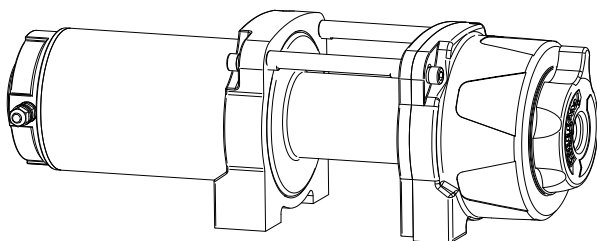




ELECTRIC WINCH

Model RP2000/RP3500/RP5000/RES4000 series



IATF16949 : 2016



ISO 9001:2015

**TO PREVENT SERIOUS INJURY,
READ AND UNDERSTAND ALL WARNINGS
AND INSTRUCTIONS BEFORE USE.**

Due to continuing improvements,
actual product may differ slightly from the product described herein.

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SAFETY WARNING & PRECAUTIONS

Read the entire technical and safety information in this manual before set up or use of this winch. Observe safety precautions for personal safety and the safety of others. The instructions that follow are basic guidelines only and can not cover all situations encountered during use. The operator and assistants must carefully plan usage to prevent accidents.

1. Do not operate winch under influence of drugs or alcohol.
2. Read manual before using this winch.
3. Always use heavy gloves when handling wire rope.
4. Never hook the cable back upon itself. The cable can break under tension and cause injury and damage.
5. Stay clear of wire rope and keep others away when in operation or with load on wire.
6. Inspect winch and wire rope before each use. Do not use winch if wire rope or winch shows wear or damage.
7. Replace any parts as needed before using the winch.
8. Do not exceed the winch capacity.
9. Do not use the winch as a hoist or to move people.
10. Do not use winch to secure a load or tow vehicles.
11. This winch is designed for intermittent use only.
12. Look to see where the frill bit will come through before drilling holes for installation.
13. Never drill into the gas tank or electrical wiring.
14. Place towel or sandbag over wire while winch is in use. Fig.1
15. Keep hands clear of wire rope, hook and fairlead opening during operation. Fig.2
Always use handsaving belt to hold hook when spooling. Fig.3

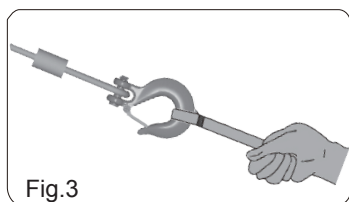


Fig.3

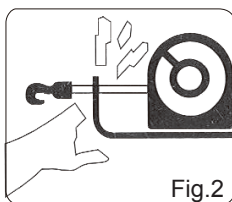


Fig.2

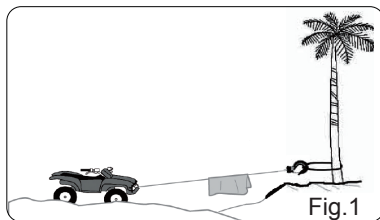


Fig.1

INSTALLATION INSTRUCTIONS

When installing a winch, your installation may vary from the manual diagrams and instructions included here due to vehicle and mounting operation in the structure. Always disconnect the battery from the vehicle to remove the electric hazard.

CAUTION:

If you choose not to use an ATV mounting kit, You may be required to drill holes in a structural support on the ATV. Be sure the location will be strong enough to support the rated pulling force of the winch. Do not drill into wiring or gas tank! If the mounting bolts needed are different in length from that supplied, use a bolt of equal or better quality to that supplied by the manufacturer. Tight the mounting bolts to required torque.

1. Install the mounting kits or prepare a flat and secure location on the vehicle for the winch.
2. Position the winch over the mount and check for operation of the clutch lever to frame clearance.
Check for tire to winch clearance. If ok, continue on to the next step.
3. Secure the winch to the mounting bracket or surface chosen with the correct hardware.

NOTE: Make sure the winch mounting bolts and winch hardware have been checked for proper torque.

INSTALLATION INSTRUCTIONS-WIRING

1. For RP2000 & REW2000



1) Option 1- solenoid and wireless remote control (see Fig.4)

- 1). Plan a route for the wiring from the point of the vehicle where the winch will be mounted, or used, to the battery. This route must be secure, out of the way of moving parts, road debris, or any possibility of being damaged by operation or maintenance of the vehicle. For example, you may wish to route the wires under the vehicle, attaching it to the frame using suitable fasteners. Do not attach the wires to the exhaust system, drive shaft, emergency brake cable, fuel line, or any other components which may create damage the wiring through heat or motion, or create a fire hazard.
- 2). If you drill through the bumper or any part of the body to route the wires, be sure to install a rubber grommet in the hole to prevent fraying of the wires at that point.
- 3). Route the Cables from the Solenoid to the battery and from the Solenoid to the Winch, following the precautions discussed earlier.
- 4). Attach the wires from the Solenoid to the terminals on the Winch.
- 5). Attache the Circuit Breaker (supplied to special order) to the positive terminal on the battery.
- 6). Attach the red Battery Cable to the Circuit Breaker.
- 7). Attach the black Battery Cable directly to the negative terminal of the battery.

2) Option 2- switch control (see Fig.5)

- 1). Connect 2 short cables to motor terminals. Red cable to motor terminal marked in red. Black cable to motor terminal marked in black.
- 2). Connect 2 long cables to 2 battery terminals. Red cable to battery positive terminal. Black cable to battery negative terminal.

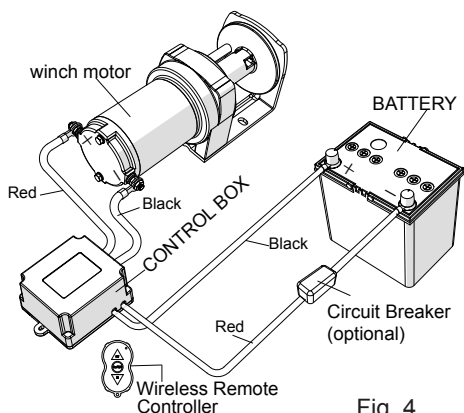


Fig. 4

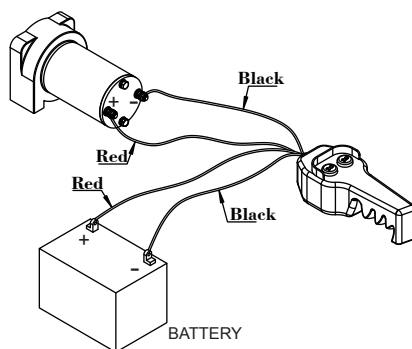


Fig.5

CLUTCH OPERATION

CAUTION: Do not adjust the clutch unless there is no load on the wire rope.

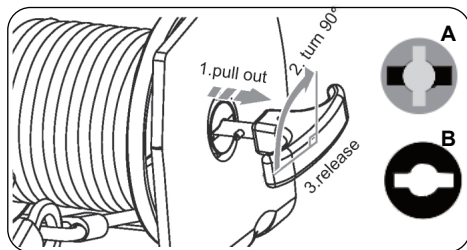


Fig.8

For model RP2000,REW2000(Fig.8)

A. Disengage the clutch to free spool position

1. Pull out the knob.
2. Turn the knob 90° clockwise.
3. Release the knob.

B. Engage the clutch

1. Pull and hold the knob.
2. Turn the knob 90° counter-clockwise.
3. Release the knob and let it sit in the groove

**For model RP3500, RP5000,
RES4000**

1.To engage the clutch,
turn Clutch Knob clockwise
completely until it stops. Fig.9

**2.To release the clutch
(freespool),**
turn Clutch Knob counterclockwise
completely until it stops. Fig.10

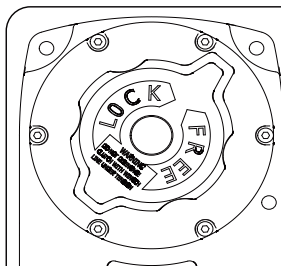


Fig.9

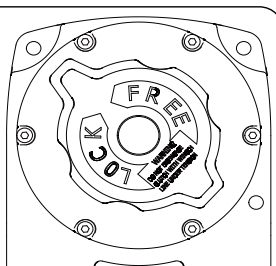


Fig.10

WINCH OPERATION

NOTE:

If a winch is to be used to pull a vehicle, it should optimally be rated to a single line pull at least twice the vehicle's weight.

1. Check the wire rope. Do not use damaged rope.
2. Check the the electrical connections to make sure all are tight and clean.
3. Put the vehicle transmission in NEUTRAL.
4. Keep the vehicle battery running.
5. Disengage the clutch to free spool position.
Refer to CLUTCH operation above.
6. Grab the hook with the hand-saving strap and pull the cable to the desired length.
Hook onto the object using a pulling point, tow strap, tree protection strap, or chain.

Fig.11

WARNING:

Always leave at least 5 full turns of the cable on the drum.

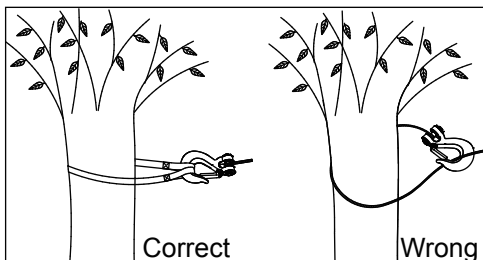


Fig.11

WINCH OPERATION-continue

7. Reengage the clutch by turning the Clutch Knob till it sits to the ENGAGE position.
8. Place a heavy rag or carpet(not included) over the wire rope span,1.8 m from the hook to help absorb the force released if the wire rope breaks.

WARNING:

Do not allow anyone to stand near the wire rope, or in line with the wire rope behind the winch while it is under power. If the wire rope should slip or break, it can suddenly whip back towards the winch, causing a hazard for anyone in the area. Stand well aside while winching.

9. Operate the control briefly to ensure they work properly and in right direction. If operation is reversed, the power cables may be connected backwards. Make correction before use.
10. While standing aside of the tow path, press(and hold) the push button on the remote control to pull the load. If the load does not move, stop pulling and check for obstacles blocking the load or check to see if the load is too heavy for winch capacity. Do not power the hook all the way into the fairlead to prevent damage.
11. Do not operate the winch at extreme angle.

Fig.12

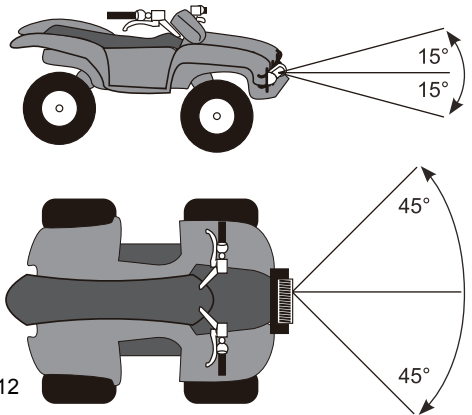


Fig.12

CAUTION:

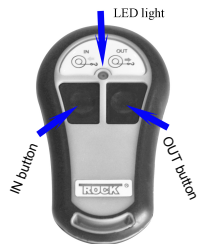
The winch is designed for intermittent use only, and should not be in a constant duty application. The duration of the pulling job should be kept as short as possible. If the winch motor becomes very hot to touch, stop the winch and let it cool down for several minutes. Never pull for more than one minute at or near the rated load. Do not maintain power to the winch if the motor stalls as it can damage the motor or gears.

12. When pulling is complete, secure the load so it cannot move in either direction. Reverse the direction of the winch to release the tension on the rope so that the hook can be unfastened from the load.

WIRELESS REMOTE CONTROL OPERATION

1. Follow the winch wiring and operation instruction on pages in front.
2. Activate the Remote: Press and hold both IN and OUT buttons on the Remote Controller simultaneously for 3 seconds till the red LED on the Remote lights up and stays on.
3. Press "OUT" or "IN" button on the Remote Controller. Watch the steel cable (or wire rope) feeding out or retracting in accordingly.
4. If the steel cable (or wire rope) movement does not match "OUT" or "IN" action on Remote Control, check and correct winch wiring. Make test again after correction.
5. If Wireless Remote Control operates the winch correctly, the winch is ready for use.
6. Deactivate Wireless Remote Control by pressing and holding both IN and OUT button for 3 seconds simultaneously till the red LED in Remote Controller turns off.

NOTE: Remote Controller can automatically turn off in 2 minutes standby to save battery.



MAINTENANCE & SERVICE

WARNING:

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Disconnect the Battery Cables before performing any inspection, maintenance, or cleaning procedures.

LUBRICATION:

1. All moving parts within the winch have been lubricate using high temperature lithium grease at the factory. No internal lubrication is required.
2. Lubricate wire rope periodically using a light penetrating oil.

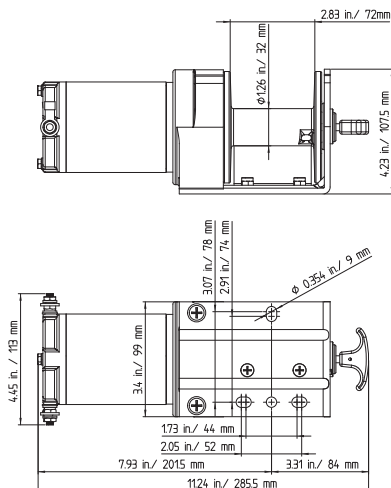
CABLE ASSEMBLY REPLACEMENT (to be performed only by a qualified service tech):

1. Move Clutch Knob to the OUT position.
2. Extend Cable Assembly to its full length. Note how the existing Wire Rope is connected to the inside of the drum.
3. Remove old Cable Assembly and attach new one.
4. Retract Cable onto Drum being carefull not to allow kinking.
5. Test the Winch for proper operation.

TROUBLE SHOOTING

SYMPTOM	POSSIBLE CAUSE	SUGGESTED REMEDY
Motor does not turn on	*Switch Assy not connected properly	*Insert Switch Assy firmly to the connector
	*Loose battery cable connection	*Tighten nuts on cable connectors
	*Solenoid malfunctioning	*Tap Solenoid to free contact, applying 12V (for 12V motor) or 24V(for 24V motor) to coil terminal directly. Solenoid will make an audible clicking when activating.
	*Defective Switch Assy	
	*Defective Motor	*Check for voltage at amature port with switch pressed. If voltage is present, replace motor.
	*Water has entered motor	*Drain and dry. Run in short bursts without load until completely dry.
Motor runs too hot	*Long period of operation	*Let winch cool down periodically.
Motor runs slowly or without normal power	*Battery runs down	*Recharge battery by running vehicle engine.
	*Insufficient current or voltage	*Clean, tighten or replace the connector.
Motor runs but cabledrum does not turn	*Clutch not engaged	*Push clutch Handle(13) into IN position. If that does not work, ask a qualified technician to check and repair.
Motor runs in one direction only	*Defective or stuck Solenoid	*Tap solenoid to free contacts. Repair or replace solenoid.
	*Defective Switch Assy	*Replace Switch Assy.

SPECIFICATIONS-RP2000 & REW2000(stainless steel)



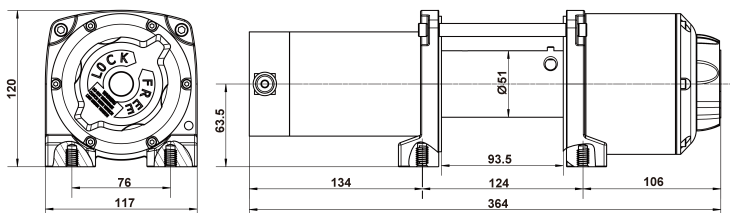
Model	RP2000	REW2000
Rated line pull	2000lbs(907kgs) single line	
Motor(permanent magnet)	12V DC input power:1.9Hp(1.4Kw)	
Gear Ratio	153:1	
Gear train	Single-stage planetary	
Brake	Automatic load-holding brake	
Power in and power out	Yes	
Free Spooling	Yes	
Drum	Ø1.26"x2.8" (Ø32mmx72mm)	
Drum material	Aluminum	Stainless steel
Rope material	Steel cable	Stainless steel cable
Rope dia. & length	Ø5/32"x50'(Ø4mmx15m)	
Hook(with safety latch)	3/16"	3/16" stainless steel
IP rating	IP65, winch and controls(resistant to water jets)	
N.W.(kgs)	6.8	6.9

Performance (1st layer of the drum)

Line pull		Line speed		Amp Draw
Lbs	kgs	Ft/min	m/min	
0	0	14.0	4.3	14
1000	454	9.0	2.7	60
1500	680	7.5	2.3	90
2000	908	5.9	1.8	115

Line pull by layer			Cable Capacity	
Layer	lbs	kgs	ft	m
1	2000	908	6	1.8
2	1636	740	13	4.0
3	1385	625	22	6.7
4	1200	540	33	10.0
5	1059	480	44	13.4
6	947	426	50	15.2

SPECIFICATIONS-RP3500

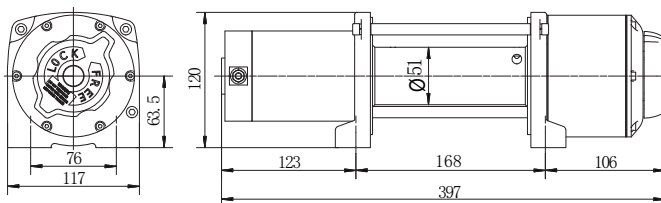


Model	RP3500	
	E16P03	E16P04
Rated line pull	3500 lbs (1589kgs)single line	
Motor(permanent magnet)	12V DC input power: 3.1Hp(2.3kw)	
Gear Ratio	136:1	
Gear train	3-stage planetary	
Brake	Automatic load-holding brake	
Power in and power out	Yes	
Free Spooling	Yes	
Drum	Ø2.01"x3.64"(50mmx92.5mm)	
Rope material	Steel cable	Synthetic rope
Rope dia. & length	Ø7/32"x42'(Ø5.56mmx12.8m)	
Hook(with safety latch)	1/4"	
Fairlead	Roller fairlead	Aluminum hawse fairlead
Winch dimension	14.3"x4.61x4.72"(363mmx117mmx120mm)	
Mounting bolt pattern	3"x4.88"(76.2mmx124mm)	
IP rating	IP66 (Winch and Controls except remote switch,resistant to powerful water jets)	
N.W.(kgs)	11.3	9.9

Performance data (1st layer of the drum)

Line pull		Line speed		Amp draw	Line pull by layer			Cable Capacity	
Lbs	kgs	Ft/min	m/min		Layer	lbs	kgs	ft	m
0	0	23	7.0	35	1	3500	1589	10.2	3.1
1000	454	19.7	6.0	87	2	2988	1357	22.1	6.7
2000	908	15	4.6	140	3	2606	1183	35.7	10.8
3500	1589	7.5	2.3	200	4	2311	1049	50	15.2

SPECIFICATIONS-RP5000



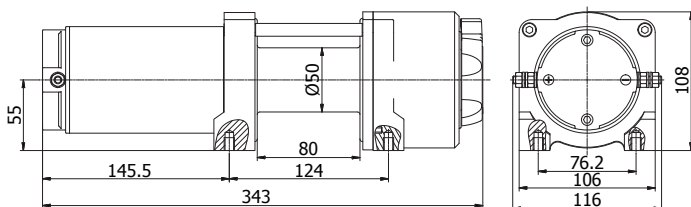
Model	RP5000	
	E16P05	E16P06
Rated line pull	5000lbs(2268kgs) single line	
Motor(permanent magnet)	12V DC input power: 3.8Hp(2.8kw)	
Gear Ratio	165:1	
Gear train	3-stage planetary	
Brake	Automatic load-holding brake	
Power in and power out	Yes	
Free Spooling	Yes	
Drum	Ø2.01"x5.4"(50mmx137.5mm)	
Rope material	Steel cable	Synthetic rope
Rope dia. & length	Ø1/4"x50'(Ø6.3mmx15m)	
Hook(with safety latch)	1/4"	
Fairlead	Roller fairlead	Aluminum hawse fairlead
Winch dimension	15.62"x4.61"x4.72"(397mmx117mmx120mm))	
Mounting bolt pattern	3"x6.61"(76mmx168mm)	
IP rating	IP66 (Winch and Controls except remote switch,resistant to powerful water jets)	
N.W.(kgs)	15.3	13.19

Performance data (1st layer of the drum)

Line pull		Line speed		Amp draw
Lbs	kgs	Ft/min	m/min	
0	0	20.7	6.3	34
2000	908	15.1	4.6	135
3000	1360	11.5	4.0	155
4000	1810	10.5	3.2	190
5000	2270	9.2	2.8	230

Line pull by layer			Cable Capacity	
Layer	lbs	kgs	ft	m
1	5000	2270	11.5	3.5
2	4080	1852	25.4	7.7
3	3446	1565	42	12.8
4	2983	1354	50	15.2

SPECIFICATIONS-RES4000

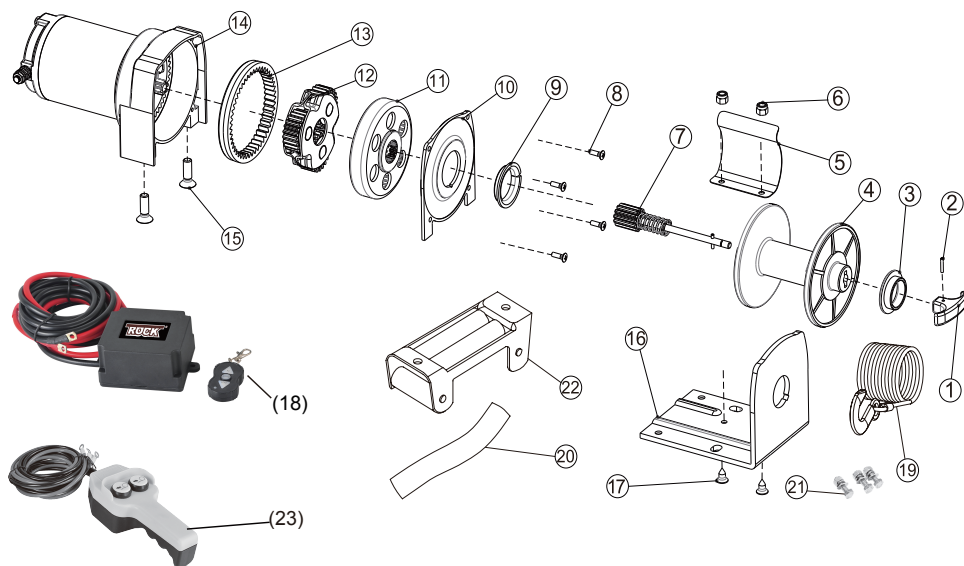


Model	RES4000	
	E16B02	E16B03
Rated line pull	4000 lbs (1815kgs)single line	
Motor(permanent magnet)	12V DC input power:4.6Hp(3.4Kw)	
Gear Ratio	242:1	
Gear train	2-stage planetary	
Brake	Automatic load-holding brake	
Power in and power out	Yes	
Free Spooling	Yes	
Drum	Ø2.01"x3.15"(50mmx80mm)	
Rope material	Steel cable	Synthetic rope
Rope dia. & length	Ø7/32"x42' (Ø5.56mmx13m)	
Hook(with safety latch)	1/4"	
Fairlead	Roller fairlead	Aluminum hawse fairlead
Winch dimension	13.5"x4.6"x4.5"(344x116x114mm)	
Mounting bolt pattern	1.89"x3" (48x76mm)	
IP rating	IP67	
N.W.(kgs)	13.5	11.7

Performance data (1st layer of the drum)

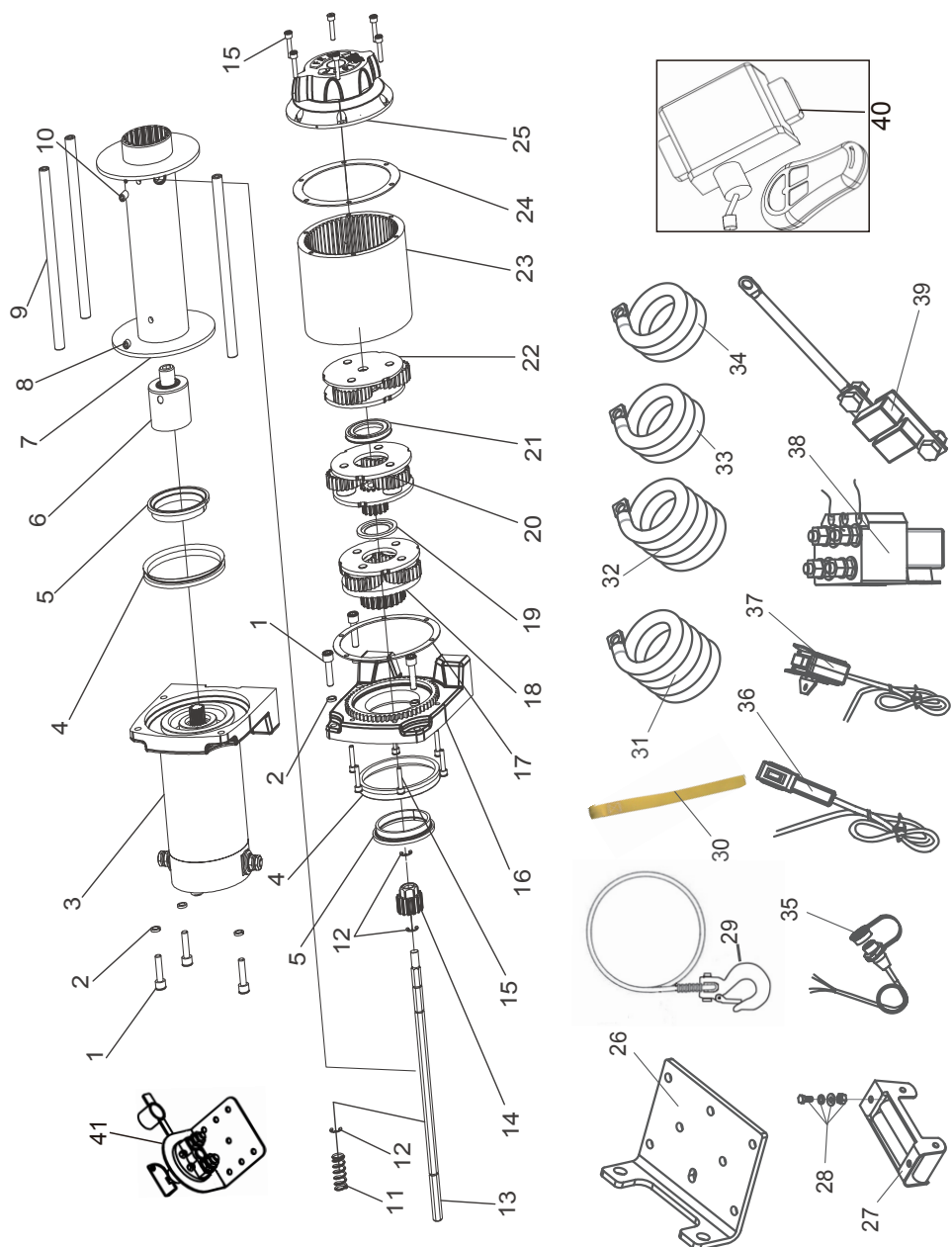
Line pull		Line speed		Amp draw	Line pull by layer			Cable Capacity	
Lbs	kgs	Ft/min	m/min		Layer	lbs	kgs	ft	m
0	0	18.0	5.5	22	1	4000	1816	8.2	2.8
1000	454	14.8	4.5	82	2	3264	1482	20.3	6.2
2000	908	12.5	3.6	145	3	2725	1252	33.1	10.1
3000	1360	10.8	3.3	225	4	2386	1083	47.6	14.5
4000	1816	10.2	3.1	280	5	2104	955	50	15.2

WINCH ASSEMBLY DRAWING & PARTS LIST-RP2000,REW2000



Part	Description	Qty	Part	Description	Qty
1	Clutch Knob	1	14	Motor Assembly	1
2	Roll Pin	1	15	Bolt	2
3	Drum Support	1	16	Mounting Bracket	1
4	Drum Support	1	17	Screw	2
5	Tension Plate	1	18	Control Box(option 1) Isarid MP wireless receiver	1
6	Lock Nut M5	2	19	Cable Assembly with hook 5/32"x50'	1
7	Pinion Shaft	1	20	Hook Strap	1
8	Cross-head Screw	4	21	Bolt, Nut, Washer, Spring Washer M5	3
9	Bushing	1	22	Roller Fairlead(optional)	1
10	Gearbox Cover	1	23	Switch(option 2)	1
11	Gear Carrier	1			
12	Planetary Gear	1			
13	Ring Gear	1			

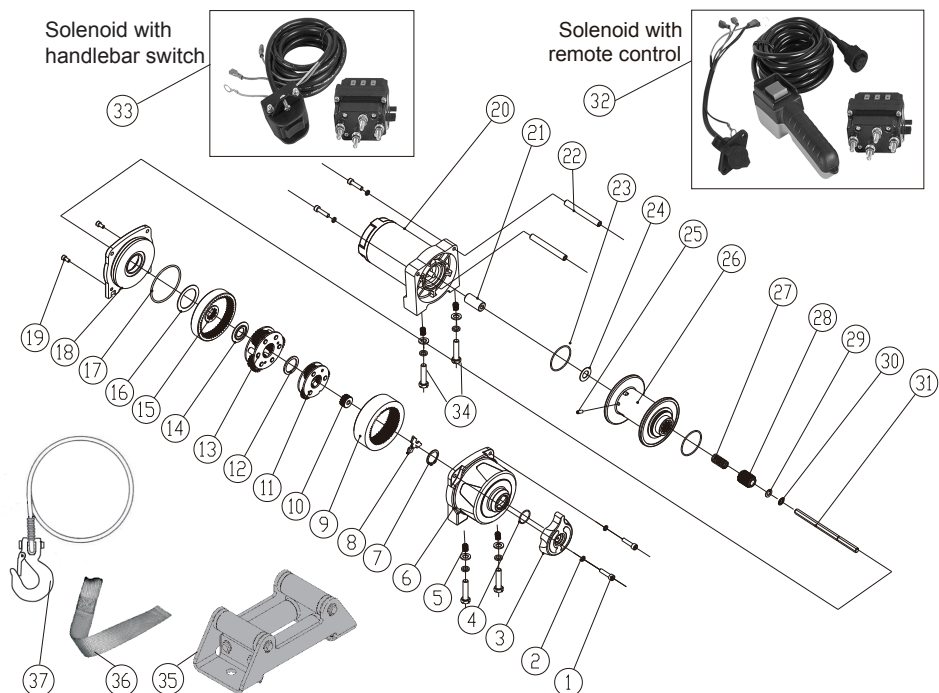
WINCH ASSEMBLY DRAWING -RP3500,RP5000



WINCH PARTS LIST-RP3500,RP5000

Part	Description	Qty	Part	Description	Qty
1	Screw M6x25	6	21	Washer	1
2	Spring Washer	6	22	Gear Carrier Assembly-input	1
3	Motor	1	23	Gear Housing	1
4	Seal	2	24	Washer	1
5	Bushing	2	25	Gear Housing Cover Assembly	1
6	Brake Assembly	1	26	Mounting Plate	1
7	Drum	1	27	Fairlead	1
8	Screw M6x8	1	28	Mounting hardware for fairlead	2
9	Tie Bar	3	29	Hook Assembly with hook	1
10	Screw M8x10	1	30	Hook Strap	1
11	Spring Washer	1	31	Electric Wire (red)	1
12	Circlip	3	32	Electric Wire (black)	1
13	Drive Shaft	1	33	Electric Wire (blue)	1
14	Sun Gear-intermediate	1	34	Electric Wire (yellow)	1
15	Screw M4x12	12	35	Socket Lead	1
16	End Bearing	1	36	Pendant Controller	1
17	Washer	1	37	Switch Controller (optioanal)	1
18	Gear Carrier Assembly-output	1	38	Solenoid	1
19	Washer	1	39	Circuit Breaker	1
20	Gear Carries Assembly-intermediate	1	40	Wireless Remote Control (optional)	1
			41	Master Switch(optional)	1

WINCH ASSEMBLY DRAWING & PARTS LIST-RES4000



Item	Description	Qty
1	Screw	4
2	Spring Washer	4
3	Clutch Knob	1
4	O-ring	1
5	Coil	4
6	Gear Box	1
7	Spring Retainer	1
8	Clutch Driven Disc	1
9	Dual Gear Ring	1
10	Gear-sun- input	1
11	Gear Carrier-input	1
12	Washer	1
13	Gear Carrier-Output	1
14	Nylon Retaining Ring	1
15	Gear Disc-output	1
16	Washer	1
17	O-ring	1
18	Cover-gearbox	1
19	Screw	2
20	Motor End	1

Item	Description	Qty
21	Connector	1
22	Tie Bar	2
23	O-ring	2
24	Spacer	1
25	Screw	1
26	Drum	1
27	Spring-clutch	1
28	Clutch Gear	1
29	Washer	1
30	Retaining Ring	1
31	Driven axle	1
32	Solenoid with Remote Control (Optional)	1
33	Solenoid with Handle bar switch (Optional)	1
34	Bolts +Washer +Spring Washer	4
35	Roller Fairlead	1
36	Hand-saving Strap	1
37	Cable with Hook	1