Extracting Stuck Equipment Safely

How to Avoid Expensive and Painful Incidents
GO THROUGH THE MUD THEY SAID

IT ISN'T THAT DEEP THEY SAID
THERE’S MORE TO EQUIPMENT EXTRACTION THAN HOOKING AND PULLING
“Four Zones of Extraction”

- Tow Zone
- Stuck Zone
- Danger Zone
- Clear Zone
“Tow Zone”
Working Through the Pull

- Is the towing unit capable?
Can I position the towing unit on higher ground?
“Four Zones of Extraction”

• Tow Zone
• Stuck Zone
• Danger Zone
• Clear Zone
Weight of What is Stuck
How Deep is It Buried?
WEIGHT TRANSFER
(ONLY IF NECESSARY)

START HERE with the static weight of the vehicle -
(The Hard number)
Choose ONLY ONCE and
Choose ONLY ONE PATH

SURFACE RESISTANCE

START HERE with the static weight of the vehicle -
(The Hard number)
Choose ONLY ONCE and
Choose ONLY ONE PATH

GRADIENT RESISTANCE

START HERE with the static weight of the vehicle -
(The Hard number)
Choose ONLY ONCE and
Choose ONLY ONE PATH

1. When using DAMAGE resistance (.666) DISREGARD rolling resistance (.05 or .15).
2. When using VIABLE resistance (.75, 100% or 1.5) DISREGARD damage resistance (.666).

THIS CHART IS NOT TO BE COPIED OR USED BY ANYONE WHO HAS NOT BEEN INSTRUCTED BY WRECKMASTER.
Knowing these weights help set up how much recovery strength will be needed.
Take the time to dig out around the tires to break the suction.
“Four Zones of Extraction”

- Tow Zone
- Stuck Zone
- Danger Zone
- Clear Zone
The “Angel of Heaven” Was Listening
Choose the Right Connecting Equipment

- Chains
- Wire ropes (cables)
- Tow ropes and straps
- Recovery straps and ropes
- Clevices, hooks, hitches
Chains—Never Jerk on Them
Chains—Never Jerk on Them

<table>
<thead>
<tr>
<th>Chain Link Diameter (inches)</th>
<th>Breaking Strength (pounds)</th>
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<tbody>
<tr>
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<td>Grade 30</td>
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<tr>
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</table>

Source: U.S. Department of Transportation
Cables—Never Jerk on Them
Tow Ropes and Straps Are Not The Same Devices
Tow Ropes and Straps—Never Jerk on Them
Recovery Ropes and Straps—Jerk Straps
Sudden stop at end of rope. Are you ready?
MAXIMUM PULL FORCE MAXIMUM

35,000 LB./LIVRE (15,850 KG)

PROTECT WEB FROM SHARP EDGES.

PROTÉGER LA TOILE DES BORDS TRANCHANTS.
‘Clevises’, Hooks, and Hitches
Working Through the Pull

Remain Calm
Remember, your goal is to get the vehicle out of whatever it is stuck in. But your overriding goal should be to do it safely.

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