

INVACARE SCOOTERS

ZOOM-3

LYNX™ / PANTHER™ SERIES

LYNX SX-3

LYNX LX-3

LYNX LX-3^{PLUS}

PANTHER LX-4

PANTHER MX-4

*DEALER: THIS MANUAL MUST BE GIVEN TO THE USER OF THE SCOOTER.

USER: BEFORE USING THIS SCOOTER, READ THIS MANUAL AND SAVE FOR FUTURE REFERENCE.

FOURNISSEUR: CE MANUEL DOIT ÊTRE REMIS À L'UTILISATEUR DU TRIPORTEUR.

UTILISATEUR: AVANT D'UTILISER CE TRIPORTEUR, LIRE CE MANUEL ET LE CONSERVER À TITRE DE RÉFÉRENCE.

**A Domestic Spanish Owner's Manual and a Domestic Spanish Warning Label Kit are available, part number 1093215. To order, call the Customer Service number at (800) 333-6900.*

**Un Manual de Instrucciones y Etiquetas de Advertencia en Español están disponibles. Parte No. 1093215. Para ordenarlos, llame a nuestro Departamento de Servicios a Nuestros Clientes, teléfono No. (800) 333-6900.*



Yes, you can.®

WARNING

WARNING

DO NOT OPERATE THIS EQUIPMENT WITHOUT FIRST READING AND UNDERSTANDING THIS MANUAL. IF YOU ARE UNABLE TO UNDERSTAND THE WARNINGS, CAUTIONS AND INSTRUCTIONS, CONTACT A HEALTHCARE PROFESSIONAL, DEALER OR TECHNICAL PERSONNEL IF APPLICABLE BEFORE ATTEMPTING TO USE THIS EQUIPMENT - OTHERWISE, INJURY OR DAMAGE MAY RESULT.

PROCEDURES OTHER THAN THOSE DESCRIBED IN THIS MANUAL MUST BE PERFORMED BY A QUALIFIED TECHNICIAN.

SPECIAL NOTES

WARNING/CAUTION notices as used in this manual apply to hazards or unsafe practices which could result in personal injury or property damage.

NOTICE

THE INFORMATION CONTAINED IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.

WARNING

As a manufacturer of powered scooters, Invacare endeavors to supply a wide variety of powered scooters to meet the many needs of the user. However, final selection of the type of powered scooter to be used by an individual rests solely with the user and his/her healthcare professional capable of making such a selection.

TIE-DOWN RESTRAINTS AND SEAT POSITIONING STRAPS

Invacare recommends that powered scooter users NOT be transported in vehicles of any kind while in a powered scooter. As of this date, the Department of Transportation has not approved any tie-down systems for transportation of a user while in a powered scooter, in a moving vehicle of any type.

It is the position of Invacare that users of powered scooters should be transferred into appropriate seating in vehicles for transportation and use be made of the restraints made available by the auto industry. Invacare cannot and does not recommend any powered scooter transportation systems.

AS REGARDS RESTRAINTS - SEAT POSITIONING STRAP - IT IS THE OBLIGATION OF THE DME DEALER, THERAPISTS AND OTHER HEALTHCARE PROFESSIONALS TO DETERMINE IF A SEAT POSITIONING STRAP IS REQUIRED TO ENSURE THE SAFE OPERATION OF THIS EQUIPMENT BY THE USER. SERIOUS INJURY CAN OCCUR IN THE EVENT OF A FALL FROM A POWERED SCOOTER.

SAVE THESE INSTRUCTIONS

WARNING

TABLE OF CONTENTS

SPECIAL NOTES	2
SPECIFICATIONS	4
PROCEDURE 1 - GENERAL GUIDELINES	6
GENERAL GUIDELINES	6
SAFETY HANDLING	10
WARNING/CAUTION LABEL LOCATION	11
PROCEDURE 2 - SAFETY INSPECTION	12
SAFETY INSPECTION CHECKLIST	12
MAINTENANCE	13
TROUBLESHOOTING	14
PROCEDURE 3 - OPERATION	15
CONTROL PANEL FEATURES	15
OPERATION OF THE SCOOTER	17
USING THE HAND BRAKE LEVER/BRAKE ARM	18
BRAKE RELEASE LEVER	18
RESET CIRCUIT BREAKER/FUSE REPLACEMENT	19
PROCEDURE 4 - BATTERIES/CHARGING	20
REMOVING/INSTALLING THE BATTERIES WITH CABLES	20
REPLACING THE BATTERIES	20
CHARGING THE BATTERIES	22
PROCEDURE 5 - SEAT	24
REMOVING/INSTALLING THE SEAT	24
ADJUSTING THE SEAT HEIGHT	25
90° SEAT SWIVEL ADJUSTMENT	27
ADJUSTING THE SEAT DEPTH	27
USING THE ADJUSTABLE SEAT SLIDE	28
REMOVING/INSTALLING THE SEAT UPHOLSTERY/CUSHION	28
PROCEDURE 6 - BACK	29
FOLDING/UNFOLDING THE BACK	29
REMOVING/INSTALLING THE BACK UPHOLSTERY CUSHION	29
ADJUSTING THE BACK RECLINE	29
ADJUSTING THE HEADREST	29
PROCEDURE 7 - ARMS	30
ARMREST ANGLE ADJUSTMENT	30
ARMREST WIDTH ADJUSTMENT	30
ARMREST DEPTH/HEIGHTADJUSTMENT	30
PROCEDURE 8 - TILLER ADJUSTMENT	32
TILLER ANGLE ADJUSTMENT	32

TABLE OF CONTENTS

PROCEDURE 9 - SHROUD/WHEELS/ANTI-TIPPERS	34
REMOVING/INSTALLING THE REAR SHROUD	34
REPLACING FOAM FILLED TIRES ONTO WHEEL RIMS	34
REMOVING/INSTALLING THE REAR WHEELS	34
REMOVING/INSTALLING THE FRONT WHEELS	36
PROCEDURE 10 - TRANSPORT	37
TRANSPORTING THE SCOOTER	37
PROCEDURE 11 - OPTIONS/REPLACEMENT PARTS	39
REMOVING/INSTALLING THE FRONT BASKET	39
REMOVING/INSTALLING THE FLOOR BASKET	39
REMOVING/INSTALLING THE SEAT POSITIONING STRAP	39
REMOVING/INSTALLING THE CRUTCH/CANE HOLDER	40
REMOVING/INSTALLING THE SAFETY FLAG	40
REPLACING ANTI-TIPPER WHEELS AND ANTI-TIPPER WHEEL ASSEMBLY	40
REPLACING SEAT LEVER	41
REPLACING TILLER ANGLE ADJUSTMENT LEVER	42
REPLACING HEADLIGHT LIGHTBULBS	42
REPLACING ON-BOARD BATTERY CHARGER	43
LIMITED WARRANTY	44

SPECIFICATIONS

	LYNX (3-Wheel Models)			
	ZOOM-3	SX-3	LX-3	LX-3^{Plus}
Overall Length:	39.5-inches (100 cm)	43.5-inches (104 cm)	47-inches (119 cm)	47-inches (119 cm)
Overall Width:	22-inches (56 cm)	23-inches (58 cm)	25-inches (64 cm)	25-inches (64 cm)
Ground Clearance:	2.5-inches (6.35 cm)	3.5-inches (8.89 cm)	3-inches (7.62 cm)	3-inches (7.62 cm)
Seat Height From Floor Pan:				
Contour Seat:	14-1/2-inches (37 cm) 15-inches (37 cm) 16-inches (40 cm)	14-1/2-inches (37 cm) 15-1/2-inches (39 cm) 16-1/2-inches (42 cm)	14-1/2-inches (37 cm) 15-1/2-inches (39 cm) 16-1/2-inches (42 cm)	14-1/2-inches (37 cm) 15-1/2-inches (39 cm) 16-1/2-inches (42 cm) 17-1/2-inches (44 cm)
Deluxe Seat:	N/A	N/A	15-inches (38 cm) 16-inches (41 cm) 17-inches (43 cm) 18-inches (46 cm)	15-inches (38 cm) 16-inches (41 cm) 17-inches (43 cm) 18-inches (46 cm)
Armpad to Floor:				
Fixed:	26 - 28-inches (66 - 71 cm)	27- 30-inches (68 - 76 cm)	27- 30-inches (68 - 76 cm)	27- 30-inches (68 - 76 cm)
Adjustable:	N/A	N/A	27- 33-inches (68 - 83cm)	27- 33-inches (68 - 83cm)
Weights:				
Front Frame Section:	N/A	39 -lbs (17 Kg)	47 -lbs (21 kg)	47 -lbs (21 kg)
Rear Frame Section:	N/A	35 -lbs (16 kg)	38 -lbs (17 kg)	38 -lbs (17 kg)
Contour Seat w/arms:	20 -lbs (9.1 kg)	22 -lbs (10 kg)	22 -lbs (10 kg)	22 -lbs (10 kg)
Deluxe Seat w/Arms:	N/A	N/A	31-lbs (14 kg)	31-lbs (14 kg)
Rear Shroud:	2-lbs. (1 kg)	2-lbs (1 kg)	3 -lbs (1 kg)	3 -lbs (1 kg)
Batteries:(each)	9.9-lbs. (4.5kg)	14 -lbs (6 kg)	23 -lbs (10 kg)	23 -lbs (10 kg)
Total Weight w/o Batteries:	77.2-lbs (35 kg)	98-lbs (44 kg)	*110-lbs (50 kg)	*110-lbs (50 kg)
w/ Batteries:	97-lbs (44 kg)	126-lbs (57 kg)	*156-lbs (70 kg)	*156-lbs (70 kg)
❖Wheel Size				
Front:	2 x 8-inches (5.08 x 20.32 cm)	2 x 8-inches (5.08 x 20.32) cm	2-1/2 x 9-inches (6.35 x 22.86 cm)	2-1/2 x 9-inches (6.35 x 22.86 cm)
Rear:	2-1/2 x 9-inches (6.35x22.86 cm)	2-1/2 x 9-inches (6.35x22.86 cm)	3 x 10-inches (7.62 x 25.40 cm)	3 x 10-inches (7.62 x 25.40 cm)
Max. Weight Limitation:	250 lbs (114 kg)	250lbs (114 kg)	300lbs (136 kg)	300lbs (136 kg)
Maximum Speed:	3-1/2 M.P.H. (5.63 K.P.H.)	4-1/2 M.P.H. (7-1/4 K.P.H)	5 M.P.H. (8 K.P.H)	5 M.P.H. (8 K.P.H)
Max. Incline and Stability:	8° incline	8° incline	8° incline	8° incline

SPECIFICATIONS

❖NOTE: Flat free inserts are standard on all wheels.

*NOTE: Total weight of scooter includes Contour Seat Only. Add an additional 9-lbs for Deluxe Seat.

SPECIFICATIONS (continued)

PANTHER (4-Wheel Models)		
	LX-4	MX- 4
Overall Length:	47.5-inches (125 cm)	54-inches (137 cm)
Overall Width:	25-inches (64 cm)	26-inches (66 cm)
Ground Clearance:	3.25-inches (8.26 cm)	6-inches (15.24 cm)
Seat Height From Floor Pan:		
Contour Seat:	N/A 15-1/2-inches (39 cm) 16-1/2-inches (42 cm) 17-1/2-inches (44 cm)	N/A
Deluxe Seat:	16-1/2-inches (42 cm) 17-1/2-inches (44 cm) 18-1/2-inches (47 cm) 19-1/2-inches (49 cm)	17-inches (43 cm) 18-inches (46 cm) 19-inches (48 cm)
Armpad to Floor:		
Fixed:	27- 30-inches (68 - 76 cm)	N/A
Adjustable:	27- 33-inches (68 - 83cm)	30 - 36-inches (76 - 91 cm)
Weights:		
Front Frame Section:	48 -lbs (22 kg)	75 -lbs (34 kg)
Rear Frame Section:	39 -lbs (18 kg)	58 -lbs (26 kg)
Contour Seat w/arms	N/A	N/A
Deluxe Seat w/Arms	35 -lbs (16 kg)	43 -lbs (19 kg)
Rear Shroud	2 -lbs (1 kg)	4 -lbs (2 kg)
Batteries:(each)	23-lbs (10 kg)	31-lbs (14 kg)
Total Weight		
w/o Batteries:	124-lbs (56 kg)	180-lbs (82 kg)
w/ Batteries:	170-lbs (77 kg)	242-lbs (110 kg)
❖Wheel Size		
Front:	3 x 10-inches (7.62 x 25.40 cm)	4 x 13-inches (10.16 x 33.02 cm)
Rear:	3 x 10-inches (7.62 x 25.40 cm)	4 x 13-inches (10.16 x 33.02 cm)
Max. Weight Limitation:	300 lbs (136 kg)	400 lbs (181 kg)
Maximum Speed:	5-1/2 M.P.H. (9 K.P.H)	LOW HIGH 5¼ M.P.H. 7¼ M.P.H. 8½ K.P.H 11¼ K.P.H
Max. Incline and Stability:	8° incline	8° incline

❖NOTE: Flat free inserts are standard on all wheels.

*NOTE: Total weight of scooter includes Contour Seat Only. Add an additional 9-lbs for Deluxe Seat.

GENERAL WARNINGS**OPERATING INFORMATION**

Performance adjustments should **ONLY** be made by professionals of the healthcare field or persons fully conversant with this process and the driver's capabilities. Incorrect settings could cause injury to the driver, bystanders, damage to the powered scooter and surrounding property.

To determine and establish your particular safety limits, practice bending, reaching and transferring activities in several combinations in the presence of a qualified healthcare professional **BEFORE** attempting active use of the powered scooter.

For individuals with balance problems, practice transferring activities **WITH AN ASSISTANT** in the presence of a qualified healthcare professional.

DO NOT attempt to transfer into or out of the powered scooter without assistance.

BEFORE use, verify that the motor is plugged into the harness.

If so equipped, **DO NOT** operate the scooter without anti-tippers being installed. Anti-tippers **MUST BE** attached at all times.

DO NOT attempt to reach objects if you have to move forward in the seat or pick them up from the floor by reaching down between your knees.

DO NOT lean over the top of the back upholstery to reach objects from behind as this may cause the powered scooter to tip over.

DO NOT shift your weight or sitting position toward the direction you are reaching as the powered scooter may tip over.

DO NOT use an escalator to move a powered scooter between floors. Serious bodily injury may occur.

DO NOT operate on roads, streets or highways.

DO NOT attempt to move up or down an incline with a water, ice or oil film.

DO NOT attempt to ride over curbs or obstacles. Doing so may cause your powered scooter to turn over and cause bodily harm and/or damage to the powered scooter.

DO NOT make sharp turns in forward or reverse at excessive speed.

DO NOT attempt to lift the powered scooter by its tiller, seat, or shroud.

DO NOT attempt to lift the powered scooter by lifting on any removable (detachable) parts. Lifting by means of any removable (detachable) parts of a powered scooter may result in injury to the user or damage to the powered scooter.

DO NOT operate the powered scooter until you have checked that the surroundings are clear and that the area is safe for travel.

DO NOT use parts, accessories, or adapters other than those authorized by Invacare.

GENERAL WARNINGS (CONTINUED)**OPERATING INFORMATION (Continued)**

Before attempting to sit in or exit the powered scooter, **REMOVE** the key from the ignition. This will ensure that the power is off and the powered scooter will not drive.

Remove the key from the ignition while the scooter is not in use. Otherwise, injury and/or damage to the scooter and surrounding property may occur.

DO NOT connect any medical device, i.e., a ventilator, life support machine, etc. to the battery. This could cause unexpected failure of the device and the powered scooter.

Invacare specifically disclaims responsibility to all personal injury and property damage that may occur during use which does not comply with applicable federal, state and local laws and ordinances.

The rear shroud is designed to cover the batteries/controller/harness/motor connections and the transaxle. **ONLY REMOVE** the rear shroud to; 1.) manually disconnect/connect cable connections, 2.) Disassemble scooter for transport. 3.) Remove/install batteries 4.) Adjust seat height.

DO NOT stand on the front or rear shroud of the powered scooter.

Ensure seat is properly locked before attempting transfer into or out of the powered scooter. Attempting unsafe transfers may cause a fall from the powered scooter resulting in bodily injury.

Ensure that seat is locked into the **FORWARD** position **BEFORE** and **DURING** operation of the scooter. Otherwise, injury to the user and/or damage to the scooter may result.

Ensure that the tiller is properly adjusted before driving the scooter.

After making **ANY** tiller angle adjustments and **BEFORE** use, the tiller **MUST** be securely locked into position with adjustment pin protruding through the adjustment plate. A fall from the scooter could occur causing bodily injury and/or damage to the scooter. Gently, push/pull against tiller to ensure that the tiller is securely engaged into the adjustment plate.

RAMPS

DO NOT climb, go up or down ramps or traverse slopes greater than 8°.

When negotiating ramps, if the throttle control lever is released while in **FORWARD** motion the powered scooter will "ROLLBACK" approximately one (1) foot before brake engages. If the throttle control lever is released while in **REVERSE** motion the powered scooter will "ROLLBACK" approximately three (3) feet before brake engages.

ELECTRICAL

Check to ensure that all electrical connections are secure at all times.

GENERAL WARNINGS (CONTINUED)**GROUNDING INSTRUCTIONS:**

DO NOT, under any circumstances, cut or remove the round grounding prong from any plug. Some devices are equipped with three-prong (grounding) plugs for protection against possible shock hazards. Where a two-prong wall receptacle is encountered, it is the personal responsibility and obligation of the customer to contact a qualified electrician and have the two-prong receptacle replaced with a properly grounded three-prong wall receptacle in accordance with the National Electrical Code. If you must use an extension cord, use **ONLY** a three-wire extension cord having the same or higher electrical rating as the device being connected.

BATTERIES

The warranty and performance specifications contained in this manual are based on the use of deep cycle gel cell or sealed lead acid batteries. Invacare strongly recommends their use as the power source for this unit.

Carefully read battery/battery charger information prior to installing, servicing or operating your wheelchair.

RAIN TEST

Invacare has tested its' powered scooter in accordance with ISO 7176 Part 9 "Rain Test." This test provides the end user or his/her attendant sufficient time to remove his/her powered scooter from a rain storm and retain operation.

DO NOT leave your powered scooter in a rain storm of any kind.

DO NOT use your powered scooter in a shower or leave it in a damp bathroom while taking a shower.

DO NOT leave your powered scooter in a damp area for any length of time.

Direct exposure to rain or dampness could cause the powered scooter to malfunction electrically and mechanically and may cause the powered scooter to prematurely rust.

WEIGHT LIMITATION

The weight limitation is 250 lbs. (114 Kg.) for Models ZOOM-3, and LYNX SX-3, 300 lbs. (136 Kg.) for Models LYNX LX-3, LYNX LX-3^{Plus} and PANTHER LX-4, and 400 lbs. (181 Kg.) for Model PANTHER MX-4.

The front basket and the floor basket are both rated for a maximum loading capacity of 10 lbs.

EMI WARNINGS

CAUTION: IT IS VERY IMPORTANT THAT YOU READ THIS INFORMATION REGARDING THE POSSIBLE EFFECTS OF ELECTROMAGNETIC INTERFERENCE ON YOUR POWERED SCOOTER.

Electromagnetic Interference EMI From Radio Wave sources.

EMI WARNINGS (CONTINUED)

Powered scooters may be susceptible to electromagnetic interference (EMI), which is interfering electromagnetic energy (EM) emitted from sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two way radios, and cellular phones. The interference (from radio wave sources) can cause the powered scooter to release its brakes, move by itself, or move in unintended directions. It can also permanently damage the powered scooter's control system. The intensity of the interfering EM energy can be measured in volts per meter (V/m). Each powered scooter can resist EMI up to a certain intensity. This is called its "immunity level." The higher the immunity level, the greater the protection. At this time, current technology is capable of achieving at least a 20 V/m immunity level, which would provide useful protection from the more common sources of radiated EMI.

There are a number of sources of relatively intense electromagnetic fields in the everyday environment. Some of these sources are obvious and easy to avoid. Others are not apparent and exposure is unavoidable. However, we believe that by following the warnings listed, your risk to EMI will be minimized.

The sources of radiated EMI can be broadly classified into three types:

- 1) **Hand-held Portable transceivers (transmitters-receivers with the antenna mounted directly on the transmitting unit. Examples include: citizens band (CB) radios, "walkie talkie," security, fire, and police transceivers, cellular telephones, and other personal communication devices. ****NOTE: Some cellular telephones and similar devices transmit signals while they are ON, even when not being used;****
- 2) **Medium-range mobile transceivers, such as those used in police cars, fire trucks, ambulances, and taxis. These usually have the antenna mounted on the outside of the vehicle; and**
- 3) **Long-range transmitters and transceivers, such as commercial broadcast transmitters (radio and TV broadcast antenna towers) and amateur (HAM) radios.**

NOTE: Other types of hand-held devices, such as cordless phones, laptop computers, AM/FM radios, TV sets, CD players, cassette players, and small appliances, such as electric shavers and hair dryers, so far as we know, are not likely to cause EMI problems to your powered scooter.

Powered Scooter Electromagnetic Interference (EMI)

Because EM energy rapidly becomes more intense as one moves closer to the transmitting antenna (source), the EM fields from hand-held radio wave sources (transceivers) are of special concern. It is possible to unintentionally bring high levels of EM energy very close to the powered scooter's control system while using these devices. This can affect powered scooter movement and braking. Therefore, the warnings listed are recommended to prevent possible interference with the control system of the powered scooter.

EMI WARNINGS (CONTINUED)

Electromagnetic interference (EMI) from sources such as radio and TV stations, amateur radio (HAM) transmitters, two-way radios, and cellular phones can affect powered scooters. Following the warnings listed should reduce the chance of unintended brake release or powered scooter movement which could result in serious injury.

- 1) Do not operate hand-held transceivers (transmitters receivers), such as citizens band (CB radios, or turn ON personal communication devices, such as cellular phones, while the powered scooter is turned ON;
- 2) Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them;
- 3) If unintended movement or brake release occurs, turn the powered scooter OFF as soon as it is safe;
- 4) Be aware that adding accessories or components, or modifying the powered scooter, may make it more susceptible to EMI (Note: There is no easy way to evaluate their effect on the overall immunity of the powered scooter); and
- 5) Report all incidents of unintended movement or brake release to the powered scooter manufacturer, and note whether there is a source of EMI nearby.

IMPORTANT INFORMATION

- 1) 20 volts per meter (V/m) is a generally achievable and useful immunity level against EMI (as of May 1994) (the higher the level, the greater the protection);
- 2) The immunity level of this product is unknown.

SAFETY/HANDLING

“Safety and Handling” of the powered scooter requires the close attention of the user. This manual points out the most common procedures and techniques involved in the safe operation and maintenance. It is important to practice and master these safe techniques until you are comfortable in maneuvering the powered scooter.

Use this information only as a “basic” guide. The techniques that are discussed have been used successfully by many.

Individual users often develop skills to deal with daily living activities that may differ from those described in this manual. Invacare recognizes and encourages each individual to try what works best for him/her in overcoming obstacles that they may encounter, however, ALL WARNINGS and CAUTIONS given in this manual MUST be followed. Techniques in this manual are a starting point for the new powered scooter user with “safety” as the most important consideration for all.

STABILITY AND BALANCE

WARNING

ALWAYS wear your seat positioning strap.

To assure stability and proper operation of your powered scooter, you must at all times maintain proper balance. Your powered scooter has been designed to remain upright and stable during normal daily activities.

PERCENTAGE OF WEIGHT DISTRIBUTION

WARNING

DO NOT attempt to reach objects if you have to move forward in the seat or pick them up from the floor by reaching down between your knees.

Many activities require the powered scooter owner to reach, bend and transfer in and out of the powered scooter. These movements cause a change to the normal balance, the center of gravity, and the weight distribution of the powered scooter. To determine and establish your particular safety limits, practice bending, reaching and transferring activities in several combinations in the presence of a qualified healthcare professional BEFORE attempting active use of the powered scooter.

Proper positioning is essential for your safety.

STAIRWAYS**WARNING**

DO NOT attempt to move an occupied powered scooter between floors using a stairway. Use an elevator to move an occupied powered scooter between floors.

If moving a powered scooter between floors by means of a stairway, the occupant **MUST** be removed and transported independently of the powered scooter. Extreme caution is advised when it is necessary to move an **UNOCCUPIED** powered scooter up or down the stairs. Invacare recommends disassembling the scooter and transporting the six (6) components independently up or down the stairs. Make sure to use **ONLY** secure, non-detachable parts on each component for hand-hold supports.

DO NOT attempt to lift a powered scooter by any removable (detachable) parts. Lifting by means of removable (detachable) parts may result in injury to the user or assistants or damage to the powered scooter.

ESCALATORS? SORRY!

DO NOT use an escalator to move a powered scooter between floors. Serious bodily injury may occur.

Follow this procedure for moving the powered scooter between floors when an elevator is NOT available:

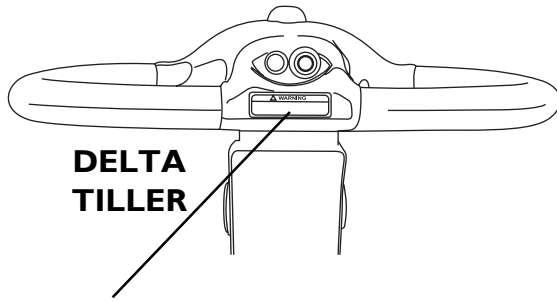
WARNING

Powered scooter weight without the batteries can weigh between 90 to 200 lbs. (depending on the model). Use proper lifting techniques (lift with your legs) to avoid injury.

1. Remove the occupant from the powered scooter.
2. Disassemble the scooter. Refer to TRANSPORTING in PROCEDURE 10 of this manual.
3. Carefully move the powered scooter components up or down the stairway.
4. Once all the components of the scooter are transported to the desired location reassemble the scooter. Refer to TRANSPORTING in PROCEDURE 10 of this manual.

WARNING/CAUTION LABEL LOCATION

GENERAL GUIDELINES

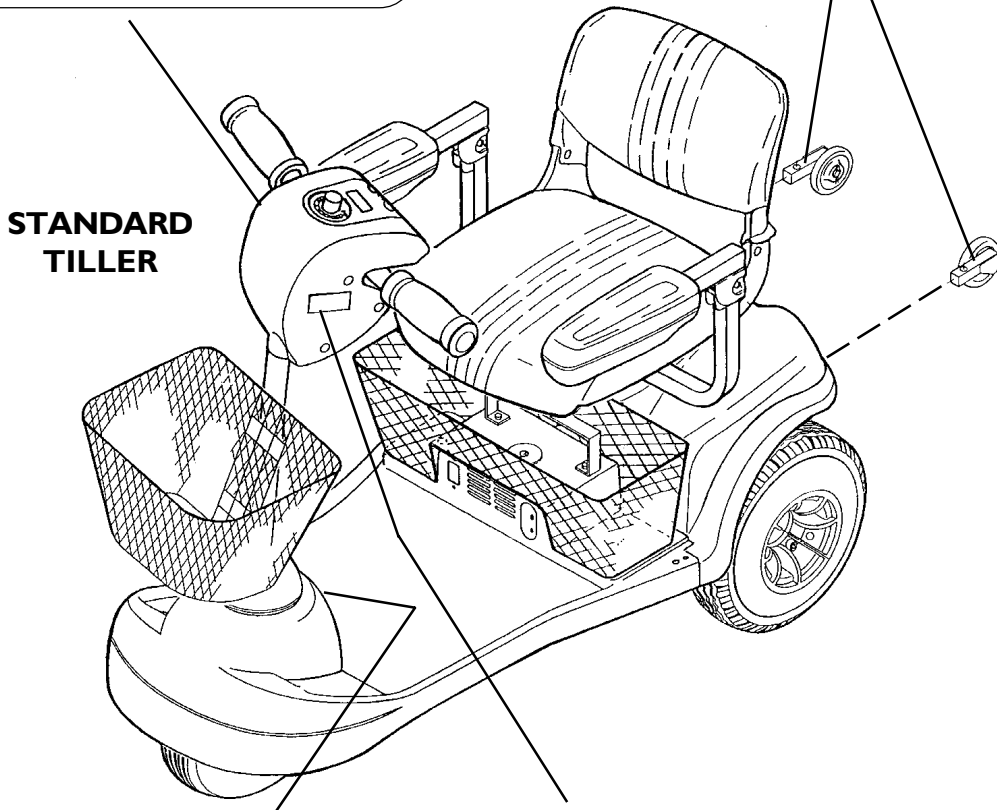


**DELTA
TILLER**

NOTE: Not included on ZOOM-3. ZOOM-3 is equipped with non-removable anti-tip tubes.

⚠ WARNING
Remove key from the ignition while scooter is not in use. Otherwise, injury and/or damage to the scooter or surrounding property may occur. 1090105

⚠ WARNING
DO NOT operate without the anti-tip tubes installed. 60106X144



**STANDARD
TILLER**

⚠ CAUTION
DO NOT lift scooter up by the front or rear shroud. Otherwise, damage to the scooter may occur. 1089265

⚠ WARNING
DO NOT operate the scooter unless the tiller is in the locked position.
DO NOT lean against or pull forward on the tiller while mounting or dismounting the scooter. Otherwise, injury may occur.
The manufacturer disclaims all responsibility for any personal injury or property damage which may occur as a result of improper or unsafe use of its products. 1090104

This Procedure Includes the Following:
Safety Inspection Checklist
Maintenance
Troubleshooting

NOTE: Every six (6) months take the scooter to a qualified technician for a thorough inspection and servicing. Regular cleaning will reveal loose or worn parts and enhance the smooth operation of the scooter. To operate properly and safely, the scooter must be cared for just like any other vehicle. Routine maintenance will extend the life and efficiency of the scooter.

Initial adjustments should be made to suit your personal body structure and preference. Thereafter follow these maintenance procedures:

ITEM	INITIALLY	INSPECT/ADJUST		
		WEEKLY	MONTHLY	PERIODICALLY
GENERAL Scooter drives straight (no excessive drag/pull to one side).	X			X
BRAKE* Does not bind or interfere with travel. Brake easy to disengage/engage.	X X		X	X
UPHOLSTERY (PROCEDURES 5 AND 6) Inspect for rips, tears.	X			X
REAR WHEELS (PROCEDURE 9) No excessive side movement or binding when raised and turned.	X			X
FRONT WHEELS (PROCEDURE 9) Inspect wheel/fork assembly for proper tension by spinning wheel, wheel should come to a gradual stop. Loosen/tighten locknut if wheel wobbles noticeably or binds to a stop. Wheel bearings are clean and free of moisture. CAUTION: As with any vehicle, the wheels and tires should be checked periodically for cracks and wear and should be replaced.	X X X	X	X	X
TILLER (PROCEDURE 8) Ensure that tiller adjustment handle engages and disengages properly and securely (PROCEDURE 3). Scooter stops completely when throttle is released (Does not continue to roll as if throttle is activated).	X X	X X		
SEAT (PROCEDURE 5) Inspect seat swivel for release and engagement. Seat locks into the determined swivel positions.	X X	X	X	

*NOTE: This includes the hand brake on the PANTHER MX-4.

ITEM	INITIALLY	INSPECT/ADJUST		
		WEEKLY	MONTHLY	PERIODICALLY
TIRES (PROCEDURE 9) Inspect for flat spots and wear. If pneumatic tires check for proper inflation. CAUTION: As with any vehicle, the wheels and tires should be checked periodically for cracks and wear, and should be replaced.	X X	X	X	
CLEANING Clean upholstery and armrests. Clean molded frame.	X		X	
FRONT AND REAR SHOCKS - PANTHER MX-4 ONLY Bolts are tight.	X		X	
CLEANING	X			X
HEADLIGHTS (where applicable) Inspect headlight bulbs for proper operation.	X	X		

MAINTENANCE

WARNING

After **ANY** adjustments, repair or service and **BEFORE** use, make sure that all attaching hardware is tightened securely - otherwise, injury or damage may occur.

CAUTION

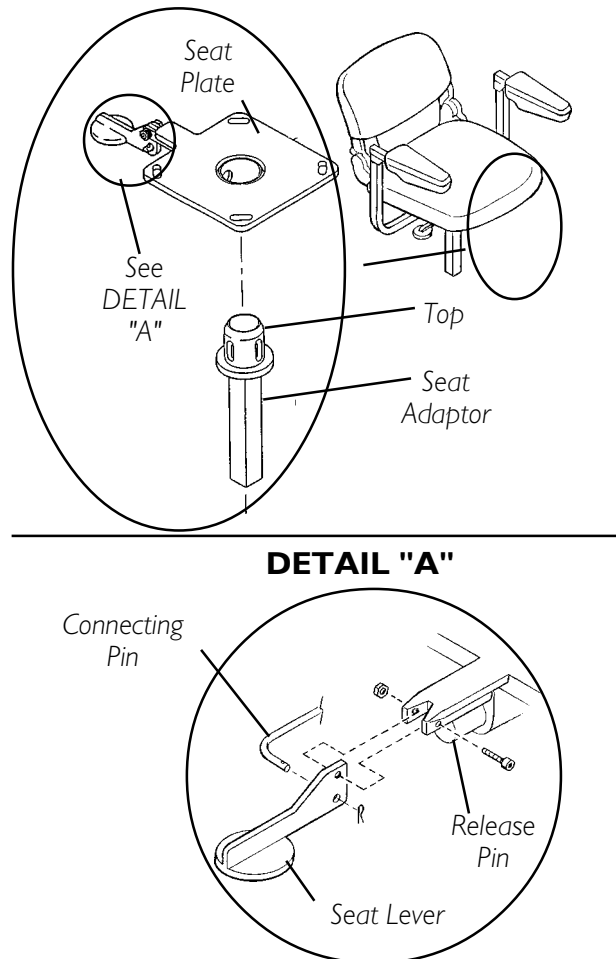
DO NOT over-tighten hardware attaching to the frame. This could cause damage to the frame.

SUGGESTED MAINTENANCE PROCEDURES

1. Before using the powered scooter, make sure all nuts and bolts are tight. Check any parts for damage or wear and replace. Check all parts for proper adjustment.
2. Ensure that batteries are properly maintained and charged as required (PROCEDURE 4).
3. Inspect brake for proper operation (PROCEDURE 3).
4. The wheels and tires should be checked periodically for cracks and wear, and should be replaced by a qualified technician.
5. Regularly check for loose nuts and/or bolts in the front and rear wheels. If loose, have them adjusted by a qualified technician (PROCEDURE 9).
6. Clean dirt, dust and grease from exposed components.
7. Periodically have the bearings of the front wheel checked to make sure they are clean and free from moisture.

LUBRICATION POINTS (FIGURE 1)

- I. Every six (6) months the following components should be lubricated. Use a Teflon[®] lubricant if necessary (FIGURE 1).
 - A. Seat Lever, Connecting Pin, and Release Pin.
 - B. Top of Seat Adaptor.

**FIGURE 1 - LUBRICATION POINTS**

Note: Teflon - Registered trademark of E.I. Du Pont Nemours and Company.

TROUBLESHOOTING GUIDE

SYMPTOM	PROBABLE CAUSE	SOLUTION
LIMITED DRIVING DISTANCE.	Batteries not charged long enough.	Charge batteries overnight or ensure 8 hours of charge between use times (PROCEDURE 4).
	Batteries weak, won't hold charge.	Replace Batteries (PROCEDURE 4).
BATTERIES NOT CHARGING.	Charger not working.	Replace Charger.
	Battery Connections loose.	Check all connections. Secure connections (PROCEDURE 4).
	NO current at wall outlet.	Switch to another wall outlet.
	BAD connection on Charger, Charger Cable, Plug or Internal Wiring problem.	Replace Charger or internal repairs required. Contact Dealer or Invacare.
BATTERIES DRAW EXCESSIVE CURRENT WHEN CHARGING.	Battery Failure.	Replace Batteries (PROCEDURE 4).
CHARGE INDICATOR SHOWS LOW CHARGE LEVEL IMMEDIATELY AFTER CHARGING.	Batteries weak, won't hold charge.	Replace Batteries (PROCEDURE 4).
	Charger not operating.	Replace Charger.
BATTERY INDICATOR FLASHES THE CHARGE LEVEL IS LOW - TOO SOON AFTER BEING RECHARGED.	Have charger checked.	Service or replace charger. Contact Dealer or Invacare.
	Weak batteries.	Replace batteries (PROCEDURE 4).
SCOOTER WILL NOT DRIVE.	Brake-Release Lever disengaged.	Engage brake-release lever. (procedure 3)
	Batteries require charging.	Charge batteries (PROCEDURE 4).
	Key not fully plugged in.	Ensure key is inserted fully into power plug jack.
	Charger plugged in.	Unplug charger from scooter.
	Circuit breaker tripped.	Reset breaker. If breaker trips again, it may indicate need for internal repairs. Contact Dealer or Invacare.
	Soft stop is engaged.If key is turned "OFF" while driving, the scooter artificially holds power for 1.5 seconds slowly decelerating unit to a stop.	With key in the "OFF" position, wait 30 seconds and turn key to "ON" position.
MOTOR "CHATTERS" OR RUNS IRREGULARLY.	Fuse is Blown. Electrical malfunction.	Replace Fuse (PROCEDURE 3). Contact Dealer or Invacare.

This Procedure Includes the Following:

Control Panel Features

Operation of the Scooter

Using the Hand Brake Lever/Brake Arm

Brake Release Lever

Reset Circuit Breaker/Fuse Replacement

WARNING

After ANY adjustments, repair or service and BEFORE use, make sure that all attaching hardware is tightened securely. Otherwise, injury or damage may result.

CONTROL PANEL FEATURES

ALL SCOOTER MODELS

With Delta or Standard Tillers (FIGURE 1).

1. **Speed Control Knob** - Located on the top face of the control panel. The number one (1) represents the slowest speed and the number ten (10) represents the fastest speed (DETAIL "A").
2. **Battery Charge-Indicator** - The charger indicator is located on the top face of the control panel and has an "E" indicating EMPTY and an "F" indicating FULL.

NOTE: The battery charge indicator is composed of eight (8) bars which, when the power is turned on, will illuminate showing the charge level of the batteries. The more number of bars illuminated the more charge the batteries have. See chart below.

NUMBER OF BARS ILLUMINATED	CHARGE OF BATTERIES
8	fully charged
4	partially charged
0	discharged

NOTE: The number of bars illuminated may decrease when driving over uneven surfaces even with batteries fully charged. True reading is with key inserted and indicator illuminated with powered scooter stationary.

WARNING

When negotiating ramps, if the throttle control lever is released while in FORWARD motion the powered scooter will "ROLLBACK" approximately one (1) foot before brake engages. If the throttle control lever is released while in REVERSE motion the powered scooter will "ROLLBACK" approximately three (3) feet before brake engages.

3. **Horn Button** - Located on front face of control panel toward the left. (DETAIL "B").

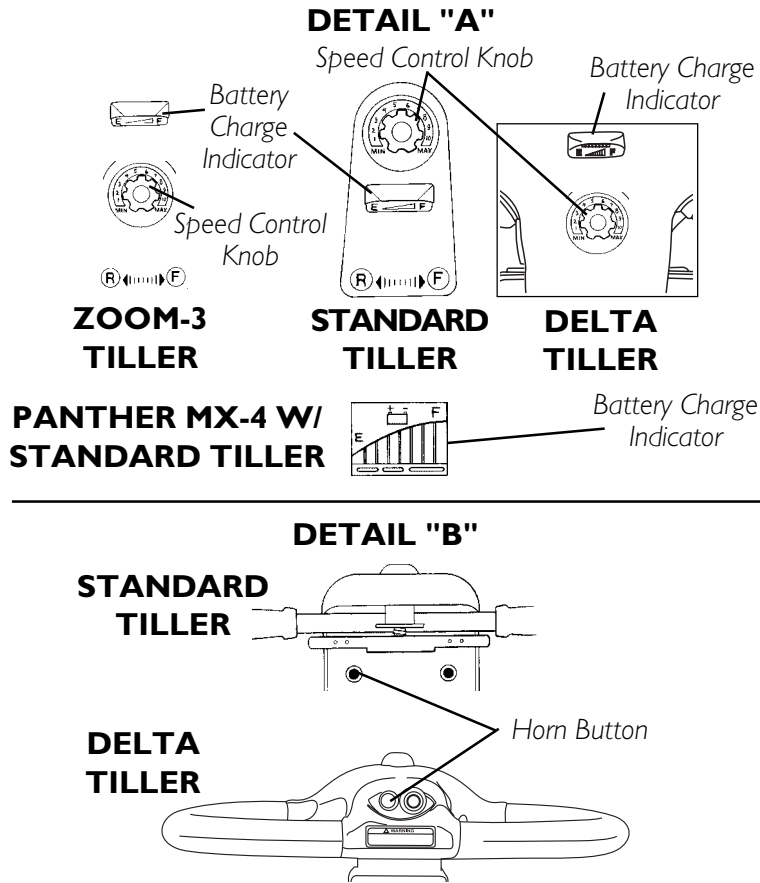


FIGURE 1 - ALL SCOOTER MODELS WITH DELTA OR STANDARD TILLERS

With Standard Tillers (FIGURE 2).

1. **Ignition** - Located on right side of the tiller control panel (DETAIL "C").
2. **Headlight Button** - Located on the front face of the control panel on ALL models EXCEPT LYNX SX-3 (DETAIL "D").
3. **Throttle Control Lever** - Located on the front face of the control panel. This lever is the "gas pedal" (DETAIL "D").

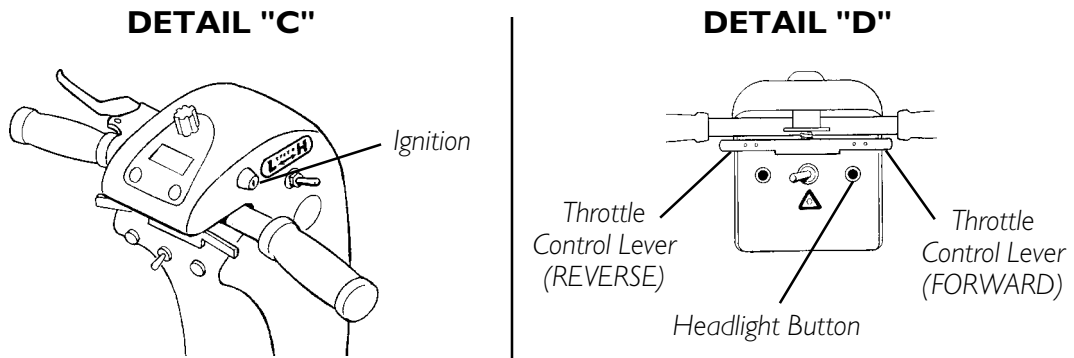


FIGURE 2 - ALL SCOOTER MODELS WITH STANDARD TILLERS

With Delta Tillers (FIGURE 3).

1. **Ignition** - Located on front face of the tiller.
2. **Headlight Button** - Located on the right side of the tiller.
3. **Throttle Control Levers** - Located centralized to the handle grips of the tiller.

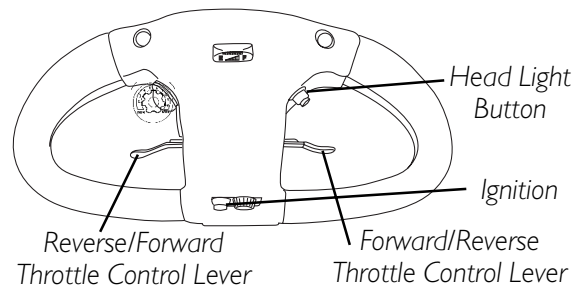


FIGURE 3 - ALL SCOOTER MODELS WITH DELTA TILLERS

PANTHER MX-4 SCOOTERS ONLY**With Standard Tillers (FIGURE 4)**

1. **Turn Signal Switch** - Located on the front face of the control panel (DETAIL "E").
2. **Hazard Light Button** - Located on the front face of the control panel. This button illuminates both turn signals.

NOTE: Switching from HIGH speed to LOW speed decreases power (speed) by approximately 25%, from 7¼ MPH to 5¼ MPH. Switching from LOW speed to HIGH speed restores power (speed).

3. **High/Low Speed Switch** - This switch is located on the right side of the control panel (DETAIL "F").
4. **Hand Brake Lever** - Located on left hand grip (DETAIL "F").

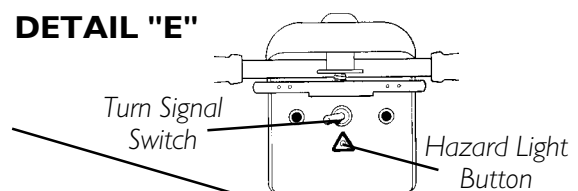
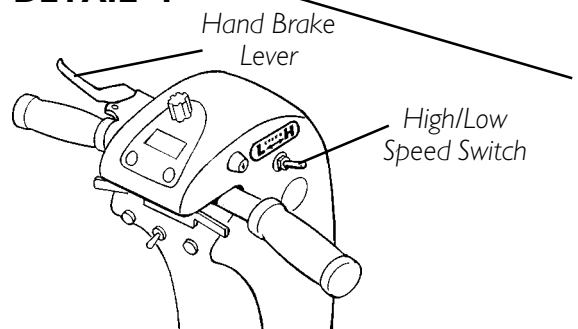
DETAIL "E"**DETAIL "F"**

FIGURE 4 - PANTHER MX-4 SCOOTERS ONLY - WITH STANDARD TILLERS

With Delta Tillers (figure 5).

1. **Turn Signal Switch** - Top face of controller.
2. **Hazard Light Button** - Right side of controller tiller.

NOTE: Switching from HIGH speed to LOW speed decreases power (speed) by approximately 25%, from 7¼ MPH to 5¼ MPH. Switching from LOW speed to HIGH speed restores power (speed).

3. **High/Low Speed Switch** - This switch is located on the top face of the control panel.

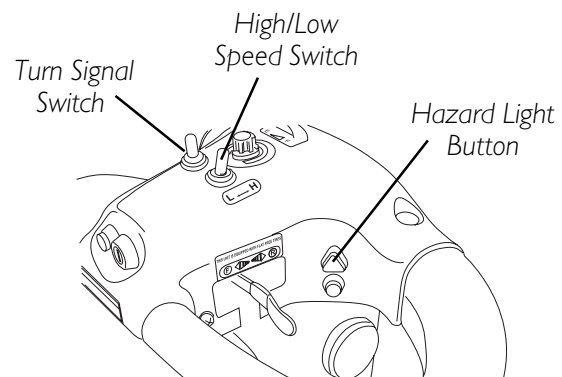


FIGURE 5 - PANTHER MX-4 SCOOTERS ONLY - WITH DELTA TILLERS

OPERATION OF THE SCOOTER (FIGURES 1-5)**WARNING**

Before attempting to sit in the powered scooter, **REMOVE** the key from the ignition. This will ensure that the **POWER** is **OFF** and the scooter will not drive.

To determine and establish your particular safety limits, practice bending, reaching and transferring activities in several combinations in the presence of a qualified healthcare professional **BEFORE** attempting active use of the powered scooter.

Ensure seat is properly locked before attempting transfer into or out of the powered scooter. Attempting unsafe transfers may cause a fall from the powered scooter resulting in bodily injury.

For individuals with balance problems, practice transferring activities **WITH AN ASSISTANT** in the presence of a qualified healthcare professional. **DO NOT** attempt to transfer into or out of the powered scooter without assistance.

1. Before operation of the powered scooter, review the CONTROL PANEL FEATURES section in this procedure of the manual.
2. Install and charge batteries. Refer to REPLACING BATTERIES and CHARGING THE BATTERIES in PROCEDURE 4 in this manual.
3. Transferring to and from the seat can be accomplished in one (1) of two (2) ways:
 - A. Flipping up the armrest makes entering/exiting easier.
 - B. For all models except ZOOM-3, the seat can be rotated in either direction. Refer to 90° SEAT SWIVEL ADJUSTMENT in PROCEDURE 5 in this manual.
4. Once the seat is locked in the forward-facing position and both armrests are in the **DOWN** position, adjust the tiller to a comfortable angle. Refer to TILLER ANGLE ADJUSTMENT in PROCEDURE 8 in this manual.
5. Adjust speed control knob to the appropriate setting. For PANTHER MX-4 also select low/ high speed.

NOTE: For driving indoors or on uneven terrain, a slower speed (and the selection of low speed for PANTHER MX-4 is recommended. For soft terrain or steep inclines (no greater than 8°), a faster speed may be necessary.

6. Insert the key into the ignition.

WARNING

Always depress the throttle control lever gradually. This will ensure smooth safe starts.

NOTE: Throttle control levers are teetered such that moving one (1) will also move the opposite side throttle control lever.

7. To operate the scooter, depress the throttle control lever in the following manner:

A. STANDARD TILLERS:

To move FORWARD - Push the RIGHT-SIDE of the throttle control lever.

To move in REVERSE- Push the LEFT-SIDE of the throttle control lever.

To STOP - Release the throttle control lever and the powered scooter will quickly slow down and the brake will engage. PANTHER MX-4 - Use the hand brake lever when needing accelerated stops. See USING THE HAND BRAKE LEVER/BRAKE/BRAKE ARM in this procedure of the manual.

B. DELTA TILLERS:

To move FORWARD - Pull the RIGHT-SIDE throttle control lever rearward (toward user), or Push the LEFT-SIDE throttle control lever forward (away from user).

To move in REVERSE - Pull the LEFT-SIDE throttle control lever rearward (toward user), or Push the RIGHT-SIDE throttle control lever forward away from user).

To STOP - Release the throttle control lever and the powered scooter will quickly slow down and the brake will engage.

NOTE: To equip the scooter for left hand operation, contact a qualified technician.

The powered scooter is equipped with a "proportional" control meaning that the farther you depress the throttle control lever, the faster the powered scooter will travel. With a proportional control, you can drive as slowly in the high speed setting as you can in the low speed setting. Your top speed, however, is limited by the setting of the speed-control knob. For safety reasons, reverse speed is limited to approximately 50% of forward speed.

When first learning to drive, select a SLOW speed and try to drive the powered scooter AS SLOWLY as possible by depressing the throttle control lever only slightly. This exercise will help you learn to utilize the full potential of the proportional control and allow you to start and stop smoothly.

USING THE HAND BRAKE LEVER/BRAKE ARM (FIGURE 6)

NOTE: The hand brake lever and brake arm are only on the PANTHER MX-4 (Without Delta Tiller).

CAUTION

ALWAYS release throttle control lever **BEFORE** using the hand brake. Using the hand brake in conjunction with the throttle control lever will cause excessive wear on the brake and the stopping distance of the scooter will increase.

HAND BRAKE LEVER

I. Squeeze the hand brake lever when needing accelerated stops.

BRAKE ARM

I. The brake arm can only be used to stop the scooter when the brake-release lever is manually disengaged. Refer to BRAKE-RELEASE LEVER in this procedure of the manual.

BRAKE RELEASE LEVER

CAUTION

Ensure that the brake-release lever is in the **ON** position (engaged) before driving. There should be an audible "click" when stopping and starting.

BRAKE-RELEASE LEVER - Manually engages and disengages the brake. The location of the brake-release lever is between the rear shroud and the rear wheel. For all models except ZOOM-3 and PANTHER MX-4, the brake-release lever is on left hand side. For ZOOM-3 and PANTHER MX-4 MODEL, the brake-release lever is on the right hand side.

ALL MODELS EXCEPT PANTHER MX-4 (FIGURE 7)

Normal driving position for the brake is the ON (lever DOWN) position. Activation of the throttle control lever automatically releases the brake so the powered scooter can drive. Releasing the throttle control lever automatically engages the brake so the powered scooter will not roll on its own.

Brake release lever OFF (lever UP) and the key removed allows the powered scooter to be pushed. The powered scooter cannot be driven with the brake in the OFF (lever UP) position.

PANTHER MX-4 ONLY (FIGURE 8)

Normal driving position for the brake is the ON (lever UP) position. Activation of the throttle control lever automatically releases the brake so the powered scooter can drive. Releasing the throttle control lever automatically engages the brake so the powered scooter will not roll on its own.

Brake release lever OFF (lever DOWN) and the key removed allows the powered scooter to be pushed. The powered scooter cannot be driven with the brake in the OFF (lever DOWN) position.

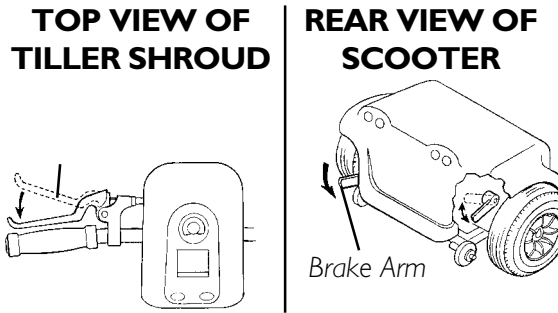
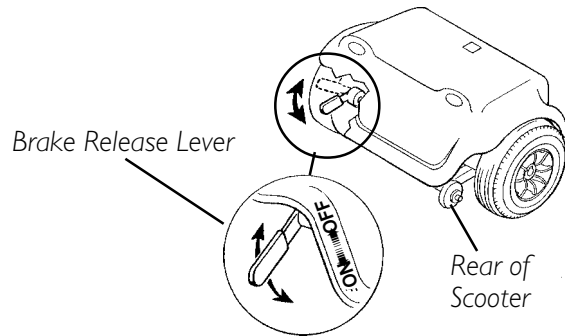


FIGURE 6 - USING THE HAND BRAKE LEVER/BRAKE ARM



NOTE: Remove key and disengage brake before manually pushing the scooter.

FIGURE 7 - BRAKE RELEASE LEVER - ALL MODELS EXCEPT PANTHER MX-4

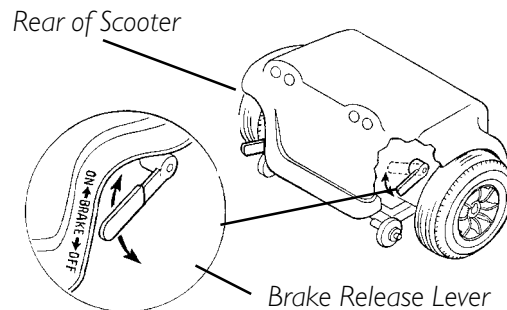


FIGURE 8 - BRAKE RELEASE LEVER - PANTHER MX-4 ONLY

RESET CIRCUIT BREAKER/FUSE REPLACEMENT (FIGURE 9)**CIRCUIT BREAKER**

NOTE: Key must be removed from ignition before resetting circuit breaker.

1. To reset, press circuit breaker button located on rear shroud.

FUSE REPLACEMENT

1. Remove seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of this manual.
2. Remove rear shroud. Refer to REMOVING/INSTALLING REAR SHROUD in PROCEDURE 9 of this manual.
3. Flip top of fuse holder open.
4. Pull fuse out and install NEW fuse.
5. Reverse STEPS 1-3 to reassemble.

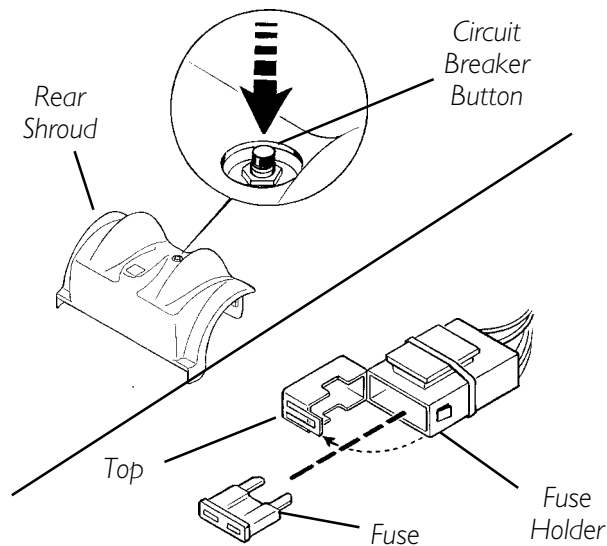


FIGURE 9 - RESET CIRCUIT BREAKER/FUSE REPLACEMENT

<i>This Procedure Includes the Following:</i>
<i>Removing/Installing the Batteries with Cables</i>
<i>Replacing the Batteries</i>
<i>Charging the Batteries</i>

WARNING

After **ANY** adjustments, repair or service and **BEFORE** use, make sure that all attaching hardware is tightened securely - otherwise, injury or damage may result.

REMOVING/INSTALLING THE BATTERIES WITH CABLES (FIGURE 1)

NOTE: To install batteries, reverse the following procedure.

NOTE: When removing/installing batteries keep all foreign objects, especially metal, clear of battery terminals.

REMOVING

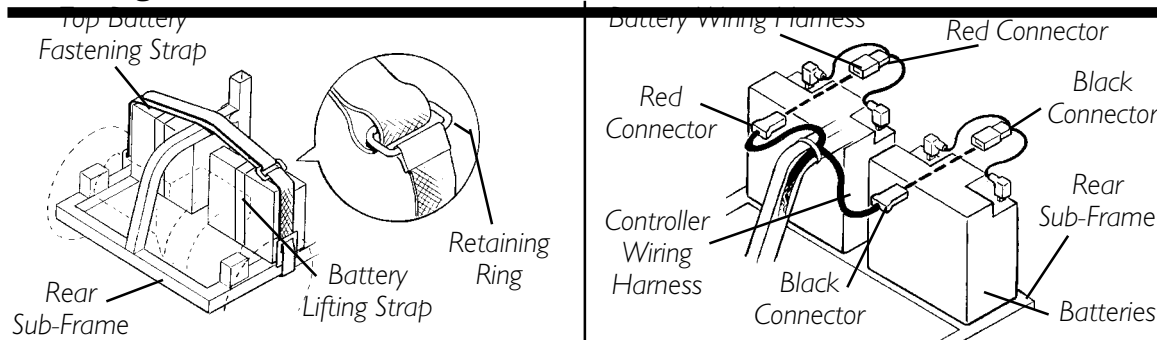
WARNING

Turn Power OFF and remove key from ignition.

Where applicable, **ALWAYS** use a battery lifting strap when moving a battery. It is the most convenient method. It also helps to prolong the life of the battery.

DO NOT tip the batteries. Keep the batteries in an upright position.

The use of rubber gloves and chemical goggles is recommended when working with batteries.



NOTE: Hardware is included with batteries.

NOTE: Only Model LYNX SX-3 battery cable assemblies shown for clarity.

FIGURE 1 - REMOVING/INSTALLING THE BATTERIES WITH CABLES

1. Turn Power OFF and remove key from ignition.
2. Remove the seat from the scooter. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 in this manual.
3. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 in this manual.
4. Disconnect top battery fastening strap and pull through retaining ring.

5. Disconnect red and black connectors of the battery wiring harness from red and black connectors of the controller wiring harness.
6. Remove batteries w/ cables from rear sub-frame.

REPLACING THE BATTERIES (FIGURE 2)

WARNING

Turn Power OFF and remove key from ignition.

Where applicable, **ALWAYS** use a battery lifting strap when moving a battery. It is the most convenient method. It also helps to prolong the life of the battery.

DO NOT tip the batteries. Keep the batteries in an upright position.

The use of rubber gloves and chemical goggles is recommended when working with batteries.

CAUTION

Place the powered scooter in a well ventilated area where work can be performed without risking damage to carpeting or floor covering.

NOTE: If there is battery acid on the sides of the battery, add baking soda to these areas to neutralize the battery acid. Before reinstalling the NEW batteries, clean the baking soda from the batteries.

RECOMMENDED BATTERY TYPES

WARNING

The warranty and performance specifications contained in this manual are based on the use of deep cycle gel cell or sealed lead acid batteries. Invacare strongly recommends their use as the power source for this unit.

CAUTION

Failure to use the correct battery size and/or voltage may cause damage to the powered scooter and give unsatisfactory performance.

NOTE: Both recommended battery types are spill proof and require no maintenance except routine charging.

SCOOTER MODEL	QTY	VOLTS	AMP HOURS
ZOOM-3	2	12	12
LYNX SX-3	2	12	17
LYNX LX-3	2	12	31
LYNX LX-3 ^{plus}	2	12	31
PANTHER LX-4	2	12	31
PANTHER MX-4	2	12	40

NOTE: Charge batteries daily. It is critical not to let them run low at any time.

NOTE: Invacare recommends that both batteries be replaced if one (1) battery is defective.

WARNING

NEVER allow any of your tools and/or battery cables to contact **BOTH** terminal(s) post(s) at the same time. An electrical short may occur and injury or damage may occur.

The use of rubber gloves and chemical goggles is recommended when working with batteries.

CAUTION

When tightening the clamps, always use a box or a crescent wrench. Pliers will “round off” the nuts. NEVER wiggle the terminal when tightening. The battery may become damaged.

1. Remove the batteries with cable assemblies from scooter. Refer to REMOVING/INSTALLING THE BATTERIES WITH CABLES in this procedure of the manual.
2. If necessary, lift battery cable boot up off of the battery terminal.
3. For **ZOOM-3** - remove the battery cable connections by gapping the connectors and pulling.
4. For all other models, remove the hardware that secures the cable assembly to the battery terminals. Hardware for each model is as follows:
 - A. For **LYNX SX-3** - Mounting screw, lockwasher, washers, and locknut.
 - B. For **LYNX LX-3**, **LX-3^{Plus}** and **PANTHER LX-4** - Mounting screw and locknut.
 - C. For **PANTHER MX-4** - Mounting screw and lockwasher.
5. Repeat STEPS 2 - 4 for opposite battery.
6. Position battery cables onto NEW battery terminals.

CAUTION

The positive (+) terminal MUST be connected to the positive (+) terminal/post, otherwise serious damage will occur to the electrical system.

WARNING

Always make black cable to negative terminal connection first. Otherwise, injury may result.

- A. BLACK Cable to NEGATIVE (-) Terminal.
- B. RED Cable to POSITIVE (+) Terminal.
7. Secure battery cable to the battery terminals:
 - A. For **ZOOM-3** - Install battery cable connector onto battery terminal ensuring terminal rests INSIDE connector.
 - B. For **LYNX SX-3** - Use mounting screw, lockwasher, two (2) washers, and locknut. Securely tighten.
 - C. For **LYNX LX-3**, **LX-3^{Plus}** and **PANTHER LX-4** - Use the mounting screw and locknut. Securely tighten.
 - D. For **PANTHER MX-4** - Use the mounting screw and lockwasher. Securely tighten.

8. Repeat STEP 7 for opposite battery.
9. Verify that all connections are correct and terminals are secure.
10. Install the NEW battery with cable assemblies onto the scooter. Refer to REMOVING/INSTALLING THE BATTERIES W/ CABLES in this procedure of the manual.
11. Charge the batteries. Refer to CHARGING THE BATTERIES in this procedure of the manual.

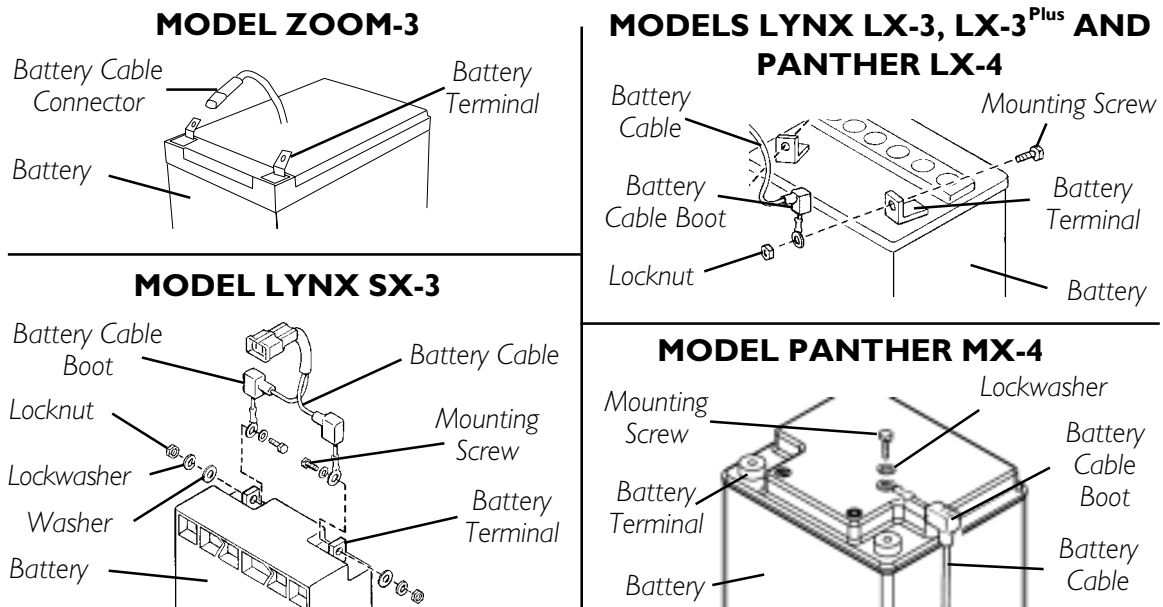


FIGURE 2 - REPLACING THE BATTERIES

CLEANING BATTERY TERMINALS

WARNING

DO NOT allow conductive material such as a wrench to join the two (2) battery terminals. This will result in a dead short that can cause burns to you and damage to the battery.

Most batteries are not sold with instructions. However, warnings are frequently noted on the top of the batteries. Read them carefully.

DO NOT allow the liquid in the battery to come in contact with skin, clothes or other possessions. It is a form of acid and harmful or damaging burns may result. Should the liquid touch your skin, wash the area immediately and thoroughly with cool water. In serious cases or if eye contact is made, seek medical attention **IMMEDIATELY**.

The use of rubber gloves and chemical goggles is recommended when working with batteries.

NEVER smoke or strike a match near batteries.

1. Examine battery clamps/terminals for corrosion.

WARNING

If there are any cracks or leaks replace batteries IMMEDIATELY.

2. Clean the terminals and inside the battery clamps by using a battery cleaning tool, wire brush, or medium grade sand paper.

NOTE: Upon completion, these areas should be shiny, not dull.

- Carefully dust off all metal particles.

CHARGING THE BATTERIES

WARNING

Never attempt to recharge the batteries by attaching cables directly to the battery terminals or clamps.

DO NOT attempt to recharge the batteries and operate the powered scooter at the same time.

CAUTION

New batteries **MUST** be fully charged prior to initial use of the powered scooter.

Always charge new batteries before initial use or battery life will be reduced.

As a general rule, you should recharge your batteries as frequently as possible to assure the longest possible life and to minimize required charging time. Plan to recharge them when you do not anticipate using the powered scooter.

The range per battery charge using recommended batteries should be approximately 5 to 9 hours of typical operation. Extensive use on inclines may substantially reduce per charge mileage.

WARNING

NEVER leave the charger unattended when the circuit breaker (charger) is tripping **ON** and **OFF**.

NOTE: If performing charging procedures independently, **READ** and **CAREFULLY** follow the individual instructions for each charger (supplied or purchased).

NOTE: If charging instructions are not supplied, consult a qualified service technician for proper procedures.

MODEL	BATTERY CHARGER*	POWER CORD
ZOOM-3	Remote (Supplied)	Supplied
LYNX SX-3	On-Board	Supplied
LYNX LX-3	On-Board	Supplied
LYNX LX-3 ^{Plus}	On-Board	Supplied
PANTHER LX-4	Remote (Supplied)	Supplied
PANTHER MX-4	On-Board	Supplied

* NOTE : AC power cord (3-prong plug, 15 ampere current rating; industrial type)

REMOTE BATTERY CHARGER (FIGURE 3)

1. Open the charger port cover located on the left side of the tiller.
2. Plug charger connector into charger port.
3. Plug charger into standard 110-volt wall outlet.
4. Refer to **BATTERY CHARGER OPERATION** in this procedure of the manual.

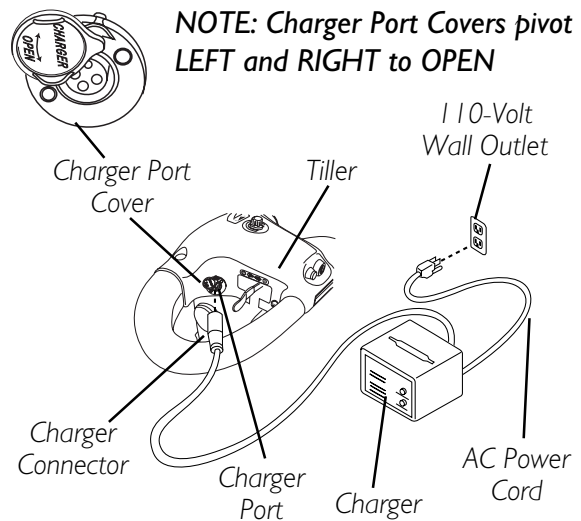
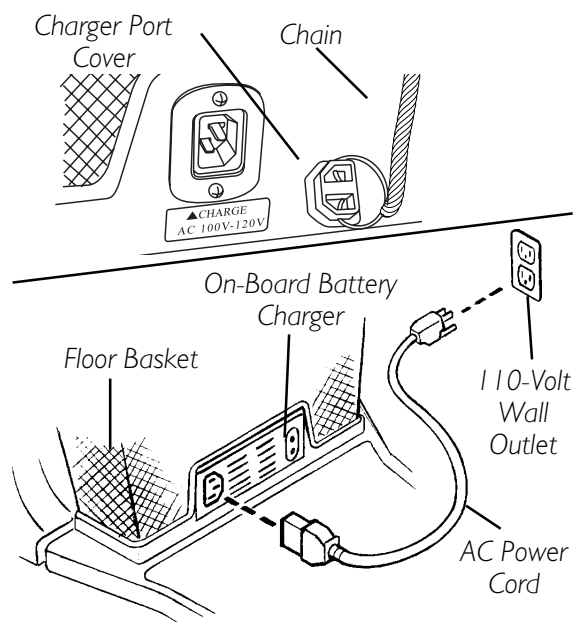


FIGURE 3 - CHARGING THE BATTERIES (REMOTE BATTERY CHARGER)

ON-BOARD BATTERY CHARGER (FIGURE 4)

1. Remove charger port cover, where applicable.
2. Plug AC power cord into on-board battery charger located underneath floor basket.
3. Plug AC power cord into 110-volt wall outlet.
4. Refer to **BATTERY CHARGER OPERATION** in this procedure of the manual.



NOTE: On Board Chargers built after 10/00 have a cover attached with a chain to the Floor basket

FIGURE 4 - CHARGING THE BATTERIES (ON-BOARD BATTERY CHARGER)

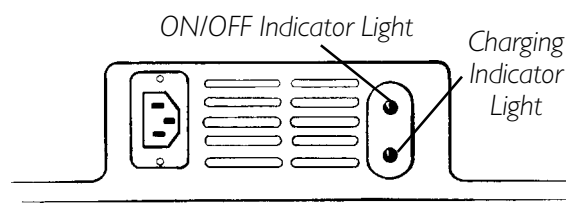
BATTERY CHARGER OPERATION (FIGURE 5)

1. The ON/OFF LED indicator will illuminate **Solid Red** indicating that the charger is ON.
2. If the ON/OFF LED indicator is "**Blinking**" **Red**, this is abnormal. Perform one (1) of the following:
 - A. **Remote Battery Chargers** - Unplug battery charger from charger port and wall outlet. Contact Invacare at the number listed on the back page.
 - B. **On-board Battery Chargers** - Unplug AC power cord from the on-board battery charger and wall outlet. Contact Invacare at the number listed on the back page.
3. When the ON/OFF LED indicator is OFF, charger is OFF.
4. When the CHARGE LED indicator is "**Blinking**" **Green**, the batteries are charging.
5. When the CHARGE LED indicator is **Solid Green**, the batteries are FULLY charged (or as fully charged as their condition will allow). At this point, the charger automatically stops charging.
6. If the charger is on and the CHARGE LED indicator is OFF, the charger is disconnected. Check that all connections are secure. If CHARGE LED indicator is still OFF, perform one (1) of the following:
 - A. **Remote Battery Chargers** - Unplug battery charger from charger port and wall outlet. Contact Invacare at the number listed on the back page.
 - B. **For On-board battery chargers** - Unplug AC power cord from the on-board battery charger and wall outlet. Contact Invacare at the number listed on the back page.

NOTE: The powered scooter is designed with an an electrical lockout to prevent it from being driven while the charger is plugged in to an outlet.

ON/OFF INDICATOR	STATUS
SOLID RED	CHARGER ON
"BLINKING" RED	ABNORMAL
LED "OFF"	CHARGER OFF
CHARGING INDICATOR	STATUS
"BLINKING" GREEN	CHARGING
SOLID GREEN	FULLY CHARGED
LED "OFF"	CHARGER

ON-BOARD BATTERY CHARGER



REMOTE BATTERY CHARGER

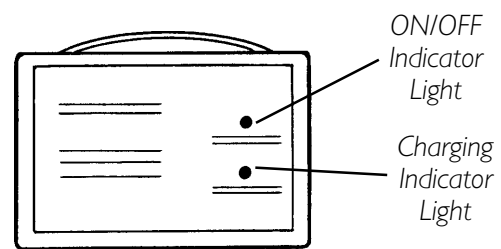


FIGURE 5 - BATTERY CHARGER OPERATION (REMOTE AND ON-BOARD BATTERY)

<i>This Procedure Includes the Following:</i>
<i>Removing/Installing the Seat</i>
<i>Adjusting the Seat Height</i>
<i>90° Seat Swivel Adjustment</i>
<i>Adjusting the Seat Depth</i>
<i>Using the Adjustable Seat Slide</i>
<i>Removing/Installing Seat Upholstery/Cushion</i>

WARNING

After **ANY** adjustments, repair or service and **BEFORE** use, make sure that all attaching hardware is tightened securely - otherwise, injury or damage may result.

REMOVING/INSTALLING THE SEAT

DETERMINING SEAT POST TYPE (FIGURE 1)

- I. Visually inspect the seat post to determine if you have a SOLID or ADJUSTABLE seat post.

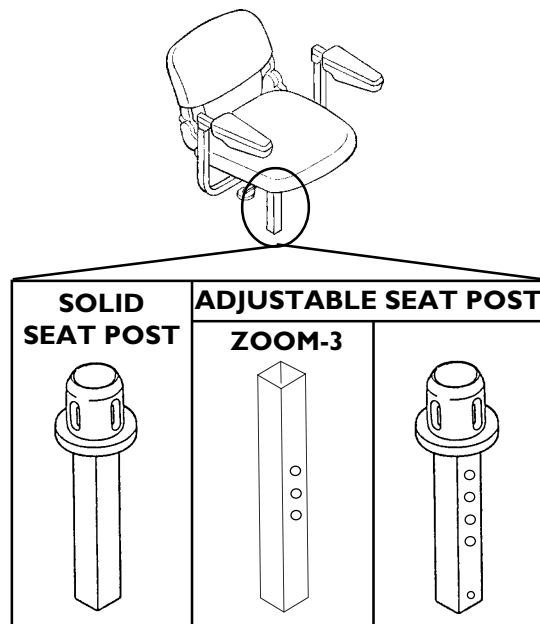


FIGURE 1 - DETERMINING SEAT POST TYPE

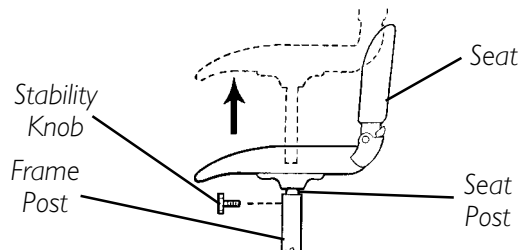
REMOVING (FIGURE 2)

1. Remove the stability knob located under the seat on the frame post.

CAUTION

When the seat height adjustment pin is removed, the weight of the seat assembly MUST be supported to prevent the seat from falling onto the frame.

2. Perform one of the following:
 - A. For **solid seat post and adjustable seat post ZOOM-3** - proceed to STEP 3.
 - B. For **adjustable height seat post** - remove the seat height adjustment pin from seat post and retain for installation.
3. Lift seat assembly up and remove from frame post.



NOTE: Only the Contour Seat shown for clarity. The Deluxe Seat removes/installs in the same manner.

INSTALLING (FIGURE 2)

WARNING

Ensure that seat is locked into the forward position BEFORE and DURING operation of the scooter. Otherwise, injury to the user and/or damage to the scooter may result.

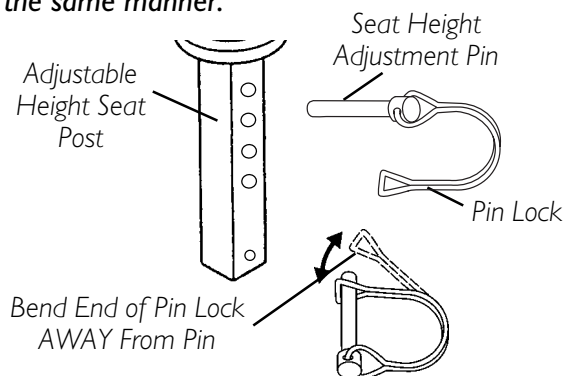


FIGURE 2 - REMOVING/INSTALLING THE SEAT

1. Position seat post of seat assembly into frame post with seat in FORWARD position.

NOTE: For adjustable height seat posts ensure that the adjustment holes align with the holes on the SIDES of the frame post.

2. If necessary, rotate seat to the forward position. Refer to 90° SEAT SWIVEL ADJUSTMENT in this procedure of the manual.

WARNING

Ensure that the seat height adjustment pin is properly engaged and locked. Otherwise, injury and/or damage may result.

DO NOT use the stability knob to adjust the seat height. It is NOT designed to support the weight of the user. Otherwise, injury to the user and/or damage to the scooter may result.

3. Perform one of the following:
 - A. For **solid seat post** - lower seat assembly down until seat post rests on mounting screw installed inside frame post.
 - B. For **adjustable height seat post** - lower seat assembly down to desired height and install seat height adjustment pin through frame post and seat post and secure. Refer to ADJUSTING THE SEAT HEIGHT in this procedure of the manual.

NOTE: When installing the seat height adjustment pin, it is necessary to support the weight of the seat assembly.

- C. For **adjustable seat post ZOOM-3** - install seat assembly onto seat post with the seat in the forward position.
4. Reinstall stability knob. Hand tighten.

ADJUSTING THE SEAT HEIGHT

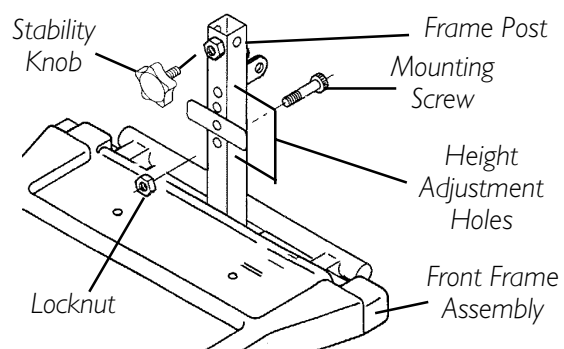
1. Determine seat post type. Refer to DETERMINING SEAT POST TYPE in this procedure of the manual.
2. Perform one (1) of the following:
 - A. For **solid seat posts** proceed to SOLID SEAT POSTS in this procedure of the manual.
 - B. For **adjustable height seat posts** proceed to ADJUSTABLE SEAT POSTS in this procedure of the manual.

WARNING

DO NOT use the stability knob to adjust the seat height. It is **NOT** designed to support weight of the user. Otherwise, injury to the user and/or damage to the scooter may result.

SOLID SEAT POST (FIGURE 3)

1. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in this procedure of the manual.
2. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of this manual.
3. Remove the batteries w/ cables. Refer to REMOVING/INSTALLING THE BATTERIES WITH CABLES in PROCEDURE 4 of this manual.
4. If necessary, remove the floor basket. Refer to REMOVING/INSTALLING THE FLOOR BASKET in PROCEDURE 11 of this manual.
5. Remove the mounting screw and locknut from the frame post.
6. Perform one (1) of the following:
 - A. For **LYNX SX-3, and PANTHER MX-4** - Insert mounting screw into one (3) of the three (3) height adjustment holes located on the frame post.
 - B. For **LYNX LX-3, For LYNX LX-3^{Plus} and PANTHER LX-4** - Insert mounting screw into one (1) of the four (4) height adjustment holes located on the frame post.
7. Secure mounting screw in place with EXISTING locknut. Securely tighten.
8. Reassemble scooter by reversing STEPS 1-4.



NOTE: Tiller assembly, rear frame assembly, and front wheel are not shown for clarity.

FIGURE 3 - ADJUSTING THE SEAT HEIGHT - SOLID SEAT POSTS

ADJUSTABLE HEIGHT SEAT POST (FIGURE 4)**WARNING**

Ensure that the seat height adjustment pin is properly engaged and locked. Otherwise, injury and/or damage may result.

DO NOT use the stability knob to adjust the seat height. It is **NOT** designed to support the weight of the user. Otherwise, injury to the user and/or damage to the scooter may result.

zoom-3

1. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in this procedure of the manual.
2. Remove the stability knob located on the front of the frame post.
3. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of this manual.
4. Disengage and remove the seat height adjustment pin from the seat post.
5. Adjust the seat post to the desired height adjustment.
6. Reinstall the seat height adjustment pin through the frame post and seat post.
7. Secure the seat height adjustment pin by performing the following steps:
 - A. Swivel the pin lock until it is parallel to the pin .
 - B. Bend the end of the pin lock and position it over the end of the pin (DETAIL "A").
8. Reassemble scooter by reversing STEPS 1-3.

ALL other models

1. Remove the stability knob located on the front of the frame post.

CAUTION

When the seat height adjustment pin is removed, the weight of the seat assembly MUST be supported to prevent the seat from falling onto the frame.

2. Disengage and remove the seat height adjustment pin from the seat post.
3. Adjust the seat assembly into the frame post to the desired height adjustment.
4. While holding the seat assembly in place, install the seat height adjustment pin through the frame post and seat post.
5. Secure the seat height adjustment pin by performing the following steps:
 - A. Swivel the pin lock until it is parallel to the pin .
 - B. Bend the end of the pin lock and position it over the end of the pin (DETAIL "A").

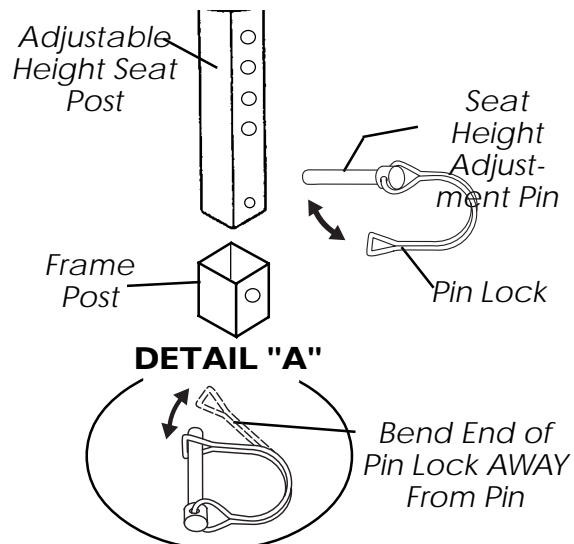


FIGURE 4 - ADJUSTING THE SEAT HEIGHT - ADJUSTABLE HEIGHT SEAT POSTS

90° SEAT SWIVEL ADJUSTMENT

ALL MODELS EXCEPT ZOOM-3 (FIGURE 5)

WARNING

Ensure that seat is locked into the forward position **BEFORE** and **DURING** operation of the scooter. Otherwise, injury to the user and/or damage to the scooter may result.

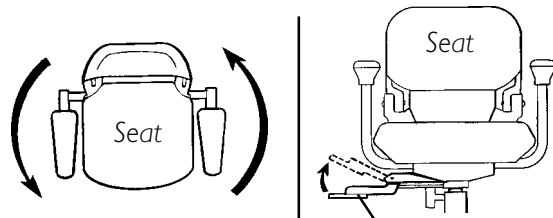
CAUTION

PANTHER MX-4 ONLY - DO NOT use the seat swivel option when the following combination occurs. Accessories are installed (such as Safety Flag, Crutch/Cane Holder, etc.) and the seat is mounted in lowest height adjustment position. Otherwise, damage to the scooter may occur.

1. The swivel release lever is located just beneath the seat on the right side.
2. Pull the swivel release lever **UP** to rotate the seat.

NOTE: The seat locks in position at 90° intervals. The seat is locked when an audible click is heard.

3. Rotate the seat to the desired position.



NOTE: Seat swivels 360° in either direction.

Swivel Release Lever (Lift UP to activate)

NOTE: Only the Contour Seat shown for clarity. The Deluxe Seat swivels in the same manner.

FIGURE 5 - 90° SEAT SWIVEL ADJUSTMENT

ADJUSTING THE SEAT DEPTH

ALL MODELS EXCEPT ZOOM-3 (FIGURE 6)

NOTE: This procedure applies to the Contour Seat ONLY. To adjust the seat depth on the Deluxe Seat, refer to ADJUSTABLE SEAT SLIDE in this procedure of the manual.

1. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in this procedure of the manual.
2. Remove the seat upholstery and cushion insert. Refer to REMOVING/INSTALLING THE SEAT UPHOLSTERY in this procedure of the manual.
3. **Place seat assembly upside down on ground/floor.**
4. Remove the four (4) mounting screws, washers, and lockwashers that secure the swivel seat assembly and seat stand to the seat.

NOTE: When aligning the swivel seat assembly with the seat stand, the swivel lever must be positioned on either side so that the lever sits in the cutout provided on the seat stand.

5. Align the following three (3) items:
 - A. The slots on the swivel seat assembly.
 - B. The slots on the seat stand.
 - C. One (1) of the two (2) mounting positions on the underside of the seat.

6. Secure all three (3) components together with the four (4) EXISTING mounting screws, lockwashers, and washers in the following manner:

WARNING

The two (2) longer mounting screws **MUST** be used to secure the rear of the seat assembly together and the two (2) shorter mounting screws **MUST** be used to secure the front of the seat assembly together. Otherwise, damage to the seat and/or injury to the user may result.

- A. Use the shorter mounting screws to secure the front of the seat assembly together. Securely tighten.
- B. Use the longer mounting screws to secure the rear of the seat assembly together. Securely tighten.

7. Install the seat upholstery and cushion insert onto the seat. Refer to REMOVING/INSTALLING THE SEAT UPHOLSTERY in this procedure of the manual.
8. Install the seat. Refer to REMOVING/INSTALLING THE SEAT in this procedure of the manual.

USING THE ADJUSTABLE SEAT SLIDE (FIGURE 7)

NOTE: This option is only available on the Deluxe Seat, models PANTHER LX-4 and PANTHER MX-4.

1. Lift up on the release lever.
2. Slide seat forward/backward to the desired position.
3. Release lever to lock seat in position.

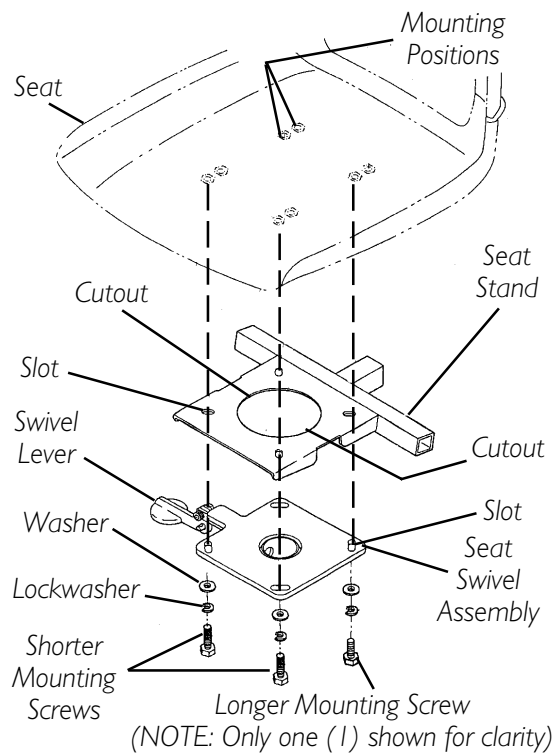


FIGURE 6 -ADJUSTING THE SEAT DEPTH

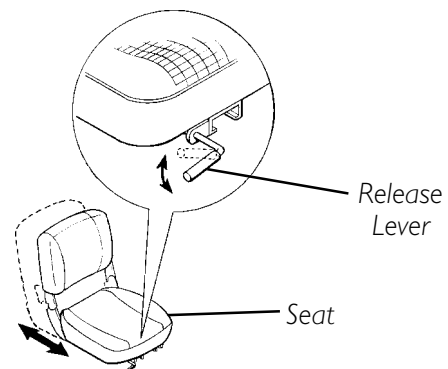


FIGURE 7 - USING THE ADJUSTABLE SEAT SLIDE

REMOVING/INSTALLING THE SEAT UPHOLSTERY/ CUSHION (FIGURE 8)

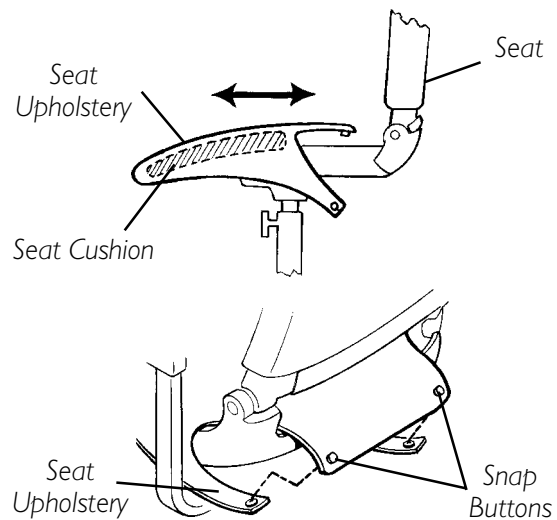
NOTE: This procedure applies to the Contour Seat Only. Seat upholstery on the Deluxe seat CANNOT be removed.

REMOVING

1. Unbutton the snap buttons of the seat upholstery located on the rear of the seat.
2. Remove seat upholstery and seat cushion from seat.

INSTALLING

1. Install NEW/EXISTING seat cushion onto seat.
2. Install NEW/EXISTING seat upholstery onto seat.
3. Secure seat upholstery to seat with rear snap buttons.



**FIGURE 8 - REMOVING/
INSTALLING THE SEAT
UPHOLSTERY/CUSHION**

WARNING

Laundering or moisture will reduce flame retardation of the upholstery.

<p>This Procedure Includes the Following:</p> <p>Folding/Unfolding the Back</p> <p>Removing/Installing the Back Cushion/Upholstery</p> <p>Adjusting the Back Recline</p> <p>Adjusting the Headrest</p>

WARNING

After ANY adjustments, repair or service and BEFORE use, make sure that all attaching hardware is tightened securely - otherwise injury or damage may result.

FOLDING/UNFOLDING THE BACK (FIGURE 1)

1. To fold, push back down towards seat.
2. To unfold, pull back up into the upright position.

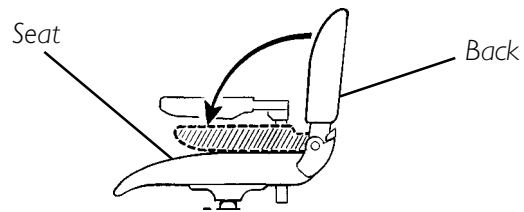


FIGURE 1 - FOLDING/UNFOLDING THE BACK

REMOVING/INSTALLING BACK CUSHION/UPHOLSTERY (FIGURE 2)

1. Unbutton the snap buttons on the back upholstery.
2. Remove and replace foam insert and/or upholstery.
3. Secure back upholstery to back with snap buttons.

NOTE: Clean upholstery with warm DAMP cloth and mild detergent to remove superficial soil.

WARNING

Laundrying or moisture will reduce flame retardation of the upholstery.

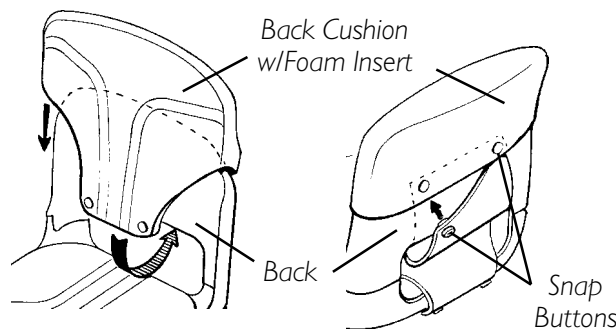


FIGURE 2 - REMOVING/INSTALLING BACK CUSHION/UPHOLSTERY

ADJUSTING THE BACK RECLINE

ALL MODELS EXCEPT ZOOM-3, SX-3 AND LX-3 (FIGURE 3)

1. Loosen the outside jam nut.
2. Adjust mounting screw up or down to obtain the desired back angle.
3. Thread inside jam nut upwards to the top edge of the back bracket.
4. Securely tighten both the inside and outside jam nuts to secure mounting screw in place.

WARNING

Both mounting screws MUST be adjusted to obtain the same back angle so the weight of the user is evenly distributed. Otherwise, injury to the user and/or damage to the scooter may occur.

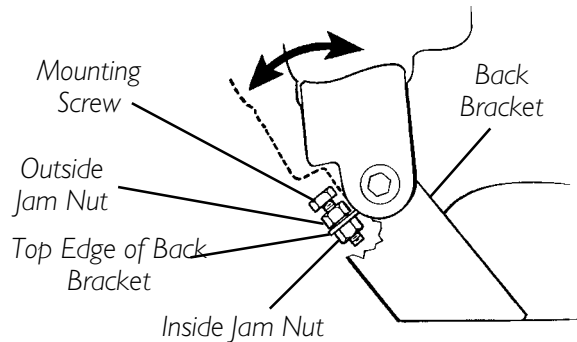


FIGURE 3 - ADJUSTING THE BACK RECLINE

5. Repeat STEPS 1-4 for opposite side of back. To maintain same angle, count the number of exposed threads between the mounting screw and the outside jam nut.

ADJUSTING THE HEADREST

ALL MODELS EXCEPT ZOOM-3 (FIGURE 4)

1. To raise headrest, lift headrest up to desired position.

NOTE: Headrest is locked in position when an audible "click" is heard.

2. To lower headrest, push release tab towards the inside of the chair. Lower headrest to desired position.

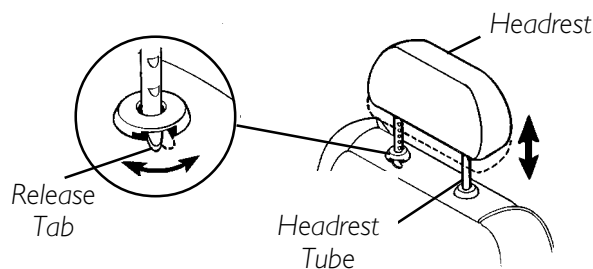


FIGURE 4 - ADJUSTING THE HEADREST

BACK

This Procedure Includes the Following:
Armrest Angle Adjustment
Armrest Width Adjustment
Armrest Depth/Height Adjustment

WARNING

After ANY adjustments, repair or service and BEFORE use, make sure that all attaching hardware is tightened securely - otherwise, injury or damage may result.

ARMREST ANGLE ADJUSTMENT

ALL SEATS BUILT AFTER 10/00 AND CONTOUR SEATS BUILT BEFORE 10/00 (FIGURE 1)

1. Lift the armrest up.
2. Loosen adjustment locknut.
3. Adjust mounting screw up or down to the desired arm angle position.
4. Retighten adjustment locknut.
5. To determine the same angle for the opposite armrest, count the exposed threads on the socket screw.
6. Repeat STEPS 1-5 for opposite armrest.

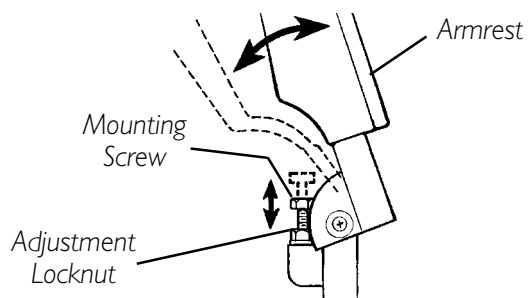
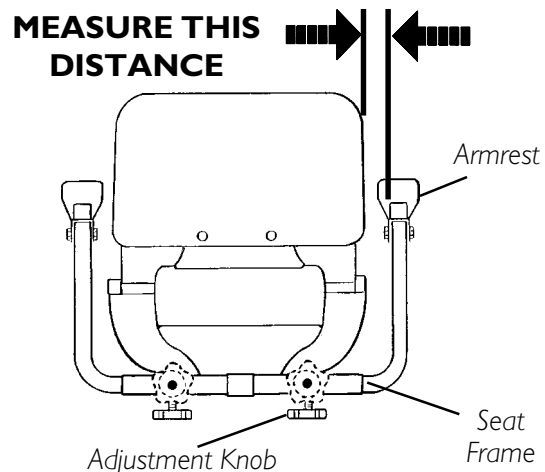


FIGURE 1 - ARMREST ANGLE ADJUSTMENT - ALL SEATS BUILT AFTER 10/00 AND CONTOUR SEATS BUILT BEFORE 10/00

ARMREST WIDTH ADJUSTMENT

ALL MODELS EXCEPT ZOOM-3 (FIGURE 2)

1. Loosen the adjustment knob located either beneath the seat frame or on the back of the seat frame.
2. Adjust armrest in or out to the desired position.



NOTE: Only Contour Seat shown for clarity. Width adjusts in the same manner for Deluxe Seat.

FIGURE 2 - ARMREST WIDTH ADJUSTMENT

CAUTION

The armrest can be adjusted to a maximum distance of 4-1/2 inches between the inside of the armrest and the mounting shaft the armrest is inserted into. If the armrest is adjusted beyond the maximum 4-1/2 inches, it will fall out.

3. Retighten adjustment knob securely.
4. Measure distance between back and inside of armrest.
5. Repeat STEPS 1-4 for opposite armrest setting armrest at distance determined in

ARMREST DEPTH/HEIGHT ADJUSTMENT

ALL MODELS EXCEPT ZOOM-3 (FIGURE 3)

NOTE: These options are NOT available on the CONTOUR SEATS Built BEFORE 10/00.

DEPTH

1. Loosen bottom adjustment knob.
2. Adjust armrest to desired position.
3. Retighten bottom adjustment knob securely.
4. Measure distance from the back edge of armrest to the back edge of the armrest post.
5. Repeat STEPS 1-4 for opposite armrest setting armrest at distance determined in STEP 4.

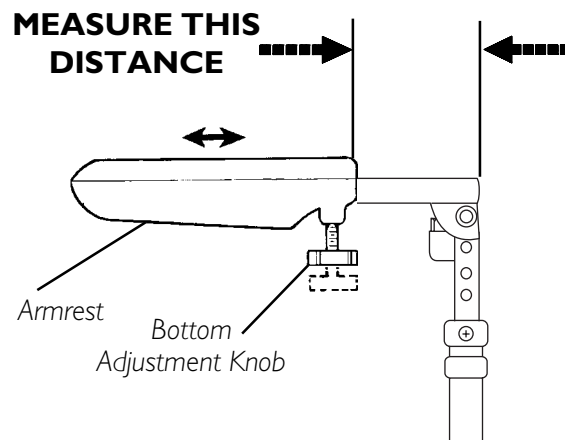


FIGURE 3 - ARMREST DEPTH ADJUSTMENT

HEIGHT (FIGURE 4)

1. Loosen the stability set screws on of the armrest post.
2. Remove the mounting screw and locknut that secure the armrest in place.
3. Adjust armrest to desired mounting position and secure with EXISTING mounting screw and locknut. Securely tighten.
4. Retighten the stability set screws on the armrest post.
5. Count the number of exposed mounting holes above the armrest armpost.
6. Repeat STEPS 1-4 for opposite armrest setting armrest at the mounting hole determined in STEP 5.

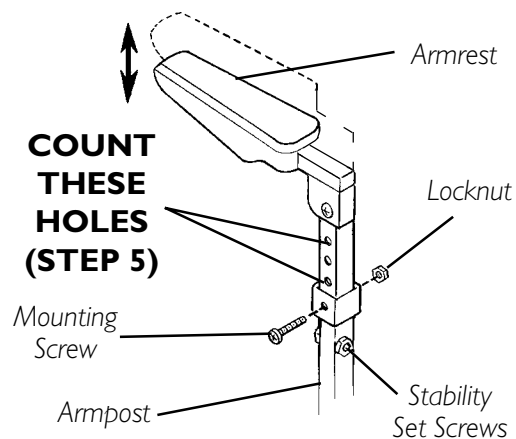


FIGURE 4 - ARMREST HEIGHT ADJUSTMENT

BACK

This Procedure Includes the Following:
Tiller Angle Adjustment

WARNING

After **ANY** adjustments, repair or service and **BEFORE** use, make sure that all attaching hardware is tightened securely - otherwise, injury or damage may result.

TILLER ANGLE ADJUSTMENT

WARNING

Ensure that tiller is properly adjusted before driving the scooter.
 After making **ANY** tiller angle adjustments and **BEFORE** use, the tiller **MUST** be securely locked into position. Otherwise, a fall from the scooter could occur causing bodily injury and/or damage to the scooter. Gently, push/pull against tiller to ensure that the tiller is securely engaged into the adjustment plate.

FOLD DOWN TILLER ZOOM-3 (FIGURE 1)

NOTE: The ZOOM-3 features a fold down tiller. This allows you to fold down the tiller for transport and storage.

1. Adjust the seat to a comfortable position. Refer to ADJUSTING THE SEAT HEIGHT in PROCEDURE 5 of this manual.
2. Backoff the tiller adjustment knob until the tiller bracket clears the tiller adjustment plate.
3. Pull tiller toward the front of the scooter until the tiller adjustment plate is closed.

NOTE: When securing tiller in upright position, keep wiring clear of tiller adjustment plate.

4. Support the tiller with your right-hand.
5. Secure the tiller by hand tightening the adjustment knob, ensuring that the tiller bracket secures the adjustment plate.
6. Gently, push/pull against tiller to ensure that the tiller is securely engaged into the locking mechanism.
7. To fold the tiller for transport or storage reverse STEPS 2 - 5.

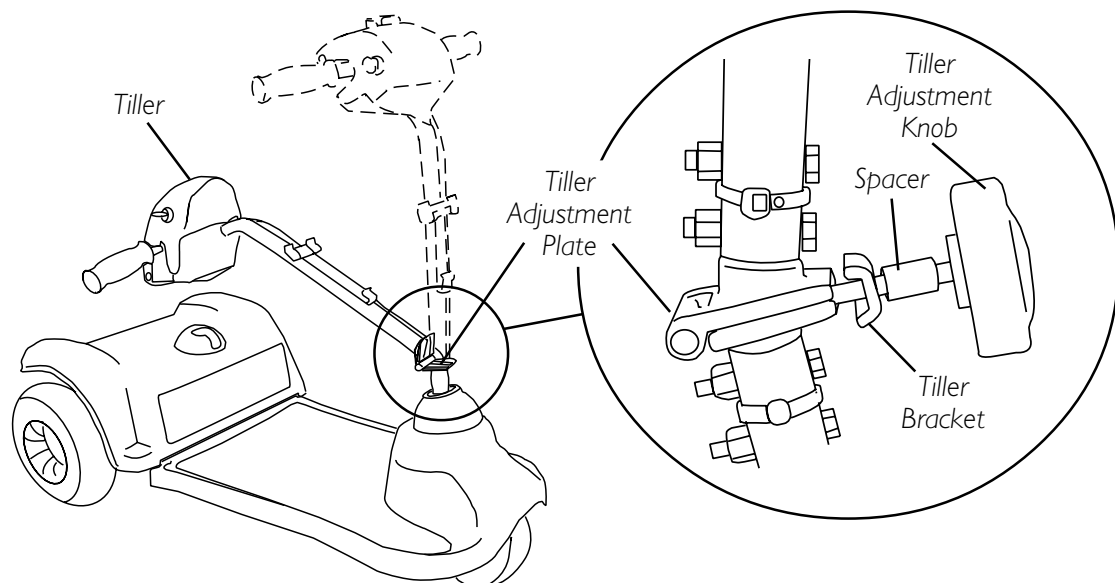


FIGURE 1 - FOLD DOWN TILLER - ZOOM-3

ALL OTHER MODELS (FIGURE 2)

NOTE: The Powered Scooters features an adjustable tiller. This allows you to lock the tiller in to a position that is most comfortable for you. It also lets you fold down the tiller for transport and storage.

NOTE: The angle adjustments on models built BEFORE 10/00 have three (3) adjustment positions. The angle adjustments on models built AFTER 10/00 have five (5) adjustment positions.

1. Adjust the seat to a comfortable position. Perform one (1) of the following:
 - A. **For models LYNX SX-3, LYNX LX-3, AND LYNX LX-3^{Plus}**, refer to ADJUSTING THE SEAT DEPTH in PROCEDURE 5 of this manual.
 - B. **For PANTHER LX-4 and PANTHER MX-4 with deluxe seats**, refer to ADJUSTABLE SEAT SLIDE in PROCEDURE 5 of this manual.
2. The tiller release lever is located on the lower left side of the tiller.
3. Support the tiller with your right-hand.
4. Push the release lever in toward the tiller to release the tiller.
5. Adjust the tiller to desired adjustment hole.
6. When the tiller is at the desired angle, pull the release lever away from the adjustment plate.
7. Gently, push/pull against tiller to ensure that the tiller is securely engaged into the locking mechanism.

NOTE: The tiller is locked in position when an audible click is heard.

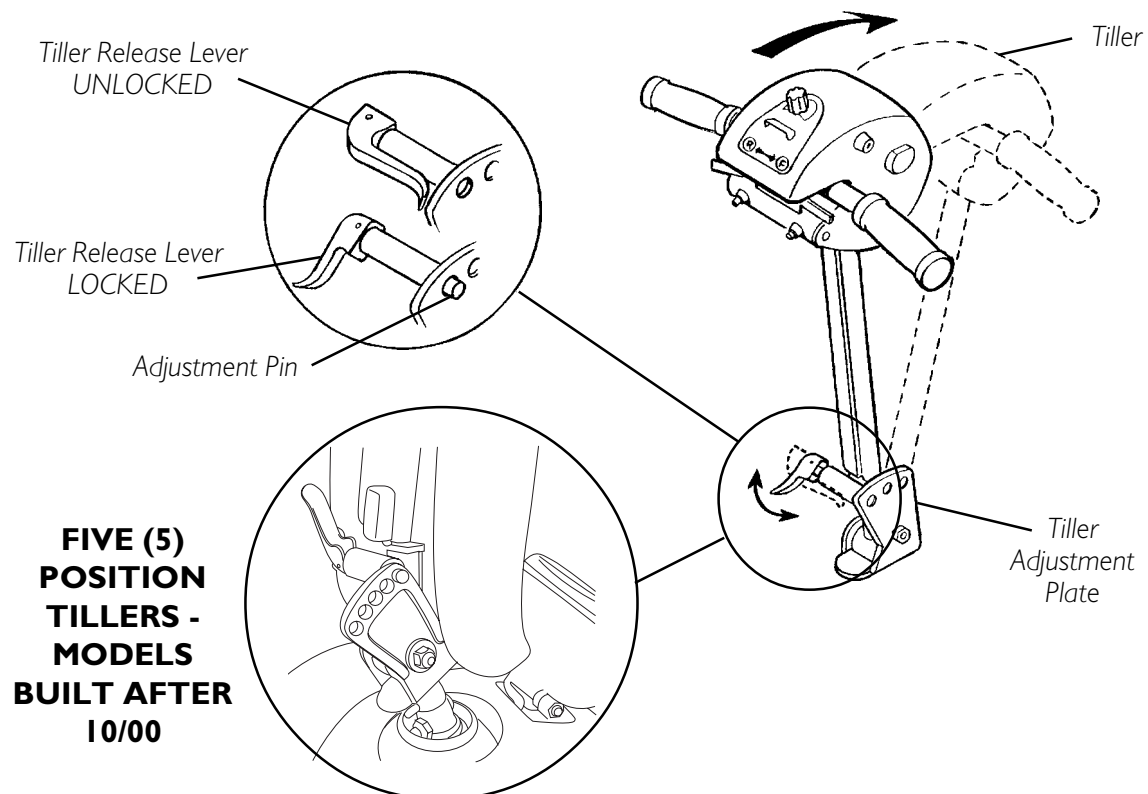


FIGURE 2 - TILLER ANGLE ADJUSTMENT - ALL OTHER MODELS

<i>This Procedure Includes the Following:</i>
<i>Removing/Installing the Rear Shroud</i>
<i>Replacing Foam Filled Tires Onto Wheel Rims</i>
<i>Removing/Installing the Rear Wheels</i>
<i>Removing/Installing the Front Wheel</i>

WARNING

After ANY adjustments, repair or service and BEFORE use, make sure that all attaching hardware is tightened securely - otherwise, injury or damage may result.

REMOVING/INSTALLING THE REAR SHROUD (FIGURE 1)

REMOVING

NOTE: To install rear shroud, reverse this procedure.

1. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of this manual.

CAUTION

SLOWLY remove rear shroud on **PANTHER MX-4**. Wiring harness for taillights is still connected to the battery harness. Otherwise, damage may result.

2. **PANTHER MX-4 MODELS** - Slowly remove the rear shroud and place on floor close to the scooter. Disconnect taillight wiring harness from battery wiring harness.
3. **ALL MODELS** - Lift the rear shroud off of the frame post.

REPLACING FOAM FILLED TIRES ONTO WHEEL RIMS

WARNING

This procedure **MUST** be performed by a qualified technician.

NOTE: During initial use of scooter, user may experience flat spot on wheels. Flat spot will vanish with continuous use of scooter.

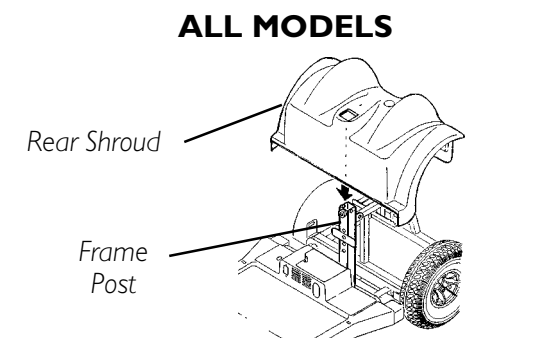
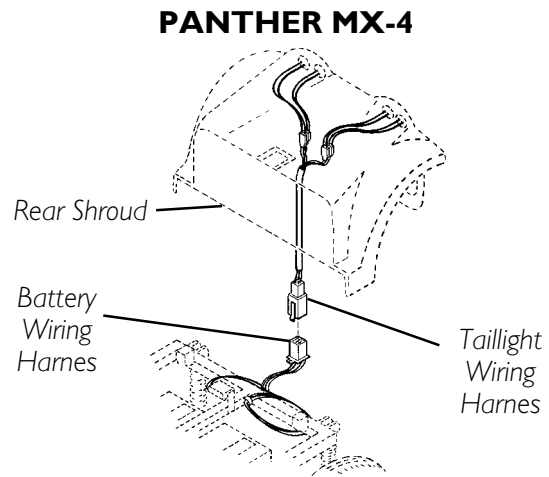


FIGURE 1 - REMOVING/INSTALLING THE REAR SHROUD

REMOVING/INSTALLING THE REAR WHEELS (FIGURE 2)**REMOVING****WARNING**

Turn Power OFF and remove key from ignition.

1. Turn Power OFF and remove key from ignition.
2. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of this manual.
3. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in this procedure of the manual.
4. Place the rear sub-frame up on blocks so that the rear tires are OFF the ground.
5. Flatten the tab on the locking tab washer that is bent against the hex head screw (FIGURE 2, DETAIL "B").
6. Remove the hex screw that secures the rear wheel to the drive shaft.
7. Use a wheel puller if necessary to remove the EXISTING rear wheel assembly from the drive shaft.

INSTALLING

NOTE: The keystock in the drive shaft MUST lineup with the cutout in the wheel hub.

1. Place keystock in cutout on drive shaft (FIGURE 2, DETAIL "A").
2. Align the three (3) mounting holes in the large washer with the three (3) mounting holes in the wheel hub.

WARNING

NEVER use a locking tab washer more than once. ALWAYS use a NEW locking tab washer when installing the rear wheels.

3. Align the NEW locking tab washer with the center mounting hole AND one (1) of the outer mounting holes in the large washer.
4. Install one (1) mounting screw through the lockwasher, OUTER mounting hole in NEW locking tab washer, large washer and wheel hub. Securely tighten.
5. Install one (1) mounting screw through the lockwasher, remaining OUTER mounting hole in large washer and wheel hub. Securely tighten.
6. Install the rear wheel onto the drive shaft.

NOTE: Use a rubber hammer if necessary to help position rear wheel completely onto the drive shaft.

7. Install the hex screw through the MIDDLE mounting hole in the locking tab washer, large washer and wheel hub. Securely tighten.
8. Visually inspect the hex screw and the NEW locking tab washer. Ensure one (1) of the tabs on the NEW locking tab washer is parallel with one (1) of the flats on the head of the hex screw (DETAIL "B", FIGURE 2).
9. If one (1) of the tabs on the NEW locking tab washer is NOT parallel with one (1) of the flats on the head of the hex screw, TIGHTEN the hex screw until the closest flat and locking tab are parallel.

NOTE: TIGHTEN hex screw only. DO NOT loosen hex screw to make one of the tabs on the NEW locking washer parallel.

10. Bend the parallel tab of NEW locking tab washer up tight against the hex screw (FIGURE 2, DETAIL "B").
11. If necessary, repeat STEPS 1 - 10 for opposite rear wheel.
12. Install the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in this procedure of manual.
13. Install the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of

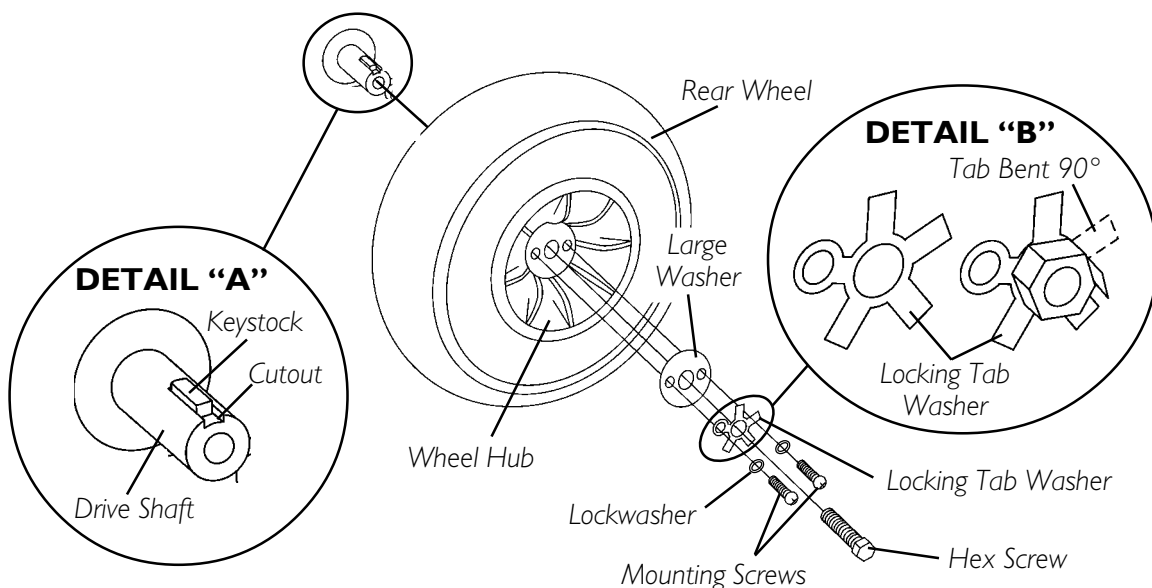


FIGURE 2 - REMOVING / INSTALLING THE REAR WHEELS

REMOVING/INSTALLING THE FRONT WHEELS (FIGURE 3)

WARNING

Turn Power OFF and remove key from ignition.

REMOVING

1. Turn Power OFF and remove key from ignition.
2. Place the front of the powered scooter up on blocks so that the front wheel is OFF the ground.
3. Remove the hardware that secures the front wheel to the mounting fork/front frame. The hardware for each model is as follows:
 - A. For **ZOOM-3** and **LYNX SX-3** - Mounting screw, washers and locknut.
 - B. For **Lynx LX-3** and **LX-3^{Plus}** - Hex head threaded insert, spacers, washer, lockwasher, and locknut.
 - C. For **PANTHER LX-4** and **PANTHER MX-4** - Mounting screw, lockwasher, washer (if applicable) and locknut.
4. Remove front wheel from mounting fork/front frame.

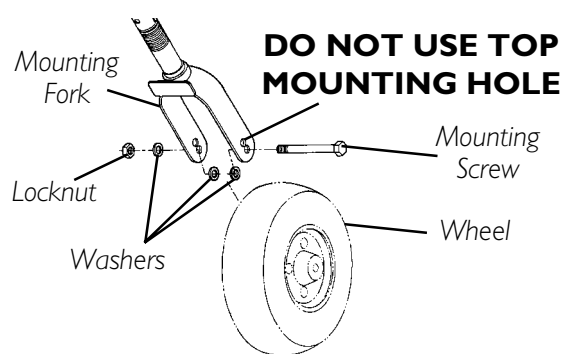
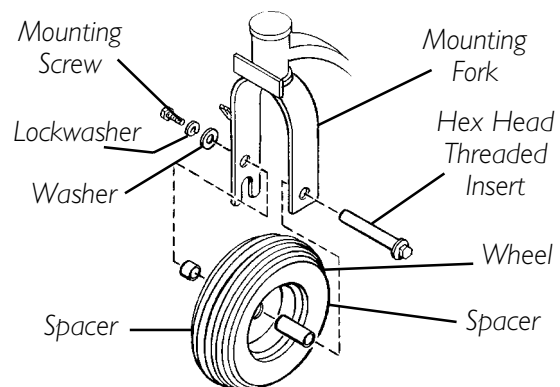
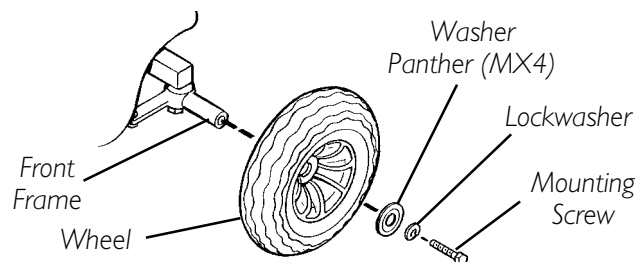
INSTALLING

1. Secure the wheel to the mounting fork/front frame in the following manner:

WARNING

Front wheel MUST be mounted in the bottom mounting hole For ZOOM-3 and LYNX SX-3. Otherwise, injury may result.

- A. For **ZOOM-3** and **LYNX SX-3** - with mounting screw, washers, and locknut.
 - B. For **LYNX LX-3** and **LX-3^{Plus}** - with hex head threaded insert, spacers, washer, lockwasher, and locknut.
 - C. For **PANTHER LX-4** and **PANTHER MX-4** - with mounting screw, lockwasher, washer (if applicable) and locknut.
2. Securely tighten front wheel mounting hardware.

MODELS ZOOM-3 AND LYNX SX-3**MODELS LYNX LX-3 AND LX-3^{Plus}****MODELS PANTHER LX-4 AND PANTHER MX-4****FIGURE 3 - REMOVING / INSTALLING THE FRONT WHEEL(S)**

<i>This Procedure Includes the Following:</i>

<i>Transporting the Scooter</i>

WARNING

After ANY adjustments, repair or service and BEFORE use, make sure that all attaching hardware is tightened securely - otherwise, injury or damage may result.

TRANSPORTING THE SCOOTER (FIGURES 1 AND 2) DISASSEMBLING THE SCOOTER

NOTE: To reassemble the scooter, reverse the following steps.

1. If applicable, remove the front basket. Refer to REMOVING/INSTALLING THE FRONT BASKET in PROCEDURE 11 of this manual.
2. Fold the back down. Refer to FOLDING/UNFOLDING THE BACK in PROCEDURE 6 of this manual.
3. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of this manual.
4. **FOR ZOOM-3 MODELS ONLY** - proceed to STEP 10.
5. Remove the rear shroud. Refer to REMOVING THE REAR SHROUD in PROCEDURE 9 in this procedure of the manual.
6. Remove the batteries with cable assemblies. Refer to REMOVING/INSTALLING THE BATTERIES W/CABLES in PROCEDURE 4 of this manual.
7. **FOR ALL MODELS EXCEPT ZOOM-3 and PANTHER MX-4**, perform the following: (FIGURE 1)
 - A. **For Models Built Without Delta Tillers:**
 1. Disconnect the BLUE connector of tiller wiring harness from BLUE connector of controller wiring harness (DETAIL "A").
 2. Disconnect the YELLOW connector of tiller wiring harness from YELLOW connector of controller wiring harness (DETAIL "A").

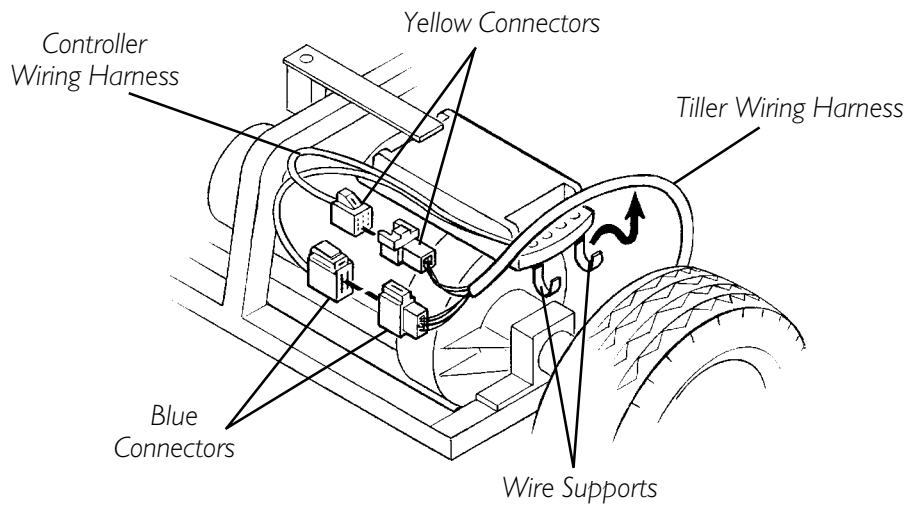
NOTE: In newer models (After 10/00), wiring harnesses from tiller to controller and connectors have been consolidated for ease of use.

B. For Models Built With Delta Tillers:

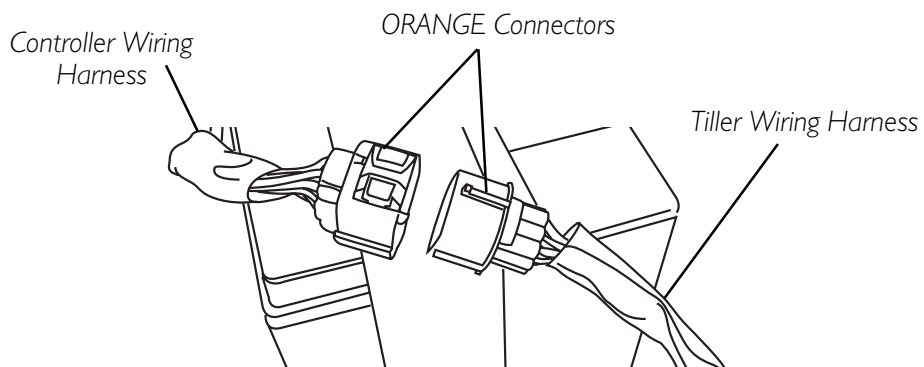
Disconnect the ORANGE connector of tiller wiring harness from ORANGE connector of controller wiring harness (DETAIL "B").

- C. If applicable, remove the tiller wiring harness from the wire supports attached to the controller (DETAIL "A").

DETAIL "A" - MODELS BUILT WITHOUT DELTA TILLERS - EXCEPT ZOOM-3 AND PANTHER MX-4



DETAIL "B" - MODELS BUILT WITH DELTA TILLERS



NOTE: Illustrations apply to Models LYNX SX-3, LYNX LX-3, LYNX LX-3^{Plus}, and PANTHER LX-4.

FIGURE 1 - TRANSPORTING THE SCOOTER - FOR ALL MODELS EXCEPT ZOOM-3

8. For Panther MX-4 Models Built Before 10/00 - Without Delta Tillers (FIGURE 3):

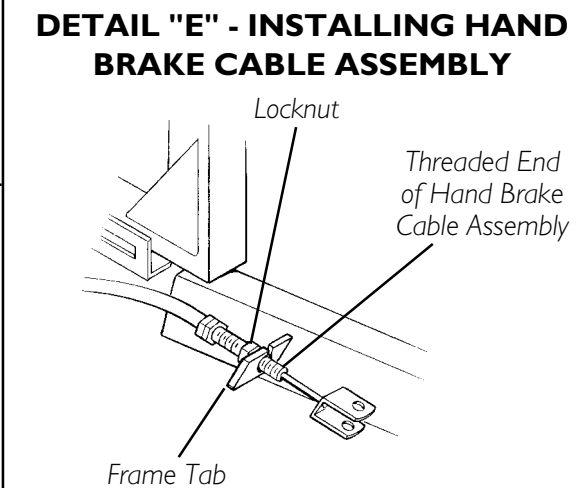
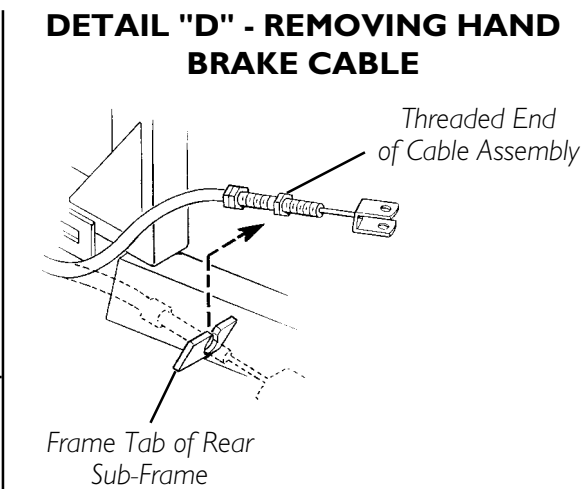
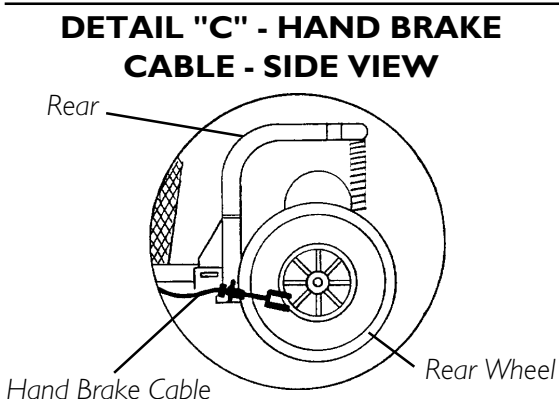
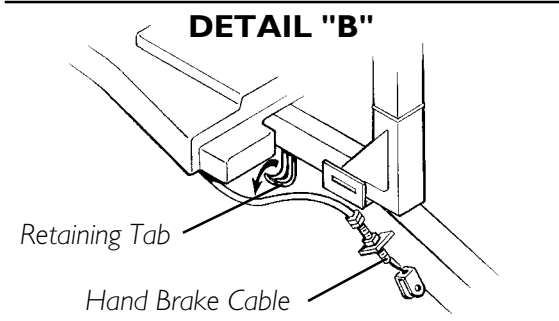
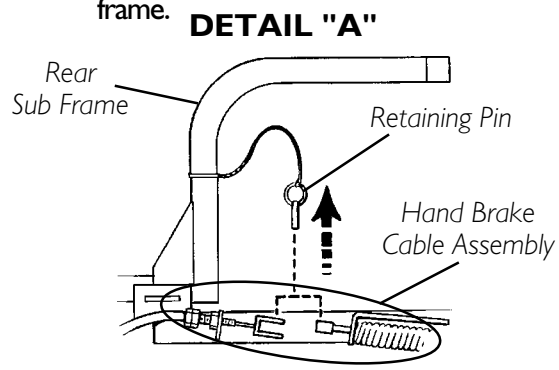
WARNING

When reassembling scooter, ensure retaining pin is properly engaged in the hand brake cable. Otherwise, injury and/or damage may result.

- A. Pull the retaining pin that secures the hand brake cable assembly together (DETAIL "A").
- B. Remove the hand brake cable from the retaining tab located underneath the front shroud (DETAILS "B" & "C").

NOTE: Note the position of the locknut in relation to the frame tab for proper reinstallation. When re-assembling the hand brake cable assembly, the locknut must be positioned in front of the frame tab (DETAILS "D" & "E").

- C. Remove the threaded end of the hand brake cable from the frame tab of the rear sub-frame.



NOTE: Side view shows location of Hand Brake Cable.

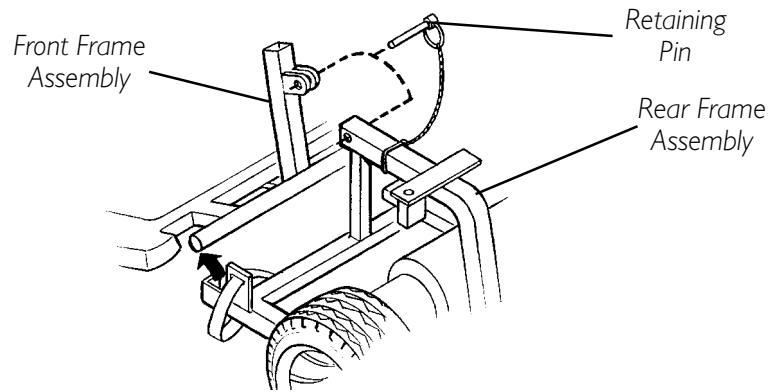
FIGURE 3 - TRANSPORTING THE SCOOTER - FOR PANTHER MX-4 MODELS BUILT BEFORE 10/00 - WITHOUT DELTA TILLERS

WARNING

When reassembling scooter, ensure retaining pin is properly engaged securing the front and rear frame together. Otherwise, injury and/or damage may result.

9. Pull retaining pin that secures the rear frame and front frame assemblies together (FIGURE 2).
10. Separate front frame assembly from the rear frame assembly (FIGURE 2).
11. Fold tiller down. Refer to TILLER ANGLE ADJUSTMENT in PROCEDURE 8 of this manual.

STEPS 8 AND 9 FOR ALL MODELS EXCEPT ZOOM-3



DISASSEMBLED VIEW

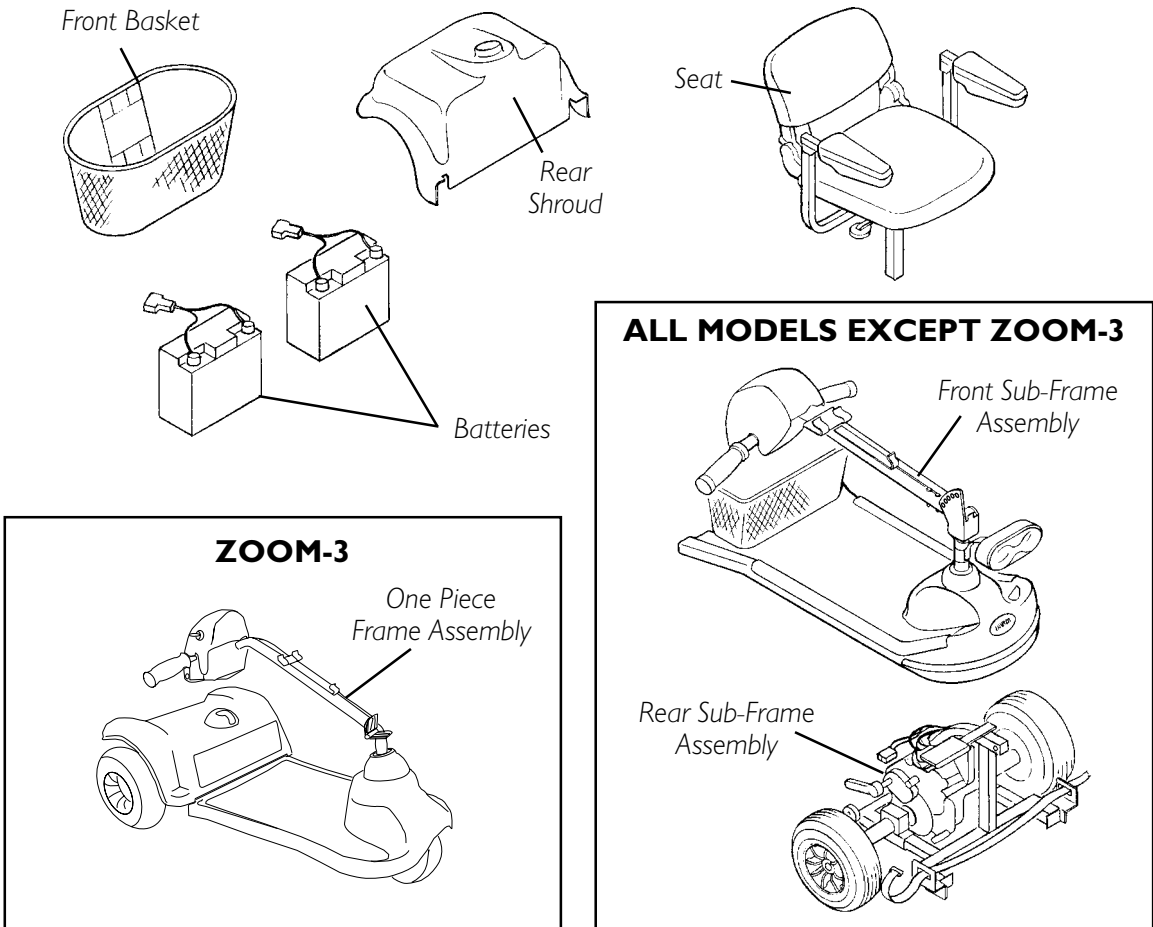


FIGURE 2 - TRANSPORTING THE SCOOTER

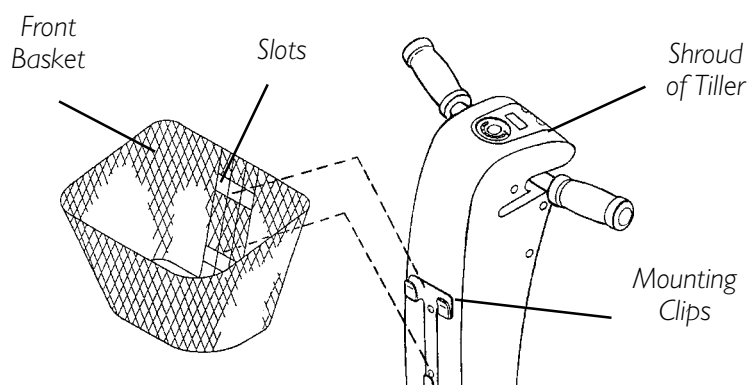
This Procedure Includes the Following:**Removing/Installing the Front Basket****Removing/Installing the Floor Basket****Removing/Installing the Seat Positioning Straps****Removing/Installing the Crutch/Cane Holder****Removing/Installing the Safety Flag****Replacing the Anti-Tipper Wheel and Anti-Tipper Wheel Assembly****Replacing Seat Lever****Replacing Tiller Angle Adjustment Lever****Replacing Headlight Lightbulbs****Replacing Battery Charger****WARNING**

After ANY adjustments, repair or service and BEFORE use, make sure that all attaching hardware is tightened securely - otherwise, injury or damage may result.

The front basket and the floor basket are both rated for a maximum loading capacity of 10 lbs.

REMOVING/INSTALLING THE FRONT BASKET (FIGURE 1)

1. To remove, lift up on basket and remove from mounting clips.
2. To install:
 - A. Align slots of basket with mounting clips on shroud of tiller.
 - B. Push down on basket to secure in place.



NOTE: ONLY Standard Tiller shown for clarity.

FIGURE 1 - REMOVING/INSTALLING THE FRONT BASKET

REMOVING/INSTALLING THE FLOOR BASKET (FIGURE 2)

1. To remove, remove the two (2) thumb screws that secure the floor basket in place.

NOTE: The front basket must be installed with angled side facing the front and the vertical side up against the rear shroud.

2. To install, secure basket to front shroud with two (2) thumb screws. Securely tighten.

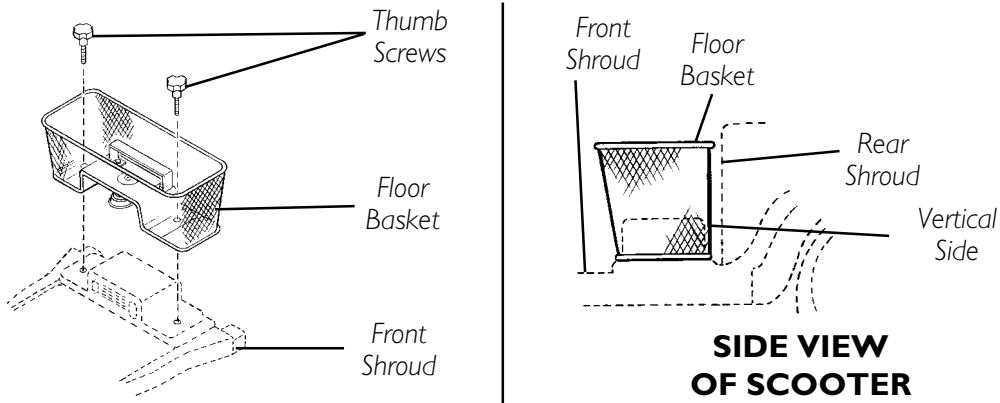


FIGURE 2 - REMOVING/INSTALLING THE FLOOR BASKET

REMOVING/INSTALLING THE SEAT POSITIONING STRAP (FIGURE 3)

NOTE: To remove, reverse the following procedure.

INSTALLING

1. Remove the width adjustment knob that is located either underneath or on the back of the seat frame.
2. Slide width adjustment knob through grommet on seat positioning strap.
3. Reinstall width adjustment knob into seat frame.
4. Repeat STEPS 1-3 for opposite seat positioning strap.

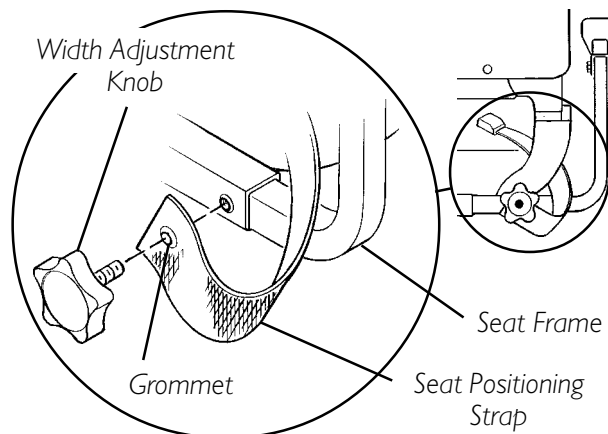


FIGURE 3 -REMOVING/INSTALLING THE SEAT POSITIONING STRAP

REMOVING/INSTALLING THE CRUTCH/CANE HOLDER (FIGURE 4)

NOTE: The Crutch/Cane Holder, Safety Flag, and Oxygen Holder all install into the accessory tube; ONLY one (1) of these may be installed at a time. These accessories are NOT available on the ZOOM-3.

NOTE: To remove, reverse the following procedure.

WARNING

The installation of the crutch/cane holder onto the back of the scooter seat significantly increases the length of the scooter. When turning the scooter or swiveling the scooter seat, it is important to take note of this increased length - otherwise, injury and/or damage to the surrounding property may result.

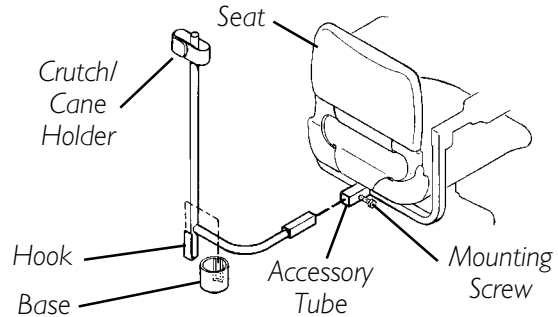


FIGURE 4 - REMOVING/INSTALLING THE CRUTCH/CANE HOLDER

INSTALLING

1. Install the crutch/cane holder into the accessory tube located on the back of the seat.
2. Install mounting screw to secure the crutch/cane holder in place. Securely tighten.
3. Align slot on base with hook on crutch/cane holder and slide base down into position.

REMOVING/INSTALLING THE SAFETY FLAG (FIGURE 5)

NOTE: To remove, reverse the following procedure.

WARNING

The installation of the safety flag onto the back of the scooter seat significantly increases the length of the scooter. When turning the scooter or swiveling the scooter seat, it is important to take note of this increased length - otherwise, injury and/or damage to the surrounding property may result.

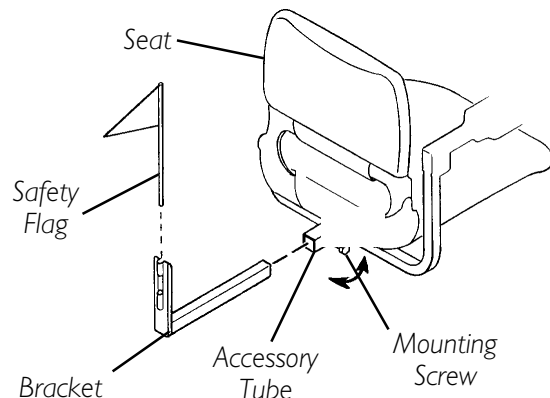


FIGURE 5 - REMOVING/INSTALLING THE SAFETY FLAG

INSTALLING

1. Install the bracket into the accessory tube located on the back of the seat.
2. Install mounting screw to secure the bracket in place. Securely tighten.
3. Install safety flag into bracket.

REPLACING ANTI-TIPPER WHEELS AND ANTI-TIPPER WHEEL ASSEMBLY (FIGURE 6)

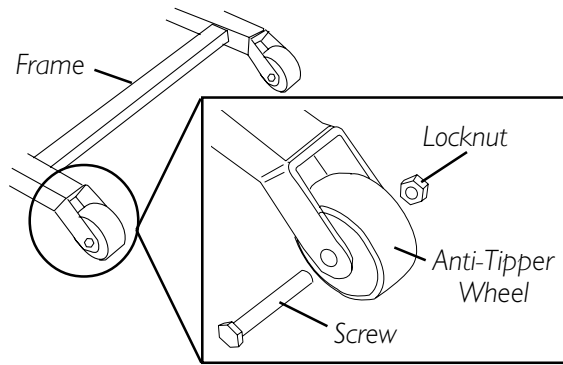
WARNING

DO NOT operate scooter without the anti-tippers being installed, if so equipped. Anti-tippers **MUST BE** attached at all times.

ANTI-TIPPER WHEELS

1. Perform one of the following:
 - A. For **ZOOM-3** - remove the screw and locknut that secures the anti-tipper wheels to the frame.
 - B. For **all other models** - Remove the cotter pin and washer that secure the anti-tipper wheel to the frame.
2. Install **NEW** wheels and secure with **EXISTING** hardware.

ZOOM-3

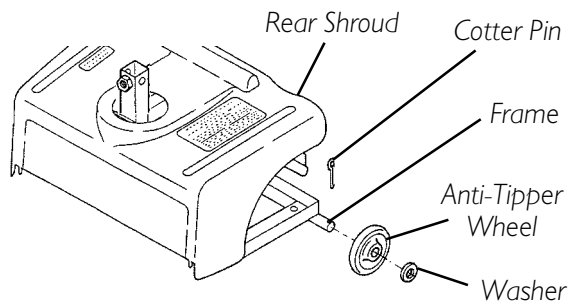


ANTI-TIPPER WHEEL ASSEMBLY

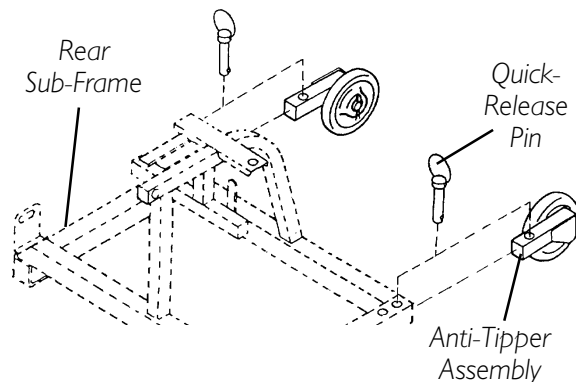
NOTE: Anti-tipper wheel assemblies are only found on the LYNX LX-3, LYNX LX-3^{Plus} and PANTHER LX-4 models.

NOTE: To replace anti-tipper wheels, refer to REPLACING ANTI-TIPPER WHEELS in this procedure of the manual.

1. Remove the quick-release pin that secure the anti-tipper assembly to the rear frame assembly.
2. Remove the anti-tipper wheel assembly.
3. Install **NEW** anti-tipper wheel assembly.



NOTE: Rear wheel removed for clarity.



WARNING

When installing quick-release pin, ensure locking pin is protruding through bottom of sub-frame assembly.

4. Secure **NEW** anti-tipper wheel assembly to sub-frame with quick-release pin.

FIGURE 6 - REPLACING ANTI-TIPPER WHEELS AND ANTI-TIPPER WHEEL ASSEMBLY

REPLACING SEAT LEVER (FIGURE 7)

NOTE: The seat lever is NOT available on ZOOM-3.

1. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of this manual.
2. Place seat upside down on ground/floor.
3. Remove cotter pin that secures the seat lever to the connecting pin.
4. Remove the mounting screw and locknut that secure the seat lever to the seat plate.
5. Install NEW seat lever.
6. Install EXISTING mounting screw through seat plate and bottom hole of seat lever and secure with locknut. Securely tighten.
7. Install connecting pin through top hole on seat lever.
8. Install cotter pin in the end of the connecting pin to secure seat lever in place.

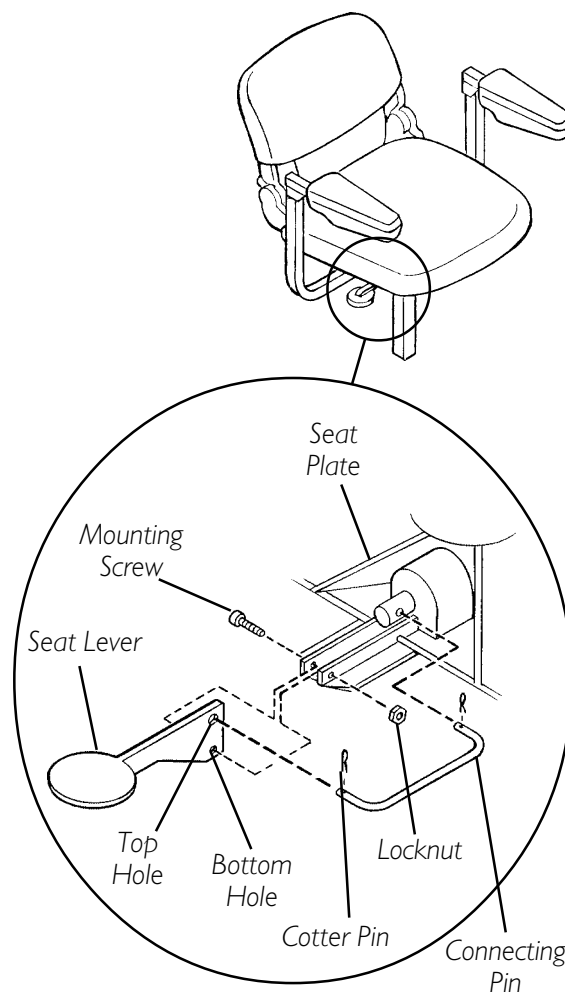


FIGURE 7 - REPLACING SEAT LEVER

REPLACING TILLER ANGLE ADJUSTMENT LEVER (FIGURE 8)

NOTE: The tiller angle adjustment lever is NOT available on ZOOM-3.

1. Adjust the tiller so that the position of the tiller is in-between adjustment holes.

NOTE: This adjustment allows the plunger to be fixed in the fully extended position.

2. Remove the retaining ring.
3. Remove the pin that secures the adjustment lever in place.
4. Remove the adjustment lever from the plunger.
5. Install NEW adjustment lever onto plunger.
6. Install pin through adjustment lever and plunger and secure in place with retaining ring.
7. Adjust tiller to one (1) of the three (3), or five (5) adjustment holes. Refer to TILLER ANGLE ADJUSTMENT in PROCEDURE 8 of this manual.

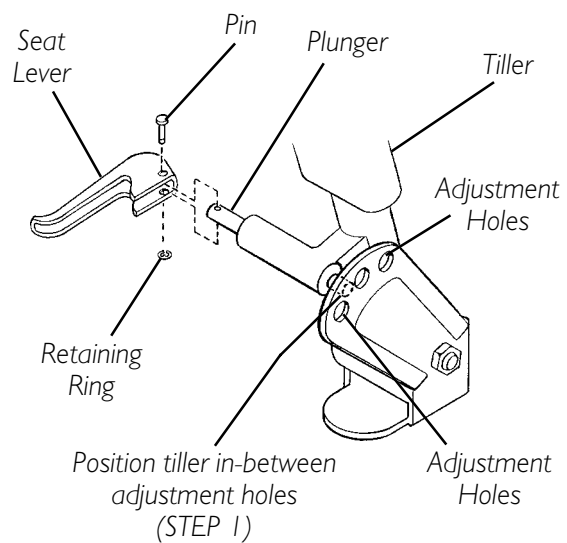


FIGURE 8 - REPLACING TILLER ANGLE ADJUSTMENT LEVER

REPLACING HEADLIGHT LIGHTBULBS

MODELS LYNX LX-3 AND PANTHER LX-4 (FIGURE 9)

1. Remove the two (2) mounting screws that secure the headlight assembly to the housing.
2. Remove the plug from the headlight assembly.
3. Remove the EXISTING lightbulb from the plug.
4. Install the NEW lightbulb into the plug.
5. Reinstall plug into headlight assembly.
6. Resecure headlight assembly to the housing with EXISTING mounting screws. Securely tighten.

LYNX LX-3 AND PANTHER LX-4

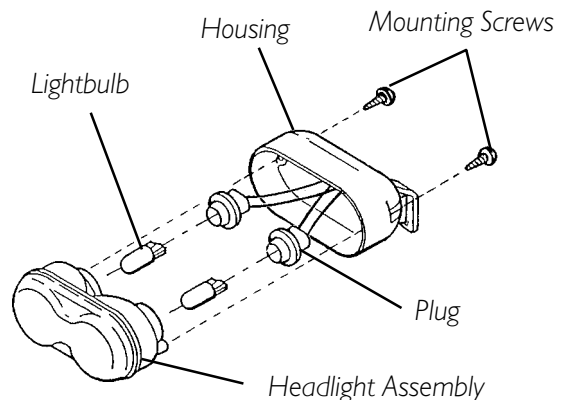


FIGURE 9 - REPLACING HEADLIGHT LIGHTBULBS MODELS LYNX LX-3 AND PANTHER LX-4

MODEL PANTHER MX-4 (FIGURE 10)

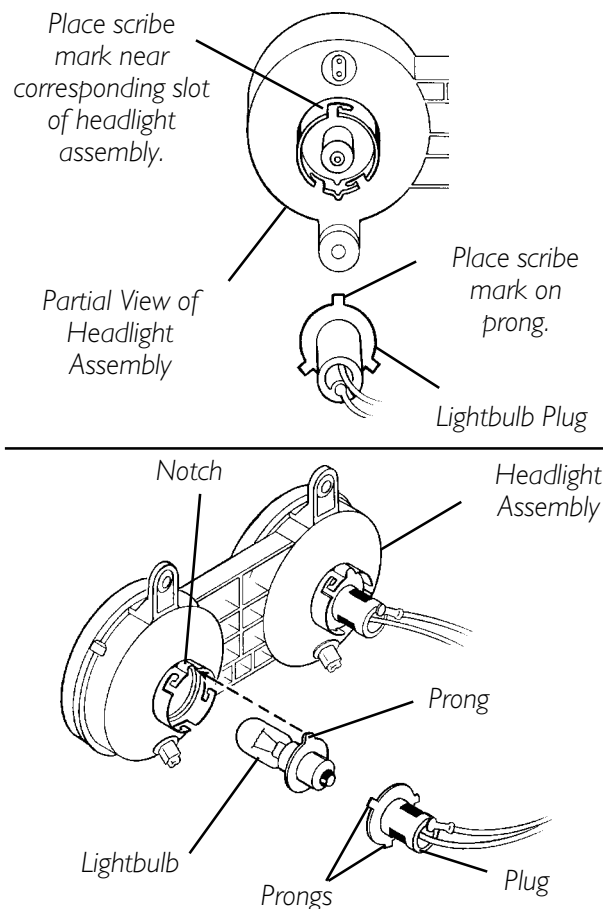
NOTE: Prongs on lightbulb plug are not equally spaced around diameter. Once removed, lightbulb plug can only be installed with prongs in the orientation in which they were removed.

1. Before removing lightbulb plug, place a scribe mark on a prong and the slot in which it is positioned. See DETAIL "A".

NOTE: When reassembling, the scribe mark will help align the prongs with the proper corresponding slots on the headlight assembly.

2. To remove lightbulb plug, twist lightbulb plug COUNTERCLOCKWISE and remove from headlight assembly.
3. Remove lightbulb from headlight assembly.
4. To install light bulb, align prong of NEW lightbulb with the slot in the head light assembly and insert.
5. Install plug into headlight assembly at the orientation noted from above and twist CLOCKWISE.

DETAIL "A" - BACK VIEW OF HEADLIGHT ASSEMBLY



**FIGURE 10 - REPLACING HEADLIGHT LIGHTBULBS
MODEL PANTHER MX-4**

REPLACING ON-BOARD BATTERY CHARGER (FIGURE 11)

1. Remove seat. Refer to REMOVING/INSTALLING SEAT in PROCEDURE 5 of this manual.
2. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of this manual.
3. Remove the floor basket. Refer to REMOVING/INSTALLING THE FLOOR BASKET in this procedure of the manual.
4. Pull on-board battery charger partially out of front shroud.
5. Disconnect blue connector of on-board battery charger from blue connector of battery wiring harness.
6. Disconnect white connector of on-board battery charger from white connector of battery wiring harness.
7. Remove the EXISTING on-board battery charger.
8. Install NEW on-board battery charger by reversing STEPS 1-7.

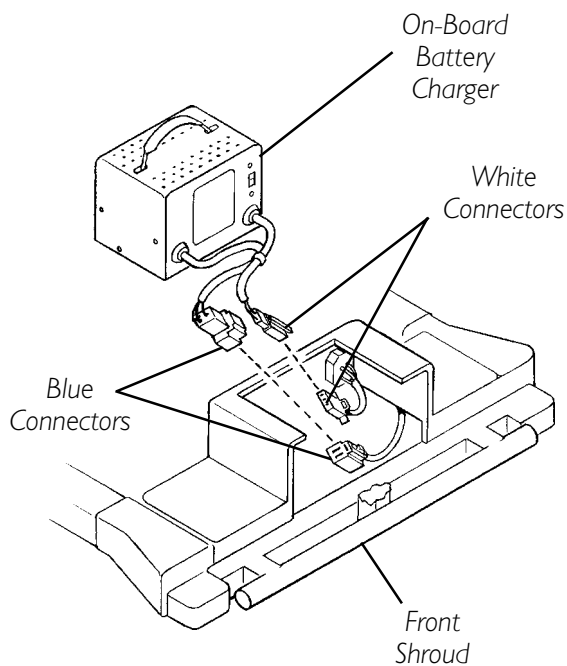


FIGURE 11 - REPLACING ON-BOARD BATTERY CHARGER

LIMITED WARRANTY

PLEASE NOTE: THE WARRANTY BELOW HAS BEEN DRAFTED TO COMPLY WITH FEDERAL LAW APPLICABLE TO PRODUCTS MANUFACTURED AFTER JULY 4, 1975.

This warranty is extended only to the original purchaser/user of our products.

This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

Invacare warrants this product to be free from defects in materials and workmanship for a period of eighteen (18) months on electrical and transaxle and three (3) years on frame from date of purchase. If within such warranty period any such product shall be proven to be defective, such product shall be repaired or replaced at Invacare's option. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. Invacare's sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.

For warranty service, please contact the dealer from whom you purchased your Invacare product. In the event you do not receive satisfactory warranty service, please write directly to Invacare at the address on the back cover, provide dealer's name, address, date of purchase, indicate nature of the defect and, if the product is serialized, indicate the serial number. Do not return products to our factory without our prior consent.

LIMITATIONS AND EXCLUSIONS: THE FOREGOING WARRANTY SHALL NOT APPLY TO SERIAL NUMBERED PRODUCTS IF THE SERIAL NUMBER HAS BEEN REMOVED OR DEFACED, PRODUCTS SUBJECTED TO NEGLIGENCE, ACCIDENT, IMPROPER OPERATION, MAINTENANCE OR STORAGE, PRODUCTS MODIFIED WITHOUT INVACARE'S EXPRESS WRITTEN CONSENT (INCLUDING, BUT NOT LIMITED TO, MODIFICATION THROUGH THE USE OF UNAUTHORIZED PARTS OR ATTACHMENTS; PRODUCTS DAMAGED BY REASON OF REPAIRS MADE TO ANY COMPONENT WITHOUT THE SPECIFIC CONSENT OF INVACARE, OR TO A PRODUCT DAMAGED BY CIRCUMSTANCES BEYOND INVACARE'S CONTROL, AND SUCH EVALUATION WILL BE SOLELY DETERMINED BY INVACARE. THE WARRANTY SHALL NOT APPLY TO PROBLEMS ARISING FROM NORMAL WEAR OR FAILURE TO ADHERE TO THE THESE INSTRUCTIONS.

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