Electric Winch

12V/24V series wound DC motor

Assembly & Operation Instructions

(4 X 4)

9500LBS——16800LBS

9500LB, WINCH SPECIFICATIONS

Rated Line Pull	9500LBS (4309kgs) single line
Motor	4.4kw/6hp, series wound
Control	Remote switch, 9.8ft(3m)lead
Gear train	3 Stage Planetary
Gear train ratio	265:1
Clutch	Sliding Ring Gear
Braking Action	Automatic In-The-Drum
Drum Size	Φ2.5"(64)mm×(8.8")223.5mm
Cable	Φ8.3mmX26m
Overall Dimensions	19.8"x6.3"x8.5"(529mm×160mm×217mm)
Mounting Bolt Pattern	255mm×114mm Φ11
Weight	N.W.37kg G.W.38Kg
Packing Size	610×350×270mm

PULL, SPEED, AMPERES, VOLTS

Line pull lbs(kgs)	Line speed ft/min(m/min)	Current A
0	24.9(7.6)	70
1500(680)	17.1(5.2)	160
3500(1588)	11.5(3.5)	220
5500(2495)	9.2(2.8)	260
7500(3402)	7.9(2.4)	310
9500(4309)	6.2(1.9)	380

LINE PULL AND ROPE CAPACITY IN LAYER

Layer	Rated Line Pull lbs(kgs)	Total Rope on Drum ft(m)
1	9500(4309)	13(5)
2	8560(3883)	23(11)
3	7009(3179)	69(21)
4	5933(2691)	92(28)

10000LB, WINCH SPECIFICATIONS

Rated Line Pull	10000LBS (4536kgs) single line
Motor	4.6kw/6.2hp, series wound
Control	Remote switch, 9.8ft(3m)lead
Gear train	3 Stage Planetary
Gear train ratio	265:1
Clutch	Sliding Ring Gear
Braking Action	Automatic In-The-Drum
Drum Size	Φ2.5"(64)mm×(8.8")223.5mm
Cable	Φ9.1mmX26m
Overall Dimensions	19.8"x6.3"x8.5"(527mm×160mm×217mm)
Mounting Bolt Pattern	255mm×114mm Φ11
Weight	N.W.37kg G.W.38Kg
Packing Size	610×350×270mm

PULL, SPEED, AMPERES, VOLTS

Line pull lbs(kgs)	Line speed ft/min(m/min)	Current A
0	24.9(7.6)	80
2000(907)	16.1(4.9)	180
4000(1814)	10.8(3.3)	240
6000(2722)	8.5(2.6)	280
8000(3629)	7.2(2.2)	330
10000(4536)	5.9(1.8)	390

LINE PILL AND ROPE CAPACITY IN LAYER

Layer	Rated Line Pull lbs(kgs)	Total Rope on Drum ft(m)
1	10000(4536)	13(5)
2	9010(4087)	23(11)
3	7377(3346)	69(21)
4	6245(2833)	92(28)

12000LB, WINCH SPECIFICATIONS

Rated Line Pull	12000LBS (5443kgs) single line
Motor	4.8kw/6.5hp, series wound
Control	Remote switch, 9.8ft(3m)lead
Gear train	3 Stage Planetary
Gear train ratio	265:1
Clutch	Sliding Ring Gear
Braking Action	Automatic In-The-Drum
Drum Size	Φ2.5"(64)mm×(8.8")223.5mm
Cable	Φ9.1mmX26m
Overall Dimensions	19.8"x6.3"x8.5"(527mm×160mm×217mm)
Mounting Bolt Pattern	255mm×114mm Φ11
Weight	N.W.37kg G.W.38Kg
Packing Size	610×350×270mm

PULL, SPEED, AMPERES, VOLTS

Line pull lbs(kgs)	Line speed ft/min(m/min)	Current A
0	24.9(7.6)	80
2000(907)	16.1(4.9)	180
4000(1814)	10.8(3.3)	240
6000(2722)	8.5(2.6)	280
8000(3628)	7.2(2.2)	330
10000(4536)	5.9(1.8)	380
12000(5443)	5.2(1.6)	400

LINE PILL AND ROPE CAPACITY IN LAYER

Layer	Rated Line Pull lbs(kgs)	Total Rope on Drum ft(m)
1	12000(5443)	13(5)
2	10200(4627)	23(11)
3	8400(3810)	69(21)
4	7300(3311)	92(28)

12500LB, WINCH SPECIFICATIONS

Rated Line Pull	12500LBS (5670kgs) single line
Motor	4.81kw/6.5hp, series wound
Control	Remote switch, 9.8ft(3m)lead
Gear train	3 Stage Planetary
Gear train ratio	265:1
Clutch	Sliding Ring Gear
Braking Action	Automatic In-The-Drum
Drum Size	Φ2.5"(64)mm×(8.8")223.5mm
Cable	Φ9.1mmX26m
Overall Dimensions	19.8"x6.3"x8.5"(527mm×160mm×217mm)
Mounting Bolt Pattern	255mm×114mm Φ11
Weight	N.W.37kg G.W.38Kg
Packing Size	610×350×270mm

PULL, SPEED, AMPERES, VOLTS

Line pull lbs(kgs)	Line speed ft/min(m/min)	Current A
0	24.9(7.6)	80
2000(907)	16.1(4.9)	180
4000(1814)	10.8(3.3)	240
6000(2722)	8.5(2.6)	280
8000(3628)	7.2(2.2)	330
10000(4536)	5.9(1.8)	380
12500(5670)	5.2(1.6)	400

LINE PILL AND ROPE CAPACITY IN LAYER

Layer	Rated Line Pull lbs(kgs)	Total Rope on Drum ft(m)
1	12500(5670)	13(5)
2	10200(4627)	23(11)
3	8750(39690)	69(21)
4	7310(3316)	92(28)

13000LB, WINCH SPECIFICATIONS

Rated Line Pull	13000LBS (5897kgs) single line
Motor	5.0kw/6.8hp, series wound
Control	Remote switch, 9.8ft(3m)lead
Gear train	3 Stage Planetary
Gear train ratio	265:1
Clutch	Sliding Ring Gear
Braking Action	Automatic In-The-Drum
Drum Size	Φ2.5"(64)mm×(8.8")223.5mm
Cable	Φ9.5mmX26m
Overall Dimensions	19.8"x6.3"x8.5"(527mm×160mm×217mm)
Mounting Bolt Pattern	255mm×114mm Φ11
Weight	N.W.38kg G.W.39Kg
Packing Size	610×350×270mm

PULL, SPEED, AMPERES, VOLTS

Line pull lbs(kgs)	Line speed ft/min(m/min)	Current A
0	24.9(7.6)	80
1500(680)	17.2(5.2)	170
3000(1814)	11.8(3.6)	230
5500(2495)	9.2(2.8)	275
8000(3629)	7.2(2.2)	330
10500(4763)	5.7(1.7)	385
13000(5897)	5.2(1.6)	405

LINE PILL AND ROPE CAPACITY IN LAYER

Layer	Rated Line Pull lbs(kgs)	Total Rope on Drum ft(m)
1	13000(5897)	13(5)
2	10300(4672)	23(11)
3	8840(4009)	69(21)
4	7410(3361)	92(28)

13500LB, WINCH SPECIFICATIONS

Rated Line Pull	13500LBS (6123kgs) single line
Motor	5.1kw/6.8hp, series wound
Control	Remote switch, 9.8ft(3m)lead
Gear train	3 Stage Planetary
Gear train ratio	265:1
Clutch	Sliding Ring Gear
Braking Action	Automatic In-The-Drum
Drum Size	Φ2.5"(64)mm×(8.8")223.5mm
Cable	Φ9.5mmX26m
Overall Dimensions	19.8"x6.3"x8.5"(527mm×160mm×217mm)
Mounting Bolt Pattern	255mm×114mm Φ11
Weight	N.W.38kg G.W.39Kg
Packing Size	610×350×270mm

PULL, SPEED, AMPERES, VOLTS

Line pull lbs(kgs)	Line speed ft/min(m/min)	Current A
0	24.9(7.6)	80
1500(680)	17.2(5.2)	170
3000(1814)	11.8(3.6)	230
5500(2495)	9.2(2.8)	275
8000(3629)	7.2(2.2)	330
10500(4763)	5.7(1.7)	385
13500(6123)	5.2(1.6)	405

LINE PILL AND ROPE CAPACITY IN LAYER

Layer	Rated Line Pull lbs(kgs)	Total Rope on Drum ft(m)
1	13500(6123)	13(5)
2	11226(5092)	23(11)
3	9628(4367)	69(21)
4	8391(3806)	92(28)

15000LB, WINCH SPECIFICATIONS

Rated Line Pull	15000LBS (6804kgs) single line
Motor	5.1kw/7hp, series wound
Control	Remote switch, 9.8ft(3m)lead
Gear train	3 Stage Planetary
Gear train ratio	358:1
Clutch	Sliding Ring Gear
Braking Action	Automatic In-The-Drum
Drum Size	Φ2.5"(88)mm×(8.8")221.5mm
Cable	Φ10.5mmX26m
Overall Dimensions	23.9"x4.5"x9"(606mm×190mm×254mm)
Mounting Bolt Pattern	253mm×114mm Φ12
Weight	N.W.54kg G.W.56Kg
Packing Size	655×235×410mm

PULL, SPEED, AMPERES, VOLTS

Line pull lbs(kgs)	Line speed ft/min(m/min)	Current A
0	25.6(7.8)	85
3000(1361)	12.18(3.7)	230
6000(2722)	9.2(2.8)	285
9000(4082)	6.9(2.1)	340
12000(5443)	5.6(1.7)	390
15000(6804)	4.6(1.4)	430

LINE PILL AND ROPE CAPACITY IN LAYER

Layer	Rated Line Pull lbs(kgs)	Total Rope on Drum ft(m)
1	15000(6804)	16(5)
2	13600(6169)	36(11)
3	11200(5080)	62(19)
4	9540(4327)	85(26)

16000LB, WINCH SPECIFICATIONS

Rated Line Pull	16000LBS (7257kgs) single line
Motor	5.2kw/7hp, series wound
Control	Remote switch, 9.8ft(3m)lead
Gear train	3 Stage Planetary
Gear train ratio	358:1
Clutch	Sliding Ring Gear
Braking Action	Automatic In-The-Drum
Drum Size	Φ2.5"(88)mm×(8.8")221.5mm
Cable	Φ10.5mmX26m
Overall Dimensions	23.9"x4.5"x9"(606mm×190mm×254mm)
Mounting Bolt Pattern	253mm×114mm Φ12
Weight	N.W.54kg G.W.56Kg
Packing Size	655×235×410mm

PULL, SPEED, AMPERES, VOLTS

Line pull lbs(kgs)	Line speed ft/min(m/min)	Current A
0	25.6(7.8)	85
4000(1814)	12.2(3.7)	235
7000(3175)	9.2(2.8)	290
10000(4536)	6.9(2.1)	350
13000(5897)	5.6(1.7)	395
16000(7257)	4.6(1.4)	435

LINE PILL AND ROPE CAPACITY IN LAYER

Layer	Rated Line Pull lbs(kgs)	Total Rope on Drum ft(m)
1	16000(7257)	16(5)
2	13700(6214)	36(11)
3	11500(5216)	62(19)
4	9700(4400)	85(26)

16800LB, WINCH SPECIFICATIONS

Rated Line Pull	16800LBS (7620kgs) single line
Motor	5.3kw/7.2hp, series wound
Control	Remote switch, 9.8ft(3m)lead
Gear train	3 Stage Planetary
Gear train ratio	358:1
Clutch	Sliding Ring Gear
Braking Action	Automatic In-The-Drum
Drum Size	Φ2.5"(88)mm×(8.8")221.5mm
Cable	Φ10.5mmX26m
Overall Dimensions	23.9"x4.5"x9"(606mm×190mm×254mm)
Mounting Bolt Pattern	253mm×114mm Φ12
Weight	N.W.54kg G.W.56Kg
Packing Size	655×235×410mm

PULL, SPEED, AMPERES, VOLTS

Line pull lbs(kgs)	Line speed ft/min(m/min)	Current A
0	25.6(7.8)	90
4800(2177)	12.18(3.7)	245
7800(3538)	9.2(2.8)	300
10800(4899)	6.9(2.1)	360
13800(6260)	5.6(1.7)	400
16800(7620)	4.6(1.4)	450

LINE PILL AND ROPE CAPACITY IN LAYER

Layer	Rated Line Pull lbs(kgs)	Total Rope on Drum ft(m)
1	16800(7620)	16(5)
2	14100(6396)	36(11)
3	12500(5670)	62(19)
4	9900(4491)	85(26)

PRODUCT FEATURES

1. Convenient, portable power for pulling boats, stuck vehicles and other heavy item.

2. Powerful 9500LBS—16800LBS pulling power.
3. 12Volt powered for convenient use without extension cords or small gas engines.
4. Portable, with built-in carrying handle and quick-attach mounting plate.

SAVE THIS MANUAL

You will need this manual for the safety warnings and cautions, assembly instructions, operating procedures, maintenance procedures, trouble shooting, parts list, and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep both this manual and your invoice in a safe, dry place for future reference.

NOTICE

The Warnings, Cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are the factor which with cannot be built into this product, but must be supplied by the operator.

SAFTY WARNING AND PRECAUTIONS

Your winch is an very powerful machine. If it is used unsafely or improperly, there is a possibility that property damage or personal injury could result.

WARNING:

The responsibility for safe installation and operation of the winch and prevention of operation of personal injury and property damage ultimately rests with you, the operator. There is no substitute for the use of good judgment and caution in operating a winch.

READ ALL INSTRUCTIONS BEFORE USING THIS TOOL!

1. OBSERVE WORK AREA CONDITIONS. Do not use machines or power tools in damp or wet locations. Do not expose to rain. Do not use electrically powered tools in the presence of flammable gases or liquids.

2. KEEP CHILDREN AWAY. Do not let them handle machines, tools or extension cords.

3. DRESS PROPERLY. Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.

4. DO NOT OPERATE TOOL IF UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.

5. KEEP HANDS AND BODY FROM FAIRLEAD WHEN OPERATES.

6. DO NOT LIFT ITEMS VERTICALLY. The winch is designed for horizontal use only.

7. NEVER WINCH LESS THAN 5 TURNS OF WIRE ROPE AROUND THE WINCH DRUM. The wire rope end fastener may not withstand full load.

8. DO MOVE VEHICLE WITH CABLE EXTENDED AND ATTACHED TO LOAD TO PULL IT. The cable could snap.

9. USE GLOVES WHILE HANDING CABLE. Do not let wire rope slide through your hand.

10. DO NOT OVERLOAD. For load over 1/2 rated capacity, we recommend the use of the optional pulley block to double line the wire rope.

11. THE VEHICLE ENGINE SHOULD BE RUNNING DURING IN WINCH OPERATION. If considerable winching is performed with the engine off, the battery may be too weak to restart the engine.

12. USE A NYLON SLING. Never hook the wire rope back onto itself because you could damage the wire rope.

13. NEVER USE YOUR WINCH FOR LIFTING OR MOVING PEOPLE.

14. AVOID CONTINUOUS PULLING FROM EXTREME ANGLES. This will cause the wire rope to pile up on the end of the drum.

15. NEVER RELEASE FREES POOL CLUTH WHEN THERE IS A LOAD IN THE WINCH.

16. DISCONNECT POWER. Always disconnect winch power leads to battery before working in or around the winch drum so that the winch cannot be turned on accidentally.

17. When moving a load, slowly take up the wire rope slack until is become taut. Stop, recheck all winching connections. Be sure the hook is properly seated. If a nylon sling is used, check the attachment to the load.

18. When using your winch to move a load, place the vehicle brake, and chock all wheels.

19. DO NOT USE THE WINCH TO HOLD LOAD IN PLACE. Use other means of securing loads such as tie down straps.

20. DO NOT MACHINE OR WELD ANY PART OF THE WINCH. Such alterations may weaken the structural integrity of the winch and could void your warranty.

21. USE STIPULATES CURRENT. Do not connect winch to either 110v ac house current or 220v mains as winch burnout or fatal shock may occur.

22. KEEP STEADY. Never allow shock loads to be applied to winch or wire rope.

SPECIAL WARNINGS WHEN USING THIS ELECTRIC WINCH

The Cable

Be sure the cable is in good condition, and is attached properly.
Do not use the winch if the cable is frayed.
Do not replace the cable with a cable of lesser strength.

The Battery

Be sure the battery is in good condition. Avoid contacting with battery acid or other contaminants.
Always wear ANSI approved eye protection when working around a battery.
Have the engine running when using the winch, to avoid ruing the battery down.

Stand Back

Stay out of the direct line that the cable is pulling. If the cable slips or breaks, it will "whiplash" along this line.
Keep hands, clothing, hair and jewelry clear of the winch while in use.
Use a spotter to assist you in assuring that it is safe to operate the winch. Make sure this person is out of the way of the vehicle and the cable before activating the winch.

Power Limits

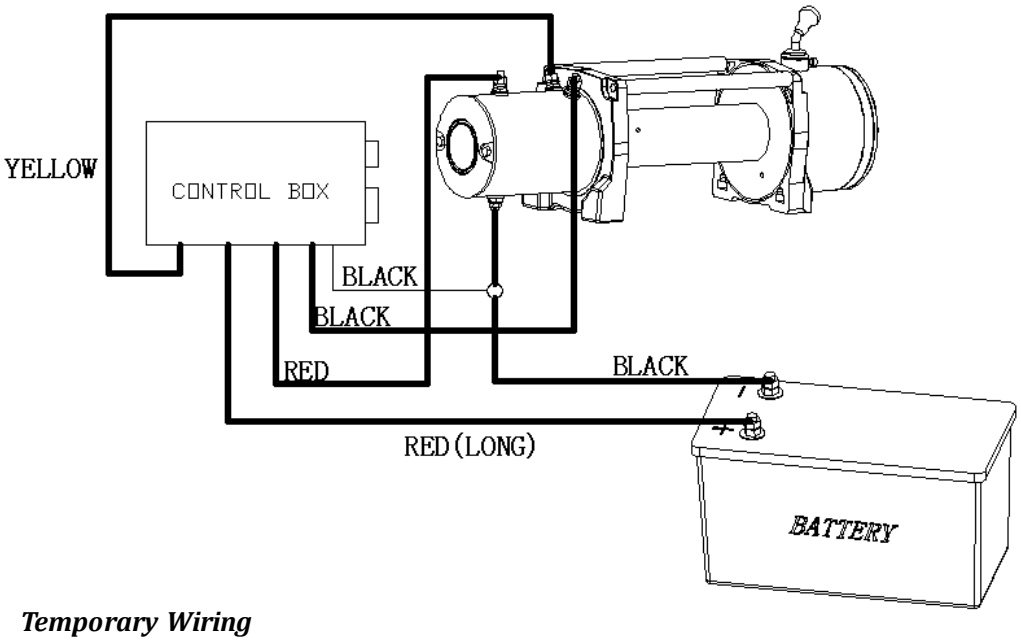
Do not attempt to exceed the pulling limits of this winch.
Never use the hand crank to "assist" the winch. This will damage the winch and may cause personal injury.

INSTALLATION

Wiring your Electric Winch

Your Winch may be used with temporary wiring or permanent wiring

9500LBS—16800LBS Wiring diagram



Temporary Wiring

1. Lift the rubber seal, and plug the POWER CABLE into the PLUG on the right side of the winch body. This plug is labeled "power". Route the Power Cable from the winch to your battery, being careful to avoid tangling it in moving equipment, or causing a tripping hazard.
2. Connect the Black Clamp Handle of the POWER CABLE to the frame of your vehicle, establishing a ground connection. Connect the Red Clamp Handle to the Positive (+/Red) terminal of your battery. ***Note: Be sure you are using a 12V automotive battery or equivalent, in good condition.***
3. Lift the rubber seal on the left side of winch body. Taking the Remote Control Unit, insert the Socket at the end of the cord into the PLUG on the left side of the winch body labeled "Remote Control".
4. Set the remote control aside in a safe place until ready for use.

Permanent wiring

1. Attach the **OVER-CURRENT PROTECTOR** to the Positive (+/Red) terminal of your battery, using the battery terminal clamp bolt.
2. 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 winch may create damage to the wiring through heat or motion, or create a fire hazard.
3. 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.
4. Route the **POWER CABLE** from the point the winch will be used to the battery. Following the precautions discussed above.
5. Remove the Red Clamp handle, and attach the red wire to the **OVER-CURRENT PROTECTOR** which is mounted onto the Positive (+/Red) terminal of your battery.
6. Remove the Black Clamp handle, and attach the black wire to the frame of your vehicle, creating a secure electrical ground.

WARNING

1. Always connect Red to Red (Positive to Positive) and Black to the vehicle's frame, making a ground connection, when using battery power from your vehicle.
2. Never continue use of your winch or other accessory until the battery is completely run down. This can permanently damage your battery!
3. You may wish to keep your engine running while using this winch, to continually recharge the battery. However, exercise extreme caution when working around a running vehicle.
4. Do not use a dirty, corroded or leaking battery. You may suffer injury from and acid burns.

MOUNTING YOUR WINCH

You winch is designed to be mounted temporarily, using the Trailer Hitch Mounting Bracket.
However, you may also mount your winch permanently.

Permanent Mounting

1. Select a mounting site on the bumper of your vehicle, truck bed, boat trailer, or other suitable location. ***NOTE: This winch can generate9500lbs—16800lbs pulling force. Be sure the location you select can withstand this force. You may need to use steel reinforcement plates, or weld on additional bracing, depending on the desired mounting location.***
2. Align the winch with the desired location, and mark for drilling the locations of the 4 holes on the base of the winch.
3. Drill these locations on your vehicle.

Temporary Mounting

1. Attach the three Plate Stud Bolts to the Adapter Plate, as shown, using the supplied Nuts. Tighten securely.
2. Index the heads of the Plate Studs into the keyhole slots on the back of the winch.
3. Attach the Winch/Adapter Plate assembly to your trailer hitch, by inserting the trailer hitch ball through the shaped hole in the Adapter Plate.

USING YOUR WINCH

1. Put you vehicle in Neutral. (Never winch with your vehicle in Gear or in Park, since this could damage your vehicle's transmission.)PUT YOUR EMERGENCY BRAKE ON. BLOCK THE WHEELS FROM ROLLING , USING SUITABLE CHOCKS.FAILURE TO FOLLOW THESE INSTRUCTIONS CAN CAUSE YOUR VEHICLE TO ROLL WHILE, CREATING AN EXTREMELY DANGEROUS SITUATION!!
2. To pull out the cable, turn the CLUTCH KNOB counterclockwise to loosen it, and then pull out the cable you need. ALWAYS LEAVE AT LEAST FIVE TURNS OF CABLE ON THE SPOOL TO PREVENT PULLING THE CABLE OUT OF THE WINCH!
3. Hook onto the object using a pulling point, tow strap or chain. Never warp the cable around the object Positive and hook onto the cable itself. This can cause damage to the object being pulled, and kink or fray the cable.
4. Re-tighten the clutch knob.
5. Stand clear, and when it is safe to do so, use the power switch in the remote control to retract the cable, and winch the item as desired.

WARNING

1. Keep hands. Clothing, hair, and jewelry clear of the drum area and cable when winching.
2. Never use the winch if the cable is frayed, kinked or damaged.
3. Never allow anyone to stand near the cable or in line with the cable behind the winch while it is under power. If the cable should slip or break, it can suddenly whip back toward the winch, causing a hazard for anyone in the area. Always stand well to the side while winching.

Warning: Do not use the crank to assist an operating winch. This will damage the winch and may cause personal injury.

1. Turn the clutch knob clockwise until hand tight. Do not force it or over tighten.
2. Place the end of the hand crank over the flattened end of threaded shaft on the left side of the winch.
3. Rotate the hand crank clock clockwise to tighten the cable. Continue to turn until the cable had been completely retracted.

MAINTENANCE

1. Lubricate the cable occasionally with light oil.
2. Grease the gears every 6 months. To do this, remove the clutch knob and separate the left and right housing. Use any good quality waterproof grease.