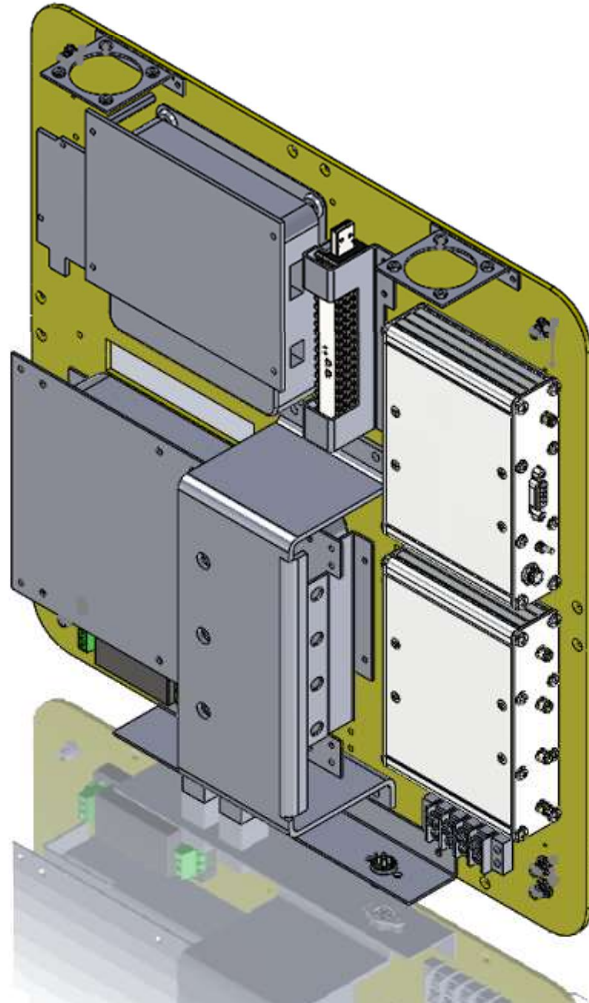




HUMATICS

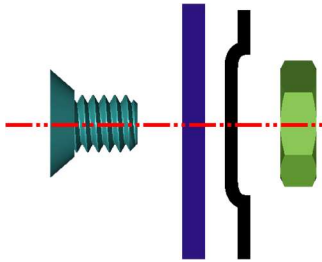






APOLLO ASSEMBLY INSTRUCTIONS

V2.1.1

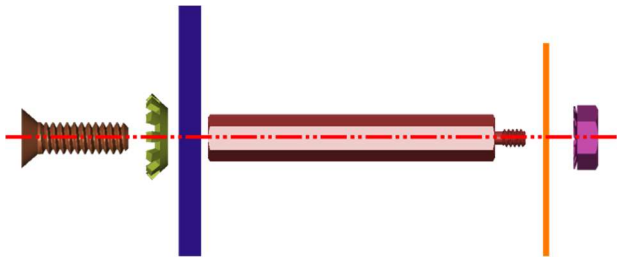
Arye Mindell







NUC Mounting Plate



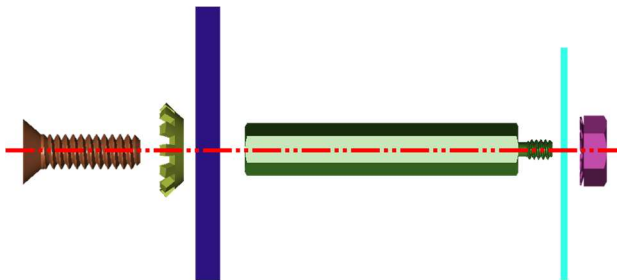
-  Steel Phillips Flat Head Screws, 82 Degree Countersink Angle, 8-32 Thread Size, 1/4" Long - 90273A190
-  Interrogator Plate
-  NUC-VESA Mount
-  Zinc-Plated Steel Narrow Hex Nut, 8-32 Thread Size - 90760A009







HPB Bracket



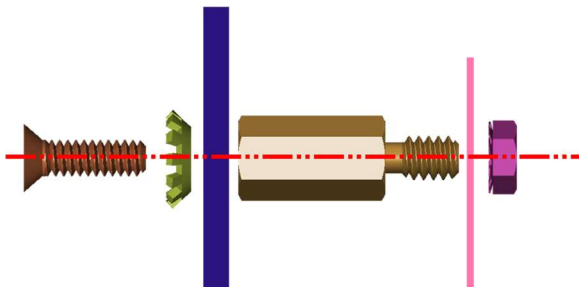
-  Steel Phillips Flat Head Screw, 82 Degree Countersink Angle, 4-40 Thread Size, 3/8" Long - 90273A108
-  Countersunk External-Tooth Lock Washer, Zinc-Plated Steel, Number 4 Screw Size, 0.113" ID, 0.213" OD - 90069A103
-  Interrogator Plate
-  12L14 Steel Male-Female Threaded Hex Standoff, Zinc-Plated, 1/4" Hex Size, 1-3/4" Length, 4-40 Thread Size - 93620A001
-  HPB bracket
-  Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 4-40 Thread Size - 90675A005







Pluto Bracket



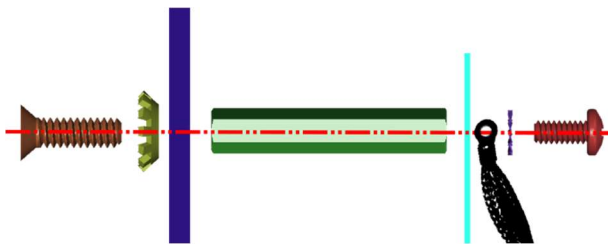
-  Steel Phillips Flat Head Screw, 82 Degree Countersink Angle, 4-40 Thread Size, 3/8" Long - 90273A108
-  Countersunk External-Tooth Lock Washer, Zinc-Plated Steel, Number 4 Screw Size, 0.113" ID, 0.213" OD - 90069A103
-  Interrogator Plate
-  12L14 Steel Male-Female Threaded Hex Standoff, Zinc-Plated, 1/4" Hex Size, 1-1/2" Length, 4-40 Thread Size - 93620A438
-  Pluto bracket
-  Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 4-40 Thread Size - 90675A005

PLL Bracket



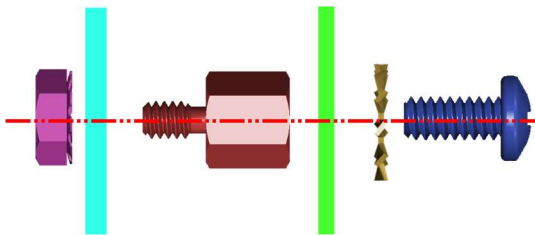
-  Steel Phillips Flat Head Screw, 82 Degree Countersink Angle, 4-40 Thread Size, 3/8" Long - 90273A108
-  Countersunk External-Tooth Lock Washer, Zinc-Plated Steel, Number 4 Screw Size, 0.113" ID, 0.213" OD - 90069A103
-  Interrogator Plate
-  12L14 Steel Male-Female Threaded Hex Standoff, Zinc-Plated, 1/4" Hex Size, 3/8" Length, 4-40 Thread Size - 93620A431
-  PLL bracket
-  Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 4-40 Thread Size - 90675A005

Pluto Bracket (Grounding Strap)



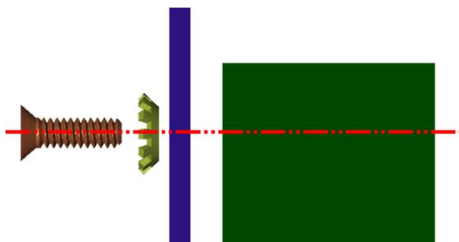
- Steel Phillips Flat Head Screw, 82 Degree Countersink Angle, 4-40 Thread Size, 3/8" Long - 90273A108
- Countersunk External-Tooth Lock Washer, Zinc-Plated Steel, Number 4 Screw Size, 0.113" ID, 0.213" OD - 90069A103
- Interrogator Plate
- Zinc-Plated Steel Female Threaded Hex Standoff, 1/4" Hex Size, 1-1/2" Length, 4-40 Thread Size - 91920A171
- Pluto bracket
- Grounding Strap
- Zinc-Plated Steel External-Tooth Lock Washer for Number 4 Screw Size, 0.115" ID, 0.26" OD - 91114A005
- Steel Phillips Rounded Head Screws, 4-40 Thread Size, 5/16" Long - 90272A107

Pluto Mounting



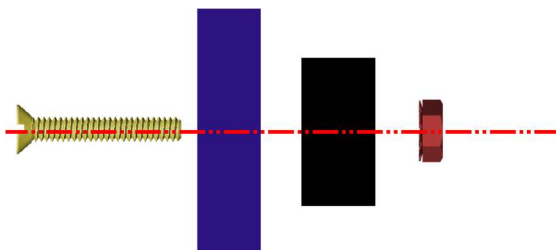
- Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 4-40 Thread Size - 90675A005
- Pluto Bracket
- 12L14 Steel Male-Female Threaded Hex Standoff, Zinc-Plated, 1/4" Hex Size, 1/4" Length, 4-40 Thread Size - 93620A430
- Pluto Board
- Zinc-Plated Steel External-Tooth Lock Washer for Number 4 Screw Size, 0.115" ID, 0.26" OD - 91114A005
- Steel Phillips Rounded Head Screw, 4-40 Thread Size, 1/4" Long - 90272A106

Rx/Tx Module



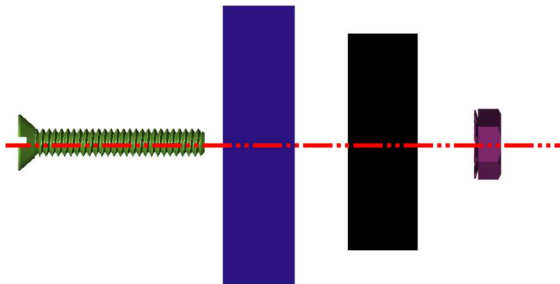
- Steel Phillips Flat Head Screws, 82 Degree Countersink Angle, 6-32 Thread Size, 5/16" Long - 90273A145
- Countersunk External-Tooth Lock Washer, Zinc-Plated Steel, Number 6 Screw Size, 0.14" ID, 0.289" OD - 90069A105
- Interrogator Plate
- Rx/Tx Module

DC Distribution Block



- Steel Phillips Flat Head Screws, 82 Degree Countersink Angle, 6-32 Thread Size, 3/4" Long - 90273A151
- Interrogator Plate
- DC Distribution Block
- Zinc-Plated Steel Locknut with External-Tooth Lock Washer, 6-32 Thread Size, 1/4" Wide - 90413A101

DC Converter



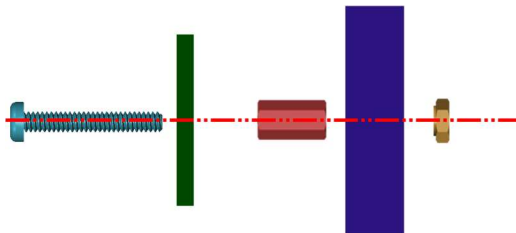
■ Steel Phillips Flat Head Screws, 82 Degree Countersink Angle, 4-40 Thread Size, 3/4" Long - 90273A113

■ Interrogator Plate

■ DC Converter

■ Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 4-40 Thread Size - 90675A005

LED Board



■ Off-White Nylon Rounded Head Screws, Phillips Drive Style, 4-40 Thread Size, 3/4" Long - 93135A278

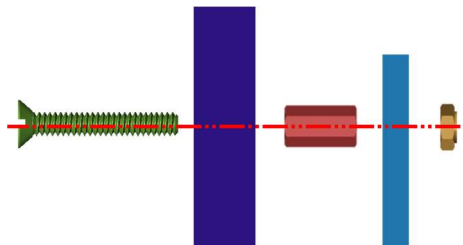
■ LED Board

■ Female Threaded Hex Standoff, 6/6 Nylon, 3/16" Hex Size, 3/8" Length, 4-40 Thread Size - 92319A869

■ Interrogator Plate

■ Nylon Hex Nut, 4-40 Thread Size - 94812A200

Arduino



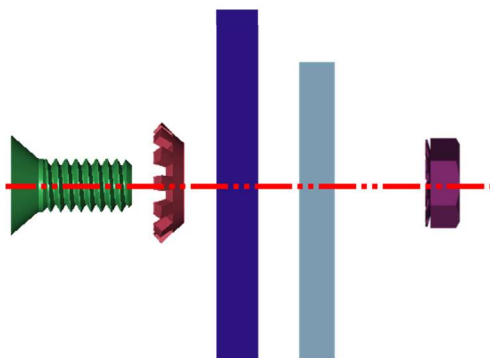
■ LED Board

■ Interrogator Plate

■ Female Threaded Hex Standoff, 6/6 Nylon, 3/16" Hex Size, 3/8" Length, 4-40 Thread Size - 92319A869

■ Off-White Nylon Slotted Flat Head Screws, 82 Degree Countersink Angle, 4-40 Thread Size, 3/4" Long - 94605A113

Mounting Bracket



■ Steel Phillips Flat Head Screws, 82 Degree Countersink Angle, 8-32 Thread Size, 3/8" Long - 90273A192

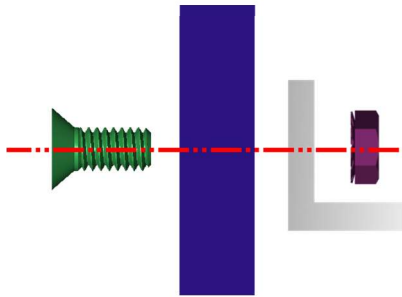
■ Countersunk External-Tooth Lock Washer, Zinc-Plated Steel, Number 8 Screw Size, 0.167" ID, 0.322" OD - 90069A110

■ Interrogator Plate

■ Mounting bracket

■ Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 8-32 Thread Size, 11/32" Wide - 90675A009

Fan Bracket



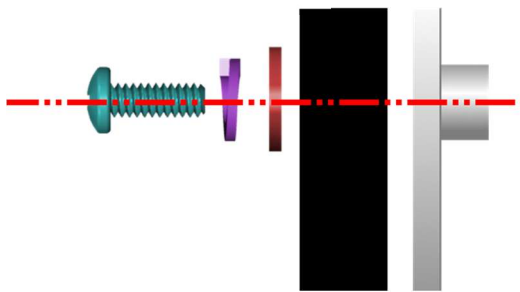
■ Steel Phillips Flat Head Screw, 82 Degree Countersink Angle, 4-40 Thread Size, 3/8" Long - 90273A108

■ Interrogator Plate

■ Mounting bracket

■ Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 4-40 Thread Size - 90675A005

Fan Mounting



■ Steel Phillips Rounded Head Screws, 4-40 Thread Size, 5/8" Long - 90272A112

■ Zinc-Plated Steel Split Lock Washer for Number 4 Screw Size, 0.12" ID, 0.209" OD - 91102A720

■ Zinc Yellow-Chromate Plated Grade 8 Steel Washer for Number 4 Screw Size, 0.125" ID, 0.312" OD - 98023A111

■ Fan

■ Mounting bracket