

May 2021 (supersedes 2013 Oct)

SHIMANO DI2 MU-UR500

(NOTE – the following information only pertains to the MU-UR500 motor unit. For MU-UR510, see [Shimano Di2 MU-UR510 45.5mm Beltline Tech Bulletin](#))

Gates Carbon Drive is compatible with multiple Shimano Di2 hub systems; however, certain considerations must be taken to ensure proper parts selection. The compatible rear sprockets for Shimano Di2 are as follows:

Table 1: Shimano Di2 Compatible Rear Sprockets

REAR SPROCKET	REAR HUB COMPATIBILITY	BELTLINE
CT1128DMN*	All Shimano 8/11-Speed Di2 Rear Hubs	39.8mm
CT1128XMN-D		41.7mm
Gates "YMN-D" Series	All Shimano Inter-5 Di2 Rear Hubs	

*Note: Gates CT1128DMN is replaced with CT1128XMN-D as of MY2021

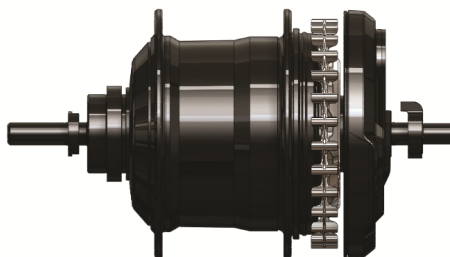
Figure 1: Di2 Specific rear offset sprockets.



It is important to note that not all belt drive compatible frames will work with the Shimano Di2 MU-UR500 system.

Due to placement of the motor unit, the belt line for the Shimano Di2 moves inboard (Figure 2). Because of this inboard movement, frames that fit the standard internally geared hubs will not necessarily fit the new Di2 series. In addition to this offset, an additional 2mm of clearance between the front sprocket and the frame must still exist.

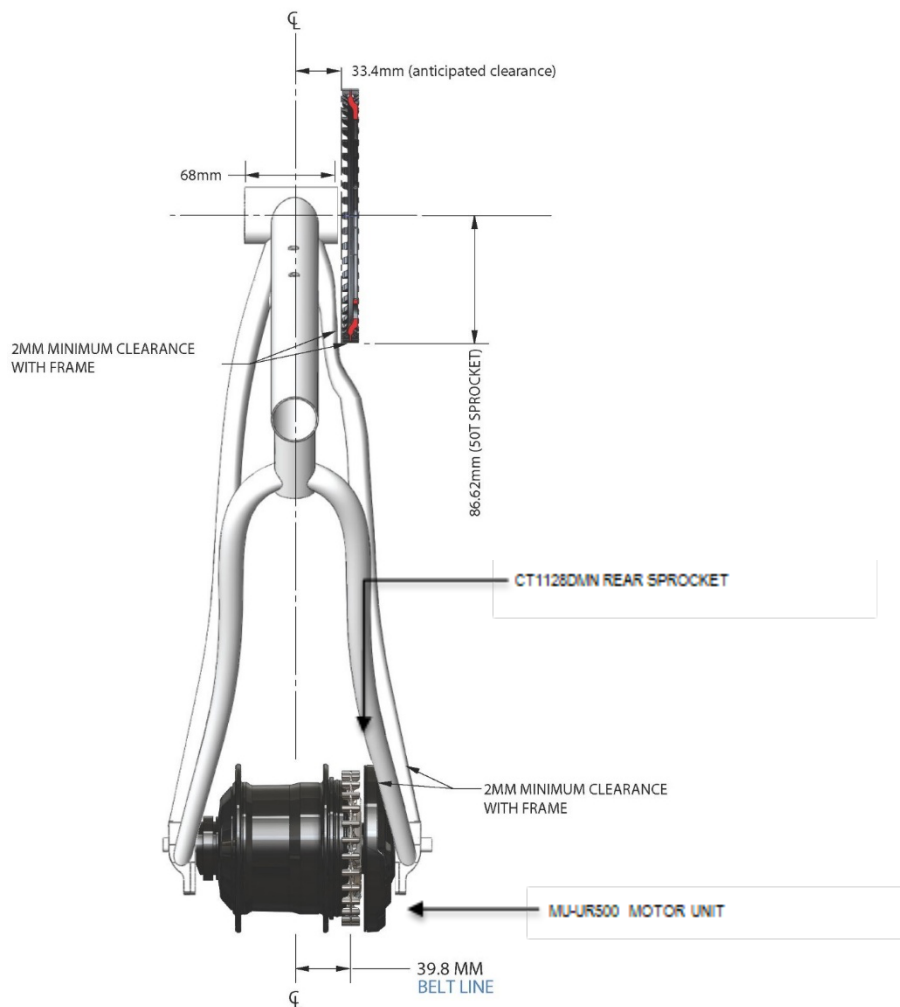
Figure 2: Alfine Di2 hub showing motor placement





For riders using a CT1128DMN rear sprocket, a Di2 specific crank assembly is offered pre-assembled as a 50T sprocket in both 170mm and 175mm crank arm lengths. The front 50T sprocket (CT11505AA-D) has a 1.8mm offset which when combined with the Gates specific S300 crankset will achieve the proper belt line. This assembly is designed to be used with a 68mm BB and the CT1128DMN rear sprocket. The S300 Di2 crank is **only** compatible with the CT1128DMN rear sprocket and not the CT1128XMN-D. Refer to Figure 3 for the belt line specification.

Figure 3: Clearance Requirements and Dimensions (S300 Di2 & CT1128DMN)



Those using the CT1128XMN-D rear sprocket will need to use the Gates S550 Modular Crankset, combined with an “MBA-15.0” front sprocket adjusted for a 41.7mm beltline using the included 1mm spacers. Otherwise, a compatible front sprocket and crank combination to match the rear 41.7mm beltline.

For questions on integration:

Europe: info@carbondrive.net

Everywhere else: CarbonDrive@Gates.com