

1. What is the Haul Truck Tie-Back?

A purpose built, high-strength synthetic fiber cable assembly used to keep the truck bed of a haul truck in the raised position during maintenance operations. The cable is used in case the hydraulics lose pressure or fail. Tie-backs are also referred to as a body up cables, bed cables, or box slings.

2. What is the cable made of?

The cable core is Plasma[®] Fiber, which is 1/7th the weight of steel cable for the same strength. Plasma[®] Fiber is a specially processed High Molecular Weight Polyethylene (HMPE), with exceptional strength properties and is commonly used in critical lifting applications. Around the core of the cable is a Twaron[®] fiber braid. Twaron[®] is an Aramid fiber used in fire protection, cut-resistant gloves, crash pads, automotive brake pads, etc. This specialized shielding provides exceptional cut protection, abrasion protection and heat resistance to the fiber core. A semi-rigid, polyurethane extrusion covers both the Plasma[®] core and Twaron[®] shielding to provide resistance to water, chemicals, debris, etc. It also serves as the primary cut and abrasion barrier.

3. What material are the fittings made of?

End fittings are a combination of high performance aircraft grade aluminum with heat treated steel hardware.

4. How strong is the cable?

The cables are designed to meet or exceed the strength of the 1.50" and 1.25" steel wire used by factory trucks. The tie-back cable is available in 23 ton rated capacity and 15 ton rated capacity with a 5 to 1 safety factor.

5. What lengths are available?

Cable length is custom ordered based on the truck model and bed combinations. Typical tie-back lengths range from 70" to 130". Because not all truck models have the same beds, it is important to confirm the desired length when ordering.

6. What truck models do they fit?

The cables are purposely engineered as a direct replacement for body up cables utilized on Caterpillar, Komatsu, Liebherr, Hitachi, Bucyrus, and Belaz haul truck models.

7. How are the cable ends terminated in the fittings?

Applied Fiber uses an advanced resin infusion process that bonds the fibers to the metal hardware (patents issued and pending). The primary advantage of this technology for tiebacks

is quality control and reliable performance. Applied Fiber is the global leader for terminated synthetic fiber systems, with products across many performance-based industries and applications. See www.applied-fiber.com for additional information.

8. How does this cable compare with a steel cable or synthetic fiber sling and shackle combination?

The cables are designed to overcome traditional safety and reliability drawbacks of wire and synthetic fiber slings. See www.haultrucktiebacks.com/overview for a brief summary and www.haultrucktiebacks.com/advantages for a more detailed overview of the unique advantages around improved safety and reliability.

9. How is the cable inspected?

Detailed instructions on cable inspection are contained in the Operator's Instruction manual. Please refer only to the manual for actual inspection instructions. Generally speaking, there are three main areas for operator inspection:

1. Inspect the two-stage jacket for cuts and exposure of core fibers.
2. Inspect the overload indication holes in the fork fitting.
3. Inspect the metal fittings for abnormal wear, cracks or damage

Additionally, the fiber core can be inspected as needed by opening the collar at each of the ends.

10. Is the Applied Fiber Tieback cable designed to be in conformance with applicable standards?

The product is designed to comply with OSHA 1910.184 and ASME B30.9 standards.

11. Will the cable absorb water weight or freeze like synthetic slings?

The cable jacket is sealed to provide an impervious moisture layer. By preventing water intrusion, the cable will not gain weight, lose strength, or freeze like traditional fiber sling assemblies. Conversely, all synthetic fibers, including HMPE, lose strength as the temperature rises and ratings are assumed at ambient temperatures. It is not recommended to use this product below -40F or above 130F.

12. What chemicals will damage the product?

- HMPE CABLE: The core strength member used in this product is HMPE, which is generally resistant to most industrial chemicals but does lose strength with Clorox or chlorine and limonene, a citric based degreaser.
- STEEL AND ALUMINUM FITTINGS / HARDWARE: Aluminum is severely degraded by alkali, caustic and acidic environments. Salt water also degrades aluminum. Aluminum should

never be exposed to chlorine environments or cleaned with chlorine based solutions. Steel hardware is similarly not impervious to these elements.

WARNING: Chemically active environments can affect the strength of synthetic cables in varying degrees from none to total degradation. Applied Fiber should be consulted directly before cables are used in chemically active environments.

13. Is the cable certified?

Every production cable is pull tested to a minimum of two times the working load and serialized. A proof load certificate is provided with each cable.

14. Can the cable be recertified?

Yes, please refer to the Operator's Instruction manual for complete information.

15. Can the fittings be reused?

While not typical, there are some cases where the fittings may be reused. Only the manufacturer can decide if the fittings are reusable. Do not attempt to remove the end fittings from the cable. Contact your dealer or Applied Fiber for additional details.