



Basic Recovery



Basics

- Safety First!!!
- Vehicle recovery is very dangerous if not done with care and respect
- Evaluate situation
- Evaluate possible solutions
- Run through the possible solutions for effectiveness, simplicity and safety
- Don't rush, take your time



Stuck on an Obstacle

(kind of)

- Try to Backup and take a different line
- Turn wheel left and right
- Try “Bumping It”
- Get out and check
 - ONLY if the vehicle can be safely left
- Ask for a spotter
- Use manpower
- Stack some rocks



Stuck on an Obstacle

- Pick a solution that is safe, simple and effective
- The vehicle may need to go forward, backwards, sideways or diagonal to get free
- Stacking Rocks
 - To get traction
 - To lift vehicle underside so that the low hanging part can clear the obstacle
- Use a strap
- Use Hi-Lift
- Use a winch



Using a Strap

- Attach to a sturdy part of the vehicle such as tow hooks, cage, etc and in the proper location depending on the direction vehicle needs to go
- Don't attach to a tow ball or a section of a bumper as it can become a projectile
- Don't use a strap with a metal hook on it
- Carry quality straps that will support the vehicle weight ; a tree strap, 20' strap and 30' strap
- When using a D-ring, turn it tight clockwise then turn it counter clockwise a ¼ turn to give it some play room
- Can double back the strap to the vehicle to cut the strap length in half if needed; 20' → 10', 30' → 15'
- If strap isn't long enough, connect two straps using a sturdy piece of wood, don't use a D-ring as it can become a projectile
- Snatch Strap, also referred as tug-ems, are different from standard straps because it has elastic properties that let it expand, and require different technique for recovery



Using a Strap

(continued)

- Make sure everyone is in a safe place before starting the recovery
- Can use manpower to help vehicle get unstuck or to keep from rolling over
- Can use a another vehicle to pull the vehicle forward, backwards or sideways
- After strap is attached to both vehicles, have the recovery vehicle move forward (or backwards) to take up the slack on the strap
- The recovery vehicle should be in the lowest gear possible
- When ready, the recovery vehicle should start moving forward and the stuck vehicle should apply some gas as well to help



Using a Hi-Lift

- Hi-Lifts are great tools, but extremely dangerous if not used with extreme care
- Make sure hi-lift moves up and down freely
 - leaving it exposed to the elements will rust it
 - oil it down
 - make sure nuts/bolts are on tight
- Wear gloves
- Select a strong point on the vehicle that will support the weight of the vehicle such as the bumper or rock rails
- Hi-lift is like a pivoting point and the vehicle needs to be kept balanced, so position it carefully or use a strap on the vehicle to keep it steady especially on an incline
- Use hi-lift base or plywood on soft surfaces
- May place rocks under tires and lower vehicle
 - Strap axle if needed
- May drive vehicle off it
- Use it as a winch



Winching Tools

- Synthetic Rope vs. Wire Cable
 - Cable holds kinetic energy and when released suddenly, it can be deadly
 - Rope is safer but require more care
- Thick gloves
- Lanyard on the end of the winch hook
- Tree Strap
- D-rings
- Snatch block
- Chains
- Protective cover for rope
- Rope/cable weight, blanket, jacket, or whatever to place over center of rope/cable
- Winch line extension or strap
- Make sure all the equipment you have is rated for the vehicle to be recovered



General Winching

- Winching can be very dangerous and deadly
- Wear gloves
- Make sure winch, winch rope/cable, battery, alternator, etc. are in good working condition
- Stay out of danger zone when winching
- If people are working around winch area, release tension in winch line, and keep hands off the winch controls
- Attach to a strong point on the other vehicle
- Use a tree strap when using a tree to winch and put it at the lowest point on the tree trunk as possible (strongest point)
- A chain can be used to move a log or as a mounting point around a rock
- Have the open winch hook face up
- Maximum pulling power is the layer of cable closest to the drum
- When re-spooling, don't hold onto winch hook...use the lanyard



Winching Techniques

- Safety first
- Single line pull
- Double line pull or even triple line pull to increase pulling power
- Changing the pulling direction
- Winching out
 - This can overheat the winch motor faster due to friction
- Side pulls
 - Watch out for the winch line bunching up on the drum
- During long pulls take a break to let the winch motor cool and to recharge the battery
- After winching , re-spool the winch line correctly