

# INSTALLATION

**Step3:**  
Align hole in shaft horizontally with Drive pin and insert  
*(Note: Ensure the slot of Drive pin at 12 o'clock position)*

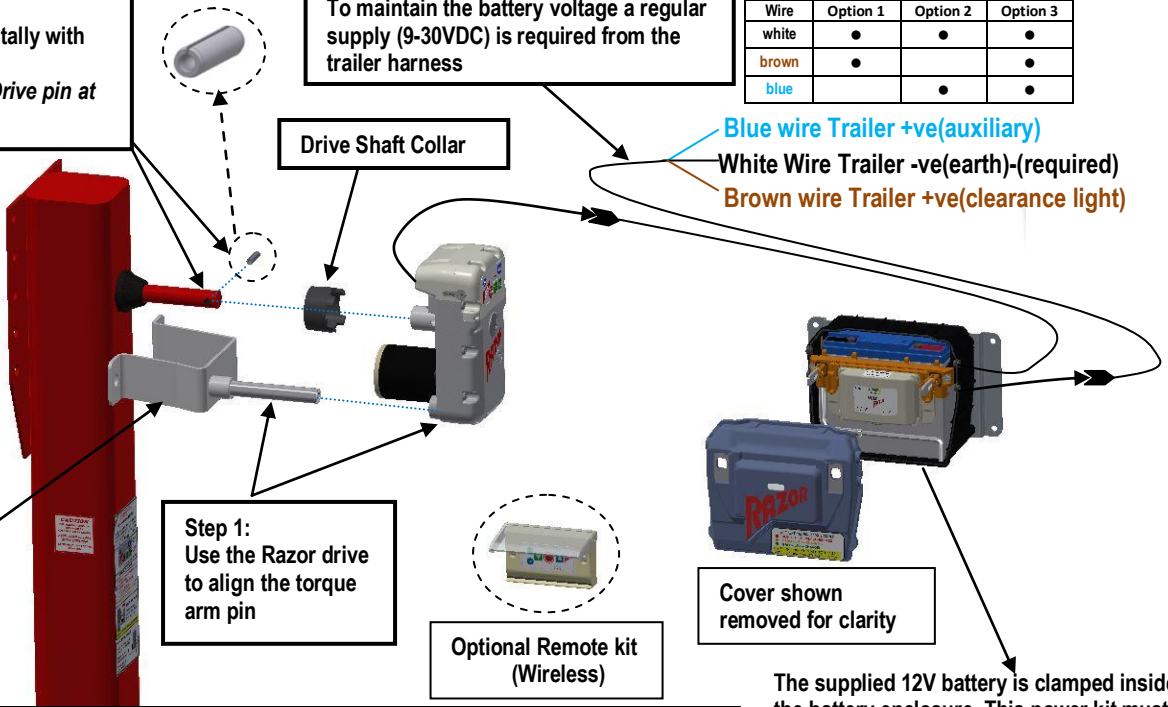
To maintain the battery voltage a regular supply (9-30VDC) is required from the trailer harness

Connection options			
Wire	Option 1	Option 2	Option 3
white	•	•	•
brown	•		•
blue		•	•

Blue wire Trailer +ve(auxiliary)  
White Wire Trailer -ve(earth)-(required)  
Brown wire Trailer +ve(clearance light)

**Step 2:**  
Tighten torque arm bolts, ensuring Razor drive is free to slide along torque arm pin after tightening.  
*(Note: For each commercial leg, there will be a unique torque arm to match.)*

**Step 1:**  
Use the Razor drive to align the torque arm pin



Cover shown removed for clarity

The supplied 12V battery is clamped inside the battery enclosure. This power kit must be fitted to a sturdy location on the trailer close enough for wiring harnesses to connect to the Drive unit.  
*(Note: Battery is maintenance free sealed 12V20Ah lead acid.)*

**Caution:**

1. Razor Drive is not to be operated without torque arm fitted.
2. The Razor Drive in conjunction with landing legs can create high forces. Ensure the supplied caution labels are fitted to each leg to avoid possible injury from high force created.
3. This Razor Drive unit **MUST NOT** be installed on a trailer used for transporting flammable goods without approval from the relevant authority.

## SERVICE

- Check cable plugs (at trailer service intervals) to ensure they are clean and dry inside. Faults can arise from bad electrical connections. If moisture is detected within the connector plugs or on the battery terminals, apply a suitable conductive moisture inhibitor.
- The operation may rely on use of both gears in the leg and this is achieved by sliding the RAZOR in and out on torque arm. If it is hard to slide along the torque arm. Ensure there is no build up dirt causing a binding effect, clean as required. (may require drive to be removed and refitted)
- All parts of the RAZOR are replaceable if damaged. To replace a controller, undo the 2 off M4 bolts and remove controller by gently tapping on the back of controller as per below image(Detailed procedures refer separate Tech bulletin 7). Any authorized service centre can provide this service if required.



- Batteries have a limited life (typically 5 years). A well maintained battery will achieve the best life. Keeping the battery as fully charged as possible at all times is critical. Long idle periods for the trailer (several months) could result in reduced battery life if the RAZOR is left connected.

**RAZOR**

## WARRANTY

**RAZOR**

### WHAT'S COVERED

Razor International Pty Ltd (Razor) warrants to the original retail purchaser that all of its products sold as new and installed in accordance with Razor's fitting instructions, will be free from defects in material or workmanship under normal use and service for a period of 12 months from the date of purchase ("the warranty period").

### WHAT'S NOT

This warranty excludes damage from accidents, objects striking RAZOR, misuse of RAZOR, alterations to RAZOR, air-borne fallout, (such as loads carried on the trailer or thrown up from the road and road wheels), windstorm, lightning, hailstorm and improper maintenance.

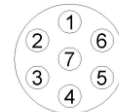
### OTHER TERMS

To the greatest extent permitted by law any warranty or guarantee either expressed or implied which varies in any way from this written warranty is excluded. Notwithstanding the provision of the warranty Razor and its authorised associates will not be responsible for any consequential loss or damage whatsoever and no such claims will be accepted. Warranty repairs will be covered for a period of 90 days or until the end of the original warranty period, whichever is the longer.

### WARRANTY ADJUSTMENTS

Razor or an authorised associate can only honour this warranty. All warranty claims are to be submitted to Razor. Razor will investigate warranty claims and where possible respond to the customer within 7 days. Subject to Razor review and approval, all RAZOR parts or units found to be defective and within the warranty period, will be repaired or replaced with an unit, as appropriate, at the sole discretion of Razor. This warranty gives you specific legal rights. You may also have other rights, which may vary from territory to territory.

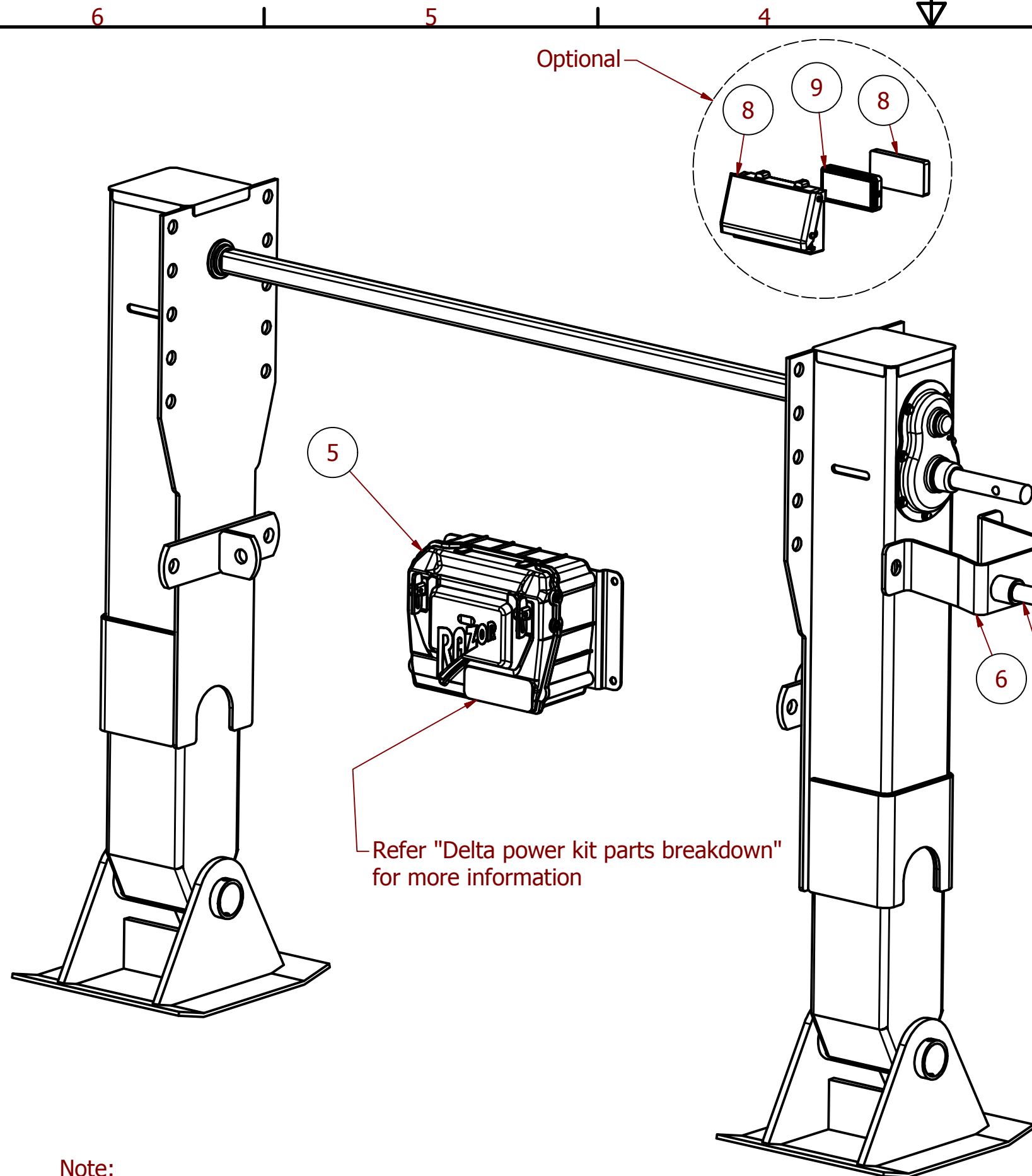
### Appendix – Trailer Wiring



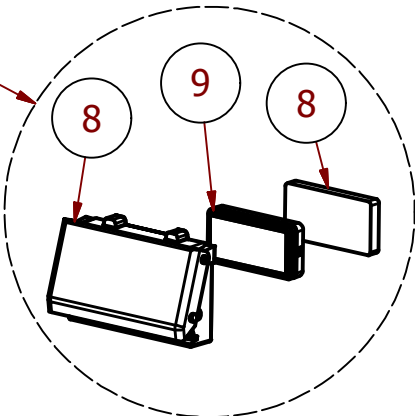
7 Pole Socket  
(view from Rear)

A.S. Pin	SAE Pin	Connect to	Colour
1	5	Left Flasher	Yellow
2	6	Reversing	Black
3	1	Earth	White
4	3	Right Flasher	Green
5	7	Service Brakes (Auxiliary)	Blue
6	4	Stop	Red
7	2	Tail, Licence & Clearance	Brown

A.S. pin refers to the configuration in accordance with Australian Standard 2513-1982 and ADR 42/02. The SAE pin is where a SAE (American Standard) connector is used. Typically this is evidenced by the larger pin in the "1" position.



Optional



Torque Arm Table	
Part Number	Description
T-M000	Jost Modul B
T-MR000	Jost Modul B Reverse
T-A000	Jost A400/C200
T-AR000	Jost A400 Reverse
T-H000	Holland Mark V
T-HA000	Holland Atlas 55

Leg Drive Table	
Leg Drive Versions	Part No.
Extra Torque Drive	LE
Standard Drive	LD
Hi-speed Drive	LH
Ultra Hi-speed Drive	LU

Refer "Delta power kit parts breakdown" for more information

Torque arm is not part of the kit and needs to be ordered separately. For each commercial leg, there will be a unique torque arm to match.

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	Refer leg drive table	Delta Drive (Harness not shown)
2	1	D-0205	Front Cap
3	1	D-0210	Cap Silicone Seal
4	1	D-0350	Rear Collar
5	1	P-1000	Power Kit (Harness not shown)
6	1	Refer torque arm table	Torque Arm
7	1	PN0064A	Drive Pin
8	1	E-M-1000	Remote bezel housing kit
9	1	RCHAP14	Horizontal remote

Note:  
Refer Delta power leg wiring schematic for more information

Remove all burrs and sharp edges

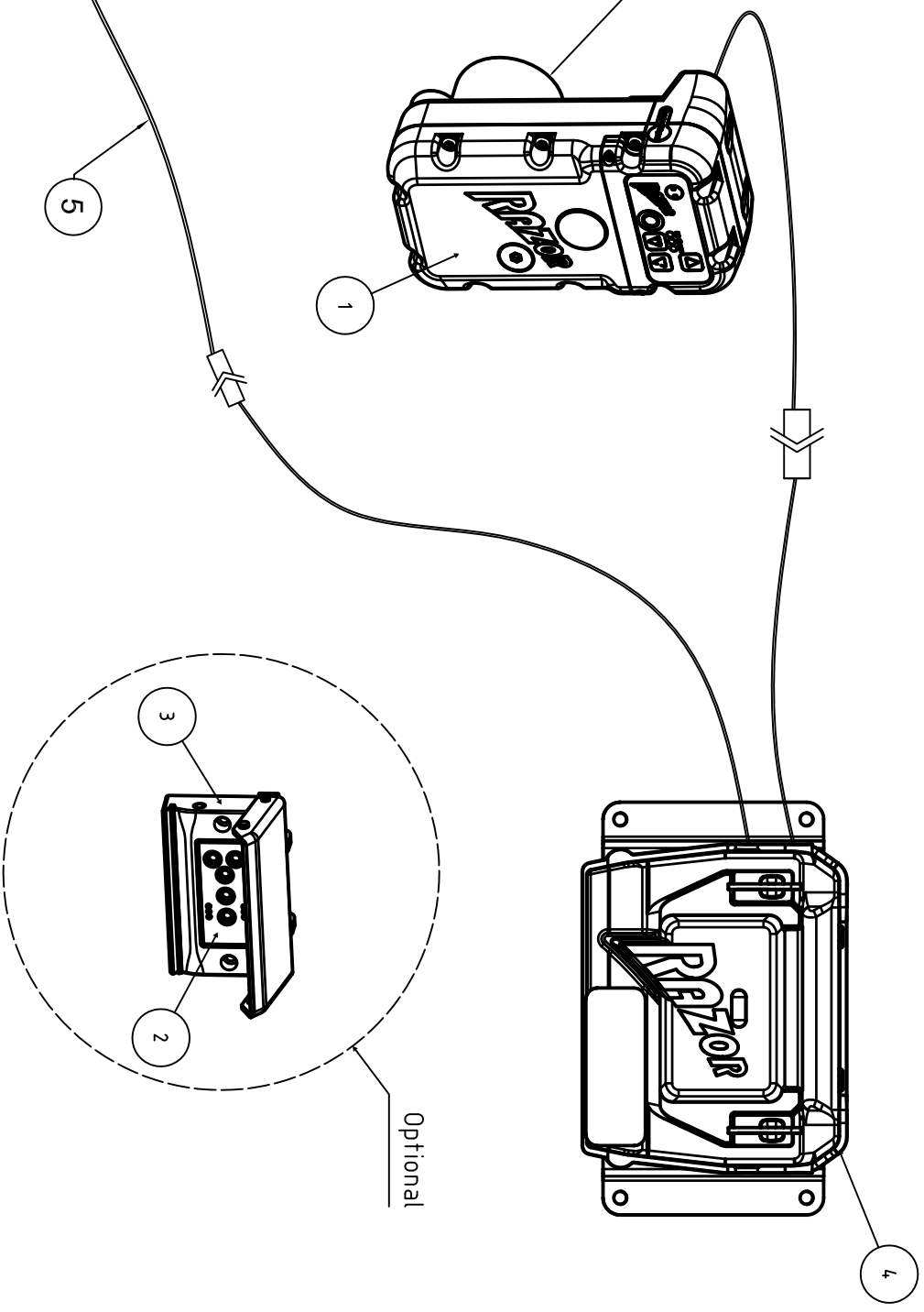
LINEAR DIMENSION TOL. (ISO-2768-f)						ANGULAR DIMENSION TOL. (ISO-2768-f)				
Nominal Length Range						Nominal Length Range				
FROM	0.5	>6	>30	>120	>400	0	>10	>50	>120	>400
TO	6	30	120	400	1000	10	50	120	400	
TOL.	±0.05	±0.1	±0.15	±0.2	±0.3	±1°	±0°30'	±0°20'	±0°10'	±0°5'



Designed by Ivan	Checked by	Approved by - date	Material	Date 24/04/2017	Sheet 1 / 1
Razor International Pty Ltd			Delta Leg Drive Kit		
Drawing Number				Edition	

# DELTA POWER LEG SYSTEM

Leg Drive Versions	Part No.
Extra Torque Drive	LE
Standard Drive	LD
Hi-Speed Drive	LH
Ultra Hi-speed Drive	LU



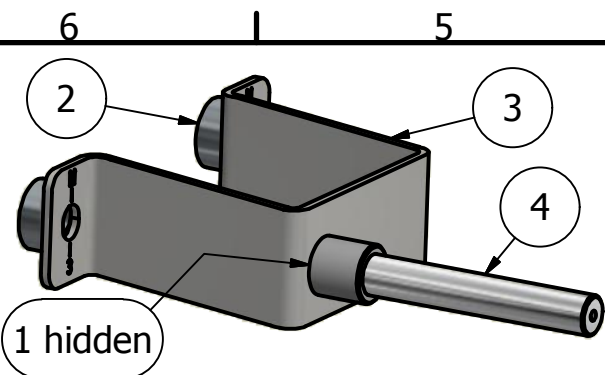
Blue +  
Brown +  
White -

## Connect to Trailer Power Supply

(Refer Note)

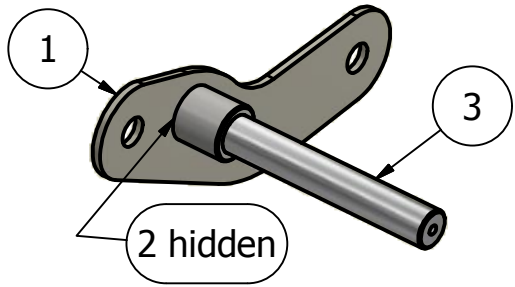
Note: Power is required (9 to 30VDC) to maintain Razor battery.  
Connect matching wire colours between Razor and Trailer Harness.  
i.e. Blue to Blue(auxiliary), Brown to Brown(clearance) and White to White(negative)

Parts List		
Item	Description	Part No.
1	Delta Leg Drive	Refer table
2	Horizontal Remote	RCHAP14
3	Bezel Housing Kit	E-M-1000
4	Power Kit	P-1000
5	Charge Harness	PN0005E



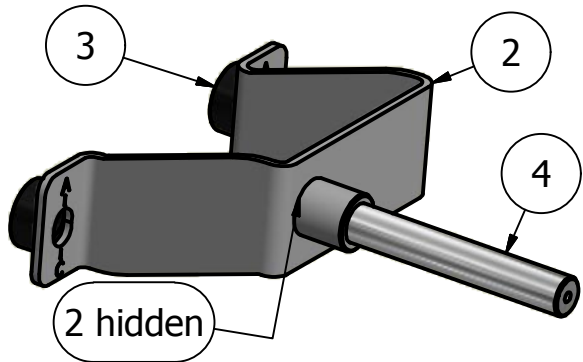
### Jost Modul B

T-M000 PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PN0088K	22mm circlip
2	2	T-0040	Modul Spacer
3	1	T-M100	Torquel Bracket Ass'y-Modul B
4	1	T-0170	Torque pin(170mm)



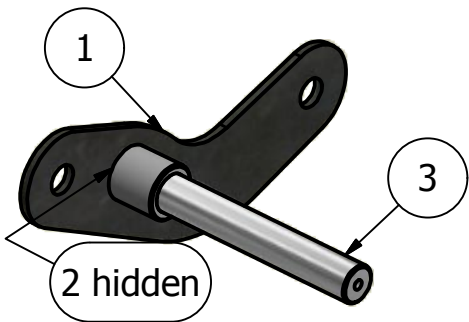
### Jost Modul B Reverse

T-MR000 PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	T-MR100	Torque Bracket Ass'y-Modul Reverse
2	1	PN0088K	22mm circlip
3	1	T-0170	Torque pin(170mm)



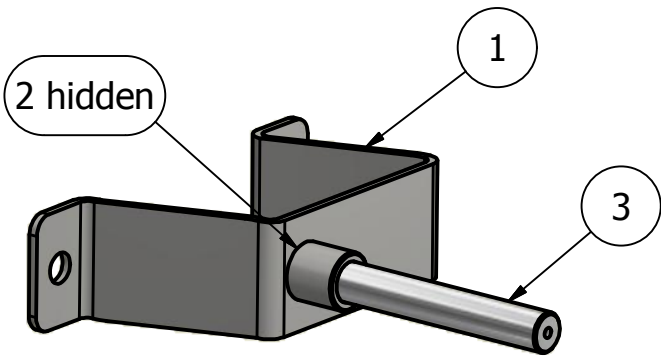
### Jost A400/C200

T-A000 PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PN0088K	22mm circlip
2	1	T-A100	Torque Bracket Ass'y-A400/C200
3	2	T-0040	Modul Spacer
4	1	T-0170	Torque pin(170mm)



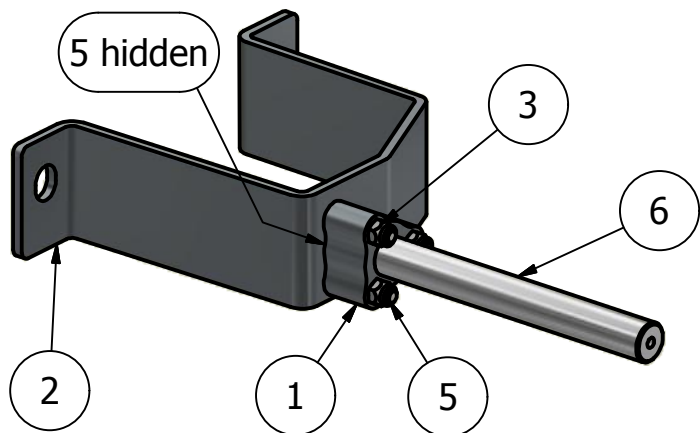
### Jost A401

T-AR000 PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	T-AR100	Torque Bracket Ass'y-A401
2	1	PN0088K	22mm circlip
3	1	T-0170	Torque Spigot(170mm)



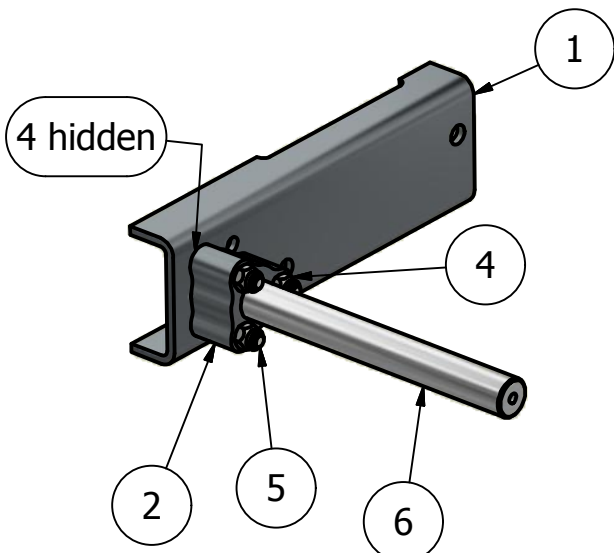
### Jost Modul C

T-MC000 PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	T-MC100	Torque Bracket Ass'y-Modul C
2	1		22mm circlip
3	1	T-0170	Torque pin(170mm)



### Maxus

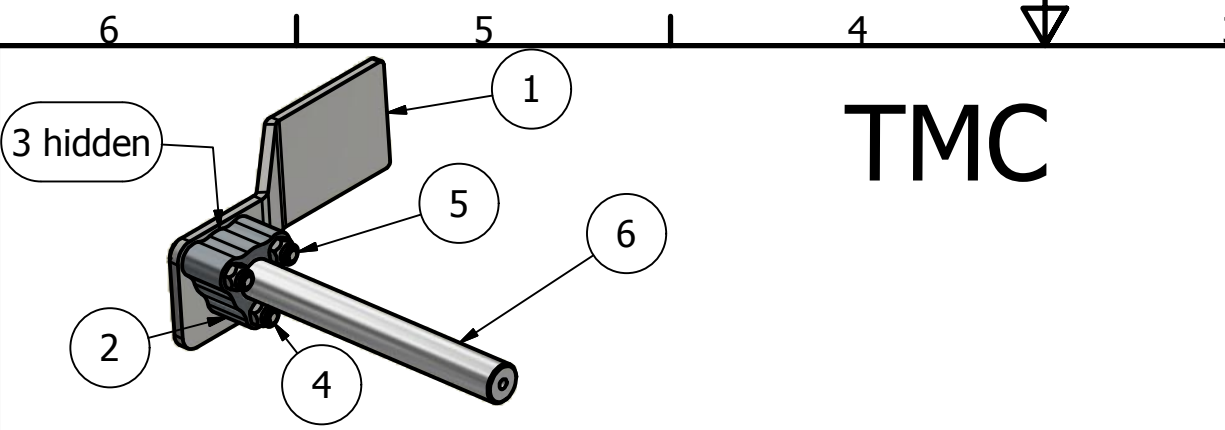
T-S000 PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PN0026T	Tri Bose
2	1	T-S010	Torque Bracket-Maxus
3	3		M8 Nylon Nut
4	1	PN0088K	22mm Circlip
5	3		M8 x 45 Hex Bolt
6	1	T-0208	Torque Spigot(208mm)



### KHitch 27

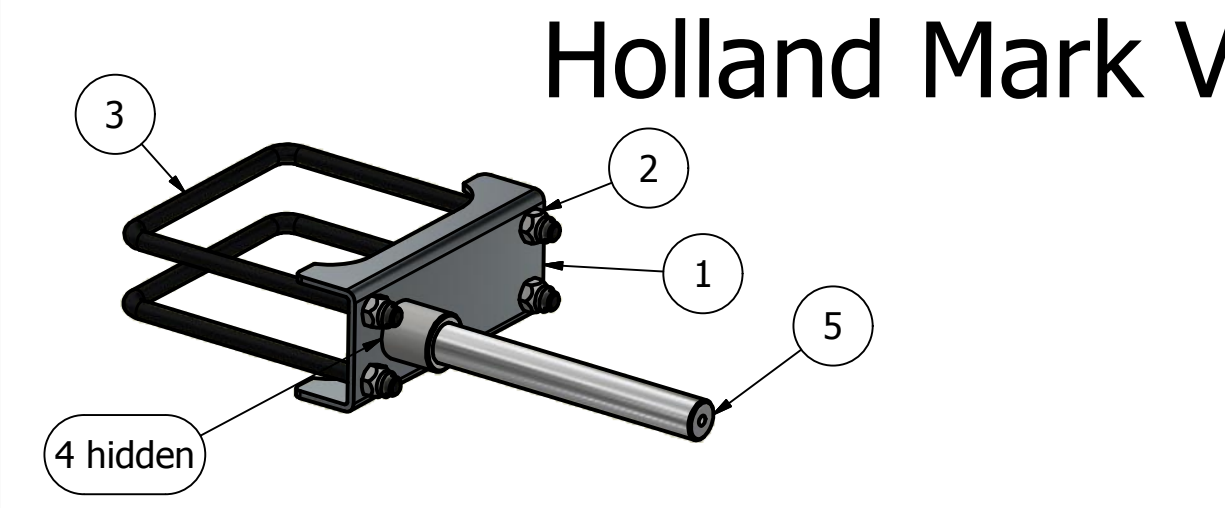
1026K27 PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PN0026C	Fleetcraft/CMS3 Bracket
2	1	PN0026T	Tri Bose
3	1	PN0088K	22mm circlip
4	3		M8 Nylon Nut
5	3		M8 x 45 Hex Bolt
6	1	T-0208	Torque Spigot(208mm)





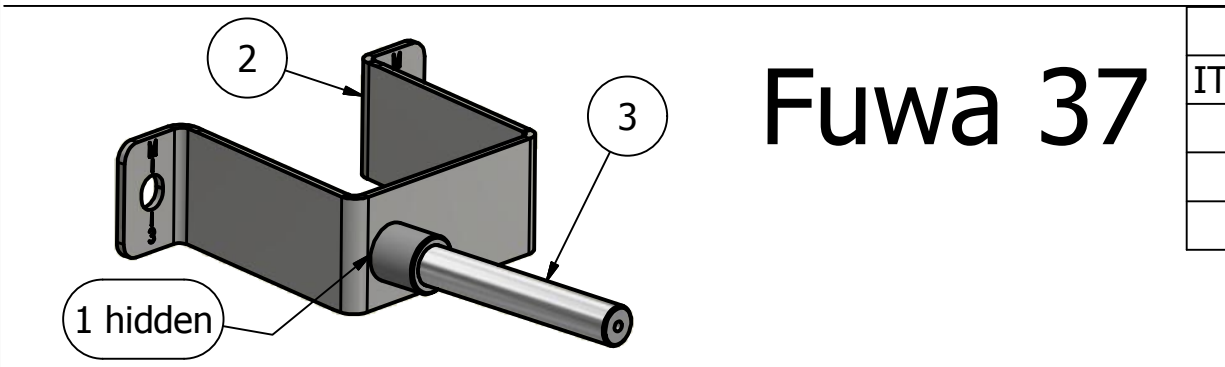
# TMC

1026T PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PN0026TMC	TMC Top Hat
2	1	PN0026T	Tri Bose
3	1	PN0088K	22cm Circlip
4	3		M8 x 45 Hex Bolts
5	3		M8 Nylon Nut
6	1	T-0208	Torque Spigot(208mm)



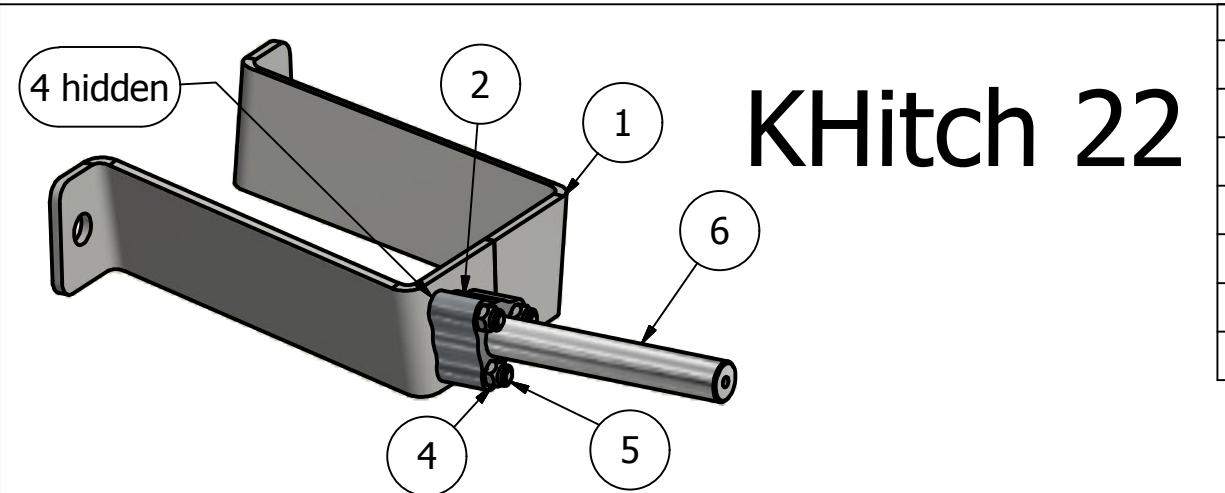
# Holland Mark V

T-H000 PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	T-H100	Torque Bracket Ass'y-Holland Mark V
2	4		M10 Nylon Nut
3	2	T-HU	Holland U Bolt
4	1	PN0088K	22mm circlip
5	1	T-0220	Torque Spigot(220mm)



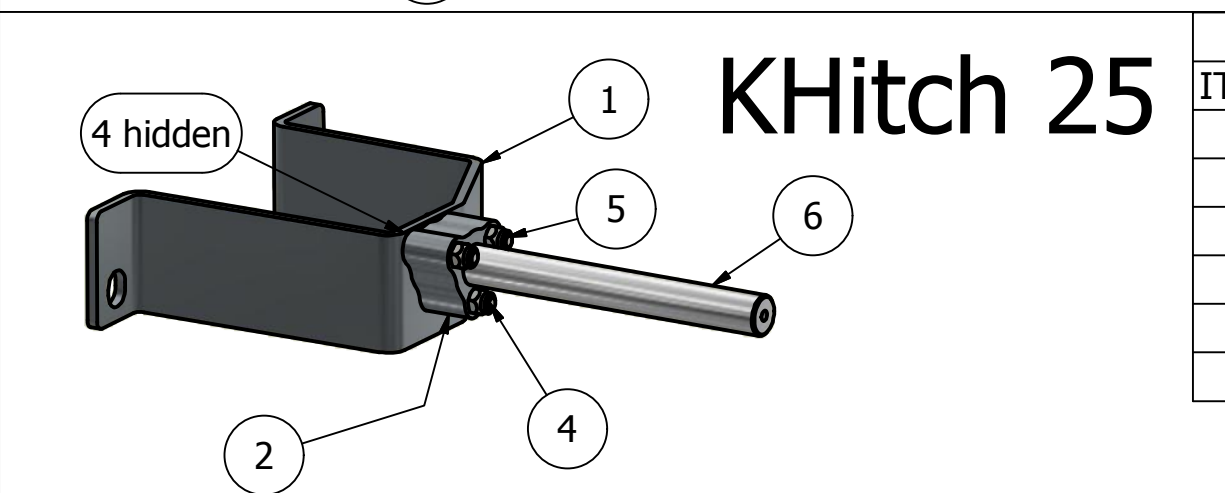
# Fuwa 37

T-F000 PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PN0088K	22mm circlip
2	1	T-M100	Torque Bracket Ass'y-Modul
3	1	T-0170	Torque pin (170mm)



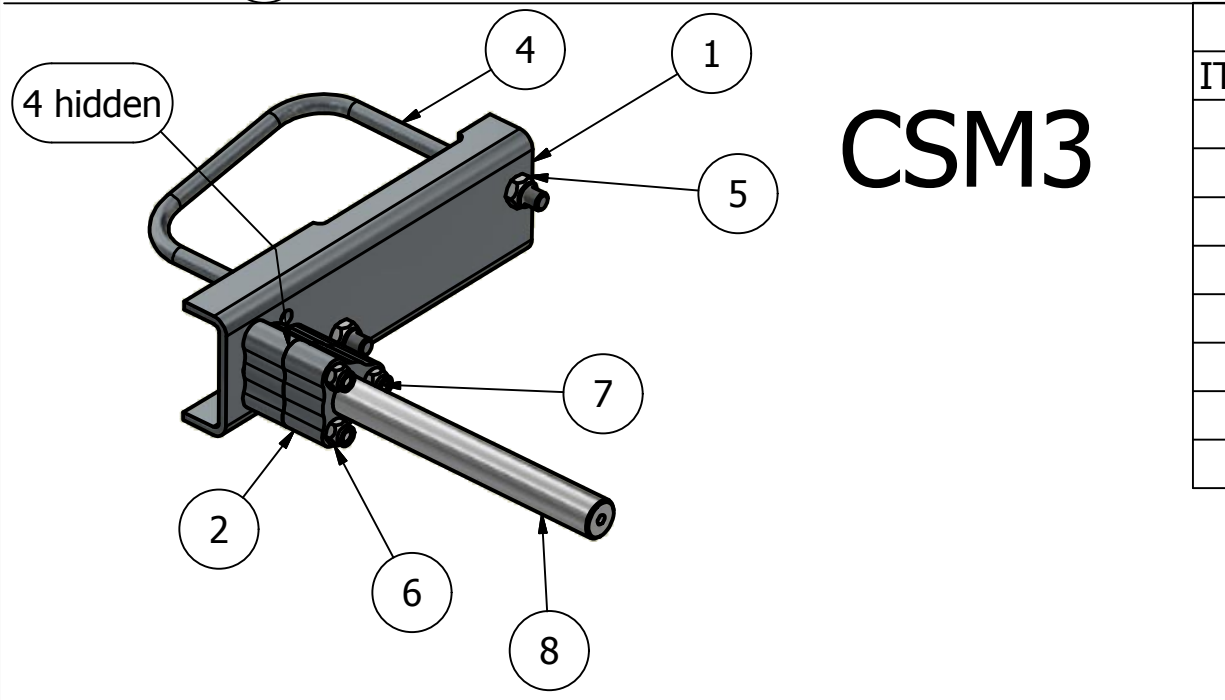
# KHitch 22

1026K22 PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PN0026K22	KHitch22 Top Hat
2	1	PN0026T	Tri Bose
3	1	PN0088K	22mm circlip
4	3		M8 Nylock Nut
5	3		M8 x 45 Hex Bolt
6	1	T-0170	Torque pin(170mm)



# KHitch 25

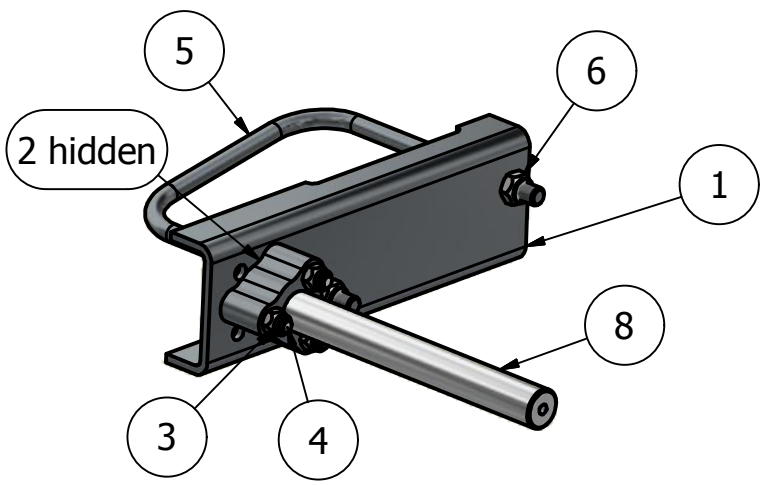
1026K25 PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PN0026K25	KHitch25 Top Hat
2	1	PN0026T	Tri Bose
3	1	PN0088K	22mm circlip
4	3		M8 Nylock Nut
5	3		M8 x 45 Hex Bolt
6	1	T-0208	Torque pin(208mm)



# CSM3

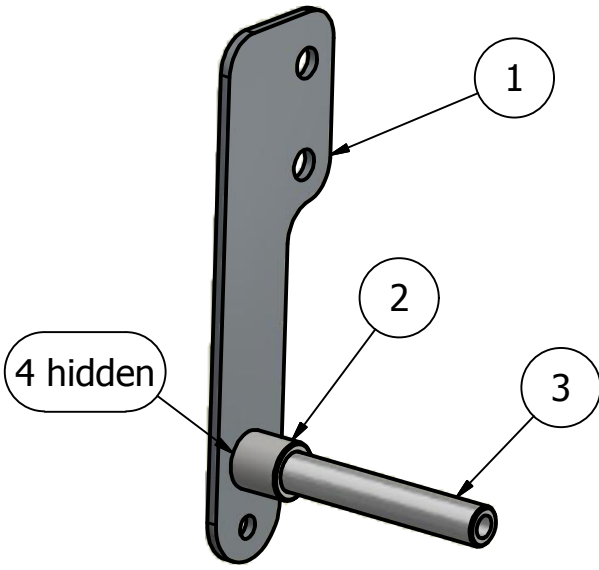
1026V PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PN0026C	Fleetcraft/CMS3 Bracket
2	2	PN0026T	Tri Bose
3	1	PN0088K	22mm circlip
4	1	PN0026HU	Holland U Bolt
5	2		M10 Nylon Nut
6	3		M8 Nylon Nut
7	3		M8 x 70 Hex Bolt
8	1	T-0208	Torque pin(208mm)

# Fleetcraft



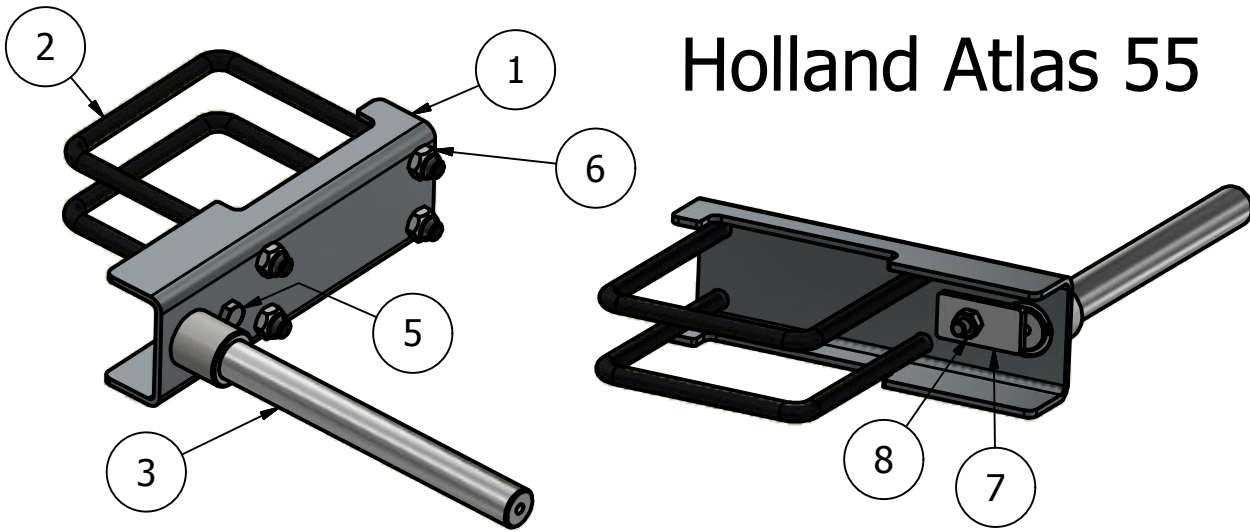
1026FC Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PN0026C	Fleetcraft/CMS3 Bracket
2	1	PN0088K	22mm circlip
3	3		M8 Nylon Nuts
4	3		M8 x 45 Hex Bolts
5	1	PN0026HU	Holland U Bolt
6	2		M10 Nylon Nuts
7	1	PN0026T	Tri Bose
8	1	T-0208	Torque pin(208mm)

# Holland Mark V Reverse



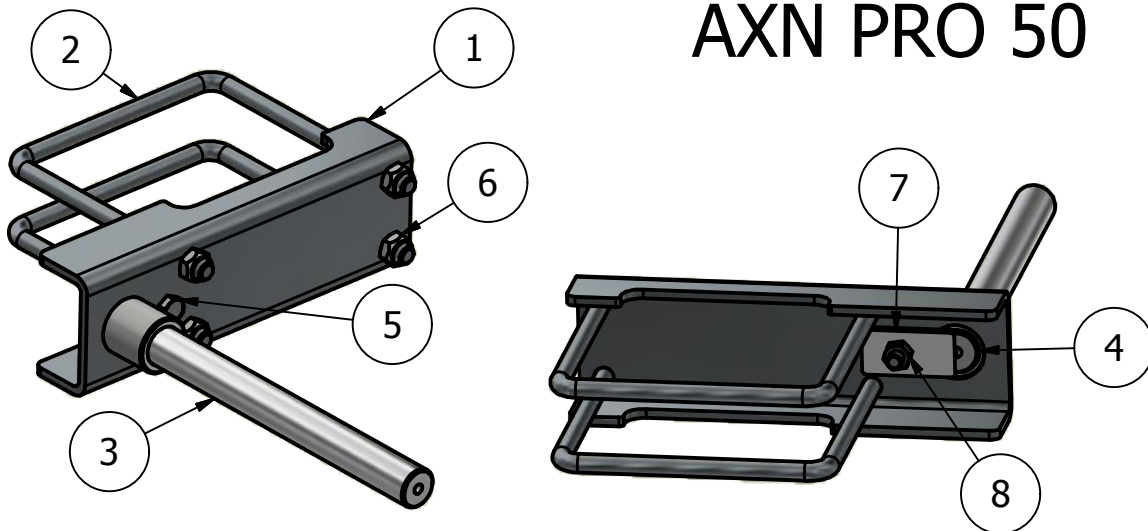
1026HR Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PN0026HR	Holland Reverse Bracket
2	1	PN0026Q	Torque Weld Bush
3	1	PN0026SJ	Torque Spigot(165mm)
4	1	PN0088K	22mm circlip

# Holland Atlas 55



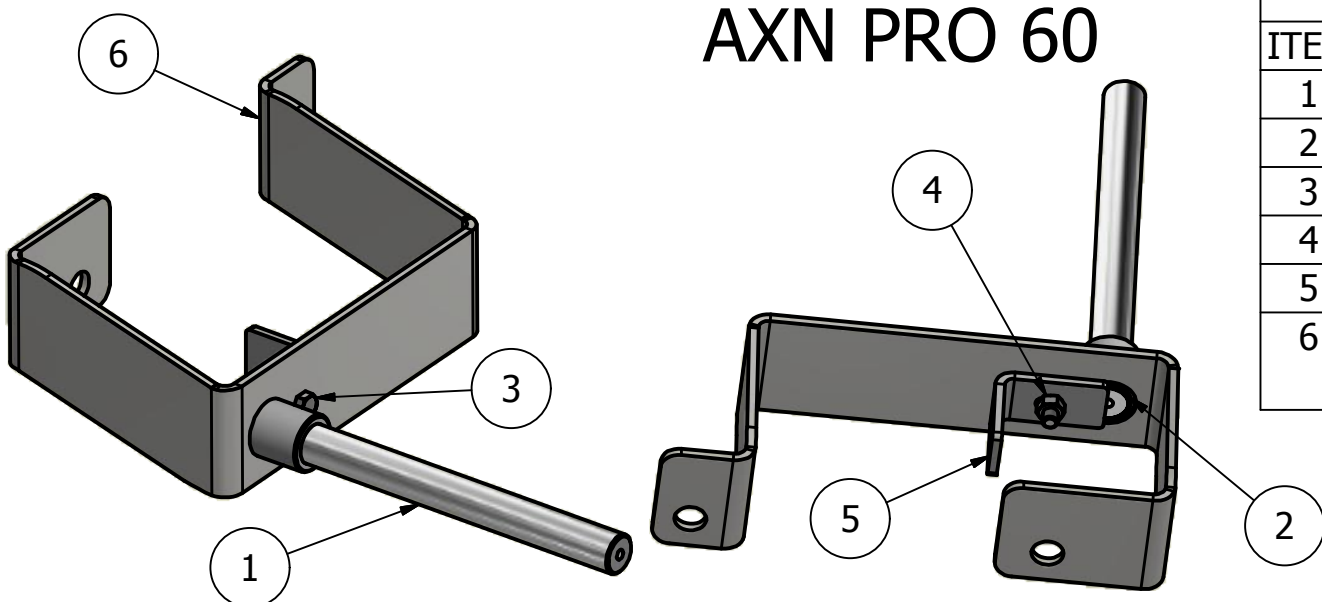
T-HA000 PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	T-HA100	Torque Bracket Ass'y-Holland Atlas 55
2	2	T-HAU	Holland Atlas U Bolt
3	1	T-0237	Torque pin(237mm)
4	1	PN0088K	22mm circlip
5	1		M8 x 25 hex bolt
6	4		M10 Nylon Nuts
7	1	T-HA015	Locking plate
8	1		M8 Nylon Nut

# AXN PRO 50



T-N5000 PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	T-N5100	Torque Bracket Ass'y-AXN Pro 50
2	2	T-AU	Holland U Bolt
3	1	T-0237	Torque pin(237mm)
4	1	PN0088K	22mm circlip
5	1		M8 x 25 hex bolt
6	4		M10 nylon nut
7	1	T-HA015	Locking plate
8	1		M8 nylon nut

# AXN PRO 60



T-N6000 PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	T-0237	Torque pin(237mm)
2	1	PN0088K	22mm circlip
3	1		M8 x 25 hex bolt
4	1		M8 nylon nut
5	1	T-N6015	AXN pro 60 L bracket
6	1	T-N6100	Torque Bracket Ass'y-AXN PRO 60