

Kendrick's Other Device for Extrication™



User Manual (KE-823)

Manufactured Exclusively By

EMERGENCY
Products + Research

Creating Industry Standards.

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What are the key improvements and advantages over the original K.E.D.™?

It has been approximately 25 years since I first invented the original K.E.D.™ rescue vest. What inspired me to develop the K.O.D.E. 2? Situations change as quickly as you respond.

Until now, no one has stepped forward to answer the call and create any significant improvements on the original K.E.D.™. The K.O.D.E. 2™ has incorporated into it, 25 years of suggestions and changes in EMS protocols and procedures for spinal immobilization. The K.O.D.E. 2 can now be put into use faster and will provide more stability for today's diverse array of patients in even more varied scenarios.

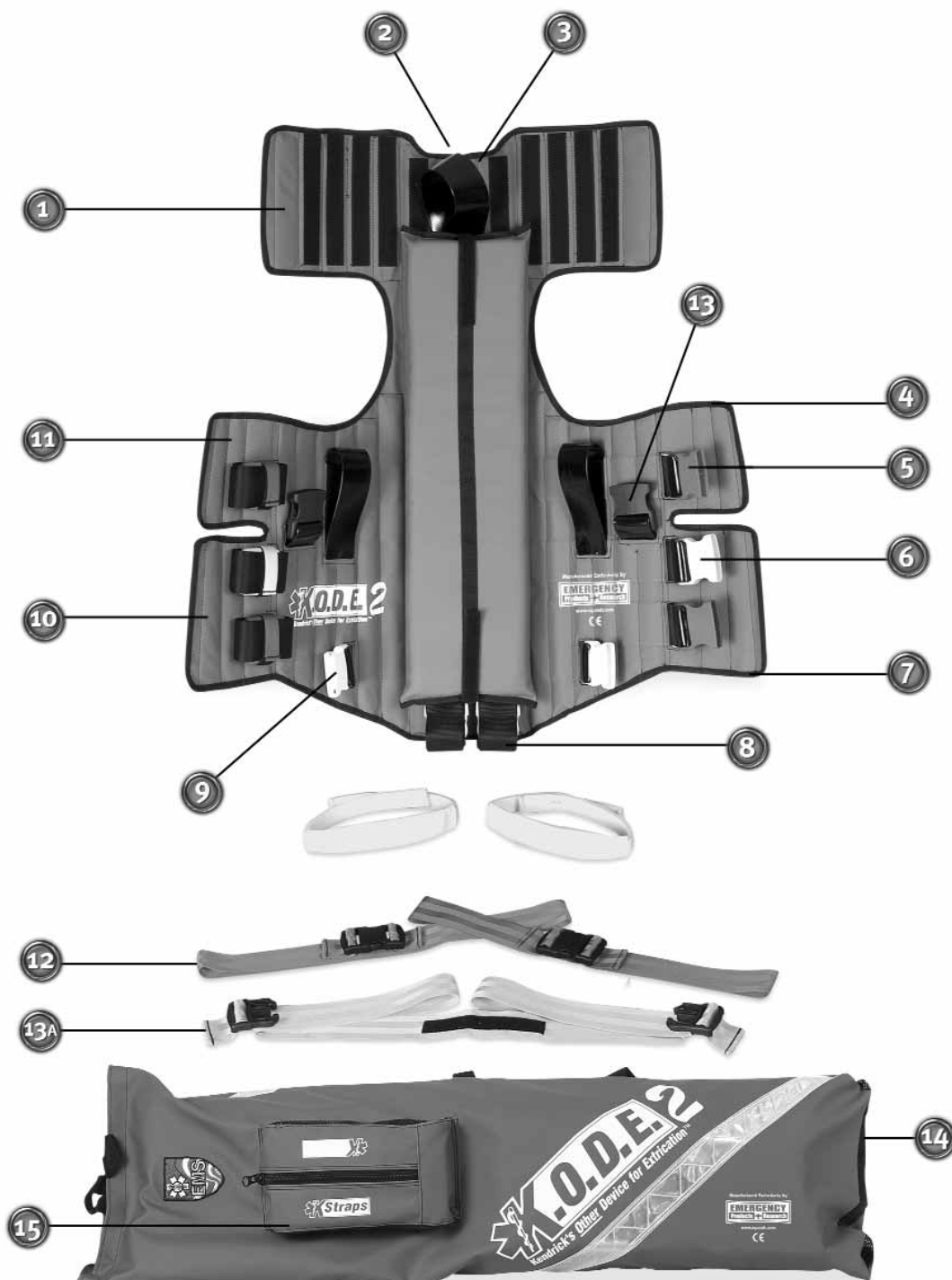
If a change didn't create a benefit, I wouldn't have made the change.



— Rick Kendrick

1. Head piece is one slat wider, to provide better securing of a patient's head that may be a little more forward than normal. There is no "hook" tape on the first slat, so it will be more comfortable on the side of the patient's face, if it is turned in. Adhesive tape will stick to the slat easier and more securely.
2. The top of the head piece dips down (notch) in the center, providing better access to the back of the patient's head.
3. There are three center slats, providing stronger vertical stability while not adding any more total weight to the device.
4. At the top of the two chest flaps, the first two slats on each side turn back independently to accommodate electrode pads and to help secure larger busted patients.
5. The longer strap with the male buckle comes from the left side of the chest piece. If the device was not stored correctly, the straps will not tangle behind the patient during placement.
6. The buckles are color coded, so it will be easier to see which buckle the rescuer has in his/her hand.
7. The body of the device is wider at the bottom, to provide coverage of wider torsos, and distribute the p.s.i. force of the lower chest strap.
8. The two long leg straps w/male white buckles are sewn closer together, so as to be in a more anatomically correct position to pass midline from back to front. The rescuer no longer needs to decide either to place straps "criss-cross" or "same side".
9. The two white female buckles for the leg straps are better positioned for easier location and anatomically correct usage.
10. The sewn in static webbing is coated to prevent absorption of fluids, making cleaning of the device easier.
11. The side flap slats/stiffeners are made of HDPE, so that they provide increased strength to place the KODE2 behind the patient, yet enough flex to conform and contour to the patient's body shape, providing better contact and patient comfort.
12. Two additional straps (orange) are provided to be used in a standing takedown maneuver.
13. Deceleration Receptacles (blue) and a shoulder strap (yellow) are incorporated to better secure the patient's shoulders back. Sometimes referred to as a "deceleration" strap (13A). It may be placed over each shoulder and buckled.
14. The carry bag is vented to help keep the device drier while stored.
15. The extra straps and the chin/forehead strap set are stored in a conveniently located, and vented pouch on the side of the carry bag.

K.O.D.E. 2	Product No.	Replacement Accessories	Product No.
K.O.D.E. 2 Vest	KE-707 (Green) KE-713 (Black)	Head and Chin Straps	KE-700
		Deceleration & Take Down Straps	KE-710
		Folding Pad	KE-711 (Green) KE-714 (Black)
		Carry Case	KE-712 (Green) KE-715 (Black)



1- ABOUT THE K.O.D.E. 2 (KE-707)

1.1 General Specifications

Length

Opened Flat	32 in	(81.28 cm)
Rolled, in Case	33.5 in	(85.09 cm)

Width

Opened Flat	34 in	(86.36 cm)
Rolled, in Case	9.5 in	(24.13 cm)

Thickness

Opened Flat	1 in	(2.54 cm)
Rolled, in Case	6 in	(15.24 cm)

Weight*

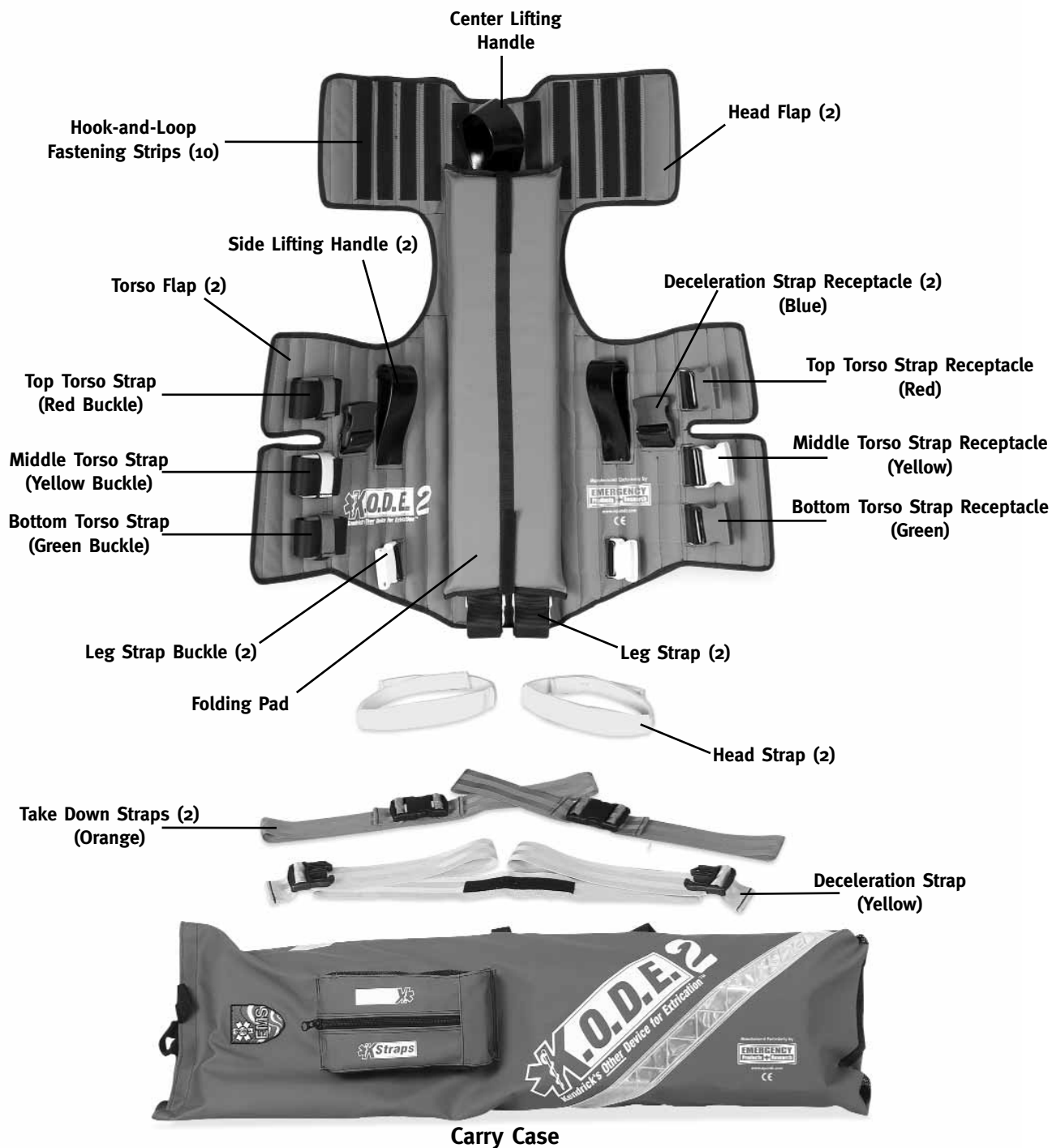
8 lb 14.4 oz (4.04 kg)

Load Limit

500 lb (227 kg)

* Weight includes restraints, pad, head straps, carry case, take down straps, and deceleration straps.

1.2 Components (Outside View with Straps in Storage Configuration)



2- About the K.O.D.E. 2 Features

2.1 Torso Straps

The **K.O.D.E. 2** is constructed with three torso straps: top, middle, and bottom. The straps are color coded for easy matching of left and right pieces (Figure 1).

When wrapping the **K.O.D.E. 2** torso flaps around the patient, fasten the middle (yellow) strap first, then the bottom (green) strap. Do not fasten the top (red) strap until just before you are ready to transfer the patient to a long spine board.

THE MIDDLE STRAP

The middle (yellow buckle) strap is the first strap to be fastened (Figure 2).

When fastening the strap initially, snug it until there is space for 2 or 3 fingers laid flat between the strap and the patient's torso. You will tighten the strap just before transferring the patient to a spine board.

The middle strap evenly secures the greatest possible area of the **K.O.D.E. 2**, providing the greatest patient stability while you finish applying the **K.O.D.E. 2**.

If the rescue situation or the patient's condition requires that you remove the patient from the vehicle sooner than anticipated, the stability provided by the **K.O.D.E. 2** with only the middle strap fastened, and properly tightened, may be preferable to using no supporting equipment. Follow your medical advisor's protocols.

THE BOTTOM STRAP

The bottom (green buckle) strap is the second strap fastened (Figure 2).

When fastening the strap initially, snug it until there is space for 2 or 3 fingers laid flat between the strap and the patient's torso. You will tighten the strap just before transferring the patient to a spine board.

THE TOP STRAP

Do not fasten the top (red buckle) strap at this time. Leave the top strap unfastened until you are ready to transfer the patient to the long spine board. This allows the patient to breathe more freely while you finish applying the **K.O.D.E. 2**.

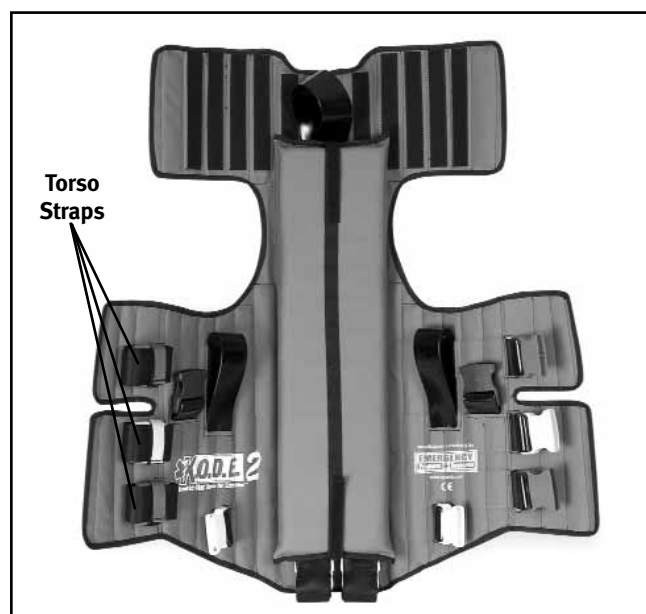


Figure 1 - Torso Straps (As Folded for Storage)

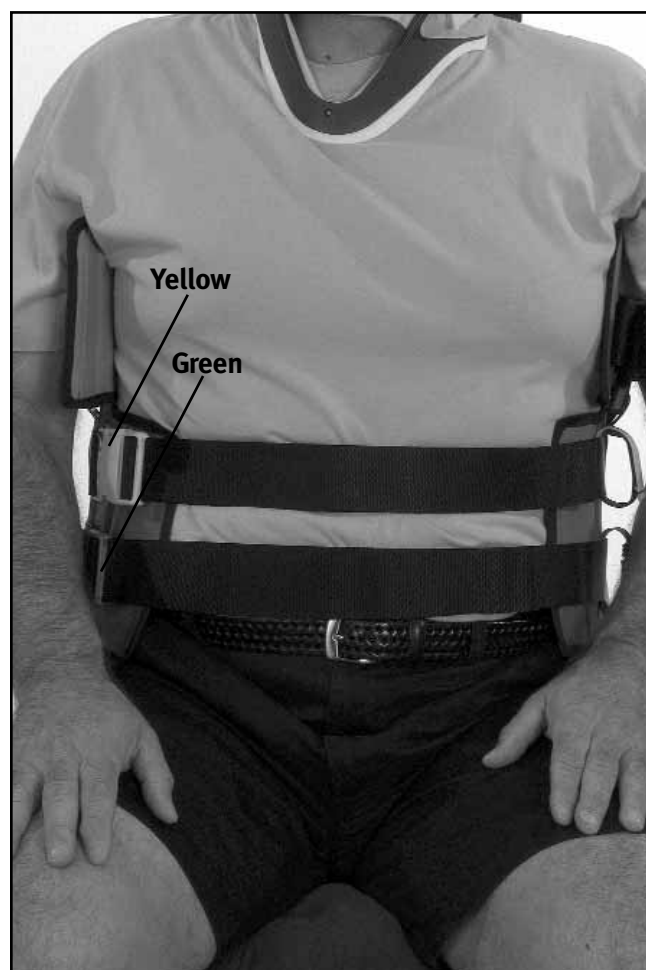


Figure 2 - Middle and Bottom Straps Fastened

2.2 Leg Straps

The leg straps secure the pelvis to the lower portion of the **K.O.D.E. 2** to stabilize the lower lumbar area.

The **K.O.D.E. 2** leg straps can be fastened in a "criss-cross" configuration or a "same-side" configuration, depending on the patient's condition.

The leg straps are most commonly used "criss-cross" style (Figure 3). For this configuration, pass the straps under the patient's legs and buckle the left strap at the right side of the **K.O.D.E. 2** and



Figure 3 - Leg Strap Applied In "Criss-Cross" Configuration

the right strap at the left side of the **K.O.D.E. 2**.

If groin injury is suspected, you can use the straps in the "same-side" configuration to reduce pressure on the

groin area. Pass the straps under the legs and buckle the left strap at the left side of the **K.O.D.E. 2** and the right strap at the right side of the **K.O.D.E. 2**.

Whether using the "criss-cross" or "same-side" configuration, you must position the straps as close as possible to the body's midline. When buckled straps are correctly positioned, they run straight down from their anchoring points on back of the **K.O.D.E. 2** (Figure 4) before passing beneath the buttocks.



Figure 4 - Back View of Leg Straps When Correctly Positioned Close to the Body Midline

2.3 Head Pad (Folding-Pad)

The foam-filled Folding Pad can be used to fill the gap that may exist between the **K.O.D.E. 2** and any of these areas: head, cervical collar (or neck, if no collar is used), shoulders.

The patient's medical condition, body structure, and head shape determine the need for padding.

Most patients, when properly positioned in the **K.O.D.E. 2**, will not need padding but when you do use it, follow your medical advisor's protocols.

If you need to apply the Folding Pad:

1. Determine whether to use the pad single thickness or folded.
2. Slide the pad between the **K.O.D.E. 2** and the patient (Figure 5). Depending on the patient's injuries, body structure, and head shape, the pad may be positioned behind the head only, behind the head and neck area, or behind head, neck area, and the tops of the shoulders.

Always take care to pad without hyperextending or flexing the patient's neck.

3. Secure the patient's head with the head straps (see Head Straps, page 7).



Figure 5 - Positioning the Folding Pad

2.4 Lifting Handles

The **K.O.D.E. 2** is constructed with three lifting handles (Figure 6). Use the handles when adjusting the **K.O.D.E. 2**'s vertical position on the patient and during extrication.

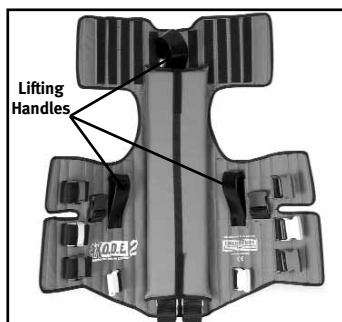


Figure 6 - K.O.D.E. 2 Lifting Handles

The top lift handle serves as an extension of the leg straps and offers a firm hold for vertical lift or horizontal pull to get the patient in position to extricate.

During extrication, the handles provide a firm hold on the patient and the **K.O.D.E. 2** as a single unit, minimizing chances of losing control or dropping the patient during extrication.

2.5 Head Straps

Two identical head straps are provided to secure the **K.O.D.E. 2** head flaps in place. They can also be used to secure the **K.O.D.E. 2** when using it as a splint.

APPLYING THE UPPER STRAP

Grasp the strap with both hands (Figure 7) and turn the center pad fully inside-out, exposing the inside (Figure 8).



Figure 7 - Exposing the Center Pad Rubber

Center the pad at the patient's eyebrows. Position the strap ends at a downward angle and secure them to the fastening strips on the **K.O.D.E. 2** head flaps (Figure 9).



Figure 8 - Exposing the Center Pad Rubber

APPLYING THE LOWER STRAP

Two methods for applying the lower strap are provided in the next column. There are alternate methods. Use and secure the strap according to your medical director's protocols.



Figure 9 - Head Straps in Place

One method for applying the lower strap when using a rigid cervical collar is shown in Figure 10:

1. Place the strap against a rigid area beneath the "chin" of the cervical collar.
2. Position the strap ends horizontally, or just above the horizontal, and secure them to the fastening strips on the head flaps.

A method for applying the lower strap to the patient's chin area, with or without a cervical collar, would be:

1. Grasp the strap with both hands and turn the center pad fully inside-out.
2. Place the strap over the patient's chin.
3. Position the strap ends horizontally and secure them to the fastening strips on the head flaps.

Make sure the strap placement does not prevent the patient from opening his/her mouth.

2.6 Buckling the Top Strap and Making Final Strap Adjustments

When the long spine board and ambulance cot are prepared and waiting, it is time to buckle the top strap and make final adjustments to the other straps.

The purpose of the adjustments is to make sure the **K.O.D.E. 2** is firmly in place from the lower spine to the head, and is positioned high up under the armpits to prevent movement during extrication.

Finish applying the **K.O.D.E. 2** as follows:

1. Remove the top (red) buckle strap from its holder and buckle it. Tighten the strap to the chest using the feed-and-pull technique.
2. Check and tighten the middle (yellow buckle) strap.
3. Check and tighten the bottom (green buckle) strap.
4. Check and tighten the leg (white buckle) straps.

The properly applied **K.O.D.E. 2** will look as illustrated in Figure 10.



Figure 10 - The K.O.D.E. 2, Applied

3- USING THE K.O.D.E. 2

3.1 General Protocols for Use

This manual illustrates use of the **K.O.D.E. 2** in an ideal setting. Other, and sometimes unusual, settings and circumstances will occur in the field and the **K.O.D.E. 2** can be adapted to many of them. **It is the responsibility of qualified Emergency Medical Service personnel to assess the patient's condition and determine the proper equipment and procedures to use.**

- Follow your medical director's protocols when using the **K.O.D.E. 2**.

In situations where there are only two or three trained operators available, one operator manually stabilizes the head and neck while the other(s) applies the **K.O.D.E. 2**.

- Follow standard emergency patient-handling procedures when using the **K.O.D.E. 2**.
- Maintain manual stabilization of the patient's head and neck until the patient is properly secured on a long spine board.
- After applying the **K.O.D.E. 2** and transferring the patient to the spine board, secure the patient to the spine board with restraints.
- Stay with the patient at all times.

WARNING

**An unattended patient can be injured.
Stay with the patient at all times**

3.2 Applying the Cervical Collar

Apply the cervical collar according to local protocols and the manufacturer's instructions.

Maintain manual stabilization of the patient's head and neck until the patient is properly secured on a long spine board.



Figure 11 - Applying the Cervical Collar

In Figure 11, one operator holds the patient's head and neck in neutral alignment while the other operator applies the cervical collar.

3.3 Removing the K.O.D.E. 2 from the Carry Case

The **K.O.D.E. 2** carry case is designed for quick removal of the **K.O.D.E. 2**, as follows:

1. Stand the carry case containing the **K.O.D.E. 2** on end with the open end of the case facing upward.

Where the case meets the ground, there will be a left and right "dog ear" (Figure 12).

2. Place your foot on one of the "dog ears" to hold the case in place while you pull the **K.O.D.E. 2** out of the case (Figure 12)
3. Unroll the **K.O.D.E. 2** and lay the Folding Pad and head straps aside.



Figure 12 - Removing the K.O.D.E. 2 From Its Carry Case

3.4 Placing the K.O.D.E. 2 Behind the Patient

The instructions below allow operators to use the **K.O.D.E. 2** design features to their best advantage.

1. Be aware of articles (wallet, belt, etc.) that could interfere with sliding the **K.O.D.E. 2** between the patient and the vehicle seat.
2. With the buckles toward the seat, grasp the **K.O.D.E. 2** at the top of the head flap and the top corner of the torso flap closest to the patient.
3. Tilt the **K.O.D.E. 2** at about a 45-degree angle and slide it behind the patient (Figure 13).

Note: Use the **K.O.D.E. 2**'s vertical rigidity as an aid when sliding the **K.O.D.E. 2** behind the patient. Tilting the **K.O.D.E. 2** at a 45-degree angle provides a rigid leading edge to slip between the patient and seat. This prevents the **K.O.D.E. 2** from rolling up and allows the **K.O.D.E. 2** to clear the vehicle roofline.

4. The operator and assisting operator(s) work the **K.O.D.E. 2** down between the patient and the seat and then into the vertical position (Figure 14). Work the **K.O.D.E. 2** far enough down to clear the vehicle roofline and be positioned behind the patient's head when the **K.O.D.E. 2** is tipped to the vertical.

Note: The third operator may move the patient forward just enough to reduce friction so the **K.O.D.E. 2** slides smoothly between the patient and seat. To avoid jostling the patient's head, coordinate this effort with the operator stabilizing the head.

5. Use the lift handles to center the **K.O.D.E. 2** behind the patient.
6. If you are going to use the leg (white buckle) straps, remove them from the fastening strips at the top of the **K.O.D.E. 2** (Figure 15). Slide them clear of the **K.O.D.E. 2** and lay them within reach (Figure 16).



Figure 13 - Sliding the K.O.D.E. 2 at an Angle



Figure 14 - Centering the K.O.D.E. 2



Figure 15



Figure 16

Releasing a Leg Strap

3.5 Wrapping and Positioning the K.O.D.E. 2

1. Wrap both torso flaps around the patient's torso, lifting the patient's arms only as much as needed to slide the flaps beneath them.
2. Use the lift handles to raise and adjust the **K.O.D.E. 2** until the top edges of the torso flaps press firmly into the armpit area. You can also use the lift handles to keep the **K.O.D.E. 2** in place until the straps can be buckled (Figure 17).

If using three operators, the two side operators lift the **K.O.D.E. 2** with the side straps.

Important

It is important to pull the **K.O.D.E. 2** up snugly under the armpits to make sure the patient's weight is suspended. This will reduce the possibility of the patient slipping downward later when he/she is lifted or maneuvered.

3. Before beginning to fasten the straps, make sure the patient is sitting back against the **K.O.D.E. 2** as fully as his/her body structure and condition allow.

To check and adjust the patient's position, the operator behind the patient holds the patient's head in alignment while a side operator gently presses on the patient's chest area just below the cervical collar.

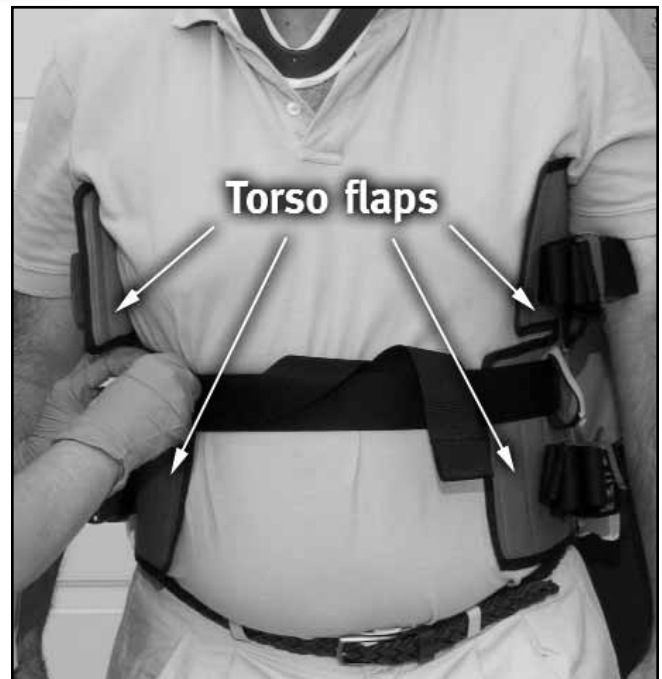


Figure 17 - Wrapping the Torso Flaps Around the Patient

Be Aware

Positioning the patient as fully as possible against the **K.O.D.E. 2** minimizes the need for padding between the patient's head and the **K.O.D.E. 2**. But be aware that some patients may not be able to sit fully back into the **K.O.D.E. 2**.

3.6 Transferring the Patient to the Long Spine Board

The technique described below for transferring the patient to the long spine board involves turning the patient with his/her back toward the midline of the vehicle. In many situations, this may be the most effective technique for preventing lower spine torque.

Alternative techniques have been developed and are in use. Follow your medical director's protocols when choosing a technique.

Be Aware

Be sure to maintain the patient's body angle and a straight midline as you turn the patient to position his/her back toward the inside of the vehicle.

TRANSFERRING THE PATIENT TO THE LONG SPINE BOARD

1. Two operators grasp the side handles of the **K.O.D.E. 2** and turn/tilt/lift the patient until his/her back is toward the inside of the vehicle (Figure 18).

2. Grasping the side handles of the **K.O.D.E. 2** and holding the patient under the knees, lift the knees enough to allow a third operator to slide the long spine board between the patient and the seat (Figure 19). Then lower the patient onto the spine board.

Note: Slide the head-end edge of the spine board as close as possible to the far side of the seat so the patient will become properly positioned on the board when you lift the knees.

3. Lift the spine board and patient out of the vehicle and place them on the ambulance cot (Figure 20).
4. Immediately loosen the top (red) torso strap to allow the patient more chest expansion.

Note: Keeping the remaining straps tightened provides stability for the patient during the starts, stops, and corners of the ambulance ride to the hospital.

5. Tighten leg straps if necessary. Properly applied leg straps will loosen when the patient is placed supine on the spine board.
6. Secure the patient on the spine board with the spine board restraints.
7. Secure the spine board on the cot with the cot restraints.



Figure 18 - Patient Pivoted with Back Toward Inside of Vehicle



Figure 19 - Lifting the Patient to Position the Long Spine Board



Figure 20 - Placing Patient and Long Spine Board on Ambulance Cot

4- SPECIAL SITUATIONS

4.1 General Protocols

When necessary, the **K.O.D.E. 2** can be adapted for use in special situations and circumstances. Some possible adaptations are presented in this section. Follow your medical director's protocol for adapting the **K.O.D.E. 2**.

4.2 Adapting the K.O.D.E. 2 for a Pregnant Patient

When applying the **K.O.D.E. 2** to a pregnant patient, fold two slats inward on each torso flap to leave the abdomen exposed.

Strap configuration will depend on the patient's abdomen and breast size. Generally, straps can be positioned to lay beneath the breasts but above the abdomen. Two possible configurations are described in this subsection.



Figure 21 - Two-Strap Configuration

USING TWO STRAPS

Fasten the bottom (green buckle) strap in the middle (yellow) buckle and the middle (yellow buckle) strap in the bottom (green buckle) strap (Figure 21).

USING ALL THREE STRAPS

Fasten the middle (yellow buckle) strap in its own buckle. Fasten the bottom (green buckle) strap in the top (red buckle). Fasten the top (red buckle) strap in the bottom (green buckle) strap (Figure 22).



Figure 22 - Three-Strap Configuration

4.3 Adapting the K.O.D.E. 2 for a Pediatric Patient

The patient's size and condition determine how the **K.O.D.E. 2** can be adapted for a child.

In this example of one possible method, the child's legs are longer than the **K.O.D.E. 2** so the **K.O.D.E. 2** and child are placed on a long spine board.

A folded blanket is placed on the child so the torso flaps can be wrapped and fastened normally (Figure 23).



Figure 23 - Applying the K.O.D.E. 2 to a Child

4.4 Adapting K.O.D.E. 2 for an Angulated Neck

When it is not desirable to straighten the patient's neck, fold the head flaps inward. Position a rolled towel as needed, then place a head strap across the patient's forehead and secure the strap to the **K.O.D.E. 2** fastening strips (Figure 24).



Figure 24 - Applying the K.O.D.E. 2 to an Angulated Neck

4.5 Adapting the K.O.D.E. 2 for Use With Monitoring Systems

Folding two slats of each torso flap inward provides more chest exposure when needed. Loosening two of the three chest straps allows defibrillation without losing immobility (Figure 25).



Figure 25 - Adapting the K.O.D.E. 2 for Use with a Monitoring System

4.6 Adapting the K.O.D.E. 2 for Use As a Splint

The **K.O.D.E. 2** can be used as a splint for pelvic stabilization and hip and/or femur stabilization. Two possible methods of adaptation are shown here.

HIP AND/OR FEMUR STABILIZATION

The **K.O.D.E. 2** and patient are placed on a long spine board with the head portion of the **K.O.D.E. 2** toward the foot end of the board.

The torso portion of the **K.O.D.E. 2** is positioned a little above the waist and centered (Figure 26). The torso flaps are secured around the patient and the head flaps are wrapped around the patient's injured leg and secured with the **K.O.D.E. 2** head straps.

PELVIC STABILIZATION

The **K.O.D.E. 2** and patient are placed on a long spine board with the head portion of the **K.O.D.E. 2** toward the foot end of the board.

The torso portion of the **K.O.D.E. 2** is positioned a little above the waist and centered. The torso flaps are secured around the patient's pelvic area and the head flaps are wrapped around both the patient's legs and secured with the **K.O.D.E. 2** head straps (Figure 27).

4.7 Using the K.O.D.E. 2 With an Anti-Shock Garment

The **K.O.D.E. 2** will not interfere with, or limit the use of, a pneumatic anti-shock garment (Figure 28).



Figure 26 - Stabilizing the Hip and/or Femur



Figure 27 - Stabilizing the Pelvis



Figure 28 - Using the K.O.D.E. 2 with an Anti-Shock Garment

5- Take Down and Deceleration Straps

5.1 Take Down Straps

The orange take down straps are to be used when you encounter a patient that has already extricated themselves from the crashed vehicle or from the accident scene and is standing upright complaining of cervical pain or tenderness.

STANDING PATIENT BACKBOARDING

1. Maintain control of the patient, while placing a cervical collar.
2. One rescuer approaches the patient from behind with the **K.O.D.E. 2**, and wraps it around the patient.
3. The rescuer in front pulls the flaps under the patient's arms and around to the front (Figure 29).
4. The middle (yellow buckle) strap is fastened and tightened. The other straps may be used, if the patient warrants additional securing (Figure 30).
5. Place a long spine board against the **K.O.D.E. 2** and patient.
6. Place one strap (orange with black buckles) through each of the two side handles on the **K.O.D.E. 2** (Figure 31).
7. Pass each of the straps through a high hand hold on the long board (Figure 31).
8. Snap the male and female buckles together (Figure 31).
9. Tighten the straps until the **K.O.D.E. 2** is carrying the weight of the patient (Figure 32).
10. One rescuer stands on each side of the long board (Figure 33).
11. Place one hand through the hand hold at the patients armpit area.
12. Place one hand just below the patients buttocks area (Figure 33).
13. In one controlled motion, each rescuer takes one step in the head direction as the board is lowered and leveled. Note: Be mindful of your back as the board tilts the patient's full weight will be in your hands (Figure 34).
14. Place the patient on the ground for additional strapping, or place them directly on your cot for securing.

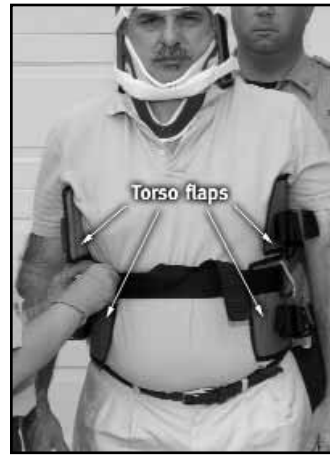


Figure 29



Figure 30



Figure 31



Figure 32



Figure 33



Figure 34

5.2 Deceleration Strap

This is the yellow strap that has a piece of hook and loop sewn to it in the middle (Figure 35). This strap is used when the **K.O.D.E. 2** is in place with the patient fully immobilized. The strap is attached to the back of the **K.O.D.E. 2** utilizing the hook and loop on the strap and the corresponding hook and loop on the back of the **K.O.D.E. 2** (Figure 36). The strap is then draped over the shoulders of the patient and fastened into the corresponding color coded buckles on the front (turned upward toward the head) of the **K.O.D.E. 2**. Once fastened the straps should be tightened to pull the shoulders of the patient into the device and straightening the upper torso.

SHOULDER (DECELERATION) STRAP

1. Place the shoulder strap around the back of the **K.O.D.E. 2**, even with the top of the shoulders (Figure 36).
2. Bring the strap forward and over the shoulders (Figure 37). Note: Do not cross the straps on the front of the patient, they cross too high, and tend to choke the patient (Figure 38).
3. Insert the female buckle into the corresponding male buckle (Figure 39).
4. Tighten the straps to a “snug” fit. Do not overtighten (Figure 40).

Front and rear view of **K.O.D.E. 2** after application of Deceleration strap (Figures 41 and 42).

(Note: Image subject is lightened slightly to enhance visibility of straps)



Figure 35



Figure 36



Figure 37



Figure 38



Figure 39



Figure 40



Figure 41



Figure 42

6- STORING THE K.O.D.E. 2

6.1 Storing the K.O.D.E. 2

If you properly prepare the **K.O.D.E. 2** before placing it in its carry case you will be able to unpack and use it quickly and smoothly.

TORSO STRAPS

Fold each torso strap accordion fashion and secure it in its hook-and-loop fastener as follows:

1. Lengthen the strap until only three or four fingerwidths of webbing have not passed backward through the buckle slide.



Figure 43 - Turning the Buckle Under

2. Turn the buckle under, flush against the webbing (Figure 43).

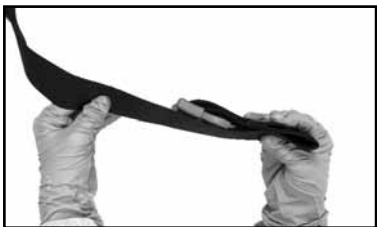


Figure 44 - Making the First Fold

3. Make the first fold beneath the buckle (Figure 44) and continue folding the strap accordion fashion (Figure 45).



Figure 45 - Folding Accordion Style

4. When all the webbing is folded, secure it in the hook-and-loop fastener (Figure 46).



Figure 46 - Securing the Strap

Make sure

to position the folded strap so the fastening strips wrap around it at the location of the buckle release tabs. This will enable you to pull the strap free without tangles, and have the buckle in your hand, in a single motion.

LEG STRAPS

Storing the leg straps as described here will keep them out of the way while sliding the **K.O.D.E. 2** between the patient and the vehicle seat, yet readily available when you want to use them.

Leave the leg straps in their stored position in situations where you choose not to use them. (Figure 47).

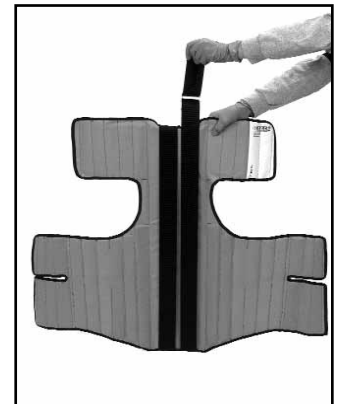


Figure 47 - Wrapping the Leg Straps

Store both leg straps as follows:

1. Lengthen the leg strap until about six inches of webbing have not passed backward through the buckle slide (Figure 48).



Figure 48 - Securing the Folded Strap in the Fastener

2. Beginning at the point where the strap is attached to the **K.O.D.E. 2**, fold the strap down around the bottom edge of the **K.O.D.E. 2** then up and around the inside of the **K.O.D.E. 2** (Figure 48).
3. Turn the buckle under to rest flush against the webbing and secure the strap in place by pressing its hook-and-loop fastening strip against a fastening strip on the outside of the **K.O.D.E. 2** (Figure 48).

FOLDING PAD

Lay the **K.O.D.E. 2** flat with the buckles facing upward. Place the Folding Pad on the center of the **K.O.D.E. 2**, with one end of the pad at the bottom edge of the **K.O.D.E. 2** (Figure 49).

HEAD STRAPS

Press one end of each strap against the hook and loop fastening strips on the head area of the **K.O.D.E. 2** and lay the straps parallel with the Folding Pad.



Figure 49 - Positioning the Folding Pad And Head Straps

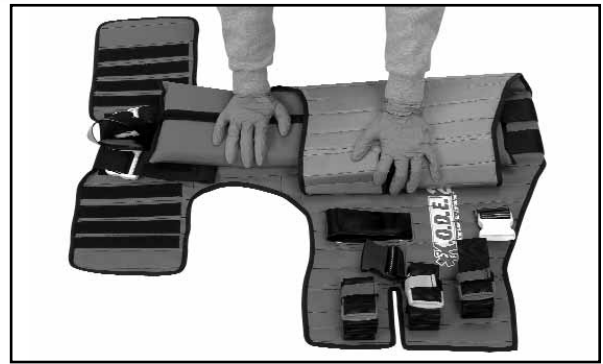


Figure 50 - Folding the Torso Flap



Figure 51 - Rolling the K.O.D.E. 2

TORSO FLAPS

1. Fold the torso flap over the Folding Pad, tucking the edge of the flap over the edge of the pad (Figure 50).
2. Roll the folded portion of the **K.O.D.E. 2** over the remaining torso flap (Figure 51) until the center portion of the inside of the **K.O.D.E. 2** is upward (Figure 52).
3. Grasp the **K.O.D.E. 2** to keep it rolled and slide it into the carry case.



Figure 52 - Ready for the Carry Case

7- MAINTAINING THE K.O.D.E. 2

7.1 Cleaning and Disinfecting the K.O.D.E. 2

1. Lay all pieces of the **K.O.D.E. 2** on a clean surface and rinse off with warm water.
2. Lightly scrub the **K.O.D.E. 2** and Folding Pad with a mild soap solution and a medium bristle brush. Wash the head straps with the soap solution and a clean sponge.
3. Rinse all pieces with warm water.
4. To disinfect, apply a solution of 2% to 5% chlorine bleach and water.
5. Rinse all pieces with warm water.
6. Allow all pieces to dry completely before returning them to the Carry Case.

7.2 Inspecting the K.O.D.E. 2

- ☐ Are all components present?
- ☐ Is all stitching secure?
- ☐ Are vertical battens (inside **K.O.D.E. 2**) solid and unbroken?
- ☐ Are torso and leg straps and lifting handles in good condition?
- ☐ Are all buckles free of visible damage and do they operate properly?
- ☐ Are head straps free of excessive wear and is their stitching secure?
- ☐ Is Folding Pad in good condition?
- ☐ Are Deceleration and Take Down straps in good condition?

Important

Storing a damp or wet **K.O.D.E. 2** in its carry case will encourage the growth of mold. Do not return the **K.O.D.E. 2** to its carry case until it is thoroughly dry.

WARNING

Untrained operators can cause injury or be injured.
Permit only trained personnel to apply the K.O.D.E. 2.

Improper maintenance can cause injury.
Maintain the K.O.D.E. 2 only as described in this manual.

An unrestrained patient can fall off the spine board or cot and be injured. Use restraints to secure the patient on the spine board and cot.

Improper use of the K.O.D.E. 2 can cause injury.
Use the K.O.D.E. 2 only for the purpose described in this manual.

Do not attach equipment or items of any kind to the K.O.D.E. 2 as it may cause injury to the patient.

An unattended patient can be injured.
Stay with the patient at all times.



The K.O.D.E. 2 is a component of the
Extrication Management System



KE-800
KTD™ Traction Device



KE-707
K.O.D.E. 2 Extrication Vest



KE-708
EMS Bag



KE-107
Kendrick Lite Weight
Spine Board

Disclaimer

This manual contains general instructions for the use, operation and care of this product. The instructions are not all-inclusive. Safe and proper use of this product is solely at the discretion of the user. Safety information is included as a service to the user. All other safety measures taken by the user should be within and under consideration of applicable regulations. It is recommended that training on the proper use of this product be provided before using this product in an actual situation.

Retain this manual for future reference. Include it with the product in the event of transfer to new users.

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