

DISCOVERY

4WD MOTOR KIT

INSTALLATION AND SERVICE MANUAL

KIT PART #PK-000029-00

**FITS: CLUB CAR™
PRECEDENT™/ONWARD™/TEMPO™ 2004 TO PRESENT
with Curtis™ 1510/1515 Controller lifted with a 6" A-Arm Lift Kit**

- Allsport™ ASM-P6A or P6AHD
- Nivel™ Madjax™ GTW 6" A-Arm Lift Kit 18140 or 16-035,
- Nivel™ Jakes 7467
- RedHawk™ Rhox Lift-563



Before installing your SilverWolf Kit- Please ensure that all minimum requirements are met.
If you have any questions, consult your local authorized SilverWolf Dealer or contact us at
support@silverwolf.com

INTRODUCTION



Thank You for purchasing the SilverWolf Discovery 4WD Motor Kit.

It is important to Read, Understand and Follow all Instructions before installing or operating the SilverWolf Discovery 4WD Motor Kit vehicle.

The owner, and all vehicle operators MUST Read and Understand All Warnings and Instructions in this manual and in the Vehicle Owner/ Operator's Manual. The owner of this vehicle assumes all liability for accidents, injuries or damages if the warnings and instructions are not followed.

SilverWolf Vehicles Inc. assumes no responsibility for errors or omissions in this manual, in regards to liability or damages resulting from the use of information contained in the manual. If it is lost or damaged please contact your local dealer or SilverWolf Vehicles Inc.

SilverWolf reserves the right to make changes to vehicles, parts of the vehicles, accessories, labeling or instructions without obligation to make these changes on units previously sold.

Product and specifications are subject to change without notice or obligation.



ATTENTION:

Before installing the Discovery 4WD Kit record the serial numbers from each of the Main Components for future reference.

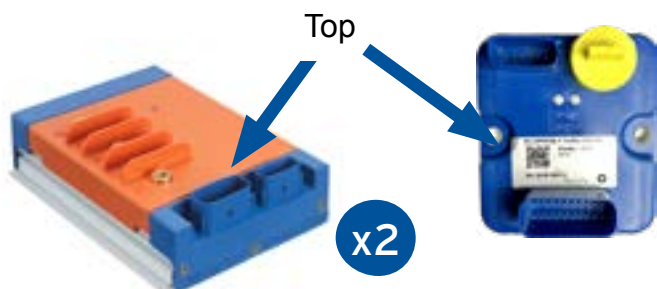
OR



Take a photo of the Barcode/Serial # Label on each Component.

PART	SERIAL #
Motor 1	
Motor 2	
Motor Controller 1	
Motor Controller 2	
GCM	

SERIAL # LOCATIONS



Back of Motor

x2



SilverWolf Smart Phone App

Included with this Kit is the SilverWolf Smart Phone App, which provides a dashboard screen with current Cart status such as speed, state of charge, and will allow the user the ability to change settings and see diagnostics from the SilverWolf Controllers and Motors.



Before starting the installation it is recommend to Download and Register the SilverWolf App, it is required to complete the setup of the Discovery 4WD system.



Get the SilverWolf App at;





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ATTENTION

Indicates a step or procedure required before proceeding to the next step or page.



CAUTION

Indicates a potentially hazardous situation which may result in minor injury or product damage.



WARNING

Indicates a Hazardous situation which if not avoided can result in serious injury / death to person(s) or damage to product and/or equipment.



TIP

Indicates a helpful Tip to make things easier and faster.



WARNING!

FAILURE TO FOLLOW THE WARNINGS IN THIS MANUAL MAY / CAN CAUSE DAMAGE TO THE VEHICLE WHICH CAN RESULT IN SERIOUS INJURY OR DEATH!

MAKE SURE TO READ and UNDERSTAND the OWNER'S INSTALLATION/ SERVICE MANUAL and ALL WARNING LABELS with this Motor Kit.

- The User or Owner assumes all risk and liability when installing the SilverWolf Components and when operating the Vehicle.
- Wear Safety Glasses and Gloves when installing this kit.
- Wear a Safety Shield when working in or near the Vehicle Battery Compartment.
- Use Insulated Tools to protect from electric shock.
- Never lay or put down tools in the Vehicle Battery Compartment.
- Do not Install the Motor Controllers where they will be submerged in water. The Motor Controllers should never be submerged; this will Void the Warranty.
- Keep Electrical Components dry and Do Not wash with direct stream or Power Washer.
- Do not operate the vehicle without the battery compartment cover properly installed.
- Never re-wire, by-pass or change the wires, switches, or controllers. Contact your dealer or the manufacturer if vehicle is not operating correctly.
- Always proceed with caution! Keep speed low and do not drive faster than the conditions permit. The terrain, conditions and operator's skill will determine a safe speed. Avoid sharp turns and do not accelerate quickly when turning, this can cause the vehicle to slide sideways or skid out of control. Abrupt maneuvers or aggressive driving can cause a rollover even on flat open areas.
- Keep 2 hands on the Steering Wheel, particularly in sharp turns. The added torque and power can add pull on the Steering Wheel.
- This Motor Kit will increase torque and traction; but Does Not increase the GVWR (Gross Vehicle Weight Rating), Cargo capacity or Towing capacity of the Vehicle. Always follow the Vehicle towing and loading specifications.
- Do not leave children or pets unattended in or near the vehicle.
- Never drive too fast! The Terrain, conditions and the operator's skill will determine a safe speed.
- Drive at a reduced speed and use extra caution when carrying passengers or cargo.
- Avoid sharp turns and do not accelerate quickly when turning.
- Always look behind you before and while backing up.
- Reduce speed when towing and allow more room for stopping and turning.
- Drive with wheels straight when going up and down hills.
- Slow down and use brakes when going down hills.
- Never drive on hills with a slope greater than 15 degrees.
- If you must cross shallow water, make sure to stop and inspect the area for sudden drop-offs, large rocks or slippery surfaces. Always proceed with caution or choose a safer route.



WARNING DO NOT lift Motor by Power Cable!



DO NOT use IMPACT TOOLS to install Motor Bolts or Wheel Lug Nuts!

WARNING Torque Settings: Motor Bolts - 55 ft/lbs
Wheel Lugs - 65ft/lbs



WARNING!

FAILURE TO FOLLOW THE WARNINGS BELOW CAN DAMAGE THE VEHICLE AND CAUSE SERIOUS INJURY OR DEATH!

- **Always** look around the Vehicle to make sure the area is clear before engaging the Throttle!
- **Always** proceed with caution! Keep speed low and do not drive faster than the conditions permit. The terrain, conditions and operator's skill will determine a safe speed. Avoid sharp turns and do not accelerate quickly when turning, this can cause the vehicle to slide sideways or skid out of control. Abrupt maneuvers or aggressive driving can cause a rollover even on flat open areas.
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4WD KIT OPERATION



← Torque to 12mph

← Motors Disengaged

← Max. Torque to 9mph

060-001030



WARNING!

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- **Always** proceed with caution! Keep speed low and do not drive faster than the conditions permit. The terrain, conditions and operator's skill will determine a safe speed. Avoid sharp turns and do not accelerate quickly when turning, this can cause the vehicle to slide sideways or skid out of control. Abrupt maneuvers or aggressive driving can cause a rollover even on flat open areas.
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- This Motor Kit will increase torque and traction; but Does Not increase the GVWR (Gross Vehicle Weight Rating), Cargo capacity or Towing capacity of the Vehicle. Always follow the Vehicle towing and loading specifications.

If this Label is not already in place it Must be placed on the Vehicle in an area that is in view of the Driver and Passenger(s)!

MAIN COMPONENT PARTS LIST



Confirm that all parts listed below are in the kit boxes before starting installation.

If you are missing parts please contact your local dealer or SilverWolf Vehicles Inc.

#	PART DESCRIPTION	PART #	QTY
1	SW Discovery Direct Drive Motor	PM-000023	2
2	SW4000 Controller	PC-500016	2
3	GCM (Golf Cart Module)	PA-000031	1
4	Discovery 4WD Switch - 4L/OFF/4H	400-000636	1
5	SW Discovery 4WD Main Harness (GCM to SW4000 Controllers)	44-000100	1
6	SW Discovery 4WD Vehicle Specific Harness for CC Precedent/Onward/Tempo w/ Curtis 1510/1515 & DC Motor	44-000107	1
7	SW Discovery 4WD Battery Power Cables - Club Car (Pair) 10' Red Positive + SW Discovery 4WD Battery Power Cables - Club Car (Pair) 10' Black Negative -	440-000127	1 (set)
8	Controller Box Base	200-001739	1
9	Controller Box Lid	200-001738	1
10	GCM Protective Plug Cover (installed on GCM)	800-000900-00	1



HARDWARE PARTS LIST



Confirm that all parts listed below are in the kit boxes before starting installation.

If you are missing parts please contact your local dealer or SilverWolf Vehicles Inc.

#	PART DESCRIPTION	PART #	QTY
1	M5 x 12mm Hex Head Bolt (*Installed on Controller)	80-000621	10
2	M5 Lock Washer (*Installed on Controller)	80-000623	10
3	M5 Flat Washer (*Installed on Controller)	80-000619	10
4	Controller Mounting Plate	20-000293	8
5	M5 X 12mm Button Head Screw	80-000595	10
6	M5 - Lock Nut	800-000904	8
7	1/4 x 2 ³ / ₄ " Socket Head Bolt	800-000907	2
8	1/4" Nylon Lock Nut	80-000588	2
9	1/4" Flat Washer	800-000908	2
10	Cable Tie Mount	800-000906	1
11	SW 4WD Switch Cut Out Template (Club Car)	200-001751	1
12	11" Black Zip Ties	800-000905	16



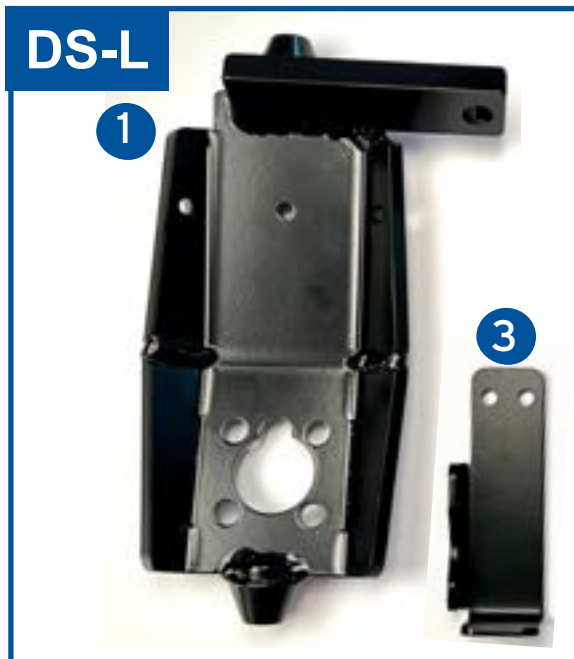
ADAPTER KIT PK-000032-00 PARTS LIST



Confirm that all parts listed below are in the kit boxes before starting installation.

If you are missing parts please contact your local dealer or SilverWolf Vehicles Inc.

#	PART DESCRIPTION	PART #	QTY
1	Adapter Bracket DS-L DriverSide Left	10-000940	1
2	Adapter Bracket PS-R PassengerSide Right	10-000939	1
3	Wire Guard Bracket- DS-L DriverSide Left	20-001658	1
4	Wire Guard Bracket- PS-R PassengerSide Right	20-001659	1
5	Socket Cap Screw M-10- 25	800-000899	8
6	Socket Cap Screw 1/2"-20 x 1 1/2" (for Standard 1/2" Lift Kit)	800-000901	4
7	Socket Cap Screw 1/2"-20 x 1 3/4" (for Heavy Duty 5/8" Lift Kit)	800-000902	4
8	1/2" Spacer Washer (for Standard 1/2" Lift Kit)	200-001729	4
9	1/2" Spacer Tube (for Heavy Duty 5/8" Lift Kit)	200-001728	4
10	Thread Locker (Not Shown)	840-000078	1



PRE-INSTALLATION INSTRUCTIONS



For the purpose of this manual and all instructions, when sitting in the vehicle facing forward:

The **Left side** of this vehicle is the **Driver side (DS)** and The **Right side** is the **Passenger side (PS)**.

These instructions will use the letters **DS-L** for the Driverside (Left) and **PS-R** (Right) for the Passengerside.

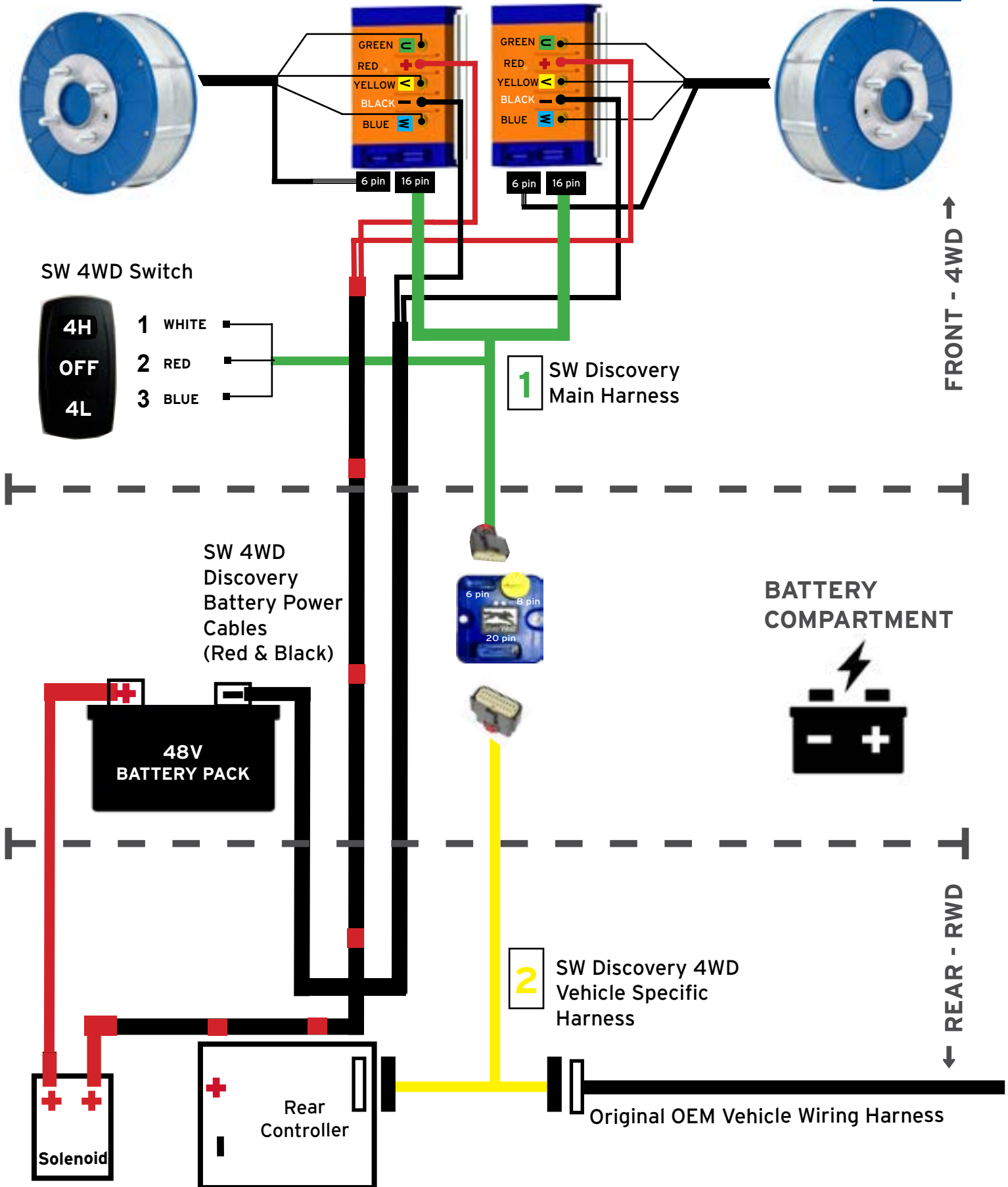


COMPONENT / HARNESS OVERVIEW



DS-L

PS-R

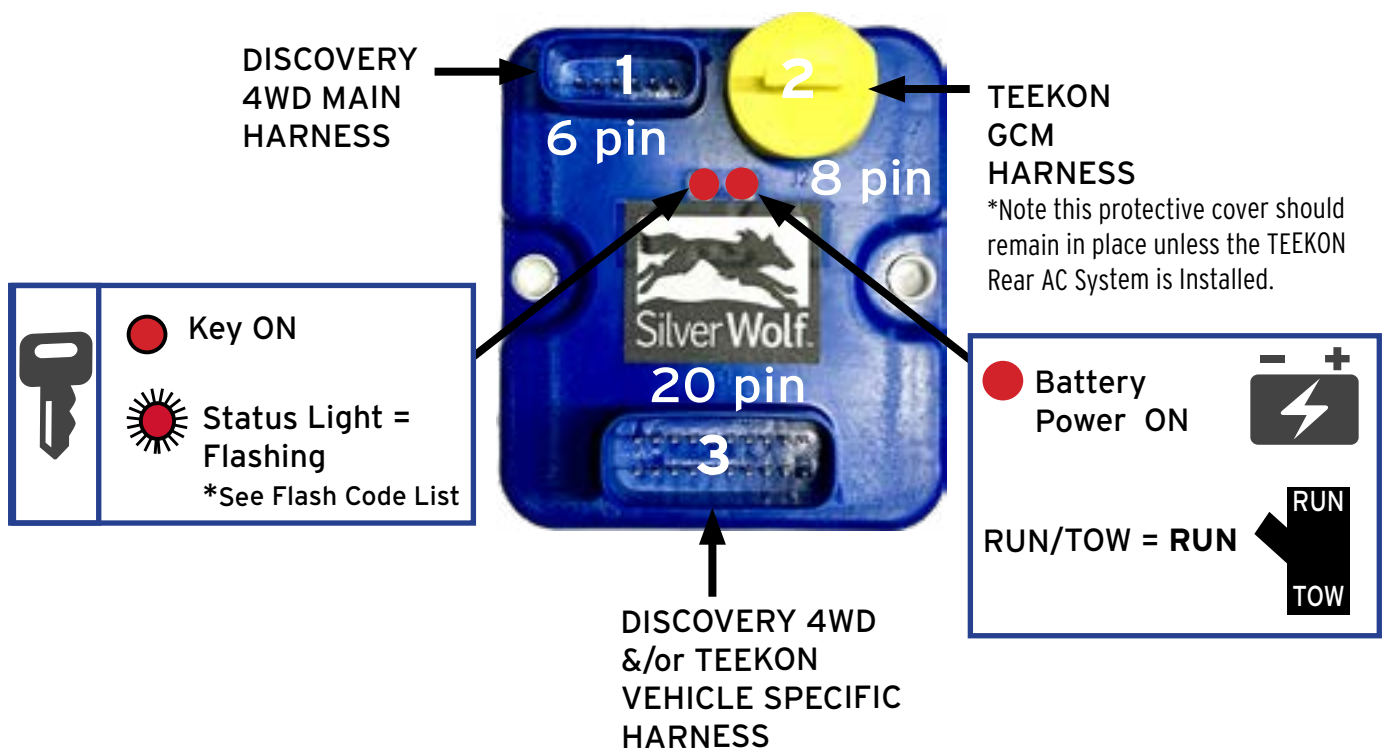




GCM (Golf Cart Module)

The GCM (Golf Cart Module) is the communication hub for the SilverWolf Drive Systems, it allows communication between the Discovery 4WD and the rear drive system.

The GCM is the central hub that connects the front and rear drive systems. The GCM provides vehicle diagnostics via 2 status lights and via the built in Bluetooth along with the SilverWolf App.





BEFORE INSTALLING THE SILVERWOLF DISCOVERY 4WD MOTOR KIT:

Make sure that the Golf Car's Electrical System is working properly.

All components such as the Controller, Motor, Run/Tow Switch, Pedal Cluster, FWD/REV Switch and all Wiring needs to be in good condition and operating to Manufacturers Standards.

If the system is not working properly this must be repaired before installing this kit!



If any modifications have been made to the Vehicle's Electrical System or any of it's parts this may affect the operation of the SilverWolf Motor Kit. Please contact your dealer.



WARNING!

FAILURE TO FOLLOW THE WARNINGS BELOW CAN DAMAGE THE VEHICLE AND CAUSE SERIOUS INJURY OR DEATH!

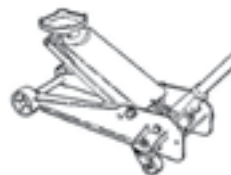
BEFORE STARTING THE SILVERWOLF DISCOVERY 4WD INSTALLATION MAKE SURE:

- The Key is turned OFF and Removed from the Ignition
- The Run/Tow Switch is in the Tow position
- The Parking Brake is Engaged
- The Main  Positive and  Negative Cables on the Vehicle's Battery System are Disconnected



Tools Required

- Standard SAE and metric Socket Set up to 3/4" & 17mm
- Standard SAE and Metric open end Wrenches up to 3/4" & 17mm
- Torx bits up to T40
- 5/16" & 3/8" Allen Keys or Hex Sockets 8mm Torque Wrench
- Flathead Screwdriver
- Phillips Screwdriver
- Cordless Drill
- Tape Measure
- Side Cutters
- Electrical tape
- Duct tape
- Marker
- 1/2" or bigger Drill Bit
- 1 3/4" Hole Saw/ Drill
- Wheel Chocks
- Tie Rod Separator
- 4 Jack Stands
- Lift Jack (2 ton or more)
- Rotary or Oscillating Cut Out Tool





1 Removal of Vehicle Components

The following parts will need to be disassembled or loosened before installing the Discovery 4WD Motor Kit.

Note: Make sure to keep all Parts and Hardware together so it can be reinstalled after the Discovery 4WD Kit installation is complete.

- A. Remove the Front Bumper (2 Bolts)
- B. Remove the Front Brow Cap (5 Screws)
- C. Gently remove the Front Beauty Panel (No Screws)

Note: If the Cart has Lights they will need to be unplugged first.

- D. Remove the Front Brow (5-10 Screws)

Note: This part is located under the Beauty Panel

A



B



C



D





1 Removal of Vehicle Components

E. Remove the Rubber Floor Mat (4 Bolts)

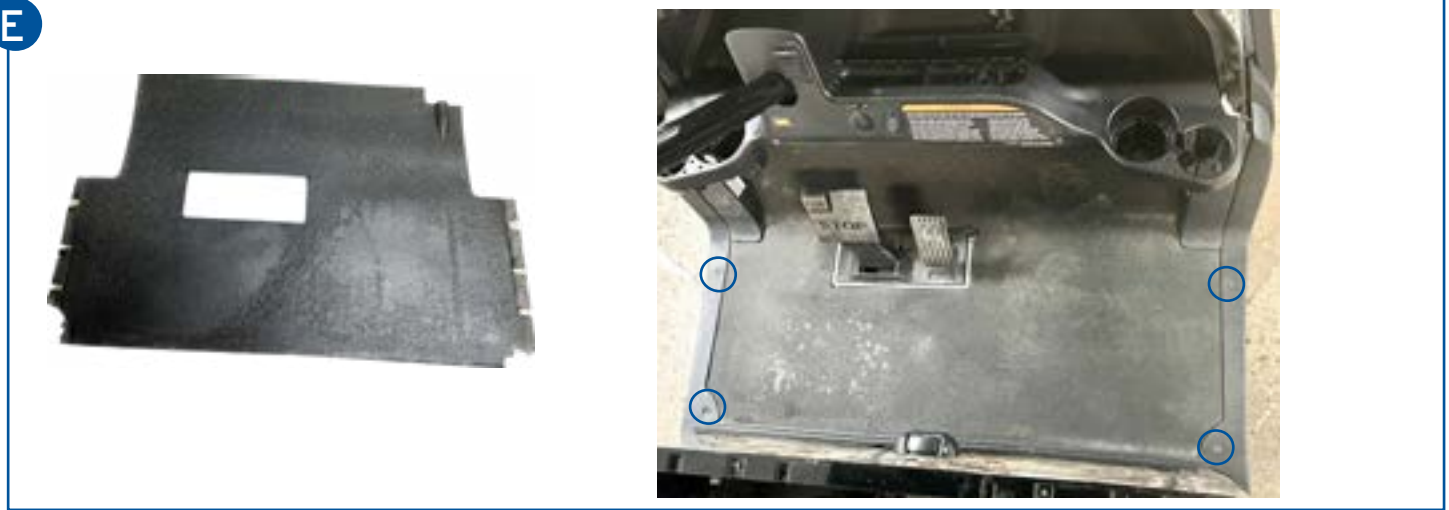
F. Remove the 4 Screws that hold the Rear Body Panel to the Battery Compartment (2 at the front and 2 at the back).
Note: This will allow the Rear Body Panel to be slightly lifted to install the Wiring Harness.

G. Remove the Plastic Socket Trim.

Insert the small Screwdriver into one side of the Charger Socket to disengage the locking tab that is between the Socket Trim and the Socket Casing. Repeat for the other side to remove the part.

H. To remove the Plastic Kick Plate remove the 3 Screws at the base of the plate and lift up on the Rear Body Panel.

I. Remove the 3 Screws on the Dashboard Board and let it hang down. Take a picture of all the connections and how they are connected on the back of the Dashboard, before unplugging them to allow the Dashboard to be removed.

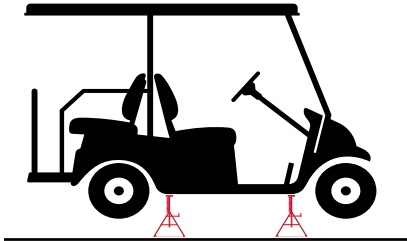




1 Removal of Vehicle Components



Before proceeding to the next steps make sure to support the Vehicle on the Frame at all 4 corners using 4 Jack Stands rated for 2000 lbs or more. Make sure all 4 Wheels are off the ground and the Vehicle is secure and does not move!



J. Remove the Front Wheels.

K. Remove the 2 Nuts that hold the Rack and pinion Arms. They will be used to install the new Adapters.

L. Remove the Socket Cap Screws that hold the Spindle & Hub on to the A-Arm Lift Kit (4 Bolts) These Bolts are not used, new Bolts are included with the kit.

M. Remove the Left and Right Spindle & Hub Assembly.





1 Removal of Vehicle Components

M



Removal of Parts Complete!

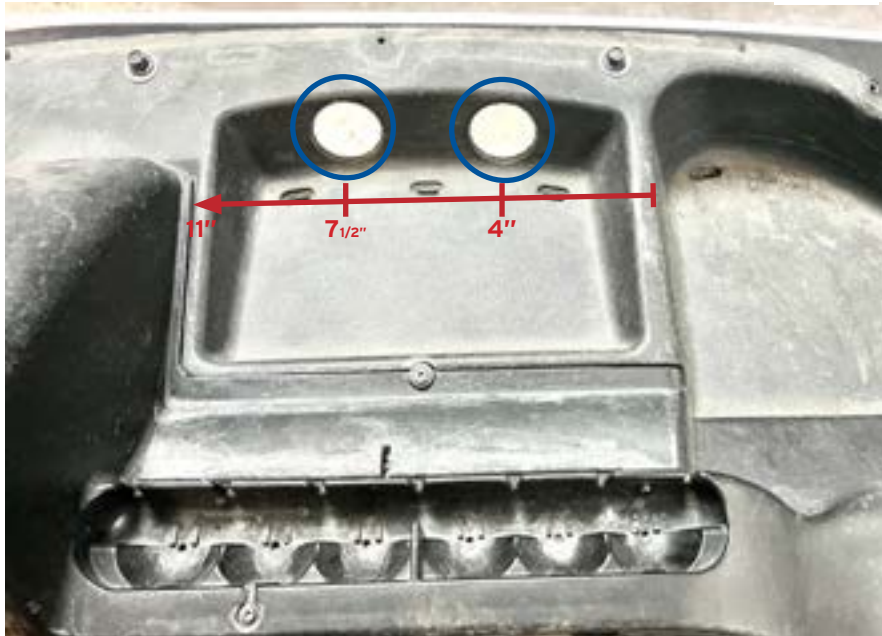


2 Pre-Install Set Up / Drill & Cut Out

The next steps will set up the cart for installation of the Electrical Components.

! Before Drilling any of the holes make sure all Wires & Cables (such as Headlight Wires) are moved away from the drilling area!

A Use a 1 3/4" Hole Saw to drill 2 holes about 3" apart in the plastic base at the front of the Cart.



B Drill a 3/4" hole at the base of the back of the Steering Column Cover.



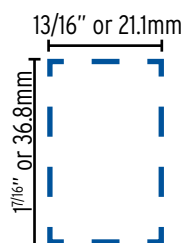
C Use the Switch Template and a Marker to draw the cut out area for the 4WD Switch.



Use a Rotary or Oscillating Cut Out Tool to make a clean square cut. The plastic is not easy to cut with a Knife and this can result in a rough cut and a loose fit. Make sure not to rush this step.



Cut Out Hole Size





3 Adapter & Motor Installation

First determine which 6" A-Arm Lift Kit is on the Cart.

It will either be the Standard 1/2" Lift or the Heavy Duty 5/8" Lift. To do this check the Tie Rods on the end of the A-Arms on the Lift Kit to see if it has a 1/2" or 5/8" Hole. Note: If the Spacer Tube fits into the hole in the Tie Rod it is a 5/8" hole.

Use either the 1/2" Hardware Bag or the 5/8" Hardware Bag and follow the specific instructions on the next 2 pages.

1/2"



5/8"



1/2" Standard Hardware



X4

5/8" Heavy Duty Hardware



X4

PS-R



DS-L





3 Adapter Installation for 1/2" Standard Lift Kit

! DO NOT use Impact Tools! Carefully align and turn in the Bolts before using the Ratchet!

A. Install the PS-R Adapter Bracket to the passengerside of the A-Arm Lift kit using the two 1/2"x 1 1/2" Socket Cap Screws and 2 small Spacers. The Spacers go between the Adapter and the Tie Rod. Repeat for Driverside.

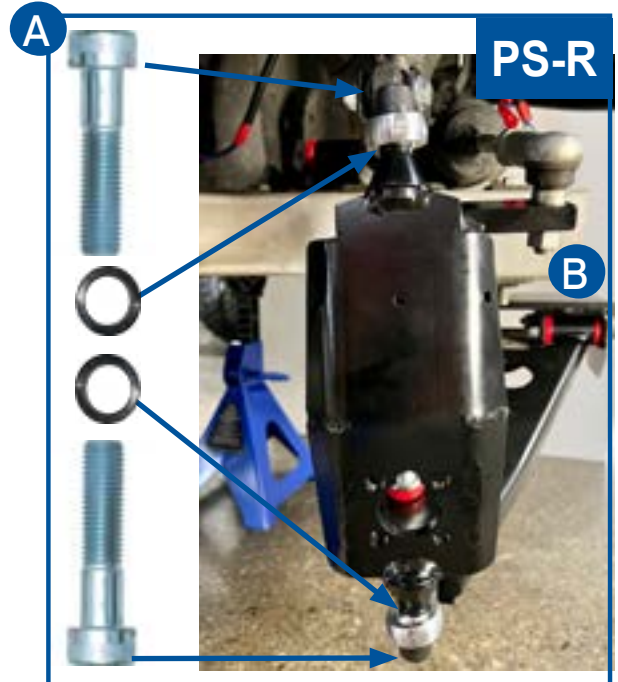
Note: Apply a drop of Thread Locker to each Bolt before installing.

B. Reinstall the 2 Steering Arm Nuts to the Arm on each of the Adapter Brackets

PS-R



DS-L





3 Adapter Installation for 5/8" Heavy Duty Lift Kit

! DO NOT use Impact Tools! Carefully align and turn in the Bolts before using the Ratchet!

A. Install the PS-R Adapter Bracket to the passengerside of the A-Arm Lift kit using the two 1/2"x 1 3/4" Socket Cap Screws and 2 Spacer Tubes. The Spacer Tubes go into the Tie Rod End so that the wider end is between the Adapter and the Tie Rod. Repeat for Driverside.

Note: Apply a drop of Thread Locker to each Bolt before installing.

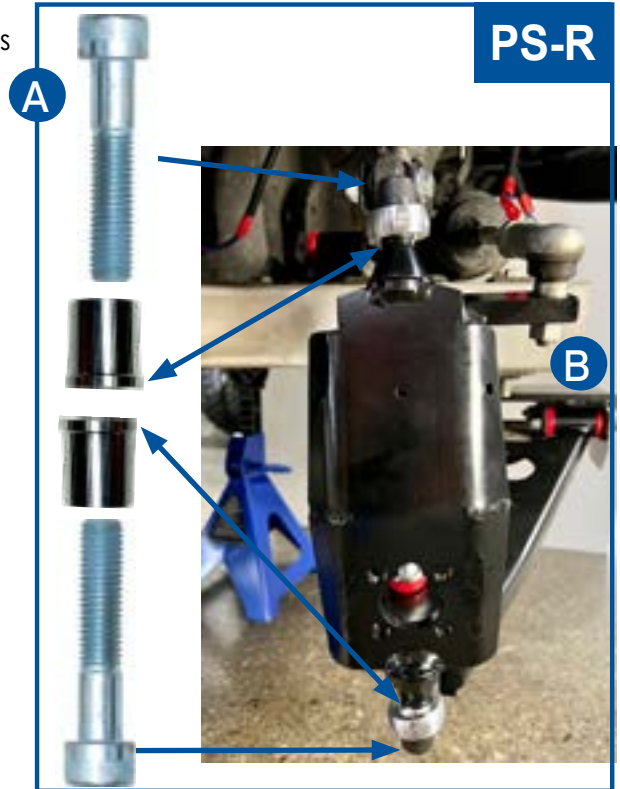
B. Reinstall the 2 Steering Arm Nuts to the Arm on each of the Adapter Brackets

PS-R

PS-R



DS-L





3 Adapter & Motor Installation



WARNING DO NOT lift Motor by Power Cable!



The Motor **MUST** be installed with the Line facing up!



WARNING

DO NOT use **IMPACT TOOLS** to install Motor Bolts or Wheel Lug Nuts!

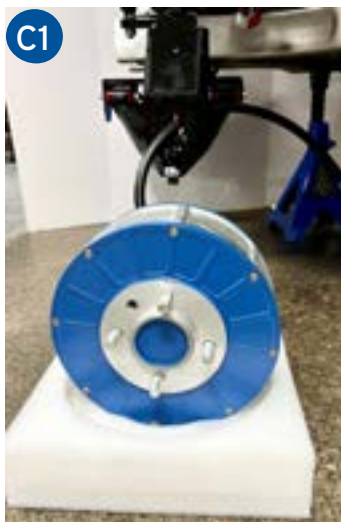
Torque Settings: Motor Bolts - 55 ft/lbs
Wheel Lugs - 65ft/lbs

C Install the Discovery Motors on to the Adapter Bracket as follows; Start with the Passengerside Motor

Note: Steps 1-3 are shown on the Driverside Motor but they are the same for both motors.

1. Set the Motor on a piece of foam in front of the Adapter Bracket. Slide the Motor Cables through the Adapter Bracket Hole and back under the Cart. Leave slack in the Cables to allow the Motor to be lifted into place.
2. Set the Motor on to a Floor Jack making sure it is balanced and does not fall off. Look for the Paint Line on the Motor Shaft. Turn the Motor so that the Line is facing up. The Motor **MUST** be installed with the Line facing up!
3. Slide the Motor in to place by lifting it with the Jack and pushing it into the hole in the Adapter Bracket. Check that the 4 bolt holes on the Motor are aligned with the 4 holes on the Adapter Bracket.

Note: Make sure to hold on to the Motor so that it does not come off Jack.



DS-L



3 Adapter & Motor Installation

4. Once aligned, install 1 of the M10 x 25mm Socket Cap Screws into the front upper Bolt. DO NOT install Wire Guard or use Thread Locker at this time. Tighten it in place with a Ratchet. . Remove the Lift Jack. Apply Thread Locker to 2 of the Screws and Install into the 2 rear Adapter Holes.

Note: Turning the Steer will allow access to all 4 holes with a Ratchet.

Now remove the 1 front Screw and apply Thread Locker to the 2 Screw insert them through the Wire Guard and into the Motor bolt holes.

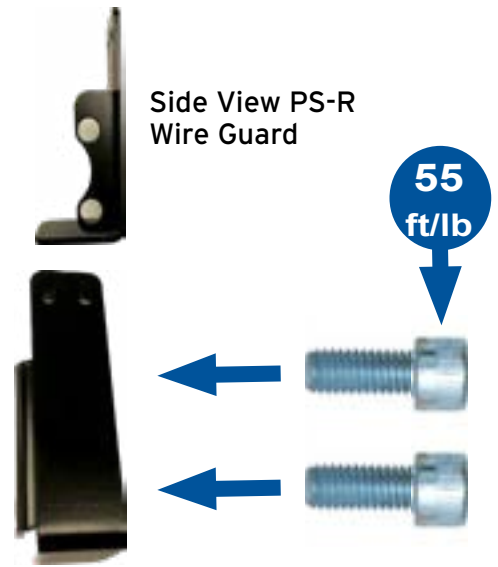
5. Tighten all 4 of M10 Motor Bolts with a Torque Wrench to 55 ft/lbs

6. Repeat for the DS-L Driverside Motor.

C4



PS-R





3 Adapter & Motor Installation

D. The Motor Cable will need to be routed along the back of the Adapter Bracket behind the Wire Guard and up along the Shock in through one of the 1 3/4" hole in the Dash area. Do not connect the Motor Cables at this time, they will be connected later in the install process.

Use 4 Zip Ties to secure the Motor Cable in place. 1 on the Adapter, 1 on the Wire Guard and 2 on the Shock.

Make sure the Motor Cable is tight against the Adapter and the Zip Ties are not loose.

- Repeat for the DS-L Driverside Motor.

PS-R

D





4 Controller & Harness Installation

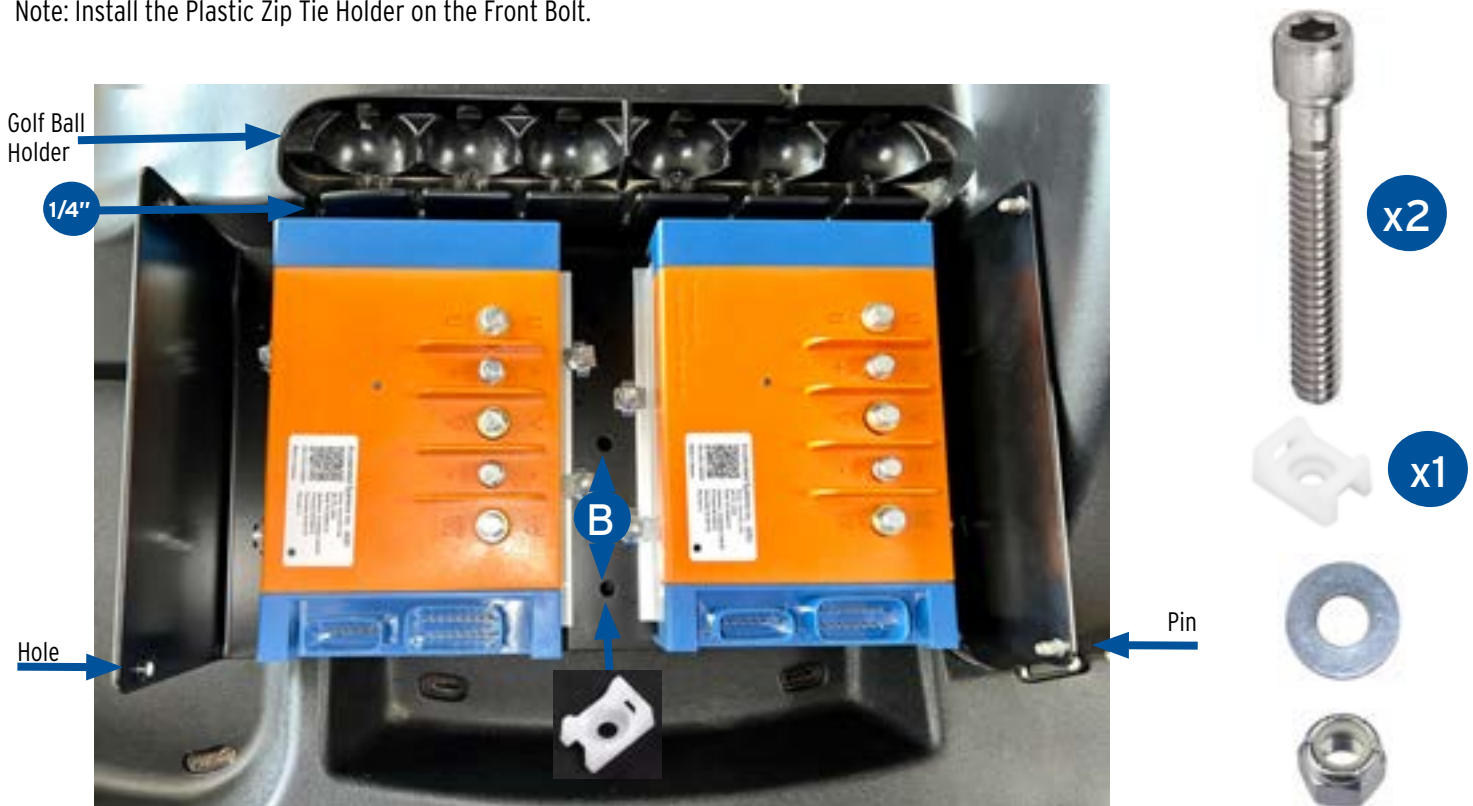
A. Install the 2 Controllers to the Controller Plate using the 8 - M6 bolts, Lock Nuts and Controller Plates. Make sure the Controllers are centered on the Controller Plate and installed in the direction shown below. Make sure to install the Heads of the M6 Bolts up thru the bottom of the Controller Plate.

Note: The Controllers are the same, they become Driverside (DS-L) or Passengerside (PS-R) once the 4WD Main Harness and the Motor Cables are attached.



B. Now install the Controller Box Assembly in the Front Dash Area of the Cart. Align the Box leaving about 1/4" gap between the front edge of the Box and the back of the Golf Ball Holder Area. Use a 1/4" drill to drill through the 2 holes in the Controller Plate down through the plastic base of the Dash Area.

Use the two 1/4" x 2 3/4" Socket Cap Bolts, Washer and Lock Nut to secure the Controller Box to the Cart. Note: Install the Plastic Zip Tie Holder on the Front Bolt.





4 Harness & Cable Placement & Installation

The Parts shown below will be installed in the next steps.

SW Discovery 4WD Main Harness
(GCM to SW4000 Controllers)



SW Discovery 4WD Vehicle
Specific Harness
(GCM to Rear Controller)



GCM
(Golf Cart Module)



SW Discovery 4WD Power Cables
Red Positive +



SW Discovery 4WD Power Cables
Black Negative -



Discovery 4wd Switch
(4H/OFF/ 4L)





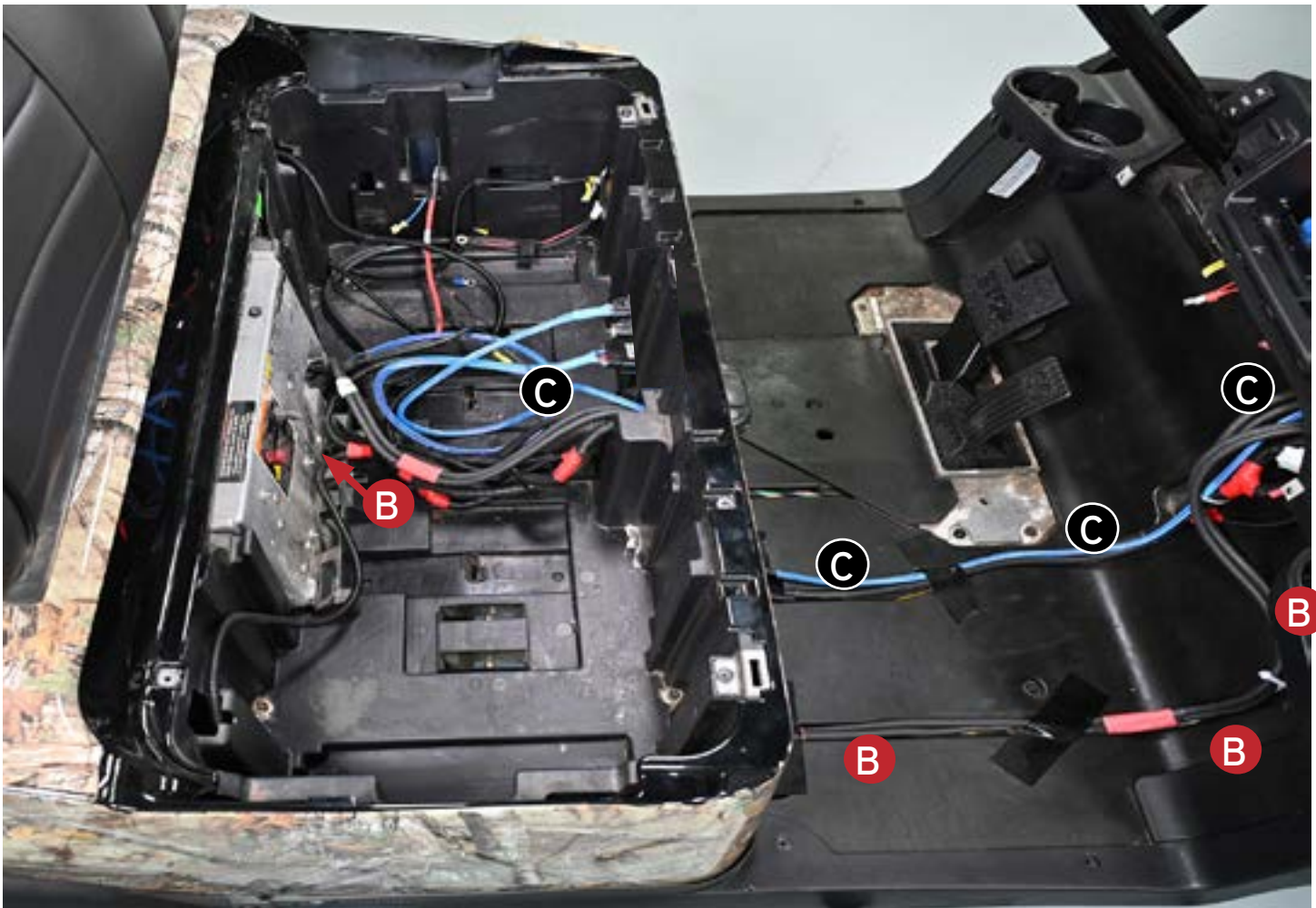
4 Harness Placement & Installation

! DO NOT connect any of the Cables or Connectors until all Cables are laid in place!

- B.** Start in the Floor area with the Red (Positive) Power Cables. Locate the end with the larger 3/8" Ring Terminals and run them under the Kick Plate at the base of the Seat up into the battery compartment. Run the Cables between the Batteries back out under the Controller Back Plate to the Positive Post on the Solenoid.
- C.** Repeat the same steps for the Black (Negative) Power Cables with the only difference being that they will stay in the Battery Compartment and connect to the Main Battery Negative Post.
- D.** Now run the other ends of the Power Cables Negative & Positive (with the Smaller 1/4" Ring Terminals) along the floor of the Cart as shown below and up under the Dash (see next page) into the front of the Cart. Make sure the Cables do not go near any moving parts.

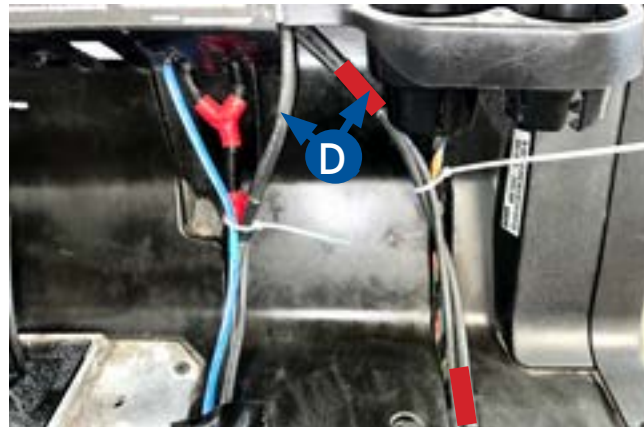


The Floor of the Cart has grooves where the Power Cables can be routed. There may be other Wires in the grooves, using Duct Tape to hold the Cables in place will help with installation.





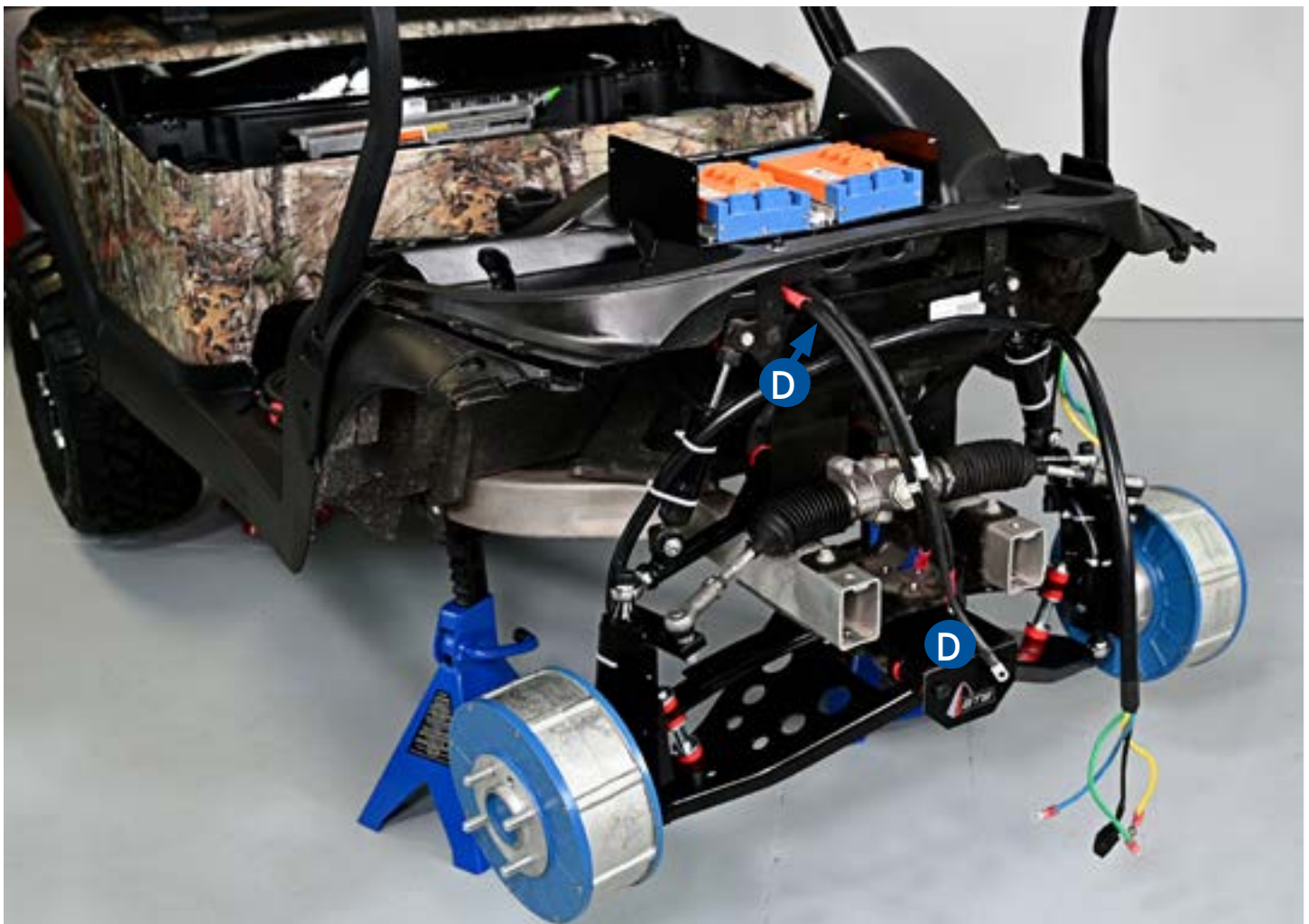
4 Harness Placement & Installation



Passengerside
Cupholder

D. The Power Cables should be in place as shown below.

Note: Zip Ties will be used to secure the wires in place once the Cables are connected and the slack is moved back in to the Battery Compartment.

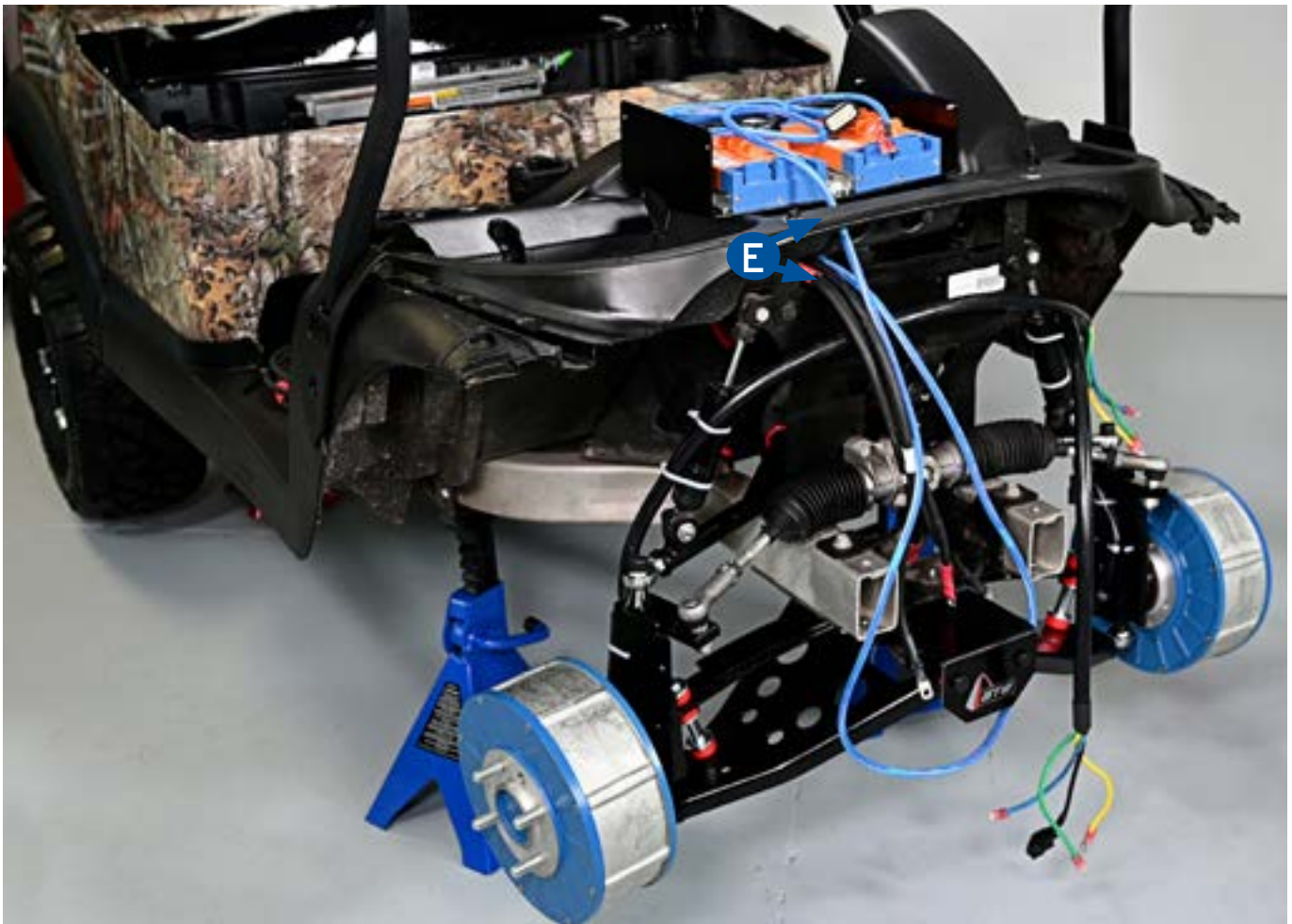




4 Harness Placement & Installation

E. Feed the Single 6 Pin Connector end of the Discovery 4WD Main Harness through the 1 3/4" DriverSide hole in the plastic dash area at the front of the Cart. Then feed it back into the Floor area of the Cart. Be careful to keep it away from moving parts.

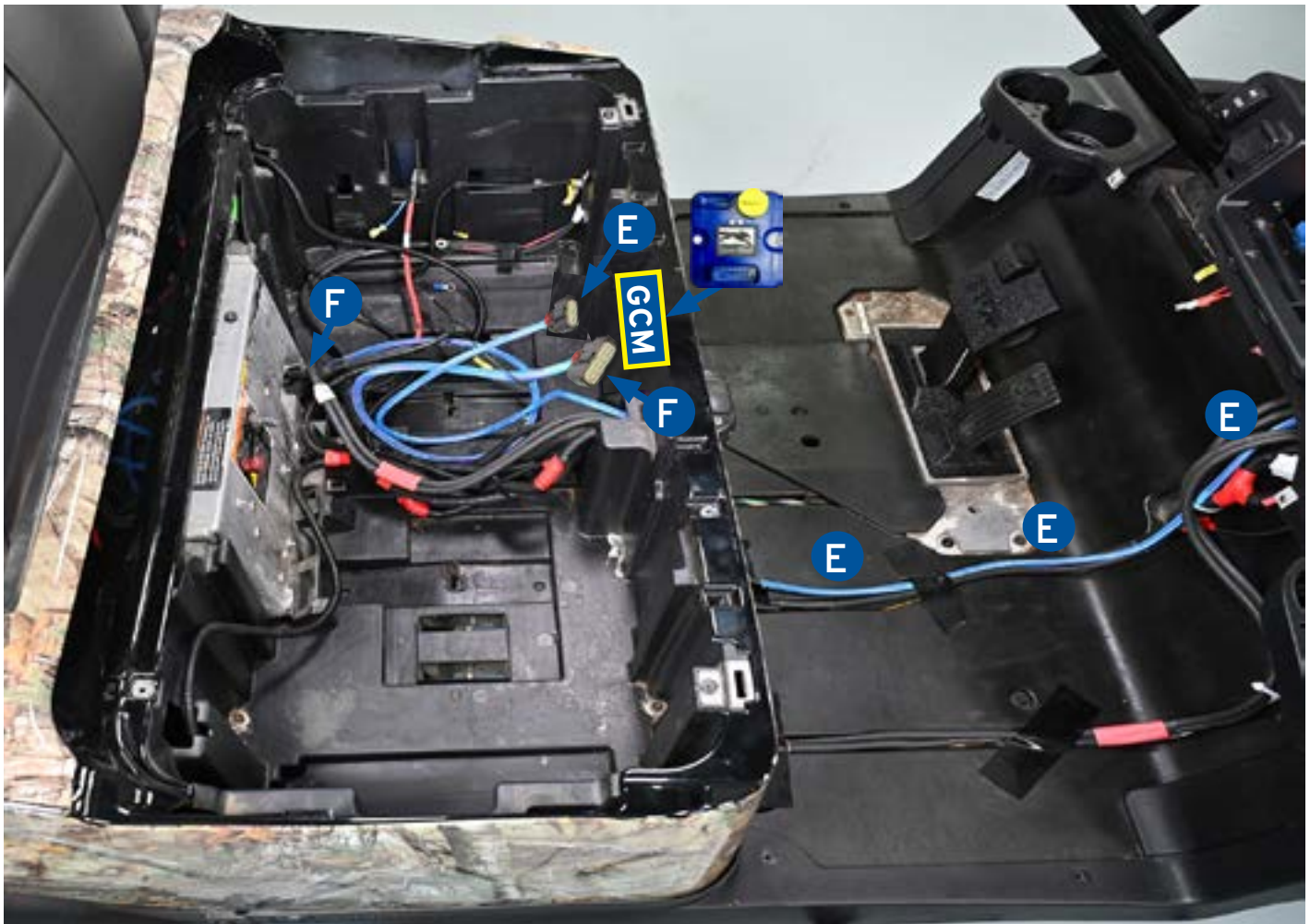
Note: Zip Ties will be used to secure the wires in place once the Cables are connected and the slack is moved back in to the Battery Compartment.



INSTALLATION CLUB CAR (Precedent/Onward/Tempo)



E. The 6 Pin Connector of the Main Harness then runs in the same area as the Black Power Cables going up under the Kick Plate at the base of the Seat into the battery compartment. It will stop inside the front of the Battery Compartment where the GCM will be mounted.



F. Now run the Discovery 4WD Vehicle Specific Harness from the front of the Battery Compartment by the GCM back between the Batteries and out under the Controller Cover at the back of the Battery Compartment.

Unplug the 16 Pin Original Vehicle Harness Connector from the Controller. Plug this into the Female Connector on T section of the Vehicle Specific Harness. Plug the Male Connector on the T section into the Vehicle Controller. see next page...





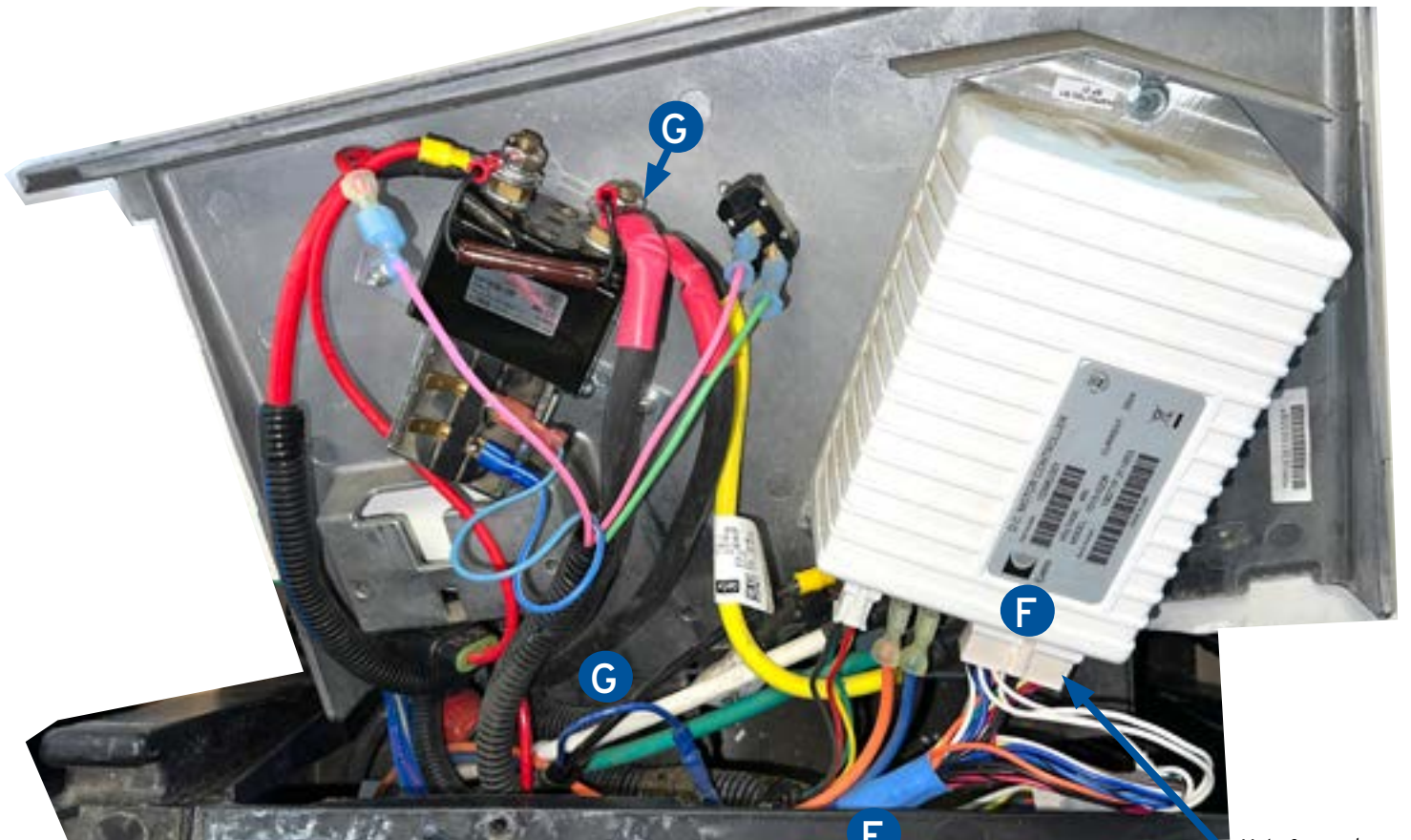
4 Harness Placement & Installation

G. If not already done slide the Red Battery Power Cables out under the Controller Cover at the back of the Battery Compartment. Connect the pair of Red Power Cables to the side of the Solenoid coming from the Controller.

Note: This step assumes that a Heavy Duty Solenoid and Pre-Charge Resistor have already been installed.

The Controller Cover can now be reinstalled. The new Cables and the original Cables will need to go through the opening at the bottom of the Controller Cover.

Note: With the added Cables and Harness the Controller Cover can be difficult to get back in to place. To make sure none of the Cables or Harnesses are damaged use the cut out tool to remove some of the plastic below the opening on the Controller Cover.

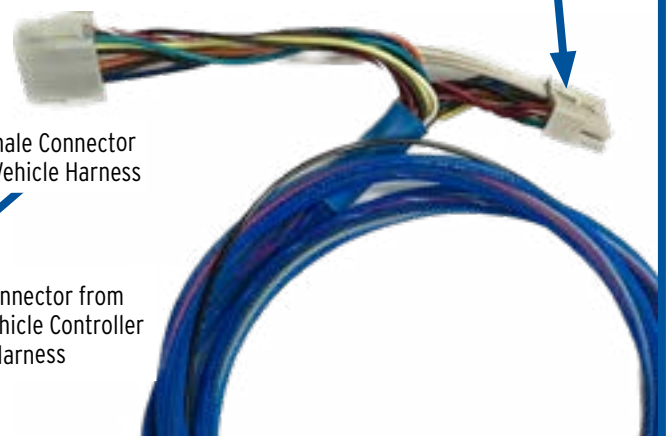


Male Connector to Controller



Female Connector to Vehicle Harness

Connector from Vehicle Controller / Harness

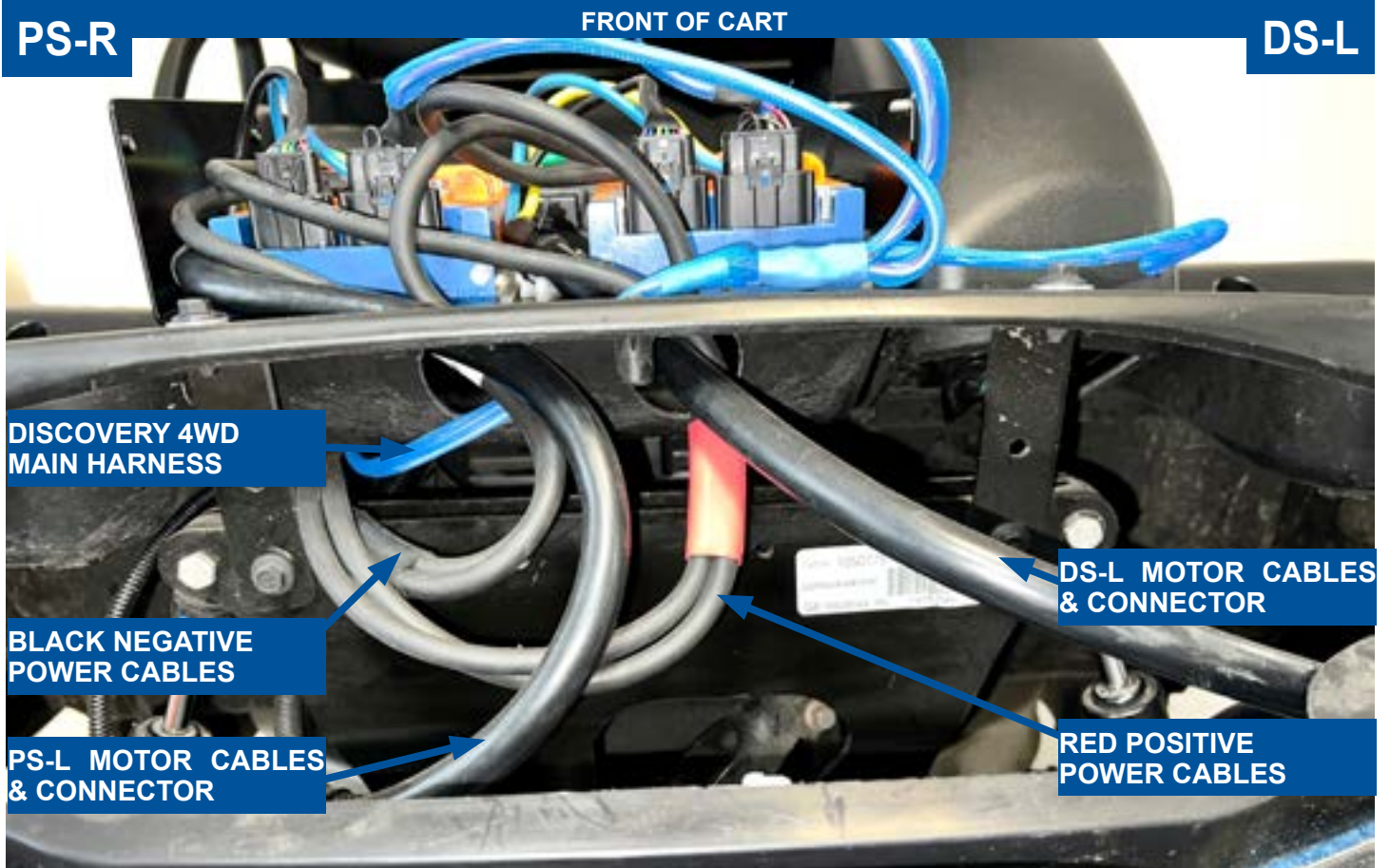




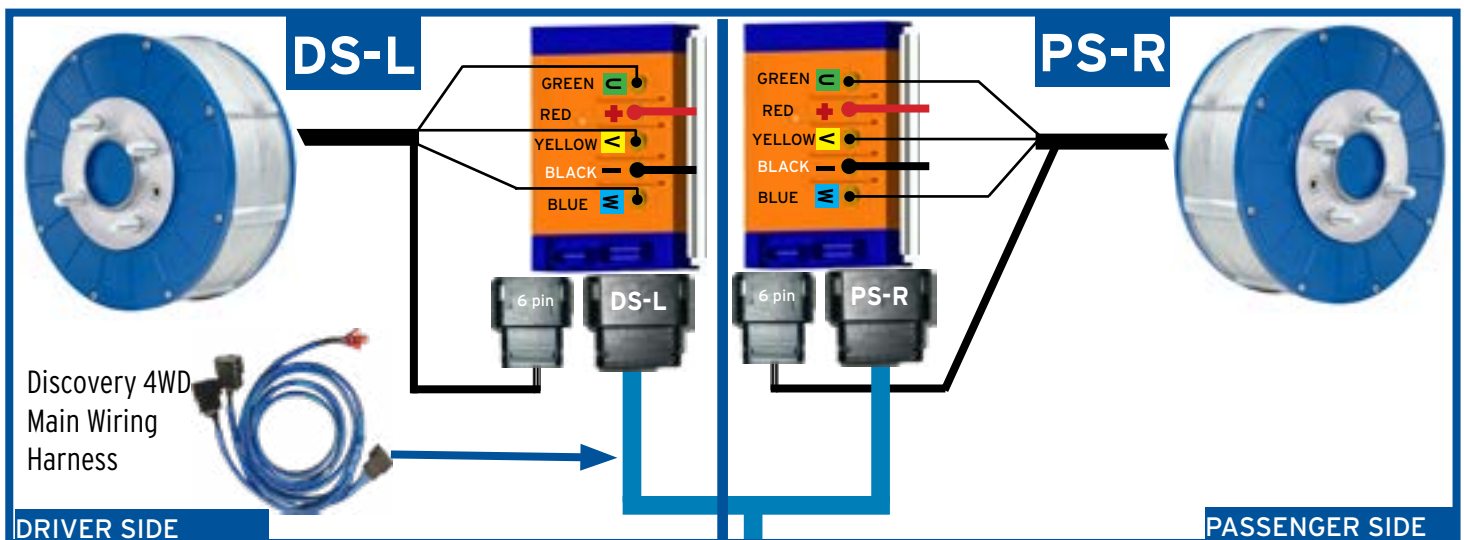
4 Controller & Harness Installation

H. Before connecting or plugging in any of the Connectors or Cables make sure they run through the cut out holes in the Dash Area as shown below.

Slide the Red (Positive) Cables through one of the cut out holes and the Black (Negative) Cables through the other hole.



! At this point it is Important to make sure to Install Cables & Connector according to DS-L & PS-R:



I. Connect the Power Cables, Main Harness and Motor Harness as shown above and on the following page.



4 Controller & Harness Installation

I. Start with the Red & Black Power Cables. Attach one of the Red Positive Cables to the Positive + Post on the Controller. Attach the other Red Cable to the other Positive + Post on the other Controller.

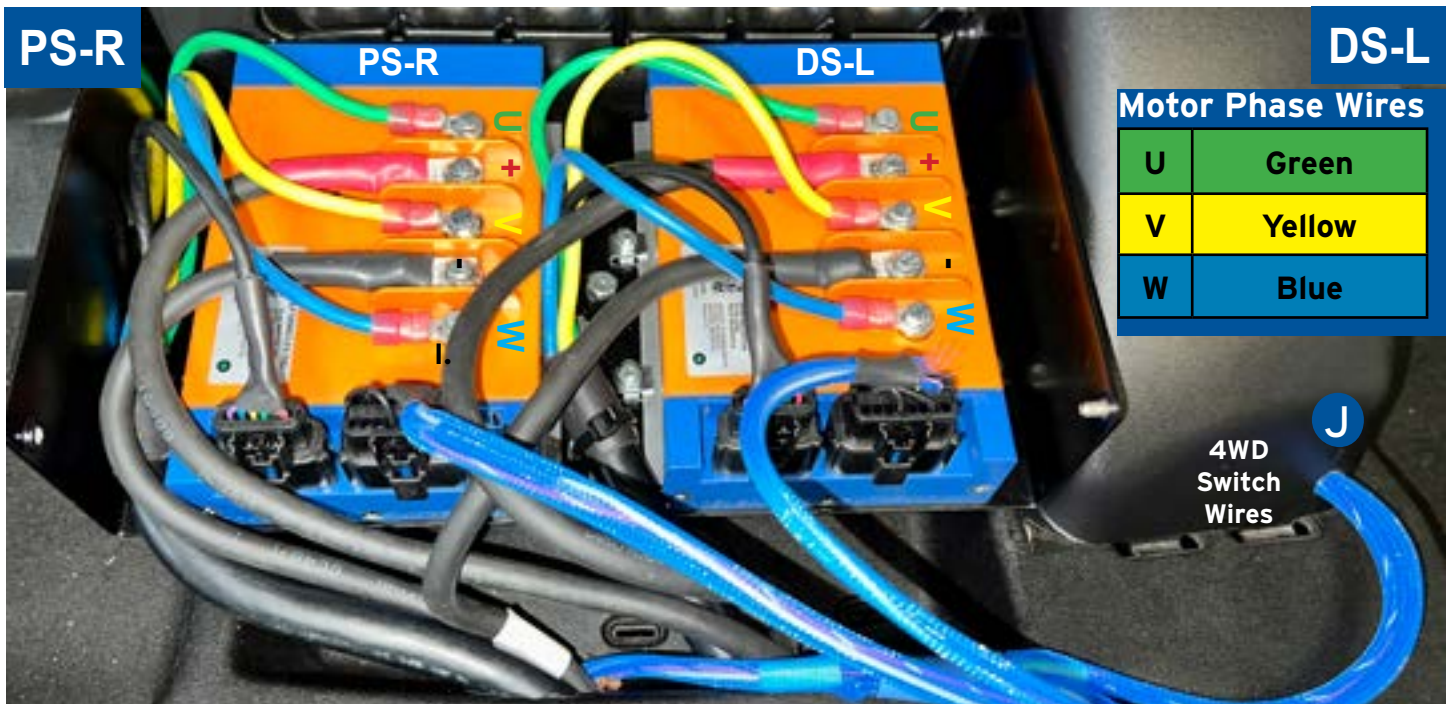
Then attach one of the Black Negative Power Cables to the Negative - Post on the Controller and attach the other Black Negative - Cable to the other Negative- Post on the Controller.

Locate the Driverside Motor Harness and attach the 3 Phase Wires as shown in the chart below. Plug in the small 5 Pin Motor Connector to the Driverside Controller. Repeat for Passengerside Motor Harness.

Note: The Driverside Harness will need to be zip tied to the Wire Holder between the 2 Controllers to keep it in place.

Locate the Connector labeled DS-L on the Main Harness and plug it into the Controller on the Driverside. Plug the Connector labeled PS-R into the Controller on the Passengerside.

Note: Move the Cables and Wires so that they are positioned as shown in the photo below, this will allow the Controller Box Cover to be installed at the end when the Cart is fully assembled.



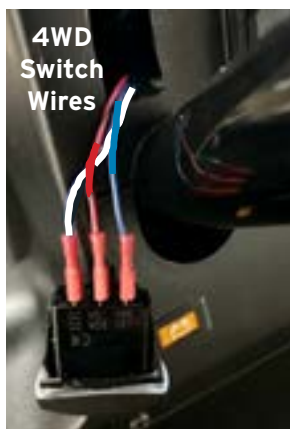
Motor Phase Wires

U	Green
V	Yellow
W	Blue

Discovery 4WD Switch

J. Run the 3 Wire section of the Discovery 4WD Wiring Harness into the 3/4" hole that was drilled in the back of the plastic housing on the Steering Column out through the Switch Cut hole.

Connect the 3 Wires at the back of the 4WD Switch as shown on the chart below. Confirm the Wires are secure and on the correct posts, then slide the Switch in to the cut out hole on the dashboard.



4WD Switch Wiring

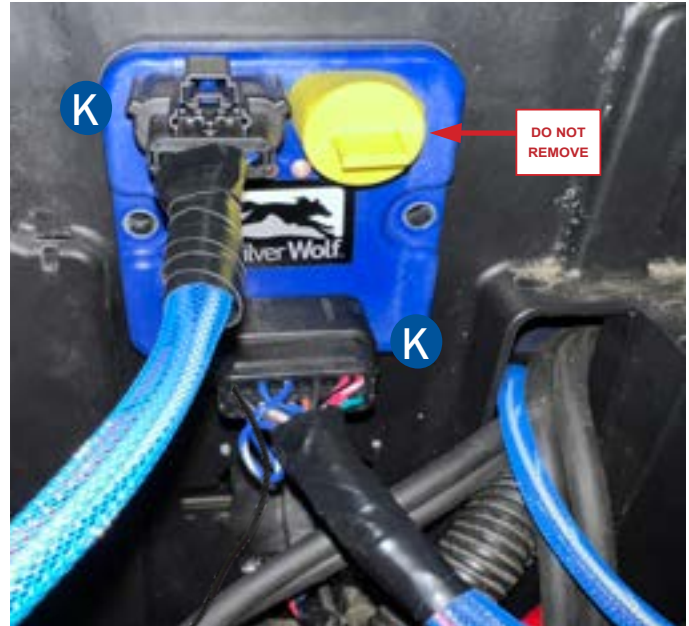
	Color	Position
1	White	4H
2	Red	OFF
3	Blue	4L



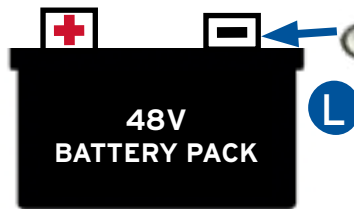
4 Controller & Harness Installation

K. Install the GCM at the front of the Battery Compartment using the Velcro provided.

Align and Carefully plug in the 6 Pin Connector from the 4WD Main Harness and the 20 Pin Connector from the Vehicle Specific Harness. Do Not force the Connector into place, it will easily slide on if it is aligned correctly. It should click into place when fully seated.



L. In the next step the Ring Terminal from the Vehicle Specific Harness will be connected to the Main Negative on the Battery Pack along with the Battery Power Cables.

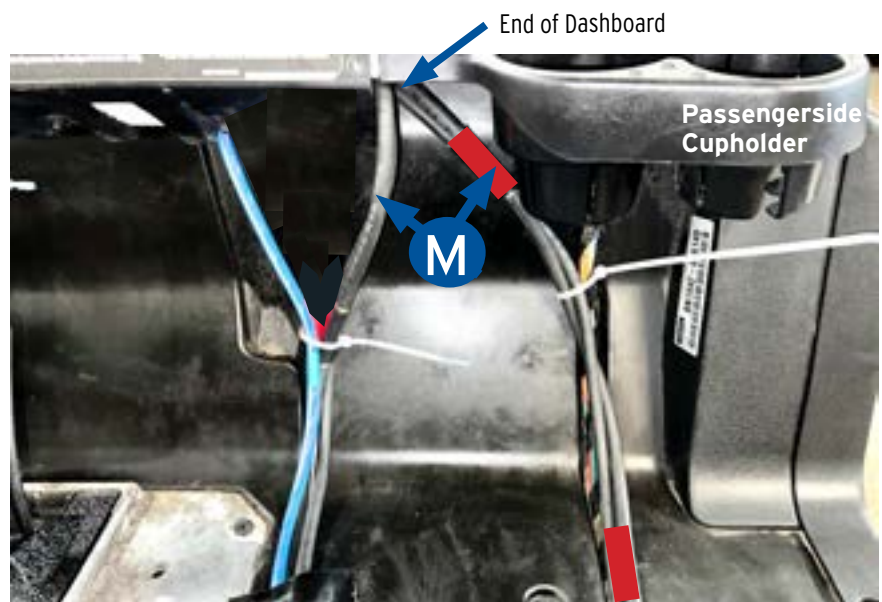


M. Now start from the Front of the Cart and feed the extra length of the Main Harness and Battery Cables back in to the Floor area and back in to the Battery Compartment.

Make sure the Cables are not too tight and are not close to any moving parts. Use the Zip Ties to secure the Harnesses and Cables at the front of the Cart then at the dashboard area. The extra lengths can lay in the Battery Compartment between the Batteries.

Re-Install the Dashboard so that the System Pre-test can be run.

Note: With the extra Cables and Wires behind the Dashboard they will need to be run out the end of the Dashboard on the Right. If this can not be done a small cut out can be made at the bottom of the dashboard.



This is the end of the Discovery 4WD Kit Installation. Before re-assembling the Cart a Pre-Drive Test is recommended.



5 Pre-Drive Test Check List



BEFORE POWERING UP THE VEHICLE!
Check that all Cables and Connectors are secure and in the correct location.



A Cables & Connectors at the Controllers



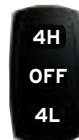
Motor Phase Wires

U	Green
V	Yellow
W	Blue



B 4WD Switch Wiring

	Color	Position
1	White	4H
2	Red	OFF
3	Blue	4L



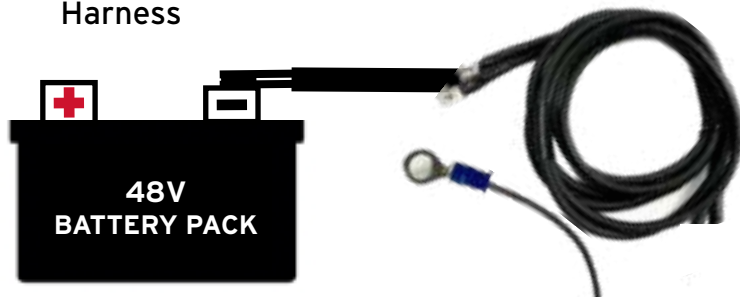
D Red Positive Cables (2) T-End of Vehicle Specific Harness



C GCM Connectors



E Black Negative Cables (2) & Small Ring Terminal from Vehicle Specific Harness

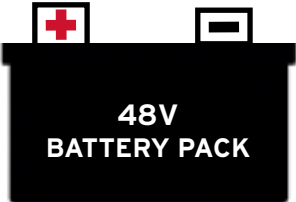




5 Pre-Drive Test - Power Up

! Before Connecting the Battery make sure all 4 Wheels are still off the ground and the Vehicle is secure and does not move!

! BEFORE Connecting the Main Positive (Red) Power Cable make sure the RUN/TOW is in TOW!



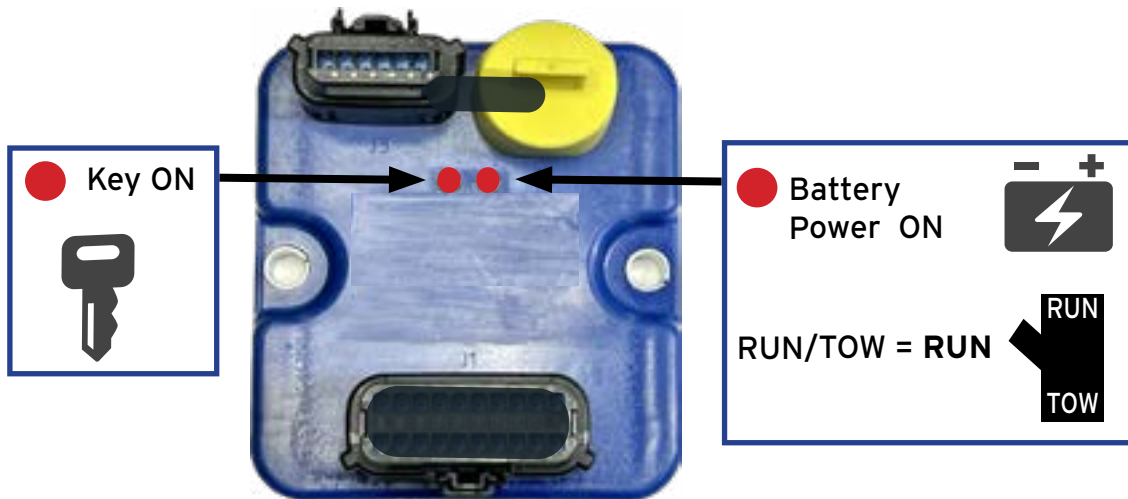
A. Connect the Main Negative Cable along with the 2 Battery Negative Cables from the 4WD Controllers and the small Ring Terminal from the Vehicle Specific Harness.
Connect the Main Positive + Cable to the Battery



B. Move the RUN/TOW Switch to RUN
The Battery Power LED on the GCM will turn ON.



C. Turn ON the Key
The Key ON LED will turn ON.



! LED Light Flashing = See Flash Code List in the Troubleshooting Section

! With both Red LEDs are ON and Solid proceed to the next steps.

! To complete the pre-drive test and set up of the Discovery 4WD System the SilverWolf App is required.



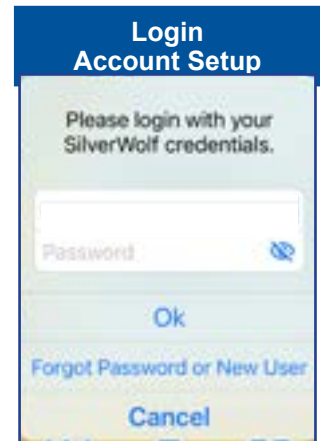
5 SilverWolf App - Pairing

To complete the pre-drive test and set up of the Discovery 4WD System

- Download the SilverWolf App
- Open the App and Select "New User to setup your User Credentials and register the Discovery 4WD kit.
- Create a Login using the e-mail address related to the Device being used to pair, then create a Password.
- Complete the registration.



Get the SilverWolf™ App at;



Once the App registration is complete open the SilverWolf App;

- Select the Menu Button
- Select Bluetooth Connections to find the signal labeled "SW GCM"

Note: If the signal "SW GCM" does not show up select the button to locate the Vehicle ID.

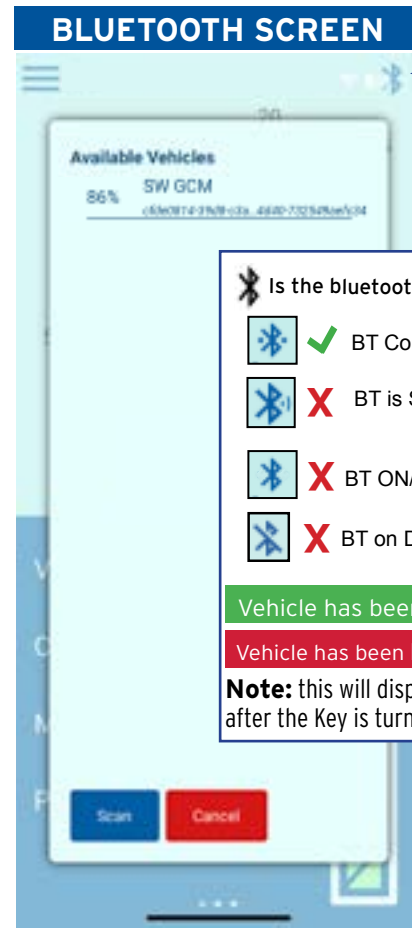
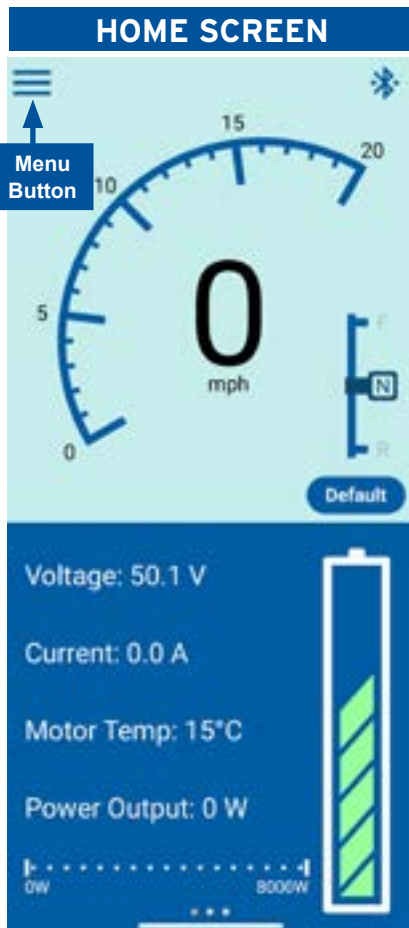
- Select the signal to connect to the Cart and follow the in App steps to complete the pairing process.

Note: The app will ask for Tire Size & Battery Type. For help or more details see the "Vehicle Setup" section in this Manual.

Note: The bluetooth® ID description can be changed and given a specific ID. Such as "BlueCart 1"

Selecting the Edit Button (Android™) or Swipe Left (Apple™) to allow editing.

This ID is specific to the Device it is setup on and will not show on another paired device.



Bluetooth Connection Status

Is the bluetooth® connected?

- BT Connected
- BT is Searching
- BT ON/ Not Connected
- BT on Device is OFF

Vehicle has been CONNECTED

Vehicle has been DISCONNECTED

Note: this will display for 3-5 secs after the Key is turned Off or On.



5 Pre-Drive Test

! Make sure all 4 Wheels are off the ground and the Vehicle is secure. Check that the area around the Vehicle Tires is clear and that they can spin freely.

With both GCM LEDs ON solid, and with the Vehicle paired to the SilverWolf App complete the following steps:



! This Pre-Drive Test must be done while sitting in the Driver Seat.

In the SilverWolf App slide the bottom screen left to show the icon of the 4 Wheels.



1. Move the Cart Switch to FWD
2. Move the 4WD Switch to 4H
* The indicator on the bottom Screen should show 4H
3. Press the Throttle. Confirm All 4 wheels are turning Forward
 - Repeat with Vehicle in Reverse
 - Repeat same 2 tests in 4L

Note: On the 4WD Screen the front 2 Motors have a Power Meter which will increase as the throttle is depressed and power is increased.

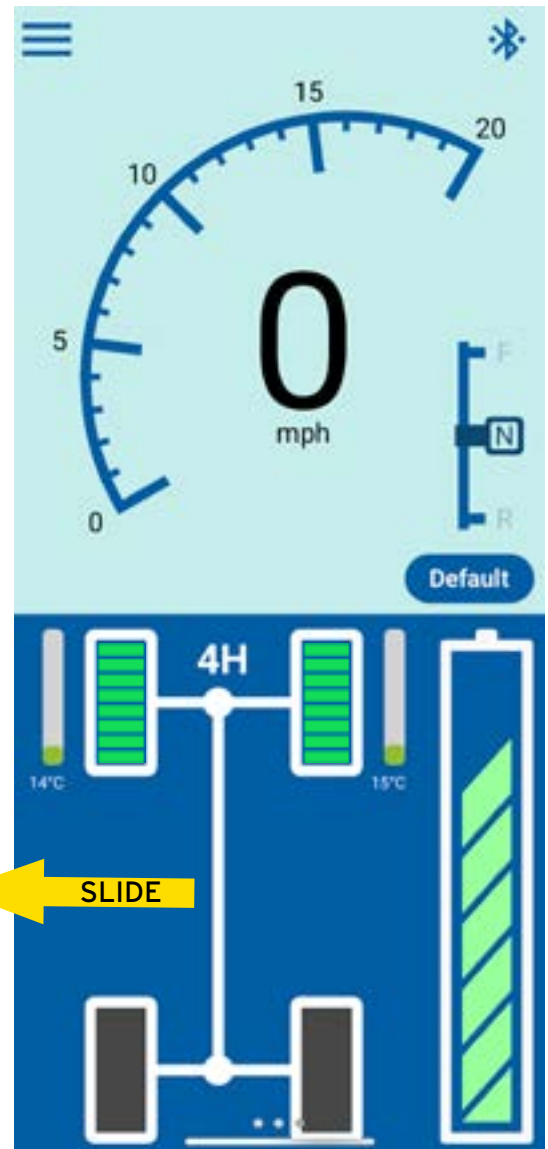
If there are no power bars in this area either the Throttle is not engaged or the Cart is going faster than 9mph/14kph in 4L or 12 mph/ 19kph in 4H.

When the Power Meter Bars turn yellow the Motors are in regen mode and are helping to slow the Vehicle down.

The rear Wheels will be turning but there will be no readings or power bars in the rear wheel icons because it is not a SilverWolf System.

Note: The Tires may still spin when the Throttle is engaged and the 4WD switch is in the OFF position. The systems applies a minimal amount of power to prevent Motor drag when they are not engaged.

If the Cart wheels do not turn go to the Diagnostics page in the App or see the Troubleshooting section in this manual.



4WD KIT OPERATION

	← Torque to 12mph
	← Motors Disengaged
	← Max. Torque to 9mph

060-001030

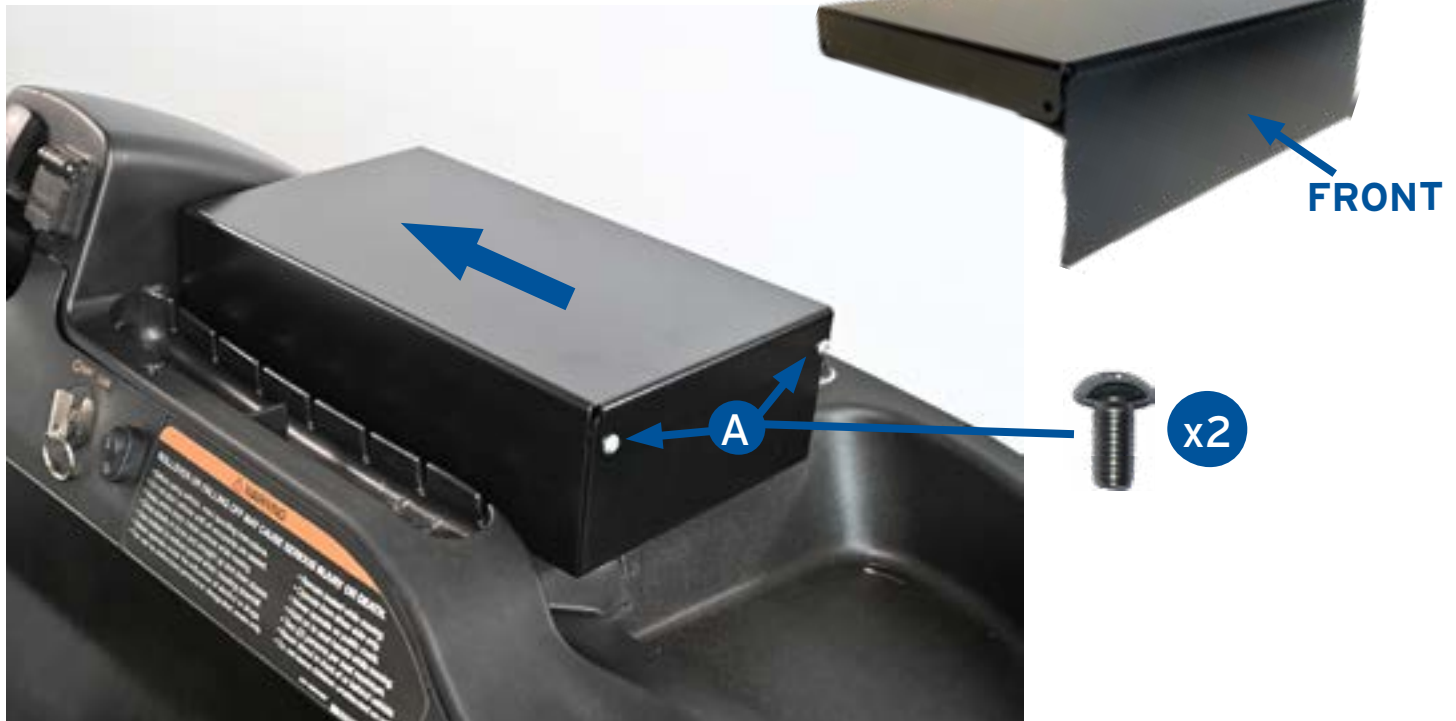
The Cart can now be reassembled.



6 Re-Assemble the Vehicle

A. Install the Controller Box Lid by sliding it into place from right to left on to the two Studs on the left side of the Controller Box. Be careful not to pinch the cables or wires.

Now use the two M5 Button Head Screws to secure the Lid in to place.



B. Re-install the Original Vehicle Parts as seen on page 13 & 14 of these instructions, being careful not to pinch or damaged any of the wires or cables.

C. Install the front Wheels/Tires on to the Motors and tighten to 65 ft/lbs.

6 Tire Alignment & Lift Kit Adjustment



Check the Leaf Springs & Adapter for contact when steering. Adjust if needed!

- Check to see if there is contact between the end of the Lift Kit Leaf Spring and the Wire Guard or Motor Power Cable. (see photos on next page)
- Turn the steering all the way from right to left to make sure there is no contact or rubbing.
- CAUTION If the Leaf Springs OR any other part is making contact with the motor Power Cables you will need to adjust the wheels which MAY include Toe In and OR Camber.

Continued on next page.

65
ft/lb

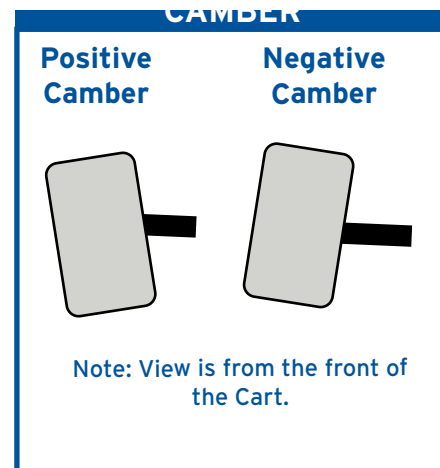
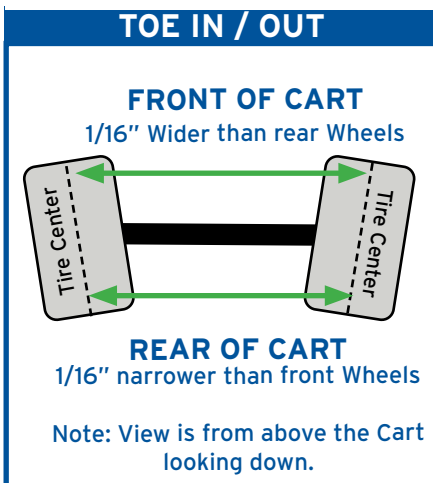


INSTALLATION CLUB CAR (Precedent/Onward/Tempo)



! You Must check that the Vehicle Wheel Alignment and Toe In are adjusted properly! Failure to do so may result in damage or serious Injury!

Please refer to the Vehicle Owners Manual for specific torque settings for each fastener. For help with properly checking the adjustment's please contact your authorized SilverWolf Dealer and or Authorized Cart Service center.



Toe In or Toe Out is the alignment of the wheels from back to front when measured from the center of each Tire.
Note: With the added torque on the front wheels **Toe In** should be adjusted so the rear of the wheels is in by 1/16".

Camber is the tilt of the individual Wheel.
Inward is Negative Camber and Outward is Positive Camber.

The Cart is now ready for the Drive Test!

! Before performing the Drive Test check for any loose Wires or Parts that could get caught or damaged. Make sure the area around the Vehicle is Clear and proceed Slowly allowing time to get use to the extra power and traction!



SilverWolf App Features

From the Home Screen The Silverwolf App has two areas to access information, change settings and check Vehicle status.

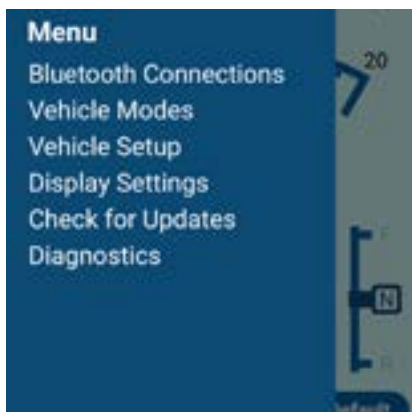
1. For current Vehicle (4WD) status, On the Fly Regen Braking adjustment and 4WD individual Motor Status slide left on the bottom of the Screen.
2. The Menu which can be accessed by selecting the button at the top right corner of the Home Screen.

HOME SCREEN



MENU

1. The Menu which can be accessed by selecting the button at the top right corner of the Home Screen.



This provides access to the different pages for setup, receiving updates, changing the 4WD settings and Vehicle diagnostics.



SilverWolf App Features

HOME SCREEN

- Menu Button**: Located at the top left.
- Bluetooth Connection Status**: Located at the top right.
- Speedometer**: A circular gauge showing 0 mph.
- Direction Indicator**: A small 'N' icon with a 'Default' button below it.
- Battery Voltage**: Digital display showing 50.1 V.
- Amp Meter**: Digital display showing 0.0 A.
- Motor Temp.**: Digital display showing 15°C.
- Power Output**: Digital display showing 0 W.
- VEHICLE MODE BUTTON**: A large battery icon on the right side of the screen.

BATTERY SOC METER
Shows current Battery State of Charge
Battery Icon (Changes Colors)

100%	40%	20%	10%
52-50V	48-47V	46.5V	46v

The Digital & Visual Meters show current power output.
The visual Power Meter goes from Yellow to Red as power increases.

When the Battery Charge Icon goes Orange there is about 20% of the Charge left . When it starts to Flash Orange the Battery State of Charge is at about 10% and should be charged as soon as possible.
Note: The Battery State of Charge will vary depending on the condition and type of the Batteries.

HOME SCREEN -4WD

- 4H-OFF-4L Indicator**: A '4H' indicator at the top.
- DS-L Motor Power**: Two meters showing 14°C and 18°C.
- DS-L Motor Temp**: A large battery icon on the right side.



SilverWolf App Vehicle Modes

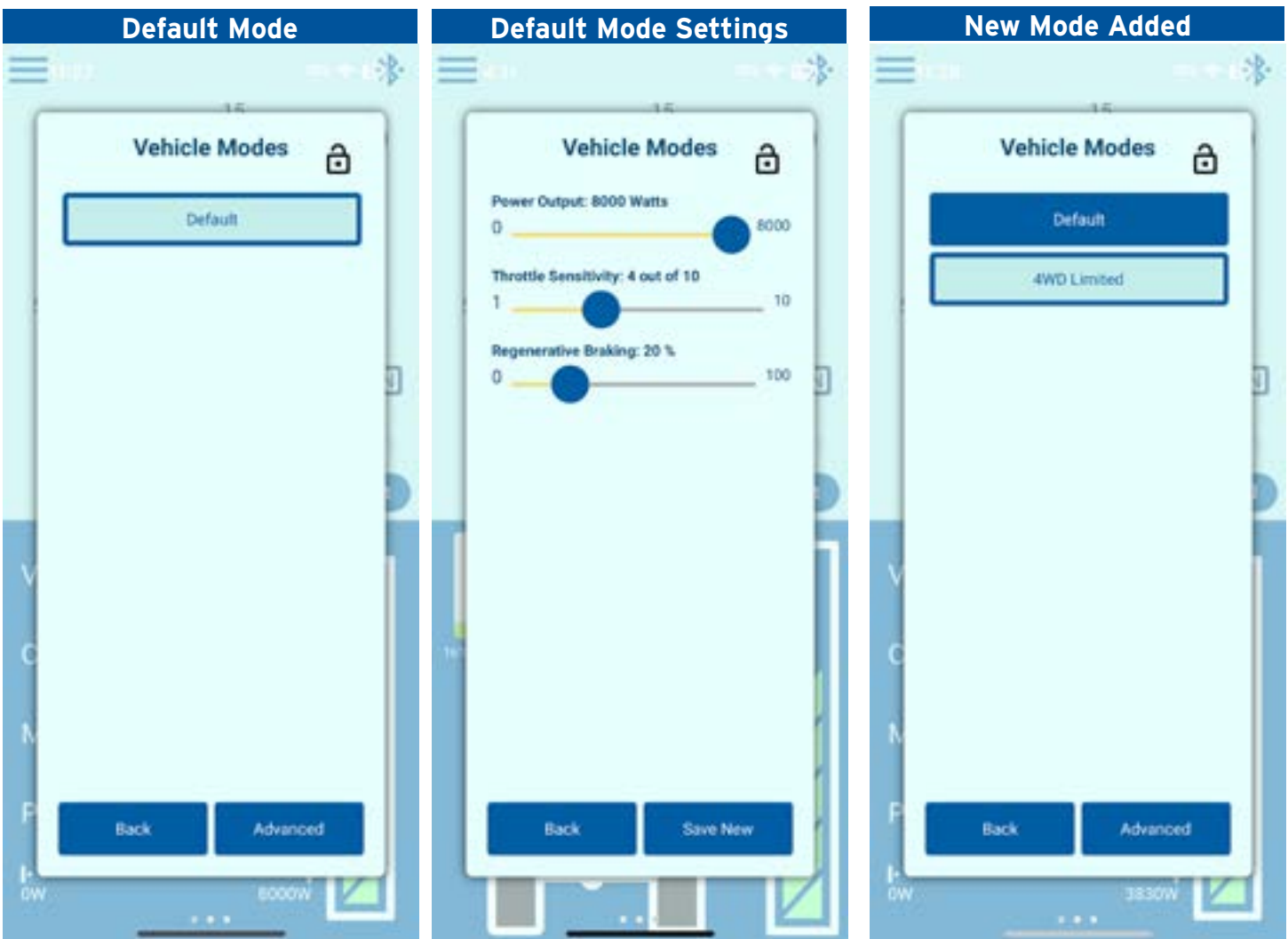
! When using the SilverWolf™ App make sure the Device (Phone or Tablet) is mounted in the Vehicle! DO NOT pickup or hold on to the Device while operating the Vehicle!

In the Vehicle Modes Screen there will be one Default Mode. See below

New Modes can be added by selecting the Advanced Button at the bottom of the screen. Move the sliders to change the values and then save the changes as a new Mode.

Note: If the new settings are not saved as a new Mode the Vehicle will revert back to the last Mode/ settings it was in when the Key is turned OFF & ON.

For a description of each Advanced Mode Settings see the next page.



Lock Mode

Select the Lock Icon at the top right corner of the Vehicle Modes Screen to lock the Vehicle in the current mode. To unlock simply touch the Lock Icon again.

Note: When the Vehicle is locked in one of the modes it can only be unlocked using the same device or login credentials that originally locked it.



Unlocked

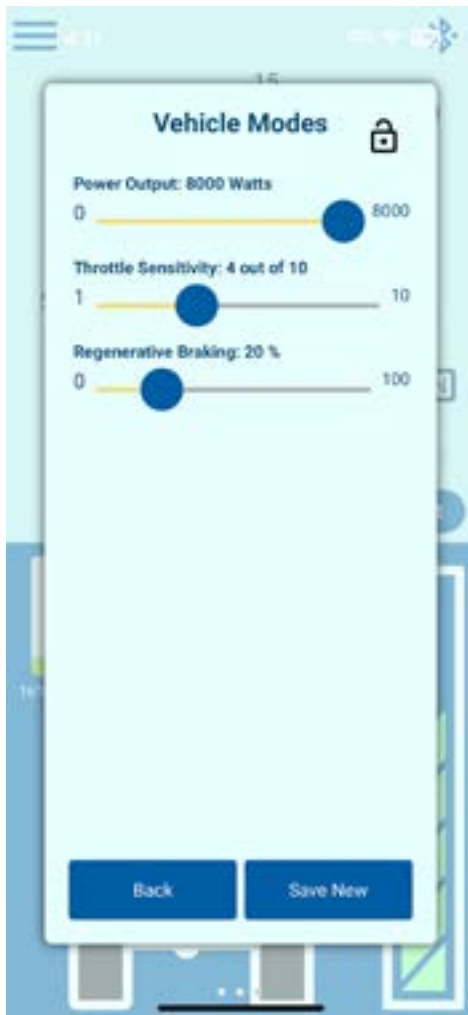


Locked



SilverWolf App Advanced Settings

Advanced Settings



Advanced Settings Sliders

Power Output:

This setting allows the Power going to the front Motors to be adjusted, giving more or less power to the front drive when needed or when the battery is low.

Note: The higher the Power Output the quicker the battery will discharge.

Recommended Setting = 6000 Watts

Throttle Sensitivity:

This Setting controls the response time of the throttle; a low setting will make the Throttle less responsive and require it to be depressed further. A higher setting will be more aggressive but can cause a jumpy throttle and a rougher ride.

Recommended Setting = 3-4

Regenerative (Motor) Braking:

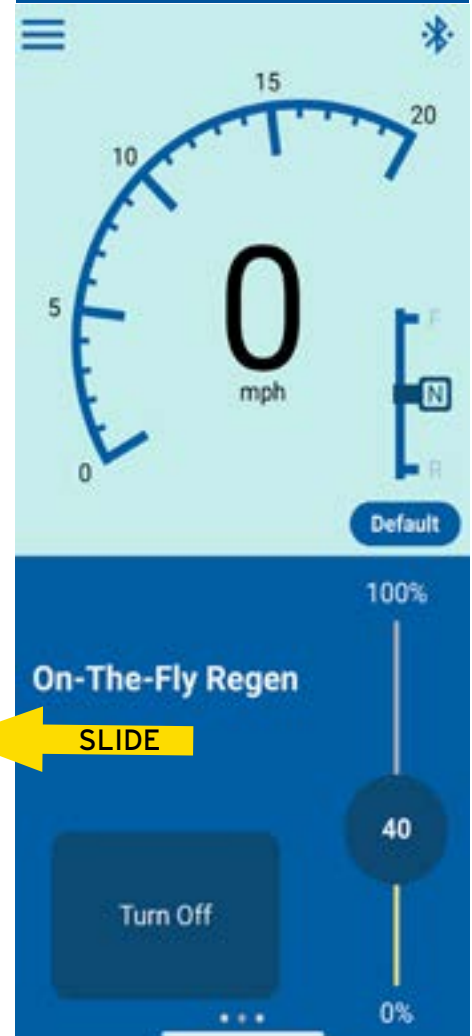
This setting also known as "Regen Braking" adjusts the maximum electric braking force on the front Motors. The higher the setting the harder the Vehicle will come to a stop.

Recommended Setting = 20% - 50% depending on the location and terrain.



Regenerative Braking does not replace the Vehicle's Original Mechanical Brakes! Always make sure the Mechanical Brakes are working properly and to the manufacturers specifications!

On-the-Fly Regen Braking



On-The-Fly Regenerative Braking:

This feature is found on the Main Screen by swiping Left at the bottom of the page.

The Regen Electric Braking can be adjusted while the Vehicle is moving to help slow it down and can help in cases such as when going down hill where extra braking may be required.

How to use:

1. Swipe left at the bottom of the Main Screen to bring up the On-The-Fly Regen Braking Slider.
2. Select On to turn on this feature.
3. Then slowly slide the adjustment circle up to increase the Regen Braking or down to decrease the Regen Braking of the front Motors

Note: to go back to the Original or Default Regen Braking setting touch the "Off" Button at the bottom of the screen.

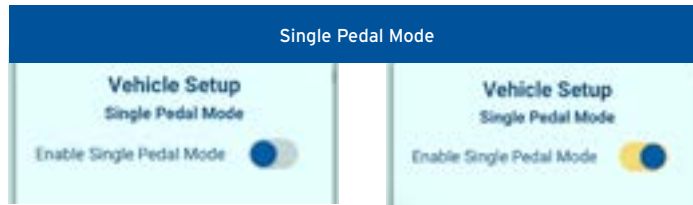
When the Key is Turned off & on the Regen Braking setting will revert back to the setting of the last Vehicle Mode it was in. I.e. "Default Mode."



SilverWolf App Vehicle Setup

! Before using the Vehicle make sure to accurately set the Vehicle specifications as shown below! Selecting the incorrect settings can damage the Vehicle and/or cause serious injury!

To change or update the Vehicle Settings open the Menu Screen and select Vehicle Setup. Choose the setting that will be changed.



Single Pedal Mode allows the first 25% of the Pedal/Throttle to apply partial Regen Braking.

Single Pedal Mode Enabled:

The Pedal/Throttle has partial Regen Braking in the first 25% of movement.

Single Pedal Mode -OFF

The Pedal/Throttle has no Regen Braking until it is completely released.

Changing the Regenerative (Motor) Braking setting in the advanced settings will affect this feature.

Note: This feature does not turn off when the Key is off and will need to be turned on and off here.



SilverWolf App Vehicle Setup

Battery Configuration



Select the Battery Pack Voltage

Note: for Lithium Ion Batteries select Custom and enter the Battery manufactures nominal rating (not maximum charge). i.e. 52.1v

Select the Battery Protection Settings.

Note: for Lead Acid Batteries there is only one setting.

For Lithium Ion Batteries choose the settings according to the Batteries performance.

Minimal: provides the least amount of Battery Protection, allowing the Controllers to pull more current at a lower Battery Charge.

Note: This can damage the Battery(s) or Components if used with a Battery Management System (BMS) that can not properly controller the Battery discharge.

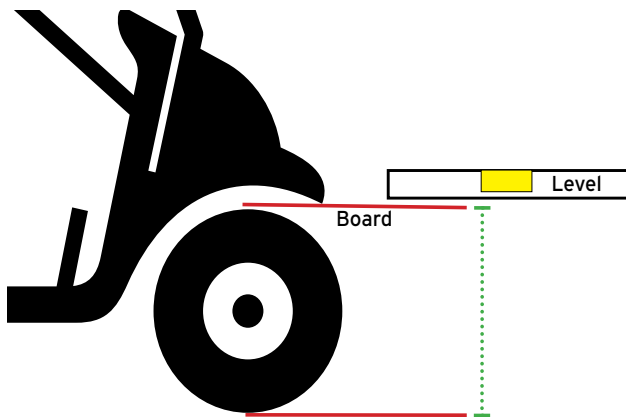
Default: provides standard battery protection.

Cautious: provides the most amount of Battery protection, by more rapidly reducing the power limit as the Battery discharges.

Tire Size

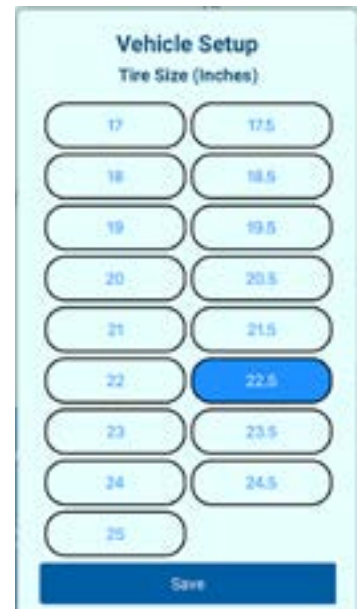


Make sure to select the correct Wheel Size. Selecting the incorrect size will give an inaccurate speed reading.



For the most accurate Speed reading first make sure the tires are filled to the manufacturer specified PSI rating on the tire.

Then measure the height of the Wheel with a Tape Measure, Flat Board and a Level. Select the closest size.



Calibrate Throttle

This will match the Vehicles Throttle range to the Controller for smoother performance. This is recommended when first pairing the Vehicle or if the Throttle is not responding not operating properly.

Club Car OBC Bypass

Only select if the rear Controller of the Cart has been replaced with a SilverWolf TEEKON AC Drive system.

Update Controller Configuration

Only select if the SilverWolf App says a Controller Configuration is required.

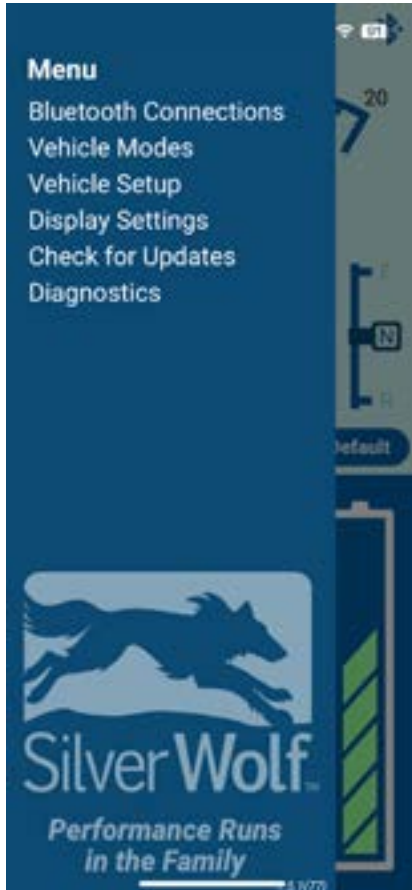




SilverWolf App Menu Other

Display Settings

Display Settings allow the user to change languages and switch between Miles and Kilometers per hour.



Check for Updates

Checks for Online Updates to keep the firmware and configuration up to date.

Select "Check for Updates"

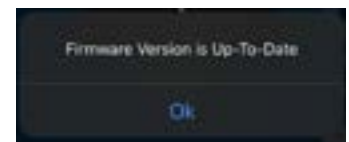
Note: In order to receive the updates, you will need to be connected to wifi or use your smartphone's data.

You do NOT need to be connected to the cart.

When connected to the cart select "Check for Updates" to complete the update.

Autoconnect: The Vehicle will automatically reconnect or disconnect when the Key is turned ON or OFF. This feature will only work with the paired Device and when it is in range.

The Backup Buzzer will also engage: 2 Beeps = **Connected** and 1 Long Beep = **Disconnected**



Demo Mode

Demo Mode: To access Demo Mode, tap the SilverWolf Log 8x to show the "Start Demo Mode" selection.

This is a demonstration tool to show how the Silverwolf™ Smart Phone App works. Changes made are not live and do not affect the Vehicle.


Note: When in this mode the Vehicle is disconnected and will not re-connect until Simulation Mode is stopped.




SilverWolf App Diagnostics

Warning Icons- Main Screen

The SilverWolf™ App includes a troubleshooting Icon as well as a more detailed diagnostics page.

 On the Main Screen a **Warning Icon** will appear when there is a potential problem. Touching the Icon will reveal a description of the fault and the next steps that should be taken.

Diagnostics

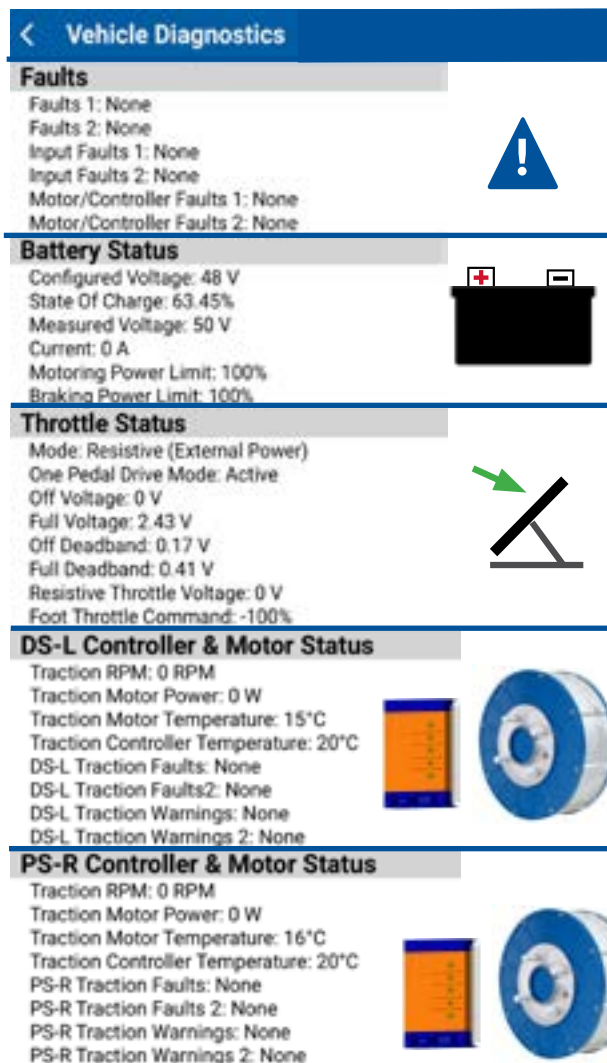
For a more detailed diagnostic go to the “Diagnostics” section in the Menu. 

Select the Diagnostics Page and scroll down to see Vehicle Faults, Warnings and the status of the Main Components of the Vehicle. The diagnostics page shows the current Status of the Vehicle and it’s Main Components.

For more help with troubleshooting select “**Upload Snapshot**” at the bottom of the Diagnostics page; this will send the current Vehicle diagnostic status to the Dealer or SilverWolf for further analysis by an authorized technician.

Send an e-mail to the dealer or to support@silverwolf.com to inform them of the “Uploaded Snapshot” or for further assistance.

Note: this will required a Wifi connection or the use of Cellular Data.



Vehicle Diagnostics

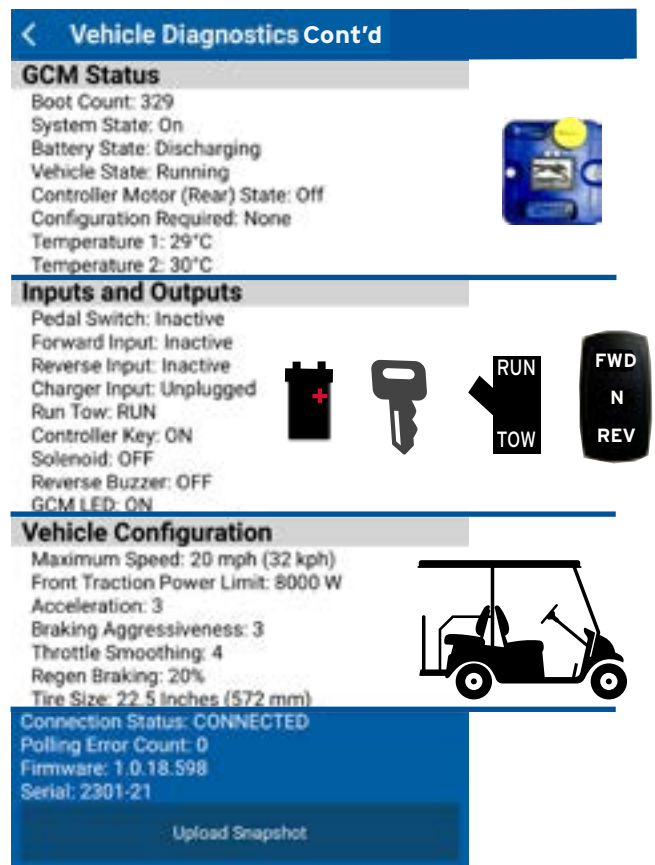
Faults
 Faults 1: None
 Faults 2: None
 Input Faults 1: None
 Input Faults 2: None
 Motor/Controller Faults 1: None
 Motor/Controller Faults 2: None

Battery Status
 Configured Voltage: 48 V
 State Of Charge: 63.45%
 Measured Voltage: 50 V
 Current: 0 A
 Motoring Power Limit: 100%
 Braking Power Limit: 100%

Throttle Status
 Mode: Resistive (External Power)
 One Pedal Drive Mode: Active
 Off Voltage: 0 V
 Full Voltage: 2.43 V
 Off Deadband: 0.17 V
 Full Deadband: 0.41 V
 Resistive Throttle Voltage: 0 V
 Foot Throttle Command: -100%

DS-L Controller & Motor Status
 Traction RPM: 0 RPM
 Traction Motor Power: 0 W
 Traction Motor Temperature: 15°C
 Traction Controller Temperature: 20°C
 DS-L Traction Faults: None
 DS-L Traction Faults2: None
 DS-L Traction Warnings: None
 DS-L Traction Warnings 2: None

PS-R Controller & Motor Status
 Traction RPM: 0 RPM
 Traction Motor Power: 0 W
 Traction Motor Temperature: 16°C
 Traction Controller Temperature: 20°C
 PS-R Traction Faults: None
 PS-R Traction Faults 2: None
 PS-R Traction Warnings: None
 PS-R Traction Warnings 2: None



Vehicle Diagnostics Cont'd

GCM Status
 Boot Count: 329
 System State: On
 Battery State: Discharging
 Vehicle State: Running
 Controller Motor (Rear) State: Off
 Configuration Required: None
 Temperature 1: 29°C
 Temperature 2: 30°C

Inputs and Outputs
 Pedal Switch: Inactive
 Forward Input: Inactive
 Reverse Input: Inactive
 Charger Input: Unplugged
 Run Tow: RUN
 Controller Key: ON
 Solenoid: OFF
 Reverse Buzzer: OFF
 GCM LED: ON

Vehicle Configuration
 Maximum Speed: 20 mph (32 kph)
 Front Traction Power Limit: 8000 W
 Acceleration: 3
 Braking Aggressiveness: 3
 Throttle Smoothing: 4
 Regen Braking: 20%
 Tire Size: 22.5 inches (572 mm)

Connection Status: CONNECTED
 Polling Error Count: 0
 Firmware: 1.0.18.598
 Serial: 2301-21

Upload Snapshot



GCM/Controller LED Flashing

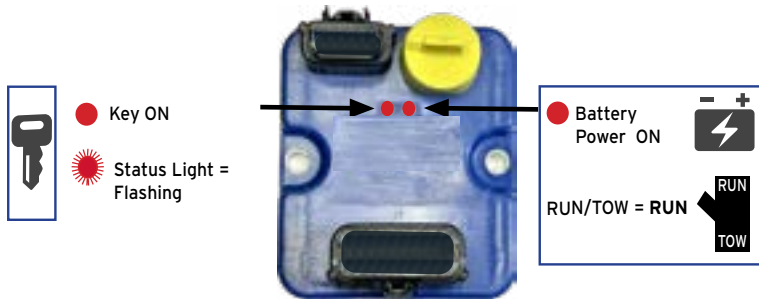
TROUBLESHOOTING without the SilverWolf™ SMART PHONE APP

If the SilverWolf™ App is not being used or it will not connect, there are Red Lights on the 2 4WD Controllers and the GCM which will indicate the status of the cart.

Note: Before contacting the dealer or SilverWolf™ for support, make sure that the Batteries have a full charge.

For SilverWolf™ Support contact support@silverwolf.com.

GCM (GOLF CART MODULE)- LED Flash Codes



Status Light = Flashing *See Flash Code List below

The Key (left side) LED will blink 2, 3 or 4 times, pause and then repeat when there is a detected error.

FLASHES	STATUS / DESCRIPTION	NEXT STEP
2	There is an issue with the GCM or Battery. This could be a configuration issue, such as incorrect battery configuration, or wrong parameter file loaded.	<ul style="list-style-type: none"> Check for Updates Confirm Battery Configuration
3	There is a peripheral or Non- SilverWolf Component issue. This occurs if the GCM detects an issue with a connected Switch, Throttle, Solenoid or other peripheral input or if that peripheral is configured incorrectly.	<ul style="list-style-type: none"> Recalibrate the Throttle Check the wiring of Throttle, FWD/REV Switch, Key Switch, Solenoid and 4H/4L Switch
4	There is an issue with a connected Motor or Controller. - This could be a communication/Harness issue such as a Harness is damaged or loose. - It can indicate an issue with the Motor connected to that Controller - It can indicate that a configuration change in the Motor Controller settings is required.	<ul style="list-style-type: none"> Check for Updates Select "Update Controller Configuration" in the Setup Menu. Check the Harness & Cables from the Motor to the Controller

SW4000 CONTROLLER- LED Flash Codes



To see the LED light on the SilverWolf Controllers remove the 2 Screws that hold the Controller Cover in place and slide the Cover off of the Controller. This will reveal the DS-L and PS-R Controllers.

If the LED on one of the Controllers is Flashing, count the # of flashes. This will be a 2 digit sequence with a pause between the 1st and 2nd #. i.e. 2 - 8.

If the SilverWolf App can not connect to the system note the flash code and contact the Dealer or SilverWolf Support.



SilverWolf™ Vehicles Inc. warranty obligations are limited to the terms set forth below:

SilverWolf™ Vehicles Inc. hereby warrants to the original purchaser of a new motor kit and/or accessories that they shall be free from defects in material and workmanship, under normal use and service, subject to the exclusions and limitations set forth below, for a period of one (1) year from date of original retail purchase to customer or End-User.

The purchaser must provide proof of the date of purchase with any warranty claim. If a defect exists, at its option, SilverWolf™ Vehicles Inc. will;

1. Repair the Product at no charge, at a place and location of its choosing,
2. Exchange the Product with a Product that is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original Product.
3. Refund the purchase price of the Product.

A replacement product/part assumes the remaining warranty of the original Product or ninety (90) days from the date of replacement or repair whichever provides longer coverage for you. When a Product or part is exchanged, any replacement item becomes your property and the replaced items become SilverWolf™ Vehicles Inc.'s property. When a refund is given, your Product becomes the property of SilverWolf™ Vehicles Inc.

Exclusions and Limitations

SilverWolf™ Vehicles Inc.'s Limited Warranty does not cover the following items:

1. Products lost or damaged during shipment;
2. Abnormal strain, neglect or abuse
3. Installation and use of parts or accessories that are not genuine SilverWolf™ parts (unless approved by the SilverWolf™ Vehicles Inc. in writing)
4. Accident or collision damage
5. Damage to product due to misuse, accident, theft or fire
6. Modification or disassembly of motor, controller and/or any other original parts and components This limited warranty covers material & workmanship for the above-specified period.

Voiding of Warranty:

This warranty shall be void if the motors or accessories are abused or used in any unintended manner or if they show indications that they been altered in any way to cause them to perform outside of SilverWolf's™ specifications.

Motors kits which are installed on vehicles used for rentals or free public use are not covered under warranty.

Any modifications or alterations leading to changes in the stability or speed of the vehicle, can cause serious personal injury or death.



Disclaimer

This limited warranty is exclusive. SilverWolf™ makes no other warranty of any kind, expressed or implied. Any implied warranties of merchantability or fitness for a particular purpose which exceed the obligations or time limits stated in this warranty are hereby disclaimed by SilverWolf™ Vehicles Inc. and excluded from this warranty. The purchaser and SilverWolf™ Vehicles Inc. expressly agree that the remedy of the replacement or repair of the defective component thereof is the sole remedy of the purchaser. SilverWolf™ Vehicles Inc. makes no other representation or warranty of any kind.

No SilverWolf™ Vehicles Inc. Dealer, Distributor, Reseller, Agent or Employee is authorized to make any modification, extension or addition to this warranty.

No Consequential Damages

SilverWolf™ Vehicles is not responsible for direct, special, incidental, or consequential damages including, but not limited to, loss related to property, loss of use, loss of time, inconvenience, or any other economic loss.

How to Make a Warranty Claim:

To make a warranty claim under this limited warranty, you must present defective component to an authorized SilverWolf™ dealer. SilverWolf™ Vehicles Inc. will return the replacement item to the end user.

How to Contact SilverWolf™ Vehicles Inc;

60 Northland Dr. Unit 6
Waterloo, ON Canada N2V 2B8

Tel: 1-888-398-7078

E-mail: support@silverwolf.com

For parts and repair contact your local dealer. or support@silverwolf.com



CONTACT SILVERWOLF AT: SUPPORT@SILVERWOLF.COM

www.silverwolf.com

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