

HQ Precision-Glide Track Upgrade Kit QF09761 (HQ Studio Frame For HQ Avante Machine)

Assembly Instructions

The Upgrade Kit:

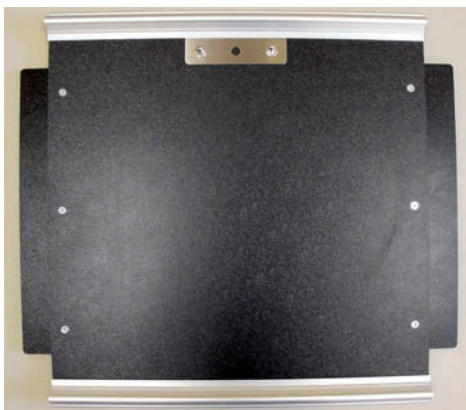
Is designed for the Studio Frame 12 foot with the HQ Avante machine. Available for end users that purchased the original HQ Studio Frame with white 4W track at 12 foot. This kit includes the QF09711 and a 2' extension kit and when combined give the customer the full 12 foot width. It is designed to be about 12 feet long and not shorter or longer. We created a size that was most usable and flexible for a majority of users.

Contents:

Two Foot Extension Parts:



Track, tape, screw bag, couplers
as packaged



Top view as packaged,
top of image goes to front



Bottom view as packaged,
bottom of image goes to front

Contents - continued

- Assembly Instructions for: QF09760 and QM09811
- 1: QF09537 Precision-Glide Carriage Assembly HQ 16 8W (separate box)
- 2: Table top assembly: Includes table top each assembled with 2 track support extrusions and 2 adjustable brackets with hardware:
 - 8 screw M6x1.0x12mm socketed washer head
 - 8 screw M6x1.0x16mm socketed flat head screw with 2 flats on the sides of threads
 - 8 screw M6x1.0x16mm socketed flat head
 - 8 nut M6x1.0 acorn
 - 8 washer M6 large stainless steel
 - 8 lock washer M6

Tools:

- 3mm Allen wrench
- 4mm Allen wrench
- 10mm/4mm Wrench
- 8mm Drill Bit
- 8mm Drill Bushing
- 2 nut M6 for fixture/drilling

Hardware:

- 12 - Screw M5x0.8x8 Socketed Button Head Screw
- 4 - Screw M6x1.0x32mm with 16.5mm socketed washer head.
- 9 - command strips,
- 4 - black track 10'
- 2 - track support coupler
- 1 - QM29711 Assy Machine Encoder HQ16 V3
- 1 - QM20795 Cable Terminator 18

Precision-Glide Machine Wheel Kit:

- 1 - QM09811 Precision-Glide Machine Wheel Kit

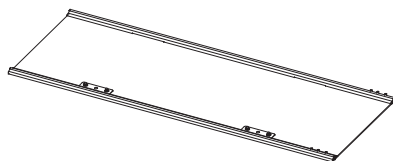
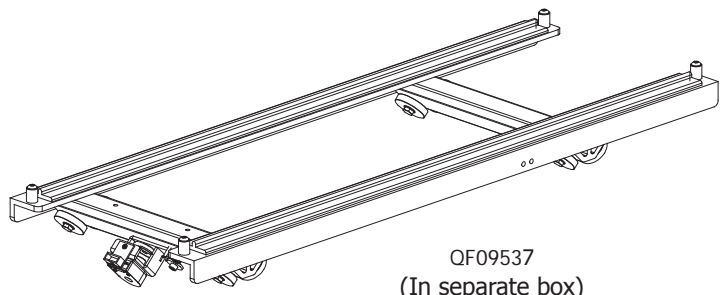
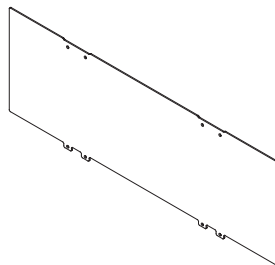
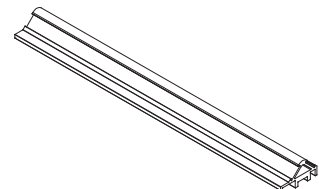


Table Top Assembly (2)

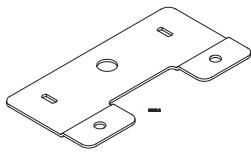
Part Number NA



Plastic Table Top (2)
Part of table top
assembly
QF09700-302



Track Support (4)
Part of table top assembly
QF09700-02



Adjustable Bracket (4)
Part of table top assembly
QF09700-10



M6x12 Washer Head Screw (8)
Part of table top assembly
QF09318-303



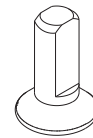
M6x16 Flat Head Screw (8)
Part of table top assembly
QF09700-14



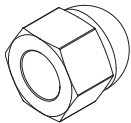
M6 Flat Washer (8)
Part of table top assembly
QF09700-12



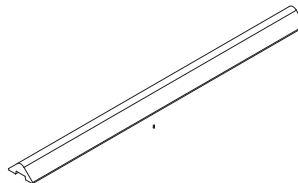
M6 Lock Washer (8)
Part of table top assembly
QF09700-16



M6 Flat Head Screw with
two flats (8)
Part of table top assembly
QF09700-11



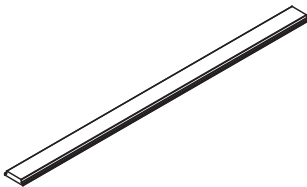
M6 Acorn nut (8)
Part of table top assembly
QF09700-13



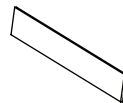
Track Support Coupler (2)
QF09318-03



M5x8 Screw (12)
QF09318-304



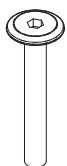
Black Track (4)
QF09700-04



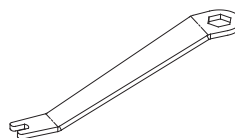
Command Strip (9)
QF10541



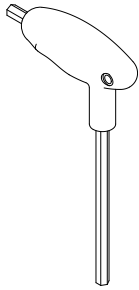
M6 Regular nut for drill
fixture (2)
QF09725-17



M6x32 Socketed Washer Head
Screw (4)
QF09725-03

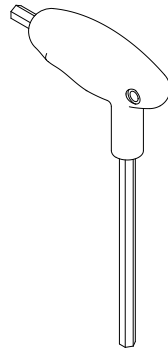


10mmX4mm wrench (1)
QF09700-15



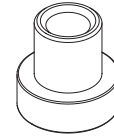
3mm Allen
Wrench (1)

QF09318-111



4mm Allen
Wrench (1)

QF09318-112



8mm Drill Bushing (1)
QF09725-02



8mm Drill Bit (1)
QF09725-01



Precision-Glide Machine
Wheel Kit with
Instructions (1)
QM09811

Step 1: Table Preparation

1-1: Remove the poles and place them aside in a safe place.

1-2: Pull up the white table tracks to access the track support fixing screws underneath.

1-3: Remove the 4 small Phillips head screws from each flat track support on the three 4' table sections.

1-4: Remove the old plastic tops from each 4' table section.

1-5: Remove the old tape that was holding down the old plastic top from each 4' table section.

Step 2: Table Top and Track Support Joining

Parts needed

2-Table Top Assembly (from QF09700 kit)
1- 2' Table Top Extension (from QF09750 kit)
4-Track Support Coupler (2 from each kit)
24-Screw, M5x8mm socketed button head (12 from each kit)

Tools Required

3mm Allen Wrench (Provided)



NOTE: The 2' extension will be installed into the center of the two longer 5' table sections found in the QF09700 Precision-Glide Track Upgrade Kit. The QF09750 HQ Precision-Glide Track Upgrade 2' Extension Kit for HQ Studio Frame includes a 2' table top extension, two additional track support couplers and 12 more screws to do this.

2-1: Lay out the table assemblies as follows: Place the 2' extension in the center of the two longer 5' table sections with the track supports face down on a flat protective surface such as a carpeted floor or on the HQ Studio Frame surface. The table top assemblies should be orientated so the track support without the metal adjusting brackets is facing the front of the table when upside down, track support on table top (**Fig. 2-1 and Detail. 2-1**) When the table top assembly is turned over, right side up, the track support without the metal adjustment brackets will be at the rear edge of the table top.

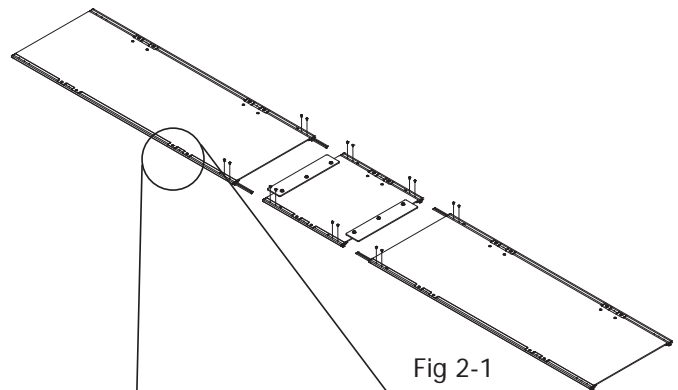
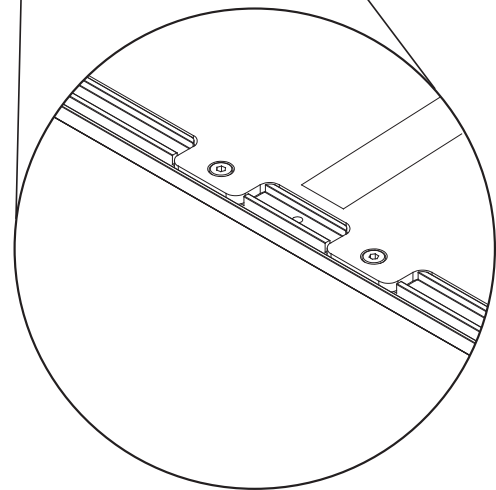


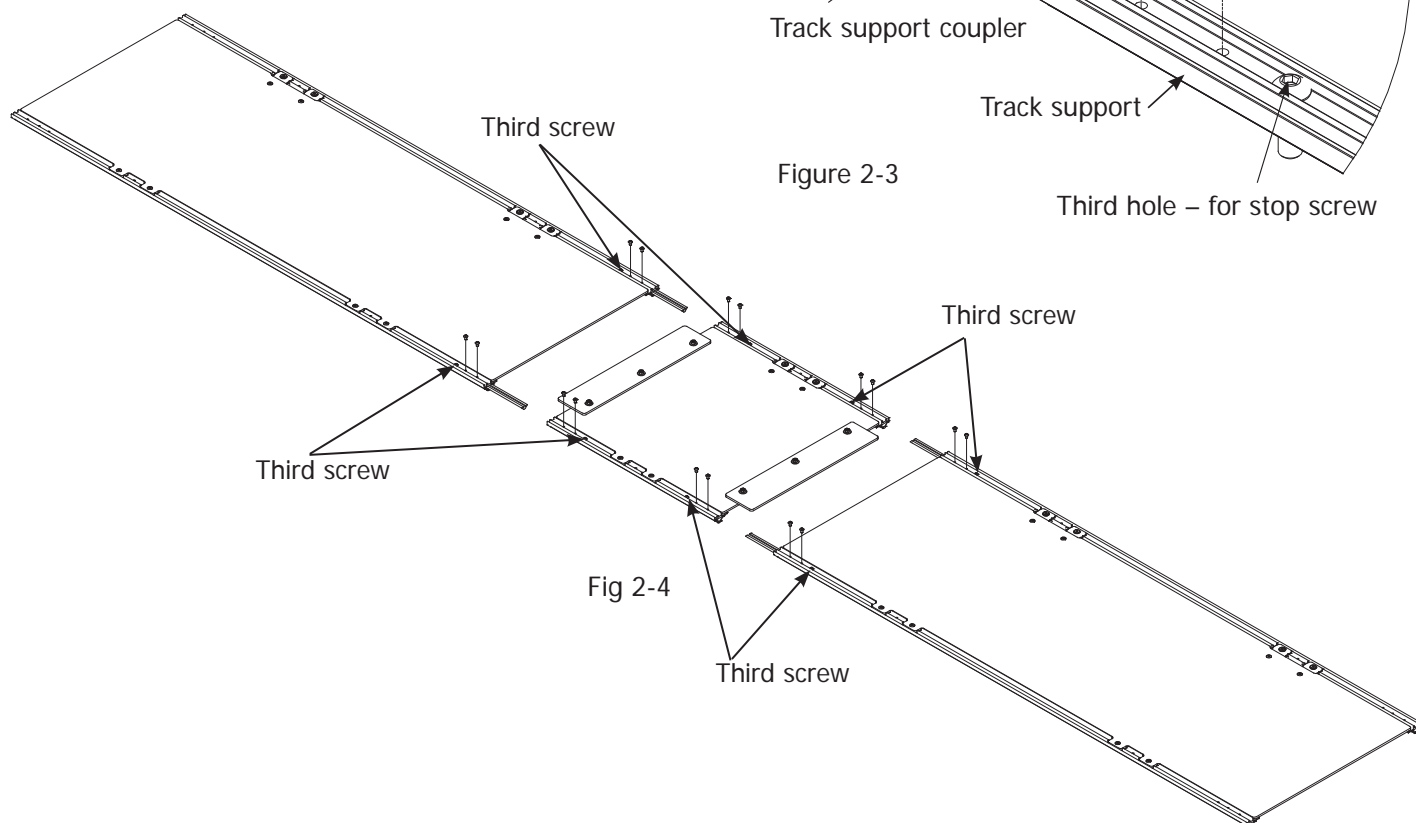
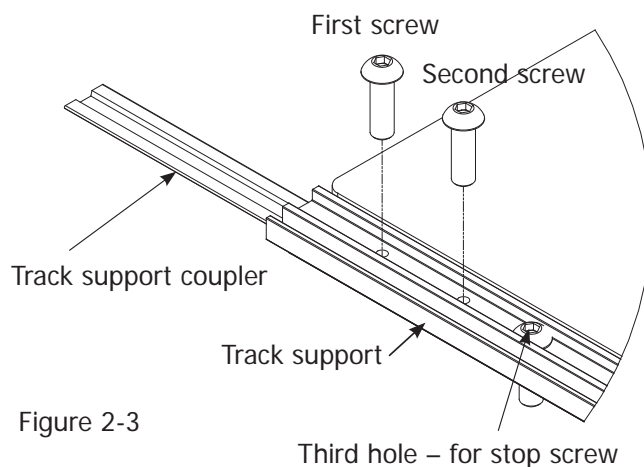
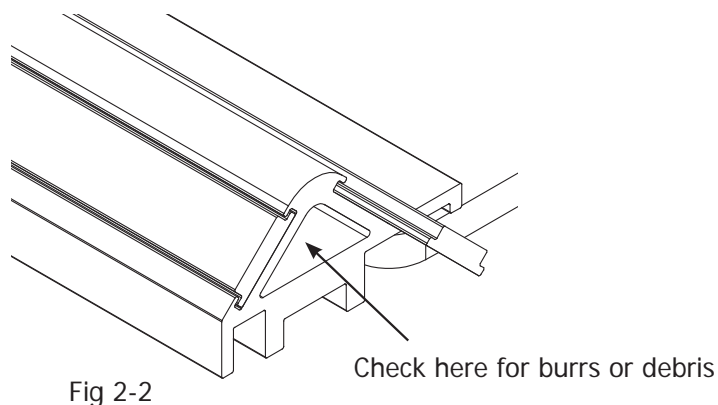
Fig 2-1



Detail 2-1 - Table shown upside down with non-adjusting track support at front edge of table

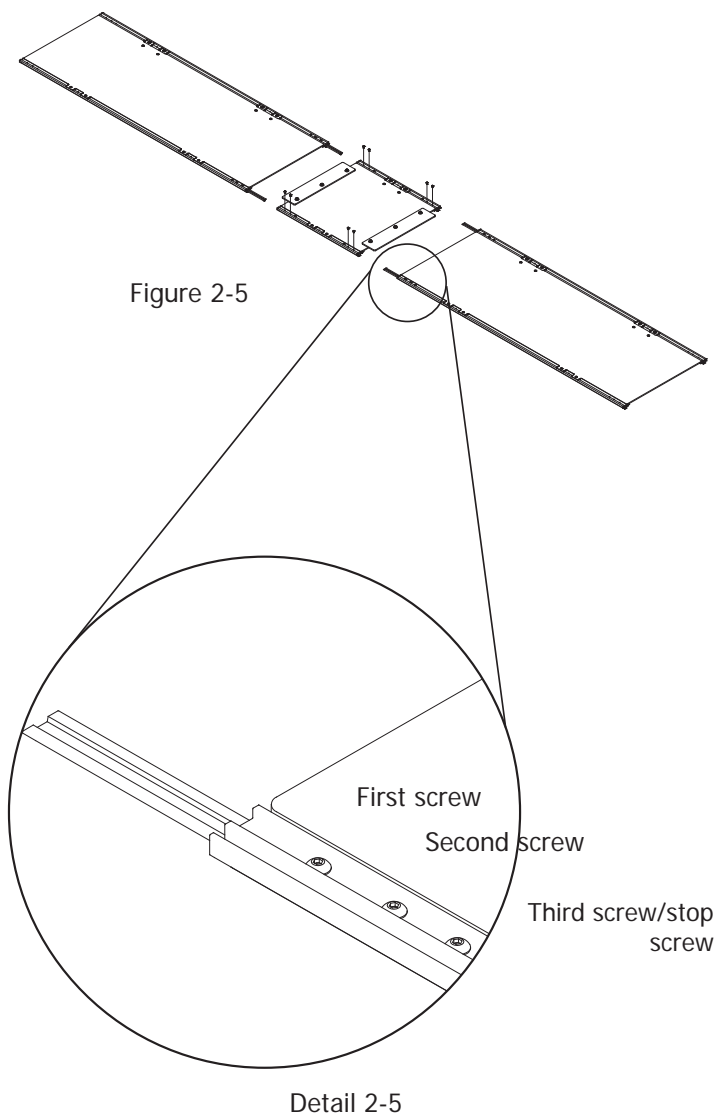
2-2: Check inside the ends of the track supports for burrs or debris and remove all foreign matter from the inside if necessary. (**Fig. 2-2**)

2-3: To prepare for joining the two 5' and the 2' table top assemblies together, insert one M5x8mm Socketed Button Head Screw into the third hole from the splice end on each of the track supports as shown in (**Fig. 2-3 and Fig. 2-4**) These third screws serve as stop screws for the track support couplers. Fully tighten the third screws with the 3mm Allen wrench provided. These screws will help align the coupler into the track support sections when joined.



2-4: Insert a coupler up to the stop screw in the two track supports at one end of the first 5' table top assembly. Thread a M5x8mm Socketed Button Head Screw into the first and second holes on both track supports on the table top assembly and lightly tighten. (**Fig. 2-5 and Detail 2-5**)

2-5: Repeat step 2-4 for the other 5' table top assembly, to install the couplers and screws. (**Fig. 2-5 and Detail 2-5**)



2-6: Thread M5x8mm Socketed Button Head Screws into the first and second holes on both track supports on the 2' extension table. **(Fig. 2-6 and Detail 2-6)**

2-7: Slide the couplers from both 5' tables into the 2' extension in the center, align and lightly tighten the coupler into each of the track supports. There should be minimal gap between the sections. **(Fig. 2-7)**

2-8: Once alignment is assured fully tighten all coupler screws. **(Fig. 2-7)**

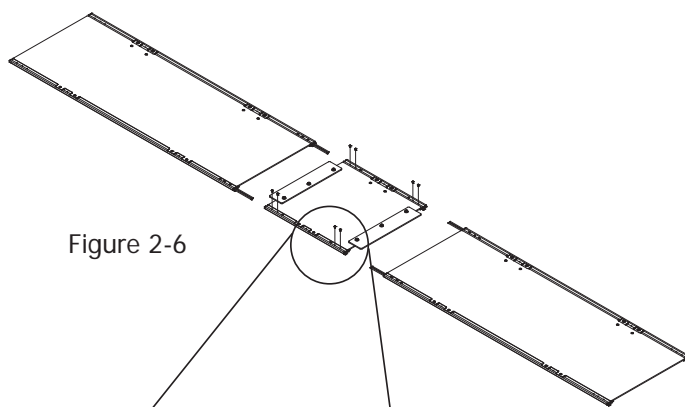
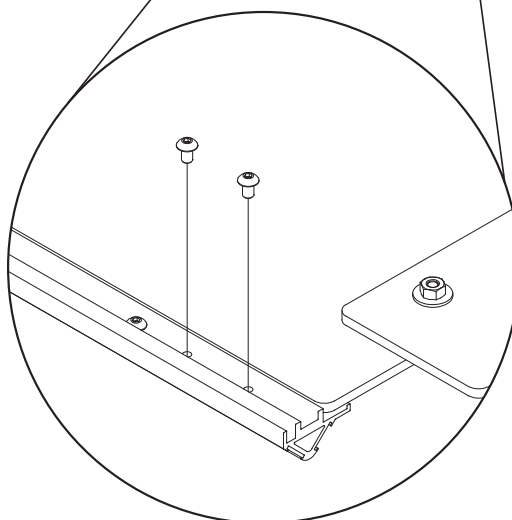


Figure 2-6



Detail 2-6

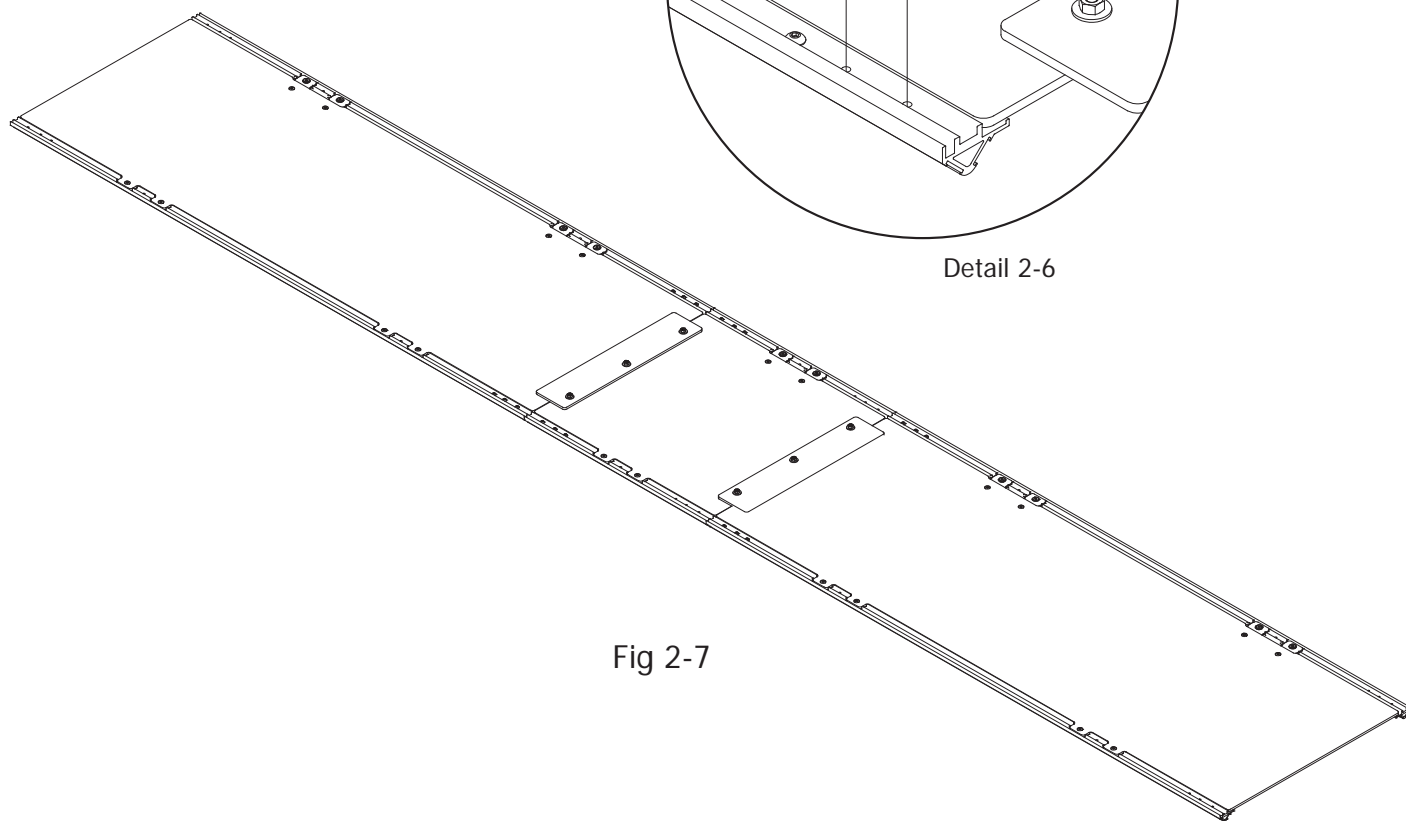


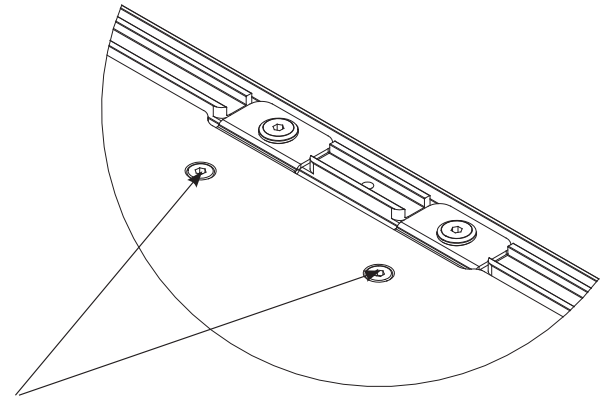
Fig 2-7

Step 3: Check Screws

Tools Required

4mm Allen wrench (Provided)

3-1: Important: The flat head screws on the stainless steel adjusting bracket do not turn, they have two flats that fit into slots in the adjusting bracket to prevent them from turning. (**Fig. 3-1**) **If you turn the head of these screws they will become damaged and or break.** This may also damage the adjusting bracket. The acorn nuts on these special flat head screws on the adjusting bracket will be checked and tightened later once the final track support adjustments are made.



These screws do not turn, they have flats for adjusting bracket – do not turn. Tighten at the acorn nut only.

Figure 3-1

3-2: Check the (10) large washer head screws on the track supports on the adjusting bracket side to make sure they are tight. (**Fig. 3-2**) Check the (10) flat head screws on the track support without adjusting brackets to confirm they are tight. (**Fig. 3-3**) These screws turn and tighten into the track support.

Check these for tightness

Large washer head screws

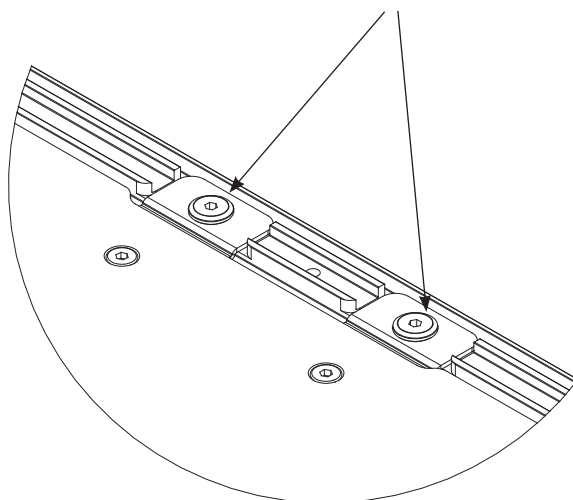


Figure 3-2

Flat head screws on non-adjusting track support

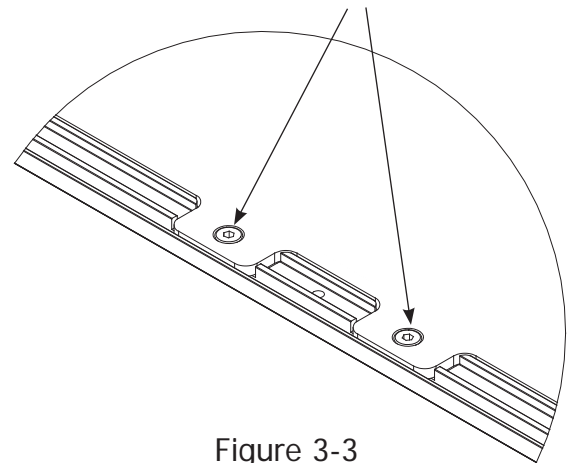


Figure 3-3

Step 4: Turn Over the Table Top

Parts needed

1-Table top assembly

Tools Required

1-Second person

4-1: Now that the table assemblies are joined it is time to carefully turn them over. Care should be taken to turn the assembly over so the couplers will not be bent and no damage will occur to the assembly. It is recommended that two people turn the assembly over being careful to keep it as straight as possible. Keep as much weight and stress off the center joint of the table assembly as possible. (**Fig.4-1**)

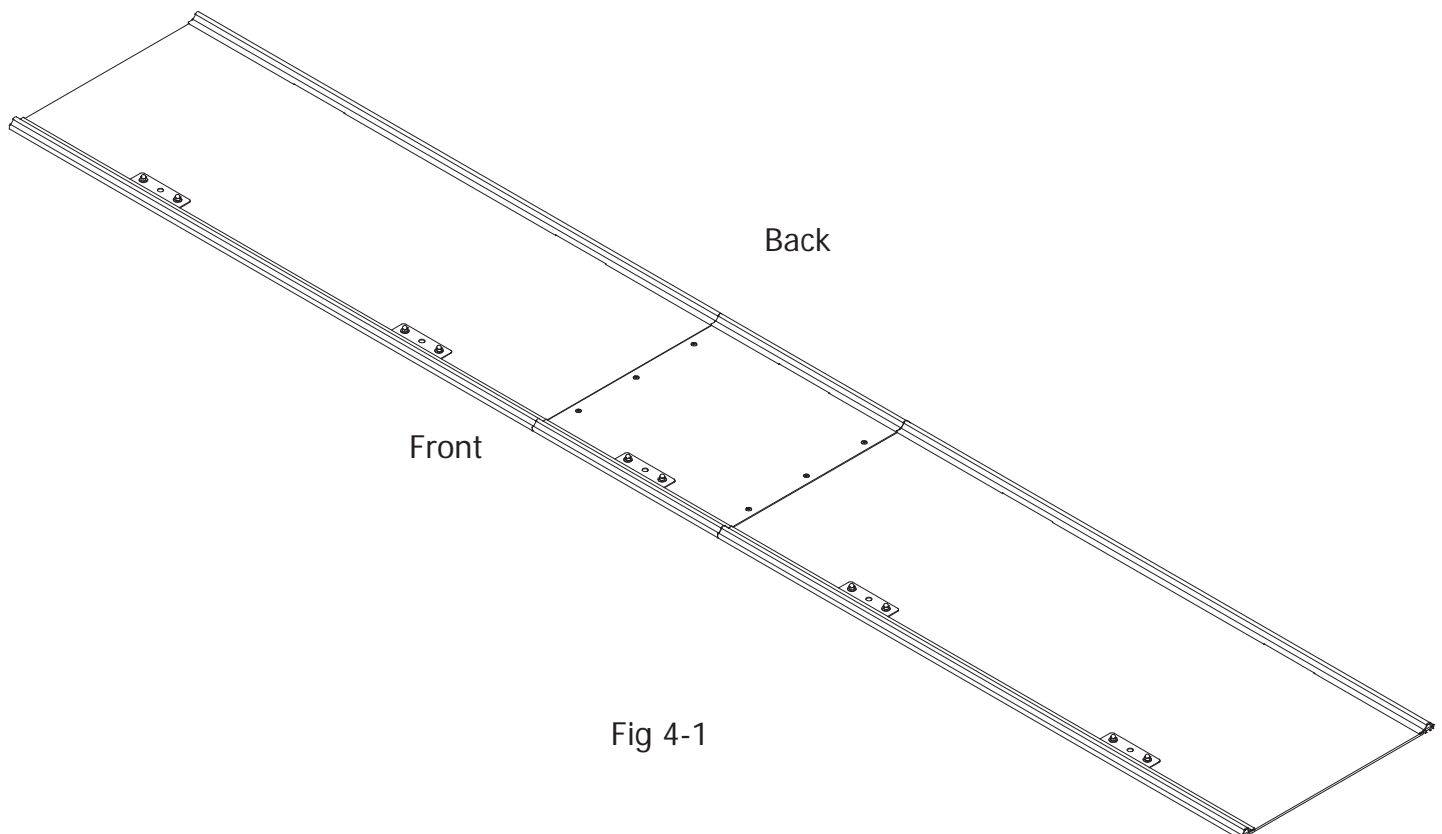


Fig 4-1

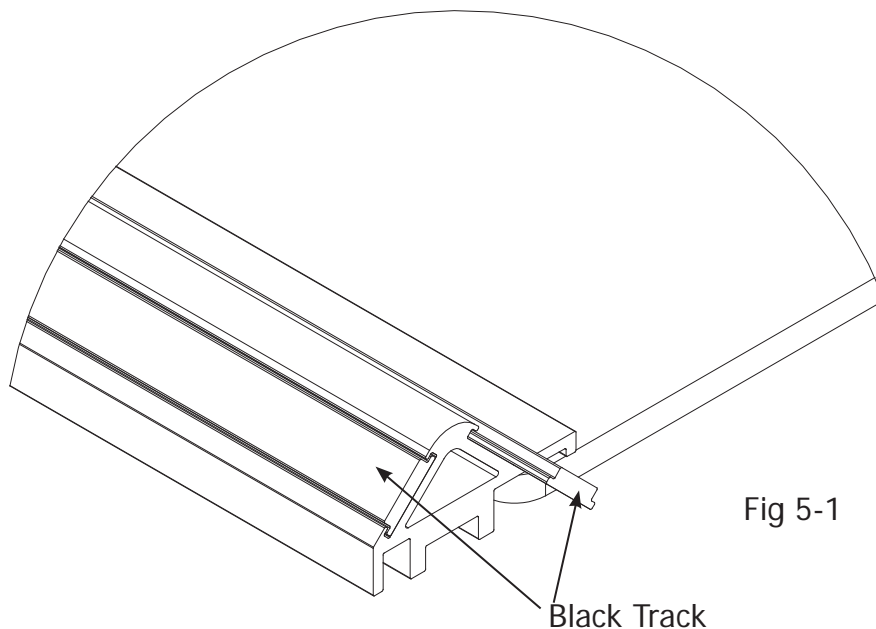
Step 5: Insert Black Track

Parts Needed

4-Black track 12'

1-Table top assembly

5-1: Insert a black plastic track completely into both sides of the two aluminum track supports. The plastic track should slide into the track support easily. If a plastic track binds slightly, try backing the track out a little, then, try pushing it further. If the track binds badly, check the track supports for debris, burrs misalignment or damage. (**Fig. 5-1**)



Step 6: Position the Table Top

Parts needed

- 1-Table top assembly
- 1-Double-sided tape

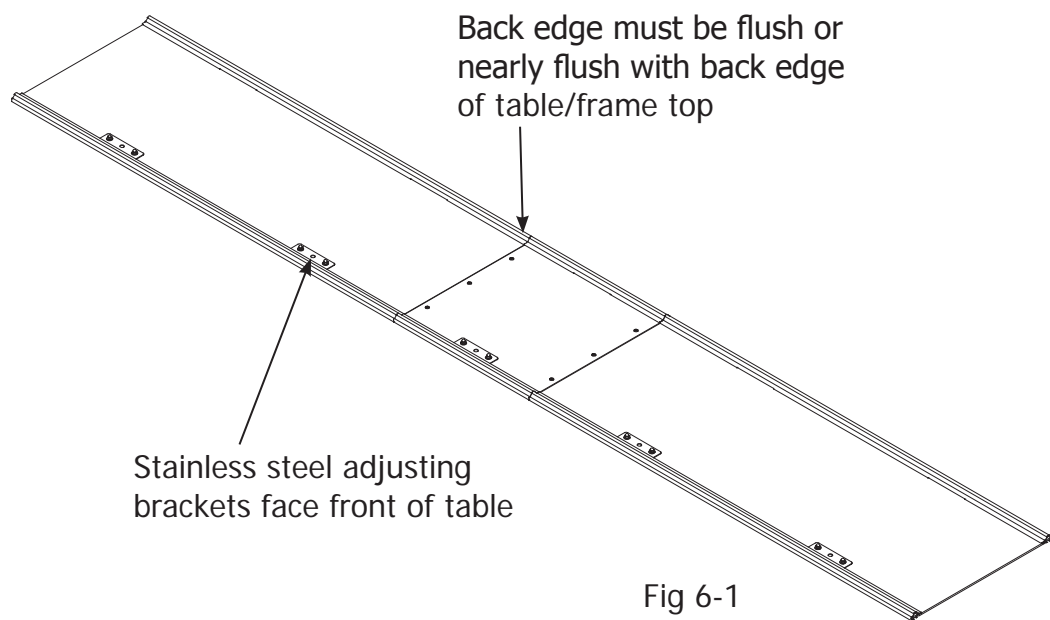
Tools Required

- 1-Tape measure (not provided)
- 1-Pencil, (not provided)
- 1-Second person



HINT: Make sure the stainless steel adjusting brackets are towards the front of the table.

6-1: Using a tape measure, mark the center of the table/frame top, left to right, with a pencil. Mark the center of the 2' section/new table top assembly left to right with a pencil. Center the table top assembly with the center line of the frame top. Position the table top track assembly so the aluminum track support without the adjusting brackets is flush with the back edge of the table/frame top. (**Fig. 6-1**)



6-2: Study where the new black plastic top will be aligned on the frame with it as flush to the back edge as possible, and install the new tape on the perimeter and on all cross members to hold down the new plastic top.

6-3: Before removing the tape backing, do a test run to see how the new plastic top will align. Ensure that everything will align fine onto the frame top sections and mark where the new top will start and stop. Ideally the table top assembly will fully cover the tape.

6-4: Remove the tape backing. With the help of a second person place the new top onto the tape, starting at the back at one end and aligning the back of the top flush with the back edge of the frame, moving across the table from one end to the other.



NOTE: It is important that the back track be flush with the back edge of the frame to ensure that the new carriage encoder at the back of 8-wheel HQ Precision-Glide carriage will work properly and not interfere with the table.

Step 7: Align Tracks to the Carriage

Parts needed

1-table top assembly
1-table
1-carriage

Tools Required

1-10mm wrench (Provided)

7-4: Finally, fully tighten the two acorn nuts on the four adjusting brackets. **Do not over-tighten the acorn nuts onto the screws with flats.**

7-1: Loosen, but do not remove the acorn nut on each of the four metal adjusting brackets on the track support at the front of the table.



NOTE: The encoder on the 8-wheel HQ Precision-Glide carriage goes to the back of the table.

7-2: Place the carriage on the tracks at one end of the table. Roll the carriage back and forth along the length of the table, establishing the distance between the two tracks, taking care to check that the wheels are engaging the track on both the front and the back of the carriage.

7-3: With a machine on the carriage, roll the carriage the entire length of the table, working the tracks into the wheels as you go. Lightly tighten the two acorn nuts on each metal adjusting bracket as you move down the table. Check the carriage to verify that it rolls smoothly and that both ends of the carriage are engaging the tracks. If you find a section of track where the carriage rocks back and forth when the machine is moved all the way forward or back, loosen the acorn nuts and adjust the front track until the carriage rolls smoothly and does not rock, then re-tighten the acorn nuts on the metal adjusting bracket.

Step 8: Screw Down Kit

Parts Needed

4-M6x32mm washer head screws

Tools Needed

1-10mm/4mm Wrench (Provided)

1-4mm Allen Wrench (Provided)

1-8mm Drill Bit (Provided)

1-8mm Drill Bushing (Provided)

1-Electric Drill (Not Provided)

1-Second Person



Important: Before using the screw down kit it is important that the table leaves are all pulled firmly together to remove all gap between them.

8-1: To hold the table top assembly more firmly in place, a screw down kit is provided.

8-2: Remove the two acorn nuts from each of the 5 adjusting brackets at the front of the table with the 10mm wrench provided. (**Fig. 8-1**)

8-3: Flip the track assembly upside down and remove the two screws with washer heads from just one of the adjusting brackets with the 4mm Allen wrench provided. (**Fig. 8-1**) This will be used as a drill template along with the drill bushing to help drill the hold down screw holes in the correct position.

8-4: Insert the drill bushing through the bottom of the adjusting bracket so the drill bushing flange is under the bracket and so the top of the drill bushing protrudes above the bracket. (**Fig. 8-1 and 8-2**)

8-5: Rotate the adjusting bracket 180° and place the two round holes over the two screws with flats on the side. The two mounting tabs with round holes should be facing down. (**Fig. 8-1 and 8-2**)

8-6: Lightly tighten the two regular M6 nuts onto the two screws with flats on the side with the 10mm wrench provided. This will position the drill bushing properly for drilling the 8mm hole.

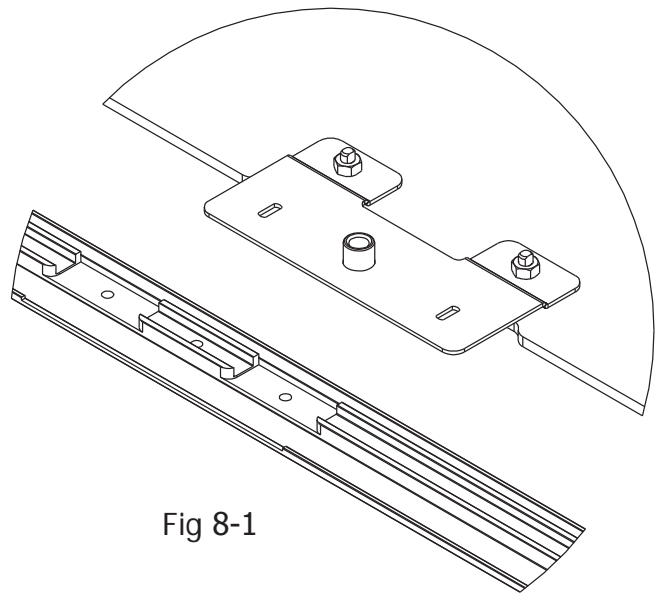


Fig 8-1

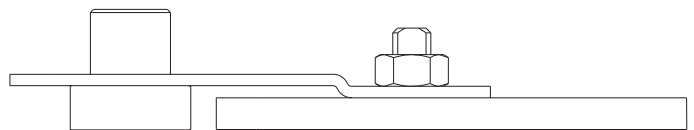


Fig 8-2



HINT: if you over tighten the two regular nuts you may have a hard time getting them back off – do not over tighten them! The wrench has a 4mm side to help hold the screw if needed.

8-7: Using an electric drill (not provided) and the 8mm drill bit provided, place the drill bit into the drill bushing provided and carefully drill through the table top, making sure you drill straight and not at an angle.

8-8: Repeat **Steps 8-5** through **8-7** to drill holes for the other four adjusting brackets.

8-9: Reinstall the bracket you have been using as a drill template back onto the aluminum track extrusion with the two screws with washer heads. Tighten the screws with the 4mm Allen Wrench provided.

8-10: With the help of a second person, place the (4) adjusting brackets over the 4 sets of screws with flats. Install a flat washer, lock washer and acorn nut on each screw. Finger-tighten only for now.

8-11: Thread the (4) M6x32mm Socketed Washer Head Screws up through the table top and into the aluminum track supports. Leave them loose for now.

8-12: Place the carriage on the tracks and adjust the track alignment as needed and described in **Step 7 page 15**.

8-13: Lastly, tighten fully the M6x32mm Socketed Washer Head Screws up through the table top. Test one more time with a machine on the carriage to ensure that the tracks are aligned to the carriage and that the carriage does not rock when moved all the way forward or back as it moves up and down the table.

Step 9: Machine Encoder and Wheel Installation

9-1: Use the Precision Glide Wheel Instructions (QM09811) to install the new machine wheels and the existing encoder to the machine.

Step 10: Cable Connections

10-1: Locate the existing QM20795 stitch regulation terminator cable and plug the D 9 pin connector into the back of the machine control-pod.

10-2: Run the middle connection, with a wire going in and a wire going out around behind the machine, under the bottom of the power-pod cover and to the machine encoder.

10-3: Run the remaining connector at the end of the cable back under the power-pod cover and to the carriage. Plug it into the carriage encoder.

10-4: Locate the flat cable clamp, QM11881 and stick it to the back of the machine as shown.

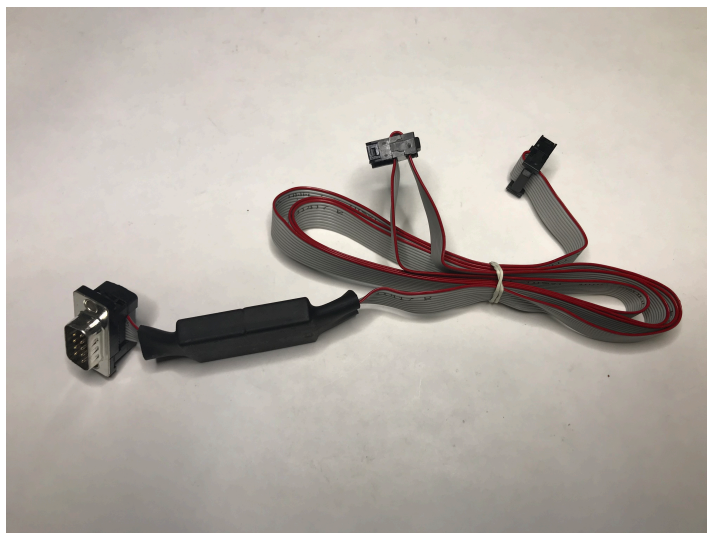


Fig 10-1



Fig 10-2



Fig 10-3