Kinetic Recovery Ropes (also known as a snatch ropes or yanker ropes) are designed to stretch, to smoothly transfer the kinetic energy of a recovering vehicle to a vehicle that is stuck. The ability of a Kinetic Recovery Rope to stretch is what makes it unique and what sets it apart from a non-elastic tow rope or tow strap. RTR Vehicle's Kinetic Recovery Ropes are designed and built for the express purpose of stretching under load, to provide a smooth and powerful pull. Some key features that set our Kinetic Recovery Ropes apart:

- 100% Double Braid Nylon.
- Maximum Strength Nylon (others use factory-dyed black nylon which has an approx 10% lower MTS).
- Professionally spliced in the US by trained and certified splicers.
- Abrasion protection in the eyes and on the rope body.
- Optional fiber-lock coating of the exterior in a custom color.
- Up To 30% Elongation Under Load.

Benefits of Using RTR Vehicle's Kinetic Recovery Ropes over other recovery/tow equipment:

- More durable and therefore less susceptible to damage from normal wear and tear.
- Decreased shock loads on Recovery Mounting Points.
- Superior performance when recovering larger vehicles with a much smaller tow vehicle.
- Superior performance in very low traction situations.
- Lightweight and portable.

How to Correctly Use Your Kinetic Recovery Rope

Step 1: Verify your equipment is adequate for the use and in good condition. A Kinetic Recovery Rope should be sized such that the Minimum Tensile Strength (MTS or 'minimum breaking strength) is roughly 3 times the Gross Vehicle Weight of the vehicle conducting the recovery.

Step 2: Remove any obstructions from the path of the stuck vehicle, so that it has a clear way out of the stuck condition.

Step 3: Securely attach rope to both vehicles - use a proper shackle or tow point. Recovery points should be properly welded or bolted to the vehicle chassis. **WARNING: Never connect recovery equipment to a tow ball, as they are not designed for this type of load and can fail, causing serious damage.**

Step 4: Ensure all bystanders are well clear of the area. No person should be within 1.5X the rope length of either vehicle, unless they are inside one of the vehicles.

Step 5: Tow the stuck vehicle out. The towing vehicle can start with slack in the tow rope and drive up to 5mph max. **WARNING: Do not exceed 5MPH with a properly sized rope. WARNING: Do not pull in a direction that would side load your recovery points unless they are specifically designed to handle side loads - most are not and improper side loading can lead to recovery point failure and/or rolling of the stuck vehicle.** The stuck vehicle should be driven, as this provides additional traction amid the recovery effort, and also allows for directional control once the stuck vehicle begins to move. The recovering vehicle should continue to pull on the stuck vehicle until it is no longer stuck.

Step 6: Unhook and stow your rope.

Kinetic Recovery Rope Specifications & Selection

The rope properties below are the published strengths for the rope sizes we manufacture. To select the proper rope size for your application, the Vehicle Class is presented as a guide. It is not a hard and fast rule, as many environmental factors such as slope, type and consistency of terrain vehicle is mired in, and mire depth all play a role in determining the force that will be required to recover the stuck vehicle - the Safe-Xtract Vehicle Recovery App does an excellent job of calculating a total resistance based on all these factors and more. We recommend the below chart unless you expect extreme environmental conditions, in which case it may be desirable to increase the diameter by one level. We do **not** recommend decreasing the diameter for lighter environmental conditions.