

**T-LINE SAFETY SYSTEM**

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USER INSTRUCTION MANUAL  
**T-LINE SAFETY SYSTEM**

THESE INSTRUCTIONS APPLY TO THE FOLLOWING MODELS:

AFA945012, AFA945012R, AFA945012SS, AFA945012RSS,  
AFA945024, AFA945024R, AFA945024SS and AFA945024RSS



Protocol Quintin Certifications  
T-line V2  
from 24/09/2024

Please read and understand the manufacturer's instructions for each component or part of the complete system. Manufacturer's instructions must be followed for proper use, care, and maintenance of this product. These instructions must be retained and be kept available for the user's reference at all times. Alterations or misuse of this product, or failure to follow instructions, may result in serious injury or death.

**Note:** The user is advised to keep this user instructions document for the life of the product.

## 1. INTRODUCTION:

This Manual contains safety information and instructions for operating the T-Line system.

This T-LINE System is classed as a Personal Protective Equipment (PPE) by the European PPE Regulation (EU) 2016/425.

This Manual should be stored in an area where it is accessible to operators of the T-Line system.

Further information on operating the T-Line system is available in training material and courses. Further enquiry regarding these materials and courses should be directed to: [customer-care@kstrong.com.au](mailto:customer-care@kstrong.com.au)

The Equipment Record and an Operators Manual must be supplied to the end user when the T-Line is sold, resold or otherwise made available for use. This is to ensure that the end user gets the necessary information for the safe use of the T-Line system.

## 2. CUSTOMER SERVICE:

Please contact the authorized T-Line distributor in your area for enquiries regarding the operation, Periodic Examination and Recertification and Repair of your T-Line system. If you have any questions about how to configure and use your T-Line safely, then contact manufacturer.

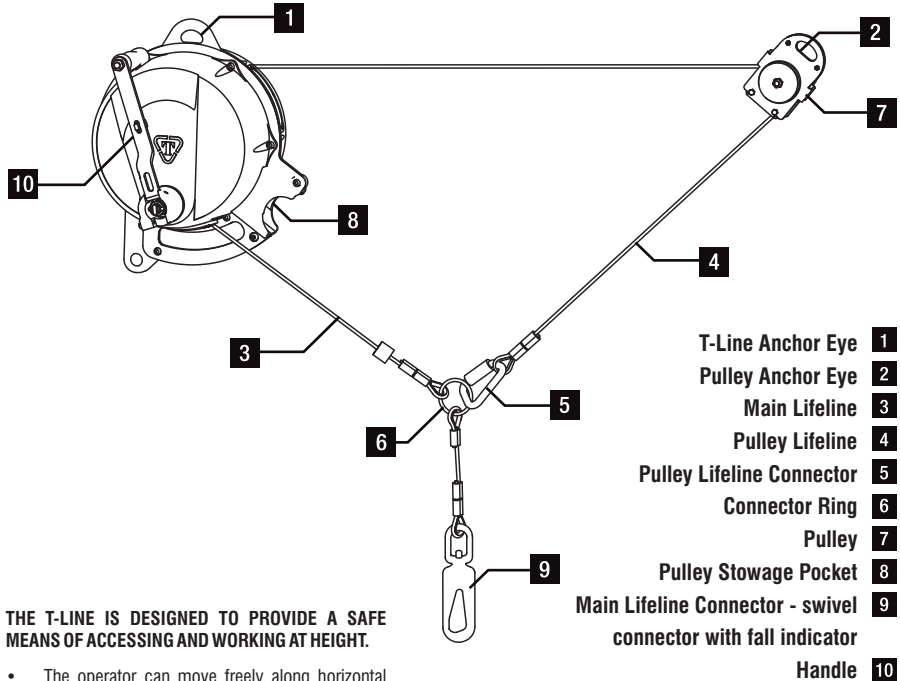
## 3. IMPORTANT SAFETY INFORMATION:

- Do not use the T-Line unless you have read and understand the instructions and warnings in this Manual. Failure to follow the instructions or heed the warnings or improper operation could result in injury or death.
- Do not tamper with or make any alterations to the T-Line.
- The T-Line shall not be used outside its limitations as described in this Manual, or for any purpose other than that for which it is intended.
- The operation and maintenance of the T-Line system must comply with the work safety laws of the jurisdiction in which it is used. Compliance may include the requirement for a Risk Assessment or Fall Hazard Survey Report.
- Operators of the T-Line system must be properly trained and competent.
- A full body harness suitable for fall-arrest is the only acceptable body holding device that can be used with the T-Line system.
- Operators must carry out a Pre-Use Check of the equipment, as per the instructions in this Manual, to ensure that it is in a serviceable condition and operates correctly before it is used.
- It is essential for safety that equipment is withdrawn from use immediately if the red indicator tab on the connector is exposed or should any doubt arise about its condition for safe use.
- Do not remove the labels from the T-Line. Replace labels that are illegible.
- For protection of one person only.
- Operators should be fit and healthy – otherwise consult a physician before using the T-Line.
- A rescue plan shall be in place to deal with any emergencies that could arise during the work.
- It is important to check before use, any dangers that may arise by the use of combinations of items of the equipment in which the safe function of any one item is affected by or interferes with the safe function of another.
- It is essential for the safety of the user that if the product is resold outside the original country of destination, the reseller shall provide instruction for use, maintenance, for periodic examination and for repair in the language of the country in which product is to be used.
- It is essential that when the equipment becomes wet, either from being in use or when due to cleaning, it shall be allowed to dry naturally, and shall be kept away from direct heat.
- User must check for the legibility of product marking before each & every use.
- Components of the system shall not be substituted.
- Retractable lanyards are made of GI/SS material
- If any damage or breakage is found in the product, it must not be used. Remove it from service immediately.
- It is crucial that the Authorized person/user of this fall protection equipment reads and understands these instructions. In addition, it is the employer's responsibility to ensure that all users are trained in the proper use, inspection, and maintenance of fall protection equipment.
- Proper use of fall arrest systems can save lives and reduce the risk of serious injury from a fall.
- Pregnant women and minors must not use this product.

**4. DESCRIPTION OF EQUIPMENT**

THE T-LINE IS A TWIN LIFELINE SYSTEM.

The lifelines automatically pay out and retract during normal movement of the operator – and automatically lock at the onset of a fall.



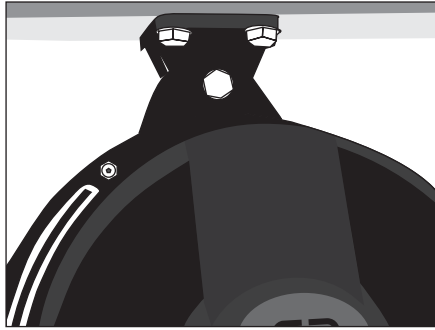
**THE T-LINE IS DESIGNED TO PROVIDE A SAFE MEANS OF ACCESSING AND WORKING AT HEIGHT.**

- The operator can move freely along horizontal walkways or platforms. When the user is moving horizontally, one lifeline pays out whilst the other retracts- and the T-Line will not lock.
- If the user falls, the T-Line will arrest the fall and hold the user. If the user falls, both lifelines pay out quickly - and the T-Line locks. The pulley brake grips the locked lifeline and prevents sliding.
- The user can safely climb and descend. When climbing, both lifelines retract – and the T-Line will not lock. When descending under normal conditions, both lifelines pay out slowly – and the T-Line will not lock.

**IMPORTANT:**

The Pulley Lifeline Connector (5) must be properly secured to the Connector Ring (6) when using the T-Line in twin line mode. Failure to do so could result in serious injury or death. Always ensure that an alternate means of fall protection is utilized whilst changing between modes.

## 5. INSTALLATION:



The T-Line must be attached with a bracket (AFA945017), which is the integral part of T-line anchor system to a structure with a minimum strength of 23kN / 5000lbs. Refer the above figure.

The Pulley is taken from the Pulley Stowage Pocket and moved to the far end of the elevated work area – extracting the Pulley Lifeline along the way.

The T-Line and Pulley must be installed overhead. The Pulley must not be mounted below the T-Line. Do not allow slack in anchor slings as this will increase arrest distance.

Installation of a 24m T-Line unit must be carried out by an Authorised T-Line Installer.

- **Safe Working At Heights During Installation**

Ensure that the risk of fall from height is controlled during installation. For example, a mobile elevated work platform may be used during installation.

- **Anchor Point Specification And Connection**

The anchorage and structure to which the T-Line is attached shall be capable of sustaining a static load of 23kN / 5000lbs.

Always ensure that the building or structure, to which the T-Line is to be connected, has been approved for this purpose by a qualified Engineer.

A suitable connector and anchor system must be used to connect the T-Line to the supporting structure. For example: the T-Line Clevis Anchor Point, the T-Line Beam Clamp or the T-Line Anchor Slings (each sold separately).

Do not allow slack in anchor slings as this will increase arrest distance.

All components and subsystems should also comply with applicable Standards.

Follow manufacturer's instructions. Unless specifically allowed by the manufacturer, slings should not be choked and lanyards should not be back-hooked. Connectors should be compatible in size and shape to prevent rollout.

## 6. T-LINE INSTALLATION LOAD CASES

This section is intended to inform installers of the T-Line System the required minimum capacity of the structure to which it is attached.

### Load Case

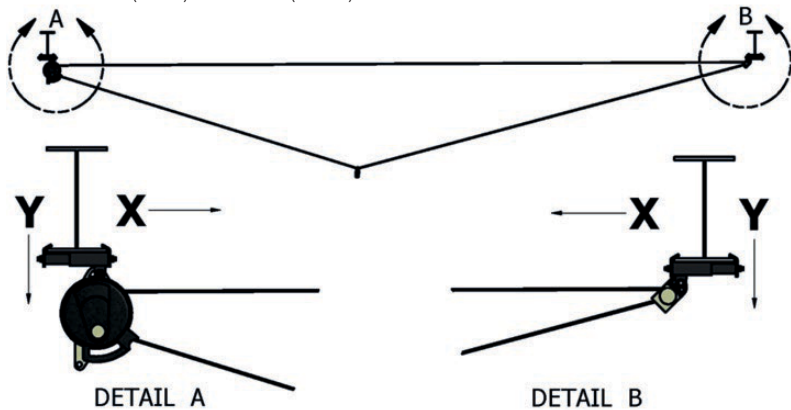
The structure to which the T-Line system is attached is required to have the listed capacity in their respective directions. The load case applies to both of the systems anchor points. These loads are to be considered minimums. Failure to confirm that the structure supporting the T-Line System can resist these loads may cause system failure and serious injury or death.

### Load Case

Y DIRECTION (VERTICAL) 3050 LBS (13.5KN)

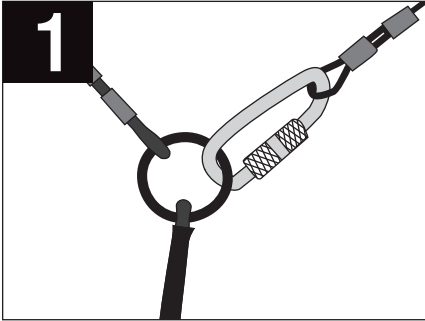
X DIRECTION (HORIZONTAL) 3050 LBS (13.5KN)

RESULTANT FORCE (TOTAL) 5000 LBS (23.0KN)

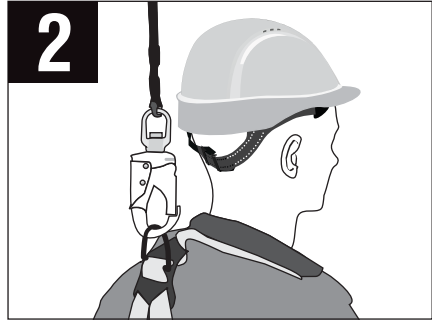


Fall Clearance & Deflection Chart															
Length	Configuration V-Line					FAF (KN) USER	Configuration T-Line								
	FAF (kN) (140Kgs & 100 Kgs) (Extremity)	FAF (kN) (60Kgs) (Extremity)	FAD (60Kgs)	FAD (100Kgs)	FAD (140Kgs)		Fall Clearance	FAF (KN) (140Kgs & 100 Kgs) (Extremity)	FAF (KN) (60Kgs) (Extremity)	FAF (kN)(Corrosion Conditioning) (Extremity)	FAD (60Kgs)	FAD (100Kgs)	FAD (140Kgs)	Fall Clearance	FAF (KN) USER
5	6	6.0	1	0.5	0.5	2.31		6.5	6.0	7.2	1	0.65	0.5	2.31	
6	6.1	6.1	1.015	0.515	0.515	2.33		6.6	6.1	7.3	1.1	0.77	0.66	2.41	
7	6.2	6.2	1.03	0.53	0.53	2.34		6.7	6.2	7.5	1.2	0.89	0.82	2.51	
8	6.3	6.2	1.045	0.545	0.545	2.36		6.8	6.2	7.7	1.3	1.01	0.98	2.61	
9	6.4	6.3	1.06	0.56	0.56	2.37		6.9	6.3	7.9	1.4	1.13	1.14	2.71	
10	6.5	6.3	1.075	0.575	0.575	2.39		7	6.3	8.0	1.5	1.25	1.3	2.81	
11	6.6	6.4	1.09	0.59	0.59	2.40		7.1	6.4	8.2	1.6	1.37	1.46	6.31	
12	6.7	6.4	1.105	0.605	0.605	2.42		7.2	6.4	8.4	1.7	1.49	1.62	3.01	
13	6.8	6.5	1.12	0.62	0.62	2.43		7.3	6.5	8.6	1.8	1.61	1.78	3.11	
14	6.9	6.6	1.135	0.635	0.635	2.45		7.4	6.6	8.7	1.9	1.73	1.94	3.25	
15	7	6.6	1.15	0.65	0.65	2.46		7.5	6.6	8.9	2	1.85	2.1	3.41	
16	7.1	6.7	1.165	0.665	0.665	2.48		7.6	6.7	9.1	2.1	1.97	2.26	3.57	
17	7.2	6.7	1.18	0.68	0.68	2.49		7.7	6.7	9.3	2.2	2.09	2.42	3.73	
18	7.3	6.8	1.195	0.695	0.695	2.51		7.8	6.8	9.5	2.3	2.21	2.58	3.89	
19	7.4	6.8	1.21	0.71	0.71	2.52		7.9	6.8	9.6	2.4	2.33	2.74	4.05	
20	7.5	6.9	1.225	0.725	0.725	2.54		8	6.9	9.8	2.5	2.45	2.9	4.21	
21	7.6	6.9	1.24	0.74	0.74	2.55		8.1	6.9	10.0	2.6	2.57	3.06	4.37	
22	7.7	7.0	1.255	0.755	0.755	2.57		8.2	7.0	10.2	2.7	2.69	3.22	4.53	
23	7.8	7.0	1.27	0.77	0.77	2.58		8.3	7.0	10.3	2.8	2.81	3.38	4.69	
24	7.9	7.1	1.285	0.785	0.785	2.60		8.4	7.1	10.5	2.9	2.93	3.54	4.85	

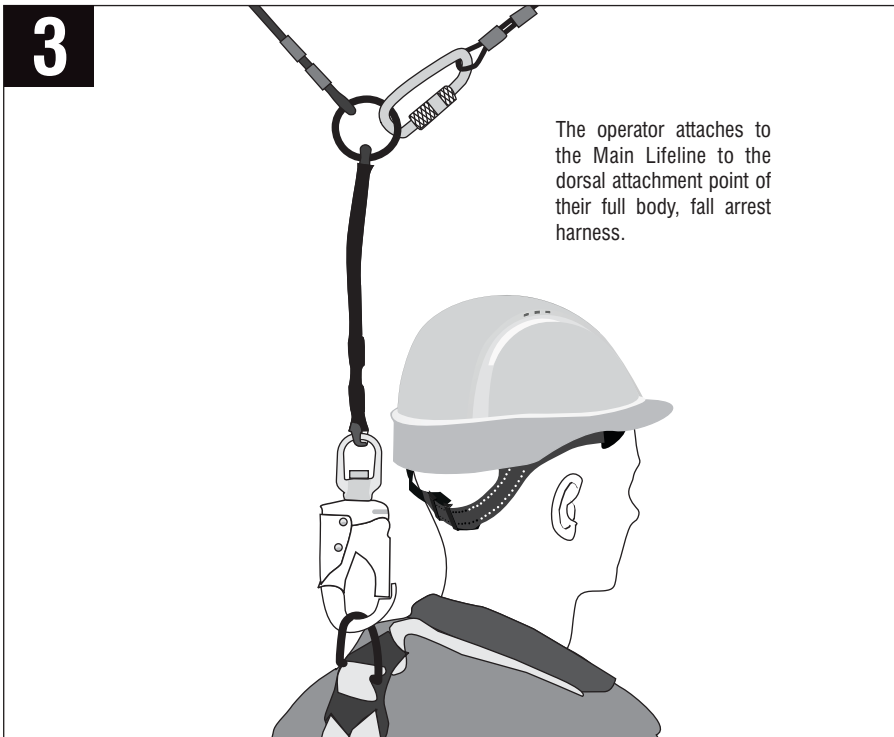
**6. MAKING PROPER CONNECTIONS**



The Pulley Lifeline must be attached to the Connector Ring using the Pulley Lifeline Connector.



The Main Lifeline is terminated with a swivel connector - Karabiner or snaphook - with fall indicator.



The operator attaches to the Main Lifeline to the dorsal attachment point of their full body, fall arrest harness.

**7. GENERAL**

- Do not pass the lifeline(s) over sharp or abrasive edges.
- Do not allow lifelines to come into contact with live electrical sources.
- Do not allow the lifeline(s) to deflect around plant equipment or other obstacles.
- Do not allow chemical reagents to contact the lifelines, casing, or internal mechanism.
- Do not cross over lifelines with other lifelines.
- Do not allow the lifeline(s) to pass under the head, arms, or legs, or wrap around the body.
- Do not hold or lock off the lifeline(s).
- Do not let the lifeline(s) retract in an uncontrolled manner.
- Do not allow foreign materials to enter the casing.
- Avoid using the T-Line in hazardous environments, such as areas with extreme temperatures or highly corrosive atmospheres.
- Use the T-Line only within the temperature range of 0°C to 60°C. It is not suitable for wet conditions.
- If the anchor point is deformed, replace it with a new one immediately.
  
- **Safe Access And Continuous Protection:**
  - Ensure that users can approach and connect to the T-Line without being exposed to a risk of fall. For example: the Main Lifeline Connector or a tag to the Main Lifeline Connector should be left in a suitable location so that users may connect to the system before moving to where there is a risk of fall. The same applies to egress and disconnecting.
  - Ensure continuous connection to the T-Line whenever there is a risk of fall from height; or if not connected and there is a risk of fall from height, then an alternate means of fall protection must be employed.

**8. PRE-USE CHECK:**

Pre-Use Checks are essential and should be carried out by the operator each time, before the T-Line system is used.

If the Pre Use Check finds any defect or should any doubt arise about its condition for safe use it is essential for safety that equipment is not used and withdrawn from use immediately.

Check the Equipment Record to ensure that that the Periodic Examination and Recertification is up to date.

The Pre-Use Check of the T-Line consists of visual checks and checks of operation.

- Visually inspect the T-Line casing and lifelines for signs of damage or cracking that may reduce the structural integrity of the device in any way.
- Withdraw approximately 1m of each lifeline and check that it remains under tension and then rewinds smoothly.
- Withdraw the Main Lifeline rapidly to check that it locks. This test can be repeated on the Pulley Lifeline but is not strictly necessary as the two lifelines share the same locking mechanism.
- Inspect the swivel connector with fall indicator. If any portion of the indicator reveals the red marker, the T-Line should be removed from service.
- Check the fall-arrest harness, other connectors and anchor slings (if used) as per the manufacturer's instructions.

If you have any questions about how to configure and use your T-Line safely, then contact manufacturer.

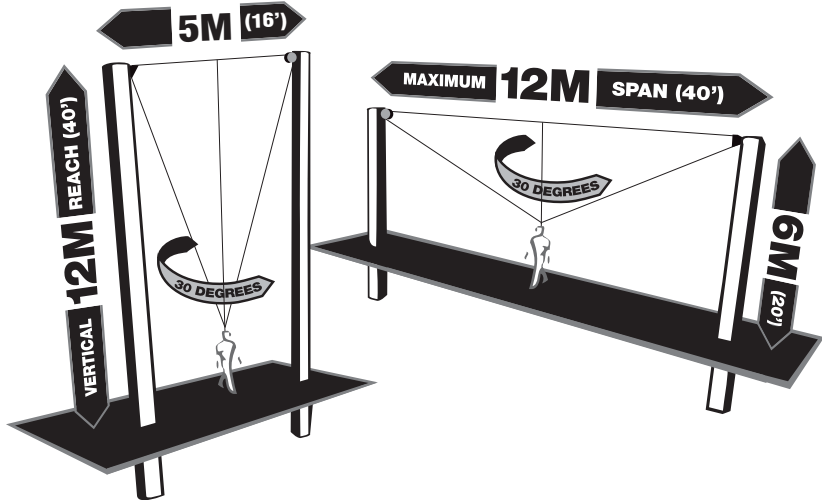
## 10. HOW TO USE



T-LINE SAFETY SYSTEM

# 12M/40'

## T-LINE SAFETY SYSTEM CONFIGURATIONS



The 12m / 40' T-Line can be installed at a maximum span of 12m / 40'. At this span, the maximum vertical reach is 6m(20').

The 12m/40' T-Line can be installed at a minimum span of 5m/16' . At this span , the maximum vertical reach is 12m/40'.

The T-Line can be installed at spans and vertical reach between the limits as set out above.

### **Pendular Swings:**

The operator must remain between the T-Line and the Pulley.

Minimize pendular swings by working directly below the Pulley Lifeline which runs between the T-Line and the pulley. so that in case of a fall there will be no collision with ground and other obstacle in the fall path including the pendulum effect.

If you have any questions about how to configure and use your T-Line safely, then contact manufacturer.

## SAFE LIMIT OF OPERATION

**Free Fall:**

The operator must remain below the T-Line and the Pulley.

When the operator is within the vertical Safe Limit of Operation, the Lifelines will exhibit retraction tension and the connector ring will be above the operator's head. Never work at a level where the operators head is above the connector ring. (Note: It is normal for the Lifelines to exhibit some catenary or sag, particularly at wider spans.)

**Fall Clearance:**

It is essential that there is adequate clearance under the system so that in the event of a fall the operator will not strike the ground or any obstacle.

## SPECIFICATION MODEL 12M/40'

MAXIMUM SPAN	12m / 40'
MINIMUM SPAN	5M / 16'
MAXIMUM FALL ARREST FORCE	6kN / 1,350lbs
ANCHORAGE RATING REQUIREMENT	23kN / 5,000lbs
STATIC STRENGTH	12kN / 2,698lbs
WEIGHT	17.5kg /38.5lbs
MAXIMUM USER WEIGHT	140kg / 310 lbs
MINIMUM USER WEIGHT	60kg / 132 lbs



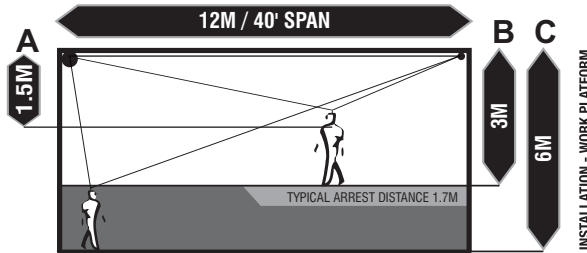
# 12M/40'

## FALL CLEARANCE AND SAFE WORK LIMITS

The below images depict the safe limits for the work area provided by the 12m / 40' T-Line Safety System, as well as the typical fall arrest distances at the upper and lower limit. It is important that the user not work outside of these limits as they may be exposed to the risk of serious injury or even death. The upper limit of the safe area is dictated by the catenary in the T-Line cables. It is important that the user not try to work above this level as this will introduce slack into the system.

The Fall Arrest Distances indicated are typical values that have been experienced during testing. In certain circumstances, smaller fall arrest distances can be achieved. If your application requires reduced fall arrest distances, please contact the manufacturer for guidance and support.

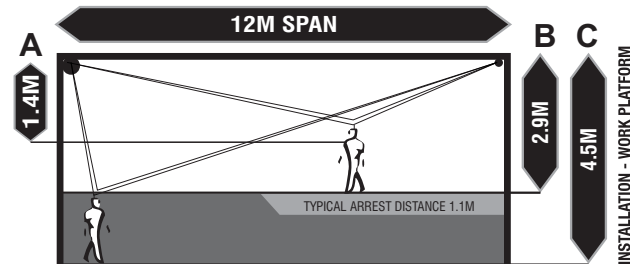
### STANDARD CONFIGURATION



Fall Clearance From The Working Platform =  
 Fall Arrest Distance + Harness Stretch + Safety Factor =  
 $1.7 + 0.3 + 1 = 3.0\text{M}$

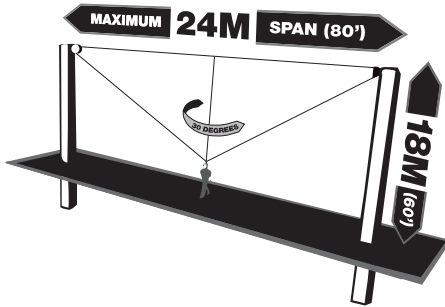
- A - Minimum distance from the T-line anchor to dorsal of user
- B - Minimum distance from the T-line anchor to feet (Platform) of user
- C - Maximum distance from the T-line anchor to feet (Platform) of user

### V-LINE CONFIGURATION



Fall Clearance From The Working Platform =  
 Fall Arrest Distance + Harness Stretch + Safety Factor =  
 $1.1 + 0.3 + 1 = 2.4\text{M}$

- A - Minimum distance from the V-line anchor to dorsal of user
- B - Minimum distance from the V-line anchor to feet (Platform) of user
- C - Maximum distance from the V-line anchor to feet (Platform) of user

**24M/80'****XL T-LINE SAFETY CONFIGURATIONS**

The 24m / 80' T-Line can be installed at a maximum span of 24m / 80'. At this span, the maximum vertical reach is 18m/60'.

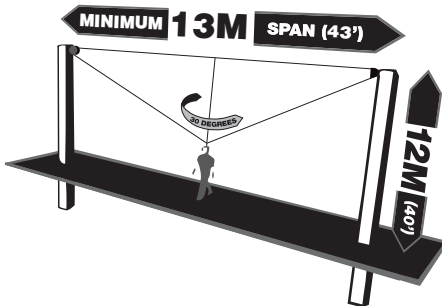
For spans greater than 18m/60' and up to 24m/80', the 24m/80' T-Line can provide a vertical range of 18m/60'. For spans of 18m/60' or less, this T-Line can provide a vertical range equal to that of the span. However, minimum horizontal span offered with 24m/80' T-line is 13m/43'.

**Pendular Swings:**

The operator must remain between the T-Line and the Pulley.

Minimize pendular swings by working directly below the Pulley Lifeline which runs between the

T-Line and the pulley, so that in case of a fall there will be no collision with ground and other obstacle in the fall path including the pendulum effect.



If you have any questions about how to configure and use your T-Line safely, then contact manufacturer.

## SAFE LIMIT OF OPERATION

The installation of the 24m T-Line must be carried out by an authorised T-Line Installer.

### Free Fall:

The operator must remain below the T-Line and the pulley.

When the operator is within the vertical Safe Limit of Operation, the lifelines will exhibit retraction tension, and the connector ring will be above the operator's head. Never work at a level where the operator's head is above the connector ring. (Note: It is normal for the lifelines to exhibit some catenary or sag, particularly at wider spans.)

### Fall Clearance:

It is essential that there is adequate clearance under the system so that in the event of a fall the operator will not strike the ground or any obstacle.

## SPECIFICATION MODEL 24m / 80'

MAXIMUM SPAN	24m / 80'
MINIMUM SPAN	13m / 43'
MAXIMUM FALL ARREST FORCE	6kN / 1,350lbs
ANCHORAGE RATING REQUIREMENT	23kN / 5,000lbs
STATIC STRENGTH	12kN / 2,698lbs
WEIGHT	22kg / 49.5lbs
MAXIMUM USER WEIGHT	140kg / 310 lbs
MINIMUM USER WEIGHT	60kg / 132 lbs

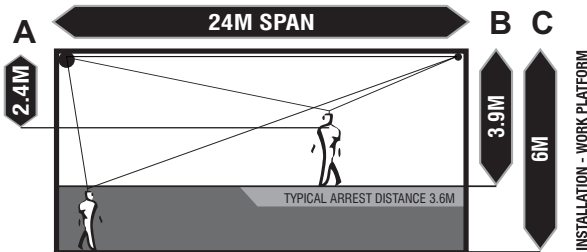


## 24M/80'

### FALL CLEARANCE AND SAFE WORK LIMITS

The below images depict the safe limits for the work area provided by the 24m / 80' XL T-Line Safety System, as well as the typical fall arrest distances at the upper and lower limit. It is important that the user not work outside of these limits as they may be exposed to the risk of serious injury or even death. The upper limit of the safe area is dictated by the catenary in the T-Line cables. It is important that the user not try to work above this level as this will introduce slack into the system.

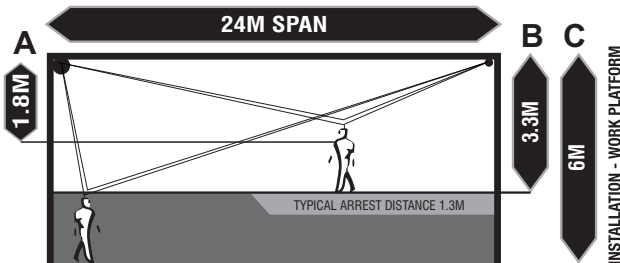
#### STANDARD CONFIGURATION



Fall Clearance From The Working Platform =  
 Fall Arrest Distance + Harness Stretch + Safety Factor =  
 $3.6 + 0.3 + 1 = 4.9\text{M}$

- A - Minimum distance from the T-line anchor to dorsal of user
- B - Minimum distance from the T-line anchor to feet (Platform) of user
- C - Maximum distance from the T-line anchor to feet (Platform) of user

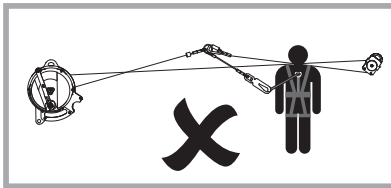
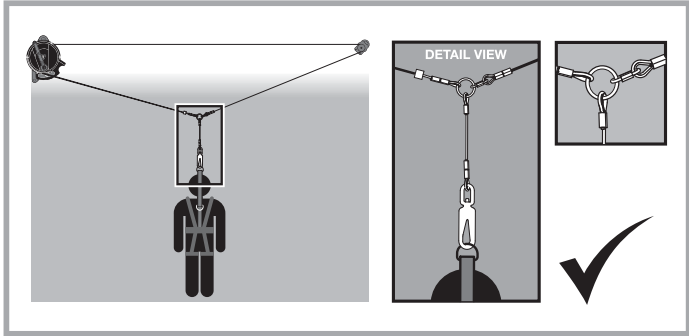
#### V-LINE CONFIGURATION



Fall Clearance From The Working Platform =  
 Fall Arrest Distance + Harness Stretch + Safety Factor =  
 $1.3 + 0.3 + 1 = 2.6\text{M}$

- A - Minimum distance from the V-line anchor to dorsal of user
- B - Minimum distance from the V-line anchor to feet (Platform) of user
- C - Maximum distance from the V-line anchor to feet (Platform) of user

**TWIN  
LINE  
MODE**



**10. TRANSPORT:**

Ensure that the T-Line is fully retracted with the Pulley stowed in the Pulley Stowage Pocket in preparation for transport. Ensure that the T-Line is protected from excessive vibration or impact during transport.

**11. PERIODIC EXAMINATION AND RECERTIFICATION:**

The continued efficiency and durability of the T-Line system and the safety of the user depends on regular Periodic Examination and Recertification.

Periodic Examination and Recertification is additional to the Pre Use Check and is a more formal, in-depth inspection and must be carried out at intervals of 12 months or less.

Under extremely severe corrosive liquid or abrasive dust exposures or for operation under extremes of temperature, more frequent Periodic Examination and Recertification may be necessary.

Periodic Examination and Recertification is only to be conducted by an Authorized Service Agent.

**12. WITHDRAWAL FROM USE AND REPAIR:**

If the product becomes damaged, it will NOT provide the optimum level of protection, and therefore should be immediately removed from service. Never use the damaged product. Repair is permitted, provided that it is either done by the manufacturer or a competent repair center or individual approved by the manufacturer.

**13. EQUIPMENT RECORD:**

Documentation is a key element of a well-managed personal protective equipment program. Equipment Records should be maintained as proof of Periodic Examination and Recertification and Repair. It is the responsibility of the user organization to enter onto the Equipment Record the details required.

**14. CLEANING AND STORAGE:**

Use a damp (not wet) cloth to remove dirt or other contaminants from the casing. Do not use abrasives or solvents. Mild detergent may be used but residue must be wiped away.

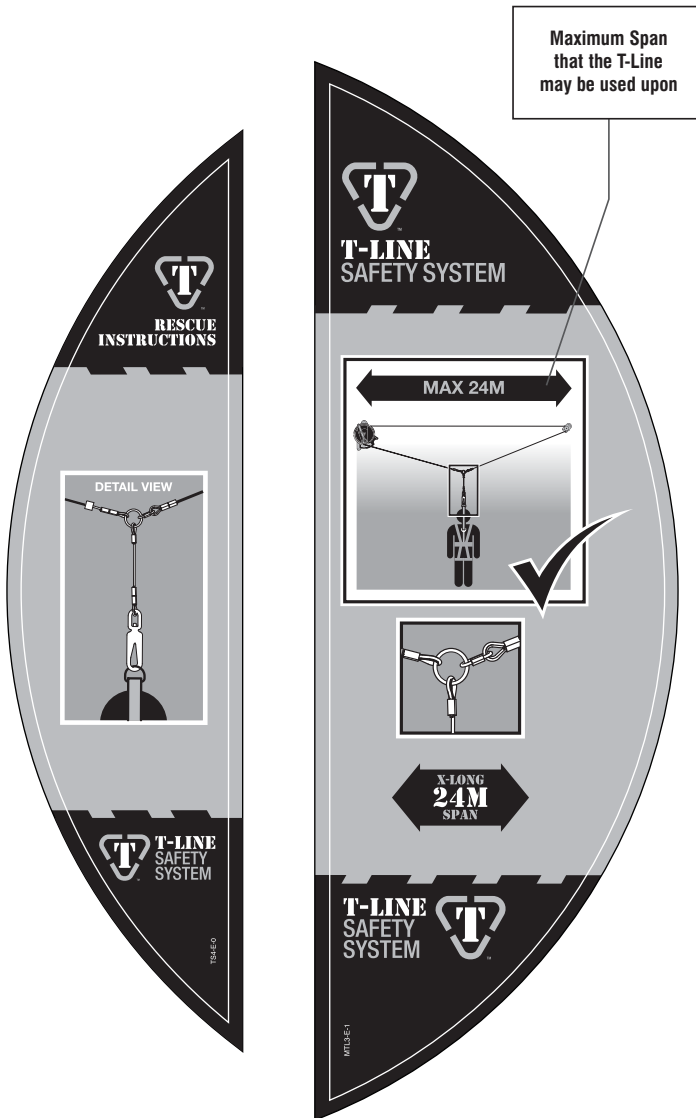
Use a bristle brush to remove dirt or other contaminants from the lifelines. Do not use a wire brush. Do not use gasoline or solvent. Lubrication may be applied to a clean dry lifeline with a cloth.

Never immerse in water. If water does get into the casing, hang the unit and slowly withdraw each lifeline allowing the water to run out. Use a clean dry cloth to wipe the lifeline dry as it returns. Repeat if required.

Store the T-Line in a clean, dry place.



**LABELS**





**T**  
**RESCUE INSTRUCTIONS**

**T**  
**T-LINE SAFETY SYSTEM**

**T**  
**T-LINE SAFETY SYSTEM**

**T**  
**T-LINE SAFETY SYSTEM**

DETAIL VIEW

MAX 12M

X-LONG  
**12M**  
SPAN

**T**  
**T-LINE SAFETY SYSTEM**

TS4E-0

MTL3E-1











## T-LINE SAFETY SYSTEM



Always read  
and follow the  
instructions

**Certification Body:**

QUINTIN CERTIFICATIONS, 825 route de Romans 38160, Saint Antoine l'Abbaye France (Notified Body 2927)

**Ongoing Assessment Body:**

SGS Fimko Oy, Takomotie 8, FI-00380 Helsinki, Finland (Notified Body 0598)

For EU Declaration, please visit <https://kstrong.com/asia/eu-declaration-form/>



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