encourage our customers to write or call for a demonstration of this equipment prior to use or for any additional information relative to use or repairs. Call 1-800-MSA-2222 during regular working hours.



For More Information: Call (1-800-MSA-2222) or Visit Our C.A.R.E. Website at (www.MSAnet.com/CARE)

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MINE SAFETY APPLIANCES COMPANY
PITTSBURGH, PENNSYLVANIA, U.S.A. 15230

AUDI-LARM TESTER

⚠ WARNING

This manual must be read carefully by all persons who have or will have the responsibility for using or servicing the product. Like any complex piece of equipment, this Alarm Tester from MSA will perform as designed only if it is used and serviced according to the instructions. Otherwise, it could fail to perform as designed, and persons who rely on this product could sustain serious personal injury or death.

INTRODUCTION

This device is intended to test all MSA Audi-Larm assemblies while connected to the SCBA.

Three functional Tests are performed:

- Ring-up Test
- Set point Test
- Ring-down Test

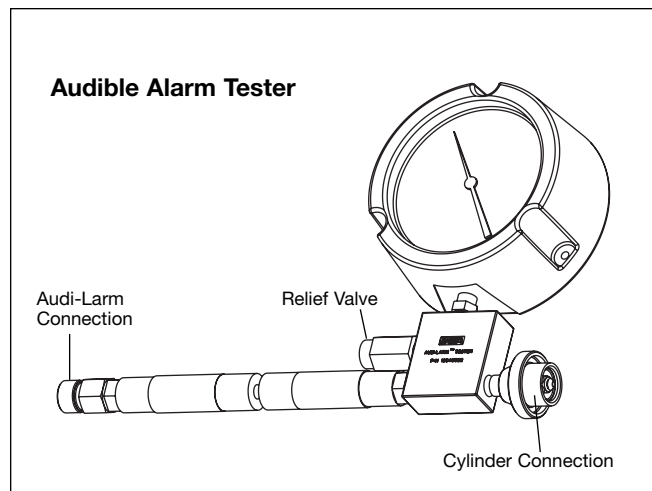
⚠ WARNING

The Cylinder Valve must be closed fully; the Regulator must be in the off position. Open the bypass to relieve all pressure in the system. Close the bypass fully, ensuring that the SCBA can be pressurized. Failure to follow this warning can result in serious personal injury or death.

For all Audi-Larm assemblies tested, a minimum of 1800 psig Cylinder pressure is necessary for proper tester operation.

INSTRUCTIONS

1. Remove protective caps from cylinder and Audible Alarm connections. Save protective caps for restore-age.
2. Be sure that an o-ring is in place on the insert of both the Audi-Larm assembly and Alarm Test Fixture.



3. Thread cylinder connection of the Alarm Test Fixture onto the cylinder valve outlet, hand tightening coupling nut.
4. Position the Audi-Larm assembly so that the adjusting screw is facing out.
5. Thread the Audi-Larm assembly onto the Audi-Larm connection of the Alarm Test Fixture, hand tightening coupling nut.

RINGUP TEST

1. Slightly open the cylinder valve of the SCBA and observe the pressure gauge needle as it begins to rise.

⚠ 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. The Audi-Larm must ring prior to the pressure gauge needle reaching the Charge Zone. This indicates that the Audi-Larm assembly is functioning on ring-up.
3. If it does not ring, refer to the appropriate Audi-Larm assembly section of the Certified Maintenance Instructions.
4. Close the cylinder valve when the needle reaches the Charge Zone, (1600-1800 psig), of the Alarm Tester Fixture gauge. A pressure relief valve is incorporated to limit the system test pressure to approximately 1900 psig.
5. Alarm Test Fixture will continuously vent air via the exhaust port in the Alarm Test Fixture.

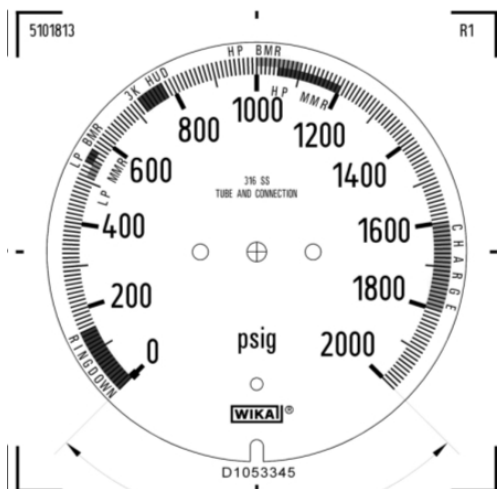
⚠ WARNING

If the cylinder valve is not fully closed prior to the gauge reaching the upper band of the Charge Zone, (1800 psig), the Relief Valve will open and discharge air from the system.

SET POINT TEST

The Alarm Test Fixture gauge is color coded for High and Low Pressure BMR, High and Low Pressure MMR, and 3000 psig with URC Assembly (3K HUD). It is necessary to properly identify what style (MMR or BMR) and pressure range (HP 4500 psig, LP 2216/3000 psig and 3000 psig URC Assembly) to correctly verify the proper set point.

AUDI-LARM TESTER



TYPE OF AUDI-LARM to be tested	COLOR SCALE	RINGING PRESSURE
LOW PRESSURE MMR Alarm BMR Alarm	Color Orange Color Blue	510 to 550 psig 540 to 570 psig
HIGH PRESSURE MMR Alarm BMR Alarm	Color Blue Color Orange	1050 to 1200 psig 1000 to 1100 psig
3000psig with Universal Rescue Connection (URC)	Color Blue 3K HUD	720 to 780 psig
PORTABLE AIR-SUPPLY SYSTEM	None	540 to 570 psig
AIR-LINE SYSTEM Cascade System 2216 psig	None	460 to 500 psig
Cascade System 4500 psig	None	1000 to 1100 psig

- As soon as the system has been pressurized to the Charge Zone, close the cylinder valve fully resulting in the pressure bleeding from the system at a controlled rate.

⚠ 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.

- There is no additional action from the user other than closing the cylinder valve to initiate the set point test.
- 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.
- 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 in the Alarm Tester Fixture. This action automatically results in the initiation of the Ring-down test.

RING-DOWN TEST

- The Audi-Larm assembly must ring continuously until the Alarm Tester pressure gauge reading is within color code marked Ring down.
- 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 SCBA prior to removing the Audi-Larm from the Alarm Test fixture. Failure to follow this warning can result in serious personal injury or death

Removing the Audi-Larm assembly from Alarm Test Fixture

- Remove the Audi-Larm assembly from the Audi-Larm connection of the Alarm Test Fixture, by unthreading the coupling nut handwheel.
- 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.

AUDI-LARM TESTER

3. **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.