$$A_6^{\text{BCJ},1} = O(p^2) O(p^{12}) + O(p^{12}),$$

$$A_6^{\text{BCJ},2} = O(p^6) O(p^8) + O(p^{12}),$$

$$A_6^{\text{BCJ},3} = O(p^{12}), A_6^{\text{BCJ},4} = O(p^{12}).$$