

WARN Customer Service: 1-800-543-9276

www.warn.com





WARN INDUSTRIES, INC.

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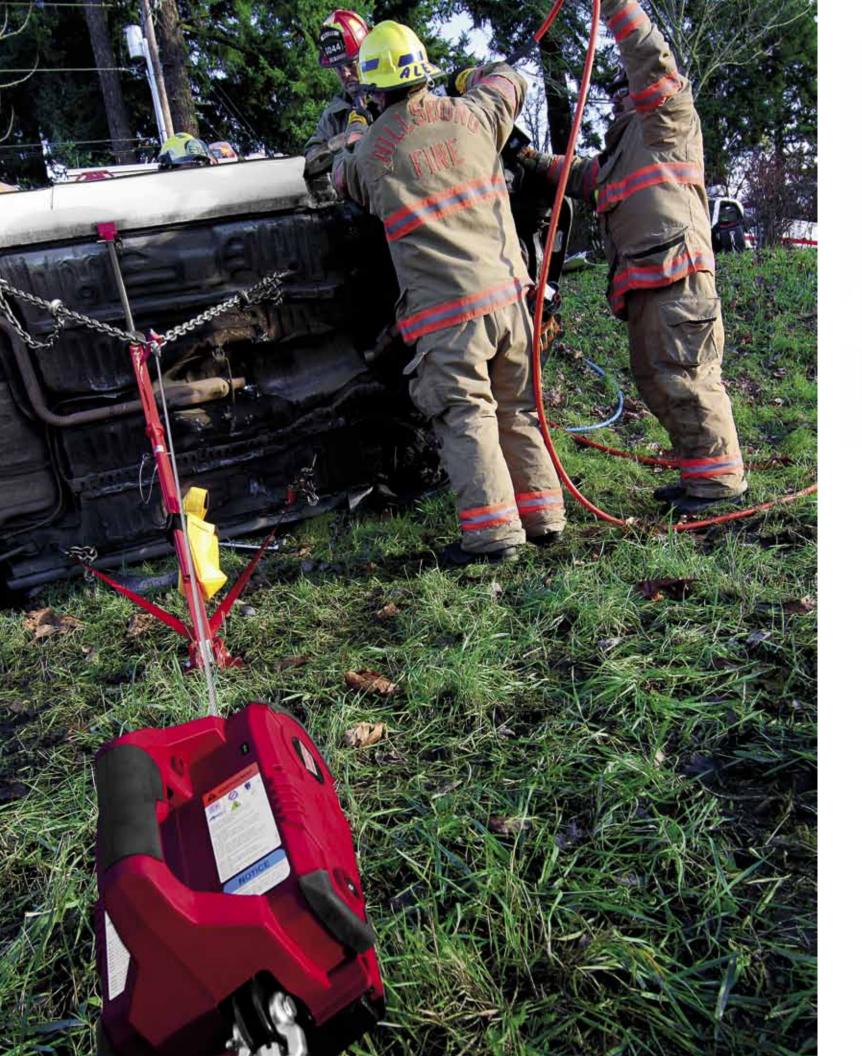
1-503-722-1200 FAX: 1-503-722-3000 Dealer Locator Service: 1-800-910-1122

The dealer locator service is available 7 days per week and 24 hours a day. Customer service is available between 7:00 am and 4:00 pm Pacific Time, Monday through Friday.

# PRODUCT GUIDE

WINCHES, PULLING/LIFTING TOOLS AND ACCESSORIES FOR FIRE AND RESCUE APPLICATIONS







# PULLZALL RESCUE KIT VERSATILITY IN HANDHELD FORM

The extremely useful WARN PullzAll™ lifting/pulling device is perhaps the most versatile piece of equipment ever introduced to the fire and rescue world. It provides the extra advantage every rescue crew needs in time sensitive situations. From extractions to stabilizing vehicles to peeling back sheet metal, PullzAll does the job. It will lift or pull up to 1,000 lbs. (454 kg). Critical accessories are included—two NiMH batteries, two 12" rigging cable attachments, charger, two rigging straps, two D-shackles, a snatch block, and a case to hold it—all designed to ensure that you get the most out of this ultra-portable, yet powerful tool.

PN 83360 PullzAll Rescue Kit. Includes Cordless PullzAll, two rechargeable batteries, two rigging cable attachments, two rigging straps, two D-shackles, and nylon carrying bag.

PN 86357 PullzAll carry bag.









times when there is no time...use this gear with a PullzAll to make extractions easier. Simplifies and speeds up anchoring to car posts and other fixed objects. Includes:

- One PullzAll Quick Response rescue strap, load-rated
- Two wire rope extension rigging straps
- Two D-shackles
- One load-rated carabiner

PN 86519



# **PullzAll Battery**

24V PulizAll Features:

• 1,000 lb. (454 kg) pulling or lifting capacity

Dynamic brake holds the full-rated load

• Electronic load limiter with LED readout

• Portable, cordless operation with 24V NiMH

• Lightweight; weighs only 18 lbs.

battery pack (2 included)

• Trigger-controlled operation with variable speed control

• Switches from forward to reverse with a push of a button

• 15' of 7/32" (4.6 m of 6mm) wire rope with hook and clasp

These 24V NiMH packs for the cordless PullzAll are perfect for use as a spares, and are directreplacement units. PN 685013

### **PullzAll 12V charger**

For use with cordless PullzAll, this product plugs into the accessory/cigarette lighter of your automobile and will charge the 24V NiMH battery. PN 685012

### **PullzAll Rigging Cable**

Galvanized aircraft wire rope with loop on both ends allows you to hook up to another sharp object for an anchor point. Sold in packs of six. PN 83361

PN 83362

24" length 12" length







# **OLYMPUS 25**

### **UNPRECEDENTED POWER IN AN ELECTRIC WINCH**

At 25,000 lbf (11,340 kgf), the Olympus 25 has the largest pulling capacity of any electric winch available. The high-tech axial flux permanent magnet motor provides an extra-long extended duty cycle for the longest, most difficult pulls. In fact, the Olympus 25 is the only electric winch that delivers near hydraulic levels of performance. On top of its power, it's extremely efficient, and uses 1/3 the power of a typical electric winch. The compact lightweight structure makes it easy to mount, and helps to maintain your vehicle's payload capacity and fuel economy. The waterproof construction and superior corrosion resistance, along with an overload interrupt switch (OLI), provide excellent durability, control, and performance. The Olympus 25 is made from lightweight aluminum alloy and features a durable industrial contactor and a heavy-duty remote control with a 32' (10m) lead. It is equipped with 100' (30m) of WARN Severe Duty synthetic winch rope with patented six-strand Dynema construction for the ultimate balance of strength, durability, and weight.



### **Olympus 25 Features:**

- The largest pulling capacity of any electric winch available: 25,000 lbf (11,340 kgf), with synthetic rope
- Axial Flux Permanent Magnet Motor provides amazing power and duty cycle—near hydraulic performance
- Weighs 65% less than comparative hydraulic winch systems better fuel economy and more payload
- Equipped with 100' of 5/8" (30m of 15.9mm) WARN Severe Duty synthetic rope

PN 87393 (Polished/Synthetic Rope) PN 87390 (Black/Synthetic Rope)









# 9.5cti MULTI-MOUNT

The 12-volt 9.5cti Multi-Mount packs 9,500 lbs. (4,310 kg) of portable pulling capacity into a sturdy die-cast aluminum body.

The Multi-Mount system allows you to use the winch on the front of a vehicle with a WARN front reviver, or at the rear using a standard Class III receiver hitch for maximum winching versatility.

### 9.5cti Features:

- Extreme-duty seals for outstanding weather resistance
- A thermometric indicator provides information about motor temperature
- 125' of 5/16" (38 m of 8 mm) aircraft-grade wire rope and hawse fairlead
- Remote control with 12' lead
- Includes winch, carrier, and wiring for front of vehicle
- Front receiver and rear power lead sold separately
- Available in 12V only

### PN 85760



# XD9000i MULTI-MOUNT

The XD9000i Multi-Mount is a long time favorite, and delivers excellent value for a 9,000 lb. capacity portable winch. Mount the winch on the front of a vehicle with a WARN front receiver, or at the rear using a standard Class III receiver hitch.

### XD9000i MultiMount Features:

- Integrated control pack
- 4.6 hp series-wound motor delivers big torque and power
- Runs cool with low amp draw for long winching duty cycles
- Proven 3-stage planetary gear train
- 125 ft. of wire rope, remote control, and hawse fairlead
- Includes winch, carrier, and wiring for front of vehicle
- · Front receiver and rear power lead sold separately
- Available in 12V only

### PN 37441





# MOLALLA MOUNT—INGENIOUS PORTABLE SIDE-MOUNT SYSTEM

Making better use of your fire engine is what the WARN Molalla Mount is all about. This portable side-pull receiver enables you to quickly deploy a WARN 9.5ti or XD9000i Multi-Mount Winch. This innovative receiver lets you pull from either side of the rescue vehicle. The weight of the vehicle literally holds the mount in place. And you can achieve winching versatility that previously was

# • Maximum pull rating 9,500 lbs. (4,309 kgs)

- Side reflectors for night visibility/safety
- Made from structural steel

20,000 lbs. (9,072 kgs)

• Durable, chip-resistant black powder coat finish

Requires vehicle with minimum rear axle weight of

2:1 safety factor

SPECS:

NFPA compliant





Combines a heavy-duty receiver bracket with a 3/4" (20mm) shackle. Utilizes a standard Class III receiver hitch as a recovery point for off-road use. Fits all standard Class III hitches (hitch pin not included).

PN 29312 Receiver Shackle Bracket

PN 63063 Hitch pin kit 5/8" (15.9mm) diameter hitch pin and clip. Fits 2" class III receiver.

# POWERPLANT™ VEHICLE-MOUNTED MULTI-TOOL

Two tasks, one tool. An integrated, powerful way to bring both an air compressor and a powerful winch wherever you need. Great for brush trucks or Jeeps.

### **PowerPlant Features:**

- A vehicle-mounted multi-tool combining a winch and a premium air compressor
- PowerPlant HP model delivers 9,500 lb. pulling capacity with fast linespeed
- PowerPlant HD model features 12,000 lb. pulling capacity with longer duty cycle
- Air compressor with flow ratings of 90 CFM @ 0 PSI;
   5 CFM @ 90 PSI, 100 PSI max.
- ½ gallon (1.9 I) on-board air tank/intercooler
- Extended-duty contactor control pack
- Thermometric switch protects against overheating
- PowerPlant HP comes with 125' of 5/16" wire rope with fairlead
- PowerPlant HD includes 80' of 3/8" wire rope with fairlead
- Available in 12V only

PN 71800 PowerPlant HP PN 71801 PowerPlant HD



### M8000

### **DC Electric Vehicle Recovery Winch**

From pickups to brush fire trucks, it's hard to beat the proven dependability of the M8000. This no-nonsense winch features a fast 8 ft. per minute pulling speed at 8,000 lb. rated load, making it versatile enough for most rescue situations.

### **M8000 Features:**

- Proven performer you can depend on for the long run
- Reliable automatic, direct-drive cone brake
- 8,000 lbs. (3,630 kg) pulling capacity
- With 100' of 5/16" (30m of 8mm) wire rope
- Rugged remote with 12' (3.8m) lead
- Durable powder-coated finish resists chipping in tough terrain
- Comes in 12V or 24V

PN 26502 (12V)



# M12000

### **DC Electric Vehicle-Recovery Winch**

Great for brush trucks, the M12000 is a true workhorse. With its 12,000 lb. pulling capacity, this winch will come through in the most demanding situations.

### M12000 Features:

- A reliable workhorse for heavy winching needs
- Strong 12,000 lb. (5,440 kg) pulling capacity
- 125' of 3/8" (38 m of 9.5mm) wire rope and roller fairlead
- Remote with 12' (3.7 m) lead
- Available in 12V or 24V

PN 17801 (12V)



### **DC Electric Vehicle-Recovery Winch**

This winch is a true heavyweight with its 15,000 lb. pulling capacity and impressive specifications. Great for larger pickups or SUVs, the M15000 is great for fire and rescue use.

### M15000 Features:

- Big pulling power for big vehicles
- Pulling capacity up to 15,000 lbs. (6,804 kg)
- Remote with 12' (3.7 m) lead
- 90' of 7/16" (27 m of 11 mm) diameter wire rope and roller fairlead
- Available in 12V or 24V

PN 47801 (12V)



# **SERIES 18 HYD**

### **Hydraulic Industrial Winch**

Get 18,000 pounds of raw pulling power to hook into your hydraulic system. The Series 18 features the long-term durability of a WARN hydraulic winch, coupled with a heavy-duty disc brake for maximum holding power when doing delicate rescue operations.

### **Series 18 Features:**

- Excellent pulling power for hydraulic system equipped fire and rescue vehicles
- Pulling capacity of 18,000 lbs. (8,165 kg)
- Hardened-steel two-stage planetary geartrain
- 7.3 cubic inch hydraulic motor
- Maximum wire rope diameter recommended: ½" (12.7mm)

PN 74125 (anti-clockwise)



# 16.5ti

### **DC Electric Vehicle-Recovery Winch**

When you want the ultimate combination of brawn and brains on your rescue team, you want the WARN 16.5ti. With a thermometric indicator for motor temperature information and a brawny 16,500 lb. pulling capacity, this winch is great for your team's larger pickups and SUVs.

### 16.5ti Features:

- An outstanding combination of power and technology
- Pulling capacity up to 16,500 (7,484 kg)
- Thermometric indicator provides motor temperature information
- Remote with 12' (3.7 m) lead, thermometric indicator, and flashlight
- $\bullet~$  90' of 7/16" (27 m of 11 mm) wire rope with roller fairlead
- Available in 12V only

### PN 68801



# 30XL Hydraulic Industrial Winch

For heavy hydraulic winching applications, choose the WARN 30XL. A powerful hydraulic motor allows for extended duty. The hardened steel, planetary gear train delivers efficient and reliable operation. Complies with world-wide quality and safety standards.

- 12.0 cubic-inch high-performance motor with 30,000 lb. capacity
- Spring-applied disc brake designed to hold the full-rated load
- Hardened aircraft-grade nickel chromoly two-stage planetary geartrain for speed and reliability
- Available in air and manal clutch options
- Meets SAE J706 and CE specifications

PN 77880 (Standard Drum Manual Clutch) PN 77900 (Standard Drum, Air Clutch) PN 75990 (Long Drum, Air Clutch) PN 77890 (Long Drum Manual Clutch

Also available in 20,000 lb. capacity (20XL)

**PN 74750** (8" Drum, Air Clutch) **PN 77550** (8" Drum, Manual Clutch)

**WARN FIRE & RESCUE** 





# GEN II TRANS4MER® **MOUNTING SYSTEM**

The Gen II Trans4mer mounting system is the most versatile, durable place to mount a winch, and allows you to customize the system to your specific needs. The Gen II Trans4mer offers a variety of modular configurations, including the ability to just mount a winch or a set of lights.

Those looking for increased versatility can add some or all of these accessories:

- Light Mounting Kit
- Grille Guard Kit
- Headlamp Guards Kit
- Receiver Bracket Kit

The Gen II Trans4mer is available for larger pickups made after 2008, and comes in a durable stainless steel or black powder-coated finish.

See WARN full-line application guide, website, or call WARN Customer Service for part numbers.

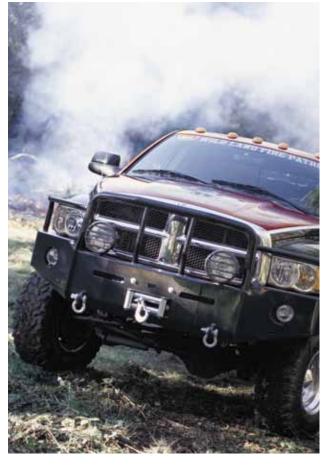




The Gen II Trans4mer System can be configured in a variety of ways. It can be as simple as a place to mount a winch (right) or highly customized with the array of optional accessories (left).

# **HEAVY DUTY BUMPERS**

With incredibly strong one-piece welded construction, a durable powdercoated finish, and optional brush guards, WARN Heavy Duty Bumpers are the ultimate bumper/winch mount for the rigors of fire and rescue use.



### **Heavy Duty Bumper Features:**

- Available for most full-sized Ford, Chevy and Dodge trucks
- Welded, one-piece construction uses heavy, thick steel
- Integrated winch mounting structure provides maximum strength. Rated for use with all WARN Heavyweight Series winches, including the 16.5ti
- Bumpers available with or without tubular grille/brush guard
- Brush guards constructed of large diameter, welded steel tubing
- Welded eyelets for D-shackles (shackles sold separately)
- Bumper design provides generous tire clearance and accommodates oversize tires
- Bumper features integrated light ports. Additional light mounting holes on top of the bumper
- Black powder-coat finish with undercoat delivers maximum durability
- Commercial duty rated and fleet approved



WARN offers a variety of other winch mounting options for a variety of vehicles. Call WARN Customer Service or visit www.WARN.com for a complete list of products and applications.

# **AUXILLARY LIGHTS**

Kit contains two lights, mounting hardware, wireless control, transmitter, wiring, rock guards and covers



# **W700D-HID DRIVING LIGHTS**

7" diameter HID lights deliver outstanding range and spread. The Xenon HID bulb is 300% brighter—and lasts 10 times longer—than 55W halogens. Features include tempered clear glass lenses, vaporized aluminum over die-cast aluminum reflectors for outstanding light output, and impact- and corrosion-resistant polymer cases for great weather resistance. The integrated ballast and wireless control switch allow for a straightforward installation. PN 82405



# **W400D-HID DRIVING LIGHTS**

4" HID lights have the extra light output you need to drive with confidence. They're 300% brighter than a 55W halogen lights, have lower amp draw and last 10 times longer. Features include durable tempered clear glass lenses, sturdy vaporized aluminum over die-cast aluminum reflectors for maximum light output, and sealed corrosion-resistant polymer outer cases for weather resistance. A self-contained ballast and a wireless control switch mean installation is easy. PN 82400

II WARN FIRE & RESCUE



# **WINCHING ACCESSORY KITS**

Includes a variety of helpful accessories to get the most out of your WARN winch. A variety of kits available for different needs. Available in medium-duty, heavy-duty, and industrial versions.

Includes accessories such as snatch block, choker chain and/or recovery strap, shackle, winching gloves, and tree trunk protector

## **SNATCH BLOCKS**

These blocks allow you to double your pulling power and perform angled pulls. An accessory not to be without!

- Doubles the pulling power of your winch
- · Aids in sharp angle and three point rigging
- Available in capacities ranging from 19,000 lbs. to 60,000 lbs.



# **CHOKER CHAIN**

- Can be used to hook up to another vehicle or sharp object for an anchor point.
- 10' of 5/16" (3m of 8mm) grade 7 choker chain with hooks. PN 26083



# **WIRELESS CONTROL SYSTEM**

The WARN Wireless Control System allows you greater options while winching.

- Control your winch remotely from up to 50' (15.2 m) away
- Integrated antenna and included hardware for easy installation
- Extreme resistance to water and the elements
- Weatherproof two-button transmitter with two-color LED
- Easy to use, even while wearing gloves
- Simple activation sequence prevents accidental power ups
- Not for use with Industrial winches

**OLI** Overload Interrupt

Digital technology designed to

limit a winch's maximum

pulling power in the case

of overload or low-voltage

situations.



PN 76080

(for Truck and SUV winches)

PN 74500

(for Powersports winches)

PN 79080

(For Utility winches)

# **SEVERE DUTY SYNTHETIC WINCH ROPE**

- Exclusively developed for Severe Duty winching applications
- 100' (30 m) x 5/8" (16 mm) diameter
- 47.500 lbf (21.546 kgf) minimum breaking strength
- Patented 6-strand Dyneema construction for the ultimate balance of strength, durability and weight
- Impervious Dyneema cover provides protection against the elements
- Easier handling, coiling, and rigging means less time for vehicle recovery
- · Reinforced welded steel tube thimble and braided eyelets for maximum capacity

PN 86962 (for Olympus 25 winches)

# **INDUSTRIAL WIRE ROPE AND HOOK ASSEMBLIES**

Wire rope is a crucial part of a winch. Our EIPS industrial-grade wire rope assemblies allow for maximum versatility. Features include:

 Standard steel hook, latch, and metal protection thimble included

 Available in a variety of lengths and diameters

 Call WARN customer service for the correct rope application



### **OLI Features:**

- · LED display provides motor current feedback
- Sealed against damage caused by moisture and chemicals For use with all WARN Industrial electric winches, 12- and 24-volt compatible
- Factory programmed to customer specifications. Can be reprogrammed to a new set point in the field by trained factory representatives

### PN 85768

(Series winch retrofit kit) PN 86727

(PC-compatible hardware for field programming)

# ATV/UTV PRODUCTS

WARN can outfit your ATV and Side by Side to make it more capable when it really counts. From powerful winches, versatile mounting systems, and durable Body Armor, WARN Powersports products let you go prepared.



# **RT40 WINCH**

Specifically designed for the extra weight of a side by side, the RT40 has the get-the-jobdone attitude ideal for the rigors of fire and rescue duty. From its durable metal rope to its limited lifetime warranty, the RT40 will come through when you need it.

### **RT40 Winch Features:**

- 4,000 lb. pulling capacity
- 55' of wire rope
- · Corded remote and mini rocker control switch
- · Fully sealed to keep the elements out
- Patented disc brake holds the full-rated load







# **XT40 WINCH**

The XT40 is the ultimate side x side/ UTV winch on the market. With a wireless control system, easy to handle synthetic rope, and a 4,000 lb. pulling capacity, this is an extreme winch for extreme situations.

### **XT40 Winch Features:**

- 4,000 lb. pulling capacity
- 50' of lightweight synthetic rope
- · Wireless Control System and handlebar mounter control switch
- Fully sealed to keep the elements out
- Patented disc brake holds the full-rated
- Limited lifetime warranty

PN 77500

# XT17 PORTABLE WINCH

Everything you need to get out of any trouble you might wander into, right here in a portable, self-recovery winch. Easy to carry: featires aluminum construction, 40 feet of synthetic rope, and a light 8.5lb design.

PN 85700 (Controls on winch) PN 85900 (Controls on vehicle)

- Kit includes everything needed to winch from any battery-equipped vehicle (load strap or tree trunk protector is sold separately)
- Rigging system allows mounting of winch to any vehicle or stable structure. No application-specific hardware is needed
- Choose from two different kits: winch with handlebar-mounted control, or corded remote wired directly to the winch
- PN 85700 includes hand-held corded remote, rigging strap and wiring. Easily transferable between vehicles
- PN 85900 includes handlebar mounted winch control with rigging strap and wiring
- Patented disc brake for reliable stopping power Sealed motor provides
- protection from extreme weather conditions





# **BODY ARMOR**

When you need to take your ATV or side x side to a rescue site, be sure its fully protected with WARN Body Armor. Made from lightweight and durable aluminum, these skid plates protect vehicle A-arms, chassis areas, and the side areas of ATVs and UTVs. Take your mind off of damaging your vehicle so you can focus on your task at hand.







# **RIGGING FOR THE PULL**

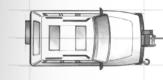
Preparing to winch starts with connecting the remote control. Free spool the winch and engage the clutch. After putting on your leather gloves, you may then pull the winch line to the anchor point. Once you secure straps to the anchor point, attach the clevis. Be sure to check the wire rope...make sure it's free from kinks, and at least five wraps are left on the winch drum. Lay a blanket or heavy coat over the winch line, protecting all from the possibility of rope or anchor point failure. Clear the area and begin winching with your remote control. Always assess every situation for maximum safety and winch technique.



# **WINCH ESSENTIALS: TECHNIQUES AND MAINTENANCE TIPS**

The tremendous efficiency and power of WARN winches makes them invaluable tools in the world of fire and rescue. It also means you must understand the basic premises of load, rigging, maintenance and rope evaluation. Please refer to the material herein and save this catalog for future reference. Also, read and save all product manuals. Now, go save some lives.

# **EFFECTIVE WINCHING TECHNIQUES: CHANGING DIRECTION**



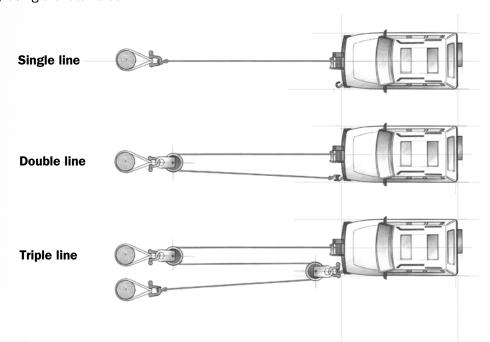
A straight line from the winch to the object being pulled is critical. (This minimizes wire rope collection off-siding on the drum which can damage rope.) If you don't have a straight line to the vehicle you're winching, you can effectively change pulling direction with the help of a snatch block. Secure the snatch block to a point directly in front of the vehicle. This lets you maintain proper drum spooling and achieve extra winching power.





To achieve extra power, a snatch block provides mechanical advantage. The snatch block is an amazingly efficient tool to utilize, easily doubling your winch capacity. At the same time, using a snatch block also cuts your line speed in half, making it easier to stabilize objects.

Using a snatch block is particularly useful in situations where your vehicle is closer to the winching situation. As you can see in the adjacent drum wrap comparisons a fuller winch drum means less power. Power you can regain, and increase, by using a snatch block.



### **WINCH AND ROPE MAINTENANCE**

Wire Rope: Inspecting your wire rope before and

after each winching operation goes a long way towards safe, reliable operation. You're checking for kinking or fraying. Either situation warrants rope replacement. Also, inspect the winch hook and hook pin for signs of wear or damage, and replace if necessary.

**Synthetic Rope:** If you have synthetic rope (such as with an Olympus 25), the outer line filaments may "fuzz up" with mild abrasion. Typically, this won't affect the performance of the winch line. When fibers become melted or fused from excessive loads the winch line needs to be replaced. Also check for:

- Inconsistent diameter (or reduction by 25%)
- Exposure to hard chemicals
- Exposed core strands (the grey synthetic cover is worn through)
- Cuts, melting or glazing of internal core strands (these are tan colored)

Also, replace your synthetic winch line every three years, only with WARN Severe Duty Winch Line.

**Cleaning:** Improve the life of your winch by keeping winch, rope and switch control clean. Use a clean rag or towel to remove dirt and debris. If necessary, unwind the winch (leaving at least five wraps on spooling drum), wipe it clean, and rewind properly before storage. Light oil on the wire rope and winch hook can prevent rust and corrosion.

**Vehicle Battery:** Operating an electric winch for long periods places a burden on your vehicle's battery. Check and maintain battery and cables according to manufacturer guidelines.

**Remote:** Inspect remote for damage. Cap the remote socket to keep dirt and debris out.

Lube: No lubrication required for the life of the winch.



### **WINCH PERFORMANCE DATA BY DRUM LAYER**

The pulling power of WARN winches increases the farther you go into the drum layers—the first layer being able to pull the least, etc. (Note: Never winch without at least five wraps of winch rope remaining on the drum.)



Olympus 25

Olympus 25 performance specs (first layer of drum)

RAT	TED LINE PU	LL	LINE S	SPEED	MOTOR CURRENT
f.	kgf	kN	ft/min	m/min	amps
	0	0.0	7.80	2.4	9
00	2268	22.2	7.33	2.2	77
000	4536	44.5	6.91	2.1	121
000	6804	66.7	6.48	2.0	165
000	9072	89.0	6.05	1.8	208
000	11340	111.2	5.63	1.7	252



9.5cti Multi-Mount

12V DC performance specs (first layer of drum)

Line Pull	Line Speed	Motor	Pull by layer:
Lbs. (Kgs. )	Ft./min. (M/min.)	Current	layer/Lbs (Kgs.)
0	62 (18.9)	47 amps	1/9500 (4313)
2000 (910)	16.3 (4.97)	160 amps	2/8650 (3927)
4000 (1810)	11.8 (3.60)	230 amps	3/7920 (3595)
6000 (2720)	9.31 (2.84)	305 amps	4/7400 (3359)
8000 (3630)	7.59 (2.31)	370 amps	5/6940 (3150)
9500 (4310)	6.67 (2.03)	425 amps	



12V DC performance specs (first layer of drum)

Line Pull	Line Speed	Motor	Pull by layer:
Lbs. (Kgs. )	Ft./min. (M/min.)	Current	layer/Lbs (Kgs
0	30 (9.14)	67 amps	1/12000 (5443
2000 (910)	14 (4.27)	140 amps	2/11120 (5044
4000 (1810)	8.62 (2.63)	210 amps	3/10340 (4690
6000 (2720)	6.92 (2.11)	250 amps	4/9770 (4432)
8000 (3630)	5.80 (1.77)	320 amps	5/9250 (4196)
10000 (4540	4.39 (1.34)	370 amps	
12000 (5440	3.86 (1.18)	440 amps	

24	V D	Сре	rforman	се	spe	cs	(first	laye	er of	drum)
	D 11									

Line Pull	Line Speed	Motor	Pull by layer:
Lbs. (Kgs. )	Ft./min. (M/min.)	Current	layer/Lbs (Kgs.)
0	31.94 (9.57)	24 amps	1/12000 (5443)
2000 (910)	11.7 (3.57)	105 amps	2/11120 (5044)
4000 (1810)	9.5 (2.90)	129 amps	3/10340 (4690)
6000 (2720)	8.5 (2.59)	152 amps	4/9770 (4432)
8000 (3630)	7.5 (2.29)	175 amps	5/9250 (4196)
10000 (4540)	6.5 (1.98)	198 amps	
12000 (5440)	6.0 (1.83)	221 amps	



30XL

### 30XL performance specs

Drum Layer	Rated Line Pull (lbf)	(kgf)	(kN)		gpm speed (m/min)		O gpm speed (m/min)
1	30000	13608	133.4	13	4.0	18	5.4
2	25385	11514	112.9	16	4.8	22	6.7
3	22000	9979	97.9	18	5.5	25	7.6
4	19412	8805	86.3	21	6.4	29	8.8
5	17368	7878	77.3	23	7.0	32	9.8

Drum Layer	5/8" (15.9mm) Standard Drum Capacity (ft.)	(m)	5/8" (15.9mm) Long Drum Capacity (ft.)	(m)
1	21	6.2	36	10.9
2	45	13.6	78	23.9
3	73	22.2	127	38.8
4	104	31.8	183	55.7
5	140	42.6	245	74.6