



Operation Manual

# EX-700CT EX-1100CT EXTENSOMETERS



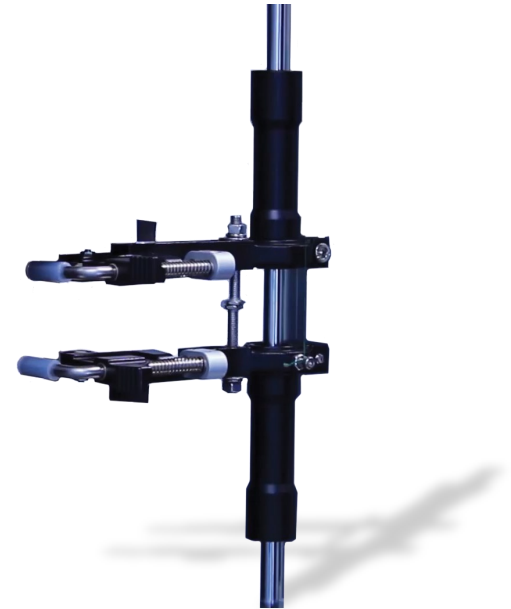


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## A. PRODUCT DESCRIPTION

**EX-700CT and EX-1100CT Extensometers feature 700mm and 1100mm strokes, respectively, and** are used to measure the axial strain of materials with elongations above 20%. The extensometer gage length is user adjustable and spring loaded knife edges securely hold the extensometer arms to the specimen. Several knife edge profiles are available to ensure the specimen is not damaged due to high stress concentrations.



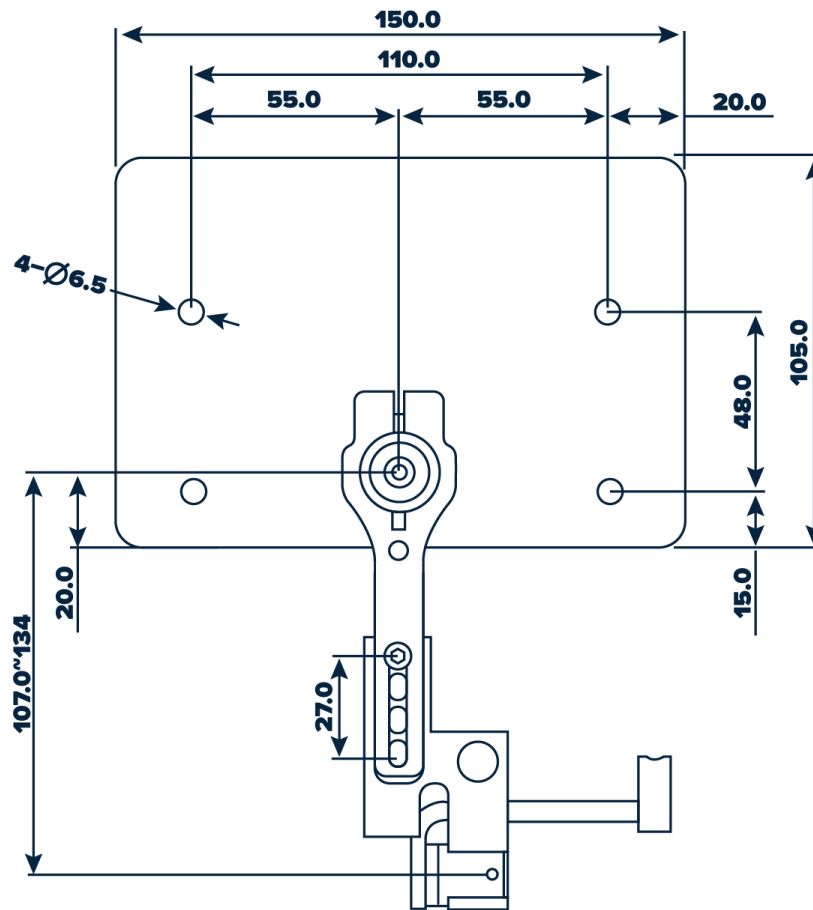
## B. SPECIFICATIONS

Standard 700 and Extended 1100 Series

	Standard: 700mm	Extended: 1100mm
Gauge length	10mm to 50mm	10mm to 50mm
Standard Resolution	0.025mm (0.001in)	0.025mm (0.001in)
High Resolution (Optional)	0.005mm (0.0002in)	0.005mm (0.0002in)
Specimen Thickness	0.2-6mm	0.2-6mm
Test space	110-130mm	110-130mm
Min. load	20gf	20gf
Test stroke	S- Standard: 700mm	L- Extended: 1100mm
Dimension	S- Standard: 15.0x10.5x103.7cm (WxDxH)	L- Extended: 15.0x10.5x148.7cm (WxDxH)
Weight	8.6kg	12kg

## C. INSTALLATION

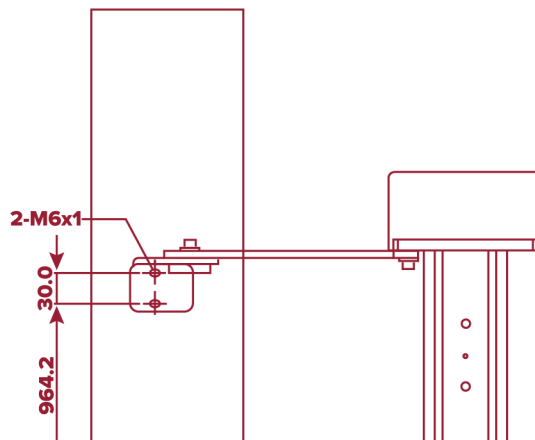
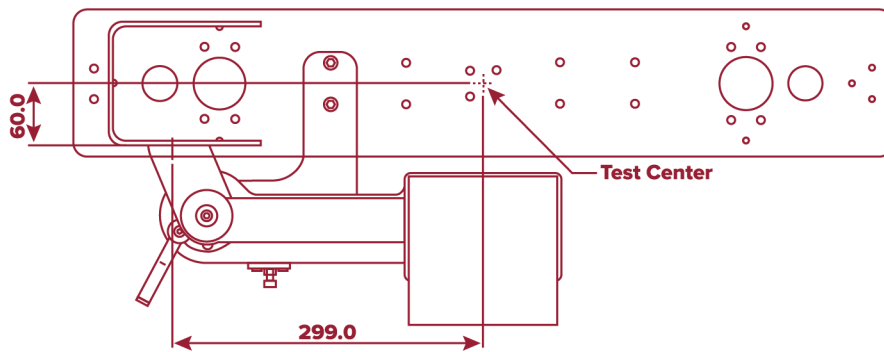
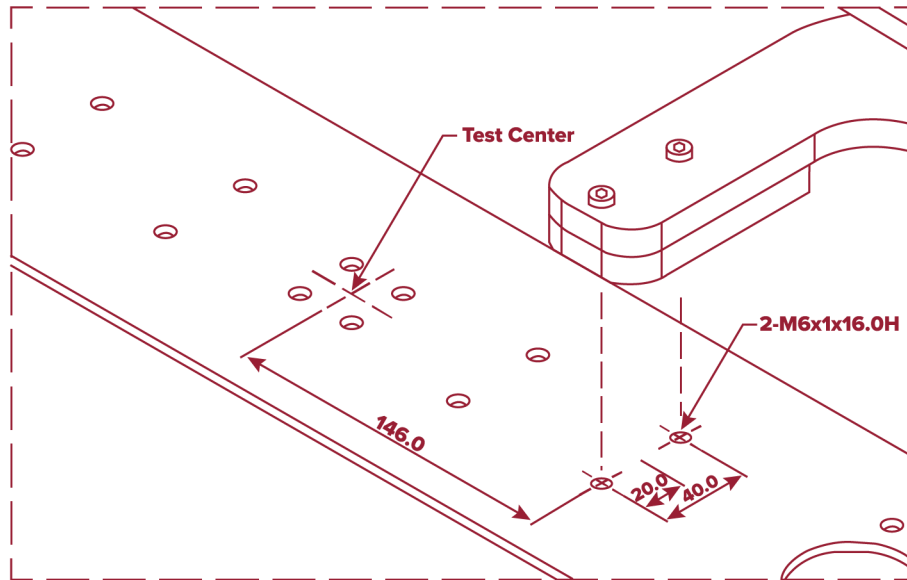
Base Plate (Top view)



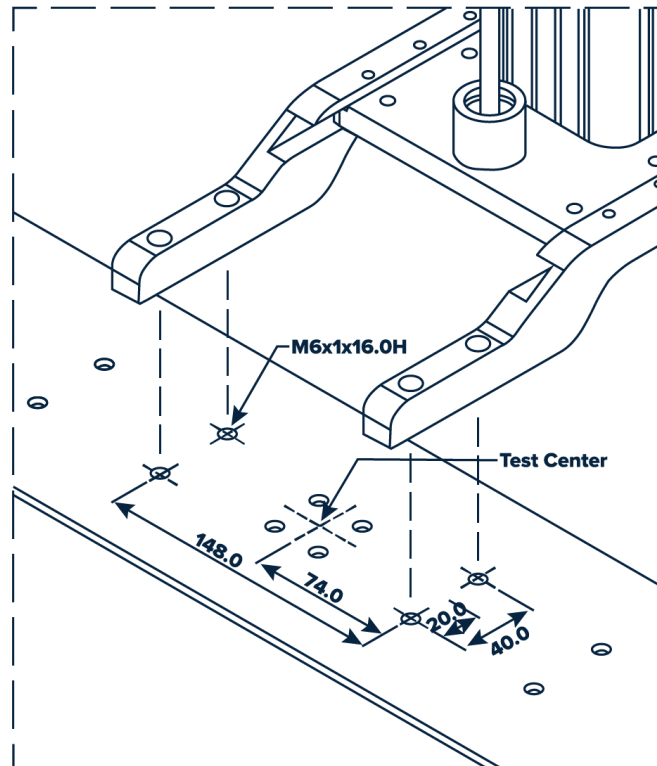
Base Plate (Side view)



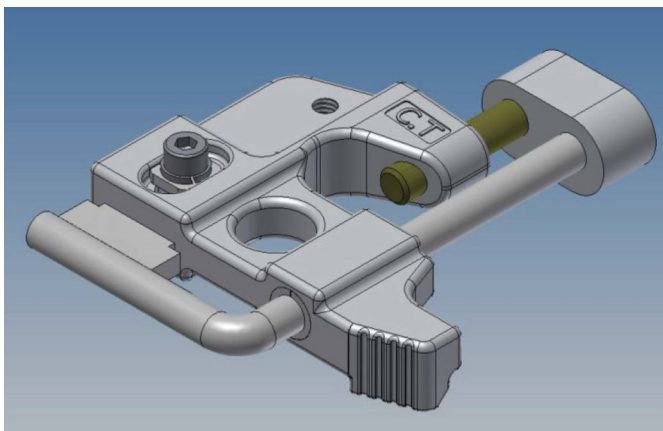
**Revolvable type**



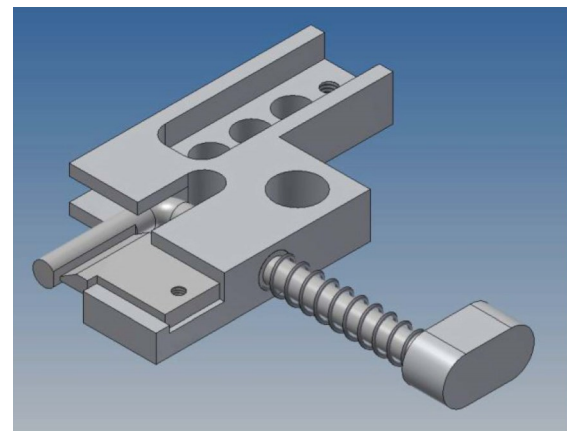
### Fixed Type



### Grip Types

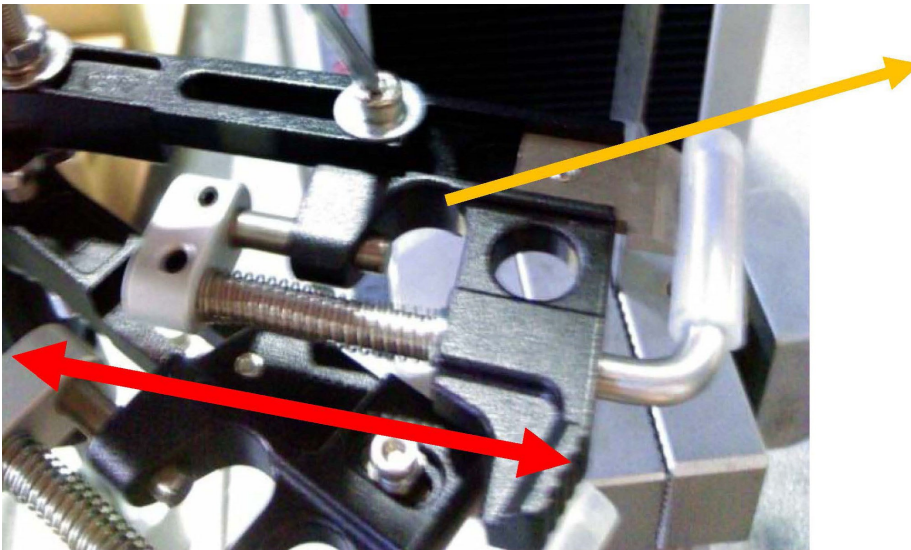


**D Type—Straight**

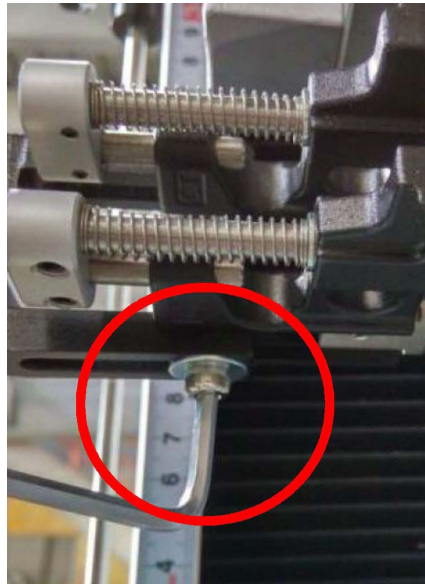
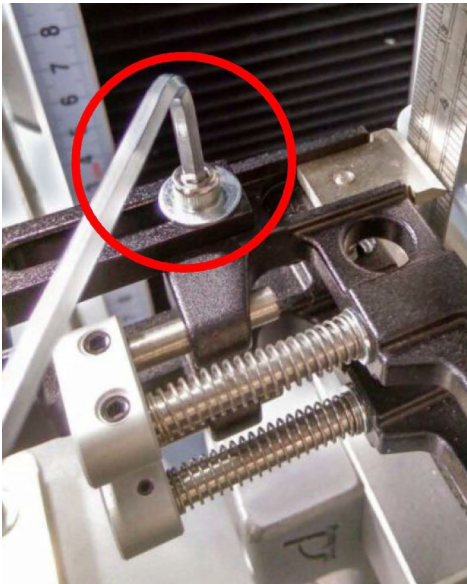


**C Type—90 Degree**

## D. ADJUSTING THE CLAMPING SURFACE PLANE

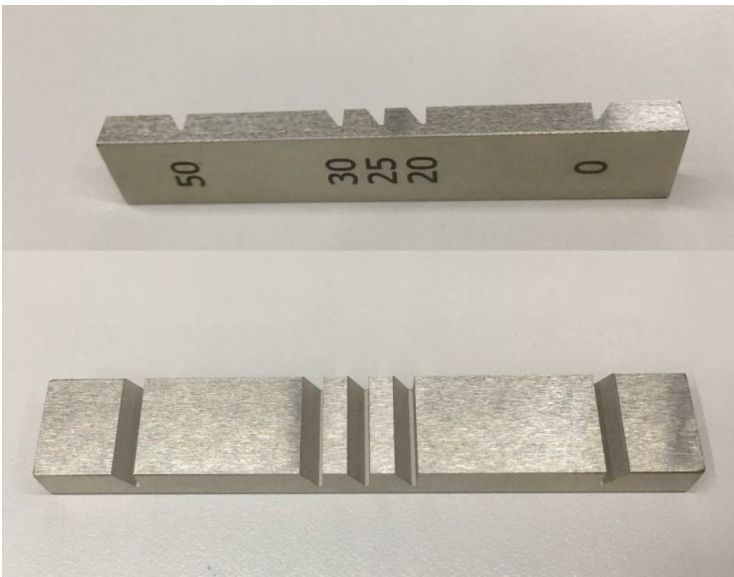


1. **The clamping surface/ plane for both the extensometer and grips need to be the same.** Loosen the upper and lower fixing screws of the clips to adjust the horizontal location of the knife edges.

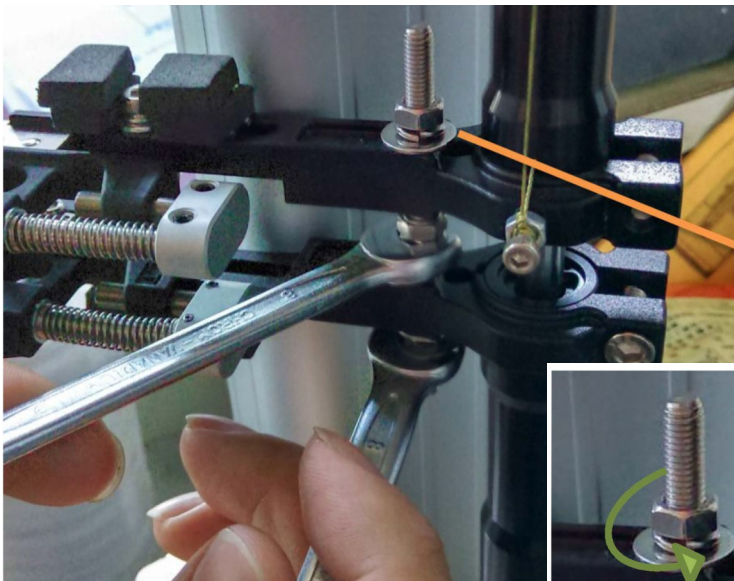


2. **Clamp a long thin stiff sample in the grips. After loosening the clips in step 1, clamp the extensometer knife edges onto the sample.** Ensure the knife edges are properly aligned in-plane, then tighten the clip screws to secure the knife edges in place.

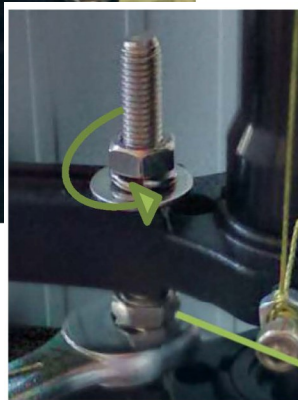
## E. ADJUSTING THE GAGE LENGTH



1. **The Positioning Tool is used to adjust the extensometer gage length.**  
It offers four possible gage lengths: 20mm, 25mm, 30mm, and 50mm.

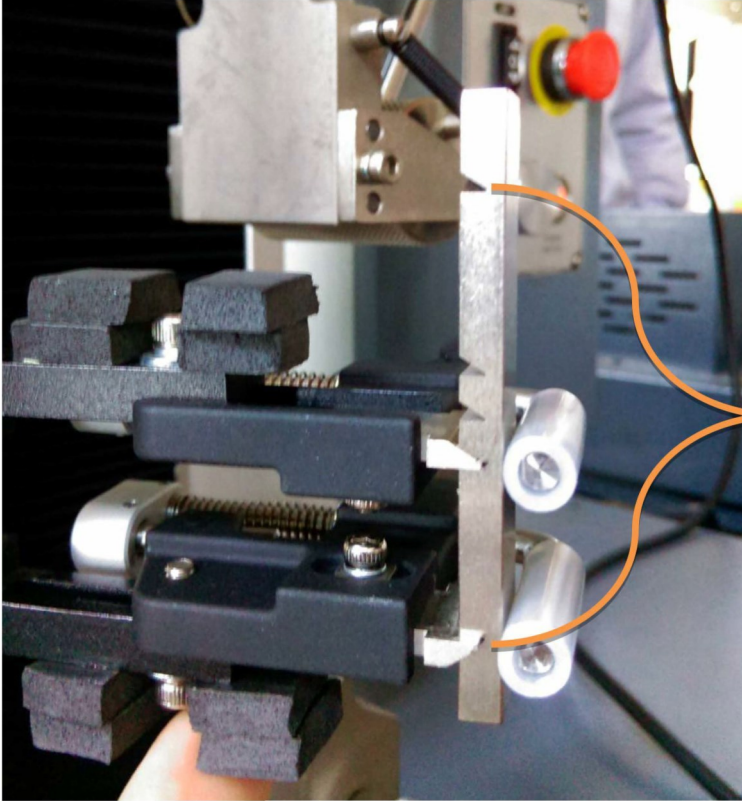


2. **Loosen the upper and lower nuts to the gage length fixing screws with two No.8 open wrenches.**



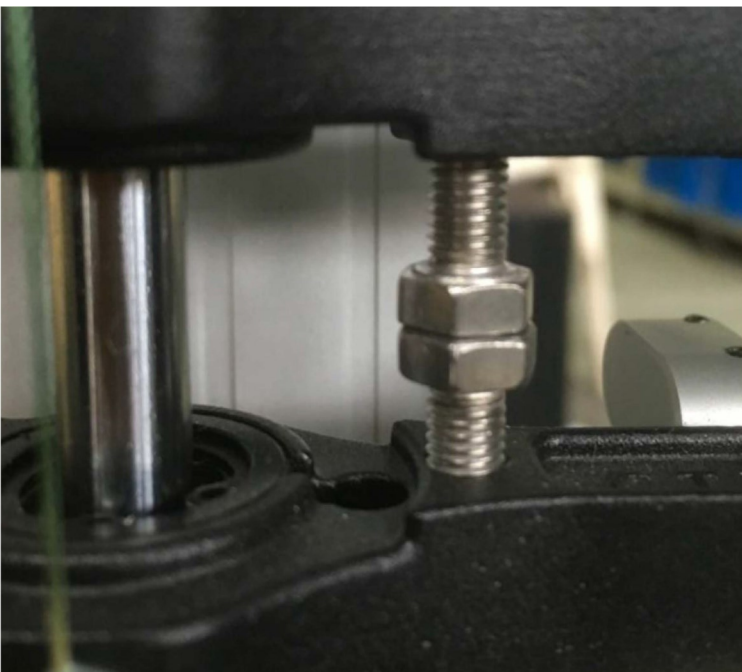
Fixed





3. **Insert the Positioning Tool into the knife edges. The groove marked “O” should be clamped in the lower knife edge.**

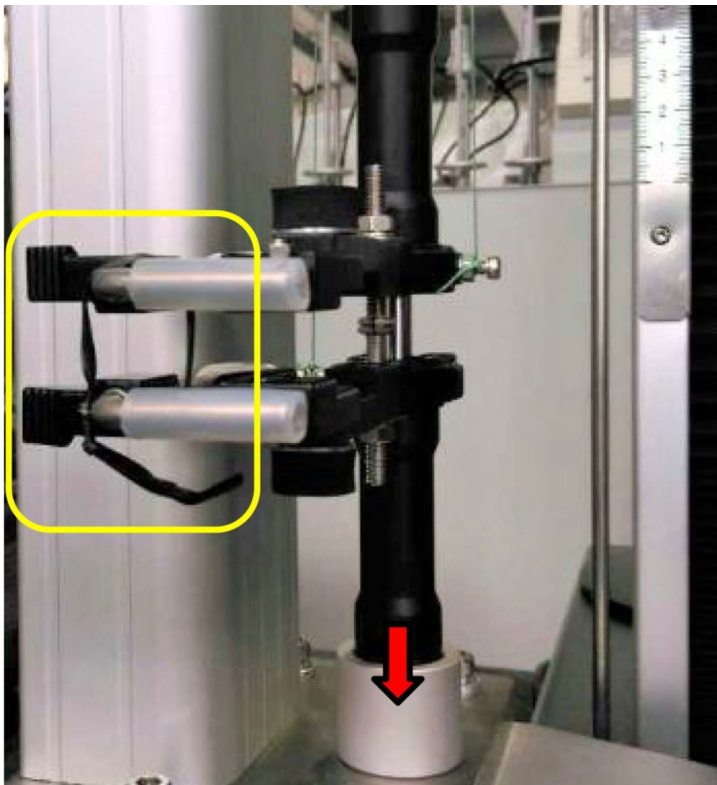
**Insert the upper knife edge in the groove corresponding to the desired gage length.**



4. **After installing the positioning tool, turn the upper and lower gage length adjusting screws so that the heads touch.**



5. **Next, tighten the upper and lower fixing screws with two No.8 open wrenches to set the gage length.**



- ▶ **When the extensometer is not being used, push the lower arm into the holder at the base of the extensometer and rotate out of the way. Next, use a twist tie to secure the upper arm to the lower arm.**



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