Standards Procedure (Skill) Respiratory Section
Respiratory: NIPPV
(Non-Invasive Positive Pressure)

B	EMT	B
A	AEMT	A
P	PARAMEDIC	P

Clinical Indications:

- Non-Invasive Positive Airway Pressure (NIPPV) is indicated in all patients whom inadequate ventilation is suspected.
  This could be as a result of Pulmonary Edema, CHF, COPD, Pneumonia, or Asthma.
- Agencies may utilize Continuous and/or Bi-Level Positive Airway Pressure Devices

Clinical Contraindications:

- Decreased Mental Status.
- Facial features or deformities that prevent an adequate mask seal.
- Excessive respiratory secretions.

Procedure:

1. Ensure adequate oxygen supply to ventilation device.
2. Explain the procedure to the patient.
3. Consider placement of a nasopharyngeal airway.
4. Place the delivery mask over the mouth and nose. Oxygen should be flowing through the device at this point.
5. Secure the mask with provided straps starting with the lower straps until minimal air leak occurs.
6. If the Positive Pressure is adjustable on the NIPPV device adjust and slowly titrate to achieve a positive pressure as follows:

   <u>Continuous pressure device:</u>

   5 – 25 cmH_20 for Pulmonary Edema, CHF, COPD, Asthma, Drowning, possible aspiration, or pneumonia.

   25 cmH_20 is maximum pressure that should be utilized with NIPPV.
   Increasing positive pressure can cause hypotension.
   Use caution or remove and re-evaluate with Systolic blood pressures consistently < 100mmHg.
7. Evaluate the response of the patient assessing breath sounds, oxygen saturation, and general appearance.
8. Titrate oxygen levels to the patient's response. Many patients respond to low FIO2 (30-50%).
9. Encourage the patient to allow forced ventilation to occur. Observe closely for signs of complications. The patient must be breathing for use of the NIPPV device.
10. If indicated, nebulized medications can be administered in-line with NIPPV.
11. Document time and response on patient care report (PCR).

Certification Requirements:

- Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the local EMS System.