

ASSEMBLY INSTRUCTIONS FOR FSH LADDERS

PARTS LIST

- A. Stair section
- B. U-bar assembly
- C. Top step
- D. Vertical assembly
- E. Rear guardrail
- F. Base rails (quantity 2) or single piece base weldment (for FSH 6 and 7 steps)
- G. Top handrail – right side
- H. Top handrail – left side
- J. Lower handrail – quantity 2

HARDWARE

Item:	Quantity Included:
1. 5/16-18 x 1" bolts	4
2. 5/16-18 x 1-1/4" bolts	2
3. 5/16-18 x 1-3/4" bolts	6
4. 5/16-18 x 2-1/4 bolts	12
5. 5/16-18 locknuts	32
6. Handrail Brackets	6
7. Swivel casters (2 or 3 inch)	4
8. Caster springs	4
9. Acorn nuts	4
10. Your pack may include washers. They can be used but are not necessary.	

Assembly Instructions – Refer to Illustration

1. Unpack your ladder and make sure that all parts are present, using the parts list and the illustration for reference. You should have two people available for the assembly process. Tools required: ½" wrench and socket wrench.
2. The ladder will be assembled on its side. It's recommended that sheets of cardboard or other padding be placed on the floor in the assembly area to prevent scratches to the powder coat.
3. Lay the stair section weldment (A) on its side. Attach the u-bar assembly (B) to the bottom of the first step using 4 locknuts (5) and washers (6). Ensure the u-bar is straight and properly seated, then fully tighten the locknuts.
4. Connect the top step weldment (C) to the brackets at the top of the stair section using 4 locknuts (5). Fully tighten the locknuts.
5. The vertical weldment (D) and rear guardrail (E) are added at the same time. Position the vertical weldment (D) so that the back of the top step lies between the two flattened ends at the top of the vertical. The holes near the back of the top step should align with the holes in the flattened ends. Before bolting in place, align flattened ends of the rear guardrail with the same holes, so the guardrail is perpendicular to the top step. Then use two 1-1/4" bolts (2) with locknuts (5) and washers (6) to connect both assemblies to the top step. Do not tighten the bolts, as adjustments to the positioning will need to be made as assembly continues. Pivot the vertical assembly into an approximation of its final position to make assembly of the base easier.
6. Assemble caster hardware. Slide a spring (9) onto each caster stem (8), then slide into caster sleeves. Caster sleeves are welded onto the base rails (F). There could be two separate base rails or one base weldment, depending on the size of your ladder. Either way, orient the caster sleeves so they are pointing up, as shown in the assembly drawing. Slide each caster stem with spring into a caster sleeve so the wheel is on the bottom and the threaded part of the stem sticks out the top. Fasten the stems in place using the acorn nuts (10).
7. Again, whether you have two base rails, or one base weldment depends on the size of your ladder. The assembly procedure is the same whether you have one piece or two. Making sure the wheels are on the bottom, attach the flattened ends of the base rails (F) to the front u-bar using two 1-3/4" bolts (3), locknuts (5), and washers (6). Do not fully tighten the bolts yet.
8. Connect the flattened ends at the back end of the base to the outsides of the u-bar at the bottom of the vertical assembly, adjusting the position of the vertical as necessary so that the holes align. Use two 1-3/4" bolts (3), locknuts (5), and washers (6) for the connection. Do not fully tighten.
9. Install the upper handrail (G or H depending on what side the ladder is lying on) on the upper side of the ladder. Use a 1-3/4" bolt (3) with locknuts (5) and washers (6) on the connection to the rear guardrail. Next, use a handrail bracket (7) with two 2-1/4" bolts (4), locknuts (5), and washers (6) on the end that meets the side of the stair section. The handrail goes on the outside of the stair section, and the bracket goes on the inside. Make sure the round tubing is properly seated in the handrail bracket. If

your ladder has a 21" deep top step, there will be an additional brace connecting the top of the upper handrail to the top step. Use a 1" bolt (1) with a locknut (5) and washer (6) for this connection. Do not fully tighten any of these bolts.

10. Attach the lower handrail (J) to the outside of the stair section in the same manner. The upper end of the lower handrail should be against the bottom of the top handrail. Use two handrail brackets (7), four 2-1/4" bolts (4), locknuts (5), and washers (6). Do not fully tighten.

11. Carefully stand up the ladder. Important – Do not climb the ladder yet.

12. Make sure the ladder is standing on a level surface (clear away cardboard or wheel to another location if necessary).

13. Walk around ladder, making sure it sits level and isn't skewed. When no weight is on the ladder, the springs should lift it slightly so it can be wheeled. Make any obvious adjustments needed before putting weight on the ladder. Next, put enough weight on the first step to make the springs compress. Make sure all four feet sit on the floor with no wobble. The ladder should come to rest on the floor smoothly and easily as someone steps onto the first step. Adjust connections if needed, then fully tighten locknuts once ladder is level and square.

14. Once the connections that can be reached from the ground are tightened up, and after checking to make sure ladder is stable, climb ladder carefully to adjust and tighten the rest of the bolted connections.

15. Finish installing the upper and lower rails on the other side of the ladder, using the same hardware and positioning as the first side. Make sure handrails are symmetrical from one side of the ladder to the other.

16. Make a final inspection of the ladder to ensure all connections are tightened, the ladder sits level on the floor, and the springs function properly.

FSH LADDER ASSEMBLY INSTRUCTIONS
SEE ADDITIONAL SHEETS FOR PARTS LIST AND ASSEMBLY STEPS

