

VxMark – WorkPlan

VX~00~30000

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General Instructions

- Fasteners are tightened ½ turn past finger tight
- Thread locking fasteners must be used in all locations
- Zip ties must be trimmed
- Connectors must be hot glued or strain relieved

VX~01~30006

(card reader addition)

- ☐ Remove 13 screws (12 large, 1 small) from the underside and separate the two halves of the BMD
- ☐ Disconnect 4 cables
 - ☐ Power
 - ☐ Speaker
 - ☐ USB
 - ☐ Ground
- ☐ Remove 5 screws from printer tray and detach
 - ☐ Discard screws, set infeed aside
- ☐ Remove 2 screws from bar code reader and detach
 - ☐ Discard screws
 - ☐ Unclip ferrite bead
 - ☐ Disconnect cable and set bar code reader + cable into storage
- ☐ Detach USB hub PCBA
 - ☐ Four screws + standoff (retain these)
 - ☐ Unclip ferrite beads but do not disconnect cables
 - ☐ Disconnect Scanner power connector
- ☐ Solder 5 pin header to USB1 footprint
 - ☐ QC solder job
- ☐ Replace PCBA

- ☐ Reclip ferrite beads
- ☐ Reattach scanner power connector
- ☐ Replace printer tray
 - ☐ Use 5x M3x8L BHCS
- ☐ Install VX~02-30010 to PCBA on USB3 (vacated barcode reader header)
 - ☐ Wrap through ferrite bead used for barcode reader
 - ☐ Hot glue connector in place
 - ☐ Add a cable tie mount near casing seam
 - ☐ zip tie cable in place
- ☐ Remove keypad bumper
 - ☐ Discard four screws
- ☐ Epoxy card reader cover (**VX~02-30005**) to new keypad cable tray (**VX~02-30002**)
- ☐ Install cable **VX~02-30007** to card reader **HID~OMNIKEY-R31210375-1**
- ☐ Snap card reader into card reader mounting bracket **VX~02-30006**
- ☐ Wrap cable around retention features and zip tie in place
- ☐ Install card reader + bracket on keypad cable tray
 - ☐ Use 2x M3x8L BHCS + 2x M3 sealing washers
- ☐ Install card reader assembly onto VSAP
 - ☐ Use 4x M3x6L BHCS + M3 washers
- ☐ Route cable along existing cable tie mounts
- ☐ Add cable tie mount near casing seam and zip tie cable in place

VX~01~300016

Hinge Stiffening

- ☐ Remove both hinge arms
 - ☐ Remove 2x screws on hood and 2s screws on casing. Discard
 - ☐ Disconnect and remove LED cable
- ☐ Disassemble hinge arms from spring barrel
 - ☐ Discard 25mm bolt
- ☐ Install updated hinge arms (**VX~02-30012** and **VX~02-30011**) to spring barrels
 - ☐ Use M3x25L BHCS and M3x9L F/F standoff
 - ☐ Retain oversized delrin washer but replace M3 washer with oversized M3 SS washer
- ☐ Attach stiffener crossbody (**VX~02-30013**) to hinge arms
 - ☐ Use 1x M3x5L FHCS to install mounting brackets (**VX~02-30008** and **VX~02-30009**)

- ☐ Use 4x M3x6L BHCS and M3 oversized SS washers to install stiffener to brackets
- ☐ Attach stiffener assembly to VSAP
 - ☐ Use 8x M3x6L BHCS + M3 washers to reattach to hood and casing
 - ☐ (optional) use up to 4x M3x10L + M3 washer on stiffener holes to further stiffen infeed of casing

Finishing Up

- ☐ QC Card Reader
- ☐ QC Stiffening
 - ☐ Open and close hood
- ☐ QC PCBA and Printer Infeed
- ☐ Reattach 5 connectors
 - ☐ Power
 - ☐ Ground
 - ☐ USB hub
 - ☐ Card Reader
 - ☐ Speaker
- ☐ Mate two halves of casing
- ☐ Tighten 13 screws to ½ turn greater than finger tight
- ☐ Power on
- ☐ Update controller firmware
- ☐ Test
 - ☐ Sound
 - ☐ Card reader
 - ☐ Ballots feed
 - ☐ Hood cover alarm
- ☐ Check BMD for any rattling
- ☐ Check BMD for any gaps in seams