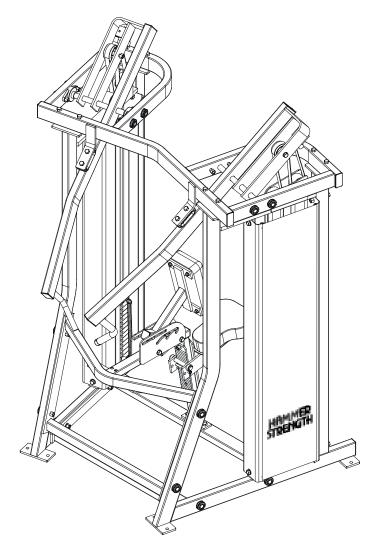
# HAMMER STRENGTH

# MTS ROW UNPACKING AND ASSEMBLY INSTRUCTIONS



QUESTIONS OR PROBLEMS? CONTACT US AT 1-800-216-8896. ASK FOR JOHN MORLEY (ext. 4606)

M051-K50-C102

These instructions are divided into the following sections:

- 1. UNPACKING
- 2. ASSEMBLY
- 3. HARDWARE

The MTS ROW comes disassembled on a pallet. Follow the steps below to unpack and assemble it.

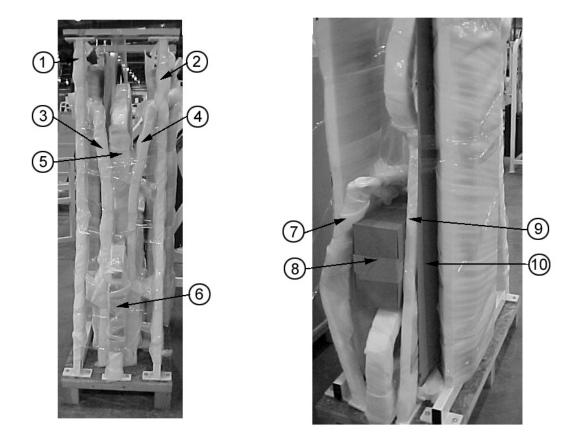


WARNING: COMPONENTS OF THIS MACHINE ARE LARGE AND HEAVY. USE CAUTION WHEN ASSEMBLING THIS MACHINE.

#### 1. UNPACKING

Follow the steps below when unpacking the components of the pallet. Keep in mind that the sides of the MTS ROW are heavy and not stable once they are unbolted from the pallet.

- 1. Remove the protective plastic wrap.
- 2. Remove the parts bag. This bag contains the washers, nuts and bolts shown in the *Hardware* section in the back of these instructions. Remove the bags containing the seat cushions. Also remove the arms.
- 3. Using a  $\frac{1}{2}$ " socket, remove the lag bolts that secure the seat post, the back and the base. See Unpacking Figure 1.



Unpacking Figure 1. MTS ROW shipping pallet.

4. Using a ½" socket wrench, unbolt the two top shipping 2x4s. These bolts are shown in Unpacking Figure 2. Discard these bolts.



Unpacking Figure 2. Top shipping bolts.



WARNING: ONCE YOU UNBOLT THE BOTTOM SHIPPING BOLTS AS DESCRIBED BELOW, THE SIDE PIECES OF THE MTS ROW ARE UNSTABLE. THEY SHOULD BE SUPPORTED WHILE THE BOLTS ARE REMOVED.

5. Using a ½" socket wrench, unbolt the bottom lag bolts on the left side as shown in Unpacking Figure 3. "Walk" the side off of the shipping crate onto the floor. Repeat this step for the right side piece. Remove and discard the shipping pallet and the lag bolts.



Unpacking Figure 3. Bottom shipping bolts.

NOTE: BE CAREFUL NOT TO DAMAGE THE FINISH OF THE MACHINE OR THE UPHOLSTERY WHEN REMOVING THE PROTECTIVE PACKAGING MATERIAL.



#### 2. ASSEMBLY

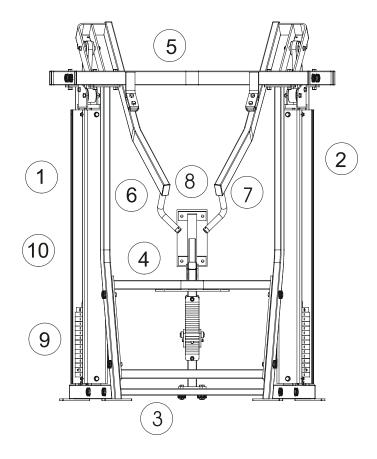
#### **TOOLS NEEDED**



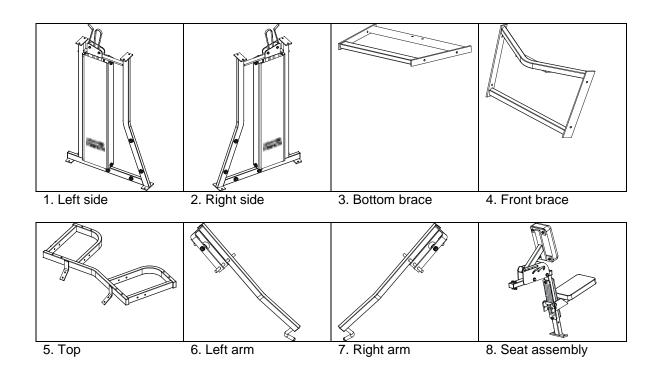
#### **ASSEMBLY TIME**

Two people can accomplish this assembly in approximately 1 hour.

#### PRIMARY HARDWARE COMPONENTS

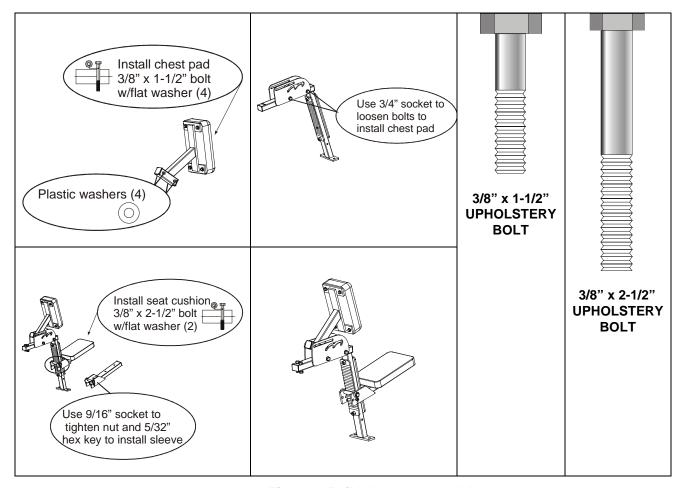


**MTS ROW Primary Hardware Components.** 



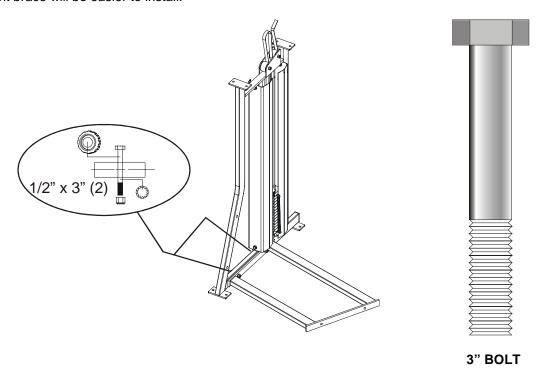


CAUTION: THE SIDES OF THIS MACHINE ARE NOT STABLE UNTIL THE BOTTOM BRACE AND FRONT BRACE HAVE BEEN INSTALLED AND THE BOLTS HAVE BEEN TIGHTENED. SIDE PIECES SHOULD BE SUPPORTED WHILE THE BOTTOM BRACE AND FRONT BRACE ARE BEING BOLTED TOGETHER. 1. Bolt together seat assembly. The seat assembly is shipped in three pieces as shown below. Fasten the chest pad and seat cushion to the seat assembly by lining up the bolt holes in the cushions with the bolt holes in the seat frame. Using a ¾" socket wrench, fasten the chest pad to the seat frame using four 3/8" x 1-1/2" bolts and 3/8" flat washers. Fasten the seat with two 3/8" x 2-1/2" bolts and 3/8" flat washers.



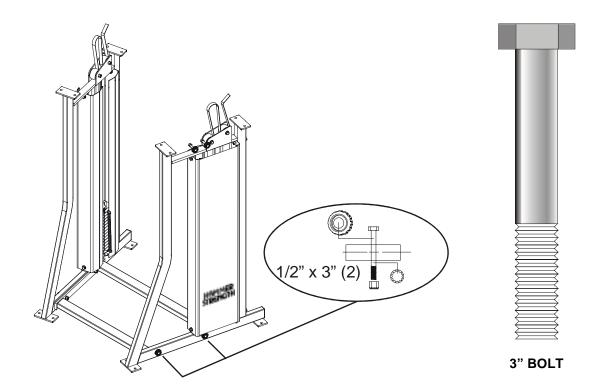
Assembly Figure 1. Build the seat assembly.

NOTE: AT THIS POINT, YOU MAY WISH TO BOLT THE BASE OF THE SEAT ASSEMBLY TO THE BOTTOM BRACE OF THE MTS ROW. USE 2-3/4" BOLTS AS SHOWN IN FIGURE 6 IF YOU WISH TO DO THIS. 2. Bolt the base to the left side of the MTS ROW. As shown in Figure 3, slide the base/seat assembly up to the left side of the MTS ROW and bolt them together using two of the 1/2" x 3" hex head bolts with hammerhead washers on the outside of the frame. Insert the bolts from the outside of the MTS ROW. Put on a star washer and hand tighten the locknuts so that the front brace will be easier to install.



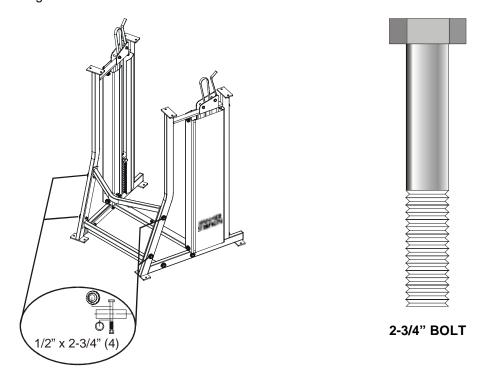
Assembly Figure 2. Bolt the base to the left side of the MTS ROW.

3. Bolt the base to the right side of the MTS ROW. Slide the right side of the MTS ROW up to the base and bolt it to the base using two of the 1/2" x 3" hex head bolts with hammerhead washers. Put on a star washer and hand tighten the nuts so that the front brace will be easier to install.



Assembly Figure 3. Bolt the base to the right side of the MTS ROW.

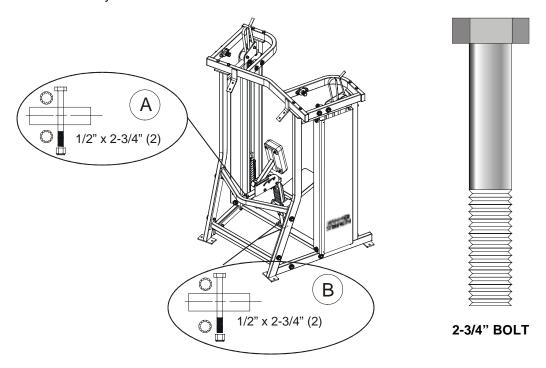
**4. Bolt the front brace to the sides.** Insert the top two ½" x 2-3/4" bolts with hammerhead washers from the outside of the MTS ROW. Put on a star washer and hand tighten the locknuts. Then insert the bottom two ½" x 2-3/4" hex bolts, hammerhead washers, star washers and hand tighten the locknuts.



Assembly Figure 4. Bolt the front brace to the sides.

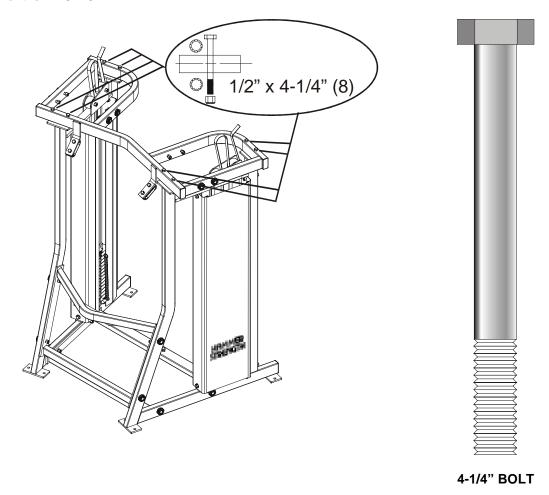
#### 5. Bolt seat assembly to MTS ROW.

- **A.** Use two  $\frac{1}{2}$ " x 2-3/4" bolts, star washers (two per bolt as shown) and nuts to fasten the seat assembly to the front of the MTS ROW as shown in A below.
- **B.** Use two 1/2" x 2-3/4" bolts, star washers (two per bolt as shown) and nuts, to fasten the seat assembly to the base of the MTS ROW as shown in B below.



Assembly Figure 5. Bolt seat assembly to MTS ROW.

**6. Bolt the top to the sides.** Insert the 8 ½" x 4-1/4" hex bolts, star washers and nuts from the top of the MTS ROW.

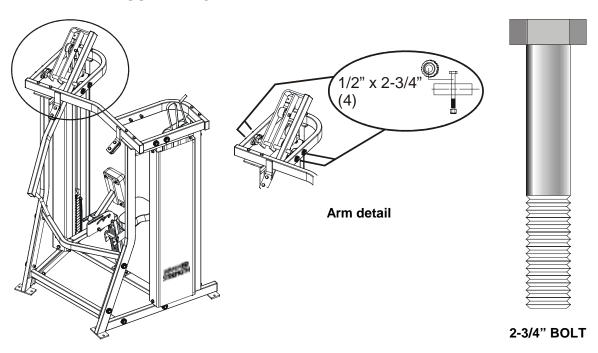


Assembly Figure 6. Bolt the top to the sides.

**Tighten the bolts on the front and base to the sides.** Using a ¾" socket wrench and combination wrench, go back and tighten the bolts on the front and on the base of the MTS ROW to the sides . Do not overtighten the bolts.

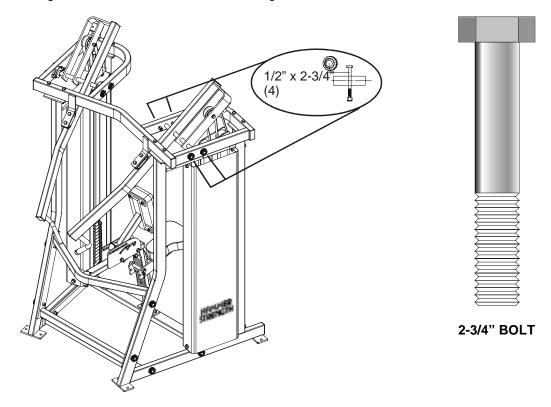
7. Bolt the left arm to the frame. Slide the left arm up into the top of the MTS ROW with the arm facing inward as shown at left. Insert two ½" x 2-3/4" bolts on the outside of the arm through the bushing and tighten. Insert two ½" x 2-3/4" bolts through the inside bushing and tighten. All bolts should be inserted through the top piece. Nuts and star washers should be on the bushings as shown in the detail view in the figure.

## NOTE: MAKE SURE THE HANDLE IS FACING INWARD AS SHOWN IN THE FIGURE BELOW.



Assembly Figure 7. Bolt left arm to frame.

**8. Bolt the right arm to the frame.** Slide the right arm up into the top of the MTS ROW with the arm facing inward as shown at left. Insert two ½" x 2-3/4" bolts on the outside of the arm through the bushing and tighten. Insert two ½" x 2-3/4" bolts through the inside bushing and tighten. All bolts should be inserted through the top piece Nuts and star washers should be on the bushings as shown in the detail view in the figure.

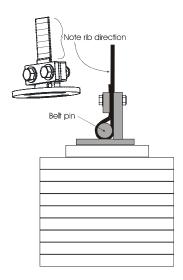


Assembly Figure 8. Bolt right arm to frame.

## NOTE: THE STEP BELOW MAY HAVE BEEN COMPLETED AT THE FACTORY.

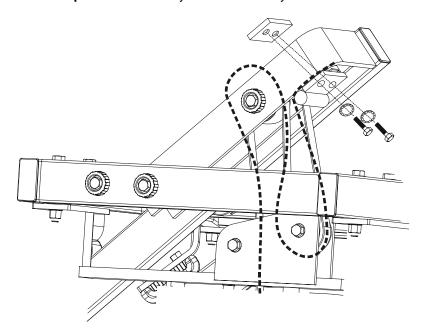
9. Connect the belts to the weight stacks. Connect the belt to the weight stack by looping the belt over the belt pin as shown below. Bolt down the belt plate to 30 ft/lbs. as shown in the figure below.

NOTE: THE "RIBS" IN THE BELT SHOULD BE FACING TOWARD THE BELT PIN AS SHOWN BELOW.



Assembly Figure 9. Connect the belts to the weight stack.

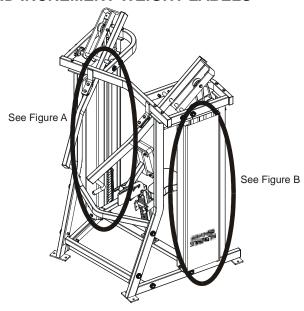
10. Run the belts through the arm pulleys and bolt down the belts. Thread the belts from the weight stacks through the arm pulleys to the belt plate. With the weight stack pin in the bottom (150 lb.) plate, pull the belt until it's tight. Use the 3/8" x 1-1/4" bolts and plates (circled) and tighten down the belt to 20 ft/lbs. Cut off the belts leaving about one inch beyond the belt plate. Use a heavy scissors or utility knife to cut off the belt.



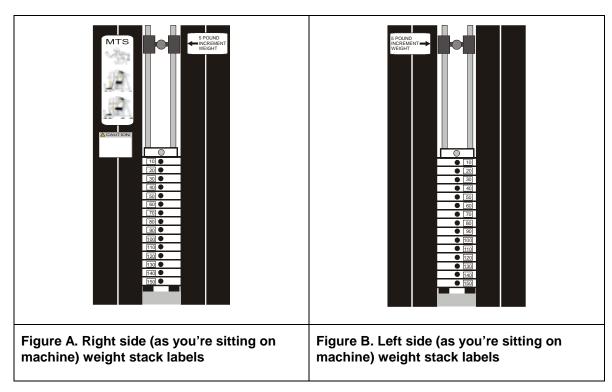
Assembly Figure 10. Belt routing through arm pulleys. Cut off excess.

NOTE: THE 3/8" STAR WASHERS THAT LOCK DOWN THE BELTS TO THE ARMS WILL NEED TO BE REPLACED EACH TIME THE BOLTS ARE LOOSENED FOR BELT MAINTENANCE.

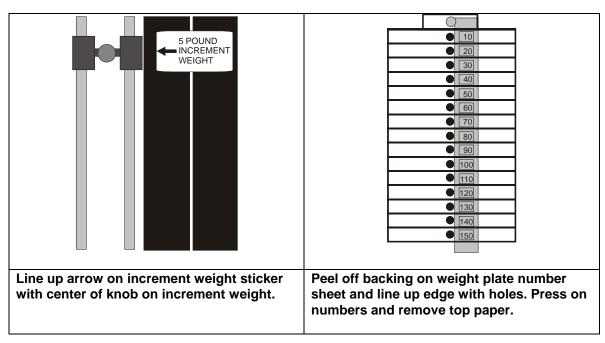
#### WEIGHT STACK AND INCREMENT WEIGHT LABELS



NOTE: STUDY THE FIGURE BELOW <u>BEFORE</u> APPLYING ANY LABELS.



Assembly Figure 11. Weight stack and increment weight label locations for MTS Row.



Assembly Figure 12. Label details.

To apply the weight plate stickers:

- 1. Peel off the backing.
- 2. Line up sticker backing edge with holes as shown in the figure. Make sure you've aligned the sheet so that the top hole in the stack (the one that holds the weight stack pin) DOES NOT get a sticker.
- 3. Make sure the sheet of labels is straight.
- 4. Press down.

#### HAMMERHEAD WASHER LOCATIONS





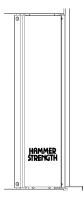
1. Outside (eight each side)

2. Inside top (two each side)

Assembly Figure 13. Hammerhead washer locations.

Assembly Figure 13 shows the 20 bolt connections on the MTS ROW that need hammerhead washers.

#### **CLEANING THE SHIELDS**



The shields on the MTS machine are made from LEXAN. Adherence to regular and proper cleaning procedures is recommended to preserve the appearance.

#### **Washing To Minimize Scratches**

Wash LEXAN with a mild soap or detergent (e.g. Joy Dishwashing Liquid) and lukewarm water using a clean sponge or a soft cloth. Rinse well with clean water. Dry thoroughly with a chamois or moist cellulose sponge to prevent water spots. Do not scrub or use brushes on these products; their coating is UV-resistant, not mar-resistant.

Fresh paint splashes, grease and smeared glazing compounds can be removed easily before drying by rubbing lightly with a grade of VM&P naphtha or isopropyl. Afterward, a warm final wash should be made, using a mild soap or detergent solution and ending with a thorough rinsing with clean water.

#### **Minimizing Hairline Scratches**

Scratches and minor abrasions can be minimized by using a mild automobile polish. Four such products that tend to polish and fill scratches are: Johnson Paste Wax, Novus Plastic Polish #1 and #2, Mirror Glaze plastic polish, and Plexus. It is suggested that a test be made on a small corner of a shield with the product selected and that the polish manufacturer's instructions be followed.

#### Some Important "Don'ts"

- DO NOT use abrasive or highly alkaline cleaners on the shields.
- Never scrape shields with squeegees, razor blades or other sharp instruments.
- Benzene, gasoline, acetone or carbon tetrachloride should never be used on the shields.
- DO NOT clean shields in hot sun or at elevated temperatures.

#### **Compatible Cleaners For Shields**

The following cleaning agents have been found compatible with LEXAN. The manufacturer's recommendations and instructions should be followed. They are: Joy, Freon T.F., Palmolive Liquid, Top Job, VM&P grade naphtha, Windex with Ammonia D.

#### Removal Of Paint, Marking Pen, Labels

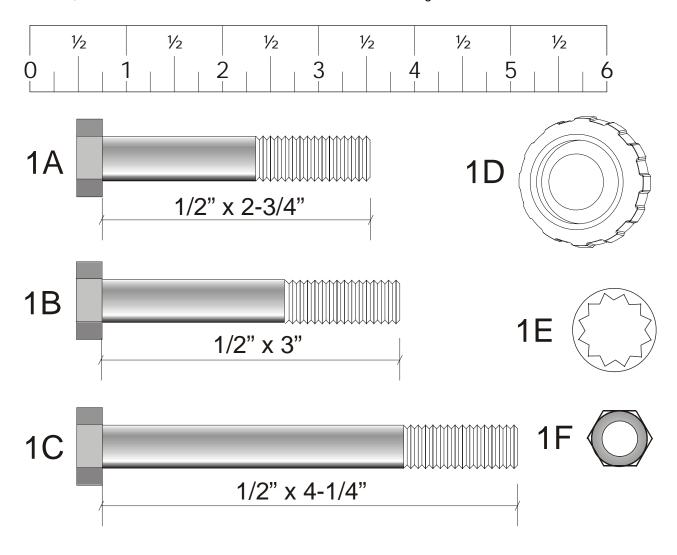
Butyl cellosolve works well for removal of paints, marking pen inks, lipstick, etc.

Labels, stickers, etc. may be removed using kerosene or VM&P naphtha. When the solvent will not penetrate sticker material apply heat (hair dryer) to soften the adhesive and promote removal. GASOLINE SHOULD NOT BE USED.

#### 3. HARDWARE

#### **PRIMARY HARDWARE**

Nuts, bolts and hammerhead washers are shown in Hardware Figure 1.

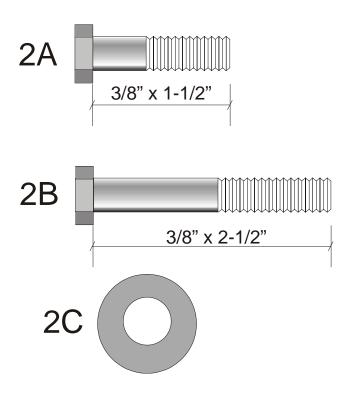


Hardware Figure 1. Hammerhead washer, bolts and nut used to bolt sides to bottom brace and front brace.

The parts shown in Hardware Figure 1 are used to bolt together the sides, bottom brace, front brace, seat and arms. They are:

- 1A. ½" x 2-3/4" hex head bolt (seat assembly-frame, front-sides, arms-top) (16) (0017-00101-1573)
- 1B. 3" hex head bolt (sides-bottom) (4) (0017-00101-1582)
- 1C. 4-1/4" hex head bolt (top-sides) (8) (0017-00101-1576)
- 1D. Hammerhead washer (slide onto bolt under head) (16) (0017-00042-1041)
- 1E. Star washer (use two on bolts that do NOT have hammerhead washers and on painted surfaces with nut) (32) (0017-00104-0379)
- 1F. 1/2" Locknut (28) (0017-00103-0223)

#### **UPHOLSTERY HARDWARE**



Hardware Figure 2. Upholstery bolts and washers.

2A. 3/8" x 1-1/2" hex head bolt (chest cushion to seat frame) (4) (0017-00101-1411)

2B. 3/8" x 2-1/2" hex head bolt (seat to seat frame) (2) (0017-00101-1417)

2C. 3/8" flat washer (6) (0017-00104-0313)

#### PREVENTIVE MAINTENANCE TIPS

ACTION	DAILY	MONTHLY	QUARTERLY	BI-ANNUALLY	YEARLY	AS NEEDED
CLEAN						
Upholstery	Х					
Guide Rods						Х
Linear Rods						Х
Shields						Х
Hand Grips						Х
INSPECT						
Belts	Χ					
Hardware			Х			
Frame				Х		
Hand Grips						Х
LUBRICATE						
Linear Bearing			Х			
Guide Rods						Х
Range Limiter						Х

#### Clean:

- Upholstery with a mild soap and water.
- Guide and linear rods with a cotton cloth.
- Hand grips with mild soap and water.

#### Inspect:

- Cables for wear or damage and proper tension (should not exceed 3/4" deflection). Pay close attention at bends and attachments points.
- Hardware should be checked for looseness. Tighten as required.
- Frames should be inspected for wear or damage.
- Hand grips should be checked for wear or damage.

#### Lubricate:

- Linear bearing with TF1000 grease (part number SK50-P0004-0000).
- Guide rods with Break-Free (part number SK50-P0005-0000). Apply the Break-Free to a cotton cloth, then run the cotton cloth up and down the guide rods as needed.
- Range limiting device should be cleaned and lightly oiled using Break-Free (part number SK50-P0005-0000).