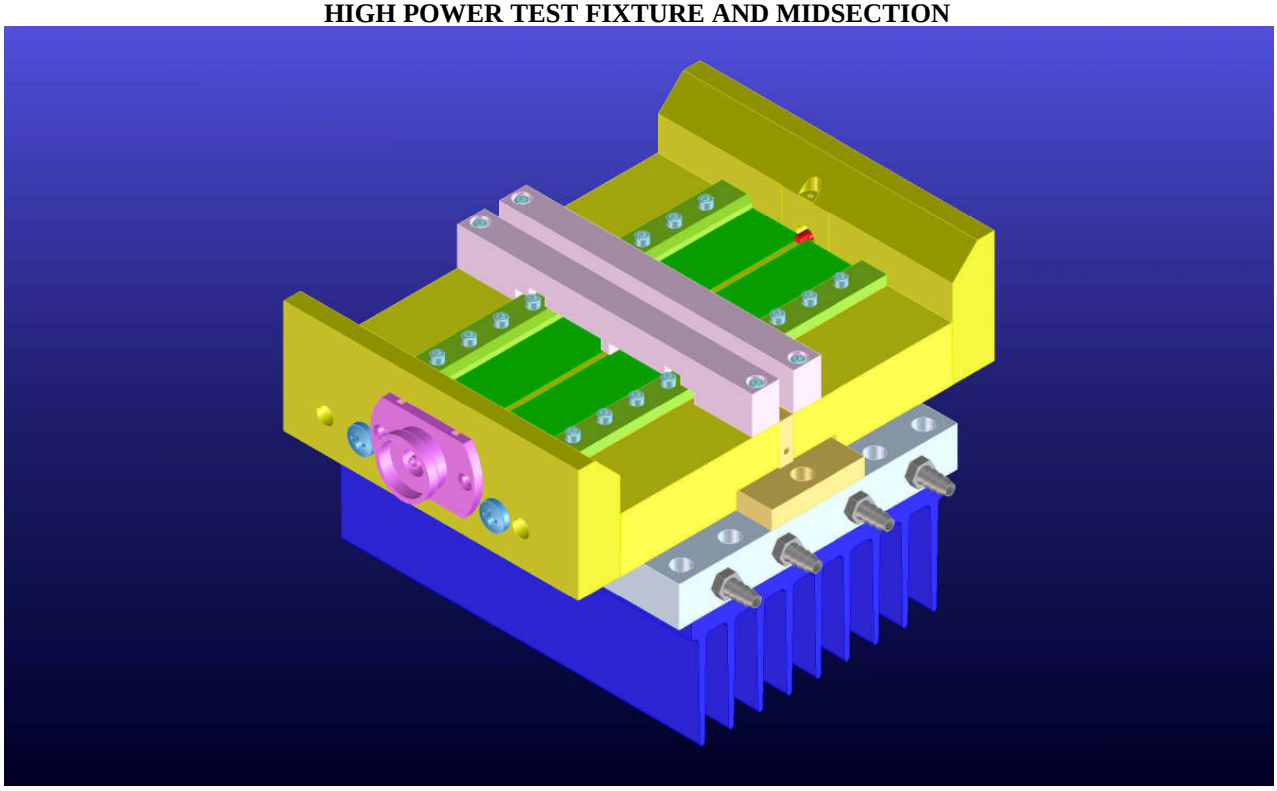
The World Wide Authority in the Design and Manufacture of Microwave Test Fixtures

USER MANUAL FOR HIGH POWER TEST FIXTURES AND CALIBRATION KITS

(PRODUCT NOTE: B6141961)

HIGH POWER TEST FIXTURE AND MIDSECTION



Part 1 of this manual explains how to disassemble the Test Fixture and Midsection assembly for testing with other Midsection assemblies as well as preparing the fixture for calibration. Details of the calibration will be covered in part 2 of this manual.

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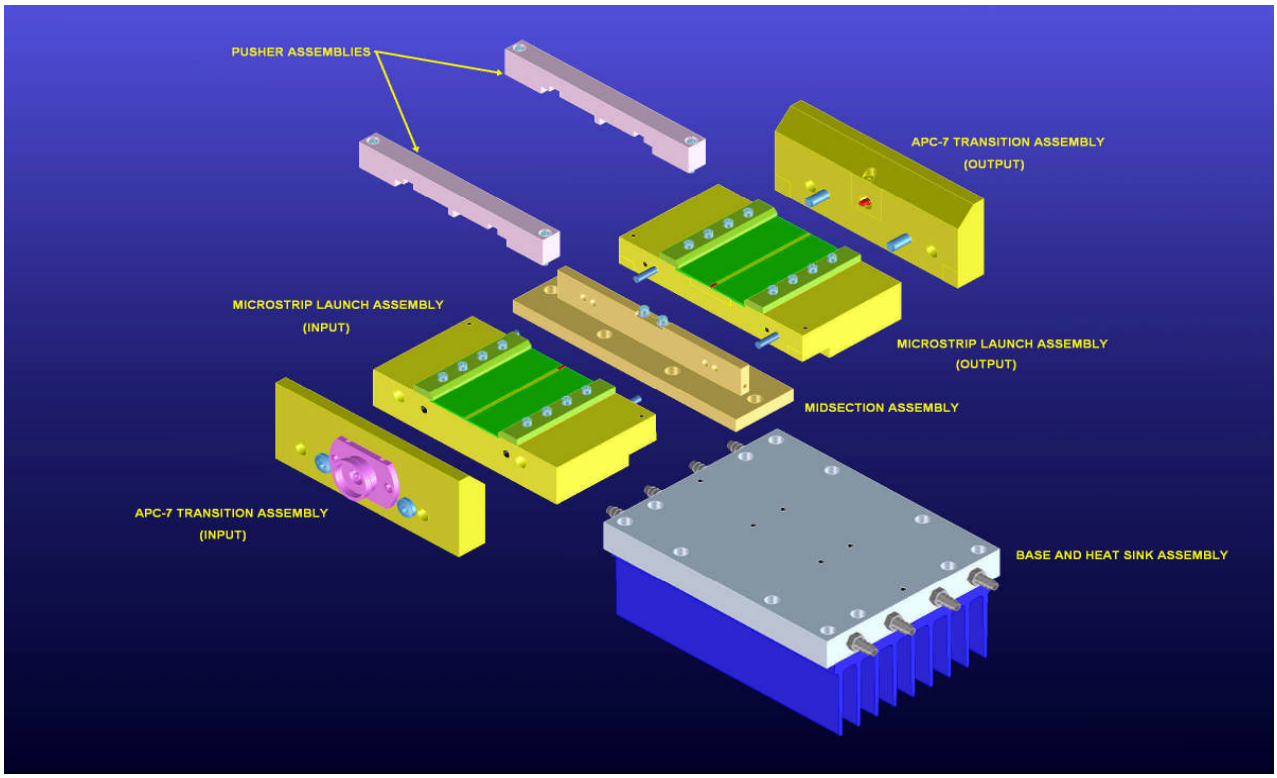
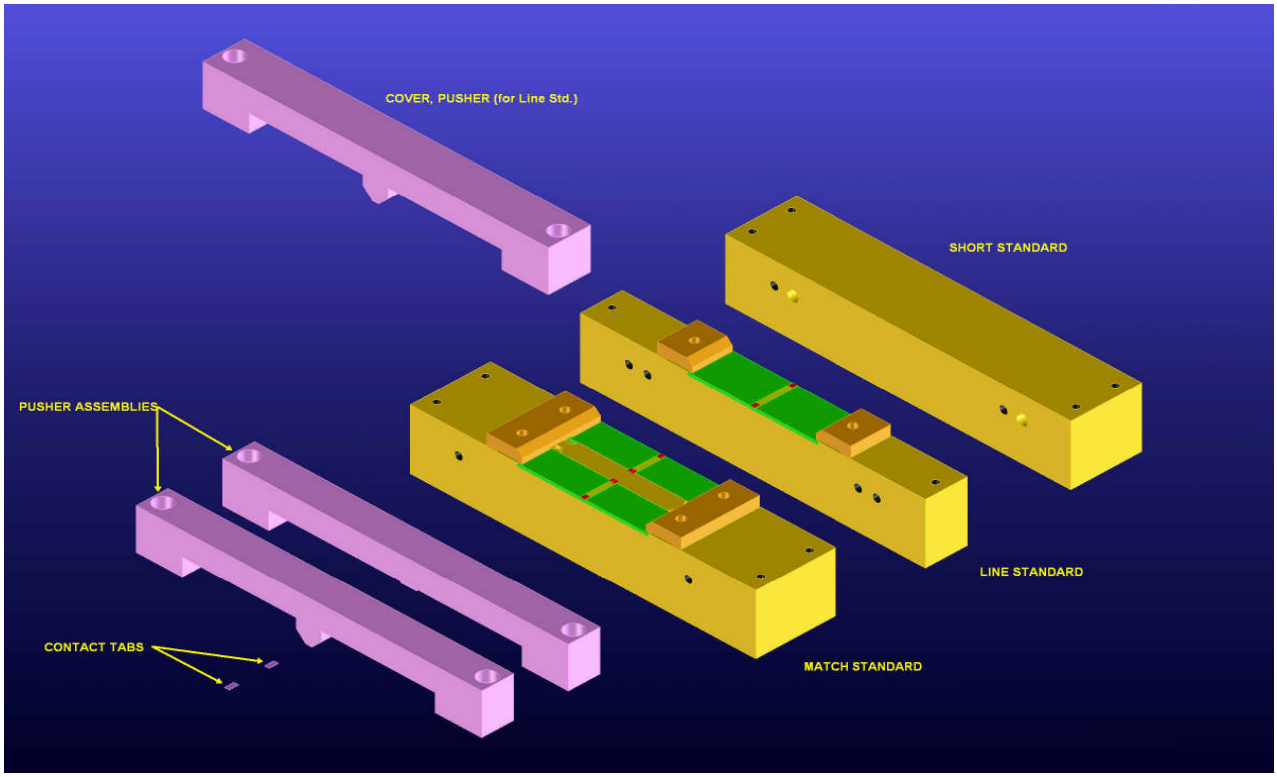


HIGH POWER TEST FIXTURE EXPLODED



CALIBRATION KIT

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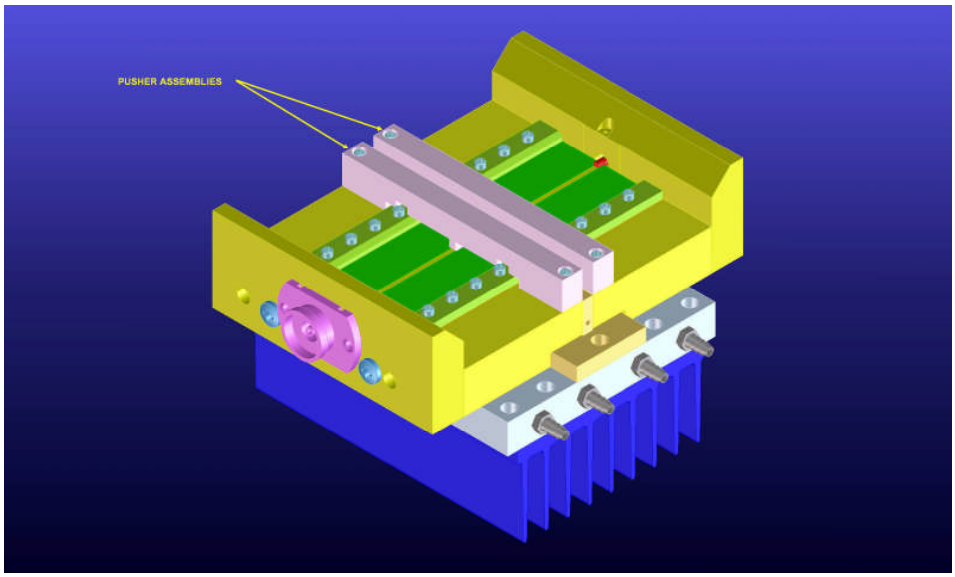
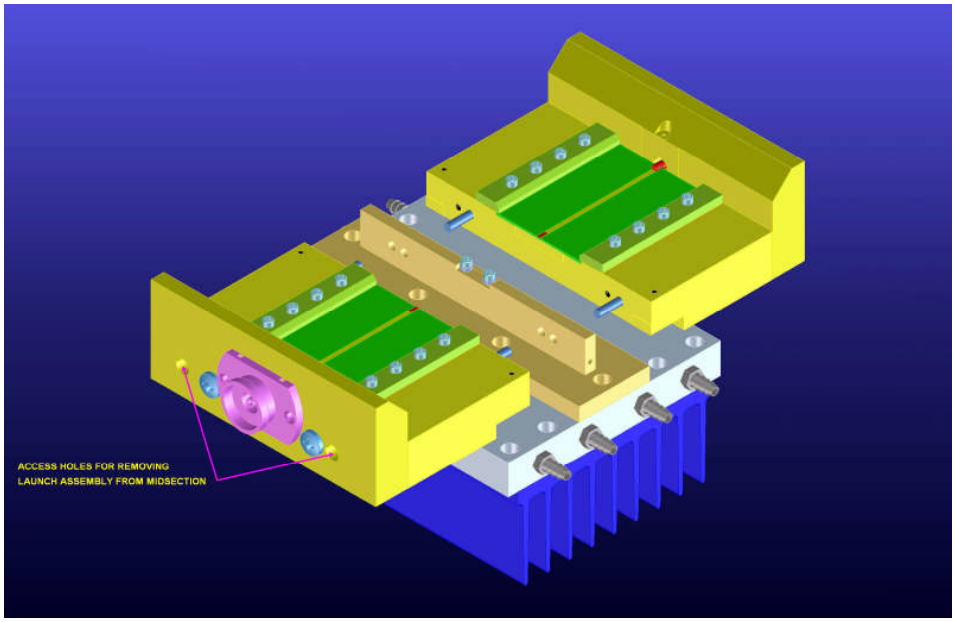
PART 1 – CHANGING MIDSECTION ASSEMBLIES

Removing the input and output launch assemblies:

Begin by removing the Pusher Assemblies.



Next, remove input and output Launch Assemblies with Transitions attached from Midsection Assembly by unscrewing the hardware via the access holes.



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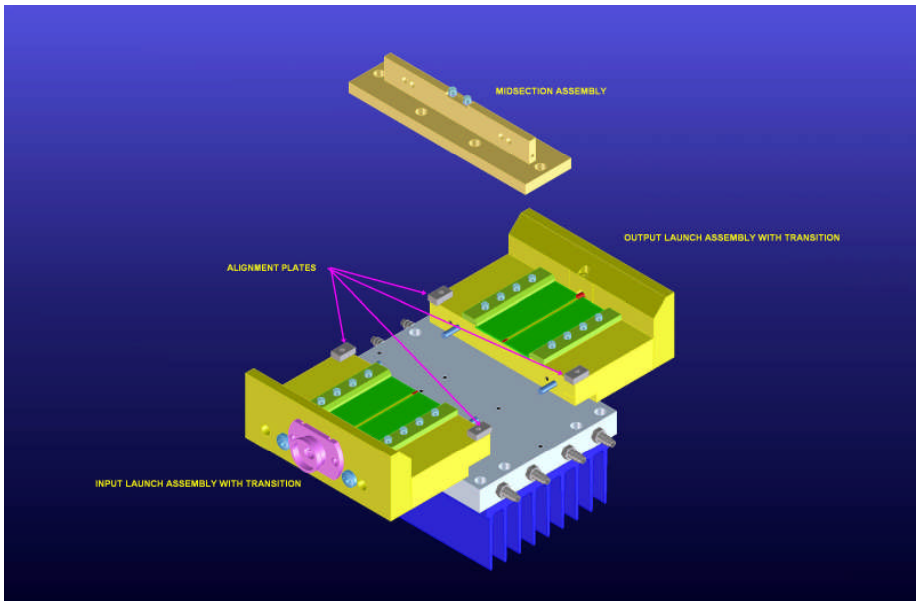
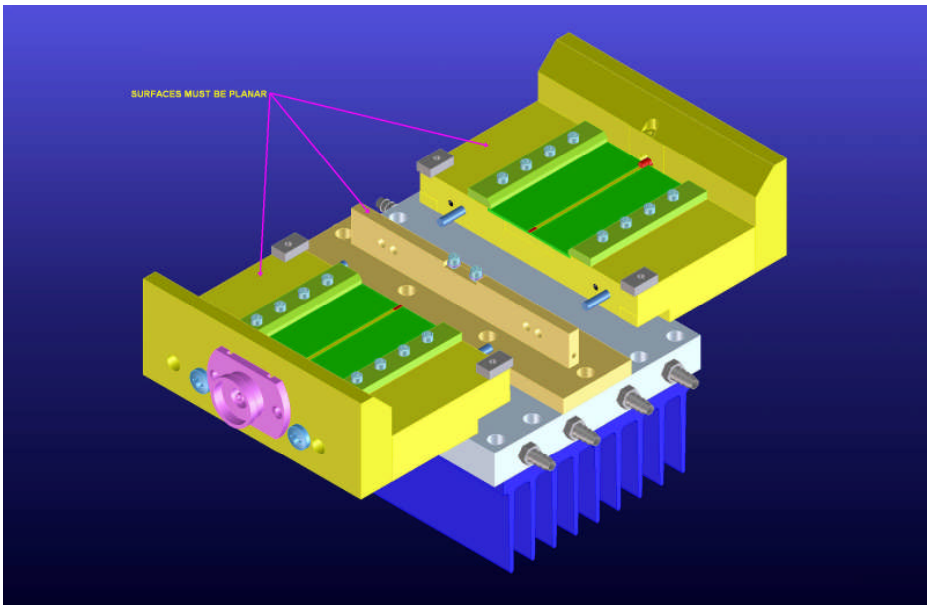
At this point the existing Midsection Assembly can be removed from the Heat Sink Assembly and another Midsection Assembly can be installed or Standards from the Calibration Kit can be mounted. Lets proceed with installing a new Midsection Assembly.

Begin by mounting the Midsection Assembly onto the Heat Sink Assembly. Before attaching the Launch Assemblies to the Midsection, attach the alignment plates to each Launch Assembly.



It is important that both Launch Assemblies be aligned with the Midsection Assembly. The alignment plates allow for the top surfaces of these assemblies to be planar.



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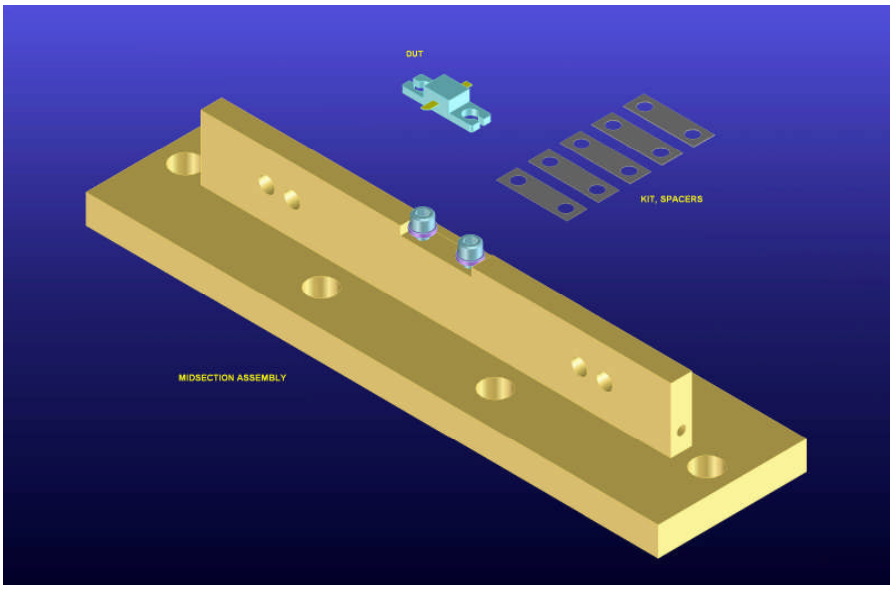
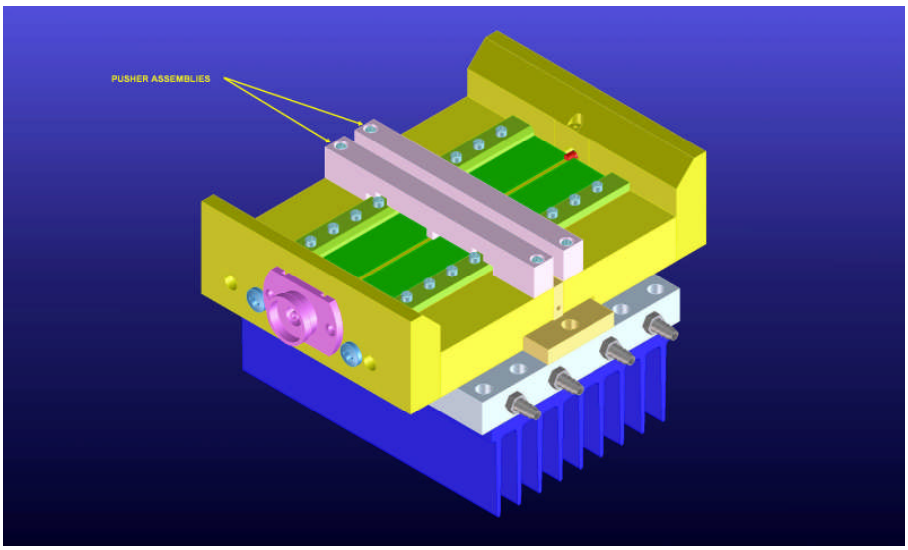
Once the Launch Assemblies have been attached to the Midsection Assembly, the alignment plates can be removed.

The DUT can now be inserted into the Midsection. In some cases depending on the tolerances of the DUT, spacers may be required under the DUT to ensure that the leads of the DUT lie flush with the contacts of the Launch Assemblies. The leads of the DUT should not have to be bent more than 0.002 inches either way when inserted into the Midsection. Bending the leads of the device more than 0.002 inches may cause damage to the device and prevent sufficient contact with the Launch Assemblies.



After the DUT is inserted into the Midsection, the Pusher Assemblies can then be attached to each Launch Assembly. The fixture is now ready for testing.



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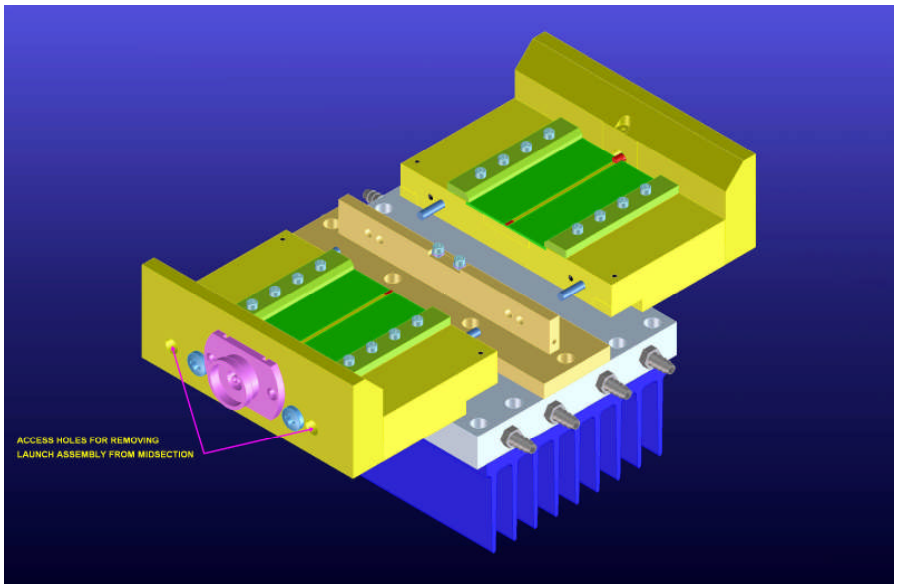
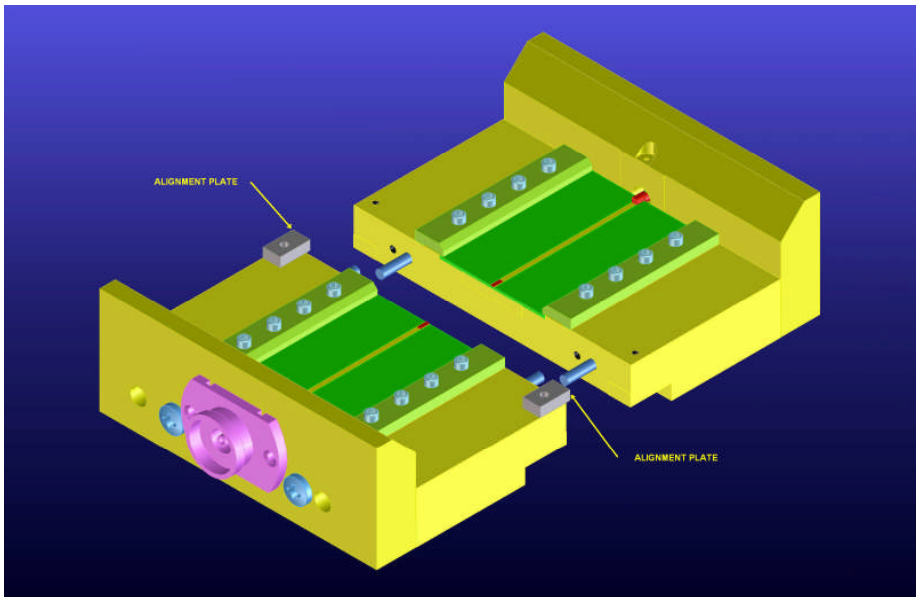
PART 2 - CALIBRATION

Begin by removing the Pusher Assemblies, DUT, and Launch Assemblies from the Midsection Assembly as shown in part 1 of this manual. At this point the Heat Sink Assembly and Midsection Assembly can be set aside.



Thru Standard:

Start by attaching the 2 Launch Assemblies together using 1 set of alignment plates.



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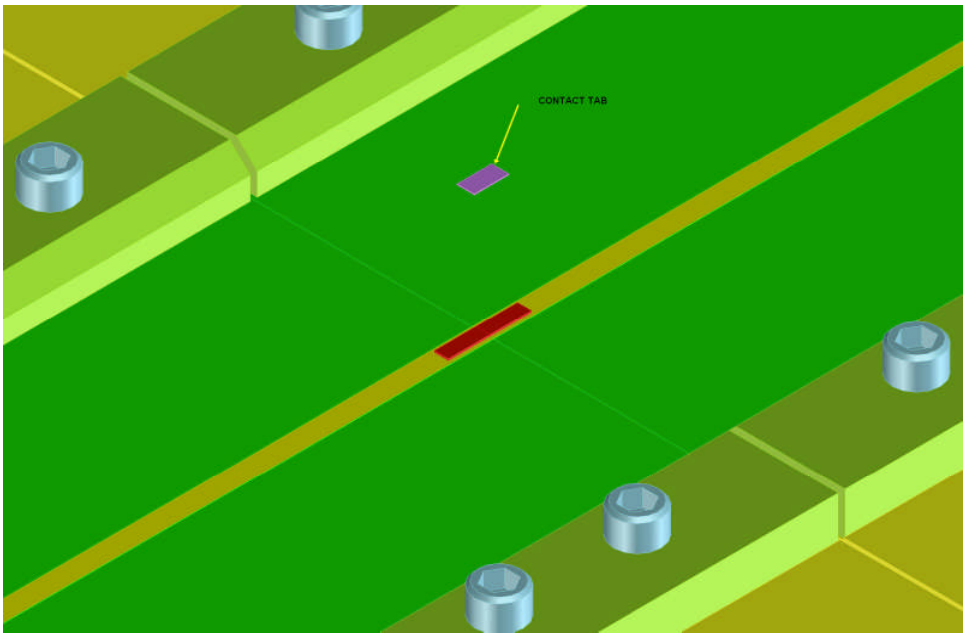
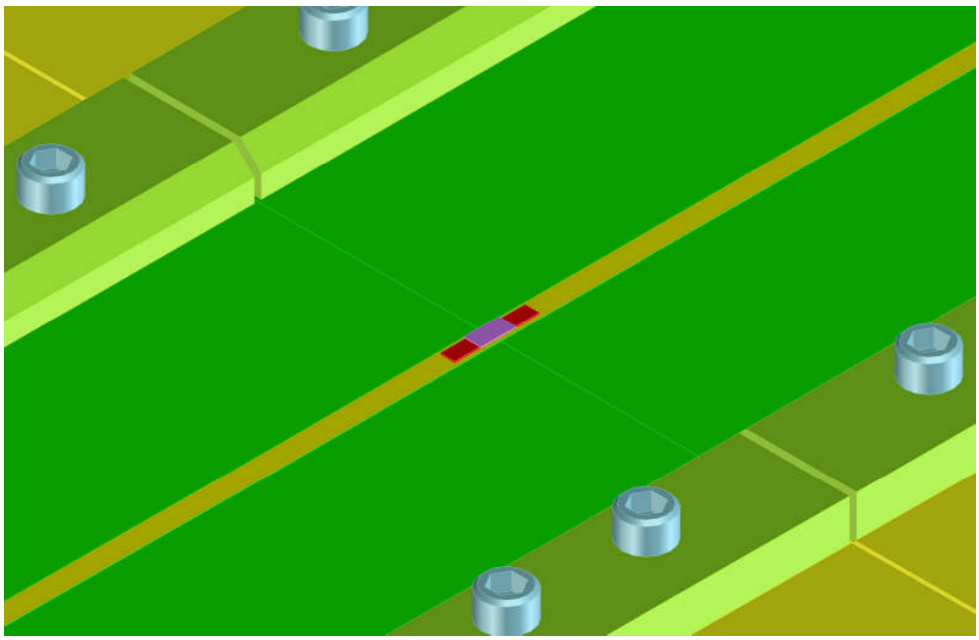
Shorter screws (provided) should be used to fasten the 2 assemblies together. Before tightening the screws, make sure the tops of both assemblies are planar. Remove the alignment plates when done.
Using the contact tab provided, position it over the contact pads of the Launch Assemblies so that an equal amount of the tab is on each contact pad of Launches.



The result should look like the view below.



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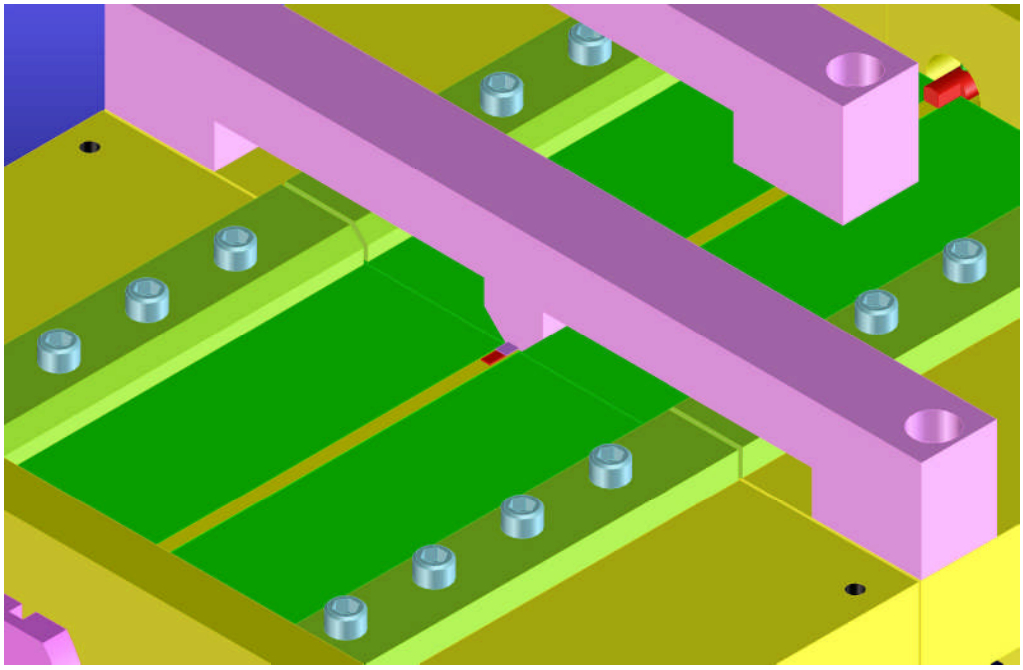
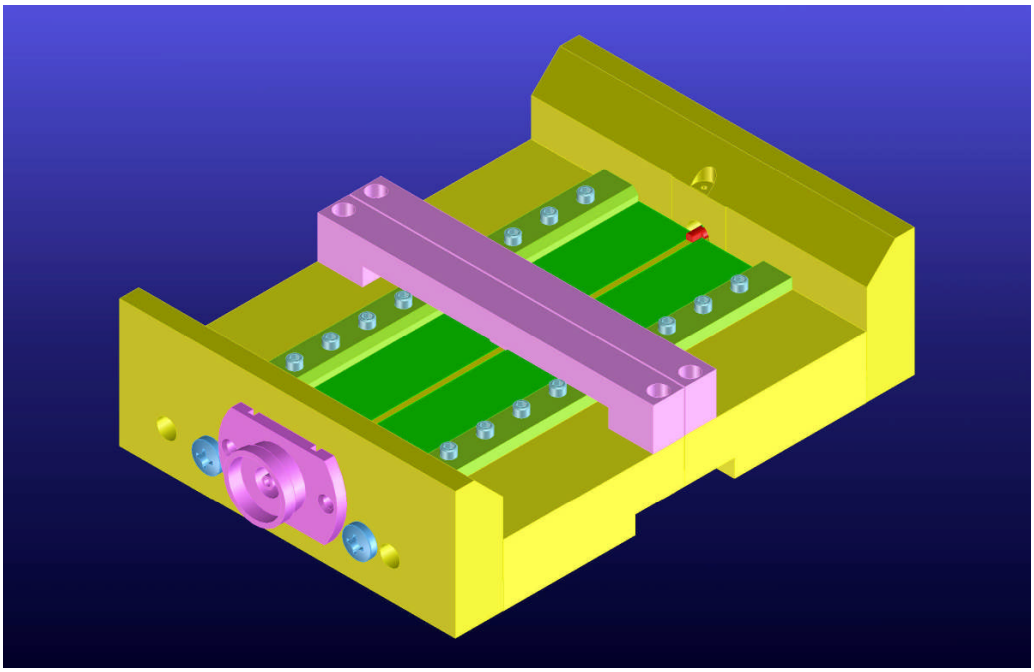
Now attach the Pusher Assembly provided with the calibration kit on each Launch Assembly so that it is pressing on the part of the contact tab that resides on the corresponding contact pad.



The Test Fixture is now ready to be calibrated with the Thru Standard.



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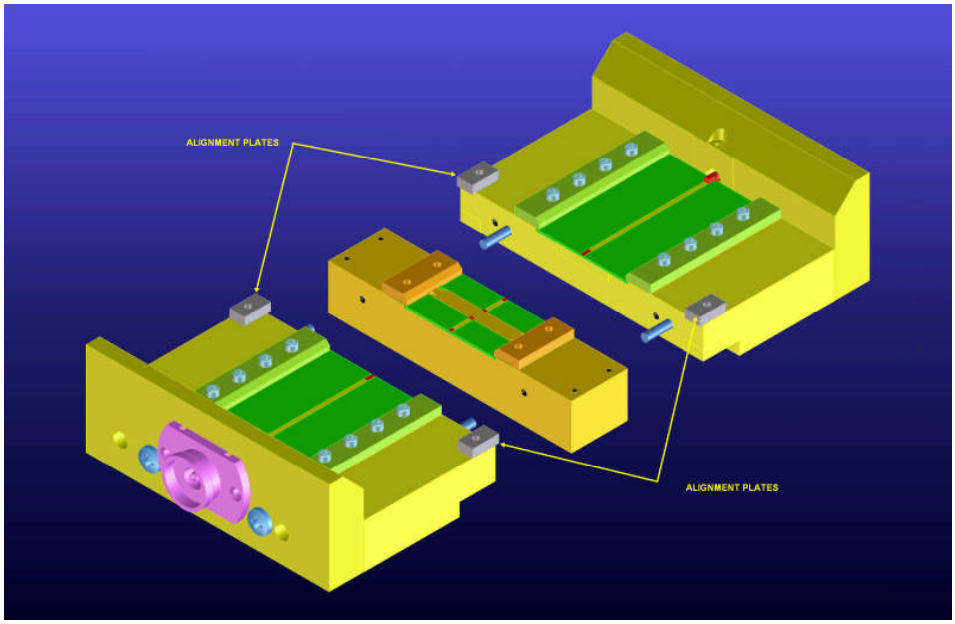
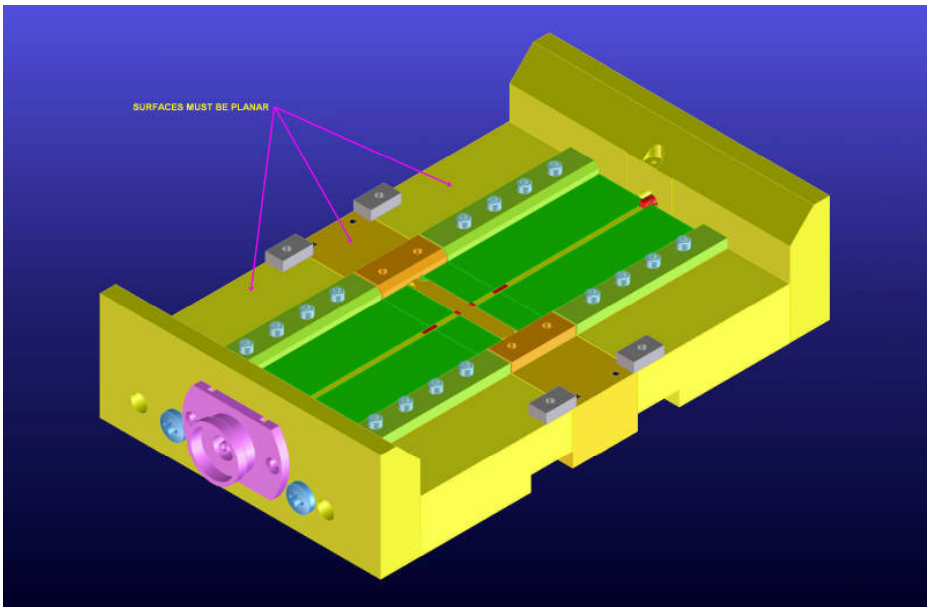
Match Standard:

Remove the Pusher Assemblies, contact tab, and separate the Launch Assemblies. Attach the alignment plates to each Launch Assembly.



Attach each Launch assembly to the Match Standard making sure that the tops are planar before tightening the screws.



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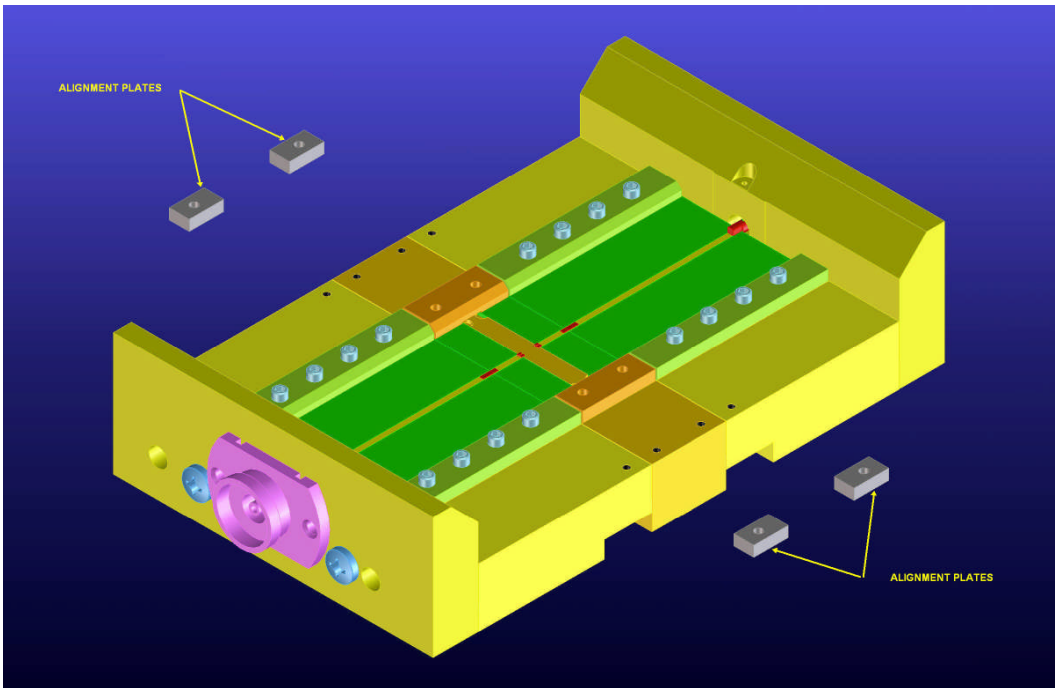
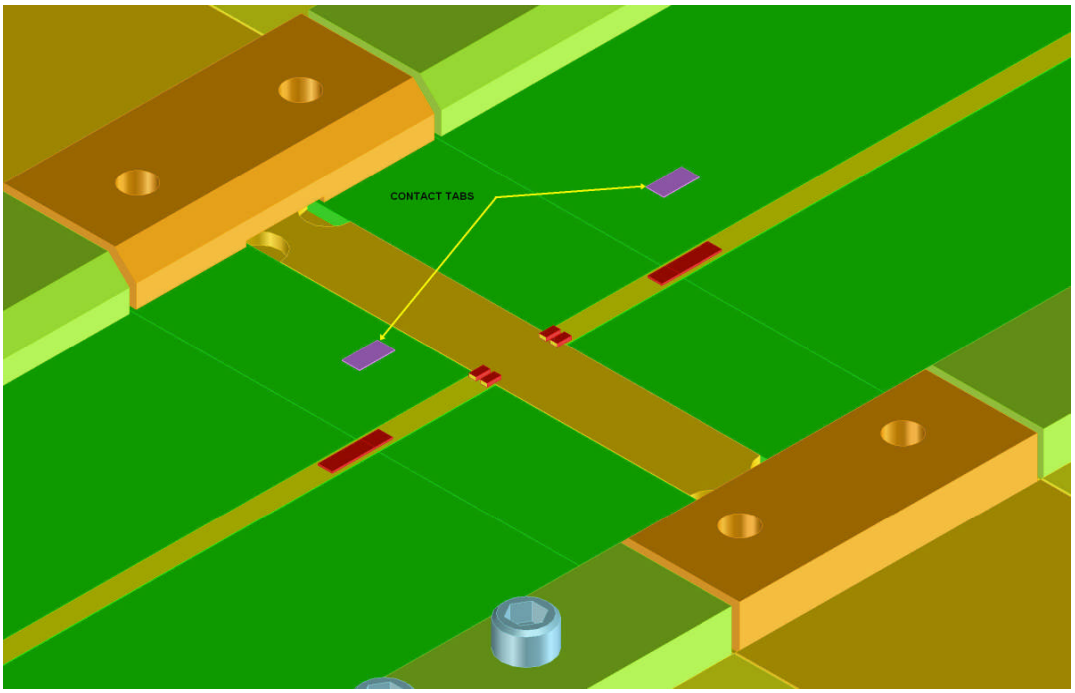
Remove the alignment plates.



Position the contact tabs (2 required for this Standard) so that an equal amount straddles contact pads of the Match Standard and the contact pads of the Launch Assemblies.



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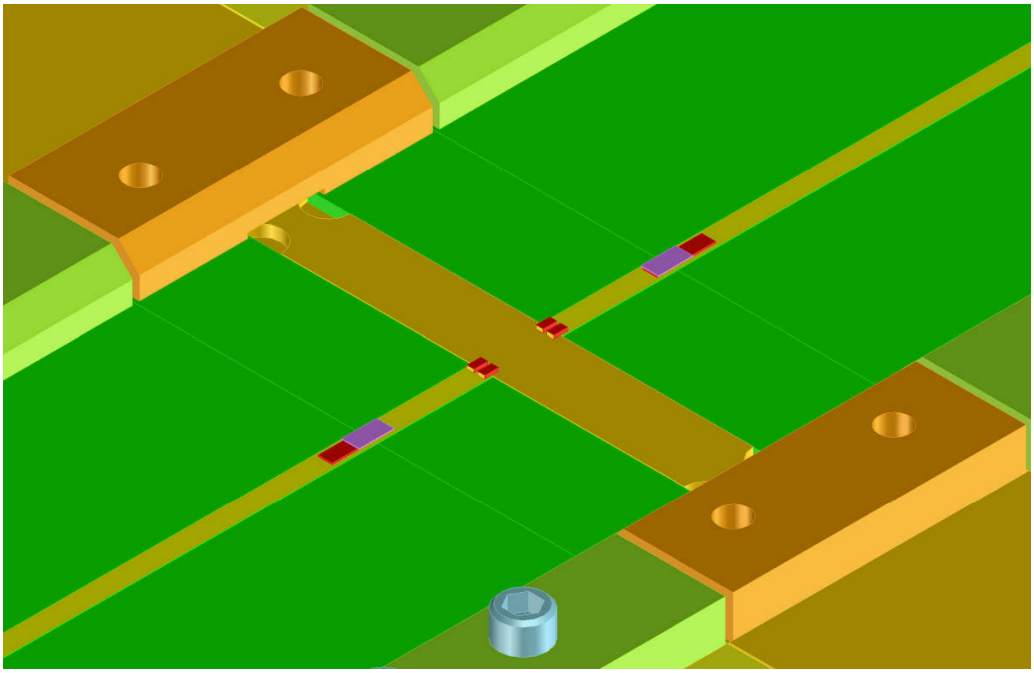
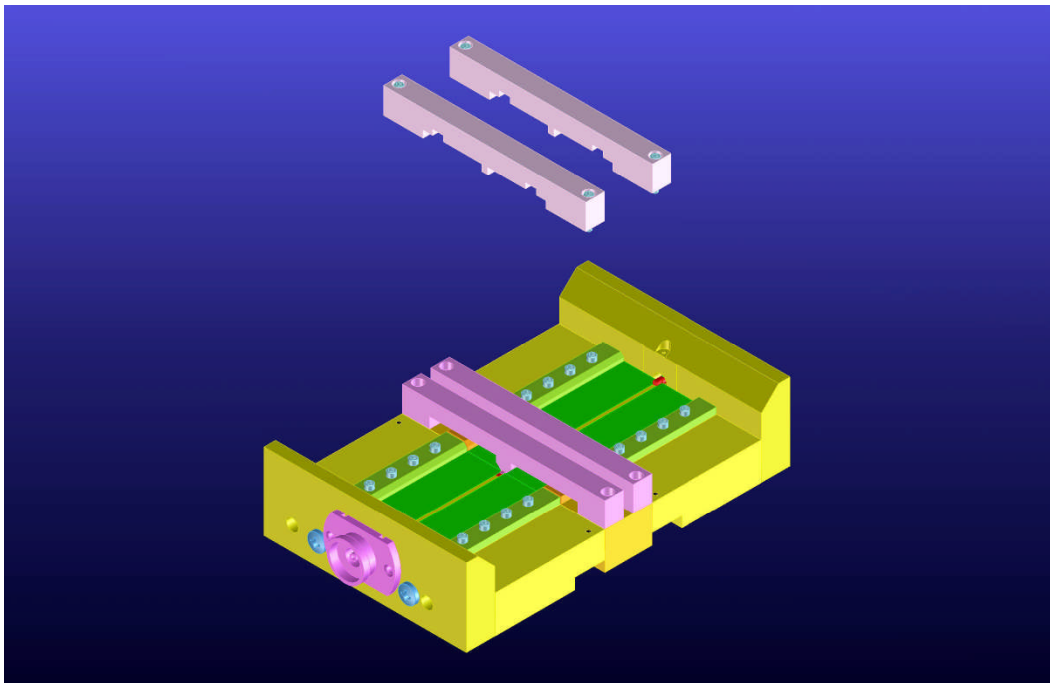
The result should look like the view below.



Next, attach the same Pusher Assemblies to the Match Standard that were used on the Thru Standard so that the tabs are held in place against the contacts pads.



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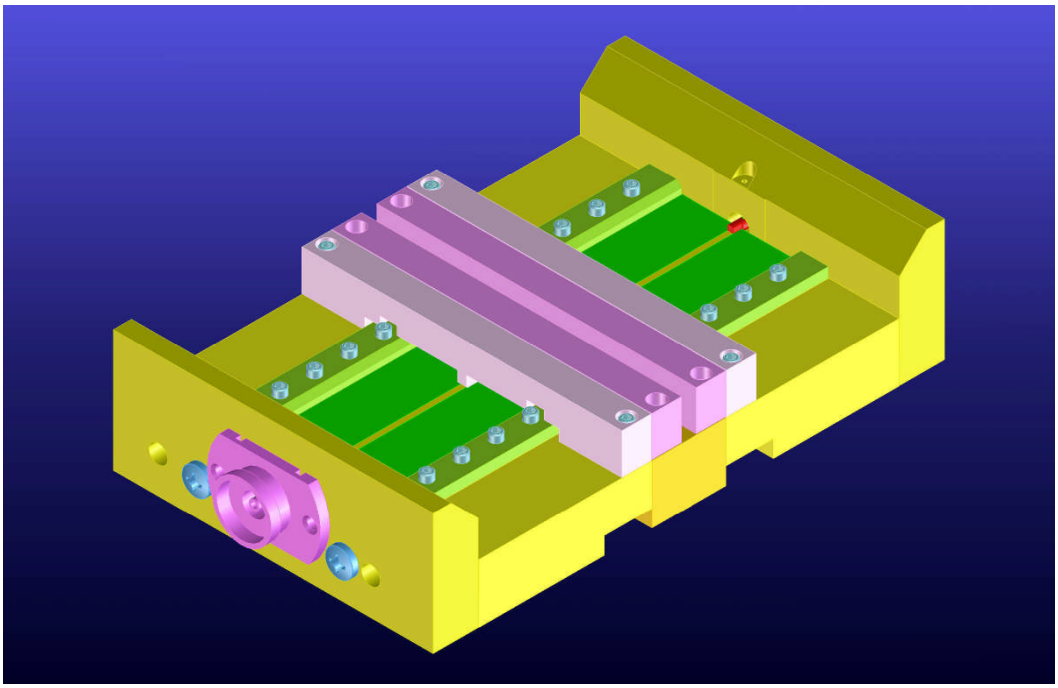
Then attach the Pusher Assemblies that came with the Test Fixture to the Launch Assemblies so that the remaining portion of the contact tabs are secure against the contact pads of the Launch Assemblies.



The Test Fixture is now ready to be calibrated with the Match Standard.

Repeat these same steps used on the Match Standard for the Line Standard and the Short Standard.

Note: In some cases depending on the length of the Line Standard, it may require a special Pusher Assembly as shown in the exploded view on page 2 of this manual.

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