

LYNX™ / PANTHER™ SERIES SCOOTERS

LYNX SX-3P

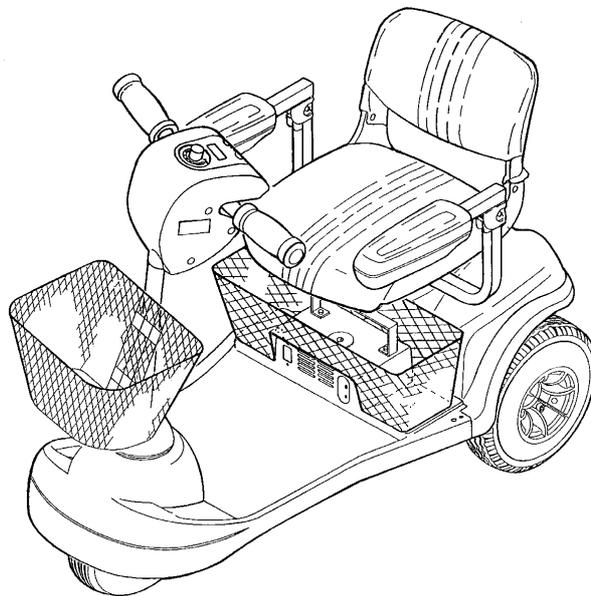
LYNX SX-3

LYNX LX-3

LYNX LX-3^{Plus}

PANTHER LX-4

PANTHER MX-4



**DEALER: KEEP THIS MANUAL. THE PROCEDURES
IN THIS MANUAL MUST BE PERFORMED BY AN
AUTHORIZED DEALER ONLY.**

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WARNING

THE PROCEDURES IN THIS MANUAL SHOULD ONLY BE PERFORMED BY A QUALIFIED SERVICE TECHNICIAN.

DO NOT SERVICE OR OPERATE THIS EQUIPMENT WITHOUT FIRST READING AND UNDERSTANDING THIS MANUAL AND THE OWNERS MANUAL SUPPLIED WITH THE SCOOTERS. IF YOU ARE UNABLE TO UNDERSTAND THE WARNINGS, CAUTIONS, AND INSTRUCTIONS, CONTACT INVACARE TECHNICAL SUPPORT BEFORE ATTEMPTING TO SERVICE OR OPERATE THIS EQUIPMENT - OTHERWISE, INJURY OR DAMAGE MAY RESULT.

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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 scooter 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 POSITIONONG STAP 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

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NOTE: The procedures in this manual pertain to all five (5) scooter models EXCEPT where specified.

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SPECIFICATIONS

SPECIFICATIONS

SPECIFICATIONS

	LYNX (3-Wheel Models)				PANTHER (4-Wheel Models)	
	SX-3P	SX-3	LX-3	LX-3 ^{Plus}	LX-4	MX- 4
Overall Length:	43.5-inches (104 cm)	43.5-inches (104 cm)	47-inches (119 cm)	47-inches (119 cm)	47.5-inches (125 cm)	54-inches (137 cm)
Overall Width:	23-inches (58 cm)	23-inches (58 cm)	25-inches (64 cm)	25-inches (64 cm)	25-inches (64 cm)	26-inches (66 cm)
Ground Clearance:	3.5-inches (8.89 cm)	3.5-inches (8.89 cm)	3-inches (7.62 cm)	3-inches (7.62 cm)	3.25-inches (8.26 cm)	6-inches (15.24 cm)
Seat Height From Floor Pan:						
Contour Seat:	14-1/2-inches (37 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)	N/A 15-1/2-inches (39 cm) 16-1/2-inches (42 cm) 17-1/2-inches (44 cm)	N/A
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)	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:	21-1/2-inches (55 cm)	21-1/2-inches (55 cm)	21-1/2-inches (55 cm) ◆22-1/2-inches (57 cm)	21-1/2-inches (55 cm) ◆22-1/2-inches (57 cm)	23-inches (58 cm)	N/A
Adjustable:	N/A	N/A	21-inches (53 cm) 22-inches (56 cm) 23-inches (58 cm) 24-inches (61 cm)	21-inches (53 cm) 22-inches (56 cm) 23-inches (58 cm) 24-inches (61 cm)	22-1/2-inches (57 cm) 23-1/2-inches (60 cm) 24-1/2-inches (62 cm) 25-1/2-inches (65 cm)	21-inches (53 cm) 22-inches (56 cm) 23-inches (58 cm) 24-inches (61 cm)
Weights:						
Front Frame Section:	31-lbs (14 kg)	39 -lbs (17 Kg)	47 -lbs (21 kg)	47 -lbs (21 kg)	48 -lbs (22 kg)	75 -lbs (34 kg)
Rear Frame Section:	35 -lbs (16 kg)	35 -lbs (16 kg)	38 -lbs (17 kg)	38 -lbs (17 kg)	39 -lbs (18 kg)	58 -lbs (26 kg)
Contour Seat w/arms	22 -lbs (10 kg)	22 -lbs (10 kg)	22 -lbs (10 kg)	22 -lbs (10 kg)	N/A	N/A
Deluxe Seat w/Arms	N/A	N/A	31-lbs (14 kg)	31-lbs (14 kg)	35 -lbs (16 kg)	43 -lbs (19 kg)
Rear Shroud	2-lbs (1 kg)	2-lbs (1 kg)	3 -lbs (1 kg)	3 -lbs (1 kg)	2 -lbs (1 kg)	4 -lbs (2 kg)
Batteries:(each)	14 -lbs (6 kg)	14 -lbs (6 kg)	23 -lbs (10 kg)	23 -lbs (10 kg)	23-lbs (10 kg)	31-lbs (14 kg)
Total Weight of Scooter w/o Batteries:	90-lbs (41 kg)	98-lbs (44 kg)	*110-lbs (50 kg)	*110-lbs (50 kg)	124-lbs (56 kg)	180-lbs (82 kg)
w/ Batteries:	118-lbs (53 kg)	126-lbs (57 kg)	*156-lbs (70 kg)	*156-lbs (70 kg)	170-lbs (77 kg)	242-lbs (110 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)	3 x 10-inches (7.62 x 25.40 cm)	4 x 13-inches (10.16 x 33.02 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)	3 x 10-inches (7.62 x 25.40 cm)	4 x 13-inches (10.16 x 33.02 cm)
Max. Weight Limitation:	250 lbs (114 kg)	250lbs (114 kg)	300lbs (136 kg)	300lbs (136 kg)	300 lbs (136 kg)	400 lbs (181 kg)
Maximum Speed:	4-1/2 M.P.H. 7-1/4 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.	5-1/2 M.P.H. 9 K.P.H.	LOW 5¼ M.P.H. 8½ K.P.H. HIGH 7¼ M.P.H. 11¼ K.P.H.
Max. Incline and Stability:	8°incline	8°incline	8°incline	8°incline	8°incline	8°incline

◆ *NOTE: with Optional Deluxe Seat.*

**NOTE: Total weight of scooter includes Contour Seat*

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

Only. Add an additional 9-lbs for Deluxe Seat.

<i>This Procedure Includes the Following:</i>
<i>Operating Information</i>
<i>Warning/Caution Label Location</i>

OPERATING INFORMATION

GENERAL WARNINGS

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.

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

ELECTRICAL

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

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

Only deep cycle, sealed case construction batteries should be used in this device.

Carefully read battery/battery charger information prior to installing, servicing or operating your powered scooter. In addition, Invacare has placed **WARNING TAGS** on batteries and **IDENTIFICATIONS TAGS** on battery cables. **DO NOT** remove these tags.

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.

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.

EMI WARNINGS (CONTINUED)

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.

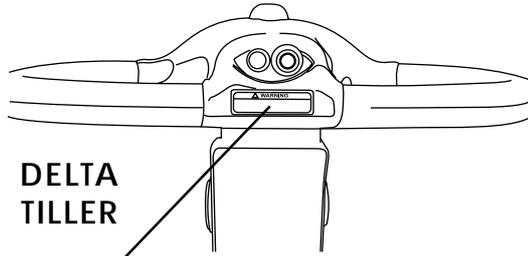
Electromagnetic interference (EMI) from sources such as radio and TV stations, amateur radio (HAM) transmitters, two-way radios, and cellular phones can affect powered scooters. Following the warnings listed should reduce the chance of unintended brake release or powered scooter movement which could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

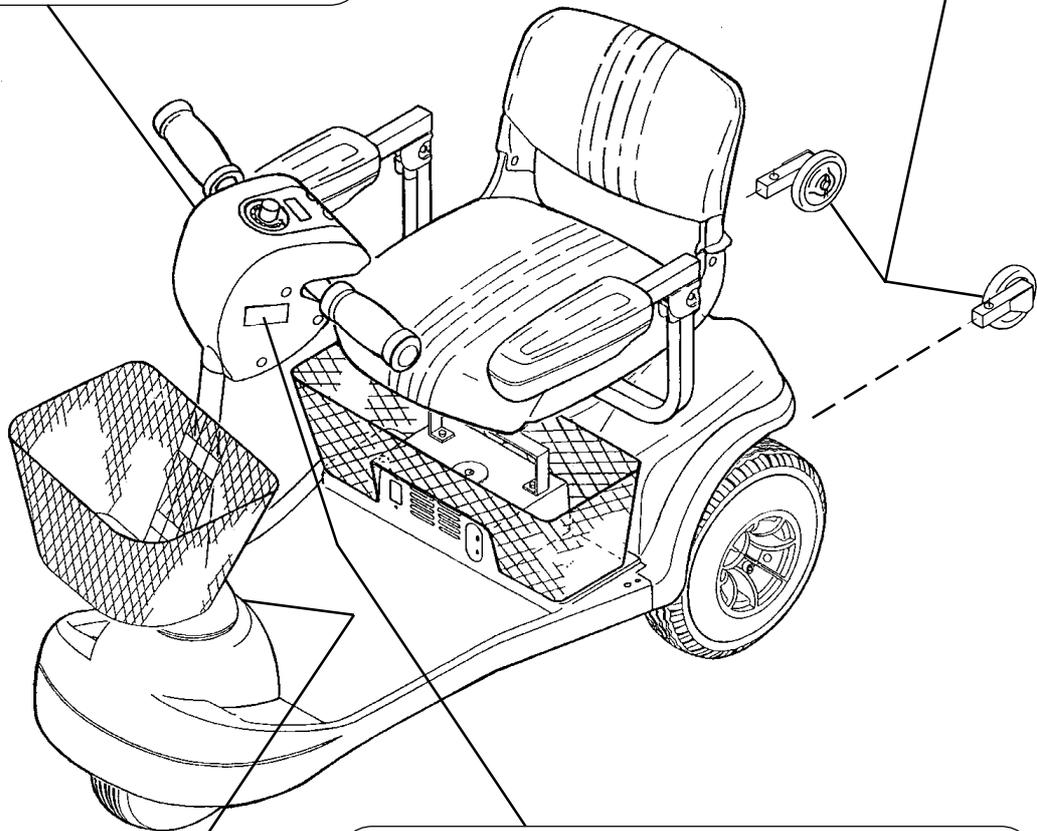
- 1) 20 volts per meter (V/m) is a generally achievable and useful immunity level against EMI (as of May 1994) (the higher the level, the greater the protection);
- 2) The immunity level of this product is unknown.

WARNING/CAUTION LABEL LOCATION



⚠ 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



⚠ 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

NOTE: Every six (6) months take the scooter to a qualified dealer 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 OF THE OWNER'S MANUAL**) Inspect for rips, tears.	X			X
REAR WHEELS (PROCEDURE 9 OF THE OWNER'S MANUAL**) No excessive side movement or binding when raised and turned.	X			X
FRONT WHEELS (PROCEDURE 9 OF THE OWNER'S MANUAL**) 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 OF THE OWNER'S MANUAL**) Ensure that tiller adjustment handle engages and disengages properly and securely (PROCEDURE 3 OF THE OWNER'S MANUAL**). Scooter stops completely when throttle is released (Does not continue to roll as if throttle is activated).	X X	X X		
SEAT (PROCEDURE 5 OF THE OWNER'S MANUAL**) Inspect seat swivel for release and engagement. Seat locks into the determined swivel positions.	X X	X	X	
TIRES (PROCEDURE 9 OF THE OWNER'S MANUAL**) Inspect for flat spots and wear. CAUTION: As with any vehicle, the wheels and tires should be checked periodically for cracks and wear and should be replaced.	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	
HEADLIGHTS (where applicable) Inspect headlight bulbs for proper operation.	X	X		

*NOTE: This includes the manually engaged brake on ALL scooters AND the hand brake on the PANTHER MX-4 (Before 10/00) ONLY.

**NOTE: Refer to the Owner's Manual, part number 1090132.

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.

Initial Maintenance Procedures (FIGURE 1)

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 of Owner's Manual, part number 1090132).
3. Inspect brake for proper operation (PROCEDURE 3 of Owner's Manual, part number 1090132).

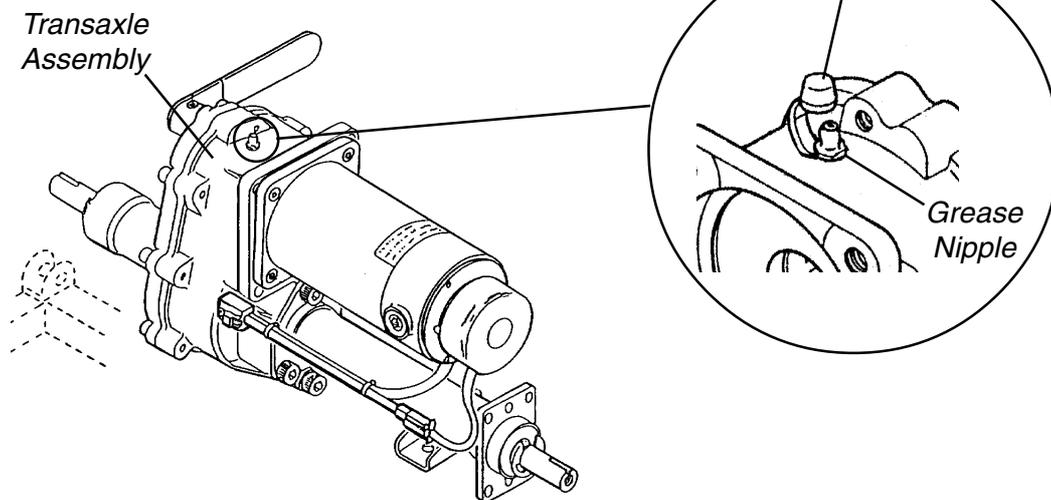


FIGURE 1 - INITIAL MAINTENANCE PROCEDURES

CAUTION

Ensure that the cover is removed from the grease nipple BEFORE operation of the PANTHER MX-4 scooter. Otherwise, damage to the scooter may occur.

4. For the **PANTHER MX-4 ONLY**, remove the cover from the grease nipple located on TOP of the transaxle assembly (FIGURE 1).

Periodic Maintenance Procedures

1. The wheels and tires should be checked periodically for cracks and wear, and should be replaced by a qualified technician.
2. 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 of Owner's Manual, part number 1090132).
3. Clean dirt, dust and grease from exposed components.

SAFETY INSPECTION MAINTENANCE

Lubrication Points (FIGURE 2)

1. Every six (6) months the following components should be lubricated. Use a Teflon® lubricant. (FIGURE 2).
 - A. Seat Lever, Connecting Pin, and Release Pin.
 - B. Axle of Scooter.
 - C. Top of Seat Adaptor.

- D. For Models **LYNX SX-3P**, **LYNX SX-3**, **LYNX LX-3**, and **LYNX LX-3** wheel Bearings of Front Wheel.
 2. For all Models **EXCEPT** the **PANTHER MX - 4**:
 - A. Remove the four (4) bolts securing the gearbox cover to the transaxle and remove the gearbox cover.
 - B. Lubricate the gears inside the transaxle with Black Pearl Grease® **OR** equivalent.

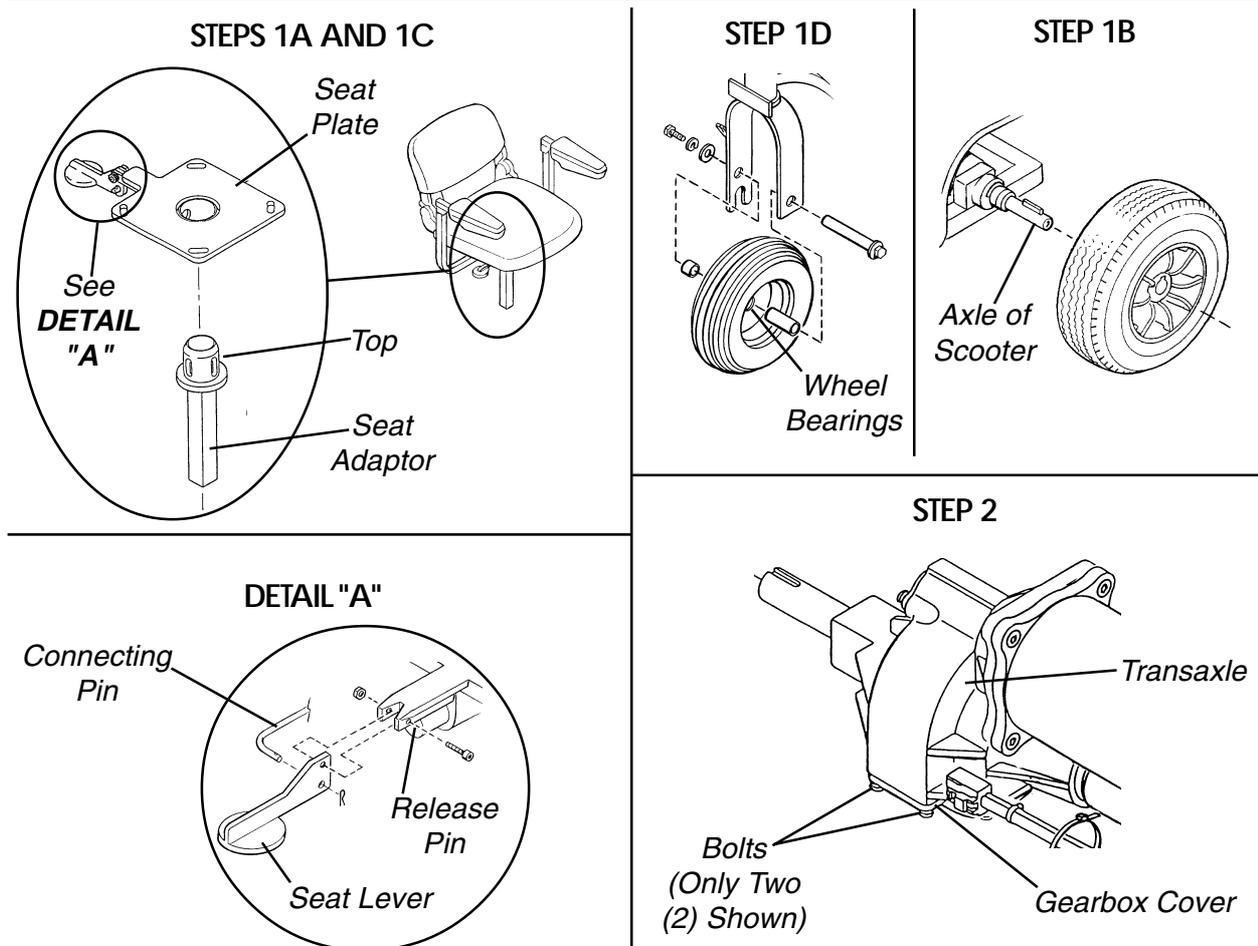


FIGURE 2 - LUBRICATION POINTS

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

Black Pearl Grease - Registered trademark of Chevron Corporation.

This Procedure Includes the Following:**Replacing Seat Post****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.

**REPLACING SEAT POST
(FIGURE 1)****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.

1. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.

NOTE: The swivel release lever is located just beneath the seat on the right side.

2. Pull the swivel release lever up.
3. While holding the swivel release lever in the upward position, pull the seat post out of the seat frame.

4. While holding the swivel release lever in the upward position, insert the NEW seat post into the seat frame.

NOTE: The seat post locks at 90° intervals. In order to ensure that the NEW seat post is locked into position, it may be necessary to rotate the seat post until an audible "click" is heard.

5. Release the swivel release lever, allowing the NEW seat post to lock into place.
6. Reinstall the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.

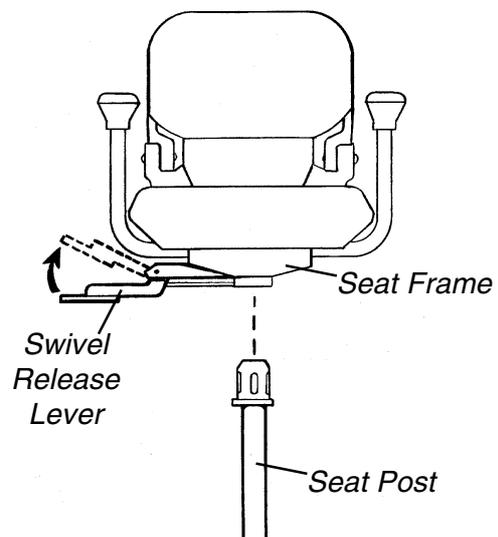


FIGURE 1 - REPLACING SEAT POST

<p>This Procedure Includes the Following:</p> <p><i>Replacing Hand Grips</i></p> <p><i>Replacing LED Canopy</i></p> <p><i>Replacing Throttle Lever</i></p> <p><i>Removing/Installing Tiller Assembly</i></p> <p><i>Removing/Installing Boot</i></p>
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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.

Turn Power OFF and remove key from ignition. Disconnect battery harness from motor lead.

REPLACING HAND GRIPS (FIGURE 1)

1. Grasp the hand grip and twist it off of the handle bar.
2. Slide the NEW hand grip over the handle bar.
3. If necessary, repeat STEPS 1-2 for the other hand grip.

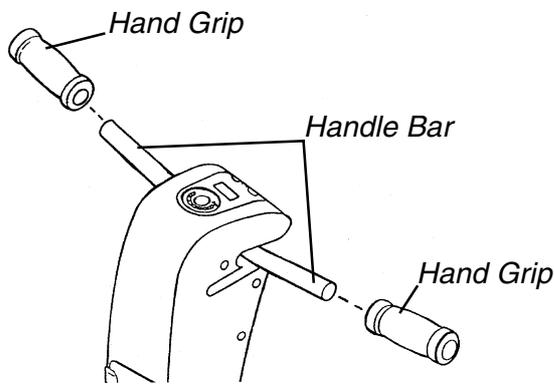


FIGURE 1 - REPLACING HAND GRIPS

REPLACING LED CANOPY (FIGURE 2)

NOTE: This procedure applies to all models EXCEPT the Panther MX - 4.

1. Grasp one (1) of the pointed locking tabs of the LED canopy under the front cover and squeeze the ends of it together.
2. While squeezing the ends, slowly pull the pointed locking tab through the front cover and through the electronics board.

3. Repeat this procedure for the other pointed locking tab of the LED canopy.
4. Remove the EXISTING LED canopy and the EXISTING rubber gasket.
5. Discard the EXISTING LED canopy and the EXISTING rubber gasket.

NOTE: Before installing the NEW LED canopy, be sure the NEW rubber gasket is between the NEW LED canopy and the front cover.

6. Align the NEW LED canopy with the mounting holes in the front cover and snap it into place.
7. Align the pointed locking tabs of the NEW LED canopy with the mounting holes in the electronics board, and snap the electronics board into place.

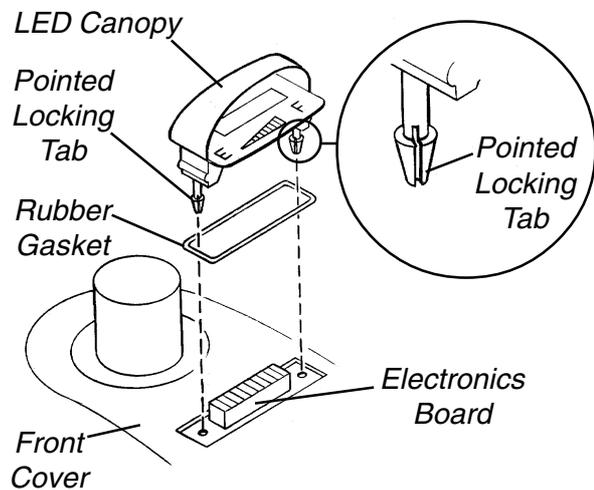


FIGURE 2 - REPLACING LED CANOPY

REPLACING THROTTLE LEVER (FIGURE 3)

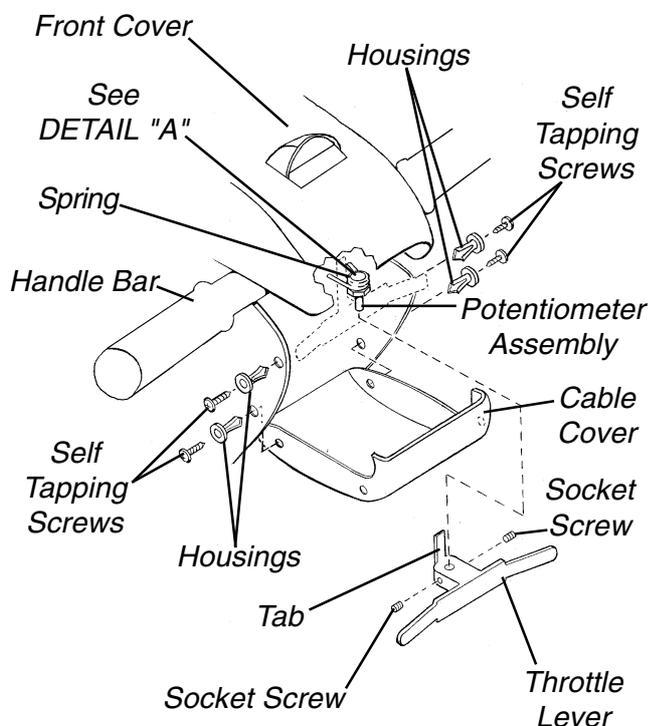
1. Remove the four (4) self-tapping screws and housings securing the cable cover to the tiller assembly.

NOTE: Save the four (4) self tapping screws and housings for reuse when installing the NEW throttle lever.

2. Slowly remove the cable cover from the tiller assembly and allow it to hang by the connecting wires.
3. Remove the two (2) socket screws securing the throttle lever to the potentiometer assembly.
4. Remove the throttle lever from the potentiometer assembly.

NOTE: To ensure the NEW throttle lever performs correctly, make certain the tab on the back of the NEW throttle lever is positioned between the two (2) ends of the spring on the potentiometer assembly. (DETAIL "A")

5. Position the NEW throttle lever on the potentiometer assembly.
6. Secure the NEW throttle lever to the potentiometer assembly using the two (2) NEW socket screws. Securely tighten.
7. Align the four (4) mounting holes in the cable cover with the four (4) mounting holes in the tiller assembly.
8. Secure the cable cover to the tiller assembly using the four (4) EXISTING self-tapping screws and housings. Securely tighten.



DETAIL "A"

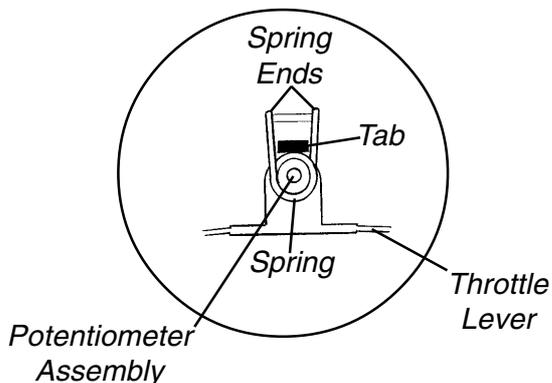


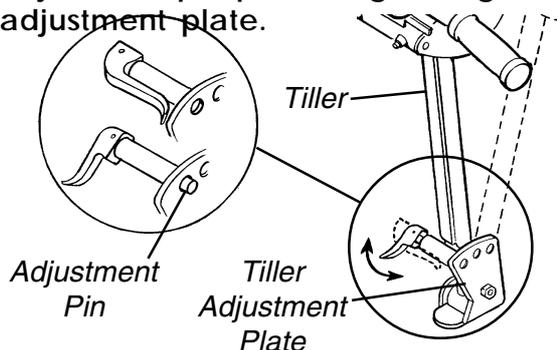
FIGURE 3 - REPLACING THROTTLE LEVER

REMOVING/INSTALLING TILLER ASSEMBLY

WARNING

Ensure that tiller is properly adjusted before driving the scooter. Refer to TILLER ADJUSTMENT in PROCEDURE 8 of the Owner's Manual, part number 1090132.

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.

NOTE: When removing the tiller assembly, perform the following steps:

STEP 1: Determine the scooter model to be serviced.

STEP 2: Carefully review the following chart to determine the necessary sections and the specific order in which these sections need to be performed.

NOTE: The sections outlined below are to remove the tiller assembly. To install the tiller assembly, reverse the order of the outlined sections.

SECTIONS TO BE PERFORMED AND THE PROPER ORDER	
MODEL	LYNX SX - 3 A D E F
	LYNX SX - 3P A D E F
	LYNX LX - 3 A D C E F
	PANTHER LX - 4 A C D E F
	PANTHER MX - 4 A B C D E F

STEP 3: Perform the appropriate steps as specified for the model.

Section A - Disassembling/Assembling Scooter (FIGURE 4)

DISASSEMBLING.

1. If necessary, remove the floor basket. Refer to REMOVING/INSTALLING THE FLOOR BASKET in PROCEDURE 11 of the Owner's Manual, part number 1090132.
2. Remove the batteries. Refer to REMOVING/INSTALLING THE BATTERIES WITH CABLES in PROCEDURE 4 of the Owners Manual, part number 1090132.
3. If necessary, remove the on - board battery charger. Refer to REPLACING ON - BOARD BATTERY CHARGER in PROCEDURE 11 of the Owner's Manual, part number 1090132.

4. Separate the front frame assembly from the rear frame assembly. Refer to TRANSPORTING THE SCOOTER in PROCEDURE 10 of the Owner's Manual, part number 1090132.

5. Position the front frame assembly on its side.

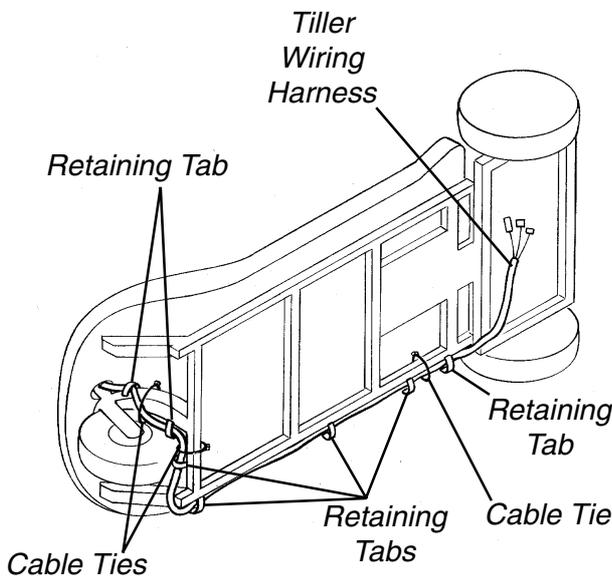
NOTE: Note the position of the tie wraps before removing.

6. Cut the cable ties securing the tiller wiring harness to the underside of the front frame assembly.

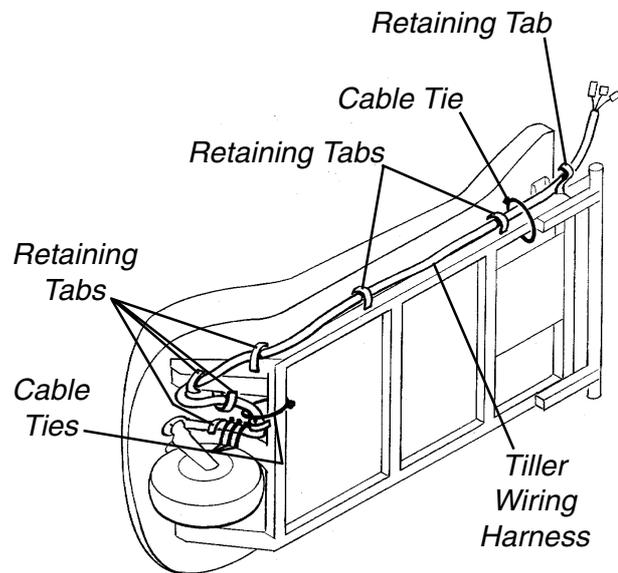
7. For PANTHER MX - 4 - cut the cable ties securing the brake cable to the underside of the front frame assembly.

8. Remove the tiller wiring harness from the retaining tabs on the underside of the front frame assembly.

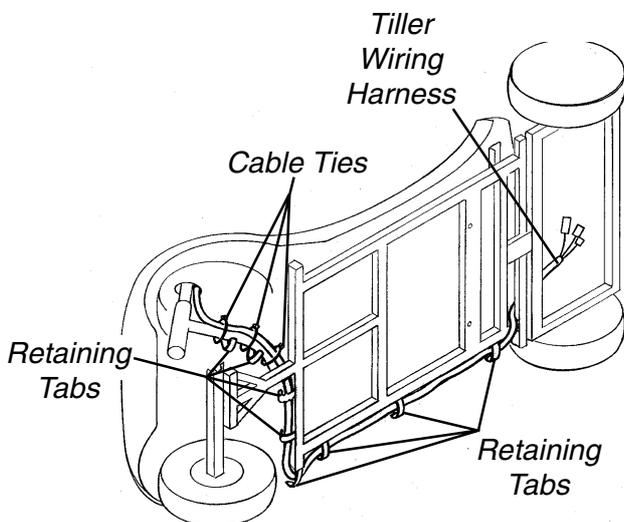
(LYNX SX - 3 AND LYNX SX - 3P)



(LYNX LX - 3)



(PANTHER LX - 4)



(PANTHER MX - 4)

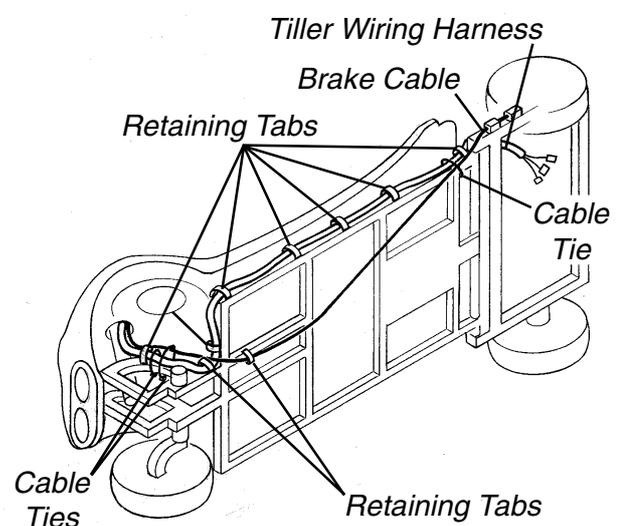


FIGURE 4 - DISASSEMBLING/ASSEMBLING SCOOTER

9. For PANTHER MX - 4, remove the brake cable from the retaining tabs on the underside of the front frame assembly.
10. Refer to the chart on page 11 of this manual to determine which section(s) need to be performed next to successfully complete the removal/installation of the tiller assembly.

ASSEMBLING.

1. Secure the tiller wiring harness in the retaining tabs on the underside of the front frame assembly.
2. For PANTHER MX - 4, secure the brake cable in the retaining tabs on the underside of the front frame assembly.

NOTE: Before installing the cable ties, be sure they are in the proper positions.

3. Secure the tiller wiring harness to the underside of the front frame assembly using NEW cable ties.
4. For PANTHER MX - 4, secure the brake cable to the underside of the front frame assembly using NEW cable ties.
5. Return the front frame assembly to the upright position.
6. Reassemble the front frame assembly and the rear frame assembly. Refer to TRANSPORTING THE SCOOTER in PROCEDURE 10 of the Owner's Manual, part number 1090132.
7. If necessary, reinstall the on - board battery charger. Refer to REPLACING ON - BOARD BATTERY CHARGER in PROCEDURE 11 of the Owner's Manual, part number 1090132.
8. Reinstall the batteries. Refer to REMOVING/INSTALLING THE BATTERIES WITH CABLES in PROCEDURE 4 of the Owners Manual, part number 1090132.
9. Reinstall the floor basket. Refer to REMOVING/INSTALLING THE FLOOR BASKET in PROCEDURE 11 of the Owner's Manual, part number 1090132.

Section B - Disconnecting/Connecting Hand Brake Cable Assembly (FIGURE 5)

NOTE: This procedure applies to the PANTHER MX - 4 ONLY.

DISCONNECTING.

NOTE: Note the distance that the adjusting nut is threaded on the hand brake cable assembly before removing for proper reinstallation.

1. Remove the adjusting nut from the hand brake cable assembly.
2. Slide the hand brake cable assembly out of the brake arm joint, the spring and the tab on the rear frame assembly.
3. Remove the spring.
4. Remove the brake arm joint from the disc brake assembly.

NOTE: Save the hand brake cable assembly and all components for reassembly.

5. Refer to the chart on page 11 of this manual to determine which section(s) need to be performed next to successfully complete the removal/installation of the tiller assembly.

CONNECTING.

1. Position the brake arm joint in the mounting hole in the disc brake assembly.
2. Position the spring between the tab on the rear frame and the brake arm joint.
3. Slide the hand brake cable assembly through the tab on the rear frame, the spring and the brake arm joint.
4. Thread the adjusting nut onto the hand brake cable assembly until there is approximately 1/2 - inch of thread showing.
5. Refer to the chart on page 11 of this manual to determine which section(s) need to be performed next to successfully complete the removal/installation of the tiller assembly.

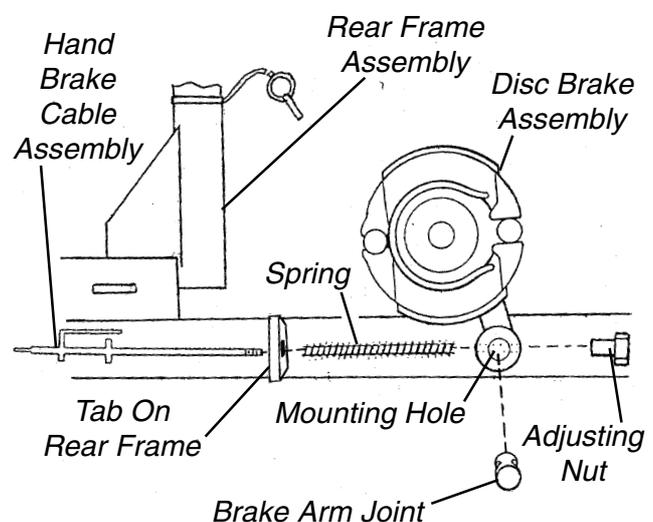


FIGURE 5 - DISCONNECTING/
CONNECTING HAND BRAKE ASSEMBLY

Section C - Disconnecting/Connecting Head light Assembly (FIGURE 6)

DISCONNECTING.

1. For LYNX LX - 3 ONLY - slowly pull the head light assembly away from the base handle bar joint.
2. Pull back the plastic guards on the **RED** and **BLACK** cables connecting the tiller wiring harness to the head light assembly.

3. Disconnect the **RED** and **BLACK** cable metal connectors of the head light assembly from the **RED** and **BLACK** cable metal connectors of the tiller wiring harness.
4. Separate the head light assembly from the tiller wiring harness.
5. Refer to the chart on page 11 of this manual to determine which section(s) need to be performed next to successfully complete the removal/installation of the tiller assembly.

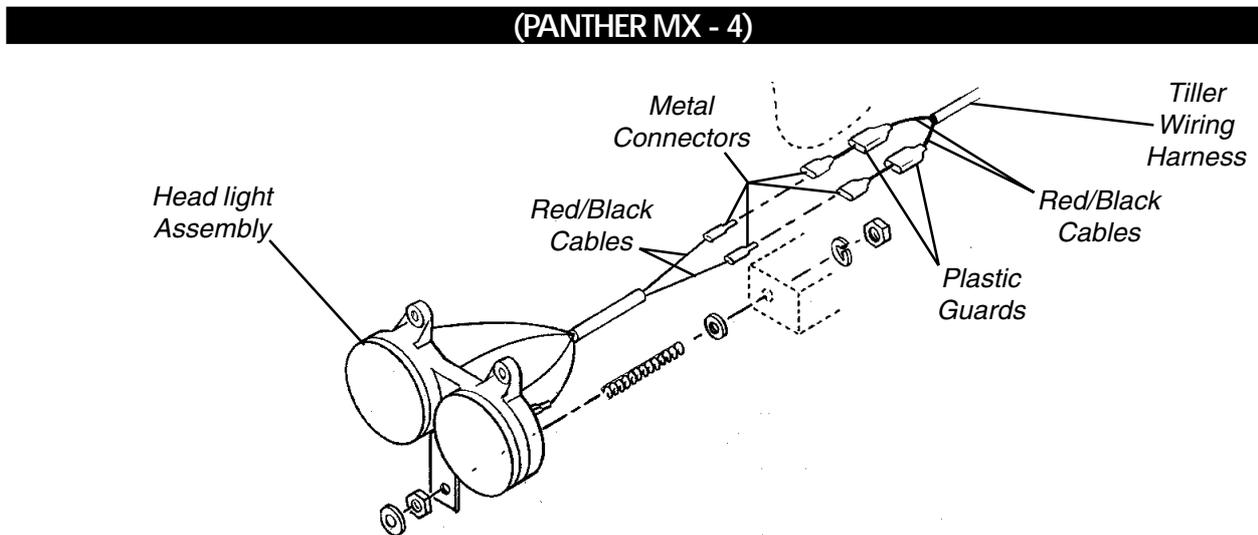
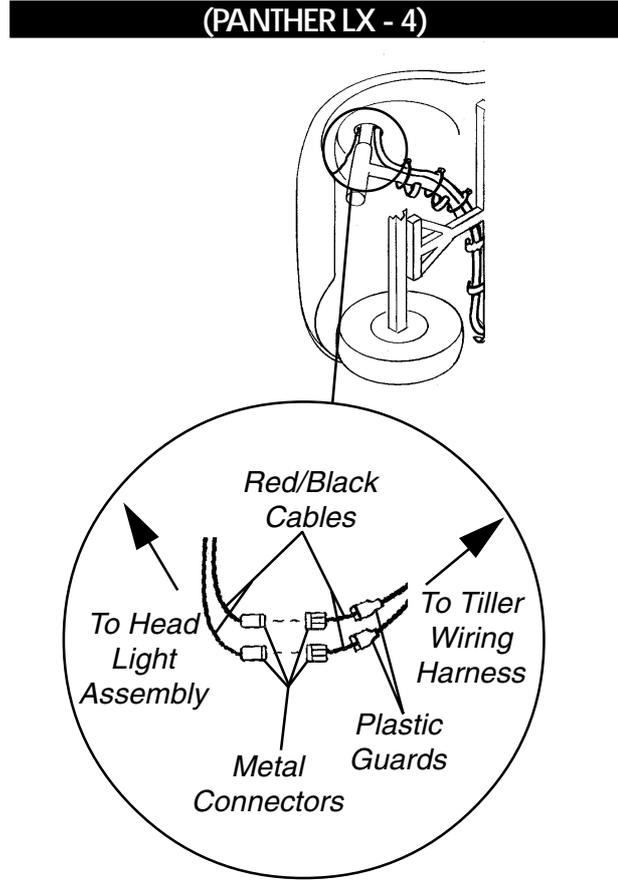
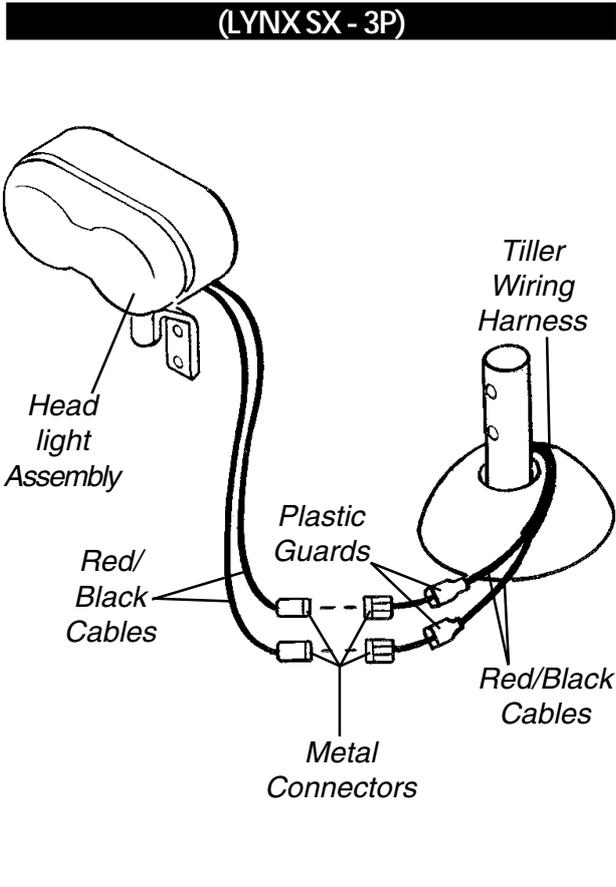
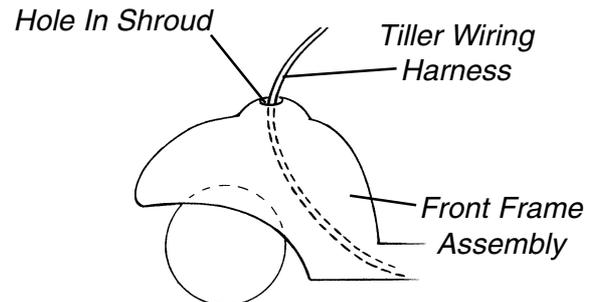


FIGURE 6 - DISCONNECTING/CONNECTING HEAD LIGHT ASSEMBLY

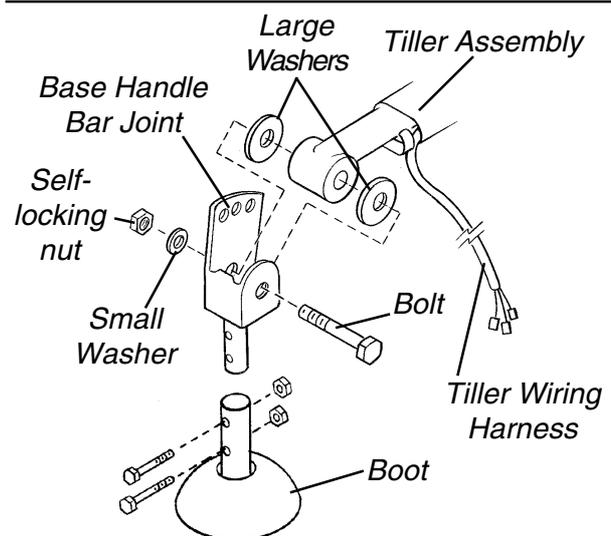
CONNECTING (FIGURE 6).

1. Connect the **RED** cable metal connector of the head light assembly to the **RED** cable metal connector of the tiller wiring harness.
2. Connect the **BLACK** cable metal connector of the head light assembly to the **BLACK** cable metal connector of the tiller wiring harness.
3. Reposition the plastic guards on the **RED** and **BLACK** cables connecting the tiller wiring harness to the head light assembly.
4. For LYNX LX - 3 ONLY, slowly thread the wires of the head light assembly through the hole in the shroud, until most of the wires of the head light assembly are on the underside of the front frame assembly.

3. Push any remaining slack in the tiller wiring harness through the hole in the shroud, until the wiring harness is on the underside of the front frame assembly (DETAIL "A").
4. Flip the front frame assembly onto its side.
5. Refer to the chart on page 11 of this manual to determine which section(s) need to be performed next to successfully complete the removal/installation of the tiller assembly.

DETAIL "A"**Section D - Disconnecting/Connecting Tiller Assembly And Handle Bar Joint (FIGURE 7)****DISCONNECTING.**

1. Return the front frame assembly to the upright position.
2. Remove the bolt, small washer, two (2) large washers and self-locking nut securing the base handle bar joint to the tiller assembly.
3. Slowly pull the tiller assembly away from the front frame assembly until there is no slack left in the tiller wiring harness (DETAIL "A").
4. Refer to the chart on page 11 of this manual to determine which section(s) need to be performed next to successfully complete the removal/installation of the tiller assembly.

**CONNECTING.**

NOTE: To simplify this procedure, lay the tiller assembly on the shroud and then align the necessary components.

1. Align the mounting hole in the tiller assembly with the holes in the two (2) large washers and with the mounting holes in the base handle bar joint.

CAUTION

DO NOT overtighten the bolt securing tiller assembly to the base handle bar joint. The tiller will bind and not work properly.

2. Secure the tiller assembly to the base handle bar joint using the provided bolt, small washer, and self-locking nut, making sure the bolt passes through the two (2) large washers. Torque the locking nut between 3 - 6 in./lbs.

Section E - Disconnecting/Connecting Base Handle Bar Joint From/To Front Frame Assembly (FIGURE 7)

DISCONNECTING.

1. Remove the two (2) bolts and self-locking nuts securing the base handle bar joint (and for the LYNX LX - 3 ONLY, the head light assembly) to the front frame assembly.
2. Refer to the chart on page 11 of this manual to determine which section(s) need to be performed next to successfully complete the removal/installation of the tiller assembly.

CONNECTING.

1. Align the two (2) mounting holes in the base handle bar joint with the two (2) mounting holes in the front frame assembly.
2. For the LYNX LX - 3, align the two (2) mounting holes in the head light assembly with the two (2) mounting holes in the front frame assembly and the two (2) mounting holes in the base handle bar joint.
3. Secure the base handle bar joint (and for the LYNX LX - 3, the head light assembly) to the front frame assembly using the two (2) bolts and self-locking nuts. Securely tighten.
4. Refer to the chart on page 11 of this manual to determine which section(s) need to be performed next to successfully complete the removal/installation of the tiller assembly.

Section F - Removing/Installing Tiller From/To Front Frame Assembly (FIGURE 8)

REMOVING.

1. Slowly pull the tiller wiring harness through the hole in the shroud assembly, until the tiller assembly is free from the front frame assembly (DETAIL "A").
2. Pull the base handle bar joint from the front frame assembly (DETAIL "B").
3. Remove the boot. Refer to REMOVING/INSTALLING BOOT in this procedure of this manual.
4. Refer to the chart on page 11 of this manual to determine which section(s) need to be performed next to successfully complete the removal/installation of the tiller assembly.

INSTALLING.

1. Reinstall the boot. Refer to REMOVING/INSTALLING BOOT in this procedure of this manual.
2. Position the base handle bar joint in the front frame assembly, making sure the mounting holes in the base handle bar joint line up with the mounting holes in the front frame assembly (DETAIL "A").
3. Slowly thread the tiller wiring harness through the hole in the shroud, until most of the tiller wiring harness is on the underside of the front frame assembly.
4. Refer to the chart on page 11 of this manual to determine which section(s) need to be performed next to successfully complete the removal/installation of the tiller assembly.

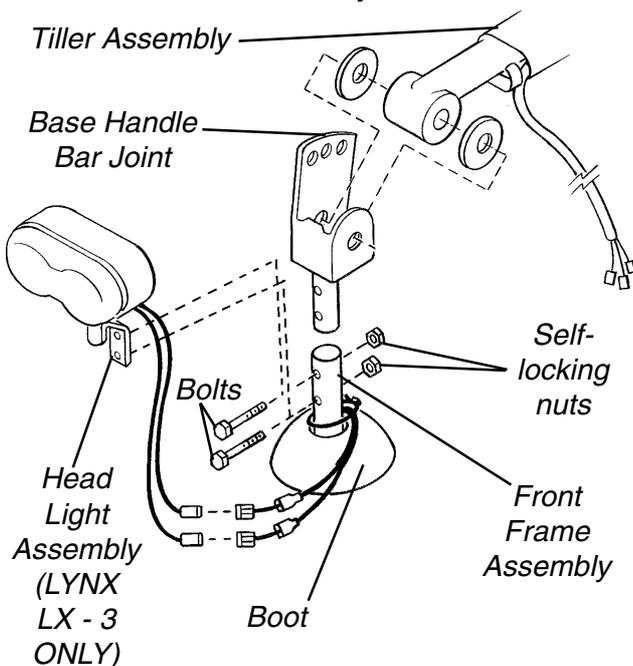


FIGURE 7 - DISCONNECTING/CONNECTING BASE HANDLE BAR JOINT FROM/TO FRONT FRAME ASSEMBLY

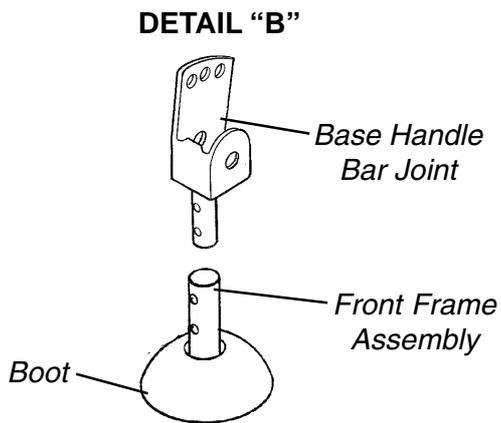
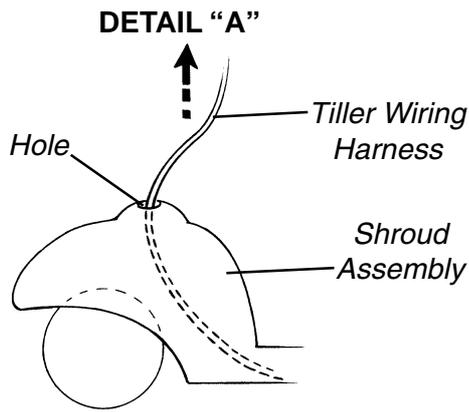


FIGURE 8 - REMOVING/INSTALLING TILLER FROM/TO FRONT FRAME ASSEMBLY

REMOVING/INSTALLING BOOT (FIGURE 9)

Removing

1. Remove the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in this procedure of this manual.
2. Remove the **EXISTING** boot by sliding it over the front fork with bearing assembly.

Installing

1. Install the **NEW** boot by sliding it over the front fork with bearing assembly.
2. Install the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in this procedure of this manual.

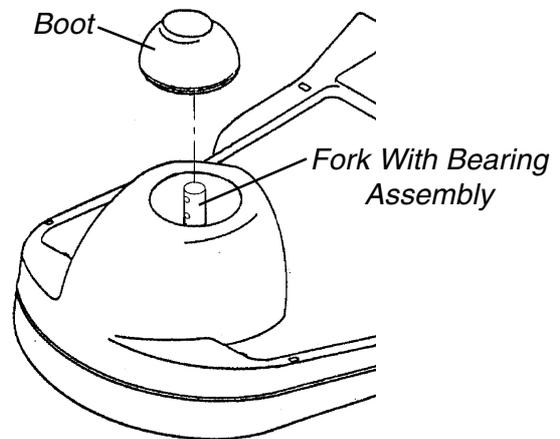


FIGURE 9 - REMOVING/INSTALLING BOOT

<p>This Procedure Includes the Following:</p> <p><i>Replacing Tire And Tube</i></p> <p><i>Removing/Installing Front Shroud Assembly</i></p> <p><i>Removing/Installing Fork With Bearing Assembly</i></p> <p><i>Removing/Installing Front Axle Assembly</i></p> <p><i>Replacing Tie Rod Assembly</i></p> <p><i>Removing/Installing Small Tie Rods</i></p> <p><i>Removing/Installing Large Tie Rods</i></p>
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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.

Turn Power OFF and remove key from ignition. Disconnect battery harness from motor lead.

REPLACING TIRE AND TUBE

WARNING

This procedure MUST be performed by an authorized Invacare dealer or qualified technician.

REMOVING/INSTALLING FRONT SHROUD ASSEMBLY (FIGURE 1)

Removing

1. Pull up on the rug to remove it from the front shroud assembly.
2. Remove the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.
3. Remove the boot. Refer to REMOVING/INSTALLING BOOT in PROCEDURE 4 of this manual.
4. Remove the two (2) mounting screws, spring washers and flat washers securing the front shroud assembly to the front frame assembly.

NOTE: Four (4) mounting screws, spring washers and flat washers are required on the PANTHER LX - 4.

5. Perform one (1) of the following:
 - A. **LYNX SX - 3, LYNX SX - 3P and LYNX LX - 3:**
 1. Proceed to STEP 6.

- B. **PANTHER LX - 4:**
 1. Remove the front head light assembly. Refer to REMOVING/INSTALLING FRONT HEAD LIGHT ASSEMBLY in PROCEDURE 10 of this manual.

- C. **PANTHER MX - 4:**
 1. Remove the front head light assembly. Refer to REMOVING/INSTALLING FRONT HEAD LIGHT ASSEMBLY in PROCEDURE 11 of this manual.

6. Remove the front shroud assembly from the front frame assembly.
7. Note the position of the U-type plate nuts before removing for proper reinstallation.
8. Remove the U-type plate nuts from the front frame assembly.

NOTE: The LYNX SX - 3, LYNX SX - 3P and LYNX LX - 3 have four (4) U-type plate nuts, the PANTHER LX - 4 and PANTHER MX - 4 have two (2) U-type plate nuts.

Installing

1. Place U-type plate nuts in position noted from STEP 7 of REMOVING.
2. Perform one (1) of the following:
 - A. **LYNX SX - 3, LYNX SX - 3P and LYNX LX - 3:**
 1. Position the four (4) U-type plate nuts on the front frame, making certain the mounting holes in the U-type plate nuts align with the mounting holes in the front frame assembly.
 - B. **PANTHER MX - 4 and PANTHER LX - 4:**
 1. Position the two (2) U-type plate nuts on the front frame, making certain the mounting holes in the U-type plate nuts align with the mounting holes in the front frame assembly.

3. Place the front shroud assembly over the front frame, making certain the mounting holes in the front shroud assembly align with the mounting holes in the U-type plate nuts and/or the mounting holes in the front frame assembly.
4. Secure the front shroud assembly to the front frame using the two (2) mounting screws, spring washers and flat washers. Securely Tighten.

NOTE: Four (4) mounting screws, spring washers and flat washers are required on the PANTHER LX - 4.

5. Perform one (1) of the following:

A. **LYNX SX - 3, LYNX SX - 3P, LYNX LX - 3** and **PANTHER LX - 4** :

1. Proceed to STEP 5.

B. **PANTHER LX - 4:**

1. Reinstall the front head light assembly. Refer to REMOVING/INSTALLING THE FRONT HEAD LIGHT ASSEMBLY in PROCEDURE 10 of this manual.

C. **PANTHER MX - 4:**

1. Reinstall the front head light assembly. Refer to REMOVING/INSTALLING THE FRONT HEAD LIGHT ASSEMBLY in PROCEDURE 11 of this manual.

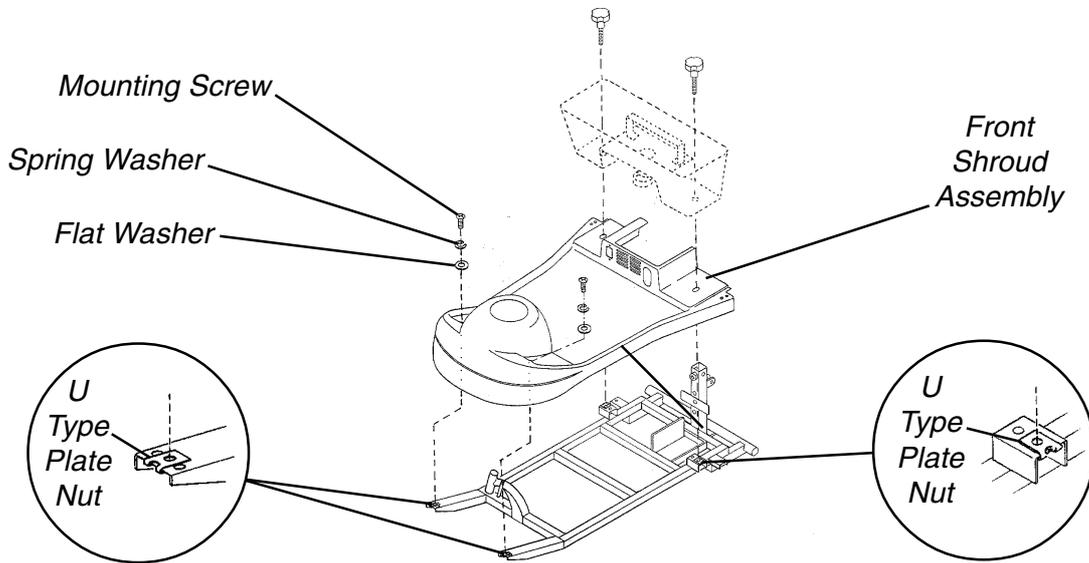
6. Reinstall the boot. Refer to REMOVING/INSTALLING BOOT in PROCEDURE 4 of this manual.

7. Reinstall the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.

8. Position the rug on the shroud assembly.

LYNX SX - 3/LYNX SX - 3P

NOTE: Only the LYNX SX - 3/LYNX SX - 3P is shown for clarity. The front shroud for the LYNX LX - 3 removes/installs in the same manner.



PANTHER LX - 4

NOTE: Only the PANTHER LX - 4 is shown for clarity. The front shroud for the PANTHER MX - 4 removes/installs in the same manner.

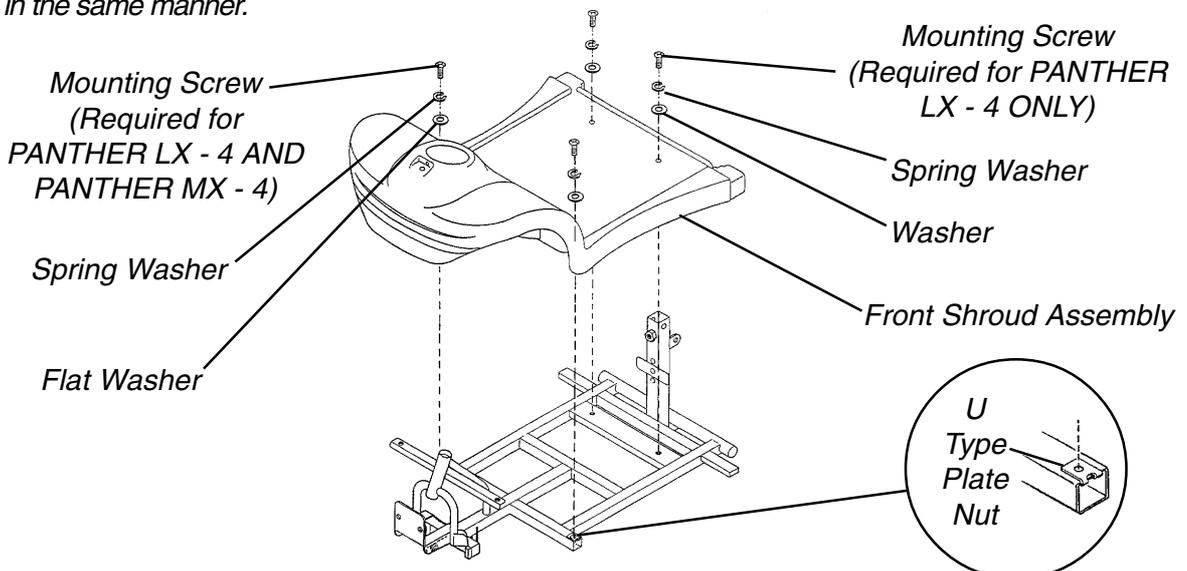


FIGURE 1 - REMOVING/INSTALLING FRONT SHROUD ASSEMBLY

REMOVING/INSTALLING FORK WITH BEARING ASSEMBLY (FIGURE 2)

NOTE: This procedure applies to the LYNX SX - 3, LYNX SX - 3P and the LYNX LX - 3 ONLY.

Removing

1. Remove the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.
2. Remove the front shroud assembly. Refer to REMOVING/INSTALLING FRONT SHROUD ASSEMBLY in PROCEDURE 5 of this manual.
3. Remove the front wheel. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
4. Remove the bearing gap nut from the front fork.
5. Remove the **TOP** bearing bushing from the **TOP** bearing housing.
6. Remove the **TOP** bearing from the **TOP** bearing housing.
7. Slide the front fork, **BOTTOM** bearing and **BOTTOM** bearing bushing away from the front frame assembly.
8. Remove the **TOP** and **BOTTOM** bearing housings from the front frame assembly.

Installing

1. Secure the **TOP** and **BOTTOM** bearing housing onto the front frame assembly.
- NOTE: Before installing the front fork, be sure it is facing the proper direction.*
2. Slide the front fork with the **BOTTOM** bearing and the **BOTTOM** bearing bushing through the mounting hole in the front frame assembly.
 3. Slide the **TOP** bearing over the top of the front fork and into the **TOP** bearing housing.

CAUTION
DO NOT overtighten the TOP bearing bushing. Otherwise, damage to the front fork assembly may occur.

4. Secure the **TOP** bearing bushing by threading it into the **TOP** bearing housing. Torque the **TOP** bearing bushing between 26 - 39 in./lbs.

CAUTION
DO NOT overtighten the bearing gap nut. Otherwise, damage to the front fork assembly may occur.

5. Secure the bearing gap nut by threading it into the front fork. Torque the bearing gap nut between 217 - 243 in./lbs.

*NOTE: When reinstalling the front wheel, replace the **EXISTING** hardware with the **NEW** hardware supplied.*

6. Reinstall the front wheel. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
7. Reinstall the shroud assembly. Refer to REMOVING/INSTALLING FRONT SHROUD ASSEMBLY in PROCEDURE 5 of this manual.
8. Reinstall the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.

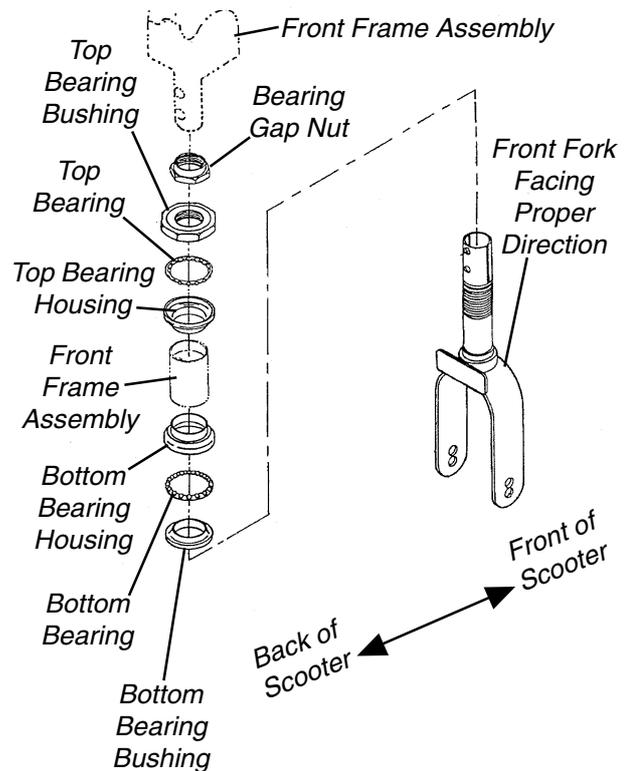


FIGURE 2 - REMOVING/INSTALLING FORK WITH BEARING ASSEMBLY

REMOVING/INSTALLING FRONT AXLE ASSEMBLY

NOTE: This procedure applies to the PANTHER LX - 4 and the PANTHER MX - 4 ONLY.

Panther LX - 4 (FIGURE 3)

REMOVING.

1. Remove the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.
 2. Remove the shroud assembly. Refer to REMOVING/INSTALLING SHROUD ASSEMBLY in PROCEDURE 5 of this manual.
 3. Remove the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
 4. Position the front frame assembly onto its side.
 5. Remove the self-locking nut and spacer securing the front axle assembly to the right front wheel axle assembly.
- NOTE: Save the self-locking nut, spacer and washer for reuse when installing the **NEW** front axle assembly.*
6. Slide the right front wheel axle assembly and the washer away from the front axle assembly.
 7. Repeat STEPS 4 - 5 for the left side of the front axle assembly.
 8. Remove the self-locking nut and three (3) washers securing the front axle assembly to the front frame assembly.
 9. Slide the front axle assembly and washer away from the front frame assembly.

INSTALLING.

NOTE: Position the two (2) washers between the front frame assembly and the front axle assembly.

1. Position the two (2) washers and front axle assembly onto the front frame assembly.

CAUTION

DO NOT overtighten the self-locking nut securing the front axle assembly to the front frame assembly. Otherwise, damage to the front axle assembly may occur.

2. Secure the front axle assembly to the front frame using the washer and self-locking nut. Torque the locking nut between 108 - 135 in./lbs.
3. Position the **EXISTING** washer and the right front wheel axle assembly on the front axle assembly.

CAUTION

DO NOT overtighten the self-locking nut securing the front axle assembly to the right front wheel axle assembly. Otherwise, damage to the front axle assembly may occur.

4. Secure the right front wheel axle assembly to the front axle assembly using the **EXISTING** spacer and self-locking nut. Torque the self-locking nut between 17 - 30 in./lbs.
5. Repeat STEPS 3 - 4 for the left side of the front axle assembly.
6. Return the front frame assembly to the upright position.
7. Reinstall the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
8. Reinstall the front shroud assembly. Refer to REMOVING/INSTALLING FRONT SHROUD ASSEMBLY in PROCEDURE 5 of this manual.
9. Reinstall the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.

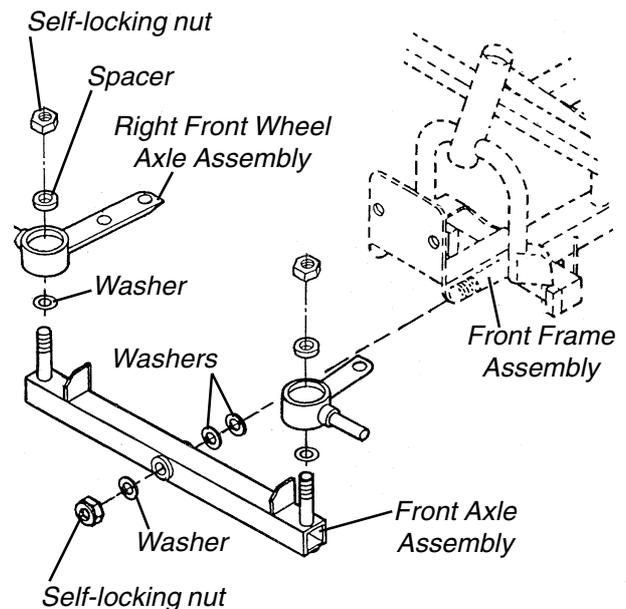


FIGURE 3 - REMOVING/INSTALLING FRONT AXLE ASSEMBLY - PANTHER LX - 4

Panther MX - 4 (FIGURE 4)

REMOVING.

1. Remove the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.
2. Remove the front shroud assembly. Refer to REMOVING/INSTALLING FRONT SHROUD ASSEMBLY in PROCEDURE 5 of this manual.
3. Remove the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
4. Position the front frame assembly onto its side.
5. Remove the front shock absorbers. Refer to REMOVING/INSTALLING FRONT SHOCK ABSORBERS in PROCEDURE 11 of this manual.

*NOTE: Save the self-locking nut, washer and spacer for reuse when installing the **NEW** front axle assembly.*

6. Remove the self-locking nut and washer securing the right front axle to the tie rod assembly.
7. Slide the tie rod assembly and the spacer away from the right front axle.
8. Remove the bolt, spring washer and washer securing the right front axle to the front frame assembly.
9. Remove the right front axle assembly.
10. Repeat STEPS 5 - 9 to remove the left front axle.

INSTALLING.

1. Align the mounting hole in the right front axle with the mounting hole in the front frame assembly.

CAUTION

DO NOT overtighten the bolt securing the right front axle to the front frame assembly. Otherwise, damage to the right front axle may occur.

2. Secure the right front axle to the front frame assembly using the washer, spring washer and bolt. Torque the bolt between 191 - 226 in./lbs.

NOTE: Position the spacer between the top of the right front axle and the tie rod assembly.

3. Slide the **EXISTING** spacer and the tie rod assembly onto the mounting pin of the right front axle.

CAUTION

DO NOT overtighten the self-locking nut securing the tie rod assembly to the right front axle. Otherwise, damage to the tie rod assembly may occur.

4. Secure the tie rod assembly onto the right front axle using the **EXISTING** washer and self-locking nut. Torque the self-locking nut between 17 - 30 in./lbs.
5. Repeat STEPS 1 - 4 to install the left front axle.
6. Reinstall the front shock absorbers. Refer to REMOVING/INSTALLING FRONT SHOCK ABSORBERS in PROCEDURE 11 of this manual.
7. Return the front frame assembly to the upright position
8. Reinstall the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
9. Reinstall the shroud assembly. Refer to REMOVING/INSTALLING SHROUD ASSEMBLY in PROCEDURE 5 of this manual.
10. Reinstall the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.

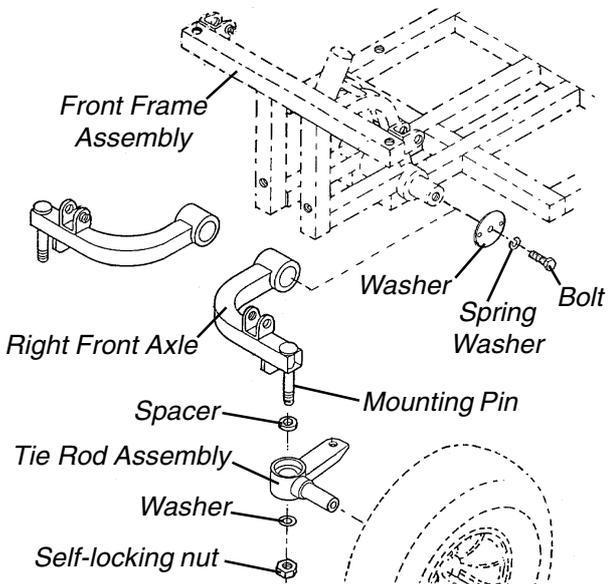


FIGURE 4 - REMOVING/INSTALLING FRONT AXLE ASSEMBLY - PANTHER MX - 4

REPLACING TIE ROD ASSEMBLY

NOTE: This procedure applies to the PANTHER LX - 4 and the PANTHER MX - 4 ONLY.

Panther LX - 4 (FIGURE 5)

1. Remove the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.
2. Remove the shroud assembly. Refer to REMOVING/INSTALLING SHROUD ASSEMBLY in PROCEDURE 5 of this manual.
3. Remove the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
4. Position the front frame assembly onto its side.
5. Remove the front axle assembly. Refer to REMOVING/INSTALLING FRONT AXLE ASSEMBLY, PANTHER LX - 4 in this procedure of this manual.
6. Remove the two (2) hex cap screws and self-locking nuts securing the steering shaft to the U - plate on the tie rod assembly.
7. Remove the U - plate and the tie rod assembly from the steering shaft.
8. Remove the bearing gap nut from the steering shaft.
9. Remove the **TOP** bearing bushing from the **TOP** bearing housing.
10. Remove the **TOP** bearing from the **TOP** bearing housing.
11. Remove the steering shaft, **BOTTOM** bearing and the **BOTTOM** bearing bushing from the **BOTTOM** bearing housing.
12. Remove the **TOP** and **BOTTOM** bearing housings from the front frame assembly.
13. Secure the **NEW TOP** and **BOTTOM** bearing housing onto the front frame assembly.
14. Slide the **NEW BOTTOM** bearing and the **NEW BOTTOM** bearing bushing onto the steering shaft.

*NOTE: Before installing the **NEW** steering shaft, be sure it is in the proper direction (FIGURE 5).*

15. Slide the **NEW** steering shaft with the **NEW BOTTOM** bearing and the **NEW BOTTOM** bearing bushing into the front frame assembly.
16. Slide the **NEW TOP** bearing over the top of the **NEW** steering shaft and into the **NEW TOP** bearing housing.

CAUTION

DO NOT overtighten the TOP bearing bushing. Otherwise, damage to the tie rod assembly may occur.

17. Secure the **NEW TOP** bearing bushing by threading it into the **NEW TOP** bearing housing. Torque the **NEW TOP** bearing bushing between 26 - 39 in./lbs.

CAUTION

DO NOT overtighten the bearing gap nut. Otherwise, damage to the tie rod assembly may occur.

18. Secure the **NEW** bearing gap nut by threading it into the **NEW** steering shaft. Torque the **NEW** bearing gap nut between 216 - 243 in./lbs.
19. Align the two (2) mounting holes in the **NEW** U-plate on the tie rod assembly with the two (2) mounting holes in the **NEW** steering shaft.
20. Secure the **NEW** U-plate and the tie rod assembly to the **NEW** steering shaft using the two (2) **NEW** hex cap screws and self-locking nuts. Torque the **NEW** self-locking nuts between 112 - 138 in./lbs.
21. Reinstall the front axle assembly. Refer to REMOVING/INSTALLING FRONT AXLE ASSEMBLY, PANTHER LX - 4 in this procedure of this manual.
22. Return the front frame assembly to the upright position.
23. Reinstall the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
24. Reinstall the front shroud assembly. Refer to REMOVING/INSTALLING FRONT SHROUD ASSEMBLY in PROCEDURE 4 of this manual.
25. Reinstall the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 3 of this manual.

PROCEDURE 5

SHROUD/FORK/WHEELS/TIE RODS

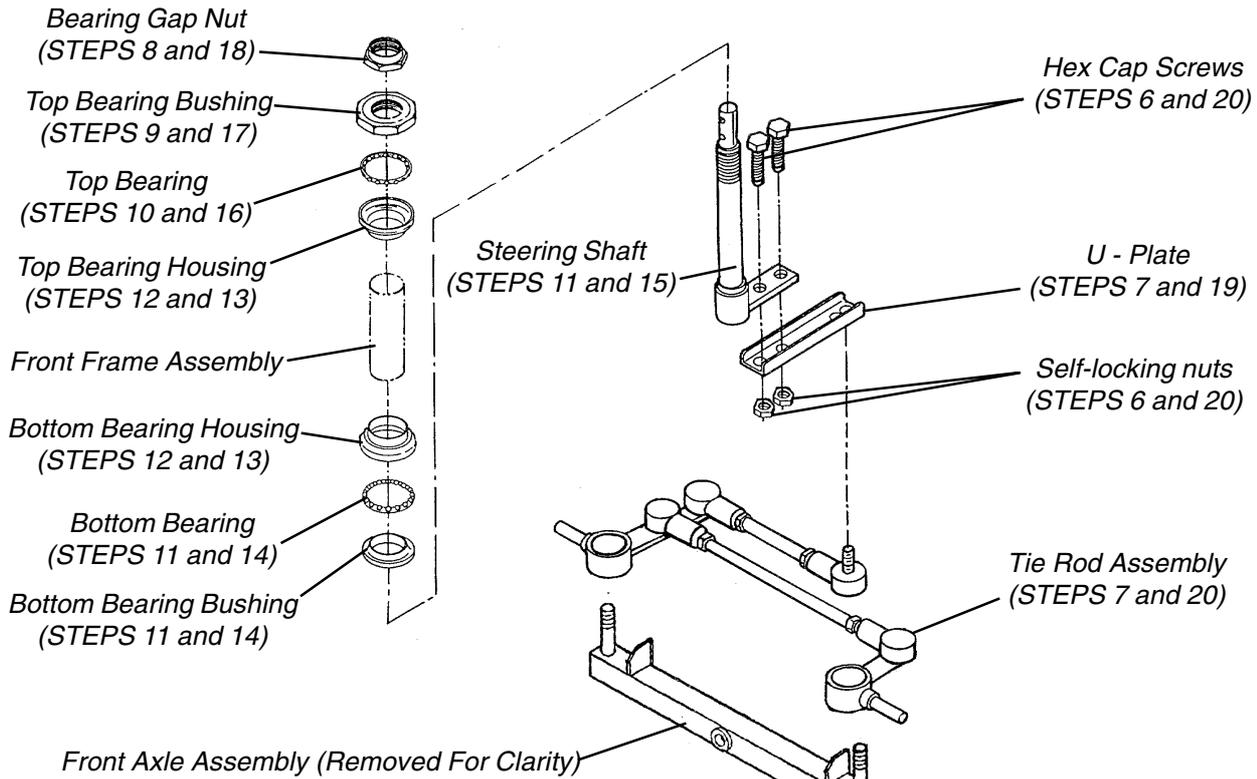


FIGURE 5 - REPLACING TIE ROD ASSEMBLY - PANTHER LX - 4

Panther MX - 4 (FIGURE 6)

1. Remove the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.
2. Remove the front shroud assembly. Refer to REMOVING/INSTALLING FRONT SHROUD ASSEMBLY in PROCEDURE 5 of this manual.
3. Remove the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
4. Position the front frame assembly onto its side.
5. Remove the front shock absorbers. Refer to REMOVING/INSTALLING FRONT SHOCK ABSORBERS in PROCEDURE 11 of this manual.
6. Remove the small tie rod. Refer to REMOVING/INSTALLING SMALL TIE RODS in this procedure of this manual.
7. Remove the large tie rod. Refer to REMOVING/INSTALLING LARGE TIE RODS in this procedure of this manual.
8. Remove the bearing gap nut from the steering shaft.
9. Remove the **TOP** bearing bushing from the **TOP** bearing housing.
10. Remove the **TOP** bearing from the **TOP** bearing housing.

11. Remove the steering shaft, **BOTTOM** bearing and the **BOTTOM** bearing bushing from the front frame assembly.
12. Remove the **TOP** and **BOTTOM** bearing housings from the front frame assembly.
13. Remove the self-locking nut and washer securing the right front wheel axle to the right front axle.
14. Slide the right front wheel axle and the spacer away from the right front axle.
15. Repeat STEPS 11-12 to remove the tie rod assembly from the left front axle.
16. Remove the tie rod assembly.

*NOTE: Before installing the **NEW** tie rod assembly, be sure it is in the proper direction (FIGURE 6).*

17. Position the **NEW** spacer between the top of the right front axle and the right front wheel axle.
18. Slide the **NEW** right front wheel axle and the **NEW** spacer onto the right front axle.

CAUTION

DO NOT overtighten the self-locking nut securing the tie rod assembly to the right front axle. Otherwise, damage to the tie rod assembly may occur.

19. Secure the **NEW** tie rod assembly onto the right front axle using the **NEW** washer and self-locking nut. Torque the **NEW** self-locking nut between 139 - 165 in./lbs.
 20. Repeat STEPS 17-18 to attach the **NEW** tie rod assembly to the left front axle.
 21. Secure the **NEW TOP** and **BOTTOM** bearing housing onto the front frame assembly.
 22. Slide the **NEW BOTTOM** bearing and the **NEW BOTTOM** bushing onto the steering shaft.
- NOTE: Before installing the **NEW** steering shaft, be sure it is facing toward the tie rods (FIGURE 6).*
23. Slide the **NEW** steering shaft with the **NEW BOTTOM** bearing and the **NEW BOTTOM** bushing through the mounting hole in the front frame assembly.
 24. Slide the **NEW TOP** bearing over the top of the **NEW** steering shaft and into the **NEW TOP** bearing housing.

CAUTION

DO NOT overtighten the TOP bearing bushing. Otherwise, damage to the tie rod assembly may occur.

25. Secure the **NEW TOP** bearing bushing by screwing it into the **NEW TOP** bearing housing. Torque the **NEW TOP** bearing bushing between 26 - 39 in./lbs.

CAUTION

DO NOT overtighten the bearing gap nut. Otherwise, damage to the tie rod assembly may occur.

26. Secure the **NEW** bearing gap nut by screwing it into the steering shaft. Torque the **NEW** bearing gap nut between 217 - 243 in./lbs.
27. Reinstall the small tie rod. Refer to REMOVING/INSTALLING SMALL TIE RODS in this procedure of this manual.
28. Reinstall the large tie rod. Refer to REMOVING/INSTALLING LARGE TIE RODS in this procedure of this manual.
29. Reinstall the front shock absorbers. Refer to REMOVING/INSTALLING FRONT SHOCK ABSORBERS in PROCEDURE 11 of this manual.
30. Return the front frame assembly to the upright position.
31. Reinstall the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
32. Reinstall the front shroud assembly. Refer to REMOVING/INSTALLING FRONT SHROUD ASSEMBLY in PROCEDURE 5 of this manual.
33. Reinstall the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 5 of this manual.

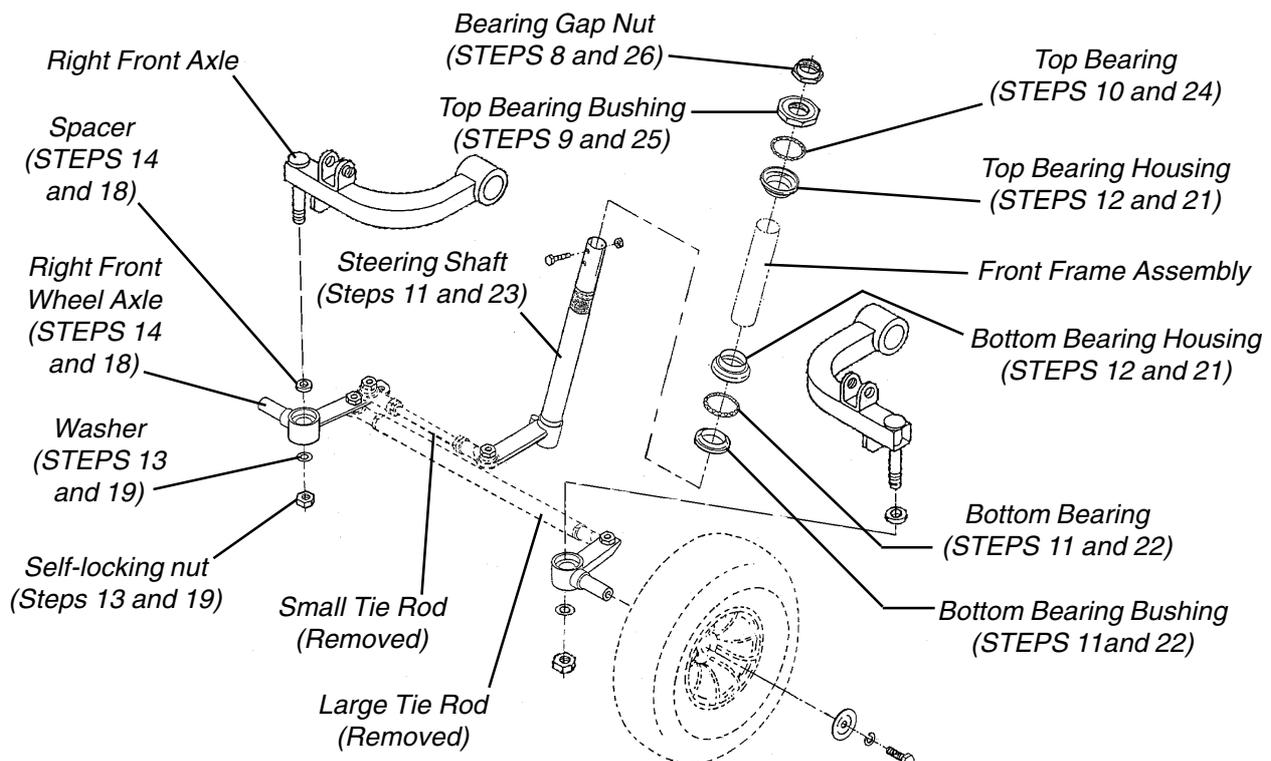


FIGURE 6 - REPLACING TIE ROD ASSEMBLY - PANTHER MX - 4

REMOVING/INSTALLING SMALL TIE RODS

NOTE: This procedure applies to the PANTHER LX - 4 and the PANTHER MX - 4 ONLY.

Panther LX - 4 (FIGURE 7)

REMOVING.

1. Remove the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.
2. Remove the front shroud assembly. Refer to REMOVING/INSTALLING FRONT SHROUD ASSEMBLY in PROCEDURE 5 of this manual.
3. Remove the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
4. Position the front frame assembly onto its side.

NOTE: Before removing the two (2) self-locking nuts and spring washers, note the mounting holes in the U - plate and the right front wheel axle for proper reinstallation.

*NOTE: Save the self-locking nut and spring washer for reuse when installing the **NEW** small tie rod.*

5. Remove the self-locking nut and spring washer securing the small tie rod to the U - plate.
6. Remove the self-locking nut and spring washer securing the small tie rod to the right front wheel axle.
7. Remove the small tie rod.

INSTALLING.

1. Position the mounting bolt of the **NEW** small tie rod in the U - plate mounting hole as noted in the REMOVING section of this procedure.

CAUTION

DO NOT overtighten the self-locking nuts securing the small tie rod to the U-plate. Otherwise, damage to the tie rod may occur.

2. Secure the small tie rod to the U-plate using the spring washer and self-locking nut. Securely tighten. Torque the self-locking nut between 112 - 139 in./lbs.
3. Position the mounting bolt of the **NEW** small tie rod in the right front wheel axle mounting hole as noted in the REMOVING section of this procedure.

CAUTION

DO NOT overtighten the self-locking nuts securing the small tie rod to the right front wheel axle. Otherwise, damage to the tie rod may occur.

4. Secure the small tie rod to the right front wheel axle using the spring washer and self-locking nut. Securely tighten. Torque the self-locking nut between 112 - 139 in./lbs.
5. Return the front frame assembly to the upright position.
6. Reinstall the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
7. Reinstall the front shroud assembly. Refer to REMOVING/INSTALLING FRONT SHROUD ASSEMBLY in PROCEDURE 5 of this manual.
8. Reinstall the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.

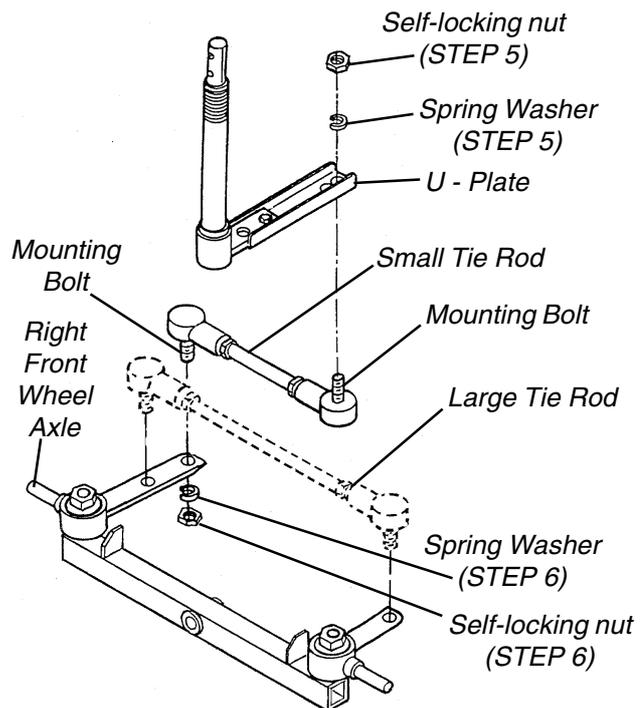


FIGURE 7 - REMOVING/INSTALLING SMALL TIE RODS - PANTHER LX - 4

Panther MX - 4 (FIGURE 8)**REMOVING.**

1. Remove the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.
2. Remove the front shroud assembly. Refer to REMOVING/INSTALLING FRONT SHROUD ASSEMBLY in PROCEDURE 5 of this manual.
3. Remove the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
4. Flip the front frame assembly onto its side.
5. Remove the front shock absorbers. Refer to REMOVING/INSTALLING FRONT SHOCK ABSORBERS in PROCEDURE 10 of this manual.

*NOTE: Save the hex cap screw, small spacer and self-locking nut for reuse when installing the **NEW** small tie rod.*

6. Remove the hex cap screw, small spacer and self-locking nut securing the small tie rod to the steering shaft.

NOTE: Before removing the hex cap screw, large spacer and self-locking nut, note the mounting holes in the right front wheel axle for proper reinstallation.

*NOTE: Save the hex cap screw, large spacer and self-locking nut for reuse when installing the **NEW** small tie rod.*

7. Remove the hex cap screw, large spacer and self-locking nut securing the small tie rod to the right front wheel axle.
8. Remove the small tie rod.

INSTALLING.

1. Align the mounting hole in the small tie rod with the center mounting hole in the right front wheel axle.
2. Position the large spacer between the small tie rod and the front wheel axle.

CAUTION

DO NOT overtighten the self-locking nuts securing the small tie rod to the right front wheel axle. Otherwise, damage to the tie rod may occur.

3. Secure the small tie rod to the right front wheel axle using the hex cap screw, large spacer and self-locking nut. Torque the self-locking nut between 139 - 165 in./lbs.

4. Align the mounting hole in the small tie rod with the mounting hole in the steering shaft.
5. Position the small spacer between the small tie rod and the steering shaft.

CAUTION

DO NOT overtighten the self-locking nuts securing the small tie rod to the the steering shaft. Otherwise, damage to the tie rod may occur.

6. Secure the small tie rod to the steering shaft using the hex cap screw, small spacer and self-locking nut. Torque the self-locking nut between 139 - 165 in./lbs.
7. Reinstall the front shock absorbers. Refer to REMOVING/INSTALLING FRONT SHOCK ABSORBERS in PROCEDURE 11 of this manual.
8. Return the front frame assembly to the upright position.
9. Reinstall the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
10. Reinstall the front shroud assembly. Refer to REMOVING/INSTALLING FRONT SHROUD ASSEMBLY in PROCEDURE 5 of this manual.
11. Reinstall the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.

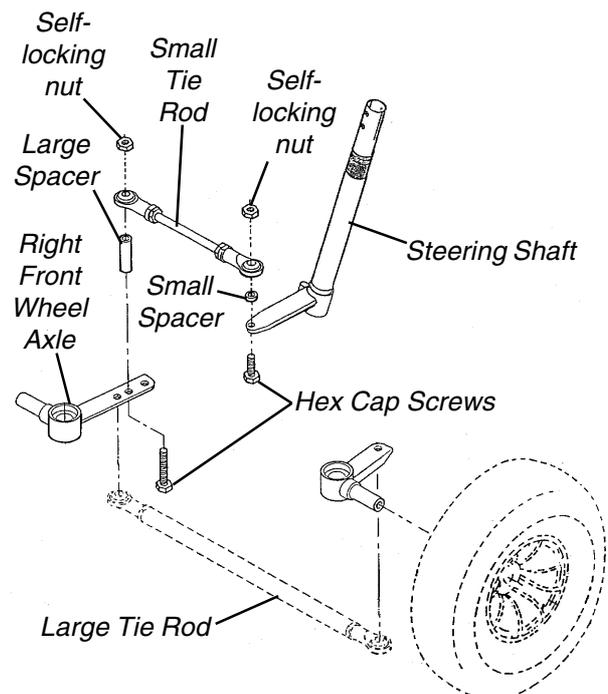


FIGURE 8 - REMOVING/INSTALLING SMALL TIE RODS - PANTHER MX - 4

REMOVING/INSTALLING LARGE TIE RODS

NOTE: This procedure applies to the PANTHER LX - 4 and the PANTHER MX - 4 ONLY.

Panther LX - 4 (FIGURE 9)

REMOVING.

1. Remove the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.
2. Remove the front shroud assembly. Refer to REMOVING/INSTALLING FRONT SHROUD ASSEMBLY in PROCEDURE 5 of this manual.
3. Remove the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
4. Flip the front frame assembly onto its side.

*NOTE: Save the self-locking nut and spring washer for reuse when installing the **NEW** large tie rod.*

5. Remove the self-locking nut and spring washer securing the large tie rod to the left front wheel axle.

NOTE: Before removing the self-locking nut and spring washer, take note of the mounting holes in the front right wheel axle for proper reinstallation.

*NOTE: Save the self-locking nut and spring washer for reuse when installing the **NEW** large tie rod.*

6. Remove the self-locking nut and spring washer securing the large tie rod to the right front wheel axle.
7. Remove the large tie rod.

INSTALLING.

1. Position the mounting bolt on the large tie rod in the mounting hole in the left front wheel axle.

CAUTION

DO NOT overtighten the self-locking nuts securing the large tie rod to the left front wheel axle. Otherwise, damage to the tie rod may occur.

2. Secure the large tie rod to the left front wheel axle using the **EXISTING** spring washer and self-locking nut. Securely tighten. Torque the self-locking nuts between 112 - 139 in./lbs.

NOTE: Before installing the hardware, be sure the large tie rod is in the proper mounting hole in the right front wheel axle.

3. Position the mounting bolt on the large tie rod in the mounting hole in the right front wheel axle.

CAUTION

DO NOT overtighten the self-locking nuts securing the large tie rod to the right front wheel axle. Otherwise, damage to the tie rod may occur.

4. Secure the large tie rod to the right front wheel axle using the **EXISTING** spring washer and self-locking nut. Torque the self-locking nuts between 112 - 139 in./lbs.
5. Return the front frame assembly to the upright position.
6. Reinstall the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
7. Reinstall the front shroud assembly. Refer to REMOVING/INSTALLING FRONT SHROUD ASSEMBLY in PROCEDURE 5 of this manual.
8. Reinstall the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.

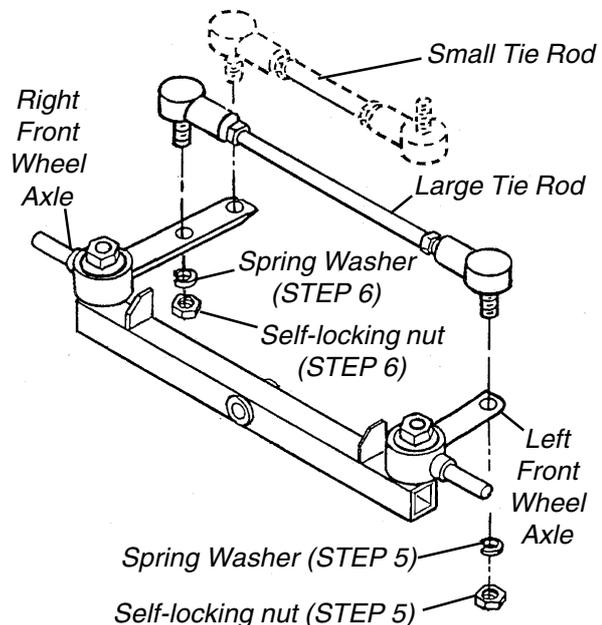


FIGURE 9 - REMOVING/INSTALLING LARGE TIE RODS - PANTHER LX - 4

Panther MX - 4 (FIGURE 10)**REMOVING.**

1. Remove the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.
2. Remove the front shroud assembly. Refer to REMOVING/INSTALLING FRONT SHROUD ASSEMBLY in PROCEDURE 5 of this manual.
3. Remove the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
4. Flip the front frame assembly onto its side.
5. Remove the front shock absorbers. Refer to REPLACEMENT PARTS - PANTHER MX - 4 in PROCEDURE 11 of this manual.

*NOTE: Save the hex cap screw, spacer and self-locking nut for reuse when installing the **NEW** large tie rod.*

6. Remove the hex cap screw, spacer and self-locking nut securing the large tie rod to the left front wheel axle.

NOTE: Before removing the hex cap screw, spacer and self-locking nut, be sure to take note of the proper mounting holes in the right front wheel axle.

*NOTE: Save the hex cap screw, spacer and self-locking nut for reuse when installing the **NEW** large tie rod.*

7. Remove the hex cap screw, spacer and self-locking nut securing the large tie rod to the right front wheel axle.
8. Remove the large tie rod.

INSTALLING.

1. Position the **EXISTING** spacer between the tie rod and the right front wheel axle.
2. Align the mounting hole in the large tie rod with the mounting hole noted in the REMOVING section.

CAUTION

DO NOT overtighten the self-locking nuts securing the large tie rod to the right front wheel axle. Otherwise, damage to the tie rod may occur.

3. Secure the large tie rod to the right front wheel axle using the **EXISTING** hex cap screw and self-locking nut. Torque the self-locking nuts between 139 - 165 in./lbs.

4. Position the **EXISTING** spacer between the tie rod and the left front wheel axle.
5. Align the mounting hole in the large tie rod with the mounting hole in the left front wheel axle.

CAUTION

DO NOT overtighten the self-locking nuts securing the large tie rod to the left front wheel axle. Otherwise, damage to the tie rod may occur.

6. Secure the large tie rod to the left front wheel axle using the **EXISTING** hex cap screw and self-locking nut. Torque the self-locking nuts between 139 - 165 in./lbs.
7. Reinstall the front shock absorbers. Refer to REMOVING/INSTALLING FRONT SHOCK ABSORBERS in PROCEDURE 11 of this manual.
8. Return the front frame assembly to the upright position.
9. Reinstall the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
10. Reinstall the front shroud assembly. Refer to REMOVING/INSTALLING FRONT SHROUD ASSEMBLY in PROCEDURE 5 of this manual.
11. Reinstall the tiller assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 4 of this manual.

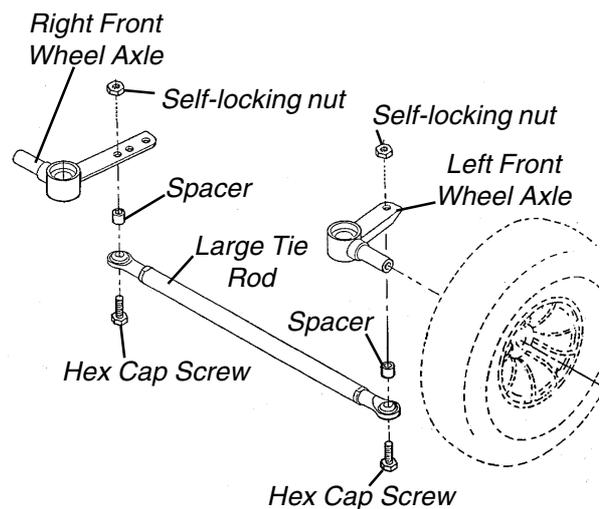


FIGURE 10 - REMOVING/INSTALLING LARGE TIE RODS - PANTHER MX - 4

This Procedure Includes the Following:
Removing/Installing Transaxle Assembly
Replacing Motor/Brake Assembly
Replacing Brake Release Lever Assembly

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.

Turn Power OFF and remove key from ignition. Disconnect battery harness from motor lead.

REMOVING/INSTALLING TRANSAXLE ASSEMBLY

Lynx SX - 3P, Lynx SX - 3, Lynx LX - 3, Panther LX - 4 (FIGURE 1)

REMOVING.

1. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.
2. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
3. Remove the batteries. Refer to REMOVING/INSTALLING THE BATTERIES WITH CABLES in PROCEDURE 4 of the Owners Manual, part number 1090132.
4. Remove the rear wheels. Refer to REMOVING/INSTALLING THE REAR WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.

NOTE: For proper reinstallation, note the position of the cable ties securing the transaxle assembly wires before cutting.

5. Cut the cable ties securing the transaxle assembly wires to the rear frame assembly.
6. Disconnect the **WHITE** connector of the transaxle assembly wiring harness from the **WHITE** connector of the controller wiring harness.

NOTE: Before removing the brackets, take note of the mounting position for proper reinstallation.

7. Remove the two (2) bolts, washers, spring washers and self-locking nuts securing the bracket and rubber spacer located near the motor to the rear frame assembly.
8. Remove the bracket and rubber located near the motor.

9. Remove the two (2) bolts, washers, spring washers and self-locking nuts securing the bracket and rubber spacer located near the transaxle housing to the rear frame assembly.
10. Remove the bracket and rubber spacer located near the transaxle housing.
11. Slide the transaxle assembly out of the rear frame assembly.

INSTALLING.

1. Slide the transaxle assembly into the rear frame assembly.

NOTE: Before installing the brackets, be sure they are in the proper mounting positions.

2. Align the mounting holes in the bracket closet to the transaxle with the mounting holes in the rear frame assembly and the mounting holes in the rubber spacer.

CAUTION

DO NOT overtighten the two (2) bolts securing the bracket and rubber spacer to the rear frame assembly. Otherwise, damage to the bracket and rubber spacer may occur.

3. Install the two (2) bolts, washers, spring washers and self-locking nuts. Torque the two (2) self locking nuts between 130 - 156 in./lbs.
4. Align the mounting holes in the notched bracket closet to the motor with the mounting holes in the rear frame assembly and the mounting holes in the rubber spacer.

CAUTION

DO NOT overtighten the two (2) bolts securing the bracket and rubber spacer to the rear frame assembly. Otherwise, damage to the bracket and rubber spacer may occur.

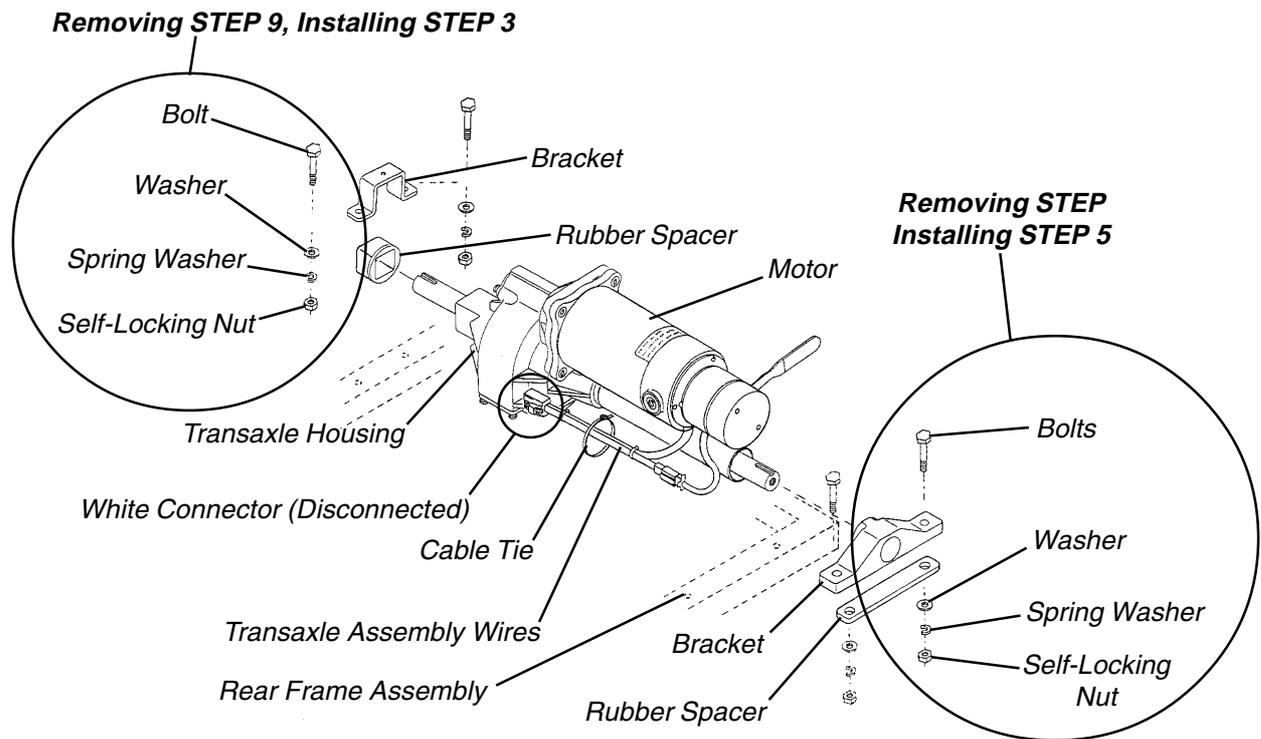
5. Install the two (2) bolts, washers, spring washers and self-locking nuts. For the Lynx SX - 3P and the Lynx SX - 3, torque the two (2) self locking nuts between 17 - 26 in./lbs. For the Lynx LX - 3 and the Panther LX - 4, torque the two (2) self locking nuts between 130 - 156 in./lbs.
6. Connect the **WHITE** connector of the transaxle assembly wiring harness to the **WHITE** connector of the controller wiring harness.

NOTE: Be sure the cable ties are positioned as noted in STEP 5.

7. Secure the wires of the transaxle assembly wiring harness to the rear frame assembly using **NEW** cable ties.

8. Reinstall the rear wheels. Refer to REMOVING/INSTALLING THE REAR WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
9. Reinstall the batteries. Refer to REMOVING/INSTALLING THE BATTERIES WITH CABLES in PROCEDURE 4 of the Owners Manual, part number 1090132.
10. Reinstall the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
11. Reinstall the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.

LYNX SX - 3P, LYNX SX - 3



LYNX LX - 3, PANTHER LX - 4

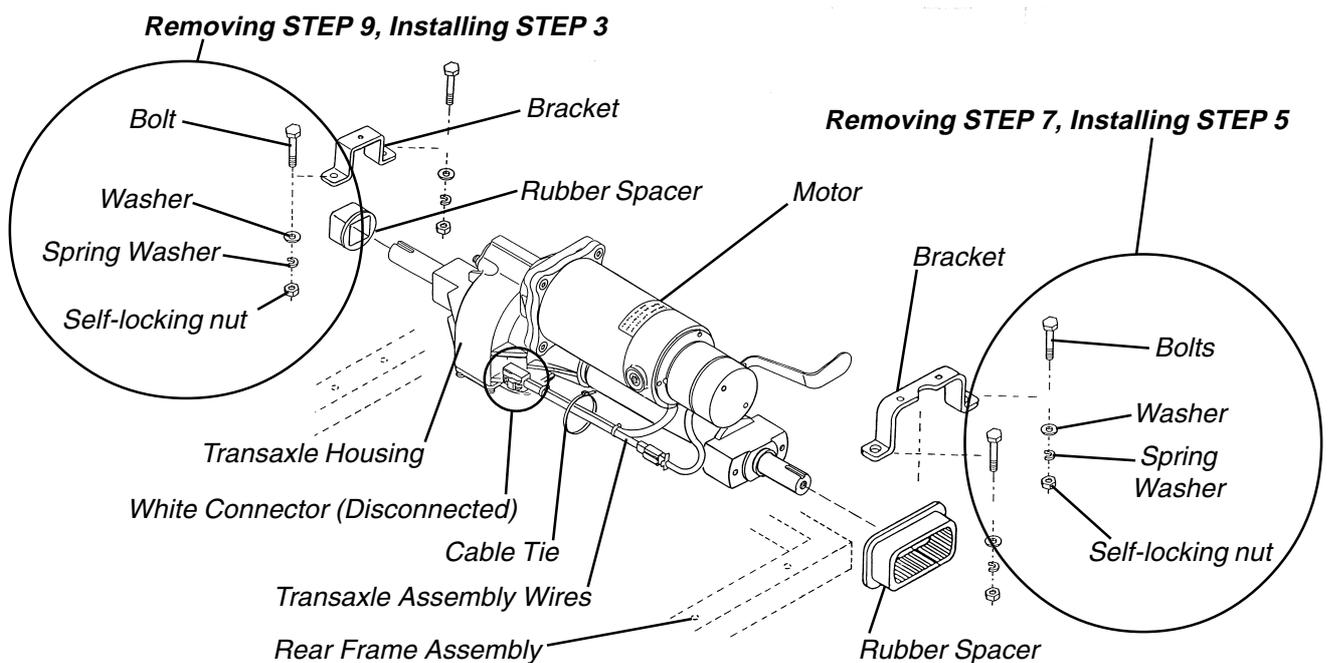


FIGURE 1 - REMOVING/INSTALLING TRANSAXLE ASSEMBLY - LYNX SX - 3P, LYNX SX - 3, LYNX LX - 3 AND PANTHER LX - 4

Panther MX - 4 (FIGURE 2)

REMOVING.

1. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.
2. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
3. Remove the batteries. Refer to REMOVING/INSTALLING THE BATTERIES WITH CABLE ASSEMBLY in PROCEDURE 4 of the Owners Manual, part number 1090132
4. Remove the rear wheels. Refer to REMOVING/INSTALLING THE REAR WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
5. Remove the disc brake assembly. Refer to REPLACING DISC BRAKE ASSEMBLY in PROCEDURE 11 of this Manual.
6. Remove the **TOP** bolts on the two (2) rear shock absorbers (DETAIL "A").
7. Rotate the top of the two (2) rear shock absorbers away from the frame (DETAIL "A").
8. Disconnect the **WHITE** connectors of the transaxle assembly from the **WHITE** connectors of the control assembly.
9. Remove the two (2) bolts, spring washers, self-locking nuts, and four (4) washers securing the U-brace and rubber spacer to the rear frame assembly.
10. Remove the U-brace and rubber spacer from the rear frame assembly.
11. Remove the two (2) screws and self-locking nuts securing the bracket and rubber spacer to the rear frame assembly.
12. Remove the bracket and rubber spacer from the rear frame assembly.
13. Slide the transaxle assembly out of the rear frame assembly.

INSTALLING.

1. Slide the transaxle assembly into the rear frame assembly.
2. Align the mounting holes in the bracket and the rubber spacer with the mounting holes in the rear frame assembly.

CAUTION

DO NOT overtighten the two (2) screws securing the bracket and rubber spacer to the rear frame assembly. Otherwise, damage to the bracket and rubber spacer may occur.

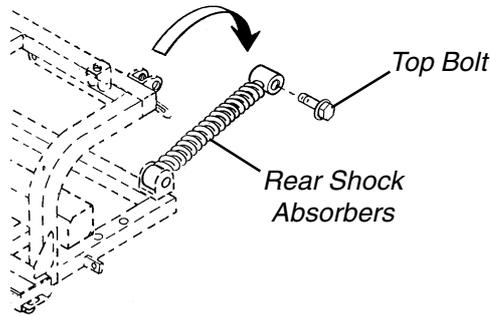
3. Secure the bracket and the rubber spacer to the rear frame assembly using the two (2) screws and self-locking nuts. Torque the two (2) self locking nuts between 16 - 20 in./lbs.
4. Align the mounting holes of the U - brace with the mounting holes in the rear frame assembly.
5. Position the rubber spacer between the U - brace and the rear frame assembly.

CAUTION

DO NOT overtighten the two (2) bolts securing the U - brace and rubber spacer to the rear frame assembly. Otherwise, damage to the U - brace and rubber spacer may occur.

6. Secure the U - brace and the rubber spacer to the rear frame assembly using the two (2) bolts, spring washers, self-locking nuts, and four (4) washers. Torque the two (2) self locking nuts between 16 - 20 in./lbs.
7. Rotate the top of the two (2) rear shock assemblies toward the frame.
8. Align the two (2) rear shock assemblies with the two (2) mounting holes on the rear frame assembly (DETAIL "A").
9. Secure the two (2) rear shock assemblies to the rear frame assembly using the existing screws (DETAIL "A"). Securely tighten.
10. Connect the **WHITE** connector of the transaxle assembly to the **WHITE** connector of the control assembly.
11. Reinstall the disc brake assembly. Refer to REPLACING DISC BRAKE ASSEMBLY in PROCEDURE 11 of this manual.
12. Reinstall the rear wheels. Refer to REMOVING/INSTALLING THE REAR WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
13. Reinstall the batteries. Refer to REMOVING/INSTALLING THE BATTERIES WITH CABLES in PROCEDURE 4 of the Owners Manual, part number 1090132.
14. Reinstall the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.

15. Reinstall the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.



DETAIL "A"

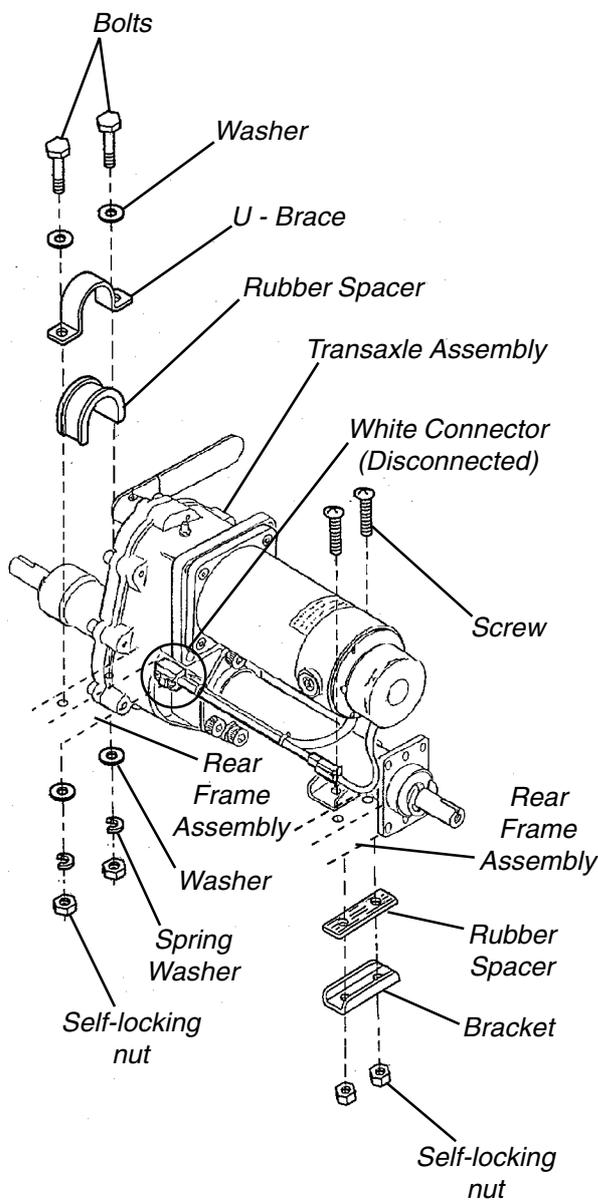


FIGURE 2 - REMOVING/INSTALLING TRANSAXLE ASSEMBLY - PANTHER MX - 4

REPLACING MOTOR/BRAKE ASSEMBLY (FIGURE 3)

1. Remove the transaxle assembly. Refer to REMOVING/INSTALLING TRANSAXLE ASSEMBLY in PROCEDURE 6 of this manual.
2. Remove the four **EXISTING** (4) nylock socket bolts that secure the motor/brake assembly to the transaxle assembly.
3. Remove the **EXISTING** motor/brake assembly from the transaxle assembly.
4. Remove the **EXISTING** plate and bushing from the transaxle assembly.
5. Position the **NEW** plate in the transaxle.
6. Position the **NEW** bushing over the plate.
7. Position the **NEW** motor/brake assembly so that the mounting holes in the **NEW** motor/brake assembly line up with the mounting holes in the transaxle assembly.
8. Install the four (4) **NEW** nylock socket bolts that secure the motor/brake assembly to the transaxle. Torque the four (4) **NEW** nylock socket bolts between 156 - 191 in./lbs.
9. Reinstall the transaxle assembly. Refer to REMOVING/INSTALLING TRANSAXLE ASSEMBLY in PROCEDURE 6 of this manual.

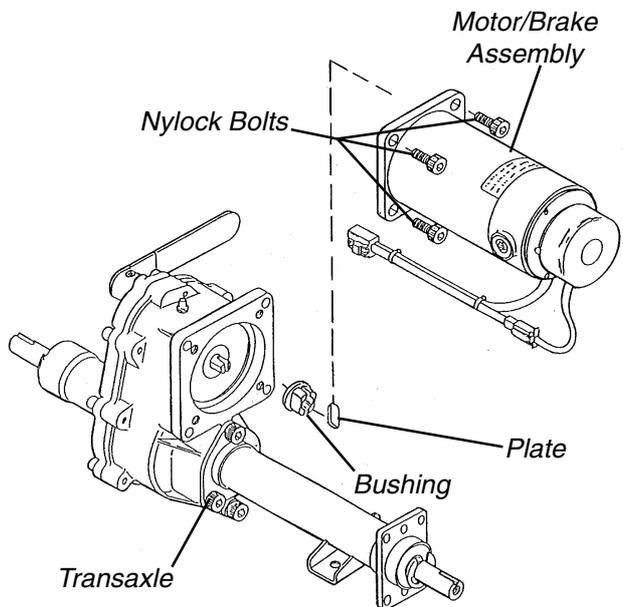


FIGURE 3 - REPLACING MOTOR/BRAKE ASSEMBLY

REPLACING BRAKE RELEASE LEVER ASSEMBLY (FIGURE 4)

For All Models EXCEPT Panther MX - 4

1. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.
2. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.

NOTE: Save the two (2) mounting screws and spring washers for reuse when reinstalling the brake cover.

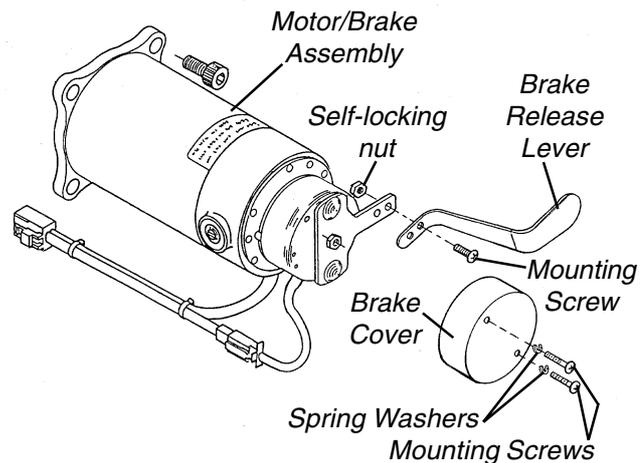
3. Remove the two (2) mounting screws and spring washers securing the brake cover to the motor/brake assembly.
4. Remove the brake cover from the motor/brake assembly.
5. Remove the mounting screw and self-locking nut securing the brake release lever to the motor/brake assembly.
6. Remove the brake release lever.
7. Align the mounting hole in the **NEW** brake release lever with the mounting hole in the motor/brake assembly.
8. Secure the **NEW** brake release lever to the motor/brake assembly using the **NEW** mounting screw and self-locking nut. Securely tighten.
9. Align the two (2) mounting holes in the **EXISTING** brake cover with the two (2) mounting holes in the motor/brake assembly.
10. Secure the **EXISTING** brake cover to the motor/brake assembly using the two (2) **EXISTING** mounting screws and spring washers. Securely tighten.
11. Reinstall the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
12. Reinstall the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.

Panther MX - 4

1. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.
2. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.

3. Remove the socket screw and the bolt socket securing the brake release lever to motor/brake assembly.
4. Remove the brake release lever.
5. Align the mounting holes in the **NEW** brake release lever with the mounting holes in motor/brake assembly.
6. Secure the **NEW** brake release lever to the motor/brake assembly using the **NEW** socket screw and bolt socket. Securely tighten.
7. Reinstall the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
8. Reinstall the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.

ALL MODELS EXCEPT PANTHER MX - 4



PANTHER MX - 4

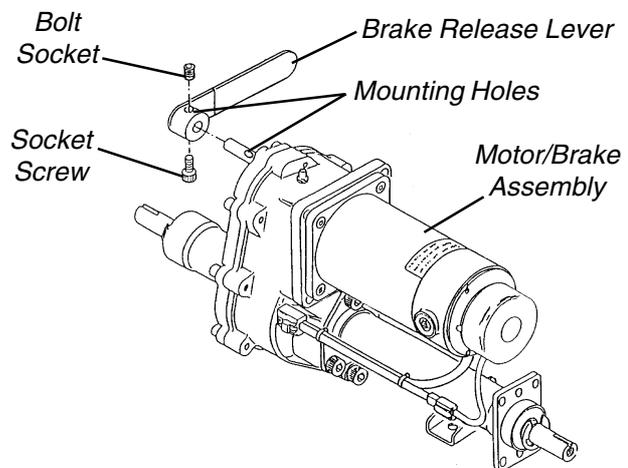


FIGURE 4 - REPLACING BRAKE RELEASE LEVER ASSEMBLY

This Procedure Includes the Following:

- Removing/Installing Controller*
- Removing/Installing Controller Harnesses*
- Replacing Circuit Breaker*

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.

Turn Power OFF and remove key from ignition. Disconnect battery harness from the motor lead.

REMOVING/INSTALLING CONTROLLER

Disconnecting/Connecting Controller Wires (FIGURE 1)

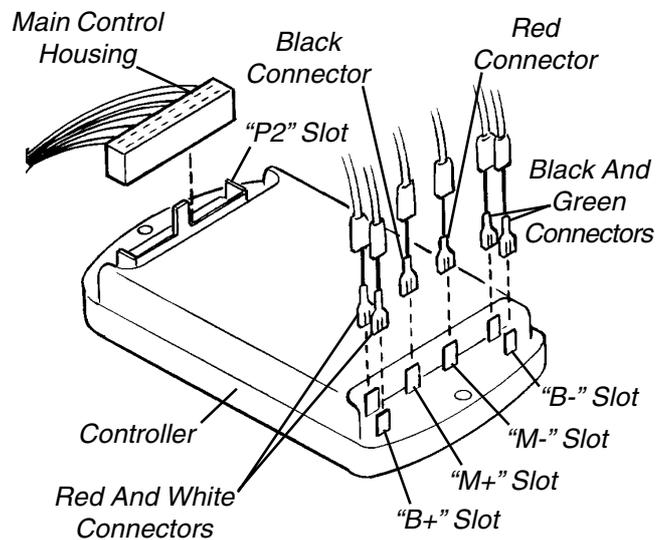
DISCONNECTING.

1. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.
2. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
3. Remove the transaxle assembly. Refer to REMOVING/INSTALLING TRANSAXLE ASSEMBLY in PROCEDURE 6 of this manual.
4. Disconnect the following from the controller (FIGURE 1):
 - A. The **RED** and **WHITE** connectors from the slot marked "B+" on the controller.
 - B. The **BLACK** and **GREEN** connectors from the slot marked "B-" on the controller.
 - C. The **BLACK** connector from the slot marked "M+" on the controller.
 - D. The **RED** connector from the slot marked "M-" on the controller.
 - E. The housing of the main control wiring harness from the slot marked "P2" on the controller.

CONNECTING.

1. Connect the following (FIGURE 1):
 - A. The **RED** and **WHITE** connectors to the slot marked "B+" on the controller.
 - B. The **BLACK** and **GREEN** connectors to the slot marked "B-" on the controller.
 - C. The **BLACK** connector to the slot marked "M+" on the controller.
 - D. The **RED** connector to the slot marked "M-" on the controller.
 - E. The housing of the main control wiring harness to the slot marked "P2" on the controller.

ALL MODELS EXCEPT PANTHER MX - 4



PANTHER MX - 4

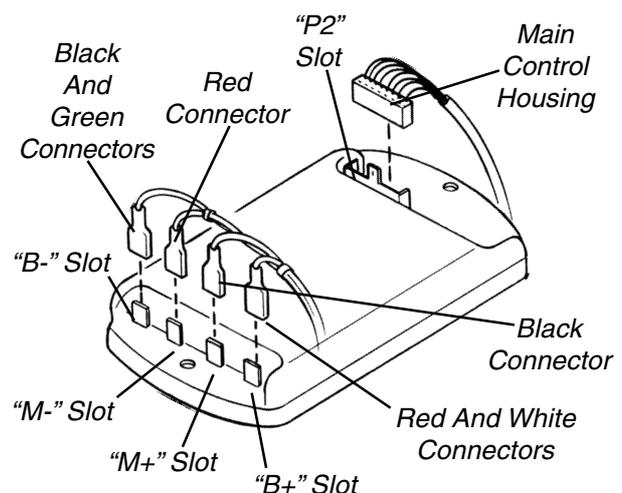


FIGURE 1 - DISCONNECTING/CONNECTING CONTROLLER WIRES

2. Reinstall the transaxle assembly. Refer to REMOVING/INSTALLING TRANSAXLE ASSEMBLY in the PROCEDURE 6 of this manual.
3. Reinstall the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 5 of the Owner's Manual, part number 1090132.
4. Reinstall the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 9 of the Owner's Manual, part number 1090132.

Removing/Installing Controller From/To Controller Plate (FIGURE 2)

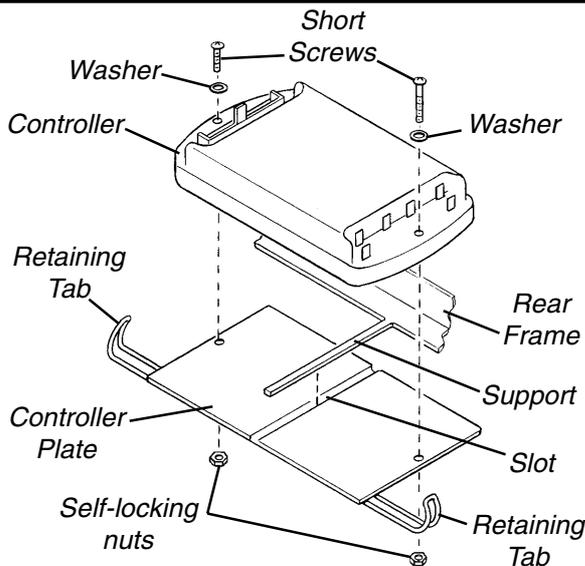
REMOVING.

1. Disconnect the controller wires. Refer to DISCONNECTING/CONNECTING CONTROLLER WIRES in this procedure of the manual.
2. Perform one (1) of the following:
 - A. **LYNX SX - 3 and LYNX SX - 3P (FIGURE 2):**
 1. Cut the cable ties securing the wires to the two (2) retaining tabs.
 2. Remove the wires from the two (2) retaining tabs.
 3. Remove the two (2) short screws, washers and self-locking nuts from the controller assembly.
 4. Gently slide the controller and the controller plate from the rear frame.
 5. Separate the controller from the controller plate.
 - B. **LYNX LX - 3 and PANTHER LX - 4 (FIGURE 2):**
 1. Remove the short screw, washer and self-locking nut from the controller assembly.
 2. Remove the long screw, washer and self-locking nuts from the controller assembly and the retaining tab.
 3. Remove the retaining tab from the controller.
 4. Gently slide the controller and the controller plate from the rear frame.
 5. Separate the controller from the controller plate.
 - C. **PANTHER MX - 4 (FIGURE 2):**
 1. Remove the two (2) screws, washers, and self-locking nuts from the rear frame.
 2. Remove the controller from the rear frame/controller plate.

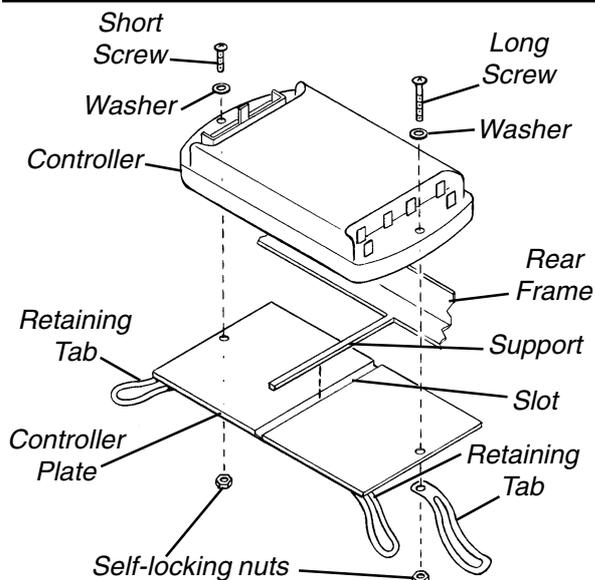
INSTALLING.

1. Perform one of the following:
 - A. **LYNX SX - 3 and LYNX SX - 3P (FIGURE 2):**
 1. Gently slide the controller and the controller plate onto the rear frame, making sure the support on the rear frame is positioned in the slot on the controller plate.
 2. Align the mounting holes in the controller plate with the mounting holes in the controller.
 3. Insert the two (2) short screws through the controller and the controller plate, and secure them with the washer and self-locking nut. Securely tighten.
 4. Position the wires in the two (2) retaining tabs.
 5. Secure the wires to the two (2) retaining tabs using **NEW** cable ties.
 - B. **LYNX LX - 3 and PANTHER LX - 4 (FIGURE 2):**
 1. Gently slide the controller and the controller plate onto the rear frame, making sure the support on the rear frame is positioned in the slot on the controller plate.
 2. Align the mounting hole in the retaining tab with the mounting holes in the controller plate and the mounting holes in the controller.
 3. Insert the long screw through the controller, the controller plate and the retaining tab, and secure it with the washer and self-locking nut. Securely tighten.
 4. Insert the provided short screw through the controller and the controller plate, and secure it with the washer and self-locking nut. Securely tighten.
 - C. **PANTHER MX - 4 (FIGURE 2):**
 1. Position the controller on the rear frame so that the mounting holes in the controller align with the mounting holes in the rear frame/controller plate.
 2. Insert the two (2) screws through the controller and the rear frame, and secure them with the washers and self-locking nuts. Securely tighten.
2. Connect the controller wires. Refer to DISCONNECTING/CONNECTING CONTROLLER WIRES in this procedure of the manual.

LYNX SX - 3P AND LYNX SX - 3



LYNX LX - 3 AND PANTHER LX - 4



PANTHER MX - 4

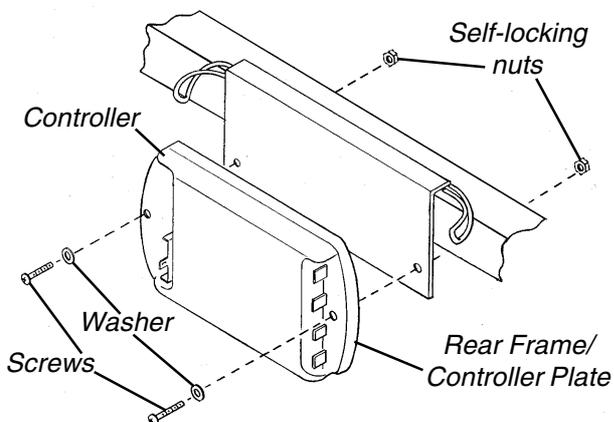


FIGURE 2 - REMOVING/INSTALLING CONTROLLER FROM/TO CONTROLLER PLATE

REMOVING/INSTALLING CONTROLLER HARNESSSES

Lynx SX - 3P And Lynx SX - 3 (FIGURE 3)

REMOVING.

1. Disconnect the controller wires. Refer to DISCONNECTING/CONNECTING CONTROLLER WIRES in this procedure of the manual.
2. Disconnect the **RED** and **BLACK** connectors of the power wiring harnesses from the **RED** and **BLACK** connectors of the controller wiring harnesses.
3. Disconnect the **WHITE** connector of the transaxle assembly wiring harness from the **WHITE** connector of the controller wiring harness.

NOTE: Note the positions of the metal connectors before removing for proper reinstallation.

4. Disconnect the metal connectors of the controller wiring harnesses from the metal connectors of the circuit breaker.
5. Disconnect the **BLUE** connector of the tiller wiring harness from the **BLUE** connector of the controller wiring harness.
6. Disconnect the **YELLOW** connector of the tiller wiring harness from the **YELLOW** connector of the controller wiring harness.
7. Cut the cable ties securing the transaxle wiring harness to the rear frame.
8. Cut the cable tie securing the power wiring harnesses and the tiller wiring harnesses to the rear frame.
9. Cut the cable tie securing the tiller wiring harnesses to the retaining tabs of the controller.
10. Remove the tiller wiring harnesses from the retaining tabs.
11. Remove the wiring harnesses from the scooter.

INSTALLING.

1. Position the tiller wiring harnesses in the retaining tabs.
2. Secure the tiller wiring harnesses to the retaining tabs using **NEW** cable ties.
3. Secure the power wiring harnesses and the tiller wiring harnesses to the rear frame using **NEW** cable ties.
4. Secure the transaxle wiring harnesses to the rear frame using **NEW** cable ties.

5. Connect the **RED** and **BLACK** connectors of the power wiring harnesses to the **RED** and **BLACK** connectors of the controller wiring harnesses.
 6. Connect the **WHITE** connector of the transaxle assembly wiring harness to the **WHITE** connector of the controller wiring harness.
- NOTE: Be sure the metal connectors are in the positions noted in STEP 4 of REMOVAL.*
7. Connect the metal connectors of the power wiring harnesses to the metal connectors of the circuit breaker.
 8. Connect the **BLUE** connector of the tiller wiring harness to the **BLUE** connector of the controller wiring harness.
 9. Connect the **YELLOW** connector of the tiller wiring harness to the **YELLOW** connector of the controller wiring harness.
 10. Reinstall the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
 11. Reinstall the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.

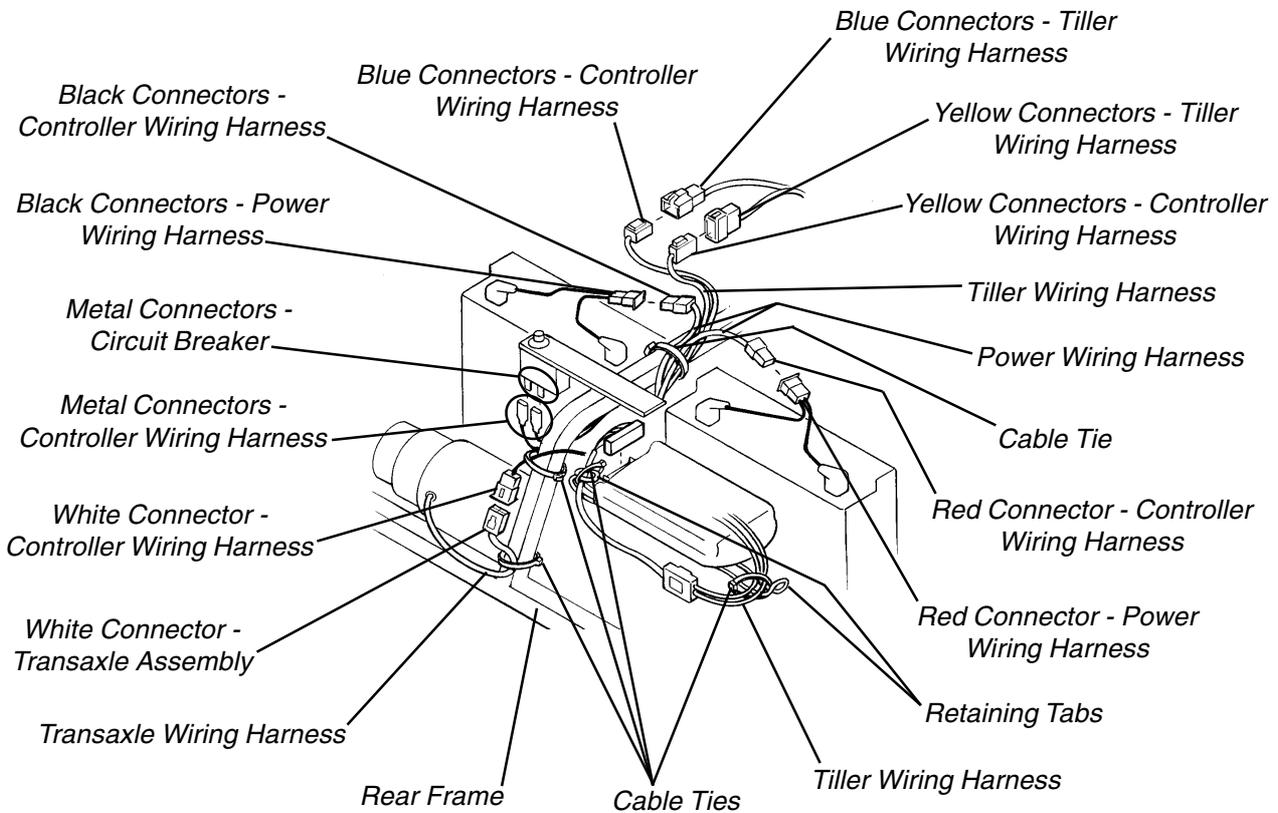


FIGURE 3 - REMOVING/INSTALLING CONTROLLER HARNESSSES - LYNX SX - 3P AND LYNX SX 3

Lynx LX - 3 and Panther LX - 4 (FIGURE 4)

REMOVING.

1. Disconnect the controller wires. Refer to DISCONNECTING/CONNECTING CONTROLLER WIRES in this procedure of the manual.
2. Disconnect the **RED** and **BLACK** connectors of the power wiring harnesses from the **RED** and **BLACK** connectors of the controller wiring harnesses.
3. Disconnect the **WHITE** connector of the transaxle assembly wiring harness from the **WHITE** connector of the controller wiring harness.

NOTE: Note of the positions of the metal connectors before removing for proper reinstallation.

4. Disconnect the metal connectors of the controller wiring harnesses from the metal connectors of the circuit breaker.
5. Disconnect the **BLUE** connector of the tiller wiring harness from the **BLUE** connector of the controller wiring harness.
6. Disconnect the **YELLOW** connector of the tiller wiring harness from the **YELLOW** connector of the controller wiring harness.

7. Cut the cable tie securing the transaxle wiring harness to the rear frame.
8. Cut the cable tie securing the power wiring harnesses to the rear frame.
9. Remove the tiller wiring harness from the retaining tab.
10. Remove the wiring harnesses from the scooter.

5. Connect the **WHITE** connector of the transaxle assembly wiring harness to the **WHITE** connector of the controller wiring harness.

NOTE: Be sure the metal connectors are in the positions noted in STEP 2 of REMOVAL.

INSTALLING.

1. Position the tiller wiring harnesses in the retaining tabs.
2. Secure the power wiring harnesses to the rear frame using **NEW** cable ties.
3. Secure the transaxle wiring harness to the rear frame using a **NEW** cable tie.
4. Connect the **RED** and **BLACK** connectors of the power wiring harnesses to the **RED** and **BLACK** connectors of the controller wiring harnesses.

6. Connect the metal connectors of the power wiring harnesses to the metal connectors of the circuit breaker.
7. Connect the **BLUE** connector of the tiller wiring harness to the **BLUE** connector of the controller wiring harness.
8. Connect the **YELLOW** connector of the tiller wiring harness to the **YELLOW** connector of the controller wiring harness.
9. Reinstall the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
10. Reinstall the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.

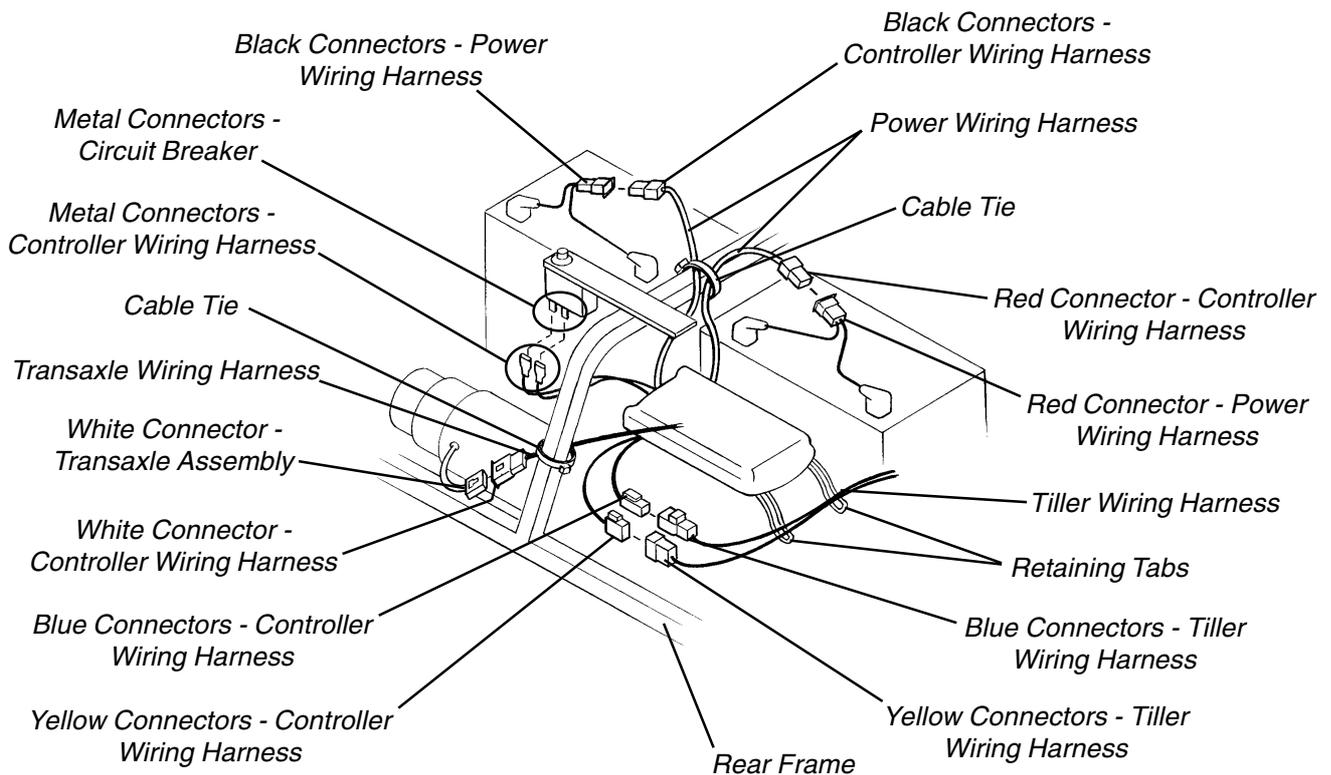


FIGURE 4 - REMOVING/INSTALLING CONTROLLER HARNESSES - LYNX LX - 3 AND PANTHER LX - 4

Panther MX - 4 (FIGURE 5)

REMOVING.

1. Disconnect the controller wires. Refer to DISCONNECTING/CONNECTING CONTROLLER WIRES in this procedure of the manual.
2. Disconnect the **RED** and **BLACK** connectors of the power wiring harnesses from the **RED** and **BLACK** connectors of the controller wiring harnesses.
3. Disconnect the **WHITE** connector of the transaxle assembly wiring harness from the **WHITE** connector of the controller wiring harness.

NOTE: Note of the positions of the metal connectors before removing for proper reinstallation.

4. Disconnect the metal connectors of the controller wiring harnesses from the metal connectors of the circuit breaker.
5. Disconnect the **WHITE** connector of the tiller wiring harness from the **WHITE** connector of the controller wiring harness
6. Cut the cable tie securing power wiring harnesses and the metal connector wiring harness to the rear frame.
7. Cut the cable tie securing the metal connector wiring harnesses to the retaining tab.
8. Remove the metal connector wiring harnesses from the retaining tab.

9. Cut the cable tie securing the tiller wiring harness to the rear frame.
10. Cut the cable tie securing the main control housing wiring harnesses to the retaining tab.
11. Remove the wiring harnesses from the scooter.

INSTALLING.

1. Position the metal connector wiring harnesses in the retaining tab.
2. Secure the metal connector wiring harness into the retaining tab using **NEW** cable ties.
3. Secure the power wiring harnesses and the metal connector wiring harness to the rear frame using **NEW** cable ties.
4. Secure the tiller wiring harness to the rear frame using **NEW** cable ties.
5. Secure the main control housing wiring harnesses to the retaining tab using a **NEW** cable tie.
6. Connect the **RED** and **BLACK** connectors of the power wiring harnesses to the **RED** and **BLACK** connectors of the controller wiring harnesses.
7. Connect the **WHITE** connector of the transaxle assembly wiring harness to the **WHITE** connector of the controller wiring harness.

NOTE: Be sure the metal connectors are in the positions noted in STEP 2 of REMOVAL.

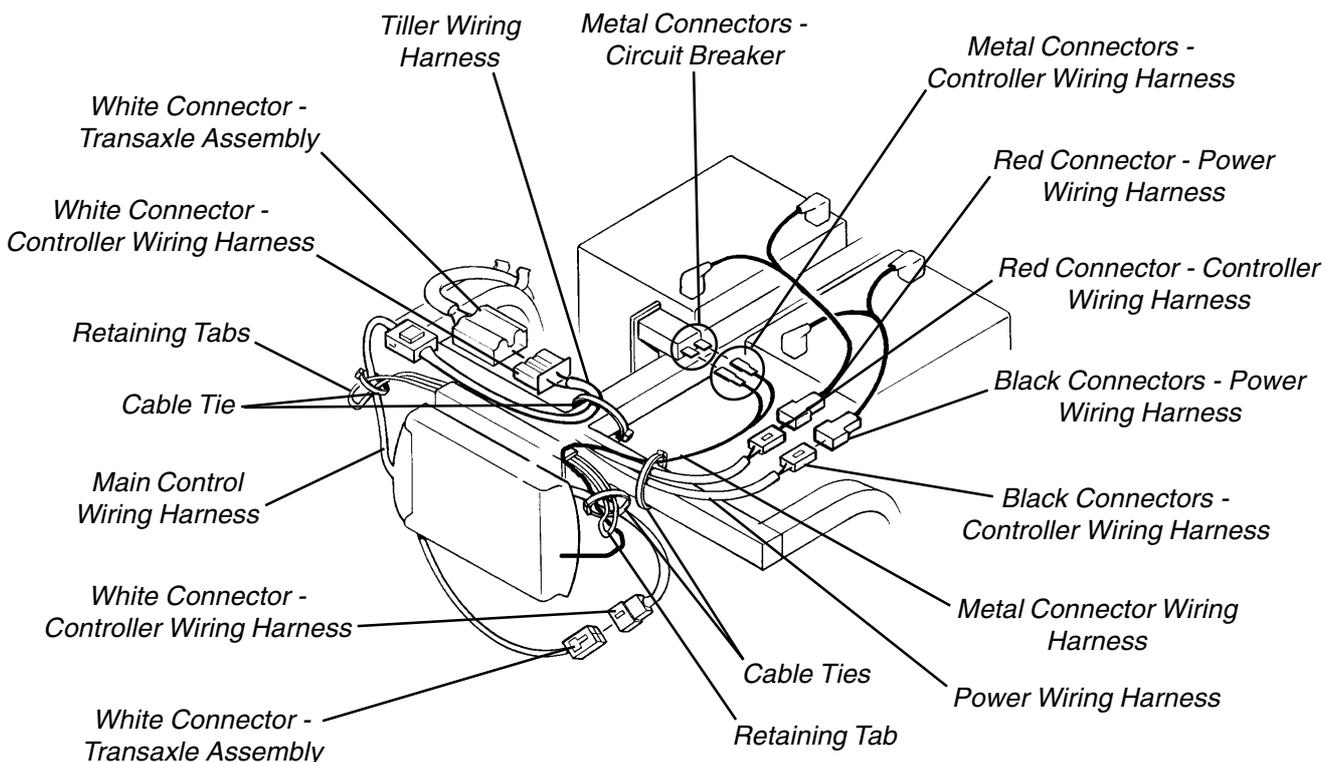


FIGURE 5 - REMOVING/INSTALLING CONTROLLER HARNESSSES - PANTHER MX - 4

8. Connect the metal connectors of the power wiring harnesses to the metal connectors of the circuit breaker.
9. Connect the **WHITE** connector of the tiller wiring harness to the **WHITE** connector of the controller wiring harness
10. Reinstall the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
11. Reinstall the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.

REPLACING CIRCUIT BREAKER (FIGURE 6)

Note: Note the proper positions of the metal connectors before removing for proper reinstallation.

1. Remove the **RED** and **BLACK** metal connectors of the power cables from the metal connectors of the circuit breaker.
2. Remove the nut and washer that secures the circuit breaker to the rear frame assembly.
3. Remove the washer from the circuit breaker.
4. Remove the circuit breaker.
5. Position the **NEW** circuit breaker so that it passes through the mounting hole in the rear frame assembly.
6. Position the **NEW** washer on the circuit breaker.
7. Position the **NEW** nut on the end of the circuit breaker and securely tighten.

NOTE: Be sure the metal connectors are positioned as noted above.

8. Connect the **RED** and **BLACK** connectors of the power cables to the metal connectors on the **NEW** circuit breaker as noted from STEP 1.

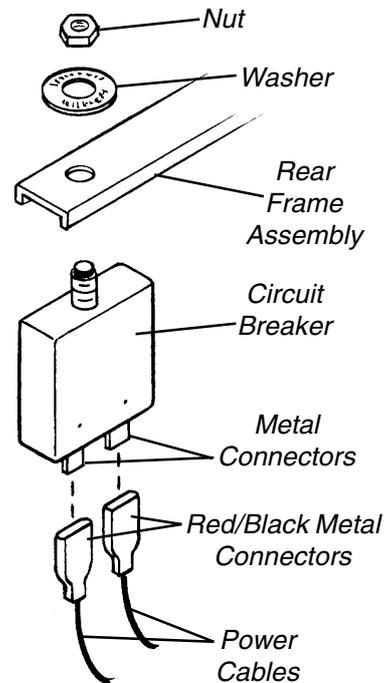


FIGURE 6 - REPLACING CIRCUIT BREAKER

C O N T R O L L E R

This Procedure Includes the Following:

Replacing Tiller Charge Port Cover

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.

Turn Power OFF and remove key from ignition. Disconnect battery harness from the motor lead.

REPLACING TILLER CHARGER PORT COVER (FIGURE 1)

*NOTE: Save the two (2) mounting screws and self-locking nuts for reuse when installing the **NEW** tiller charger port cover.*

1. Remove the two (2) mounting screws and self-locking nuts securing the tiller charger port cover to the tiller assembly.
2. Remove the tiller charger port cover from the tiller assembly.
3. Align the mounting holes in the **NEW** tiller charger port cover with the mounting holes in the tiller assembly.
4. Secure the **NEW** tiller charger port cover to the tiller assembly using the two (2) **EXISTING** mounting screws and self-locking nuts. Securely tighten.

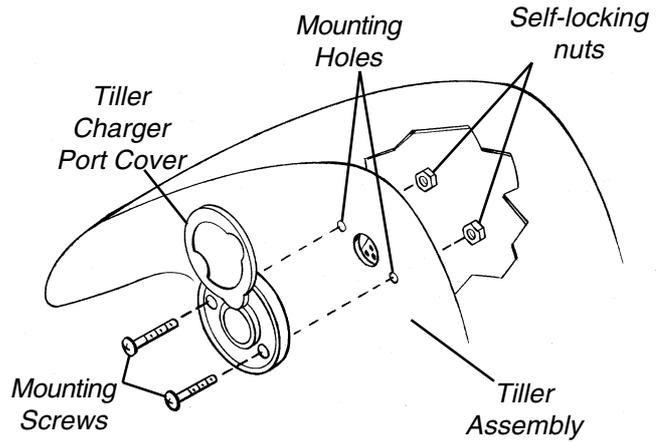


FIGURE 1 - REPLACING TILLER CHARGER PORT COVER

This Procedure Includes the Following:**Removing/Installing Head light Assembly****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.

Turn Power OFF and remove key from ignition. Disconnect battery harness from the motor lead.

REMOVING/INSTALLING HEAD LIGHT ASSEMBLY (FIGURE 1)**Removing**

NOTE: Partial disassembly of the tiller assembly is required to remove the head light assembly.

1. Perform SECTIONS "A" and "D" in REMOVING/INSTALLING TILLER ASSEMBLY in PROCEDURE 3 of this manual.
2. Pull back the plastic guards on the **RED** and **BLACK** cables connecting the tiller wiring harness to the head light assembly.
3. Disconnect the **RED** and **BLACK** cable metal connectors of the head light assembly from the **RED** and **BLACK** cable metal connectors of the tiller wiring harness.
4. Separate the head light assembly from the tiller wiring harness.

Installing

1. Connect the **RED** cable metal connector of the head light assembly to the **RED** cable metal connector of the tiller wiring harness.
2. Connect the **BLACK** cable metal connector of the head light assembly to the **BLACK** cable metal connector of the tiller wiring harness.
3. Reposition the plastic guards on the **RED** and **BLACK** cables connecting the tiller wiring harness to the head light assembly.
4. Perform SECTIONS "D" and "A" in PROCEDURE 3 - REMOVING/INSTALLING TILLER ASSEMBLY in the TILLER section of this manual.

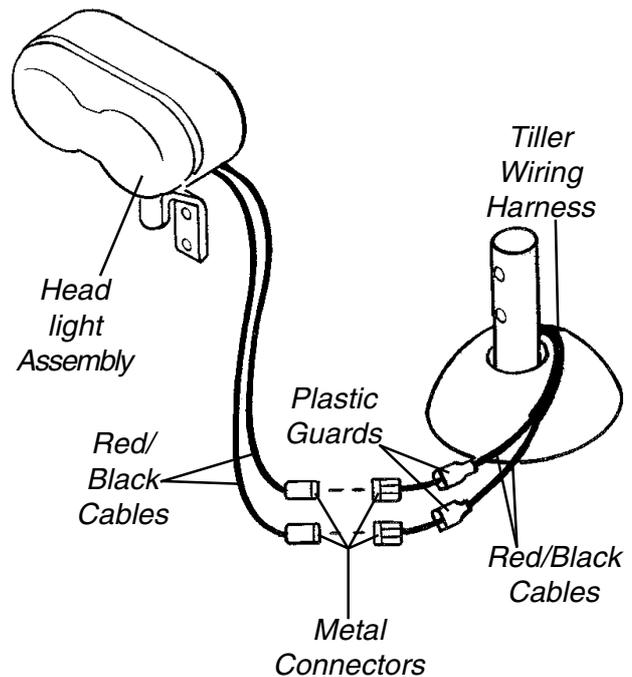


FIGURE 1 - REMOVING/INSTALLING HEAD LIGHT ASSEMBLY

This Procedure Includes the Following:

- Removing/Installing Head Light Assembly*
- Replacing Tiller Charge Port Cover*
- Replacing Cushion/Front Bumper Assembly*

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.

Turn Power OFF and remove key from ignition. Disconnect battery harness from the motor lead.

REMOVING/INSTALLING HEAD LIGHT ASSEMBLY (FIGURE 1)

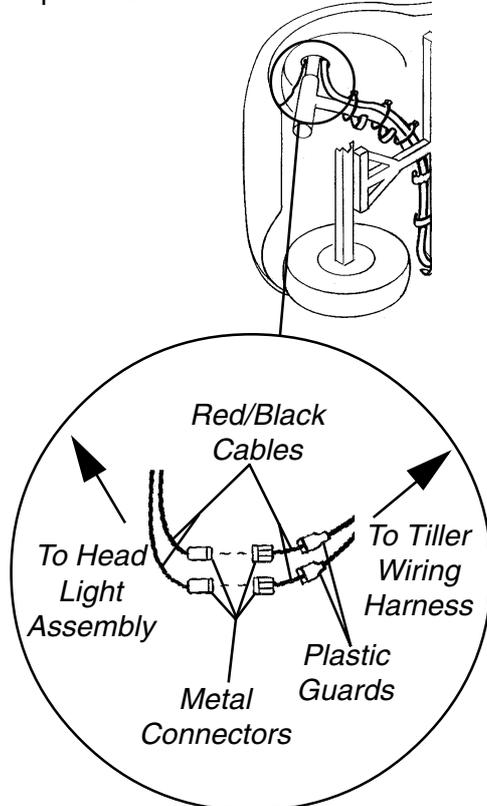
Removing

1. Flip the scooter onto its side.
2. Pull back the plastic guards on the **RED** and **BLACK** cables connecting the tiller wiring harness to the head light assembly (DETAIL "A").
3. Disconnect the **RED** and **BLACK** cable metal connectors of the head light assembly from the **RED** and **BLACK** cable metal connectors of the tiller wiring harness (DETAIL "A").
4. Remove the bolt, self-locking nut, spring washer, and washer securing the head light assembly to the front frame assembly.
5. Separate the head light assembly from the front frame assembly.

Installing

1. Align the bolt in the head light assembly with the mounting holes in the front frame assembly.
2. Secure the head light assembly to the front frame assembly using the washer, spring washer and self-locking nut. Securely tighten.
3. Connect the **RED** cable metal connector of the head light assembly to the **RED** cable metal connector of the tiller wiring harness (DETAIL "A").
4. Connect the **BLACK** cable metal connector of the head light assembly to the **BLACK** cable metal connector of the tiller wiring harness (DETAIL "A").

5. Reposition the plastic guards over the metal connectors on the **RED** and **BLACK** cables connecting the tiller wiring harness to the head light assembly (DETAIL "A").
6. Return the front frame assembly to the upright position.



DETAIL "A"

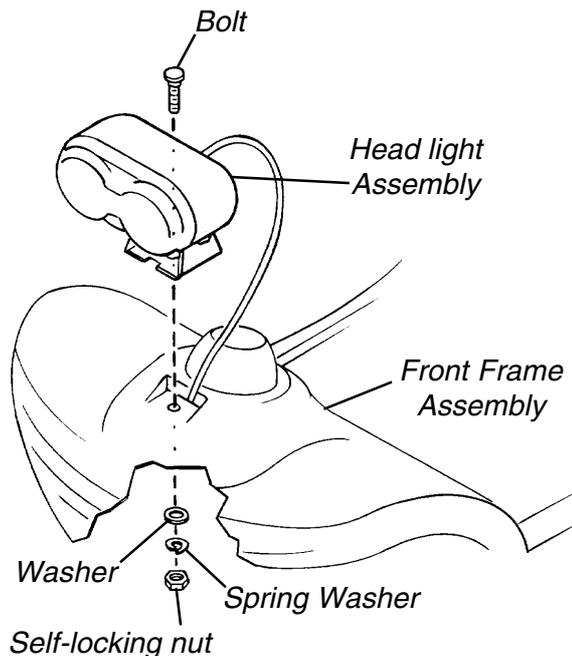


FIGURE 1 - REMOVING/INSTALLING HEAD LIGHT ASSEMBLY

REPLACING TILLER CHARGER PORT COVER (FIGURE 2)

NOTE: Save the two (2) mounting screws and self-locking nuts for reuse when installing the NEW tiller charger port cover.

1. Remove the two (2) mounting screws and self-locking nuts securing the tiller charger port cover to the tiller assembly.
2. Remove the tiller charger port from the tiller assembly.
3. Align the mounting holes in the **NEW** tiller charger port cover with the mounting holes in the tiller assembly.
4. Secure the **NEW** tiller charger port cover to the tiller assembly using the two (2) **EXISTING** mounting screws and self-locking nuts. Securely tighten.

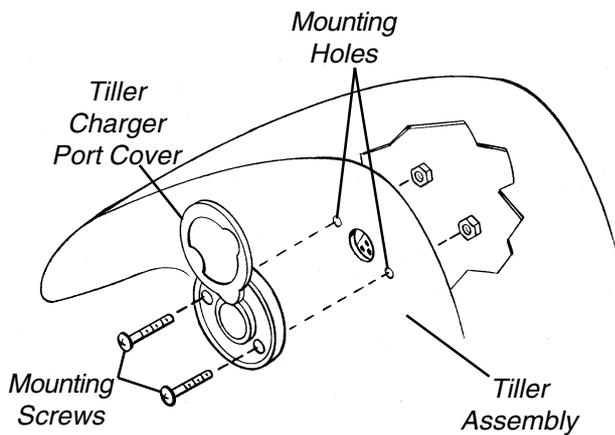


FIGURE 2 - REPLACING TILLER CHARGE PORT COVER

REPLACING CUSHION/FRONT BUMPER ASSEMBLY (FIGURE 3)

Removing The Front Bumper Assembly

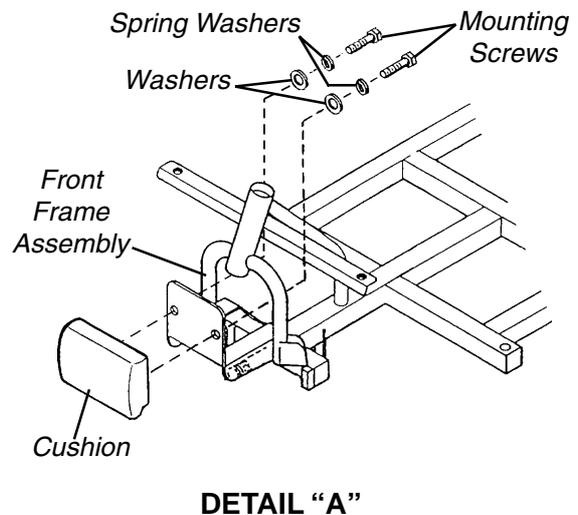
CUSHION (DETAIL "A").

1. Position the scooter on its side.
2. Remove the two (2) mounting screws, spring washers and washers securing the cushion to the front frame assembly.
3. Remove the cushion from the front frame assembly
4. Align the two (2) mounting holes in the **NEW** cushion with the mounting holes in the front frame assembly.

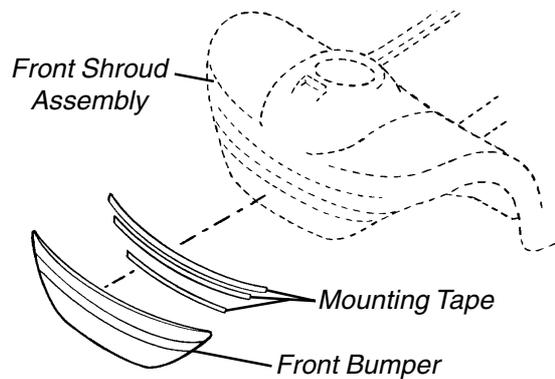
5. Secure the **NEW** cushion to the front frame assembly using the two (2) **NEW** mounting screws, spring washers and washers. Securely tighten.
6. Return the scooter to the upright position.

FRONT BUMPER (DETAIL "B").

1. Grasp the front bumper firmly and pull it away from the front shroud assembly.
2. Position the mounting tape on the bottom of the front shroud assembly.
3. Position the **NEW** bumper on the mounting tape on the front shroud assembly.



DETAIL "A"



DETAIL "B"

FIGURE 3 - REPLACING CUSHION/FRONT BUMPER ASSEMBLY

REPLACEMENT PARTS PANTHER LX 4

<p>This Procedure Includes the Following:</p> <p><i>Removing/Installing Head Light Assembly</i></p> <p><i>Replacing Tail Light Assembly</i></p> <p><i>Replacing Tail Light Cable</i></p> <p><i>Replacing Disc Brake Assembly</i></p> <p><i>Replacing Disc Brake Shoes</i></p> <p><i>Replacing Hand Brake Assembly</i></p> <p><i>Rmoving/Installing Front Shock Absorbers</i></p> <p><i>Removing/Installing Rear Shock Absorbers</i></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 occur.

Turn Power OFF and remove key from ignition. Disconnect battery harness from the motor lead.

REMOVING/INSTALLING HEAD LIGHT ASSEMBLY (FIGURE 1)

Removing

1. Separate the front frame assembly from the rear frame assembly. Refer to TRANSPORTING THE SCOOTER in PROCEDURE 10 of the Owner's Manual, part number 1090132.
2. Flip the front frame assembly onto its side.
3. Pull back the plastic guards on the **RED** and **BLACK** cables connecting the tiller wiring harness to the head light assembly.
4. Disconnect the **RED** and **BLACK** cable metal connectors of the head light assembly from the **RED** and **BLACK** cable metal connectors of the tiller wiring harness.
5. Remove the two (2) screws, spring washers and washers securing the front bumper and rubber spacer onto the front shroud assembly.
6. Remove the front bumper and rubber spacer from the front shroud assembly.
7. Remove the screw, spring washer and washer from the plate securing the top of the head light assembly to the front shroud assembly.

NOTE: Before removing the mounting hardware from the long screw, be sure to take note of the proper position for each components.

8. Remove the two (2) self-locking nuts, three (3) washers, spring washer, spring and the long screw securing the bottom of the head light assembly to the bracket on the front frame assembly.
9. Remove the head light assembly from the front shroud assembly.

Installing

1. Position the head light assembly through the front shroud assembly so the mounting holes on the top and bottom of the head light assembly align with the mounting holes on the top and bottom of the front shroud assembly.
2. Position the long screw through the bottom hole in the front shroud assembly, making sure there is a washer on either side of the front shroud assembly.
3. Position one (1) nut on the long screw, so that it is flush against the washer on the inside of the front shroud assembly.
4. Position the long screw through the bottom hole on the head light assembly.
5. Position the spring and one (1) washer on the long screw so that the spring is between the head light assembly and the bracket on the front frame assembly.
6. Position the long screw so that it passes through the bracket on the front frame assembly.
7. Secure the long screw to the bracket assembly using one (1) spring washer and self-locking nut. Securely tighten.
8. Position the plate on the **TOP** of the head light assembly making sure the mounting holes in the plate lines up with the **TOP** mounting hole in the front shroud assembly.
9. Secure the plate to the front shroud assembly using one (1) screw, spring washer and washer. Securely tighten.
10. Connect the **RED** cable metal connector of the head light assembly in the **RED** cable metal connector of the tiller wiring harness.
11. Connect the **BLACK** cable metal connector of the head light assembly in the **BLACK** cable metal connector of the tiller wiring harness.
12. Reposition the plastic guards on the **RED** and **BLACK** cables connecting the tiller wiring harness to the head light assembly.

13. Position the rubber spacer and the front bumper so that the mounting holes in the rubber spacer and the front bumper align with the mounting holes in the front shroud assembly.
14. Secure the rubber spacer and the front bumper to the front shroud assembly using the two (2) screws, spring washers and washers. Securely tighten.
15. Return the front frame assembly to the upright position.
16. Reassemble the front frame assembly and the rear frame assembly. Refer to TRANSPORTING THE SCOOTER in PROCEDURE 10 of the Owner's Manual, part number 1090132.

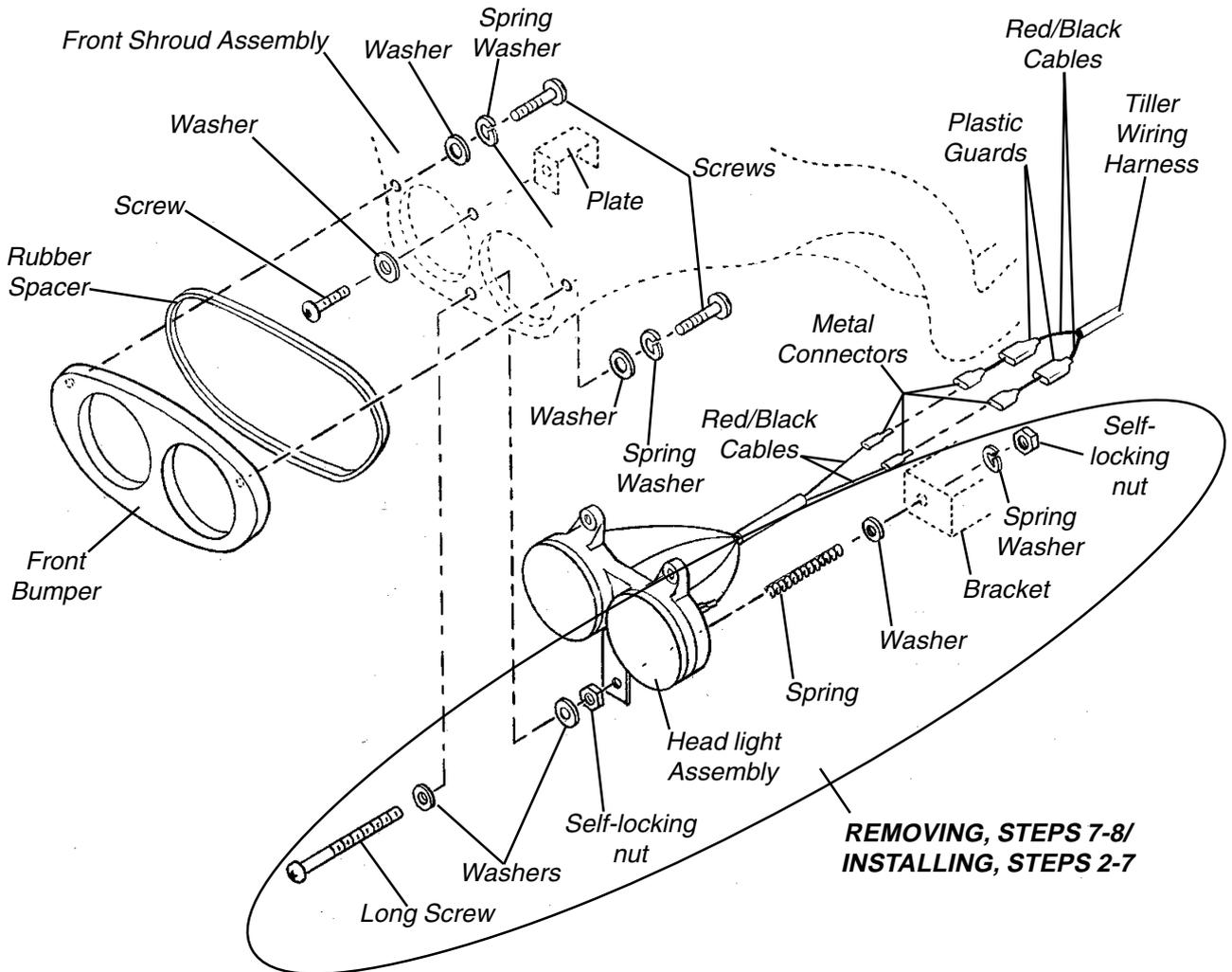


FIGURE 1 - REMOVING/INSTALLING HEAD LIGHT ASSEMBLY

REPLACEMENT PARTS

PANTHER MX 4

REPLACING TAIL LIGHT ASSEMBLY (FIGURE 2)

1. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
2. Disconnect the tail light assembly from the tail light cable by performing STEPS 2-3 in REPLACING TAIL LIGHT CABLE in this procedure of this manual.
3. From outside of the rear shroud, grasp the locking tabs on the back of the tail light assembly, and squeeze them together.
4. From outside of the rear shroud, slowly pull the tail light assembly and the rubber spacer through steel plate and the holes in the rear shroud.
5. Remove the steel plate from the inside of the rear shroud.
6. Align the **NEW** tail light assembly with the hole in the rear shroud.

*NOTE: To ensure the tail light assembly is installed securely, be sure to position the rubber spacer between the **OUTSIDE** of the rear shroud and the tail light assembly.*

7. Push the locking tabs of the **NEW** tail light assembly through the rubber spacer and through the hole in the rear shroud until they "snap" into place.
8. Thread the cables of the **NEW** tail light assembly through the **NEW** steel plate, and position the **NEW** steel plate over the locking tabs on the **NEW** tail light assembly
9. Connect the tail light assembly to the tail light cable by performing STEPS 6-8 in REPLACING TAIL LIGHT CABLE in this procedure of this manual.
10. Reinstall the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.

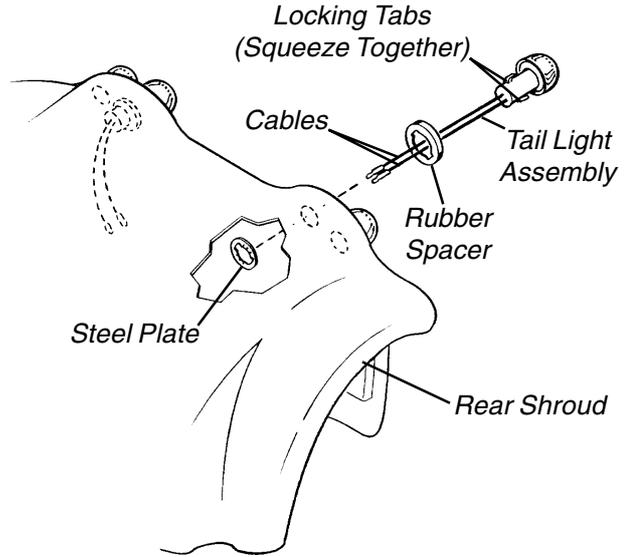


FIGURE 2 - REPLACING TAIL LIGHT ASSEMBLY

REPLACING TAIL LIGHT CABLES (FIGURE 3)

1. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
2. Pull back the plastic guards on the **RED** and **BLACK** cables connecting the tail light cable to the tail light assembly.
3. Remove the **RED** and **BLACK** cable metal connectors of the tail light assembly from the **RED** and **BLACK** cable metal connectors of the tail light cable.
4. Remove the tail light cable.
5. Position the **RED** cable connector of the **NEW** tail light assembly in the **RED** cable metal connector of the of the tail light cable.
6. Position the **BLACK** cable connector of the **NEW** tail light assembly in the **BLACK** cable metal connector of the of the tail light cable.
7. Reposition the plastic guards on the **RED** and **BLACK** cables connecting the **NEW** tail light cable to the tail light assembly.
8. Reinstall the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.

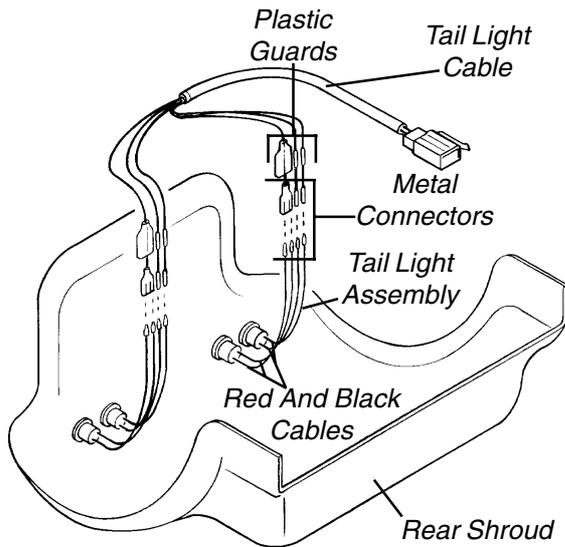


FIGURE 3 - REPLACING TAIL LIGHT CABLES

REPLACING DISC BRAKE ASSEMBLY (FIGURE 4)

Removing The Disc Brake Assembly

1. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.
2. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
3. Remove the rear wheels. Refer to REMOVING/INSTALLING THE REAR WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
4. Disconnect the hand brake cable assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY, SECTION "B" - DISCONNECTING/CONNECTING HAND BRAKE CABLE ASSEMBLY in PROCEDURE 4 of this manual.
5. Remove the four (4) hex - cap screws and spring washers securing the disc brake assembly to the transaxle assembly.
6. Remove the disc brake assembly.
7. Align the **NEW** disc brake assembly with the mounting holes in the transaxle assembly.

CAUTION

DO NOT overtighten the four (4) hex cap screws securing the disc brake assembly to the transaxle assembly. Otherwise, damage to the disc brake assembly may occur.

8. Secure the **NEW** disc brake assembly to the transaxle assembly using the four (4) **NEW** hex - cap screws and spring washers. Torque the hex cap screws between 43 - 61 in./lbs.
9. Reconnect the hand brake cable assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY, SECTION "B" - DISCONNECTING/CONNECTING HAND BRAKE CABLE ASSEMBLY in PROCEDURE 4 of this manual.
10. Reinstall the rear wheels. Refer to REMOVING/INSTALLING THE REAR WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
11. Reinstall the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
12. Reinstall the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.

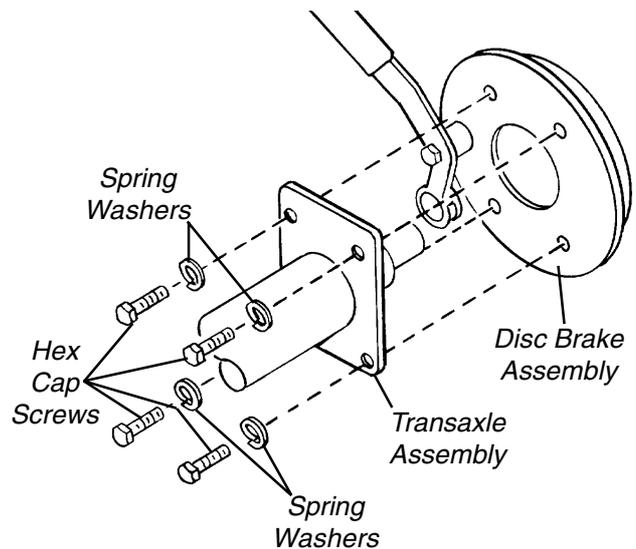


FIGURE 4 - REPLACING DISC BRAKE ASSEMBLY

REPLACING DISC BRAKE SHOES (FIGURE 5)

1. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.
2. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
3. Remove the rear wheels. Refer to REMOVING/INSTALLING THE REAR WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.

4. Disconnect the hand brake cable assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY, SECTION "B" - DISCONNECTING/CONNECTING HAND BRAKE CABLE ASSEMBLY in PROCEDURE 4 of this manual.
 5. Remove the self-locking nut and washer securing the brake arm to the cam.
- NOTE: Save the spring for reuse when installing the NEW disc brake shoes.*
6. Remove the spring securing the two (2) disc brake shoes to the brake disc.
 7. Remove the two (2) disc brake shoes.
 8. Position the two (2) **NEW** disc brake shoes on the disc brake and around the cam.
 9. Secure the **NEW** disc brake shoes to the disc brake using the **EXISTING** spring.
 10. Position the brake arm so the two (2) mounting holes in the brake arm align with the cam.

CAUTION

DO NOT overtighten the self locking nut securing the brake arm to the cam. Otherwise, damage to the brake arm may occur.

11. Secure the brake arm to the cam using the **EXISTING** self-locking nut and washer. Torque the self-locking nut between 86 - 122 in./lbs.
12. Reconnect the hand brake cable assembly. Refer to REMOVING/INSTALLING TILLER ASSEMBLY, SECTION "B" - DISCONNECTING/CONNECTING HAND BRAKE CABLE ASSEMBLY in PROCEDURE 4 of this manual.
13. Reinstall the rear wheels. Refer to REMOVING/INSTALLING THE REAR WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
14. Reinstall the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.

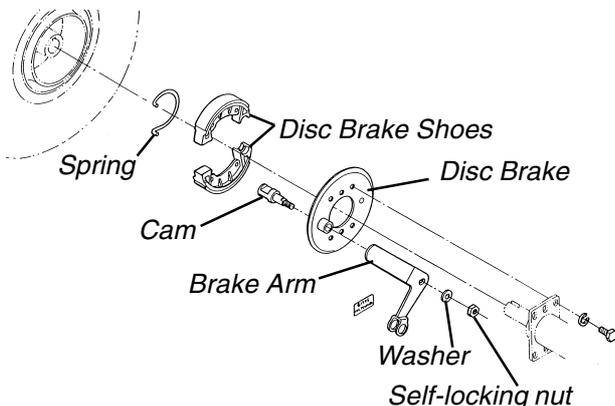


FIGURE 5 - REPLACING DISC BRAKE ASSEMBLY

15. Reinstall the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.

REPLACING HAND BRAKE ASSEMBLY (FIGURE 6)

1. Remove the bolt securing hand brake assembly to the handle bar. Refer to DETAIL "A".
2. Unscrew the adjusting nut from the cable lock and hand brake assembly. Refer to DETAIL "B".
3. Align the slit in the cable lock with the brake cable, and remove the cable lock. Refer to DETAIL "C".
4. Align the slit in the adjusting nut with the brake cable, and remove the adjusting nut. Refer to DETAIL "C".

NOTE: Note the position of the the hand brake assembly before removing for proper reinstallation.

5. Slide the hand brake assembly toward the tiller until there is slack in the brake cable.
6. Maneuver the brake cable through the two (2) slits in the hand brake assembly until the brake cable is free from the hand brake assembly (DETAIL "D").
7. Remove the hand brake assembly from the handle bar.
8. Position the **NEW** hand brake assembly onto the handle bar.

NOTE: In order to perform the next step, the NEW hand brake assembly should be positioned close enough to the tiller so that there is approximately two (2) inches of slack in the brake cable.

9. Maneuver the brake cable through the two slits in the **NEW** hand brake assembly, making sure the ball at the end of the brake cable is in the proper position in the brake housing. Refer to DETAIL "D".
10. Slide the **NEW** hand brake assembly away from the tiller, until it is in the original mounting position.
11. Align the slit in the **NEW** adjusting nut with the brake cable, and position the **NEW** adjusting nut on the brake cable. Refer to DETAIL "C".
12. Align the slit in the **NEW** cable lock with the brake cable, and position the **NEW** cable lock on the brake cable. Refer to DETAIL "C".
13. Screw the **NEW** cable lock into the **NEW** adjusting nut and hand brake assembly. Refer to DETAIL "B". Securely tighten.

14. Install the **NEW** bolt securing the **NEW** hand brake assembly to the handle bar. Refer to DETAIL "A". Securely tighten.

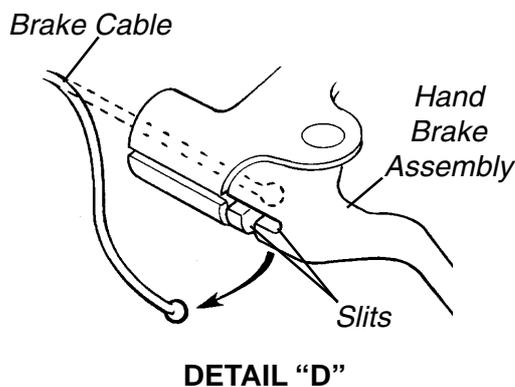
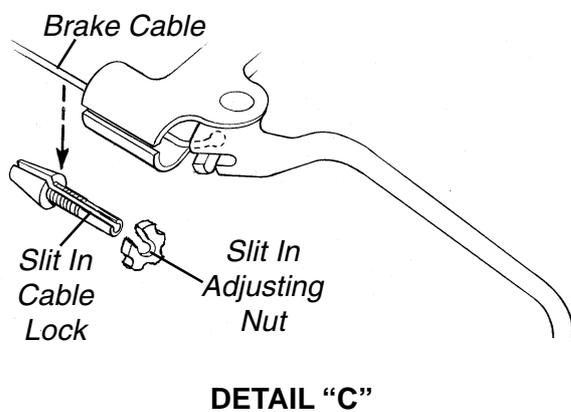
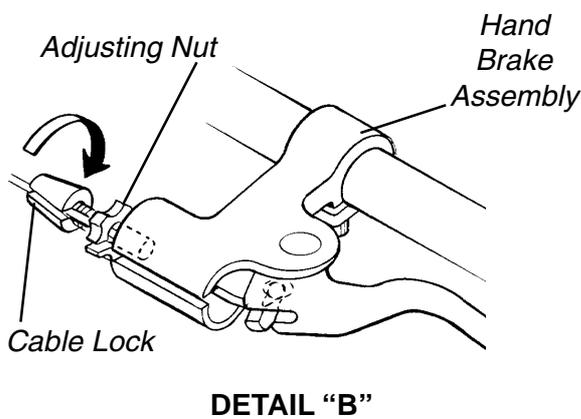
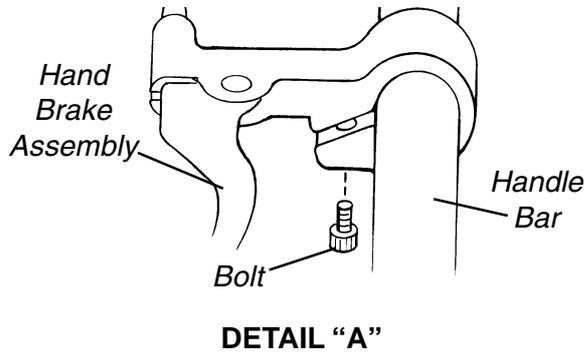


FIGURE 6 - REPLACING HAND BRAKE ASSEMBLY

REMOVING/INSTALLING FRONT SHOCK ABSORBERS (FIGURE 7)

Removing

1. Separate the front frame assembly from the rear frame assembly. Refer to TRANSPORTING THE SCOOTER in PROCEDURE 10 of the Owner's Manual, part number 1090132.
2. Remove the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
3. Flip the front frame assembly onto its side.
4. Remove the **TOP** bolt on the right front shock absorber.
5. Remove the **BOTTOM** bolt on the right front shock absorber.
6. Slide the right front shock absorber away from the front frame assembly.
7. If necessary, repeat this procedure for the other front shock absorber.

Installing

1. Slide the right front shock absorber onto the front frame assembly, aligning the mounting hole in the bottom of the right front shock absorber with the mounting holes in the tie rod assembly.

CAUTION

DO NOT overtighten the bolt securing the right front shock absorber to the tie rod assembly. Otherwise, damage to the right front shock absorber may occur.

2. Install one (1) bolt through the **BOTTOM** mounting hole in the right front shock absorber and the **BOTTOM** mounting holes in the tie rod assembly. Torque the hex cap screws between 122 - 148 in./lbs.
3. Align the mounting hole in the **TOP** of the right front shock absorber with the mounting holes in the front frame.

CAUTION

DO NOT overtighten the bolt securing the right front shock absorber to the front frame assembly. Otherwise, damage to the right front shock absorber may occur.

4. Install one (1) bolt through the **TOP** mounting hole of the right front shock absorber and the **TOP** mounting holes in the front frame assembly. Torque the hex cap screws between 122 - 148 in./lbs.

5. If necessary, repeat this procedure for the other front shock absorber.
6. Return the front frame assembly to the upright position.
7. Reinstall the front wheels. Refer to REMOVING/INSTALLING THE FRONT WHEELS in PROCEDURE 9 of the Owner's Manual, part number 1090132.
8. Reassemble the front frame assembly and the rear frame assembly. Refer to TRANSPORTING THE SCOOTER in PROCEDURE 10 of the Owner's Manual, part number 1090132.

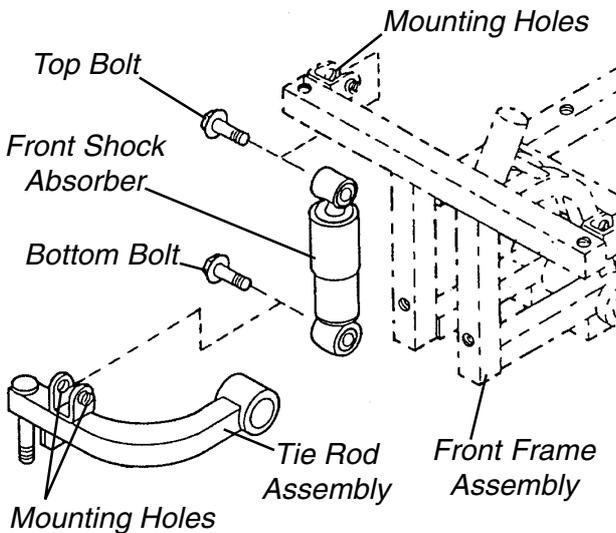


FIGURE 7 - REMOVING/INSTALLING FRONT SHOCK ABSORBER

REMOVING/INSTALLING REAR SHOCK ABSORBERS (FIGURE 8)

Removing

1. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.
2. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
3. Remove the **TOP** bolt on the right rear shock absorber.
4. Remove the **BOTTOM** bolt on the right rear shock absorber.
5. Slide the right rear shock absorber away from the rear frame.
6. If necessary, repeat this process for the other rear shock absorber.

Installing

*NOTE: When installing the bolts for the rear shock absorber, the **TOP** and **BOTTOM** bolts should be facing opposite directions.*

1. Slide the right rear shock absorber onto the rear frame assembly, aligning the mounting hole in the **BOTTOM** of the right rear shock absorber with the mounting holes in the rear frame assembly.

CAUTION

DO NOT overtighten the bolt securing the right rear shock absorber to the rearframe assembly. Otherwise, damage to the right rear shock absorber may occur.

2. Install one (1) bolt through the **BOTTOM** mounting hole in the right rear shock absorber and the **BOTTOM** mounting holes in the rear frame assembly, making sure the bolt is facing **AWAY** from the controller. Torque the hex cap screws between 122 - 148 in./lbs.
3. Align the mounting hole in the **TOP** of the right rear shock absorber with the mounting holes in the rear frame.

CAUTION

DO NOT overtighten the bolt securing the right rear shock absorber to the rear frame assembly. Otherwise, damage to the right rear shock absorber may occur.

4. Install one (1) bolt through the **TOP** mounting hole in the right rear shock absorber and the **TOP** mounting holes in the rear frame assembly, making sure the bolt is facing **TOWARD** the controller. Torque the hex cap screws between 122 - 148 in./lbs.
5. Repeat this procedure for the other rear shock absorber.
6. Reinstall the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
7. Reinstall the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.

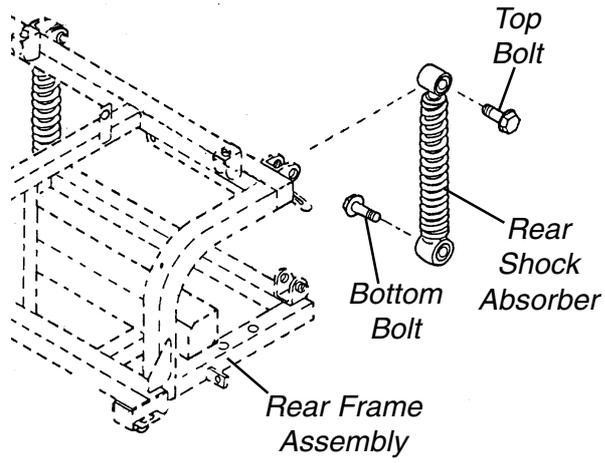


FIGURE 8 - REMOVING/INSTALLING REAR SHOCK ABSORBER

REPLACEMENT PARTS

PANTHER MX 4

This Procedure Includes the Following:
Preparing the Scooter for Left Hand Operation

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.
 Turn Power OFF and remove key from ignition. Disconnect battery harness from the motor lead.

PREPARING THE SCOOTER FOR LEFT HAND OPERATION (FIGURE 1)

1. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.
2. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
3. Remove the batteries. Refer to REMOVING/INSTALLING BATTERIES WITH CABLES in PROCEDURE 4 of the Owner's Manual, part number 1090132.
4. Perform one (1) of the following:
 ALL models EXCEPT the **PANTHER MX - 4 -**
 A. Disconnect the YELLOW connector of the tiller wiring harness from the YELLOW connector of the controller wiring harness.
PANTHER MX - 4 -
 A. Disconnect the WHITE connector of the tiller wiring harness from the WHITE connector of the controller wiring harness.
 B. Gently pull open the hinged strain relief on the rear of the WHITE connector of the tiller wiring harness.
5. Locate the YELLOW wire coming out of the rear of the YELLOW or WHITE connector (depending on scooter model) of the tiller wiring harness.
6. Insert a small, pointed tool into the FRONT of the YELLOW or WHITE connector (depending on scooter model) of the tiller wiring harness, directly under the MALE pin of the YELLOW wire.
7. Push up on and hold the plastic tang under the male pin of the YELLOW wire.

8. While performing STEP 7, pull the YELLOW wire out from the back of the YELLOW or WHITE connector (depending on scooter model) of the tiller wiring harness.
9. Repeat STEPS 5-8 for the ORANGE wire coming out of the rear of the YELLOW or WHITE connector (depending on scooter model) of the tiller wiring harness.
10. Align the MALE pin of the YELLOW wire with the slot formerly occupied by the MALE pin of the ORANGE wire in the REAR of the YELLOW or WHITE connector (depending on scooter model) of the tiller wiring harness.
11. Push the MALE pin of the YELLOW wire forward through the slot until it "clicks" into place.
12. Repeat STEPS 10-11 to position the MALE pin of the ORANGE wire into the slot formerly occupied by the MALE pin of YELLOW wire.

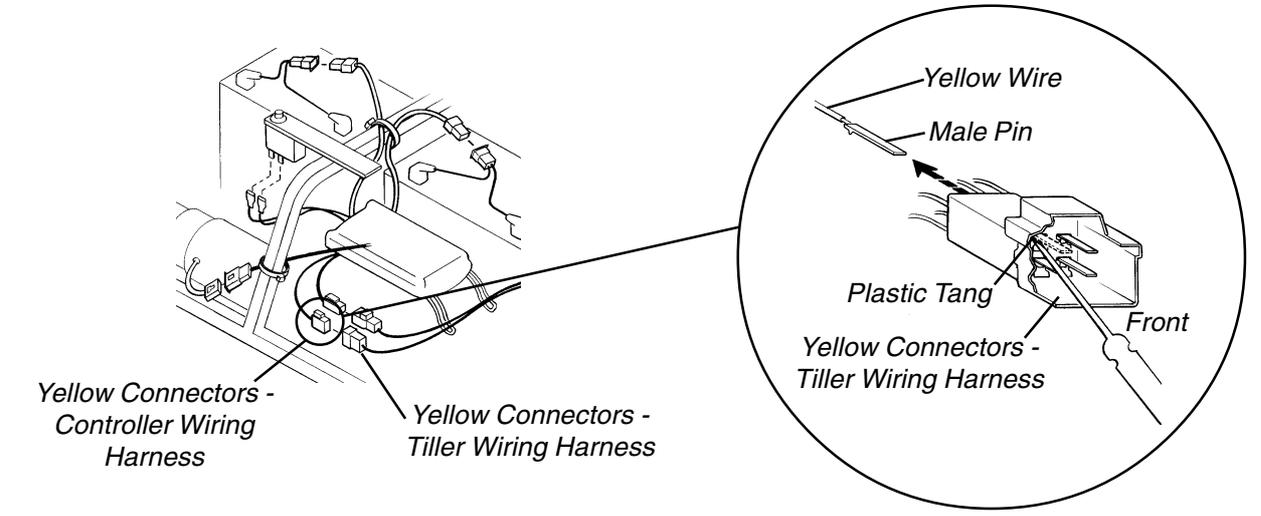
NOTE: WHEN the YELLOW or WHITE connector (depending on scooter model) of the tiller wiring harness and the YELLOW or WHITE connector (depending on scooter model) of the controller wiring harness are reconnected, the mating of the wires coming out of the rear of the connectors should be YELLOW to ORANGE.

13. Perform one (1) of the following:
 ALL models EXCEPT the **PANTHER MX - 4 -**
 A. Reconnect the YELLOW connector of the tiller wiring harness to the YELLOW connector of the controller wiring harness.
PANTHER MX - 4 -
 A. Gently close the hinged strain relief on the rear of the WHITE connector of the tiller wiring harness.
 B. Reconnect the WHITE connector of the tiller wiring harness to the WHITE connector of the controller wiring harness.

14. Reinstall the batteries. Refer to REMOVING/INSTALLING BATTERIES WITH CABLES in PROCEDURE 4 of the Owner's Manual, part number 1090132.
15. Reinstall the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in PROCEDURE 9 of the Owner's Manual, part number 1090132.
16. Reinstall the seat. Refer to REMOVING/INSTALLING THE SEAT in PROCEDURE 5 of the Owner's Manual, part number 1090132.

- 17. Position the NEW Forward/Reverse sticker OVER the EXISTING Forward/Reverse sticker on the control panel (DETAIL "A").
- NOTE: The NEW Forward/Reverse sticker is also available as a purchase part.*

(ALL MODELS EXCEPT THE PANTHER MX - 4)



(PANTHER MX - 4)

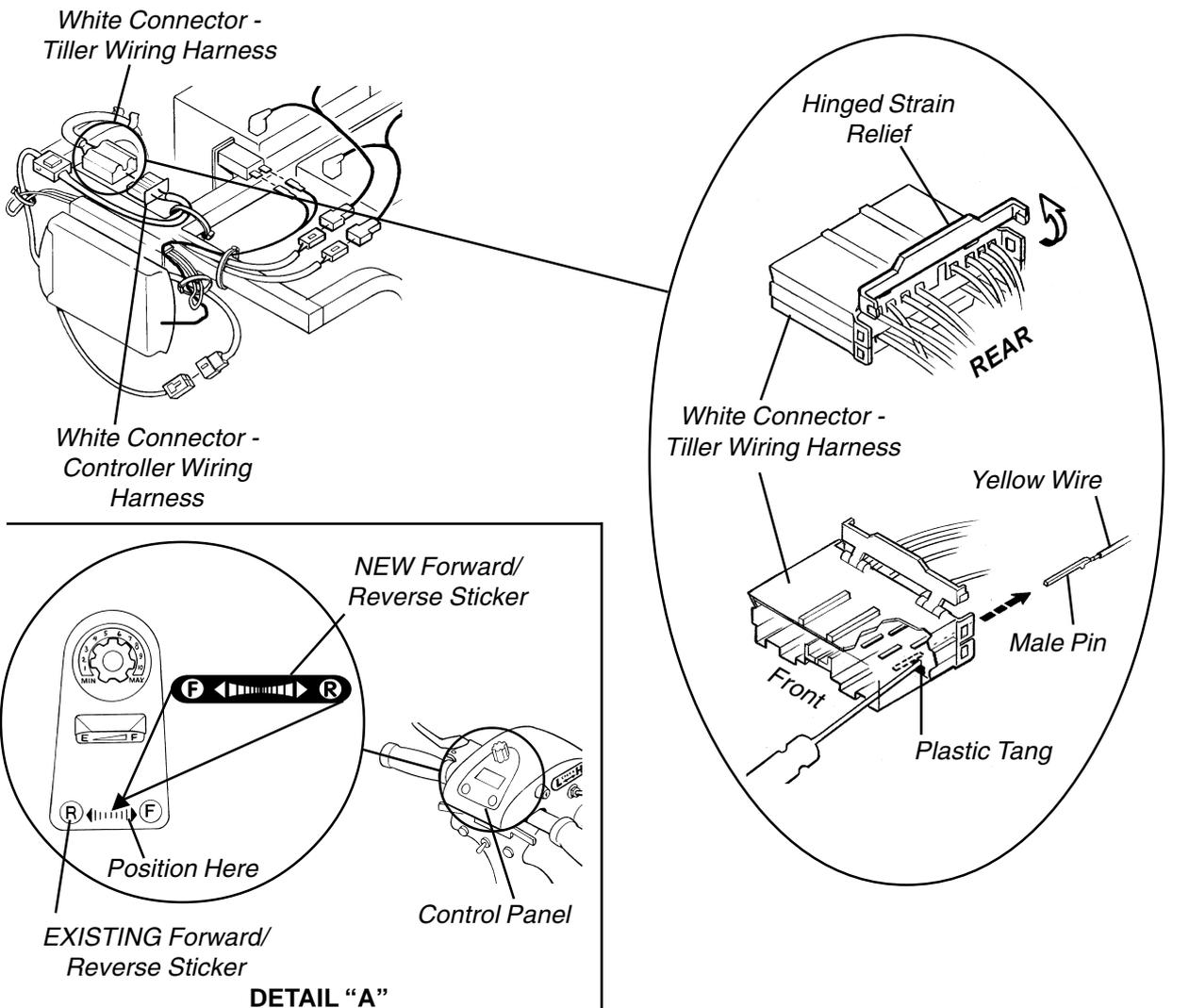


FIGURE 1 - PREPARING THE SCOOTER FOR LEFT HAND OPERATION

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 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.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, IF ANY, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESSED WARRANTY PROVIDED HEREIN AND THE REMEDY FOR VIOLATIONS OF ANY IMPLIED WARRANTY SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT PURSUANT TO THE TERMS CONTAINED HEREIN. INVACARE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER.

THIS WARRANTY SHALL BE EXTENDED TO COMPLY WITH STATE/PROVINCIAL LAWS AND REQUIREMENTS.



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