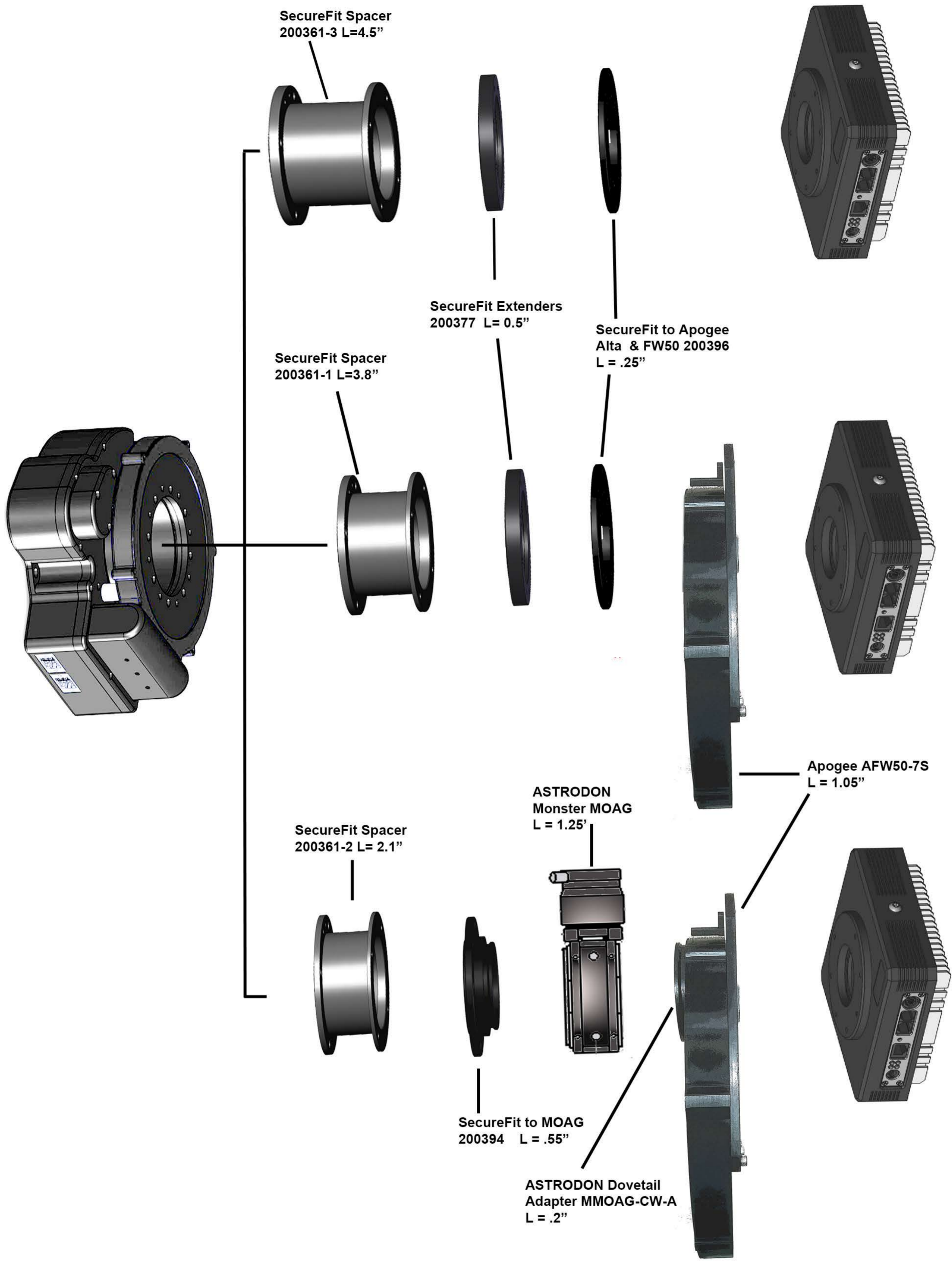


CDK 17" - OPTICAL TRAIN: for Apogee ALTA or ASPEN with FW50 and MMOAG

**Apogee AltaU16M
BF - 1.008" (1.363" for
D9 high cooling)**



IR90 to Apogee Alta, ASPEN	Inches
IR90 (raked in)	3.5
Focus Position (0-1.3")	0.48
SecureFit 4.5" Adapter - 200361-3	4.5
SecureFit CCD Extender - 200377	0.5
SecureFit to Apogee Alta & FW50 - 200396	0.25
Apogee Alta, ASPEN BackFocus	1.01
TOTAL	10.24

IR90 to Apogee Alta (D9 High Cooling)	Inches
IR90 (raked in)	3.5
Focus Position (0-1.3")	0.33
SecureFit 3.8" Adapter - 200361-1	3.8
SecureFit CCD Extender - 200377	0.5
SecureFit CCD Extender - 200377	0.5
SecureFit to Apogee Alta & FW50 - 200396	0.25
Apogee U16M High Cooling BackFocus	1.36
TOTAL	10.24

* For Aspen Camera use 200395-3 instead of 200396

IR90 to Apogee Alta, ASPEN w/Filter Wheel	Inches
IR90 (raked in)	3.5
Focus Position (0-1.3")	0.13
SecureFit 3.8" Adapter - 200361-1	3.8
SecureFit CCD Extender - 200377	0.5
SecureFit to Apogee Alta & FW50 - 200396	0.25
Apogee AFW50-7S	1.05
Apogee Alta, ASPEN BackFocus	1.01
TOTAL	10.24

IR90 to Apogee Alta w/Filter Wheel (D9 High Cooling)	Inches
IR90 (raked in)	3.5
Focus Position (0-1.3")	0.28
SecureFit 3.8" Adapter - 200361-1	3.8
SecureFit to Apogee Alta & FW50 - 200396	0.25
Apogee AFW50-7S	1.05
Apogee U16M High Cooling BackFocus	1.36
TOTAL	10.24

IR90 to Apogee Alta, ASPEN w/MMOAG/Filter Wheel	Inches
IR90 (raked in)	3.5
Focus Position (0-1.3")	0.58
SecureFit 2.1" Adapter - 200361-2	2.1
SecureFit to MMOAG - 200394	0.55
Monster MMOAG	1.25
AstroDon Adapter - MMOAG-CW-A	0.2
Apogee AFW50-7S	1.05
Apogee Alta, ASPEN BackFocus	1.01
TOTAL	10.24

IR90 to Apogee Alta w/MMOAG/Filter Wheel (D9 High Cooling)	Inches
IR90 (raked in)	3.5
Focus Position (0-1.3")	0.23
SecureFit 2.1" Adapter - 200361-2	2.1
SecureFit to MMOAG - 200394	0.55
Monster MMOAG	1.25
AstroDon Adapter - MMOAG-CW-A	0.2
Apogee AFW50-7S	1.05
Apogee U16M High Cooling BackFocus	1.36
TOTAL	10.24