

**Safe-Xtract** is a leader in vehicle recovery systems and has contributed the following vehicle recovery innovations to enhance efficiency and safety in winching and non-winching vehicle recovery:

- 1) Safe-Xtract has developed the most complete, comprehensive, and versatile kits available on the market that are able to perform single line pull (SLP), double line pull (DLP), re-direct (RD), traction extraction (TX), and momentum extraction (MX). Safe-Xtract's Xtreme Kits allow for the Spanish Burton (SB) winching configuration. (see <https://www.safe-xtract.com/recovery-kits/> )
- 2) Safe-Xtract products are County of Origin (COO) compliant, Trade Agreement Act (TAA) compliant, Berry Amendment (BA) compliant, Buy American Act (BAA) compliant, manufactured in the USA according to ISO 9001: 2015 standards and meet the Cordage Institute 1500.2 Test Methods for Fiber Rope.
- 3) Safe-Xtract is registered with System Award Management (SAM) to sell to the US government and has a Cage Code # 7LH76 and DUNS # 80214941 and Unique Identifier ID UJ2HF36ABNT1
- 4) The Safe-Xtract Vehicle Recovery Kits feature the following unique engineered products:
  - a. The patented Safe-Xtract X-Lock (see <https://www.safe-xtract.com/product/safe-xtract-sx-20000h-x-lock-vehicle-recovery-hardware-rated-for-up-to-20000-lbs/> ) enables one to:
    - i. Shorten synthetic lines to optimize winch efficiency
    - ii. Temporarily join parted synthetic lines
    - iii. Conduct a re-direct with or without the use of a pulley block
    - iv. Belay a load and/or vehicle
    - v. Anchor a vehicle
  - b. Safe-Xtract is the only vehicle recovery company that provide Safety Lanyards (see <https://www.safe-xtract.com/product/safe-xtract-safety-lanyard/> ) that, among other tasks, best arrests the rigging should the rigging fail. The Safety Lanyards, together with a soft shackle, can be used on the Safe-Xtract pulley block and Safe-Xtract X-Lock.
  - c. The Safe-Xtract soft shackles (see <https://www.safe-xtract.com/product/safe-xtract-soft-shackle/> ) provide the correct rigging configuration using specific colors on the soft shackles as well as on their labels.
  - d. Safe-Xtract developed a receiver hitch adapter (see <https://www.safe-xtract.com/product/safe-xtract-sx-rh2-0-receiver-hitch-2/> ) that is both soft shackle and screw pin bow shackle compliant. The Safe-Xtract receiver hitch only allows properly rated screw pin bow shackles to be installed.
  - e. The range of patent pending Safe-Xtract pulley blocks (see <https://www.safe-xtract.com/product-category/xlocks-pulleys/> ) are unique in that they are:
    - i. Soft shackle and screw pin bow shackle compliant
    - ii. The cheeks are engineered to only accept properly rated screw pin bow shackles thus eliminating the inclusion of under capacity screw pin bow shackles.
    - iii. The cheeks are engineered to only accept the pin of the screw pin bow shackle, thereby removing possible misalignment and subsequent side loading thus enabling superior load distribution of the screw pin bow shackle.
    - iv. The Safe-Xtract pulley block cheeks are further designed to self-orientate to correct loading in the event of a momentary slack in the line and/or should the pulley block become reversed in orientation.

- v. The Safe-Xtract pulley blocks are specifically engineered to be self-cleaning in both the axle and the pulley located between the cheeks.
  - vi. The pulley's semi-circular machined groove is specifically designed to accept certain rope diameters, thereby better maintaining rope integrity and proper groove/rope contact.
  - vii. Safe-Xtract has engineered a patent pending hybrid pulley block (see <https://www.safe-xtract.com/product/safe-xtract-sx-40000ss-pulley-block-vehicle-recovery-hardware-up-to-40000-lbs/> ) that can remain connected (better than a snatch block) while installing and removing synthetic line.
  - viii. The Safe-Xtract Recovery Kits (see <https://www.safe-xtract.com/product-category/vehicle-recovery-kits-packs/> ) are engineered for a range of winch capacities and ensure that the kit components' minimum tensile strengths (MTS) and working load limits (WLL) significantly exceed the particular winch capacity.
- 5) Safe-Xtract pioneered winching with the Hi-Lift<sup>®</sup> Jack using synthetic line and synthetic components from the Safe-Xtract Kits as well as properly rated carabiners. The Safe-Xtract Hi-Lift<sup>®</sup> Jack winching system includes an independent safety line for added safety.
  - 6) Safe-Xtract provides information on how to best secure a synthetic winch line to the winch drum using the constrictor knot (see <https://www.safe-xtract.com/tutorials/attaching-synthetic-winch-line-to-winch-drum/> )
  - 7) Safe-Xtract winch lines and winch line extensions are specifically colored for high visibility and enable the user to estimate the load on the winch by observing the colored sections' rate of retrieval onto the winch drum. (see <https://www.safe-xtract.com/product/safe-xtract-winch-line-extension/> )
  - 8) Safe-Xtract uses a proprietary protective eye coating on their winch lines and winch line extensions thus eliminating the need for a metal hook, thereby removing heavy objects from the recovery rigging.
  - 9) Safe-Xtract uses the superior Plasma<sup>®</sup> (UHMWPE) Rope and the preferred McDonald Brummel self-locking splice on all their synthetic lines.
  - 10) Safe-Xtract has a professional vehicle recovery training program provided by International 4WD Trainer's Association (I4WDTA) Certified Trainers who are also Safe-Xtract Certified Trainers. (see <https://www.safe-xtract.com/training/> ).
  - 11) Safe-Xtract has developed the Safe-Xtract Vehicle Recovery App for both Android and iPhone platforms and once downloaded does not require cell service to use. (see <https://www.safe-xtract.com/safe-xtract-vehicle-recovery-application/> ). The Safe-Xtract Vehicle Recovery App takes the guesswork out of the vehicle recovery process.
    - a. The app enables the user to input a few data points such as vehicle weight, gradient, ground condition, stuck wheels – and uses this data to determine the Total Resistance, or load, required to Xtract the stuck vehicle using either self-recovery and/or assisted recovery methods. (see <https://www.youtube.com/watch?v=OkRAR4woogw&t=17s> )
    - b. For winch-related recoveries, the App identifies the winch layer required to exceed the Total Resistance, rigging recommendations and diagrams, recommended equipment ratings, and instructional videos.

- c. The App also recommends non-winch, “Traction Xtraction” and “Momentum Xtraction,” options including an estimated maximum speed for successful and safe use of a Kinetic Energy Recovery Rope in a Momentum Xtraction.
  - d. The Safe-Xtract Vehicle Recovery App has a “Learning Center” section filled with helpful safety information and tutorials that detail proper hand signals, how to perform a stuck assessment, a listing of detailed diagrams of numerous vehicle recovery configurations, helpful instructional videos to guide you through the fundamentals of each recovery configuration, and much more.
  - e. The Safe-Xtract Vehicle Recovery App is aligned with the Safe-Xtract training program and is compatible with the use of all Safe-Xtract Vehicle Recovery kits and components.
- 12) Together with the Safe-Xtract Vehicle Recovery Training by I4WDTA and SX Certified Trainers and the Safe-Xtract Vehicle Recovery App, Safe-Xtract demonstrates its commitment to properly educate clients on safe and efficient vehicle recovery.
- 13) Safe-Xtract was invited by both 1<sup>st</sup> Special Forces Regiment and the Maneuver Center of Excellence (MCoE) to attend the Army Expeditionary Warrior Experiment (AEWE) in 2018 at Fort Benning. Safe-Xtract was one of twelve technologies chosen. Safe-Xtract was overwhelmingly well received by the Soldiers and many considered the system as a very desirable piece of equipment saying:
  - a. “Not sure how you can make this any better.”
  - b. “This needs to make it out into the force. We will benefit tremendously.”
  - c. “I would teach and train everyone in the Army on self-recovery, make it a school.”
  - d. “Put Safe-Xtract into an Army recovery school. IE combat driver school etc.”
- 14) The Safe-Xtract Vehicle Recovery System has been tested and approved by the Nevada Automotive Test Center (NATC) for the United States Special [Forces] Operational Command (USSOCOM) and was selected by the 1st Special Forces Regiment to be the training standard within their SF Groups.
- 15) Safe-Xtract has the “Cole Learning Center” with a classroom and trails where clients can be properly trained by I4WDTA Certified Trainers and SX Certified Trainers in driving and recovery from basic to advanced levels.
- 16) Before traversing technical terrain, one airs down tires for better traction, shifts into 4WD, engages low range, and engages lockers/traction control etc. Similarly, Safe-Xtract’s philosophy is that one should deploy recovery gear BEFORE one gets stuck. This results in far less risk of vehicle damage, personnel injury, and environmental harm. The main benefit of this philosophy is simpler, safer, and better controlled “recovery” for all concerned.