

From: [Chau Nguyen](#)
To: [Eric Turner](#)
Cc: [Edwin Koh](#); [Desmond Ann](#); [HuaZhen Luo](#)
Subject: FW: Fw: OESR 161186 Universal Alignment Fixture
Date: Wednesday, 26 June, 2019 21:56:48
Attachments: [image001.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)

Hi Eric,

From my meeting with WPPL this morning, please provide a tentative completion date for the 2 control boxes.

Thank you,

Chau Nguyen Senior Manufacturing Engineer	Waters THE SCIENCE OF WHAT'S POSSIBLE.™
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From: Terri Charbonneau
Sent: Tuesday, March 26, 2019 1:29 PM
To: Chau Nguyen <Chau_Nguyen@waters.com>
Cc: Gabriel Camerini <Gabriel_Camerini@waters.com>
Subject: Re: Fw: OESR 161186 Universal Alignment Fixture

Hi Chau and Gabe,

Please use account US02-151150-WPPL19002

Cost center is WP72 but it is not necessary to include the cost center.

Best,

Terri

☒ Order was created with number WPPL19002

Waters THE SCIENCE OF WHAT'S POSSIBLE.™	Terri Charbonneau Financial Analyst
Waters Corporation 34 Maple Street Milford MA 01757 USA	[T] 508-482-3159 [F] 508-482-3194 [W] www.waters.com [E] Terri_Charbonneau@waters.com



▼ Chau Nguyen---03/26/2019 09:05:17 AM---Hi Gabriel, Please review and I will let you know if I get any information from Terri so we don't ge

From: Chau Nguyen/Waters
To: Gabriel Camerini/Waters@WATTS WATERS SALES
Cc: Terri Charbonneau/Waters@WATTS WATERS SALES
Date: 03/26/2019 09:05 AM
Subject: Fw: OESR 161186 Universal Alignment Fixture

Hi Gabriel,

Please review and I will let you know if I get any information from Terri so we don't generate duplicate US charge accounts.

Thank you,

Chau Nguyen
**Senior Manufacturing
Engineer**
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----- Forwarded by Chau Nguyen/Waters on 03/26/2019 09:04 AM -----

From: Chau Nguyen/Waters
To: Terri Charbonneau/Waters@WATTS WATERS SALES
Cc: Eric Turner/Waters@WATTS Waters Sales, Christine Smith/Waters@WATTS WATERS SALES, Tetiana Morse/Waters@WATTS WATERS SALES, Jaaffar Ismail/Waters@WATTS WATERS SALES
Date: 03/26/2019 08:51 AM
Subject: Fw: OESR 161186 Universal Alignment Fixture

Hi Terri,

Please set up a cross charge account for this new CEA and let us know the US number to charge to as I will work with Eric on the mechanical design when he comes back.

Thank you,

Chau Nguyen
**Senior Manufacturing
Engineer**
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----- Forwarded by Chau Nguyen/Waters on 03/26/2019 08:42 AM -----

From: Yeehwa Chan/Waters
To: Eric Turner/Waters@WATTS Waters Sales
Cc: Desmond Ann/Waters@WATTS WATERS SALES, Chau Nguyen/Waters@WATTS WATERS SALES, JingXuan Liu/Waters@WATTS WATERS SALES
Date: 03/26/2019 04:01 AM

Hi Eric,

We have the CEA approved for the 2 control boxes.
Please help to build the testers using attached CEA.
How long does it take to build the 2 control box?

Thanks.

Best Regards,

Yee Hwa CHAN
Manufacturing Engineer

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▼ Desmond Ann---25.02.2019 17:17:38---Hi Yee Hwa, Will you be able to raise the CEA for the Universal Alignment Fixture by today?

From: Desmond Ann/Waters
To: Yeehwa Chan/Waters@WATTS WATERS SALES
Date: 25.02.2019 17:17
Subject: Fw: OESR 161186 Universal Alignment Fixture

Hi Yee Hwa,

Will you be able to raise the CEA for the Universal Alignment Fixture by today?

Thank you.

Regards,
Desmond.

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Team Lead, Manufacturing

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From: Eric Turner/Waters
To: Desmond Ann/Waters@WATTS WATERS SALES
Cc: Chau Nguyen/Waters@WATTS WATERS SALES, HuaZhen Luo/Waters@WATTS WATERS SALES, Edwin Koh/Waters@WATTS WATERS SALES
Date: 06.08.2018 08:54 PM
Subject: Re: Fw: OESR 161186 Universal Alignment Fixture

That is correct!

Eric Turner
Principal Test Engineer

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▼ Desmond Ann---05/08/2018 10:28:24 PM---Hi Eric, Noted..

From: Desmond Ann/Waters
To: Eric Turner/Waters@WATTS Waters Sales,
Cc: Chau Nguyen/Waters@WATTS WATERS SALES, HuaZhen Luo/Waters@WATTS WATERS SALES, Edwin Koh/Waters@WATTS WATERS SALES
Date: 05/08/2018 10:28 PM
Subject: Re: Fw: OESR 161186 Universal Alignment Fixture

Hi Eric,

Noted..

So the total cost for a control box is :

PDA : \$1360.00 + \$3,302.28 = \$4662.28
2998 : \$1360 + \$3,191.81 = \$4551.81

Thank you.

Regards,
Desmond.

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▼ Eric Turner---03.08.2018 08:22:27 PM---Hi Desmond, the control boxes are essentially a PDA or a 2998 with the optics removed, the chassis c

From: Eric Turner/Waters
To: Desmond Ann/Waters@WATTS WATERS SALES
Cc: Chau Nguyen/Waters@WATTS WATERS SALES, HuaZhen Luo/Waters@WATTS WATERS SALES, Edwin Koh/Waters@WATTS WATERS SALES
Date: 03.08.2018 08:22 PM
Subject: Re: Fw: OESR 161186 Universal Alignment Fixture

Hi Desmond, the control boxes are essentially a PDA or a 2998 with the optics removed, the chassis cut back, and a custom front panel installed, so we need the detectors to make the control box and the \$1360 is for the machining of the custom front panel, plus cutting the detector. So, yes, the PDAs have the PCBAs in them.

Regards,

Eric Turner
Principal Test Engineer

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▼ Desmond Ann---02/08/2018 08:55:33 PM---Hi Chau and Eric, Thanks for the info.

From: Desmond Ann/Waters
To: Chau Nguyen/Waters@WATTS WATERS SALES,
Cc: Eric Turner/Waters@WATTS Waters Sales, HuaZhen Luo/Waters@WATTS WATERS SALES, Edwin Koh/Waters@WATTS WATERS SALES
Date: 02/08/2018 08:55 PM
Subject: Re: Fw: OESR 161186 Universal Alignment Fixture

Hi Chau and Eric,

Thanks for the info.

Just to let me understand correctly.

1) When you mention the detector we need for each control box in the below email, is this the UUT or part of tester?

The PDA is 3,302.28
The 2998 is 3,191.81

2) The cost below for the control box includes all the hardware we need including all the PCBAs in the control box chassis right?

1) PDA Control Box: \$1360.00

2) 2998 Control Box: \$1360.00

Thank you.

Regards,
Desmond.

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▼ Chau Nguyen---03.08.2018 02:26:56 AM---Hi Eric, Here is the estimated mechanical fabrication cost for:

From: Chau Nguyen/Waters
To: Eric Turner/Waters@WATTS Waters Sales
Cc: Desmond Ann/Waters@WATTS WATERS SALES, HuaZhen Luo/Waters@WATTS WATERS SALES, Edwin Koh/Waters@WATTS WATERS SALES
Date: 03.08.2018 02:26 AM
Subject: Re: Fw: OESR 161186 Universal Alignment Fixture

Hi Eric,

Here is the estimated mechanical fabrication cost for:

- 1) PDA Control Box: \$1360.00
- 2) 2998 Control Box: \$1360.00
- 3) 999038477 - Fine Alignment Fixture: \$4,568.69

Chau Nguyen
Test Engineer

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▼ Eric Turner---08/02/2018 02:15:09 PM---Chau can you give us the cost of each of those things, minus the cost of the detector we need for ea

From: Eric Turner/Waters
To: Desmond Ann/Waters@WATTS WATERS SALES
Cc: Chau Nguyen/Waters@WATTS WATERS SALES, HuaZhen Luo/Waters@WATTS WATERS SALES, Edwin Koh/Waters@WATTS WATERS SALES
Date: 08/02/2018 02:15 PM
Subject: Re: Fw: OESR 161186 Universal Alignment Fixture

Chau can you give us the cost of each of those things, minus the cost of the detector we need for each control box?

The PDA is 3,302.28
The 2998 is 3,191.81

Eric Turner
Principal Test Engineer

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▼ Desmond Ann---01/08/2018 06:33:47 AM---Hi Eric, We understand from Chau that US\$24K is for the full set including control box and the fixtu

From: Desmond Ann/Waters
To: Eric Turner/Waters@WATTS Waters Sales,
Cc: Chau Nguyen/Waters@WATTS WATERS SALES, HuaZhen Luo/Waters@WATTS WATERS SALES, Edwin Koh/Waters@WATTS WATERS SALES
Date: 01/08/2018 06:33 AM
Subject: Re: Fw: OESR 161186 Universal Alignment Fixture

Hi Eric,

We understand from Chau that US\$24K is for the full set including control box and the fixture.

We will like to understand the breakdown for the cost on :

- 1) PDA/ ELambda Fine Alignment Control Box
- 2) 2998 Fine Alignment Control Box
- 3) Universal Fixture without Control Box.

Thank you.

Regards,
Desmond.

Desmond Ann
Team Lead, Manufacturing

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▼ Eric Turner---01.08.2018 01:42:49 AM---Hi Desmond, what do you want us to quote? Thanks,

From: Eric Turner/Waters
To: Desmond Ann/Waters@WATTS WATERS SALES
Cc: Chau Nguyen/Waters@WATTS WATERS SALES
Date: 01.08.2018 01:42 AM
Subject: Re: Fw: OESR 161186 Universal Alignment Fixture

Hi Desmond, what do you want us to quote?

Thanks,

Eric Turner
Principal Test Engineer

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▼ Chau Nguyen---31/07/2018 01:19:30 PM---Hi Eric, In WPPL meeting last night, Desmond asked to confirm that Flex will need 1 or 2 control box

From: Chau Nguyen/Waters
To: Eric Turner/Waters@WATTS Waters Sales,
Date: 31/07/2018 01:19 PM
Subject: Fw: OESR 161186 Universal Alignment Fixture

Hi Eric,

In WPPL meeting last night, Desmond asked to confirm that Flex will need 1 or 2 control boxes. Also, they don't think they need 1 or 2 fine alignment fixture.

Please double check and we will provide an estimate so they can raise CEA.

Thank you,

Chau Nguyen
Test Engineer

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----- Forwarded by Chau Nguyen/Waters on 07/31/2018 01:16 PM -----

From: Eric Turner/Waters
To: Desmond Ann/Waters@WATTS WATERS SALES
Cc: Chau Nguyen/Waters@WATTS Waters Sales, Edwin Koh/Waters@WATTS Waters Sales, Yeehwa Chan/Waters@WATTS Waters Sales
Date: 06/28/2018 10:37 AM
Subject: Re: Fw: OESR 161186 Universal Alignment Fixture

Hi Desmond - the "Universal alignment station" is coarse align (page 2 of your attachment) so no extra control box is needed. For page one you already have a control box for PDA and 2998. Phani had indicated to me that it was more important to have two coarse align systems. So, if you want extra fine alignment capabilities, we will have to make more control boxes. Alternately, you can modify the older box to include the new personality card and firmware to run the new PDA chips. If we need to create two more control boxes, it will take a few months and we will have to find about \$24000.

Regards,

Eric Turner
Principal Test Engineer

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▼ Desmond Ann---28/06/2018 10:20:25 AM---Hi Chau, As per discussed. please attached on the photos we have taken. On the existing fine alignme

From: Desmond Ann/Waters
To: Chau Nguyen/Waters@WATTS WATERS SALES, Eric Turner/Waters@WATTS Waters Sales,
Cc: Edwin Koh/Waters@WATTS WATERS SALES, Yeehwa Chan/Waters@WATTS WATERS SALES
Date: 28/06/2018 10:20 AM
Subject: Fw: OESR 161186 Universal Alignment Fixture

Hi Chau,

As per discussed. please attached on the photos we have taken. On the existing fine alignment station, we need to connect the following to the control box.

1. Lamp Power Supply
2. Thermistor Cable
3. Filter Wheel Assembly
4. OB Interface Cable

If we wish to use this universal fixture as an additional Fine Alignment station on top of the current Fine Alignment Station, I believe we will need to have one more control box to be connected to this universal alignment station.

[attachment "Universal Fine Alignment Fixture.pdf" deleted by Eric Turner/Waters]

Thank you.

Regards,
Desmond.

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----- Forwarded by Desmond Ann/Waters on 28.06.2018 10:10 PM -----

From: Joel Mamalateo Deduyo <joelmamalateo.deduyo@flex.com>
To: Desmond Ann <Desmond_Ann@waters.com>
Cc: HuaZhen Luo <HuaZhen_Luo@waters.com>, Yeehwa Chan <Yeehwa_Chan@waters.com>, Edwin Koh <Edwin_Koh@waters.com>, "Nallajanula Phani Bhushan" <phanibhushan.nallajanula@flex.com>
Date: 11.06.2018 07:12 PM
Subject: RE: OESR 161186

Hi Desmond,

Pls .help to check using this attachment on how to use the universal fine alignment station using ASP 279003847 Rev B

If TE82881-2 PDA Fine Alignment System Control Box is not required, pls.advise where to plug-in the following:

1. Lamp Power Supply
2. Thermistor Cable
3. Filter Wheel Assembly
4. OB Interface Cable
- 5.

Thanks and advise,



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