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Degenerate U - and V -statistics play an important role in the field of hypothesis testing since numerous test statistics can be formulated in terms of these quantities. Therefore, consistent bootstrap methods for U - and V -statistics can be applied in order to approximate critical values of those tests. First, we prove a new asymptotic result for degenerate U - and V -statistics of weakly dependent random variables. Secondly, we propose a new model-free bootstrap method for U - and V -statistics of dependent random variables. Our method is a modification of the dependent wild bootstrap recently proposed by Shao (2010, *JASA* **105**, 218–235), where we do not directly bootstrap the underlying random variables but the summands of the U - and V -statistics. Asymptotic theory for the original and the bootstrap statistics is derived under simple and easily verifiable conditions. Finally, we discuss an application to a Cramér-von Mises-type test.