



Nautilus ONE™



Service Manual



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Required Tools

- 1) 9/16" Socket Wrench
- 2) 3/4" Socket Wrench
- 3) Torque Wrench
- 4) 9/16" Wrench
- 5) Adjustable Wrench
- 6) 5/32" Hex Wrench
- 7) 5/16" Hex Wrench
- 8) 7/32" Hex Wrench
- 9) 1/4" Hex Wrench

Safety Warnings



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury.

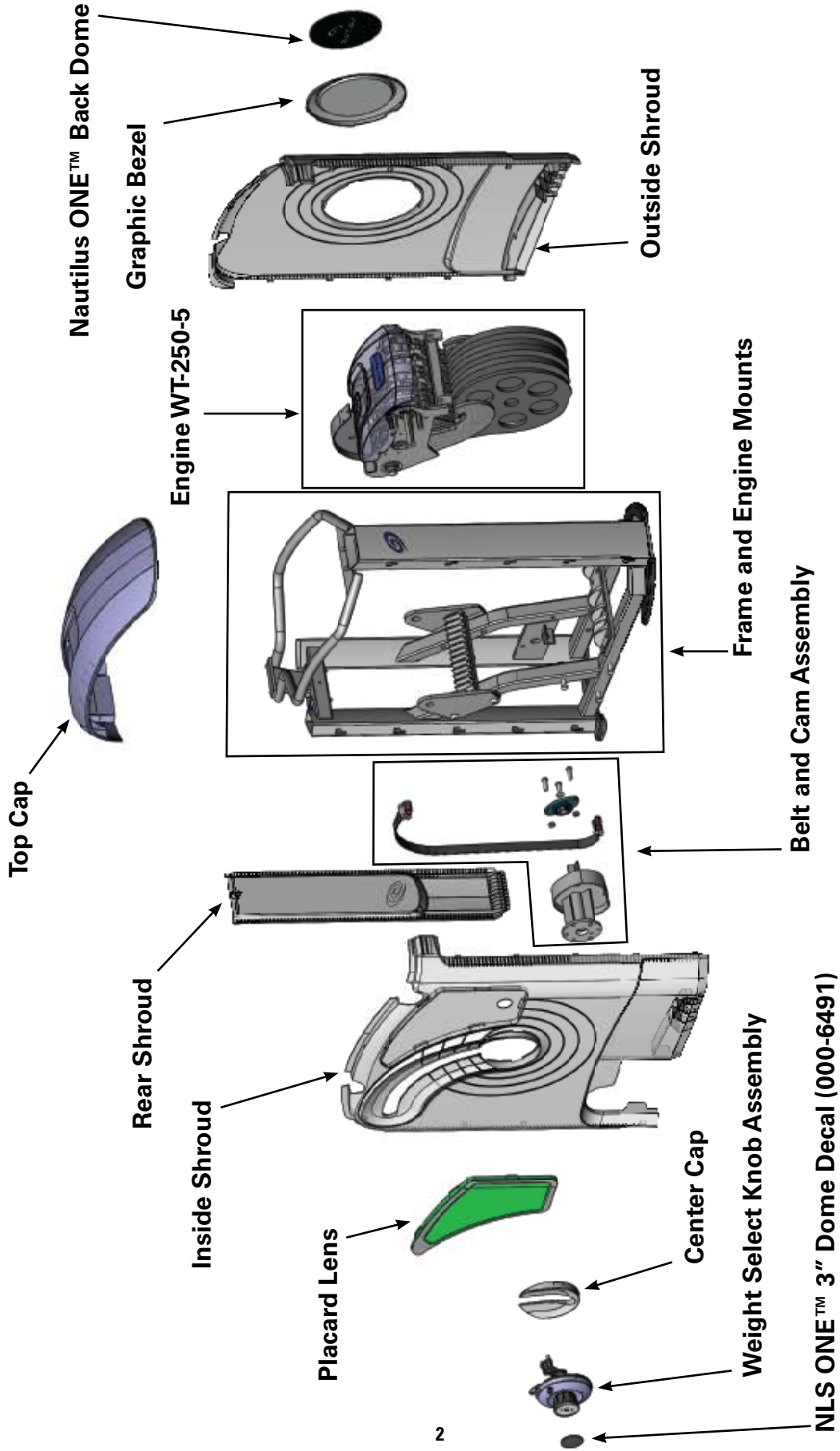
Obey the following warnings:



Read and understand all Warnings on this machine. Specific Caution, Warning and/or Danger decals may be applied to call attention to specific hazards.

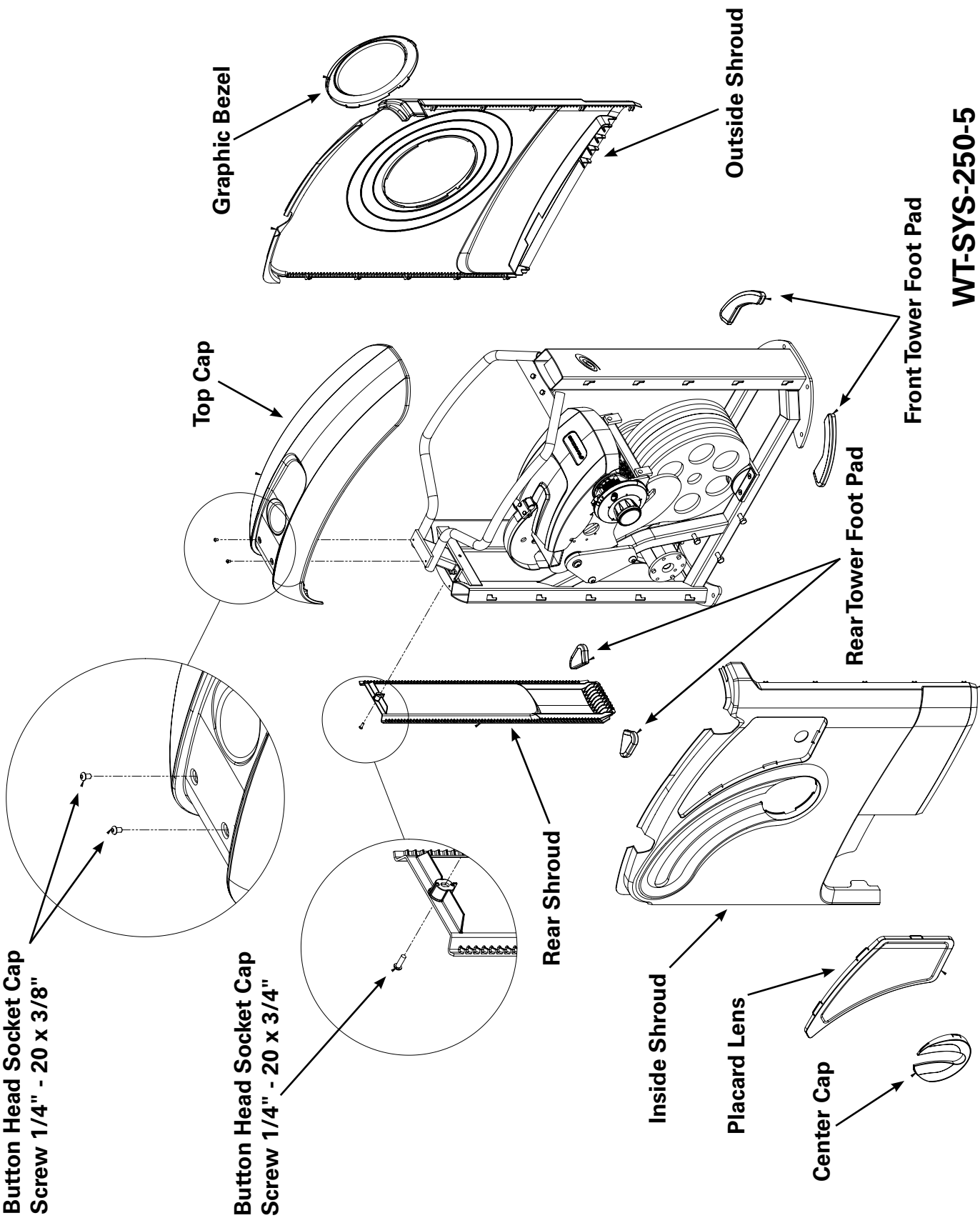
- Carefully read and understand the Service Manual before you work on the machine. Failure to follow instructions and safety warnings could result in injury to service technician or bystanders.
- Damaged machines or machines under repair must be marked as “Out of Service”, set aside and prohibited from being used by customers or others.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that repair is done in an appropriate work space away from foot traffic and exposure to unauthorized personnel.
- Adjustments and repairs to Nautilus equipment must only be performed by a professional service technician trained to service Nautilus equipment.
- Some components of the equipment may be heavy or awkward. Use a second person or other resources when performing maintenance steps involving these parts. Do not perform steps that require heavy lifting or awkward movement on your own.
- Use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts may cause a risk to users, keep the machine from operating properly, or void the warranty.
- Make sure that all warning stickers and instructional placards on the machine stay attached and are in good condition. Request replacement warning stickers or placards if necessary from Nautilus customer service.
- Do not attempt to modify the design or functionality if the machine. This could compromise user safety and may void the warranty.
- Do not place the machine back in service until the machine, shrouds, instructions, warning labels and have been verified and tested for proper performance.
- If you any questions regarding the Service Manual or the servicing of our equipment, please contact qualified Nautilus personnel immediately.

Exploded Views



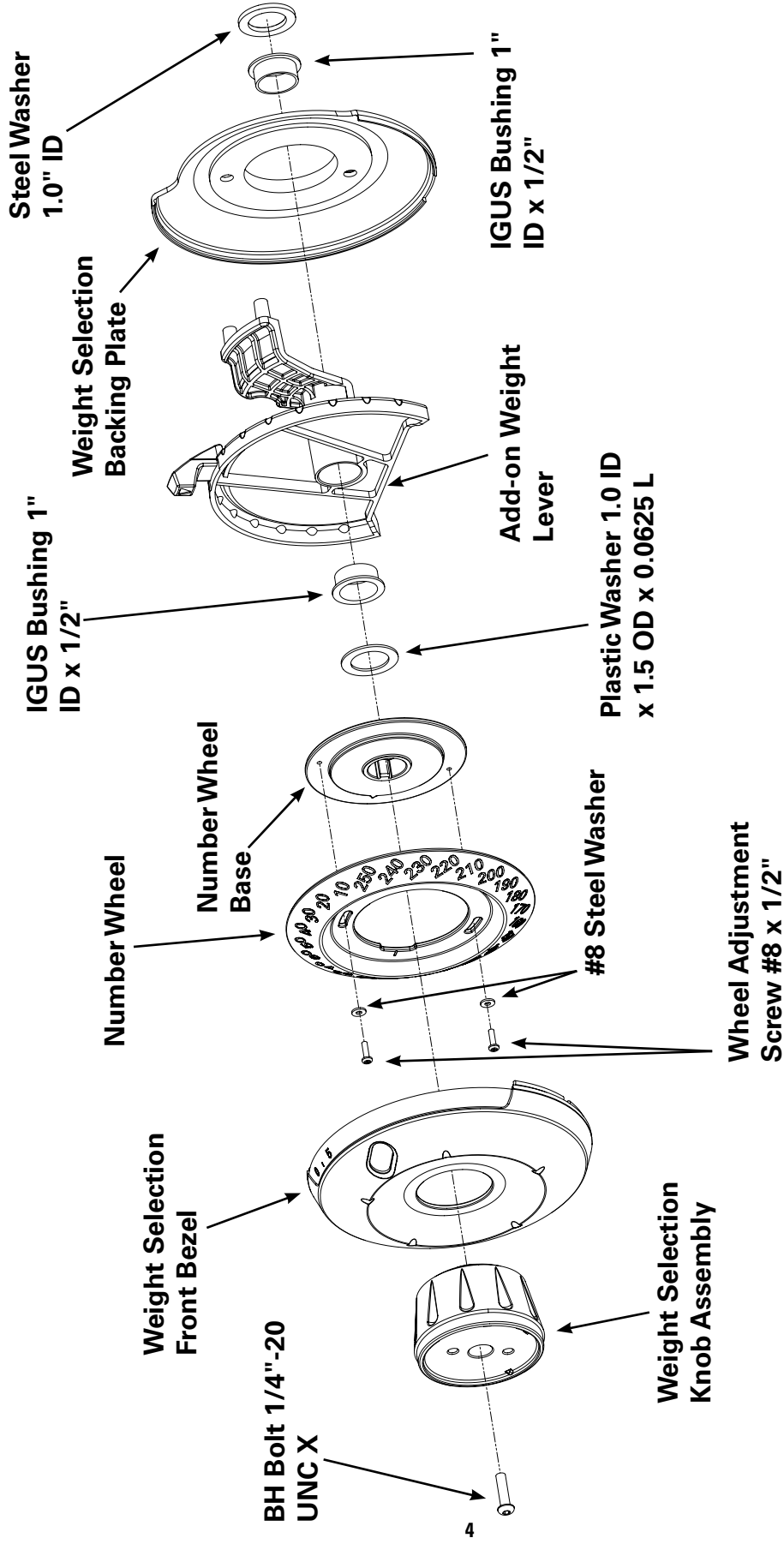
WT-SYS-250-5
Weight Tower View #1

Exploded Views



**WT-SYS-250-5
Weight Tower View #2**

Exploded Views



**WT-SYS-250-5
Weight Selection Assembly**

Service Procedures

Nautilus ONE™ Tower Shroud Removal

Tools Required: 9/16" Socket Wrench
9/16" Wrench
5/32" Hex Wrench

Remove the Top Cover

- 1-1 Remove the two mounting screws on the rear of the top cover with a 5/32" Hex wrench (Figure 1).
- 1-2 Remove the cover by lifting the rear edge up and forward to clear the front slot (Figure 2).

Remove the Handlebar

- 2-1 Remove the (4) 3/8" hex head bolts, (4) lock washers and (4) lock nuts with a 9/16" socket wrench.
- 2-2 Carefully lift the handlebar and place aside (Figure 3).

Remove the Rear Shroud

- 3-1 Remove one screw at the top of the shroud with a 5/32" Hex wrench. Lift up and out of the bottom slot (Figure 4).

(Shroud Removal continued on next page)



Figure 1

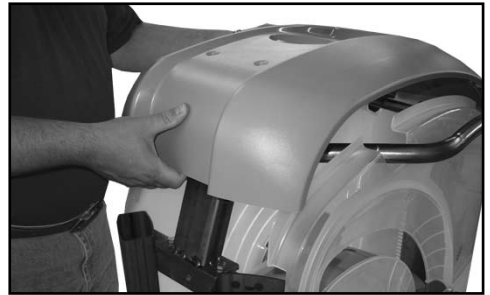


Figure 2

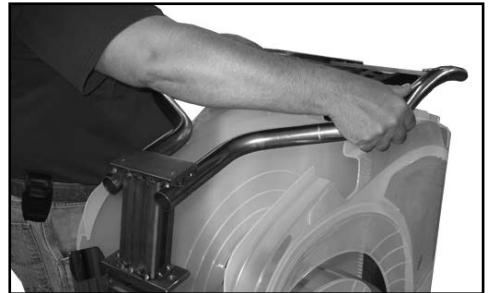


Figure 3



Figure 4

Service Procedures

Nautilus ONE™ Tower Shroud Removal (cont.)

Remove the Outside Shroud

Note: The large round bezel does not need to be removed from the outside shroud.

4-1 Lift the shroud up until the tabs stop at the top of the P-slot (Figure 5).

NOTICE: Do not attempt to remove shroud by prying with any kind of tool.

4-2 Pull shroud outward to remove from the P-slots (Figure 6).

Remove the Inside Shroud

5-1 Remove the center cap behind the dial. Adjust the dial to the lowest setting and lift the dial up and out of the way. Unsnap the center cap out of the shroud opening tabs (Figure 7).

5-2 Lift the shroud up until the tabs stop at the top of the P-slot.

5-3 Pull the shroud outward to remove it from the P-slots (Figure 8).

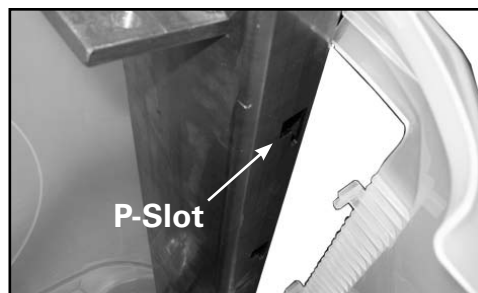


Figure 5



Figure 6

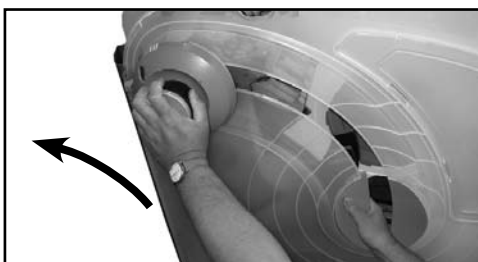


Figure 7

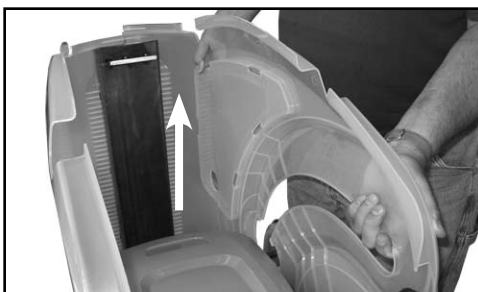


Figure 8

Service Procedures

Nautilus ONE™ Tower Shroud Installation

Attach the Rear Shroud

- 1-1 Put Rear Shroud into the Bottom slot and secure with one screw at the top.

Attach the Inside Shroud

- 2-1 Put Inside Shroud into P-slots in the Steel Frame and fit the adjustment knob assembly through the center hole of the shroud.
- 2-2 Insert front and back tabs into the P-slot openings (See Fig. 1).
- 2-3 Push down on both front and back to seat tabs at the bottom of the P-slots.

NOTICE: Do not attempt to force the shroud downward or tabs may be broken off. When the tabs are aligned to the P-slots, the cover should drop down into the slots with minimal resistance.

- 2-4 Install the center cap behind the dial. Adjust the dial to the lowest setting and lift the dial up and out of the way (Figure 2). Snap the center cap into the shroud opening tabs. Make sure to align the cap to the open ring.

Attach the Outside Shroud

- 3-1 Put Outside Shroud into the P-slots in the Steel Frame.
- 3-2 Push down on both front and back to seat tabs at the bottom of the P-slots. When the tabs are aligned to the P-slots, the cover should drop down into the slots with minimal resistance.
- 3-3 Align and attach the tab/slot where the front of both side shrouds meet at the top of the front post.

NOTICE: Do not attempt to force the shroud downward or tabs may be broken off.

Attach the Handlebar Assembly

- 4-1 Position the handle bars over the plastic shrouds (Figure 3).
- 4-2 Attach the handlebar with (4) hex head bolts, (4) lock washers and (4) lock nuts.

Attach the Rear Shroud

- 5-1 Position the handle bars over the plastic shrouds (Figure 4).

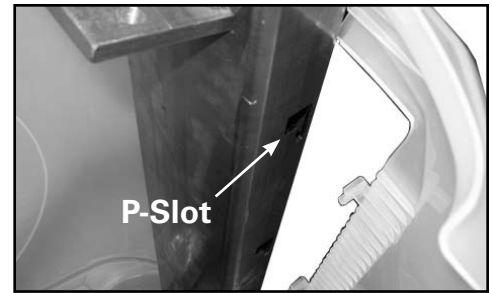


Figure 1

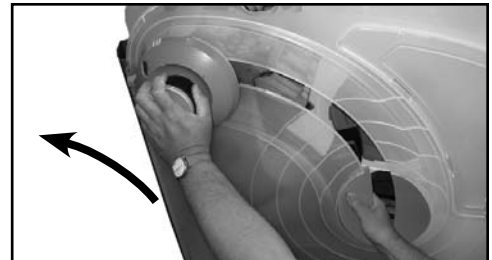


Figure 2



Figure 3



Figure 4

Nautilus ONE™ Tower Shroud Installation (cont.)

Attach the Top Cover

6-1 Lower the top cover onto side shrouds making sure that the tops edges of both side shrouds fit securely into the slots on each side of the top cover (Figure 5 and 6).

Note: Push inward on the top edge of the length of both side shrouds to assure the top cover is securely attached. If you can push the shroud inward, it is not in the slot and needs to be installed again.

6-2 Install the two mounting screws on the rear of the top (Figure 7).

Note: Overtightening the shield screws may cause the top shield to crack.



Figure 5



Figure 6



Figure 7

Service Procedures

Weight Drive Installation/Removal

Tools Required: 3/4" Socket Wrench,
Adjustable Wrench

Installation Tip: Inspect the seat frame movement arm(s) before assembly to the weight tower. If the movement arm(s) are not resting firmly against the rubber stop(s), reduce belt tension as necessary. The movement arm must rest against the rubber stops to ensure proper initial weight drive to seat frame assembly and jackshaft timing. Belt tensioning procedures are located on Page 11 of this service manual.

- 1-1 Remove (3) 1/2-13 x 3" bolts from the Tower with 3/4" socket wrench (Figure 1).
- 1-2 Remove the Weight Drive Support from the Seat Frame by removing (4) 1/2-13 x 1 1/4" bolts and (4) 1/2-13 Lock Nuts with 3/4" socket wrench and adjustable wrench. Discard (1) bolt and (1) nut (Figure 2).

NO.	PART NO.	DESCRIPTION	QTY.
1	56-0161	WEIGHT DRIVE SUPPORT	1
2	01-1331	BOLT HH 1/2-13 X 3"	3
3	01-1271	BOLT HH 1/2-13 X 1 1/4"	4
4	03-1055	LOCK NUT 1/2-13	4

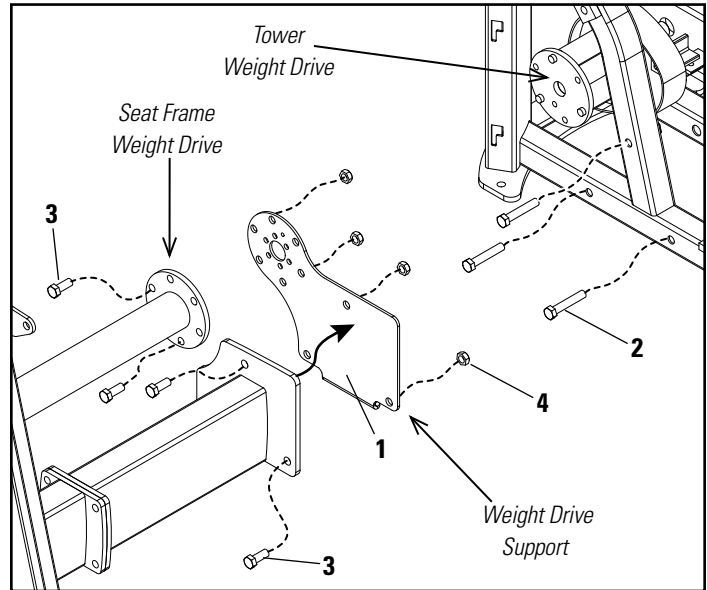


Figure 1

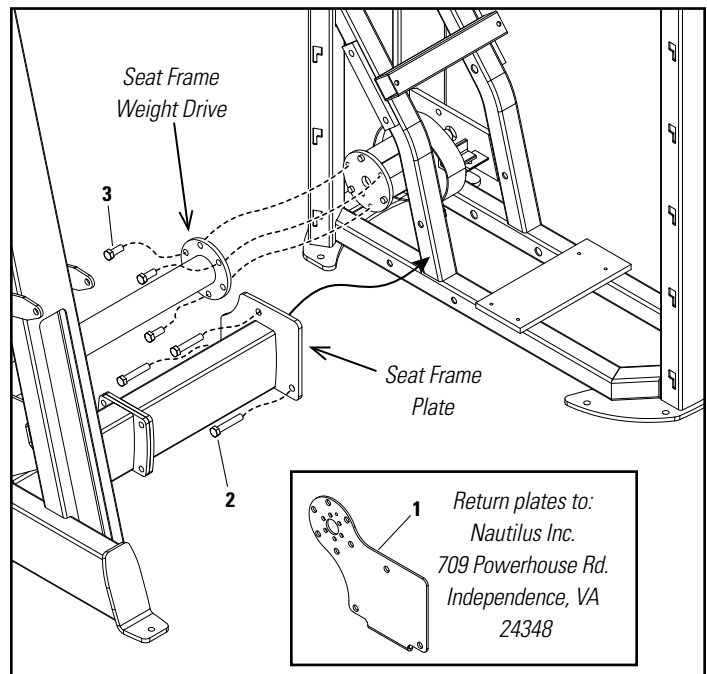


Figure 2

Service Procedures

Weight Drive Installation/Removal (cont.)

- 1-3** Align the Seat Frame Weight Drive holes to Tower Weight Drive holes and pins. Insert (3) 1/2 x 1 1/4" bolts into weight drive and (3) 1/2 x 3" bolts into seat frame plate. Carefully align Seat Frame to the Tower and tighten all bolts (Figure 3).

Note: Confirm that the movement arm is at rest against the rubber stop(s). If the movement arms are not resting on the rubber stops, then reduce seat frame belt tension (see page 11). Ensure that the Weight Drive belt cam is resting against the cam stop. If it is not at rest, then refer to "Troubleshooting Steps" on this page to reduce Weight Engine Drive belt tension. Make sure that the dial selects and engages the weight plates.

- 1-4** Reverse steps 1-1 through 1-3 for Weight Drive removal.

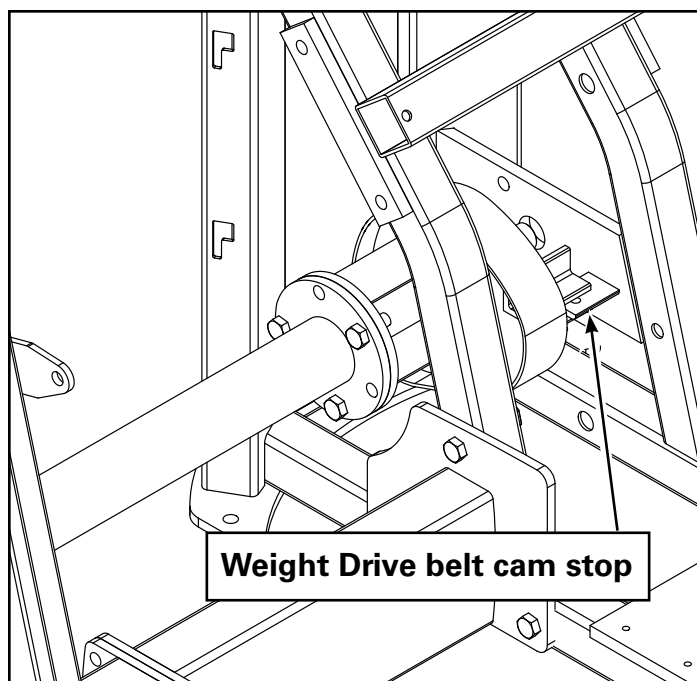


Figure 3

Troubleshooting Steps

Tools Required: 3/8" wrench

- 2-1** If the dial does not select and engage the weight plates, the Weight engine Drive Belt may be too tight.
- 2-1.1** Ensure clearance is 1/8" between the weight hooks and the weight plate hooks (Figure 2, page 11).
- 2-1.2** Refer to the "Remove the Top Cover" instructions (steps 1-1 through 1-2) on page 5 of this Service Manual.
- 2-1.3** With the top cover removed, loosen (do not remove) the two Belt Clamp Retaining Bolts with a 3/8" wrench (Figure 2, page 11).
- 2-1.4** Turn the weight selection dial to the minimum resistance setting and lift the weight drive engine assembly up several inches by the dial assembly.
- 2-1.5** Release the knob to allow the work box to drop. This should allow the belt to "slip" in the clamp, reducing tension on the Weight Engine Drive Belt.
- 2-1.6** Turn the weight selection dial to several different resistance settings to confirm the dial now engages the weight plates.
- 2-1.7** Tighten the two Belt Clamp Retaining bolts with a 3/8" wrench. Confirm that the weight selection dial will select and engage the weight plates.
- 2-1.8** Replace the top cover.
- 2-2** If the movement arms do not rest fully against the rubber stop(s) in the starting position, the Weight Engine Drive (steps 2-1-1 through 2-2-8) will be the steps to correct.

Service Procedures

Seat Frame Belt Cam Adjustment

Tools Required: 5/16" Hex Wrench

- 1-1 Use a 5/16" Hex Wrench to tighten or loosen the Button Head Belt Adjustment Bolt.

Note: Turning the screw clockwise increases tension. Turning the screw counter clockwise reduces tension (Figure 1).

Note: Increasing tension on the belt tensioning screw tightens not only the seat frame belt and proportionately increases tension on the weight engine drive belt. Excessive belt tension will cause weight hook to weight plate hook malfunctions. (Figure 2).

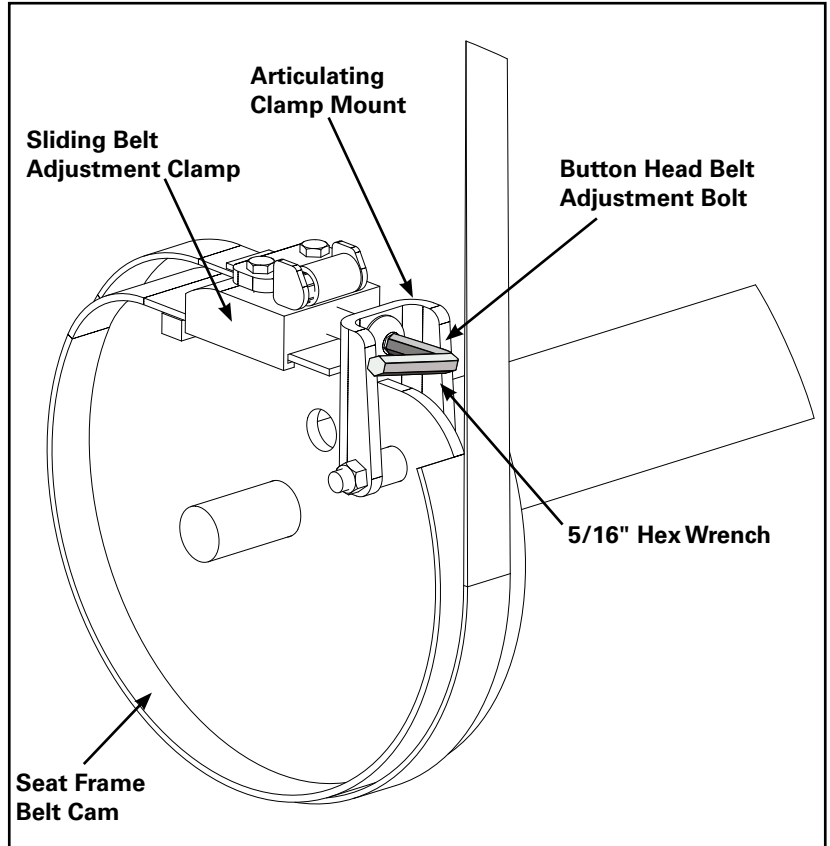


Figure 1

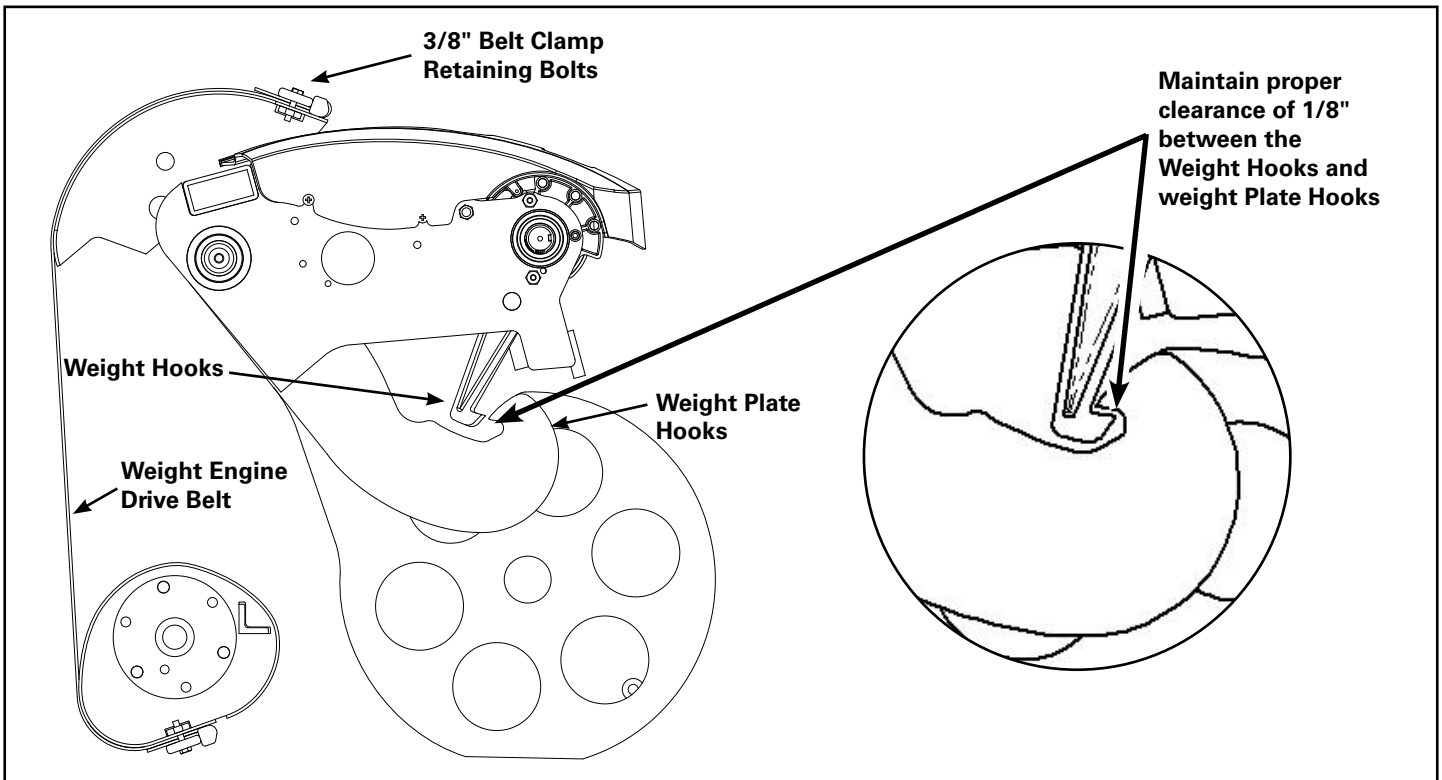


Figure 2

Service Procedures

Bottom Loading Gas Spring Replacement

These procedures apply to the following units:

- Nautilus ONE™ Mid Row (S6MR)
- Nautilus ONE™ Lat Pull (S6LATP)
- Nautilus ONE™ Chest Press (S6CP)
- Nautilus ONE™ Shoulder Press (S6SP)
- Nautilus ONE™ Bicep Curl (S6BC)
- Nautilus ONE™ Tricep Extension (S6TE)

Tools Required:

- 9/16" Socket and Ratchet
- 7/32" Hex Wrench
- 1/4" Hex Wrench

1-1 Remove (2) 3/8" upholstery bolts with a 9/16" Socket and Ratchet.

1-2 Remove the seat pad by pulling it upwards (Figure 1).

1-3 Remove the release handle shoulder bolt with a 1/4" Hex wrench and a 9/16" Socket and ratchet (Figure 2).

1-4 Remove the handle.



Figure 1

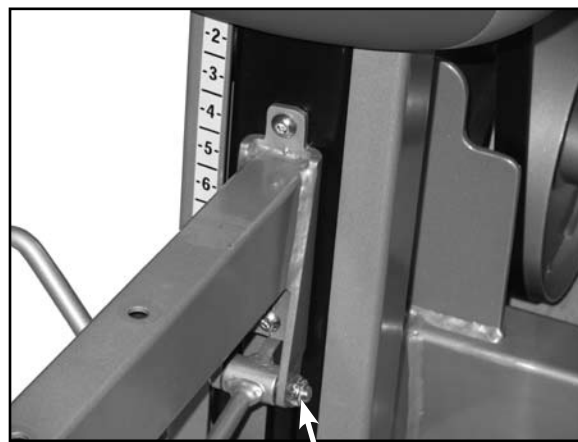


Figure 2

Remove using a 1/4" Hex head wrench and 9/16" socket and ratchet

Service Procedures

- 1-5** Remove the top 7/32" Hex head screw with a 7/32" Hex Wrench (Figure 3).
- 1-6** Remove the bottom 7/32" Hex head screw while supporting the seat bracket with your free hand (Figure 4).



Figure 3



Figure 4

Service Procedures

Note: It is necessary to disassemble the seat frame from the weight stack. This will allow the service personnel to access the gas spring assembly. Please refer to pages 9 and 10 of this service manual for the seat frame/tower disassembly and belt timing.

1-7 Once the seat frame has been disconnected from the weight tower and with the seat bracket removed (Figure 5), tip the seat frame on its back (Figures 6 & 7).


 The seat frame is heavy. Use two people for this step to prevent injury.



Figure 5



Figure 6

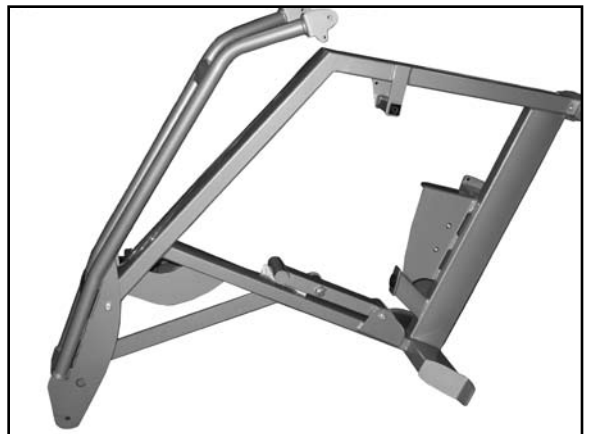


Figure 7

Service Procedures

Note: Figure 8 shows a seat disconnected from the weight tower to gain access to the gas spring seat adjustment assembly.

- 1-8** Remove the (2) plate retaining screws with a 7/32" Hex wrench (Figure 9).
- 1-9** Pull the gas spring seat adjustment assembly out of the seat frame tube (Figure 10).



Figure 8

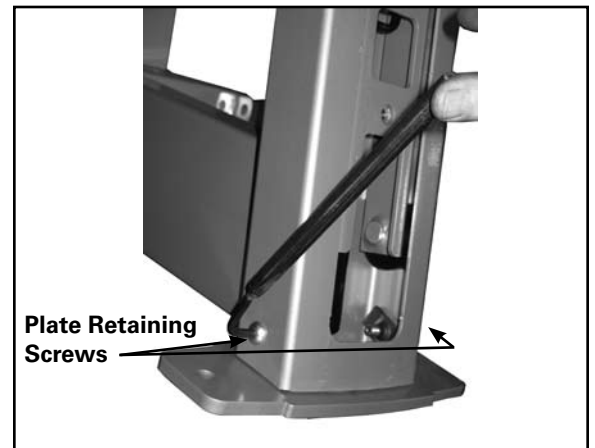


Figure 9

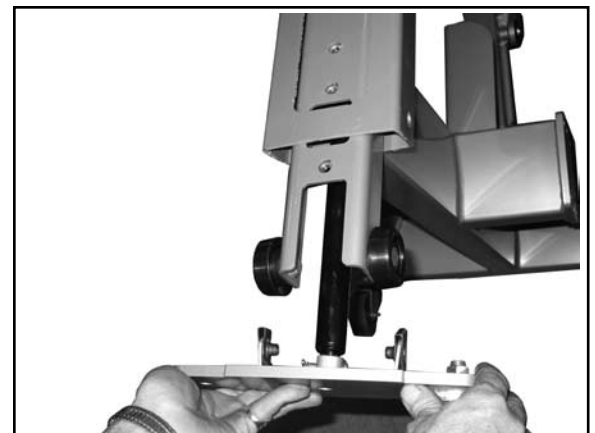


Figure 10

Service Procedures

- 1-10** Finish removing the gas spring seat adjustment assembly (Figure 11).
- 1-11** Replace the gas spring if necessary (not pictured).
- 1-12** Insert the gas spring seat frame assembly into the seat frame tube (Figure 12).
- 1-13** Confirm the horse shoe shaped bracket is aligned (Figure 13).

Note: If the plate is installed backwards, the gas spring seat frame assembly will not operate properly.

- 1-14** Tighten (2) 7/32" Hex screws with a 7/32" Hex wrench (Figure 14).
- 1-15** Refer back to pages 9-10 for seat frame/tower installation instructions.



Figure 11

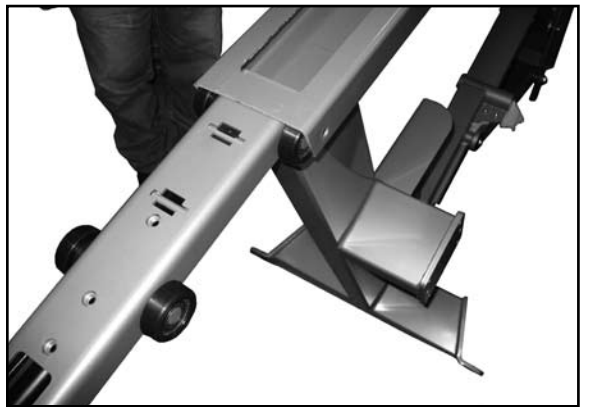


Figure 12

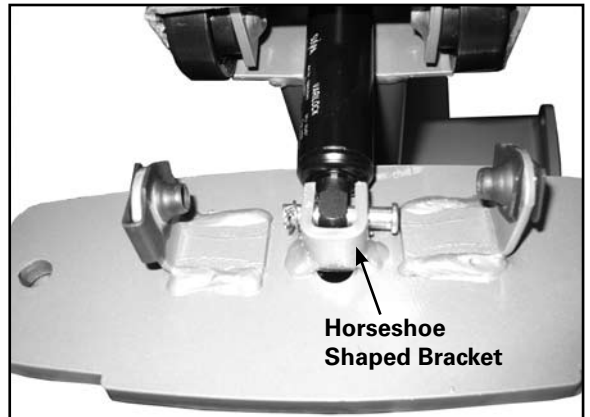


Figure 13

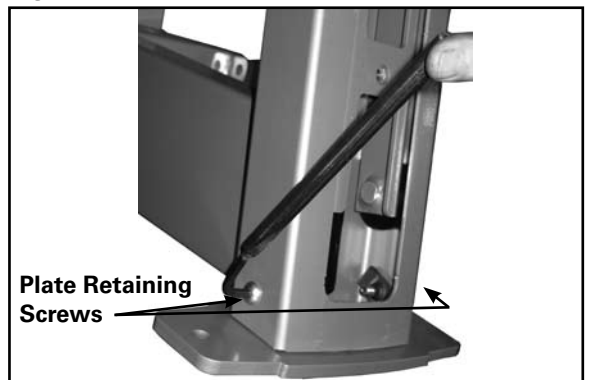


Figure 14

Service Procedures

Weight Selection Knob Removal

Tools Required: Torque Wrench

Remove the Center Cap

- 1-1 Adjust the dial to the lowest setting.
- 1-2 Lift the dial assembly up and move it aside (Figure 1).
- 1-3 Remove the center cap by carefully prying between the inside shroud and center cap.

Remove the Nautilus ONE™ 3" Decal

- 2-1 Carefully pry the 3" decal from the knob.
- 2-2 Remove the plastic decal by slowly working the prying tool between the back of the decal and the front surface of the knob (Figure 2).

Remove the Weight Selection Knob Assembly Retaining Bolt

- 3-1 Hold the knob assembly and use the 5/32" Hex wrench to turn the button head screw counter clockwise (Figure 3).

Note: The 1/4" x 20 x 1" long screw was installed with removable strength thread-lock. Apply more removable strength thread-lock when replacing the Assembly Retaining Bolt and tighten to 10 lb. ft. with a torque wrench.

- 3-2 Pull the weight selection knob assembly away from the weight tower (Figure 3).

Remove the Bezel

- 4-1 Unsnap the bezel from the add on weight lever housing and set it aside (Figure 5).

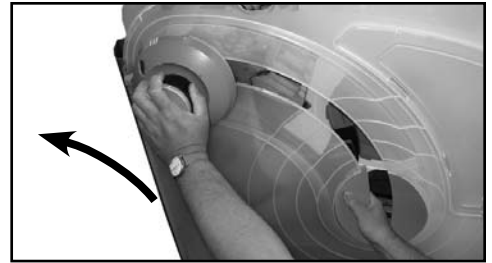


Figure 1



Figure 2

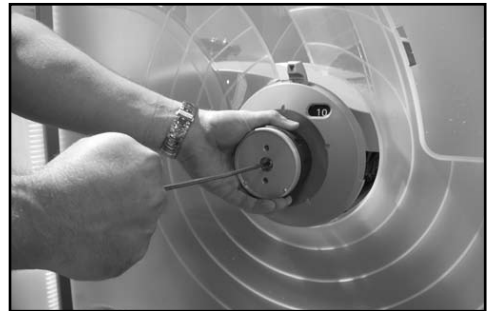


Figure 3



Figure 4



Figure 5

Service Procedures

Knob Removal (cont.)

Remove Number Wheel

- 5-1 Pull the number wheel assembly away from the weight tower (Figure 6).

Remove the Add On Weight Lever

- 6-1 The handle adjustment knob has two index pins that insert into the add on weight cam. Use a small flat head screwdriver to help separate the add on weight lever from the black plastic cam. Pull the add on weight lever assembly away from the tower approximately 1.5".

Note: The lever assembly should rotate freely but the weight selection backing plate will stay affixed.

- 6-2 Use a 1/2" socket with 6" socket wrench extension to remove the top weight selection backing plate bolt (Figure 7).
- 6-3 Rotate the add on weight lever clockwise and remove the bottom bolt with a 1/2" socket (Figure 8).
- 6-4 Remove the add on weight lever and weight selection backing plate by pulling away from the weight tower (Figure 9).
- 6-5 Reverse these steps to assemble the knob.



Figure 6

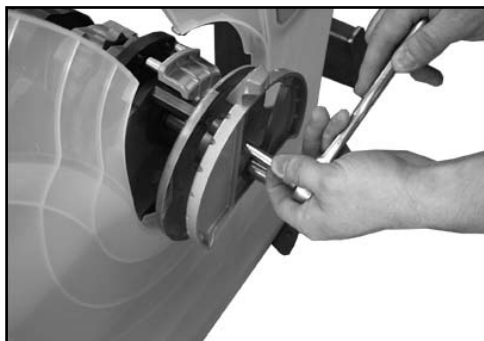


Figure 7



Figure 8

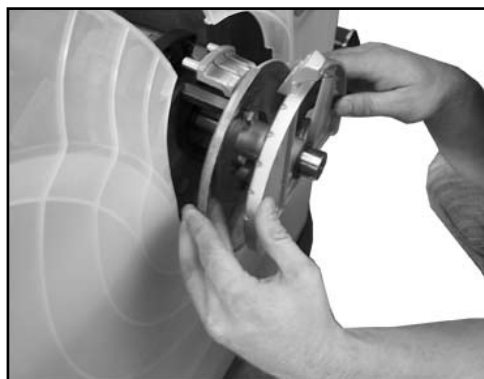


Figure 9

Contact Information

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INTERNATIONAL OFFICES:

For technical assistance and a list of distributors in your area, please call or fax one of the following numbers.

INTERNATIONAL CUSTOMER SERVICE

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Please supply the serial number of your machine and the date of purchase when you call Nautilus. Use the space in the boxes below to write down this information. To find the serial number on your machine, refer to the Safety Warning Label information page. Dial the number of the office close to you.

Serial Number

Date of Purchase



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