

### **Product Specification**

# SPT<sup>™</sup> single belt upgrade

The SPT single belt upgrade is a set of attachments that can be fitted to a conventional SPT drive unit to convert the output from 'dual belt' to 'single belt'. This system is ideal for conducting longitudinal cyclist FCW/AEB tests where there should be no equipment in between the test vehicle and cyclist target. From 2018 onwards, the Euro NCAP test protocols for cyclist testing contain such restrictions in the longitudinal test scenario. The single belt system reduces the risk of interference with the vehicle sensors and improves the accuracy and repeatability of the tests.



## Functionality

- Quick and simple changeover time (~10 mins) to convert an SPT drive unit from dual belt to single belt
- Requires only a set of hex keys
- Platform is manually brought into test starting position
- Integral hardware and software features prevent the belt becoming tangled
- Over-drivable corner unit distances the drive unit from the vehicle trajectory
- Software test setup and path generation is identical to conventional SPT systems
- Tests in excess of 20 km/h possible\*

\*SPT 20 variant up to 20 km/h. SPT 40 variant up to 40 km/h.

## **Specifications**

Variant	Maximum speed	Maximum acceleration
SPT 20	20 km/h with 15 kg payload	0.8 g with 15 kg payload
SPT 40	40 km/h with 15 kg payload	0.8 g with 15 kg payload

#### Installation

Kit inventory:

- Low profile belt (50 m or 100 m length), bolted to underside of main SPT pulley
- Friction brake and belt retainers to prevent belt spilling out during test reset
- Passively steered over-drivable platform to ensure good lateral positioning
- Magnetic break-away connection for platform
- Software upgrades to add in SPT single belt functionality



### Target attachment

We also supply a bolt-on rotating pedestrian attachment cleat which securely fixes Euro NCAP approved pedestrian and cyclist targets. This universal design is compatible with all our VRU platforms. This feature includes:

- Retrofit octagonal bottom fitting for Euro NCAP targets
- Quick rotation to account for non-orthogonal test scenarios and reduced downtime
- Compatible with existing dual belt, single belt and LaunchPad platforms
- Radar reflective chamfer to reduce radar cross section (RCS)

### About AB Dynamics

AB Dynamics is a leading global provider of automotive test and verification solutions that facilitate the development of vehicles that are safer, more efficient and sustainable. As part of the AB Dynamics Group of companies we enable customers to develop and test in virtual environments, validate on the track and then evaluate vehicles on public roads.

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