1. Select Site: Identify the second intercostal space on the anterior chest at the midclavicular line on the same side as the injury. (Fig. 1)

2. Cleanse site with antimicrobial solution

3. Remove the red cap with a twisting motion

4. Remove the ARS® from case

5. Insert the ARS® into the skin over the superior border of the third rib, midclavicular line, and direct it into the intercostal space at a 90-degree angle to the chest wall. Ensure ARS® entry into the chest is not medial to the nipple line and not directed toward the heart.

6. Insert the ARS® into the pleural space. Listen for the sudden escape of air as the tension pneumothorax is decompressed.

7. Remove the needle portion of the ARS® and leave the catheter in place. Secure the catheter to the chest as directed by your local protocols.

8. Monitor closely for recurrence of respiratory distress
1. Select Site: Identify the second intercostal space on the anterior chest at the midclavicular line on the same side as the injury. (Fig. 1)

2. Cleanse site with an antimicrobial solution

3. Remove the red cap with a twisting motion

4. Remove the ARS® from case

5. Insert the ARS® into the skin over the superior border of the third rib, midclavicular line, and direct it into the intercostal space at a 90-degree angle to the chest wall. Ensure ARS® entry into the chest is not medial to the nipple line and not directed toward the heart.

6. Insert the ARS® into the pleural space. Listen for the sudden escape of air as the tension pneumothorax is decompressed.

7. Remove the needle portion of the ARS® and leave the catheter in place. Secure the catheter to the chest as directed by your local protocols.

8. Monitor closely for recurrence of respiratory distress

See Reverse for more information

Intended Use:
The ARS is intended to be inserted into the pleural space of the chest cavity, to act as a mechanism to relieve tension pneumothorax in casualties with progressive respiratory distress, with known or suspected torso trauma.

Contraindications:
Not for use in treating simple pneumothorax or hemothorax
Not indicated for the treatment of simple barotrauma
Not indicated for pediatric patients
Not indicated for use in pregnancy

Warning:
Tension Pneumothorax is a life-threatening medical emergency, which if left untreated will result in death. Ensure placement in 3rd intercostal space perpendicular to and through the anterior chest wall lateral to the mid-clavicular line. This anatomic placement will avoid inadvertent injury to any avoiding the cardiac box, avoiding internal organs. Inserting the ARS through the chest wall of a casualty who has NOT suffered a penetrating chest injury AND in whom the diagnosis of tension pneumothorax has NOT been confirmed may result in the inadvertent puncture of the underlying lung which may create a pneumothorax.

Continually monitor patient for:
• Potential bleeding from intercostal blood vessels
• Potential local hematoma
• Occlusion or bending of the cannula
• Progressive respiratory distress
• Unilateral decreased chest expansion

Ensure casualty is treated for infection per medical protocol.

Adverse Reaction:
Adverse reactions include:
• Pain
• Bleeding
• Infection
• Injury to local nerves resulting in numbness or paralysis of intercostal muscle
• Laceration of the lung tissue of uninjured lung tissue

U.S. Design Patents:
0584,408 S; 0585,647 S; 0594,410 S; 7,674,426 B2
Canadian Design Patents:
127963; 127962; 127963
EPO Patents (European):
001002372-0001, 001013940-0001, 001013940-0002