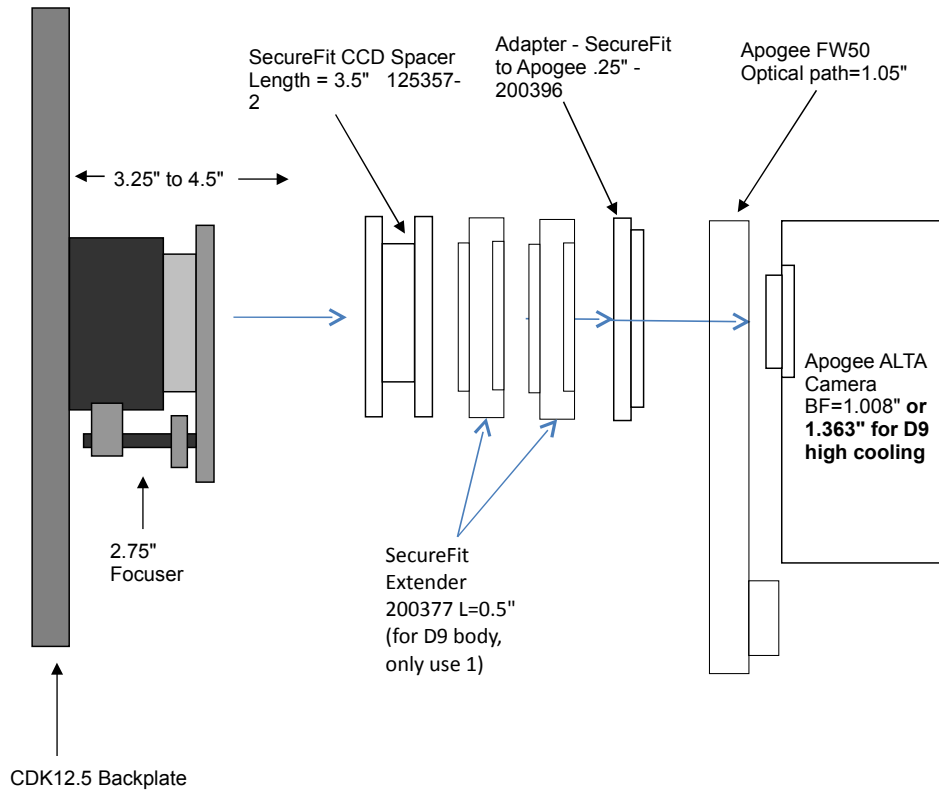


CDK12.5 - OPTICAL TRAIN: for Apogee Alta, FW50

Distance to Focuser Mounting Surface 10.45

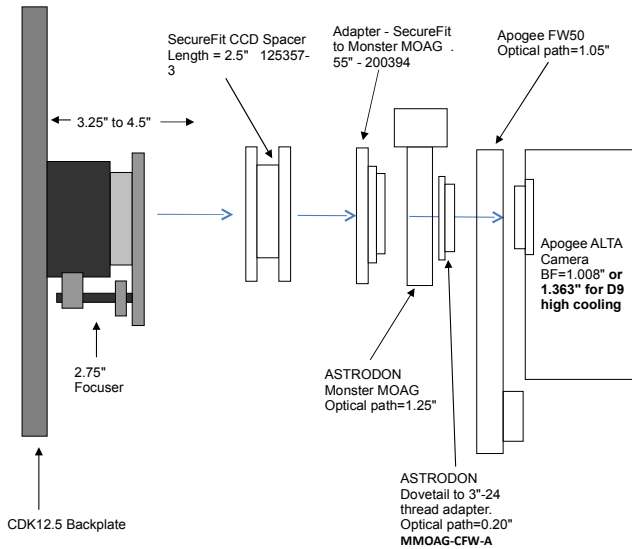


Apogee Alta CCD, FW50	10.45 remaining BF	
2.75" Focuser (racked in)	3.25	7.2
Focus position (0 to 1.3")	0.39	6.81
SecureFit CCD Spacer - 125357-2	3.5	3.31
SecureFit CCD Extender - 200377	0.5	2.81
SecureFit CCD Extender - 200377	0.5	2.31
SecureFit to Apogee Adapter - 200396	0.25	2.06
Apogee FW50	1.05	1.01
Apogee Alta U16M CCD back focus	1.01	0

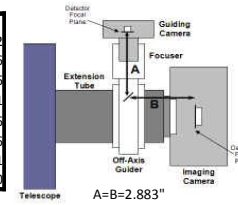
Apogee Alta CCD, FW50, (D9 High Cooling)	10.45 remaining BF	
2.75" Focuser (racked in)	3.25	7.2
Focus position (0 to 1.3")	0.53	6.66
SecureFit CCD Spacer - 125357-2	3.5	3.16
SecureFit CCD Extender - 200377	0.5	2.66
SecureFit to Apogee Adapter - 200396	0.25	2.41
Apogee FW50	1.05	1.36
Apogee Alta U16M High Cooling CCD back focus	1.36	0

CDK12.5 - OPTICAL TRAIN: for Apogee Alta, FW50 and MMOAG

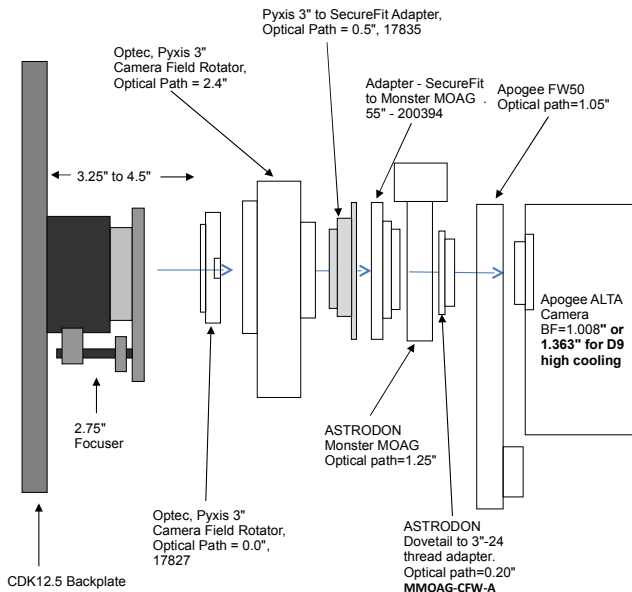
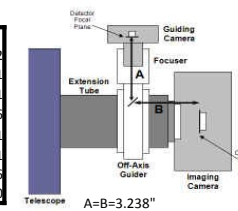
Distance to Focuser Mounting Surface 10.45



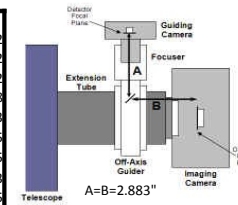
Apogee Alta CCD, FW50, & MMOAG	10.45 remaining BF
2.75" Focuser (racked in)	3.25
Focus position (0 to 1.3")	0.64
SecureFit CCD Spacer - 125357-3	2.5
Adapter SecureFit to Monster MOAG - 200394	0.55
Monster MOAG - MMOAG	1.25
AstroDon Adapter - MMOAG-CFW-A	0.2
Apogee FW50	1.05
Apogee Alta U16M CCD back focus	1.01



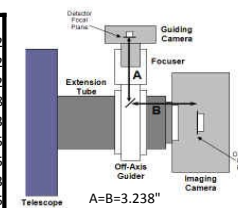
MonsterMOAG, FW50, ALTA D9 High Cooling	10.45 remaining BF
2.75" Focuser (racked in)	3.25
Focus position (0 to 1.3")	0.28
SecureFit CCD Spacer - 125357-3	2.5
Adapter SecureFit to Monster MOAG - 200394	0.55
Monster MOAG - MMOAG	1.25
AstroDon Adapter - MMOAG-CFW-A	0.2
Apogee FW50	1.05
Apogee Alta U16M High Cooling CCD back focus	1.36



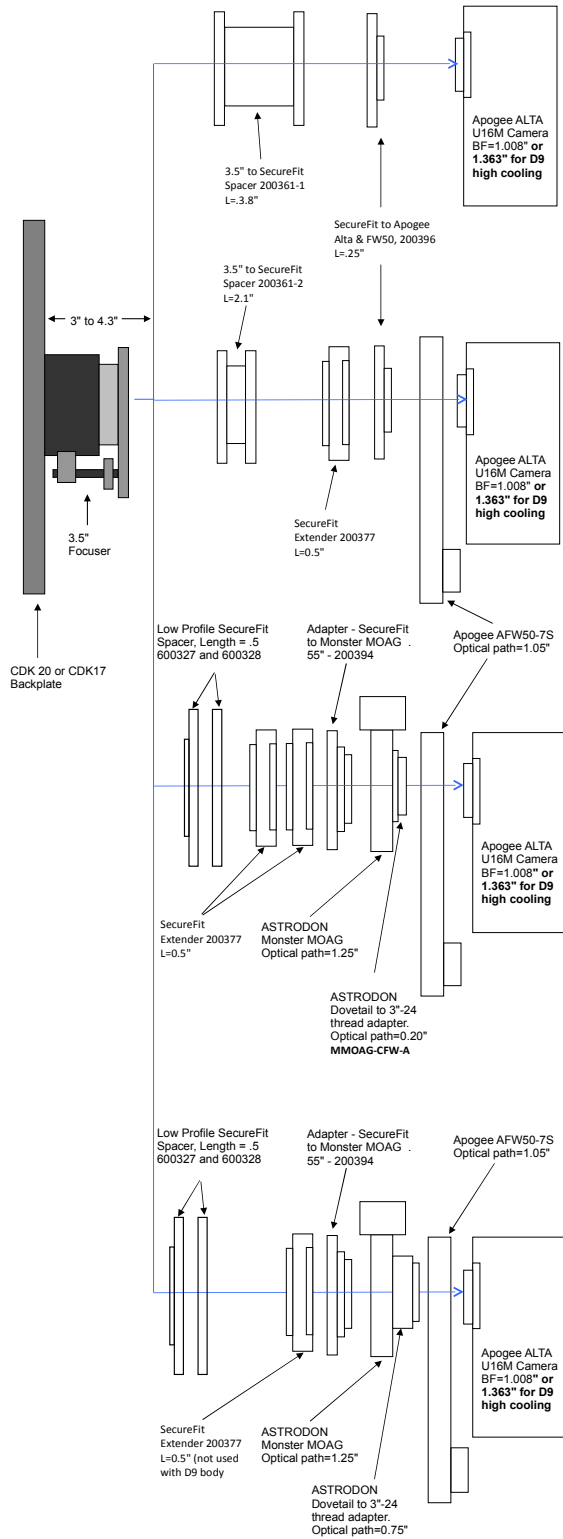
Alta CCD, FW50, Pyxis & MMOAG	10.45 remaining BF
2.75" Focuser (racked in)	3.25
Focus position (0 to 1.3")	0
PW 12.5 to Optec-3600 dovetail adapter - 17827	0
Optec Pyxis 3" Camera Rotator	2.4
Optec Pyxis 3" to SecureFit Adapter - 17835	0.5
Adapter SecureFit to Monster MOAG - 200394	0.55
Monster MOAG - MMOAG	1.25
AstroDon Adapter - MMOAG-CFW-A	0.2
Apogee FW50	1.05
Apogee Alta U16M CCD back focus	1.01



NOT ENOUGH BACK FOCUS WITHOUT A NEW CUSTOM PART	10.45 remaining BF
MonsterMOAG, FW50, ALTA D9 High Cooling	10.45 remaining BF
2.75" Focuser (racked in)	3.25
Focus position (0 to 1.3")	0
PW 12.5 to Optec-3600 dovetail adapter - 17827	0
Optec Pyxis 3" Camera Rotator	2.4
Optec Pyxis 3" to SecureFit Adapter - 17835	0.5
Adapter SecureFit to Monster MOAG - 200394	0.55
Monster MOAG - MMOAG	1.25
AstroDon Adapter - MMOAG-CFW-A	0.2
Apogee FW50	1.05
Apogee Alta U16M High Cooling CCD back focus	1.36



CDK17, 20, and 24 - OPTICAL TRAIN: for Apogee Alta, FW50 and MMOAG



MonsterMOAG, ALTA	8.81 remaining BF
3.5" Focuser (racked in)	3
Focus position (0 to 1.3")	0.75
3.5" to SecureFit, 3.8" - 200361-1	3.8
SecureFit to Apogee Alta & FW50 - 200396	0.25
Apogee Alta U16M CCD back focus	1.01

MonsterMOAG, ALTA D9 High Cooling	8.81 remaining BF
3.5" Focuser (racked in)	3
Focus position (0 to 1.3")	0.4
3.5" to SecureFit, 3.8" - 200361-1	3.8
SecureFit to Apogee Alta & FW50 - 200396	0.25
Apogee Alta U16M High Cooling CCD back focus	1.36

MonsterMOAG, FW50, ALTA	8.81 remaining BF
3.5" Focuser (racked in)	3
Focus position (0 to 1.3")	0.9
3.5" to SecureFit, 2.1" - 200361-2	2.1
SecureFit CCD Extender - 200377	0.5
SecureFit to Apogee Alta & FW50 - 200396	0.25
Apogee AFW50-7S	1.05
Apogee Alta U16M CCD back focus	1.01

MonsterMOAG, FW50, ALTA D9 High Cooling	8.81 remaining BF
3.5" Focuser (racked in)	3
Focus position (0 to 1.3")	0.65
3.5" to SecureFit, 2.1" - 200361-2	2.1
SecureFit CCD Extender - 200377	0.5
SecureFit to Apogee Alta & FW50 - 200396	0.25
Apogee AFW50-7S	1.05
Apogee Alta U16M High Cooling CCD back focus	1.36

MonsterMOAG, FW50, ALTA	8.81 remaining BF
3.5" Focuser (racked in)	3
Focus position (0 to 1.3")	0.25
Low Profile SecureFit Spacer - 600327 and 600328	0.5
SecureFit CCD Extender - 200377	0.5
SecureFit CCD Extender - 200377	0.5
Adapter SecureFit to Monster MOAG - 200394	0.55
Monster MOAG - MMOAG	1.25
AstroDon Adapter - MMOAG-CF-W-A	0.2
Apogee AFW50-7S	1.05
Apogee Alta U16M CCD back focus	1.01

MonsterMOAG, FW50, ALTA D9 High Cooling	8.81 remaining BF
3.5" Focuser (racked in)	3
Focus position (0 to 1.3")	0.4
Low Profile SecureFit Spacer - 600327 and 600328	0.5
SecureFit CCD Extender - 200377	0
SecureFit CCD Extender - 200377	0.5
Adapter SecureFit to Monster MOAG - 200394	0.55
Monster MOAG - MMOAG	1.25
AstroDon Adapter - MMOAG-CF-W-A	0.2
Apogee AFW50-7S	1.05
Apogee Alta U16M High Cooling CCD back focus	1.36

MonsterMOAG, FW50, ALTA	8.81 remaining BF
3.5" Focuser (racked in)	3
Focus position (0 to 1.3")	0.2
Low Profile SecureFit Spacer - 200383	0.5
SecureFit CCD Extender - 200377	0.5
Adapter SecureFit to Monster MOAG - 200394	0.55
Monster MOAG - MMOAG	1.25
Adapter, Astrodon dovetail to 3"-24 MMOAG-3-L	0.75
Apogee AFW50-7S	1.05
Apogee Alta U16M CCD back focus	1.01

MonsterMOAG, FW50, ALTA D9 High Cooling	8.81 remaining BF
3.5" Focuser (racked in)	3
Focus position (0 to 1.3")	0.35
Low Profile SecureFit Spacer - 600327, 600328	0.5
SecureFit CCD Extender - 200377	0
Adapter SecureFit to Monster MOAG - 200394	0.55
Monster MOAG - MMOAG	1.25
Adapter, Astrodon dovetail to 3"-24 MMOAG-3-L	0.75
Apogee AFW50-7S	1.05
Apogee Alta U16M High Cooling CCD back focus	1.36

