



**TRAC ABOUT, INC.**

**IRV2000**

**OWNERS MANUAL**

**Trac About, Inc.  
Newton, Kansas  
316-283-5660**

## **An open letter to the owner of**

### **THE TRAC ABOUT MODEL IRV2000**

*PLEASE READ THE OPERATOR S PART OF THIS MANUAL  
BEFORE OPERATING THE IRV2000*

Thank you for choosing the Trac About **IRV2000**. We sincerely hope it will allow you much more freedom to go where you would like to go. The **IRV2000** was made for safety and ease of going where you would like to go. It operates quite well inside a home, school, shopping mall, church or any building that will accept motorized chairs. It's construction and low center of gravity make the machine extremely safe.

Outdoors the **IRV2000** is unsurpassed for its ability to take you over rough terrain, through mud, snow, and seaside sand. It can cross curbs and other obstructions up to 4-5 inches if you cross them at a slight angle. **THE IRV2000 WILL NOT GO UP A STAIRWAY.**

To get the most enjoyment and use of your **IRV2000**, you really should read the manual before operating. We have tried to make it brief and to the point. We hope you enjoy.

If for any reason you have a problem with the **IRV2000**, please call Trac About Inc. at 1-800-458-8616 or e-mail from the web site, [www.tracabout.com](http://www.tracabout.com).

Sincerely at your service,

The gang at Trac About Inc.

**TRAC ABOUT, INC.**  
1801 SE 9th ST., PO BOX 502, NEWTON, KS.67114-0502  
316-283-5660\*800-458-8616\*FAX316-283-0693  
www.tracabout.com

**A PERSONAL AGREEMENT  
BETWEEN THE OWNER AND TRAC ABOUT INC.**

I do hereby agree that this IRV2000 (serial number \_\_\_\_\_) has been demonstrated to the best of my understanding. I will ask an authorized representative of TRAC ABOUT INC. if I should have any questions in the future about operation or maintenance. I will first go the Web page of [www.tracabout.com](http://www.tracabout.com) to find my answer by directly reading or by E-mail. I will call 1-800-458-8616 if I don't have access to the INTERNET or if I need more help.

I understand this IRV2000 has been setup for me and only me. Any other person that operates it will do so at their own risk. TRAC ABOUT INC. nor any person associated will not be held accountable for any damage or injury done by the operation of this machine.

Signed \_\_\_\_\_ Date \_\_\_\_\_  
(check one or both)  
Owner  
Operator

I agree to allow TRAC ABOUT, INC. to use my name, comments and or photos for promotional uses in demonstrating the abilities of the IRV 2000. I understand that there will be no monetary gain now or in the future from TRAC ABOUT'S use of my name, comments and or photos.

I give permission \_\_\_\_\_ I do not give my permission \_\_\_\_\_  
(Initial) (Initial)

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OWNERS MANUAL  
THE TRAC ABOUT  
MODEL IRV2000

**YOU MUST READ THIS MANUAL BEFORE FIRST OPERATING THE IRV2000.**

Thank you for purchasing the TRAC ABOUT IRV2000. **Please read at least the first 3 pages before operating the machine.**

We would like to hear from you with any comments or suggestions about the IRV2000. Please call 1-800-458-8616. Any changes or new information can be found on our web site at [www.tracabout.com](http://www.tracabout.com).

**OPERATION SAFETY**

The IRV2000 has been built and tested to allow you more freedom and safety than most other vehicles on the market. The safety suggestions listed below, are to help you enjoy as much pleasure as possible.

- **Always wear your seat belt.** The IRV2000 is designed for your safety and pleasure out of doors. Sometimes the going could get a little rough.
- If the battery lights show two red and one amber, you need to return and charge the batteries. **Do not charge the batteries if the battery charger is wet.**
- Do not drive the IRV2000 in vehicle areas. It is not a legal street vehicle.
- It is not recommended to drive parallel on an incline greater than 15 degrees.
- Do not drive up a slope of more than 20 degrees. **BACK THE MACHINE UP A STEEP GRADE,** going forward may cause it to go over backwards.
- **Do not ride the IRV2000 on a ramp that is not rated for at least 1000 pounds.**
- Do not unlatch the drive pins and let it coast down hill. **You will not have control.**
- Do not drive in water deeper than the top of the track.
- If you drive the IRV2000 on an ocean beach, wash off all salt each day.
- Do not high pressure wash under the seat mount. (This is where all the electronics for the IRV2000 resides. After washing let the machine set until all water is gone. **Do not operate the IRV2000 if the controls are wet.**)
- Lock the Joystick controller when leaving the IRV2000 unattended.

***WARNING: Allow only one person at a time on the IRV2000. Violation of the machine could result in personal injury or property damage.***

## INSTRUCTIONS TO OPERATE THE IRV2000

The Instructions of Operation are intended for you to have the most fun and the least amount of frustrations while you operate the **IRV2000**. Please read the first 3 pages AND page 11 of this manual before attempting to operate your new machine.

Keep in mind that the **IRV2000** weights about 400 pounds without an operator. It can cause damage to persons and property if not operated properly.

You can mount the **IRV2000** from either side of the seat simply by raising the arm of the seat. Sit down, spin in the seat and lower the arm rest. **FASTEN YOUR SEAT BELT. YOU ARE READY TO GO WHERE YOU WOULD LIKE TO GO!!** The following topics will explain the operation of each element of the Joystick controller.

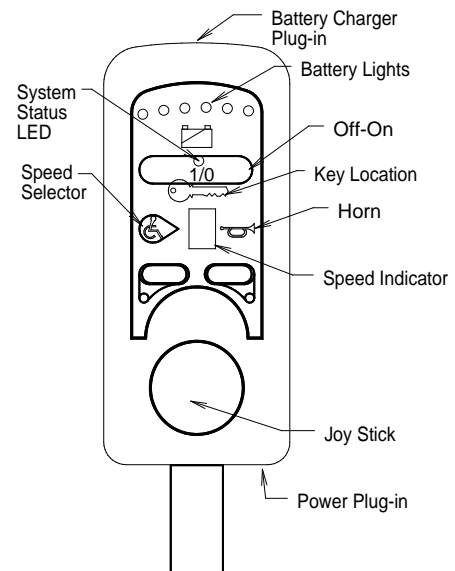
### GETTING STARTED USING THE 80 AMP CONTROLLER

(If you have the 100 amp controller, please see pages 4,5)

The following is an explanation of the **Joystick** control.

Press the long **I/O button**. If the **Joystick** will not work, you will see a little red light flashing on the **Key Location**. Touch the magnetic key on the **Key Location** red light. This will allow the Joystick to activate. (If you want to re-lock the Joystick, have power on and touch the magnetic key on the **Key Location** red light.)

You will also see the **Battery Lights** come on. If the battery is fully charged, you will see two red lights, two yellow lights and two green lights. You will see in the **Speed Indicator** window the speed number or actuator letter. “A” or “b”



### SELECTING SPEEDS

Press the **Speed Selector** until you see a “1” appear in the **Speed Indicator** window. If you press the **Speed Selector** again, you will see a “2” appear in the window.



The Joystick has a total of five speeds. The higher the number the faster the **IRV 2000** will go. To change to a lower speed you must continue to press the button through the speeds and letters to obtain the desired speed. You will see a letter appear after speed “5”. Refer to the section WHEEL POSITIONS for an explanation. (**NOTE: beginning operation in speed is advisable “1” or “2” until you are familiar with the operation of the Joystick.**)

Speeds are the result of power levels. If you need more power you need to select a higher speed setting and then adjust the ground speed by moving the lever slightly.

## **DRIVING THE IRV 2000 WITH THE JOYSTICK**

Moving the Joystick forward will drive the **IRV 2000** forward. If you push the stick just a little, you will go slow. If you push it a lot, you will go as fast as the **Speed Indicator** is set. If you move the stick a little to the left or right, you will turn in that direction in a large circle. If you move it a lot, you will turn very short. If you pull back on the stick, you will go backwards. If you release the Joystick you will stop abruptly. **Try to move the Joystick very smoothly to avoid sudden jerks.**

## **WHEEL POSITIONS**

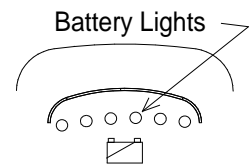
**SEE PAGE 8 FOR DIAGRAM**

If you continue to press the **Speed Selector** again and again, you will see an “A” or a “b” in the **Speed Indicator** window. These letters are used to raise and lower the tail wheel “A” or the large center wheels “b”. Move the lever sideways to change the letter. Now if you push forward or pull back on the Joystick, the wheel will go down or up. **Try to cross obstacles at an angle. You can cross a 5" curb safely if you cross at an angle. Cross small logs and ditches the same way.**

NOTE: If you run the center wheels all the way down and the caster all the way down, you now have a three-point setup that allows tight turns on hard surfaces as well as on carpet and throw rugs.

## **BATTERY LIGHTS**

The Joystick controller has six **battery lights**. They will show how much charge is left in the batteries. When the batteries are fully charged, all six lights will light. As the batteries lose their charge, the green light will be the first to quit. If both of the green and yellow lights go out, you have approximately 15 minutes before the machine quits. You can run the batteries down to the point that the left (red) light will begin to flash. When that happens, you do not have much time left. The battery charge life will depend on the load and the terrain. You should never leave the battery with a low charge. It will damage the batteries over time.



If the **IRV2000** has a problem, normally the little red light on the **I/O** begins to flash. Turn to the section titled, **TROUBLE SHOOTING** and follow the instructions.

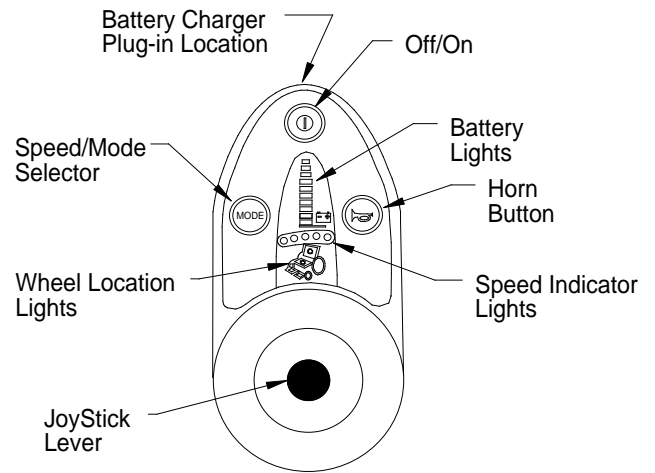
**NOTE: IF THE IRV2000 IS LEFT OUTDOORS OR IF YOU WANT HIGH SECURITY, UNPLUG THE JOYSTICK AND REMOVE IT FROM THE ARMREST.**

## **GETTING STARTED USING THE 100 AMP CONTROLLER**

(If you have the 80 amp controller, please see pages 2,3)

The following is an explanation of the **Joystick** control. Press the round **OFF/ON Button**. If the **Joystick** will not work, you will see the **Battery Lights** flashing. Refer to the flash code section.

Otherwise, you should see the **Battery Lights** and the **Speed Indicator Lights** come on without flashing. If the battery is fully charged, you will see three red lights, four yellow lights and three green lights. Also notice the **Speed Indicator Lights (1-5)**, indicating what speed range the unit is in, one light being the slowest speed available.



### **SELECTING SPEEDS**

Press the **Speed/Mode Selector** button. You should see the **Speed Indicator Lights** flash. Move the **Joystick Lever** to the right to increase speed, and to the left to decrease speed. To operate in that speed, simply move the Lever forward or back. You can also change speed while moving by pressing the **Speed/Mode Selector** button. The Joystick has a total of five speeds.



**( NOTE: beginning operation in speed “1” or “2” lights is advisable until you are familiar with the operation of the Joystick.)**

### **DRIVING THE IRV 2000 WITH THE JOYSTICK**

Moving the Joystick forward will drive the **IRV 2000** forward. If you push the stick just a little, you will go slow. If you push it a lot, you will go as fast as the **Speed Indicator** is set. If you move the stick a little to the left or right, you will turn in that direction in a large circle. If you move it a lot, you will turn very short. If you pull back on the stick, you will go backwards. If you release the Joystick you will stop abruptly.

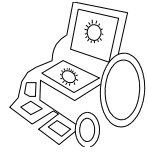
**Try to move the Joystick very smoothly to avoid sudden jerks.**



## WHEEL POSITIONS

### **SEE PAGE 8 FOR DIAGRAM**

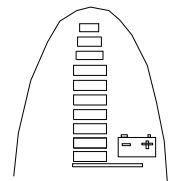
If you press the **Speed/Mode Selector** twice, you will see one of the two red **Wheel Location Lights** come on in the wheelchair picture. This mode is used to raise and lower either the tail wheel or the large center wheels, depending on which red light is lit. The light in the “seat bottom” is for the center wheels. The light in the “seat back” is for the tail wheel. Move the lever sideways to change the location. Now if you push forward or pull back on the Joystick, the wheels will go down or up. **Try to cross obstacles at an angle. You can cross a 5" curb safely if you cross at an angle. Cross small logs and ditches the same way.**



NOTE: If you run the center wheels all the way down and the tail wheel all the way down, you now have a three-point setup that allows tight turns on hard surfaces as well as on carpet and throw rugs.

## BATTERY LIGHTS

The Joystick controller has ten **Battery Lights**. They will show how much charge is left in the batteries. When the batteries are fully charged, all ten lights will light. As the batteries lose their charge, the green lights will be the first to quit. If all of the green and yellow lights go out, you have approximately 15 minutes before the machine quits. You can run the batteries down to the point that the last red light will begin to flash. When that happens, you do not have much time left. The battery charge life will depend on the load and the terrain. You should never leave the battery with a low charge. It will damage the batteries over time.



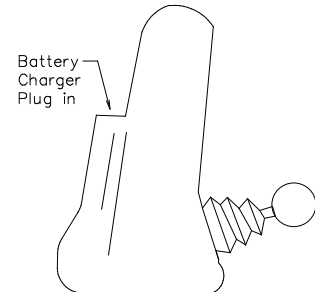
If the **IRV2000** has a problem, normally the **Battery Lights** begin to flash. Turn to the section titled, **TROUBLE SHOOTING** and follow the instructions.

**NOTE: IF THE IRV2000 IS LEFT OUTDOORS OR IF YOU WANT HIGH SECURITY, UNPLUG THE JOYSTICK AND REMOVE IT FROM THE ARMREST.**

## THE BATTERY SECTION

### CHARGING THE BATTERIES

Simply plug the charger into the **Joystick** controller, than plug the charger into any 120 volt electrical receptacle. It may take an hour or so to charge for another short run. The IRV2000 has an inhibit feature that will not allow you to operate the machine with the charger attached. If you run the batteries quite low, it may take six to twelve hours to fully recharge. You may leave the charger on for many days if you so want. It will not hurt the batteries. **DO NOT CHARGE BATTERIES IF THE CHARGER OR THE JOYSTICK IS WET.**

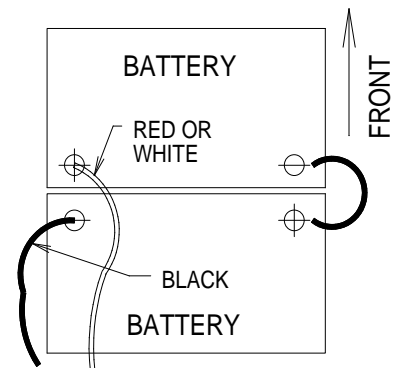


### REPLACING THE BATTERIES

#### NOTICE THE WIRING DIAGRAM

The batteries are a deep cycle, gel cell, group 24 or group 27. **Do not use acid filled batteries like the ones in your automobile.** They are not safe to use in the **IRV 2000** in the case of a roll over. Acid fill batteries are not safe to charge in a house. Gel cell deep cycle batteries will give you the best performance. You may buy your batteries from Trac About Inc. or from a good battery dealer.

Unplug the cord from the Joystick. Remove the battery cover. Remove the wing nuts on the terminal posts from the front battery. Make sure you remember which wires go where. Remove the battery. Remove the wing nuts from the rear battery and slide it forward and remove it. Make sure no wires touch the metal of the **IRV 2000**.



Before installing new batteries, make sure each one is fully charged.

When reinstalling the batteries make sure the red wires are on the positive (+) posts.

Make sure all connection are tight. **Do not drop any battery.** Reconnect the Joystick.

Insert the 24 volt charger in the Joystick and let the batteries charge until the green light on the charger comes on.

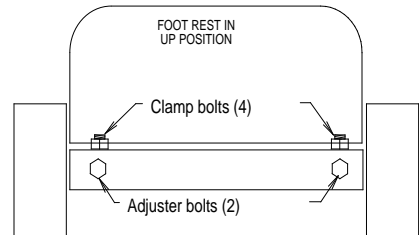
## THE TRAC SECTION

### TRACK ADJUSTMENT

The track belts are adjusted at the factory. The adjuster bolt is torqued to 10 ft-lbs.\* The track belt may stretch and need further adjustment after a period of use.

To adjust the track, remove the battery cover, loosen the two clamp bolts on top of the frame at each side using the 3/4 size wrench provided. Lift the foot rest and turn the adjuster bolt in front of the frame on each side

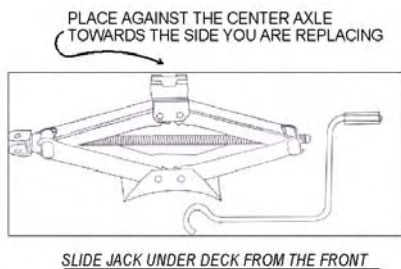
evenly. Tighten the adjuster bolts on each side to 10 ft-lbs.\* After proper tension or torque is obtained, re-tighten the clamp bolts.



### TRACK REPLACEMENT

NOTICE: Track replacement should be done only on a flat hard surface.

**TURN OFF THE JOYSTICK AND UNPLUG THE CABLE.** Remove the jack and wrench pouch from under the battery cover.



Slide the jack under the front of the machine at an angle toward the side you want to work on to the center axle. Place the center of the jack under the axle. Turn the jack handle clock-wise until the side of the machine rises about 1 inch off the ground. Lift the foot rest. Using the supplied multi-wrench, find the end marked 7/8. Turn the adjuster bolt on each side of the front frame counter-clockwise until the adjuster bolts are loosened, about 2". Using the end marked 3/4, loosen the two clamp bolts on each side of the frame top. Push both front wheels back near the end of their slots. Pull out the drive pin in the rear wheel on the side you are working on and turn it 1/4 turn so that the wheel turns by hand. Slip the track on the wheels, making sure the track center rib is in the grooves of all the wheels. Tighten the adjuster bolts on each side to 10 ft-lbs.\* Measure each side, front to rear axle, and adjust until equal. Re-tighten the clamp bolts on both sides. Release the drive pin and turn the track/wheel to engage the drive pin. Lower the jack, remove it and put it and tools away, plug the cable into the joystick, and you are ready to go. Check track tension after approximately 20 hours of runtime. Adjust accordingly.

\* 10 ft-lbs is a handle 6 inches long with 20 pounds applied at the end of the handle. If you are using the wrench supplied with the machine the handle is about 6 inches long.

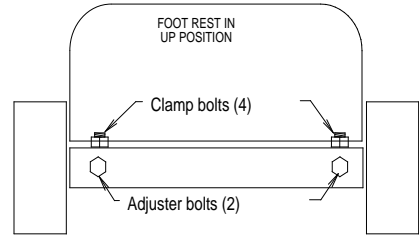
## THE TRAC SECTION

### TRACK ADJUSTMENT

The track belts are adjusted at the factory. The adjuster bolt is torqued to 10 ft-lbs.\* The track belt may stretch and need further adjustment after a period of use.

To adjust the track, remove the battery cover, loosen the two clamp bolts on top of the frame at each side using the 3/4 size wrench provided. Lift the foot rest and turn the adjuster bolt in front of the frame on each side

evenly. Tighten the adjuster bolts on each side to 10 ft-lbs.\* After proper tension or torque is obtained, re-tighten the clamp bolts.



### TRACK REPLACEMENT

NOTICE: Track replacement should be done only on a flat hard surface.

Raise the tail wheel all the way up. Remove the jack and tool pouch from under the battery cover. Assemble the jack. Slide the jack under the machine at an angle toward the side you want to work on. Place the stem part of the jack under the tail wheel. Lower the tail wheel until the side of the machine rises. **TURN OFF THE JOYSTICK AND UNPLUG THE CABLE.**

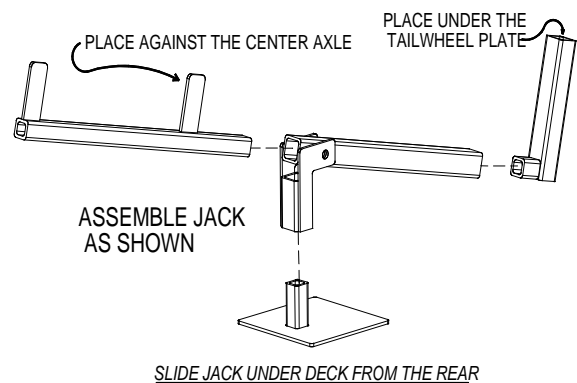
### UNPLUG THE CABLE.

Remove the wrench from under the battery cover. Lift the foot rest. Using the supplied multi-wrench, find the end marked 7/8. Turn the adjuster bolt on each side of the front frame counter-clockwise until the adjuster bolts are loosened, about 2". Using the end marked 3/4, loosen the two clamp bolts on each side of the frame top. Push both front wheels back near the end of their slots. Pull out the drive pin in the rear wheel and turn it 1/4 turn, so that the wheel turns by hand.

Slip the track on the wheels, making sure the track center rib is in the grooves of all the wheels. Tighten the adjuster bolts on each side to 10 ft-lbs.\* Measure each side, front to rear axle, and adjust until equal. Re-tighten the clamp bolts on both sides.

Release the drive pin and turn the track/wheel to engage the drive pin. Plug the cable into the joystick, turn it on and raise the tail wheel. Remove the jack, put it and the multi-tool away, and you are ready to go. Check track tension after approximately 20 hours of runtime, and adjust accordingly.

\* 10 ft-lbs is a handle 6 inches long with 20 pounds applied at the end of the handle. If you are using the wrench supplied with the machine the handle is about 6 inches long.



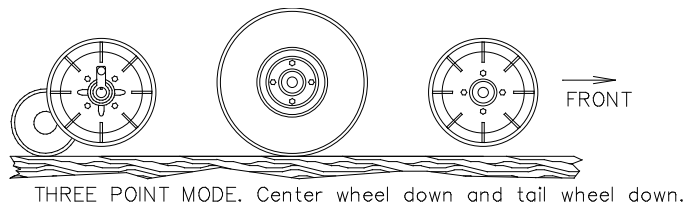
## WHEEL POSITIONS

Refer to the Controller pages 2-5 for which buttons/indicators to use for adjusting the wheel positions.

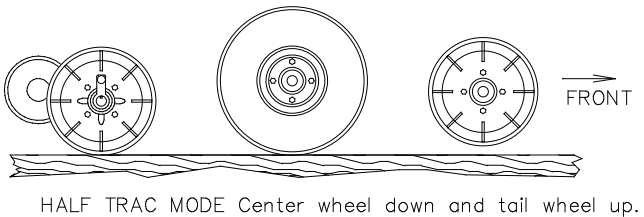
As a beginning trial, you might want to run with the large wheel slightly down. This will pick the front wheels off the ground up to one-half inch to allow for easier turning. If you are operating on rough ground, raise the center wheel all the way for a smoother ride. However, you will not be able to turn real tight. You will need to make a large circle to turn around. **Try to cross obstacles at an angle. You can cross a 5" curb safely if you cross at an angle. Cross small logs and ditches the same way.**

NOTE: If you run the center wheels all the way down and the caster all the way down, you now have a three-point setup that allows tight turns on hard surfaces as well on carpet.

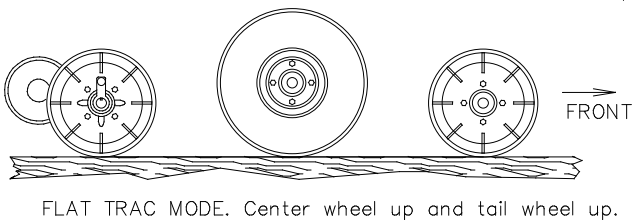
The top illustration shows the center wheel and the tail wheel down. This mode works best on hard surface and it is imperative on carpet.



The middle illustration shows the center wheel down and the tail wheel up. This mode works best in “off road” conditions, such as grass, sand, snow, etc.



The lower illustration shows the center wheel up and the tail wheel up. This mode works best on ice, snow and mud. **In this position, you must be careful not to turn too tight. If you turn too tight you may tear up grass or carpet.**

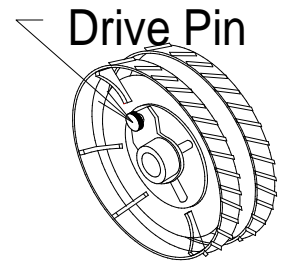


## THE DRIVE PIN SECTION

### RELEASING THE DRIVE PINS FOR FREE WHEELING

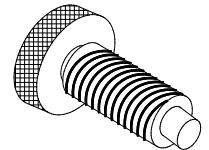
#### NOTICE THE DRAWING OF REAR WHEEL

There may be an occasion when you need to manually move the **IRV 2000**. Release the drive pin on each rear wheel by rocking the machine and pulling the pin and rotating it 1/4 of a turn. Now you can push the machine with a little effort. If for some reason you cannot pull the pin, simply remove the pin from the drive arm. To re-engage the pins, simply rotate until the pin drops into the slot. Press the speed control button until number (1) appears. Push the Joystick forward until the machine begins to move. The pins should now be in place.



### REPLACING THE DRIVE PINS

Upon occasion a drive pin may fail. It is important that the new drive pin is reinstalled properly. Remove the old pin by loosening the lock nut. (turn it counter clockwise) Turn the drive pin out. Turn the lock nut onto the new drive pin until most of the threads show. Pull the plunger out and turn 1/4 turn. Screw the drive pin into the drive arm until the shell of the drive pin touches the wheel. **DO NOT FORCE THE SHELL INTO THE WHEEL.** Turn the drive pin **out** about one quarter to one half turn. Turn the lock nut while holding the drive pin housing until the lock nut is tight. You will need a 3/4" open end wrench to tighten the locknut. Release the drive pin. Place the Joystick speed at (1) and push the Joystick forward until the pin engages the wheel.

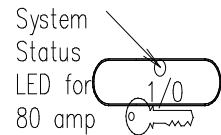


## **TROUBLE SHOOTING AND SUGGESTIONS for the JOYSTICK.**

### **FOR THE 80 AMP CONTROLLER**

If the System Status LED (location shown in Joystick drawing) light flashes, you will notice flashes of the little red light on the I/O bar.

The light will flash, then it will be off about a second, then begin to flash again. **Count the number of flashes before calling for help.**



1 flash: connection between joystick and power module could be bad.

2 flashes: a fault in an actuator. Check connections at power module.

3 flashes: left motor fault. Check connections at power module and/or at left motor.

4 flashes: right motor fault. Check connections at power module and/or at right motor.

5 flashes: left park brake fault. Check plug connection. Faulty brake. Faulty power module.

6 flashes: right park brake fault. Check plug connection. Faulty brake. Faulty power module.

7 flashes: low battery fault. Battery is too low for safe operation. Check & charge battery.

8 flashes: battery voltage too high. Could be defective battery charger.

11 flashes: stall timeout fault. (It will seem the lights flash all the time.) Turn Joystick off, wait a couple of seconds, then turn it back on. Motor current has exceeded the limit, due to overload. Reduce load by reversing direction or check for blockage of the wheels or track. Motors could be faulty. Check motors by raising machine with jack (instructions on earlier pages) and blocking the machine up. Run motors. They should turn freely.

**NOTE: It is important you count the flashes before you call the Service Center. Or call 1-800-458-8616**

### **FOR THE 100 AMP CONTROLLER**

If the Battery Lights (location shown in Joystick drawing) flash, you will notice a certain number of bars flashing.

The number of bars flashing indicate what and possibly where the problem is. **Please note the number of flashing bars before calling for help.** The following is a list of self help actions:

1 bar: The batteries need charging or there is a bad connection to the battery. Check the connections to the battery and the controller power connector. If the connections are good, try charging the batteries.

2 bars: The left motor has a bad connection. Make sure that the motor is connected properly and the controller connectors are secure.

3 bars: The left motor has a short circuit to a battery connection. Contact your service agent.

4 bars: The right motor has a bad connection. Make sure that the motor is connected properly and the controller connectors are secure.

5 bars: The right motor has a short circuit to a battery connection. Contact your service agent.

6 bars: The battery charger is preventing the controller from driving the unit. Disconnect the charger from the unit.

7 bars: A joystick fault is indicated. Make sure that the joystick is in the rest position before switching on the controller.

8 bars: A controller fault is indicated. Make sure the controller connections are secure.

9 bars: The parking brakes have a bad connection. Check the parking brake and motor connections. Make sure the controller connections are secure.

10 bars: An excessive voltage has been applied to the controller. This is usually caused by a poor battery connection. Check the battery and controller connections.

**NOTE: It is important you count the flashes before you call the Service Center. Or call 1-800-458-8616**

### **STALLING OUT OR “POWER OUT”**

If the IRV2000 should stall while driving off-road, the reason could possibly be that sand, snow, mud or some other obstruction, is between the wheels and the track. Stalling could also result from trying to make the **IRV2000** pull more than the power setting will allow. The “5” speed is the most powerful.

If stalling occurs from the above mentioned reasons, most of the time all you have to do is reverse the direction you are going and allow the tracks to clean out. Another remedy could be to allow the **IRV2000** to sit a few minutes to allow the controller to cool. If this problem persists, call Trac About Inc. for more help.



## SUGGESTION AND INSTRUCTIONS FOR VARIOUS MAINTENANCE

### MAINTENANCE SUGGESTIONS

1. About once a month release the drive pin on each rear wheel, turn the machine on, place the speed selector on the joystick in speed 1, push the joystick forward for about 5-10 seconds. Release the joystick and turn the machine off. Reinsert the drive pin, turn the machine on, push the joy stick forward until the drive pins lock into place. This will insure that if the need arises that the Trac About is to be pushed or pulled that the rear hub will be free to turn.
2. About once a month, grease the front wheel bearings with a good grade of grease. Do not over grease or the grease will run out onto the track belts.
3. Visually inspect the gearboxes for leaks. Add 80W90 if necessary.
4. Check track belts for tightness. See the section for track adjustment

### REPLACING WHEEL BEARINGS

First of all, only people that know what they are doing should replace bearings.

Occasionally the wheel bearing will wear to the point they need replaced. The bearings supplied in the wheels of the **IRV 2000** are as good as we can find. Nevertheless, they will still wear out over a period of use. Read the section **TRACK REPLACEMENT**.

Remove the track.

#### **To install the bearings:**

Use a 5/32 allen wrench to loosen the set screw in the collar on the axle. Slide the collar and wheel off the axle. Knock the bearing out of the wheel hub by driving something thru the hub from the opposite side. Replace both bearings on the hub even though only one is worn. To install a new set of bearings, you may tap the bearing into the hub by tapping on the edge of the bearing. **DO NOT STRIKE THE BEARING IN THE CENTER. YOU WILL DAMAGE YOUR NEW BEARING.** After the new bearings are installed, replace the trac.

### **REPLACE MOTOR AND/OR GEARBOX**

If the a motor should go bad for some reason, all you have to do is to unplug the curly cord from the back of the joystick, unplug the wiring harness from the motor and brake at the back of the control module. Remove the four bolts at the gear box and lift the motor out. Remove the drive part from the motor shaft, taking note how it is installed. If the wiring is removed from the motor, it is a good idea to mark the motor wires before disconnecting. This will help connecting the motor to turn the right way on installation. To remove the gearbox, block the machine up off the tracks, remove the track, remove the rear drive wheel, remove the four bolts that hold the gearbox to the gearbox mount on the frame. **This information is for a service center only.**

### **CLEANING AND WASHING**

When washing the IRV2000, be very careful not to spray high pressure water into the back of the machine. Under the cover that the seat sets on is all of the electronics. If you have been operating near salt water, remove the battery cover and flush the deck completely. Wash all sand and salt water from the wheels, and lubricate the drive pin with a light household oil. The material cover of the seat can often be cleaned by using warm water and a mild soap. Be sure you rinse the material to remove any soap.

**Trac About, Inc.**  
**IRV2000**

\*\*\* LIMITED WARRANTY \*\*\*

**Trac About, Inc.** warrants to the original purchaser, from the date of delivery through the duration of the warranty period. During the warranty period **Trac About, Inc.** will repair or, at it's option, replace any component(s) that proves to be defective at no charge provided that the part is returned, freight prepaid, to **Trac About, Inc.** The warranty does not apply if the product has been damaged by accident or misuse, or exposed to corrosive materials, or has been tampered with by anyone except an authorized Trac About IRV2000 service center. The warranty period shall begin at the date of delivery and extend as follows:

**\*Bearings and drive pins ARE NOT included in any warranty.**

*One Year Warranty:*

- |                         |               |
|-------------------------|---------------|
| * ALL ELECTRICAL WIRING | * TRACK BELTS |
| * ELECTRONIC COMPONENTS | * WHEEL TREAD |
| * BATTERIES             | * MOTORS      |
| * BATTERY CHARGER       | * GEARBOXES   |

*Five Year Warranty:*

- \*FRAME

**CORROSION CAUSED BY WATER, SALT, ACID OR ANY OTHER CORROSION CAUSING AGENT TO ANY PARTS, FRAME, OR ELECTRICAL COMPONENTS IS NOT COVERED.**

All warranty claims **MUST** be made directly to **Trac About, Inc.** and any warranty parts must be returned to **Trac About, Inc.** for credit.

**Trac About, Inc.** will not be held liable for any field modifications not expressly furnished and authorized in writing by the engineering department of **Trac About, Inc.** Any unauthorized modifications immediately render this warranty null and void.

**Trac About, Inc.** will not be liable for any consequential damages, nor for commercial consequential damages resulting from any breach of this warranty, or any other warranty, all of which are expressly disclaimed for any delays in performance of this warranty due to causes beyond the direct control of the manufacturer.

**Trac About, Inc.** neither assumes nor authorizes any person to create nor assume for **Trac About, Inc.**, any obligation(s) or liabilities in connection with **Trac About, Inc.** products, nor to undertake any responsibilities beyond those set forth in this instrument.

This warranty disclaims any liability whatsoever due to: loss of time, use of the product, anticipated profits, increased expenses, inconveniences or any other matter(s) not specifically included in this warranty.

This warranty is in lieu of any other warranties, expressed or implied, including the extent that any such limitation will be limited by any state or federal law, then such portions of the limitation will be deemed null and void.

Any dispute concerning this warranty will be governed by the laws of the State of Kansas and venue will reside in the State of Kansas.

**FDA**  
**Requirement**

**WARNING:**  
**Radio wave sources may affect power wheel chair or scooter control.**

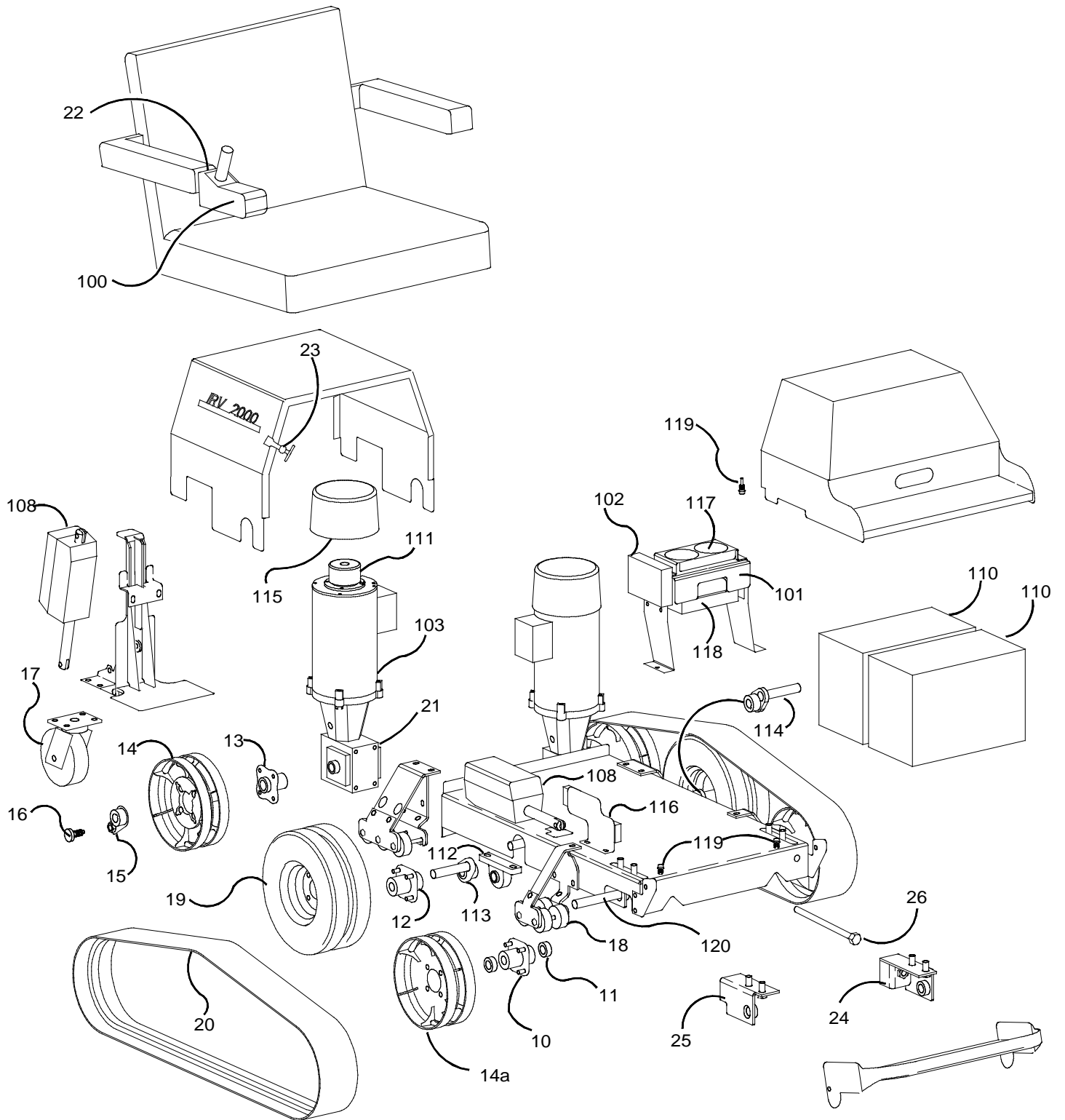
Radio wave sources, such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios, and cellular phones, can affect powered wheelchairs. Following the warnings listed below should reduce the chance of unintended brake release or powered wheelchair movement, which could result in serious injury.

- Do not turn ON hand-held personal communication devices, such as citizens band (CB) radios and cellular phones while a powered wheelchair is turned on;
- Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them;
- If unintended movement or brake release occurs, turn the powered wheelchair OFF as soon as it is safe;
- Be aware that adding accessories or components, or modifying the powered wheelchair, may make it more susceptible to interference from radio wave sources (Note: there is no easy way to evaluate their effect on the overall immunity of the powered wheelchair); and
- Report all incidents of unintended movement or brake release to the powered wheelchair manufacturer, and note whether there is a radio wave source nearby.
- 20 volts per meter (V/m) is generally achievable and useful immunity level against interference for radio wave sources (as of May 1994) the higher the level, the greater the protection);
- The immunity level of this product is not known.

# PARTS LOCATION FOR THE TRAC ABOUT INC.

## IRV2000

TRACABOUT/MANUAL/TA7000



# PARTS LIST FOR THE IRV2000

REV. 6-29-05

QPWCOREL\TRACABOT\PARTSBK

Location on chart	TRACABOUT part #	Quantity per unit	Description
10	T7230	2	HUB, FRONT without bearings
11	T7210	8	WHEEL BEARING, sealed ball
12	T7220	2	HUB, CENTER without bearings
13	TS1050	2	HUB, REAR 3/4" BORE (cut to length)
14	TS4150	2	WHEEL, DRIVE
14a	TS4140	2	WHEEL, FRONT
15	TS4170	2	DRIVE ARM
16	T7250	2	DRIVE PIN, KNOB HEAD 1/2-13
17	T7260	1	WHEEL, TAIL 5 inch
18	TS7271	22	WHEEL, BOGIE with bearings (2ea. are for Anti-Tip Device)
19	T7220	2	WHEEL, CENTER RIM and HUB
19a	T7280	2	WHEEL, CENTER TIRE ONLY
20	T7300	2	TRACK, EACH SMOOTH
20	T7301	2	TRACK, EACH CLEATED
21	T7320	2	GEARBOX
22	T7330	1	PLUNGER LATCH FOR JOYSTICK 3/8-16
22a	TS3111	1	Joystick Holder(includes lock pin tube and plunger latch pin only)
23	T7340	2	LATCH, BATTERY COVER
24	TS2230	1	LEFT FRONT AXLE BRACKET
25	TS2220	1	RIGHT FRONT AXLE BRACKET
26	T2300	2	TRACK ADJUSTER BOLT
100	T7010	1	JOYSTICK CONTROL
101	T7020	1	POWER MODULE
102	T7030	1	ACTUATOR MODULE
103	T7040	2	MOTOR, DRIVE
108	T7062	1	ACTUATOR, REAR
108	T7060	1	ACTUATOR, SIDE
110	T7070	2	BATTERY, GROUP 24, 12 VOLT
110	T7071	2	BATTERY, GROUP 27, 12 VOLT 100 amp/hr
111	T7400	2	MOTOR BRAKE
112	T7370	2	BEARING, PILLOW CENTER AXLE
113	TS1030	1	CENTER WHEEL TILT CAM RIGHT SIDE
114	TS1031	1	CENTER WHEEL TILT CAM LEFT SIDE
115	T7405	2	BRAKE COVER
116	T7115	2	MICROSWITCH
117	T7410	2	COOLING FAN
NO ID.	T7080	1	MICROSWITCH JUNCTION BOX
119	T7420	4	BATTERY COVER RUBBER STOP
120	TA1080	1	IDLER AXLE ASSEMBLY
NO ID.	T7430	1	CONTROLLER CLAMP
NO ID.	T7051	2	MOTOR WIRING HARNESS
NO ID.	T7015	1	JOYSTICK CORD
NO ID.	T7360	1	BATTERY CHARGER, SOLID STATE
NO ID.	TA4300	1	JACK
NO ID.	T7480	1	TRAC WRENCH
NO ID.	T7447	1	MOTOR/GEARBOX COUPLER

# **TRAC ABOUT, INC. PERSONAL MOBILITY VEHICLE**

## **Specifications:**

**Length:** 49" with footrest down. 38" with footrest up.

**Width:** 27"

**Weight:** 460 Lbs.

**Turning Radius:** Zero

**Load Capacity:** Up to 350 Lbs.

**Speed (5 speeds):** The speeds are programmable to a maximum of 3.5 Mph. Standard

**Energy Source:** 24-Volt System (two 12-volt batteries)

**Maximum Incline:** 30 percent

**Range:** Approx. 5 to 12 miles, depending on terrain, weight of driver and battery condition

## **Standard Equipment:**

Joystick Control with battery charge level lights and horn.

24-Volt Battery Charger

(2) 12-Volt AGM Group 24 Batteries (not included)

(2) 4" Wide Track Belts instead of wheels.

Rear wheel drive with disengaging latch pins.

Track positioning for flat track, three point and half track.

Tools for track adjustment.

20" wide seat with fold up arm rests as standard equipment.

## THE CIRCUIT BREAKER SECTION



Located on the right side of the machine, you will find the circuit breaker as shown. The purpose of this circuit breaker is for direct power shorts. The breaker should not trip unless a wire comes in contact with the frame. The controller is internally protected against adverse conditions.



The circuit breaker can be manually disconnected by pressing in on the red button as shown. Even though there is power at the batteries, there is no power going through the system.



This picture shows the circuit breaker disconnected. Notice the small black lever on an angle.



By rotating the lever up and away, the circuit breaker is now reconnected, and power is going through the system.



This picture shows the normal operation position of the circuit breaker.