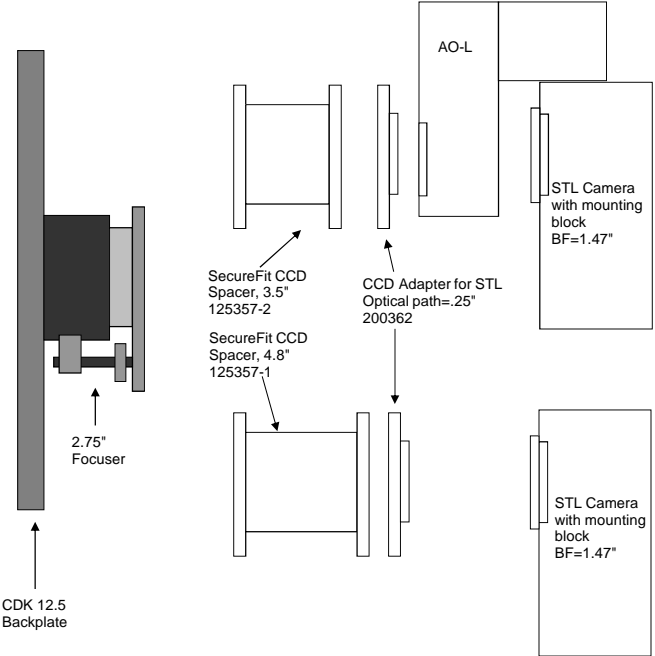


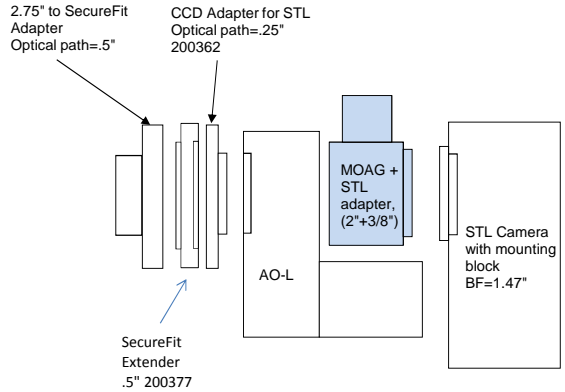
**PLANEWAVE INSTRUMENTS**  
**SECUREFIT CCD SPACERS FOR STL CAMERAS**  
for CDK12.5

← 10.445 →  
Distance from focuser mounting surface to focal plane



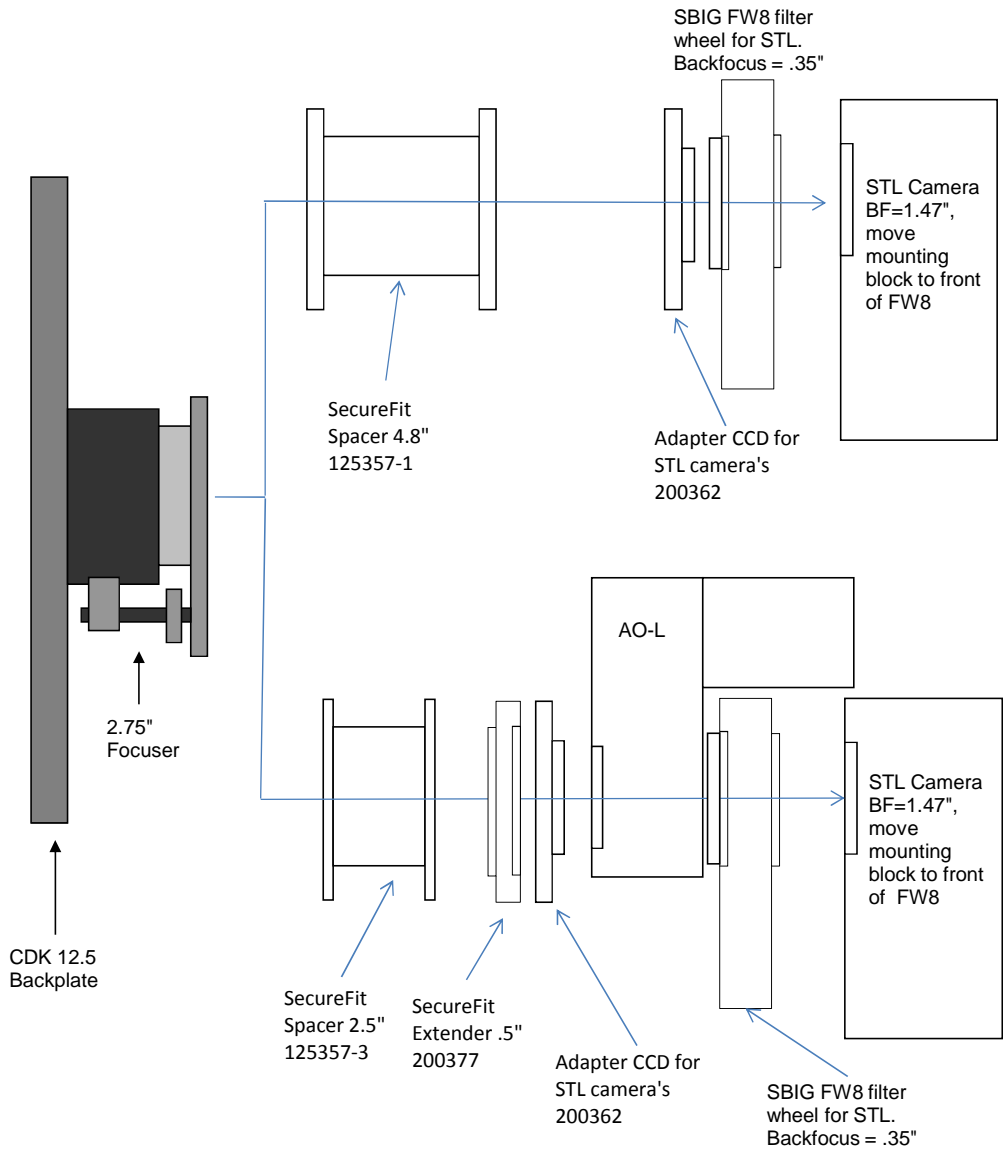
STL and AO-L required spacers	10.445 remaining BF	
2.75" Focuser (racked in)	3.25	7.195
Focus position (0 to 1.3")	0.485	6.71
SecureFit CCD Spacer 3.5" - <b>125357-2</b>	3.5	3.21
CCD Adapter, STL - <b>200362</b>	0.25	2.96
AO-L	1.49	1.47
STL Back Focus	1.47	0

STL Camera	10.445 remaining BF	
2.75" Focuser (racked in)	3.25	7.195
Focus position (0 to 1.3")	0.675	6.52
SecureFit CCD Spacer 4.8" - <b>125357-1</b>	4.8	1.72
CCD Adapter, STL - <b>200362</b>	0.25	1.47
STL Back Focus	1.47	0



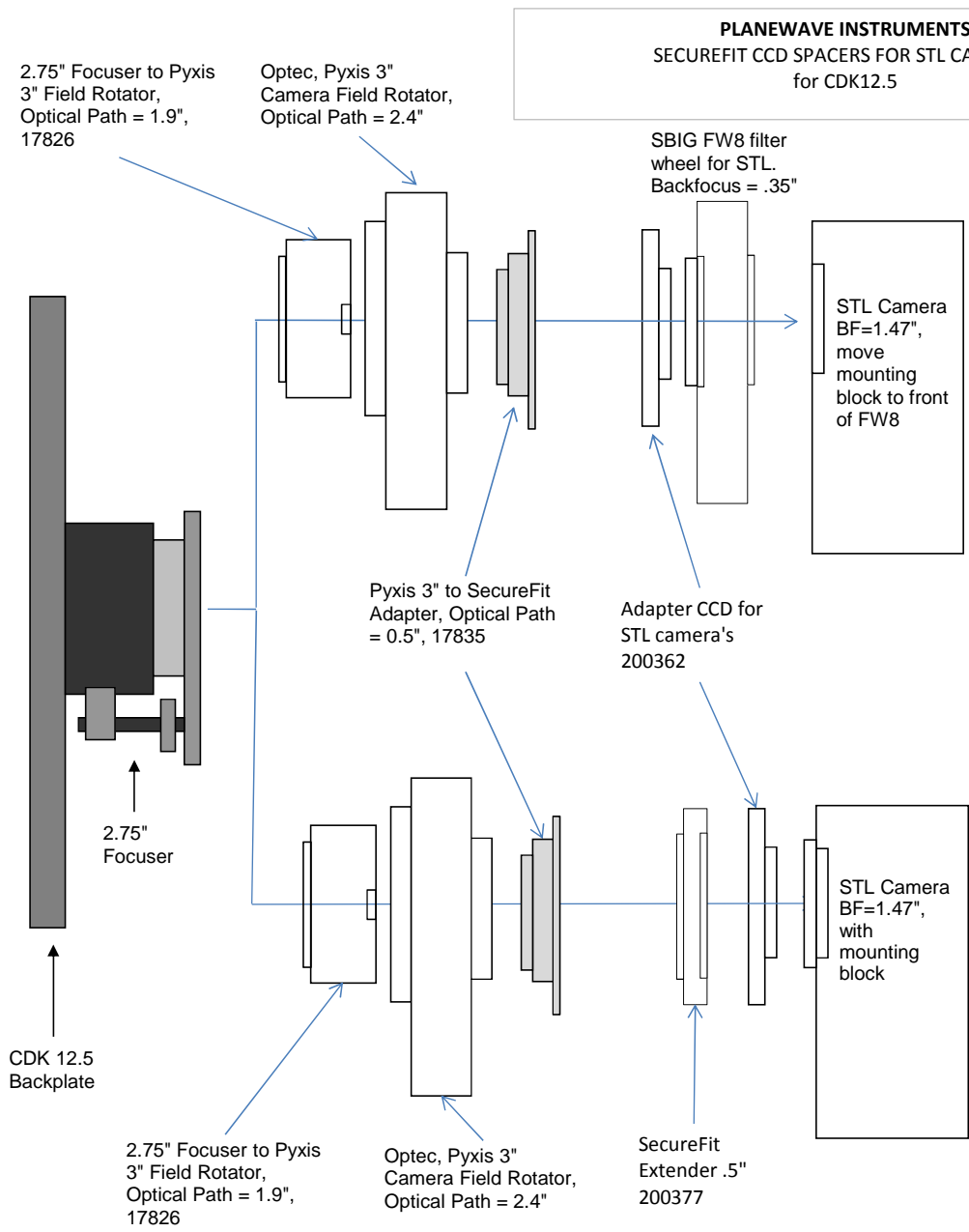
STL, AO-L and MOAG	10.445 remaining BF	
2.75" Focuser (racked in)	3.25	7.195
Focus position (0 to 1.3")	0	7.195
2.75" to SecureFit	0.5	6.695
SecureFit Extender - <b>200377</b>	0.5	6.195
CCD Adapter, STL - <b>200362</b>	0.25	5.945
AO-L	1.49	4.455
MOAG from Astrodon (2" of backfocus)	2	2.455
MOAG to SLT Adapter (3/8")	0.375	2.08
STL Back Focus	1.509	0.571

**PLANEWAVE INSTRUMENTS**  
**SECUREFIT CCD SPACERS FOR STL CAMERAS**  
 for CDK12.5



<b>STL w/ FW8</b>		10.445 remaining BF
Focuser racked in	3.25	7.195
Focus position (0 to 1.3")	0.325	6.87
SecureFit CCD Spacer 4.8" - <b>125357-1</b>	<b>4.8</b>	2.07
CCD Adapter, STL - <b>200362</b>	0.25	1.82
FW8	0.35	1.47
SLT Back Focus	1.47	0

<b>STL + FW8 + AO-L</b>		10.445 remaining BF
Focuser racked in	3.25	7.195
Focus position (0 to 1.3")	0.635	6.56
SecureFit CCD Spacer 2.5" - <b>125357-3</b>	<b>2.5</b>	4.06
SecureFit CCD Extender .5" - <b>200377</b>	0.5	3.56
CCD Adapter, STL - <b>200362</b>	0.25	3.31
AO-L	1.49	1.82
FW8	0.35	1.47
SLT Back Focus	1.47	0

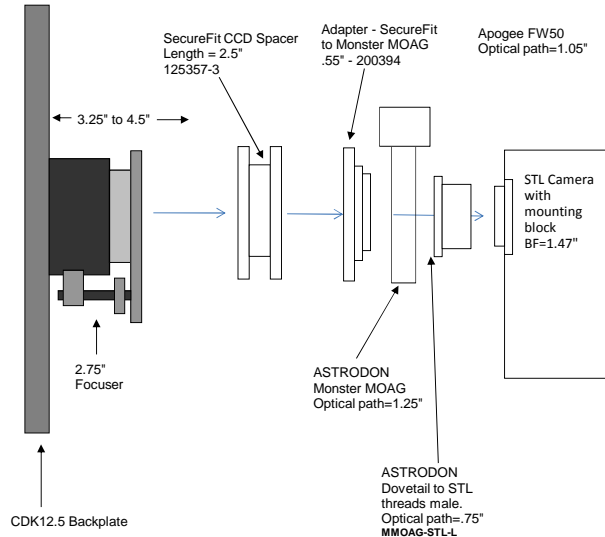


<b>STL w/ FW8</b>		10.445 remaining BF
Focuser racked in	3.25	7.195
Focus position (0 to 1.3")	0.325	6.87
2.75" Focuser to Pyxis Rotator - <b>17826</b>	1.9	4.97
Optec Pyxis 3" Rotator - <b>PYXIS 3</b>	2.4	2.57
Pyxis Rotator to SecureFit - <b>17835</b>	0.5	2.07
CCD Adapter, STL - <b>200362</b>	0.25	1.82
FW8	0.35	1.47
SLT Back Focus	1.47	0

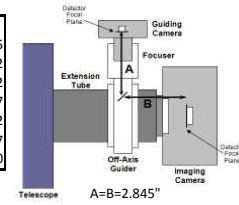
<b>STL + Pyxis</b>		10.445 remaining BF
Focuser racked in	3.25	7.195
Focus position (0 to 1.3")	0.175	7.02
2.75" Focuser to Pyxis Rotator - <b>17826</b>	1.9	5.12
Optec Pyxis 3" Rotator - <b>PYXIS 3</b>	2.4	2.72
Pyxis Rotator to SecureFit - <b>17835</b>	0.5	2.22
SecureFit CCD Extender .5" - <b>200377</b>	<b>0.5</b>	1.72
CCD Adapter, STL - <b>200362</b>	0.25	1.47
SLT Back Focus	1.47	0

# CDK12.5 - OPTICAL TRAIN: for SBIG STL BODY, AND MMOAG

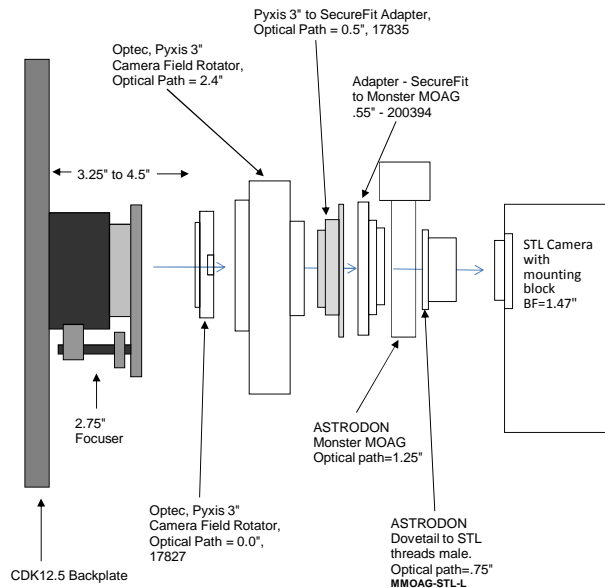
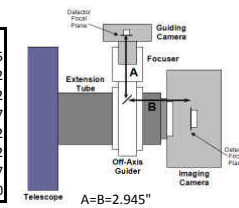
Distance to Focuser Mounting Surface 10.445



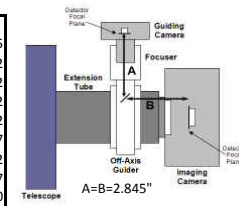
STL CCD & MMOAG		10.445 remaining BF
2.75" Focuser (racked in)	3.25	7.195
<b>Focus position (0 to 1.3")</b>	<b>0.675</b>	6.52
SecureFit CCD Spacer - 125357-3	2.5	4.02
Adapter SecureFit to Monster MOAG - 200394	0.55	3.47
Monster MOAG - MMOAG	1.25	2.22
AstroDon Adapter - MMOAG-STL-L	0.75	1.47
SBIG STL Camera with mounting block	1.47	0



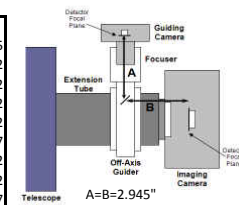
STL CCD, FW8 FILTER WHEEL & MMOAG		10.445 remaining BF
2.75" Focuser (racked in)	3.25	7.195
<b>Focus position (0 to 1.3")</b>	<b>0.575</b>	6.62
SecureFit CCD Spacer - 125357-3	2.5	4.12
Adapter SecureFit to Monster MOAG - 200394	0.55	3.57
Monster MOAG - MMOAG	1.25	2.32
AstroDon Adapter - MMOAG-STL-M	0.5	1.82
SBIG FW8 Filter Wheel	0.35	1.47
SBIG STL Camera with mounting block	1.47	0



STL CCD, Pyxis & MMOAG		10.445 remaining BF
2.75" Focuser (racked in)	3.25	7.195
<b>Focus position (0 to 1.3")</b>	<b>0.275</b>	6.92
PW 12.5 to Optec-3600 dovetail adapter - 17827	0	6.92
Optec Pyxis 3" Camera Rotator	2.4	4.52
Optec Pyxis 3" to SecureFit Adapter - 17835	0.5	4.02
Adapter SecureFit to Monster MOAG - 200394	0.55	3.47
Monster MOAG - MMOAG	1.25	2.22
AstroDon Adapter - MMOAG-STL-L	0.75	1.47
SBIG STL Camera with mounting block	1.47	0

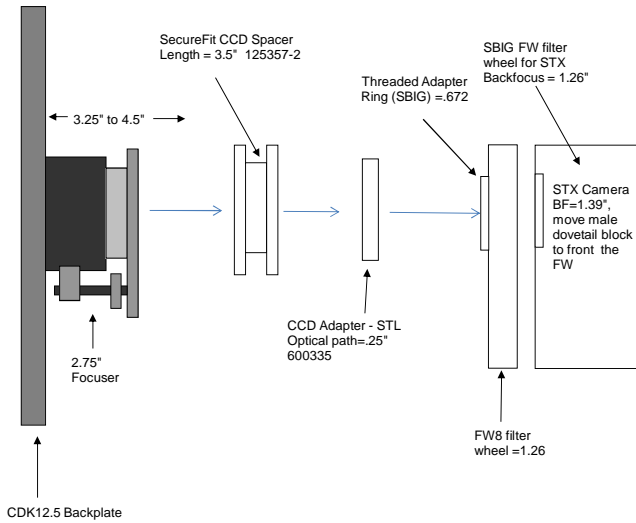


STL CCD, FW8, Pyxis & MMOAG		10.445 remaining BF
2.75" Focuser (racked in)	3.25	7.195
<b>Focus position (0 to 1.3")</b>	<b>0.175</b>	7.02
PW 12.5 to Optec-3600 dovetail adapter - 17827	0	7.02
Optec Pyxis 3" Camera Rotator	2.4	4.62
Optec Pyxis 3" to SecureFit Adapter - 17835	0.5	4.12
Adapter SecureFit to Monster MOAG - 200394	0.55	3.57
Monster MOAG - MMOAG	1.25	2.32
AstroDon Adapter - MMOAG-STL-M	0.5	1.82
SBIG FW8 Filter Wheel	0.35	1.47
SBIG STL Camera with mounting block	1.47	0

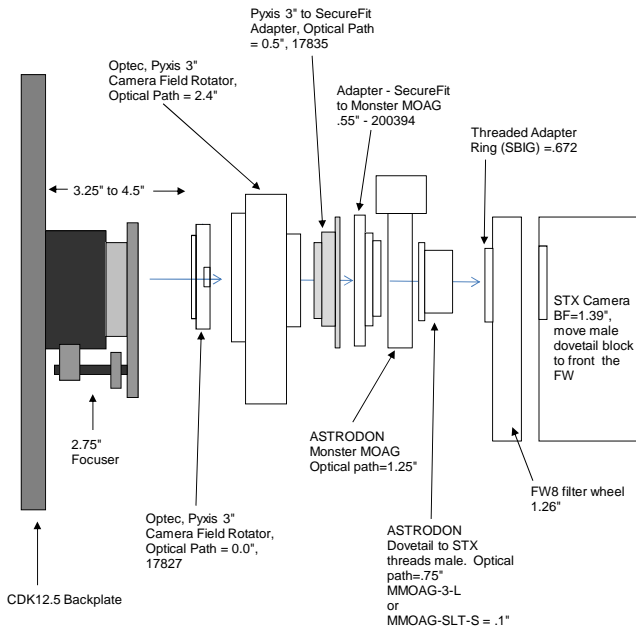


# CDK12.5 - OPTICAL TRAIN: for SBIG STX BODY, AND MMOAG

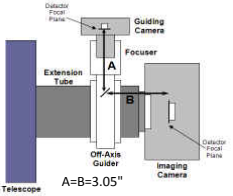
Distance to Focuser Mounting Surface 10.445



STX and FW		10.445 remaining BF
2.75" Focuser (racked in)	3.25	7.195
Focus position (0 to 1.3")	<b>0.125</b>	7.07
SecureFit CCD Spacer - 125357-2	3.5	3.57
CCD Adapter - STL - 600335	0.25	3.32
SBIG FW STX (w/threaded adapter ring attached)	1.93	1.39
STX Camera	1.39	0

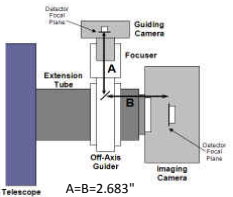


STX CCD, Pyxis & MMOAG		10.445 remaining BF
2.75" Focuser (racked in)	3.25	7.195
Focus position (0 to 1.3")	<b>0.34</b>	6.855
PW 12.5 to Optec-3600 dovetail adapter - 17827	0	6.855
Optec Pyxis 3 inch Camera Rotator	2.4	4.455
Optec Pyxis 3 inch to SecureFit Adapter - 17835	0.5	3.955
Adapter SecureFit to Monster MOAG - 200394	0.55	3.405
Monster MOAG - MMOAG	1.25	2.155
AstroDon Adapter - MMOAG-SLT-S	0.1	2.055
SBIG STX Camera with mounting block	2.06	0.00

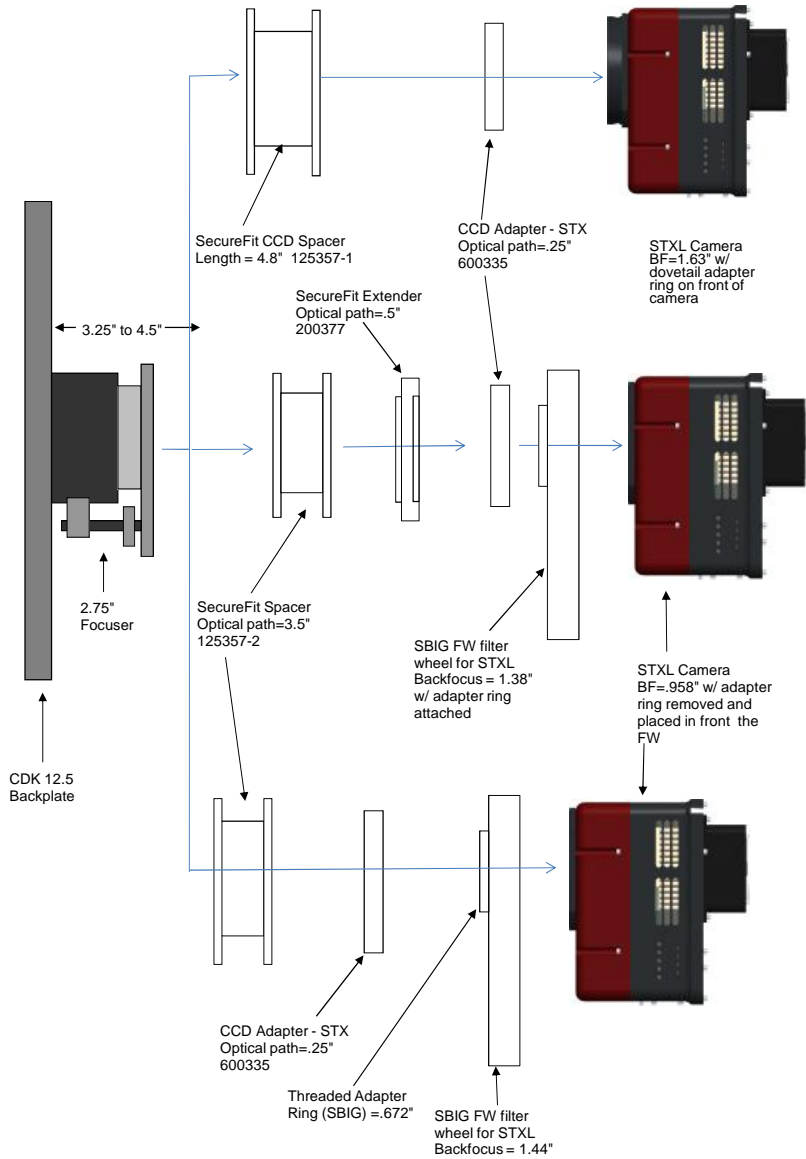


**Does not reach focus without the use of custom adapters**

STX CCD, FW8, Pyxis & MMOAG		10.445 remaining BF
2.75" Focuser (racked in)	3.25	7.195
Focus position (0 to 1.3")	<b>0</b>	7.195
PW 12.5 to Optec-3600 dovetail adapter - 17827	0	7.195
Optec Pyxis 3 inch Camera Rotator	2.4	4.795
Optec Pyxis 3 inch to SecureFit Adapter - 17835	0.5	4.295
Adapter SecureFit to Monster MOAG - 200394	0.55	3.745
Monster MOAG - MMOAG	1.25	2.495
AstroDon Adapter - MMOAG-SLT-S	0.1	2.395
SBIG FW8 Filter Wheel w/threaded adapter ring attached	1.93	0.465
SBIG STX Camera	1.39	<b>-0.925</b>



PLANEWAVE INSTRUMENTS  
CDK12.5 SPACERS FOR STXL CAMERAS

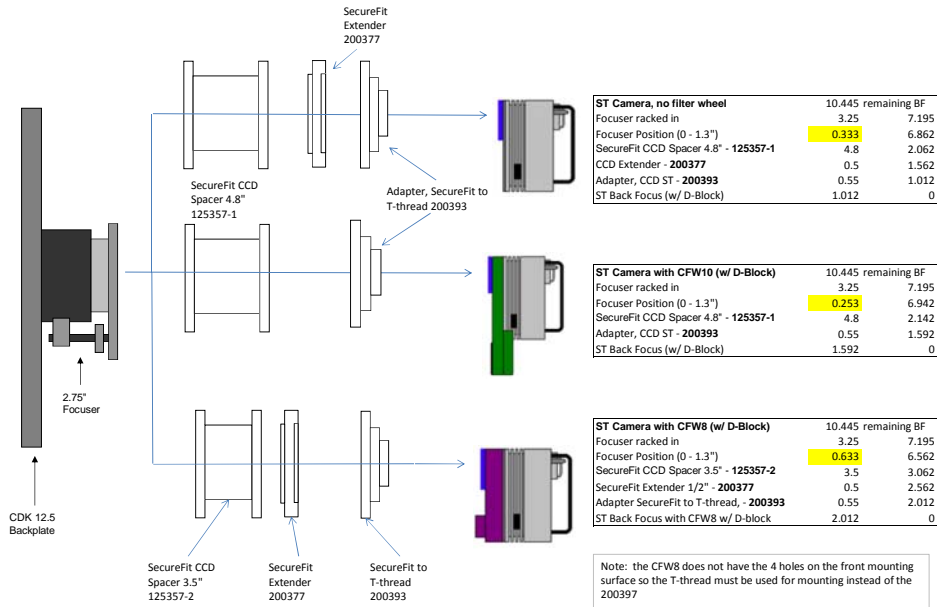


STXL		
	10.445	remaining BF
Focuser racked in	3.25	7.195
Focuser position (0-1.3")	0.515	6.68
CCD Spacer 4.8" - 125357-1	4.8	1.88
CCD Adapter STX - 600335	0.25	1.63
STXL Back Focus (w/Threaded Adapter attached)	1.63	0

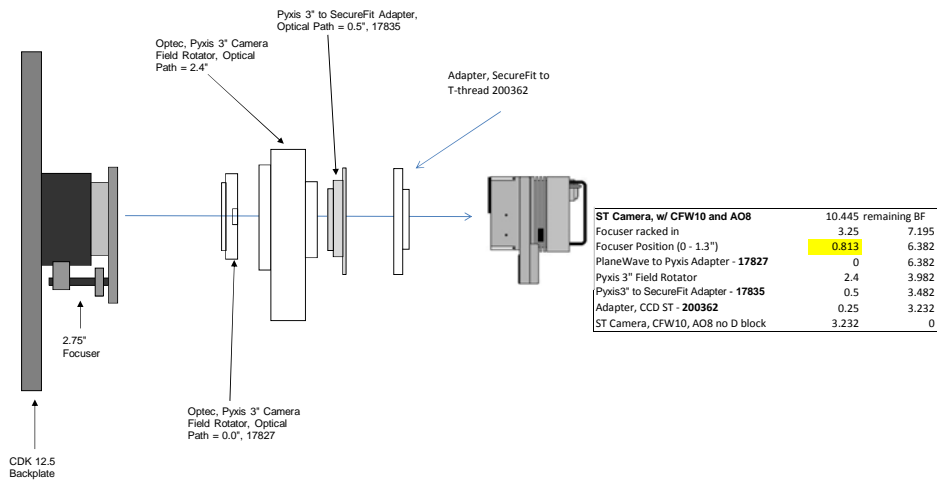
STXL w/ Standard FW		
	10.445	remaining BF
Focuser racked in	3.25	7.195
Focuser position (0-1.3")	0.547	6.648
SecureFit CCD Spacer - 125357-2	3.5	3.148
SecureFit Extender - 200377	0.5	2.648
CCD Adapter STX - 600335	0.25	2.398
Filter Wheel (w/Threaded Adapter Ring attached)	1.44	0.958
STXL Back Focus	0.958	0

STXL w/ Self Guiding FW		
	10.445	remaining BF
Focuser racked in	3.25	7.195
Focuser position (0-1.3")	0.377	6.818
SecureFit CCD Spacer - 125357-2	3.5	3.318
CCD Adapter STX - 600335	0.25	3.068
Filter Wheel, Self Guiding w/threaded adapter ring attached	2.11	0.958
STXL Back Focus	0.958	0

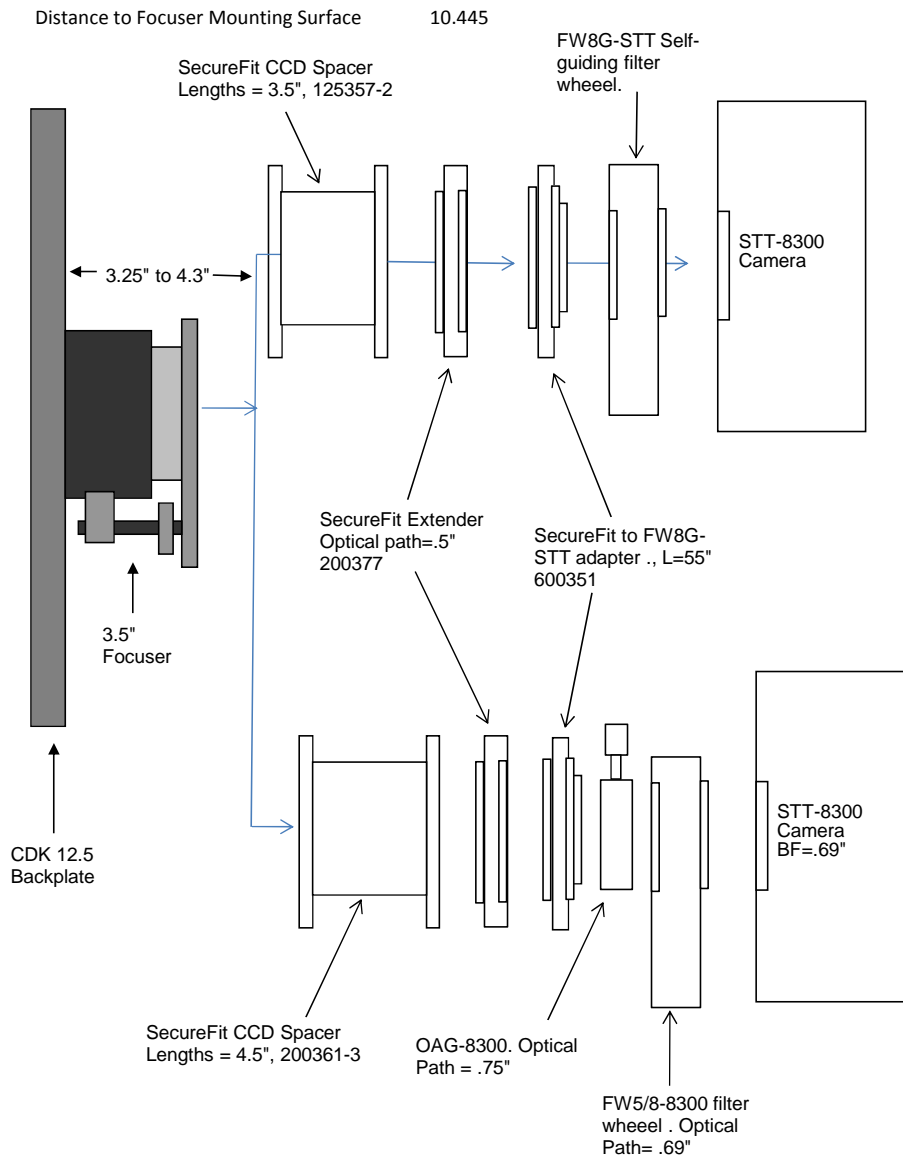
PLANEWAVE INSTRUMENTS  
 SECUREFIT CCD SPACERS FOR ST CAMERAS  
 for CDK12.5



PLANEWAVE INSTRUMENTS  
 SECUREFIT CCD SPACERS FOR ST CAMERAS  
 for CDK12.5



**PLANEWAVE INSTRUMENTS**  
CDK12.5 SECUREFIT SPACERS FOR STT CAMERAS

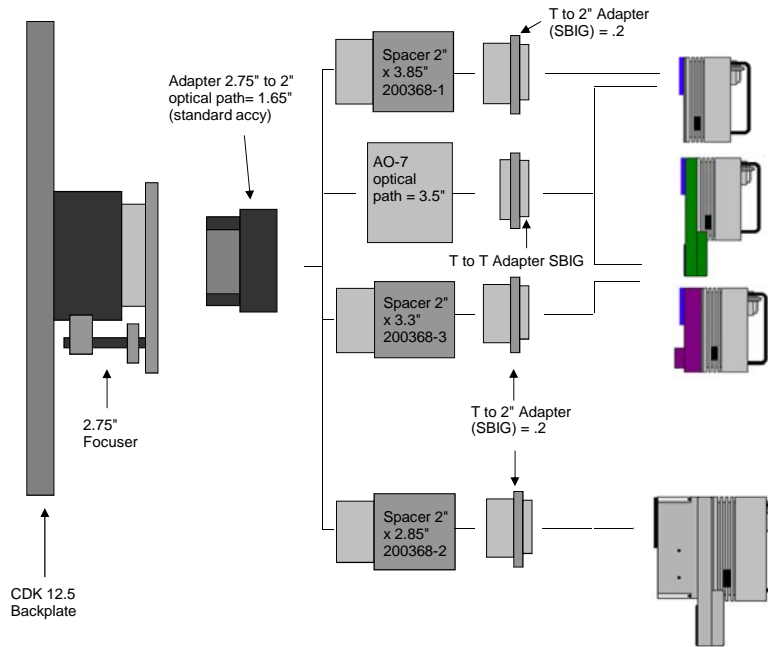


<b>STT8300 Camera w/ Self Guiding Filter Wheel</b>	10.445	remaining BF
Focuser racked in	3.25	7.195
Focuser position (0-1.3")	<b>0.517</b>	6.678
SecureFit Spacer 3.5- <b>125357-2</b>	3.5	3.178
CCD SecureFit Extender - <b>200377</b>	0.5	2.678
SecureFit to FW8G-STT - <b>600351</b>	0.55	2.128
FW8G-SST attached to STT-8300 Camera	2.128	0

<b>STT8300 Camera w/Filter Wheel, OAG8300</b>	10.445	remaining BF
Focuser racked in	3.25	7.195
Focuser position (0-1.3")	<b>0.415</b>	6.78
SecureFit Spacer 3.5- <b>125357-2</b>	3.5	3.28
CCD SecureFit Extender - <b>200377</b>	0.5	2.78
SecureFit to FW8G-STT - <b>600351</b>	0.55	2.23
OAG-8300	0.75	1.48
FW5-8300 / FW8-8300	0.79	0.69
STT-8300 Camera	0.69	0



**PLANEWAVE INSTRUMENTS**  
2" CCD SPACERS FOR ST CAMERAS  
for CDK12.5



ST Camera, no filter wheel		10.445 remaining BF
Focuser racked in	3.25	7.195
Focuser Position (0 - 1.3")	0.483	6.712
Adapter, 2.75 to 2 (standard accy)	1.65	5.062
CCD 2" Spacer x 3.85" - <b>200368-1</b>	3.85	1.212
T to 2 Adapter (SBIG)	0.2	1.012
ST Back Focus (with D-Block)	1.012	0

ST Camera with CFW10 w/ D-Block		10.445 remaining BF
Focuser racked in	3.25	7.195
Focuser Position (0 - 1.3")	0.453	6.742
Adapter, 2.75 to 2 (standard accy)	1.65	5.092
CCD 2" SPACER x 3.3" - <b>200368-3</b>	3.3	1.792
T to 2 Adapter (SBIG)	0.2	1.592
ST Back Focus (with D-Block)	1.592	0

ST Camera with CFW8 w/ D-Block		10.445 remaining BF
Focuser racked in	3.25	7.195
Focuser Position (0 - 1.3")	0.483	6.712
Adapter, 2.75 to 2 (standard accy)	1.65	5.062
CCD 2" Spacer x 2.85" - <b>200368-2</b>	2.85	2.212
T to 2 Adapter (SBIG)	0.2	2.012
ST Back Focus (with D-block)	2.012	0

ST Camera + AO-7		10.445 remaining BF
Focuser racked in	3.25	7.195
Focuser Position (0 - 1.3")	0.835	6.36
Adapter, 2.75 to 2 (standard accy)	1.65	4.71
T to T Adapter (SBIG)	0.2	4.51
ST + AO-7 backfocus	4.51	0

ST + CFW10 + AO-7		10.445 remaining BF
Focuser racked in	3.25	7.195
Focuser Position (0 - 1.3")	0.255	6.94
Adapter, 2.75 to 2 (standard accy)	1.65	5.29
T to T Adapter (SBIG)	0.2	5.09
ST + AO-7 backfocus	5.09	0

**DOES NOT HAVE ENOUGH BACK FOCUS**

ST + CFW8 + AO-7		10.445 remaining BF
Focuser racked in	3.25	7.195
Focuser Position (0 - 1.3")	0	7.195
Adapter, 2.75 to 2 (standard accy)	1.65	5.545
T to 2 Adapter (SBIG)	0.2	5.345
ST + AO-7 backfocus	5.51	-0.165