

# Wiper SYSTEMS

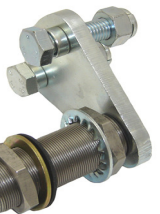
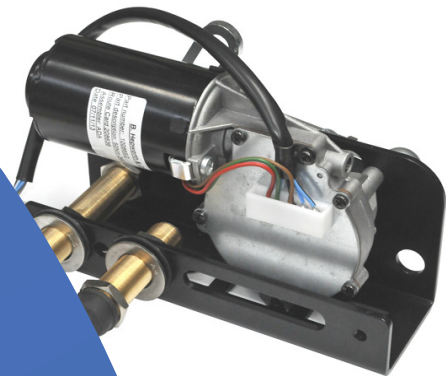
Commercial | Rail | Marine | Bus

## PREMIUM WIPER EQUIPMENT

2020

[www.wipersystems.co.nz](http://www.wipersystems.co.nz)

Ph 09 600 1423






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# SS BLADES / ARMS CLASSIC CAR




Part No.	Length	Fit Arm
SS10FBN	10" 255mm	6mm Bayonet
16592-11	11" 280mm	5mm Bayonet


Std Mini & Jag




Part No.	Length	Fit Arm
SSWB10	10" 255mm	6mm Bayonet
SSWB11	11" 280mm	




Part No.	Length	Fit Arm
SS10FSP	10" 255mm	5mm Spoon




Part No.	Length	Fit Arm
SSWB10-7	10" 255mm	7mm Bayonet
SSWB12-7	12" 305mm	
SSWB15-7	15" 385mm	



Part No.	Length	Fit Arm
SS9FPE	9" 230mm	Peg & Eye




Part No.	Length	Fit Arm
SWB14-7	14" 360mm	7mm Bayonet
SWB15-7	15" 385mm	
SWB16-7	16" 410mm	



Part No.	Length	Fit Arm
21-303	10" 255mm	Hook
21-305	13" 350mm	

Std Mini




Fits Std 13.6mm Drum spline Right crank shown

Part No.	Length	Fit Blade
SSWA11L	11" 280mm	6mm Bayonet
SSWA11R		



Fits 6mm straight shaft


Part No.	Length	Fit Blade
21-304	240-380mm	Hook



Adjustable Length Right crank shown

Fits Std 13.6mm Drum spline

Part No.	Length	Fit Blade
SSWA12L	150 - 310mm	5mm Bayonet
SSWA12R		



Fits 6mm straight shaft

Part No.	Length	Fit Blade
16582-11	205-305mm	5mm Bayonet

# TRU VISION BLADE REFILLS

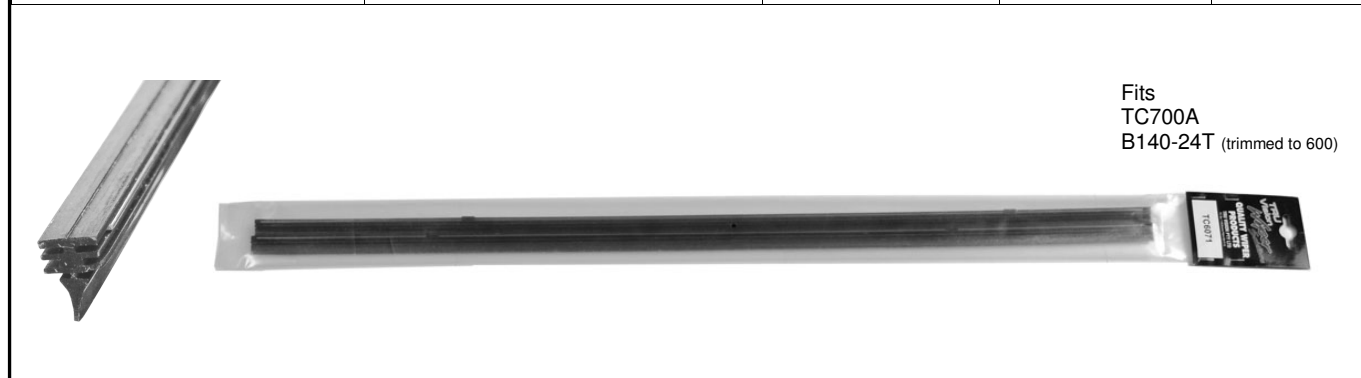


Multi Fit

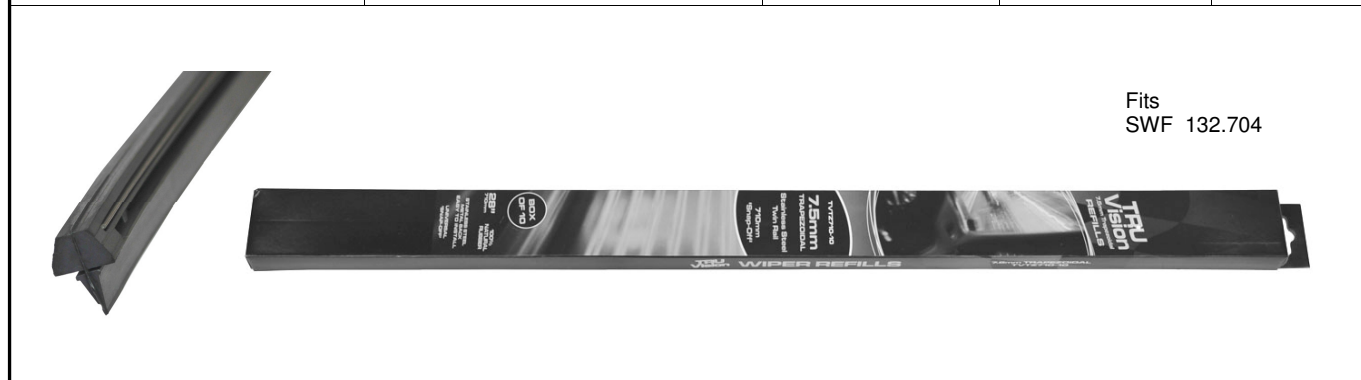
Part No.	Length	Width	Back	Quantity
TV1000-10	1000mm	8 & 9.5mm	Plastic	Box of 10

Fits  
SWF 132.801, 106.277

Part No.	Lengths	Width	Back	Quantity
TVSWF800, 1000	800, 1000mm	9.6mm	Twin Metal	Pair Pack

Fits  
TC700A  
B140-24T (trimmed to 600)

Part No.	Length	Width	Back	Quantity
TC6071	710mm	9.6mm	Twin Metal	Pair Pack

Fits  
SWF 132.704

Part No.	Length	Width	Back	Quantity
TVTZ710-10	710mm	7.5mm Trapezoidal	Twin Metal	Box of 10



# TRU VISION BLADE REFILLS

Fits  
TC800, 900, 1000



Part No.	Length	Width	Back	Quantity
TC60100	1000mm	9.5mm	Twin Metal	Pair Pack



Part No.	Lengths	Width	Back	Quantity
WRMN610	610mm	6mm	Twin Metal	Box of 20
WRMW610		8mm		
WRMW710	710mm	8mm	Plastic	Box of 10
WRPW710				

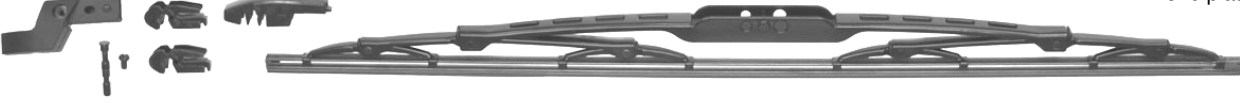







Part No.	Length	Width	Back	Quantity
EVMN710	710mm	6.5mm	Twin Metal	Pair Pack



Part No.	Lengths xx	Width	Back	Quantity
TC-xx	14, 16, 18, 20" 360, 410, 460, 510mm	13mm	Twin Metal	Pair Pack
TVA-xx Kenworth replacement	15, 16, 18" 345, 400, 450mm	16mm	Twin Metal	Pair Pack

# TRU VISION BLADES

		use WRMN610 metal refills WRPN610 plastic refill		
Part No.	Lengths xxx	Blade Attachment		
SWBxxx	300, 350, 410, 450, 500, 550 600mm	8, 9 Hook, 7 bayonet, side mount 2 screw		
		use WRMW610 metal refill WRPW610 plastic refill		
Part No.	Length xxx	Bayonet	Bolt Diameter	Blade Clip
TC602-xxx	500, 550, 600, 650mm	10mm	4.8, 6mm	14, 16mm 10 bayonet
With TCADP Blade adaptor 14mm 		use TC-14 metal refill 360 TC-16 metal refill 410 TC-18 metal refill 460		
				
Part No.	Lengths xxx	Bolt Diameter	Blade Clip	
TCCS-xxx	360, 410, 460, 510mm	4mm	6, 14mm	
TCADP Blade adaptor 14mm Not included 				
Part No.	Lengths xxx	Bolt Diameter	Blade Clip	
TCFS-xxx	410, 460, 510, 560, 610mm	4mm	6mm	
Kenworth replacement 		use TVA-15 metal refill 375 TVA-16 metal refill 400 TVA-18 metal refill 450		
Part No.	Lengths xx	Bolt Diameter	Blade Clip	
TVCS-xx	15, 16, 18" (375, 400, 450mm)	4mm	6mm	

# TRU VISION BLADES



Part No.	Length	Bayonet	Bolt Diameter	Blade Clip
TC602-70	700mm	10mm	4.8, 6mm	14, 16mm 10 bayonet



Part No.	Length	Blade Attachment
TC700A	700mm	9, 12mm Hook Fitting



Part No.	Length	Bolt Diameter	Blade Clip
TC700	700mm	4.8, 6mm	14, 16, 25mm



Part No.	Lengths xxx	Bolt Diameter	Blade Clip
TCxxx	800, 900, 1000mm	6, 8mm	20, 25, 27mm



Part No.	Lengths xxx	Bolt Diameter	Blade Clip
TVCHxxx	800, 900, 1000mm	8mm	20, 26mm

# TRU VISION BLADES

Use with # 14204578 Slide key for ADL  
Page 11

use  
TVSWF1000 metal refill  
TV1000 plastic refill



Part No.	Lengths xxx	Hook	Blade Clip
TVCHxxxH,	900, 1000mm	16mm	Underhook

Marine polished SS

EVMN710 metal refill



Part No.	Lengths xxx	Bolt Diameter	Blade Clip
WEM-xxx	500,550, 600, 650, 700mm	4, 4.8, 6mm	14mm

Marine polished SS

TVSWF800 metal refill  
TVSWF1000 metal refill  
TV1000 plastic refill



Part No.	Lengths xxx	Bolt Diameter	Blade Clip
WEM-xxx	800, 900, 1000mm	6, 8mm	14, 16mm

# DOGA BLADES

use  
TV1000 plastic refill



Part No.	Length	Bolt Diameter	Blade Clip
136.8280.GA.04	800mm	8mm	20, 26mm

# HEPWORTH MARINE GRADE BLADES



Marine SS

with 80012800  
Blade Block

use  
WRMN610 metal refill  
WRPN610 plastic refill



Part No.	Lengths xx	Bolt Diameter	Blade Block
B140-xxB	14, 16, 18, 20, 22" (340, 400, 450, 500, 550mm)	4.8mm	14mm

use  
TC6071 metal refill  
Trim to 600mm



Part No.	Length	Bolt Diameter	Blade Clip
B140-24T	600mm	4.8, 6mm	14mm

Marine SS

use  
TV1000 plastic refill



Part No.	Lengths xx	Bolt Diameter	Blade Clip
B160-xxB	24, 26, 28" (600, 650, 700mm)	4.8 & 6mm	14mm

Marine SS

use  
TV1000 plastic refill



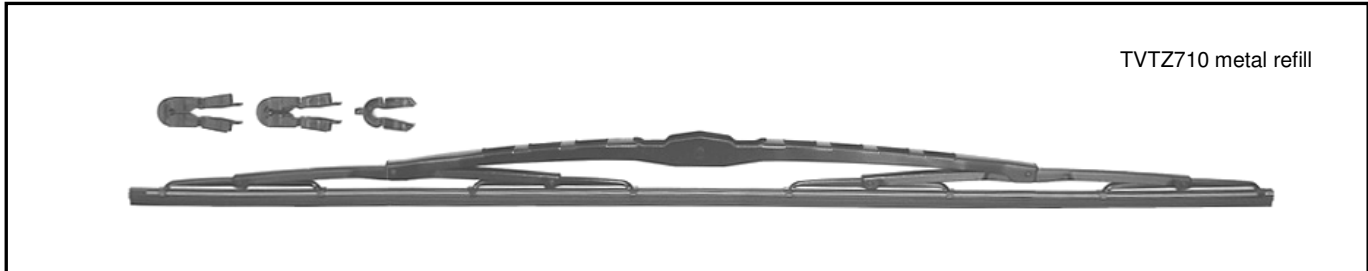
Part No.	Lengths xx	Bolt Diameter	Blade Clip
B160-xxB	32, 36, 39" (800, 900, 1000mm)	6 & 8mm	20, 26mm

use  
80262200 refill



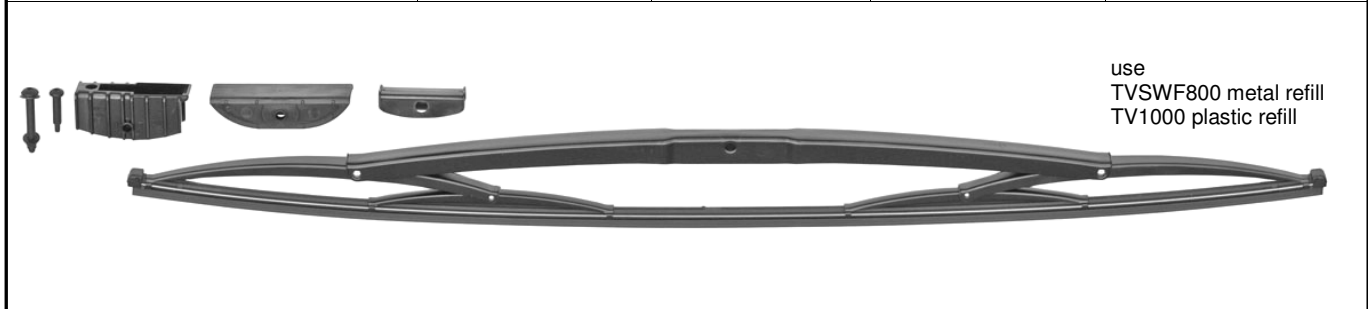
Part No.	Lengths xx	Bolt Diameter	Blade Clip
FB-xx	24, 26, 28, 30, 32" (600, 650, 700, 750, 800mm)	6mm	14mm

# SWF BLADES



TVTZ710 metal refill

Part No.	Length	Bolt Diameter	Blade Clip	Hook
132.600	600mm	6mm	N4 Adaptor 16mm	9x4mm & 12x4mm
132.704	700mm			



use  
TVSWF800 metal refill  
TV1000 plastic refill

Part No.	Length	Bolt Diameter	Blade Clip
132.801	800mm	6mm	16, 26mm



TVSWF800 metal refill  
TVSWF1000 metal refill  
TV1000 plastic refill

Part No.	Length	Bolt Diameter	Blade Clip
105.445	800mm	8mm	20, 26mm
106.277	1000mm	8mm	20, 26mm

# FEIPENG BLADES



use  
TVSWF800 metal refill  
TVSWF1000 metal refill  
TV1000 plastic refill

Part No.	Lengths xx	Bolt Dia	Blade Clip
B140-xxFEI	32, 39" (800, 1000mm)	8mm	20mm



# DENSO FLAT BLADES



Part No.	Length	Bolt Dia	Blade Clip
857240-0911	400mm	4.8mm	6mm
857240-1280	450mm		

## BLADE ADAPTORS

**SS Blade Clip**  
2 x 1/8" Holes @ 3/4" crs

Part No.	Bolt	Blade Clip
40703202	4.8mm	14mm

**Blade Adaptor**

For 4mm pin

Part No.	Bayonet
G-ADAPTOR	7 x 2.6mm

**Blade Adaptor**

For 4mm pin

Part No.	Hook
B2-ADAPTOR	9 x 3mm

**SS Blade Clip**  
3 x M5 Holes @ 22.5mm crs

Part No.	Bolt	Blade Clip
80044304	4.8mm	14mm
80044302	6mm	20mm

**Blade Spacer**

For 6mm blade to 14mm clip

Part No.	Bolt	Blade Clip
TCADP	4mm	14mm

**"K" Adaptor**

For 4mm pin

Part No.	Blade Clip
136.5043.07.06	9 x 3mm flat bar

**Slide key**

For ADL Blade to Arm

Part No.	Fit
14204578	Underhook

**Blade Block**

For 4mm pin

Part No.	Bolt	Blade Clip
80012800	4.8mm	14mm

**Blade Block N4**


For 6mm pin

Part No.	Bolt	Blade Clip
183.701	6mm	16mm



# VETUS SMALL MARINE BLADES


use  
WRMN610 metal refill



Part No.	Finish	Lengths xxx	Arm Fit
WBSxxx	Polished SS	305, 410, 510mm	7mm Bayonet
WBBxxx	Black		


# ROCA SMALL MARINE BLADES

use  
WRMN610 metal refill



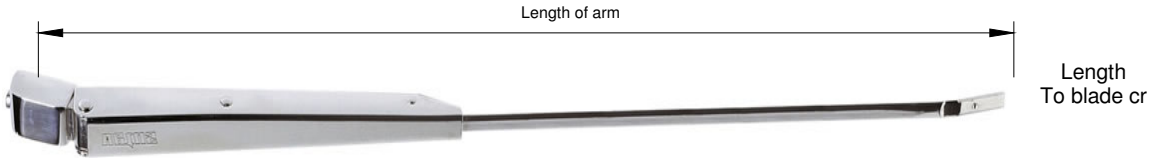
Part No.	Length	Arm Fit	Part No.	Length	Arm Fit
520911	280mm	9x3mm, 7mm Bayonet	520518	460mm	9x3mm, 7mm Bayonet
520514	360mm		520520	510mm	
520516	410mm		520522	560mm	

# MARINCO AFI SMALL MARINE BLADES

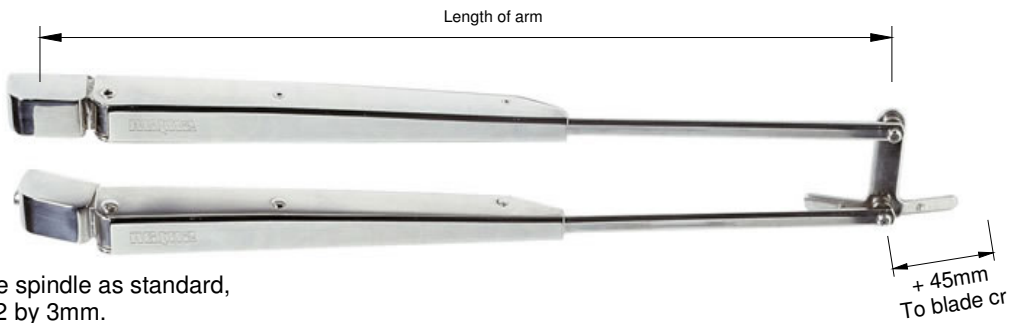


Part No.	Length	Arm Fit	Part No.	Length	Arm Fit
31012B	305mm	7mm Bayonet	31018B	460mm	7mm Bayonet
31014B	360mm		31020B	510mm	
31016B	410mm		31022B	560mm	
			31024B	610mm	

# VETUS SMALL MARINE ARMS



Part No.	Length	Head	Blade Fit
SSAS	280-366mm	13.6mm	7mm Bayonet
SSAL	395-481mm		
SSAX	473-559mm		

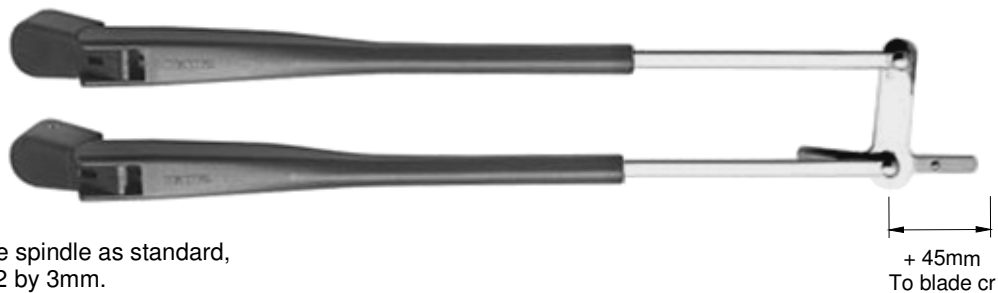


supplied with idle spindle as standard, reducing L1 & L2 by 3mm.

Part No.	Length	Head	Bridge cr	Blade Fit
SSAD	308-393mm	13.6mm	45mm	7mm Bayonet
SSADX	386-471mm			



Part No.	Length	Head	Blade Fit
RWAS	280-366mm	13.6mm	7mm Bayonet
RWAL	395-481mm		
RWAX	473-559mm		



supplied with idle spindle as standard, reducing L1 & L2 by 3mm.

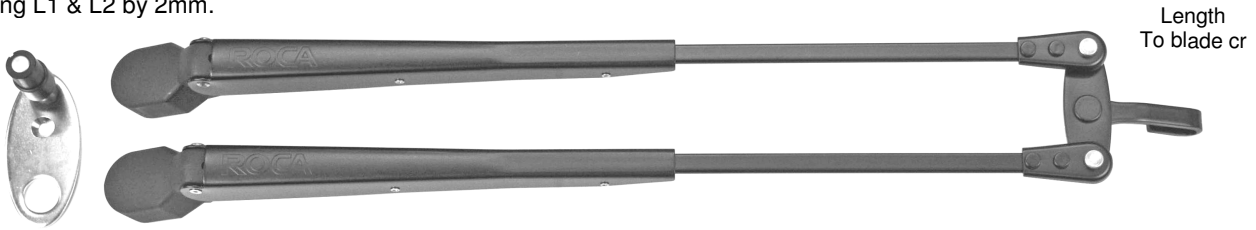
Part No.	Length	Head	Bridge cr	Blade Fit
RWAD	308-393mm	13.6mm	45mm	7mm Bayonet
RWADX	386-471mm			

# ROCA SMALL MARINE ARMS



Part No.	Length	Head	Blade Fit
538617	320-460mm	13.6mm	9x3mm Hook
538624	480-610mm		

supplied with idle spindle  
reducing L1 & L2 by 2mm.



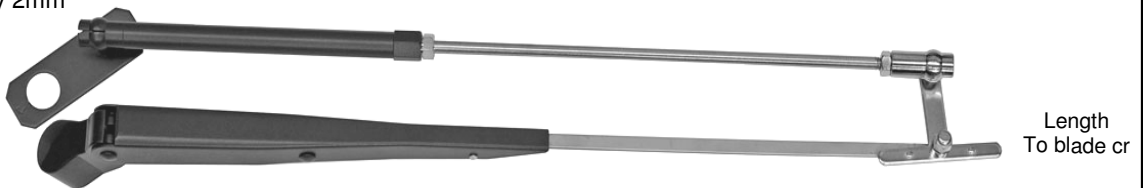
Part No.	Length	Head	Bridge cr	Blade Fit
538318	340-470mm	13.6mm	50mm	9x3mm Hook
538324	480-610mm			

# MARINCO AFI SMALL MARINE ARMS



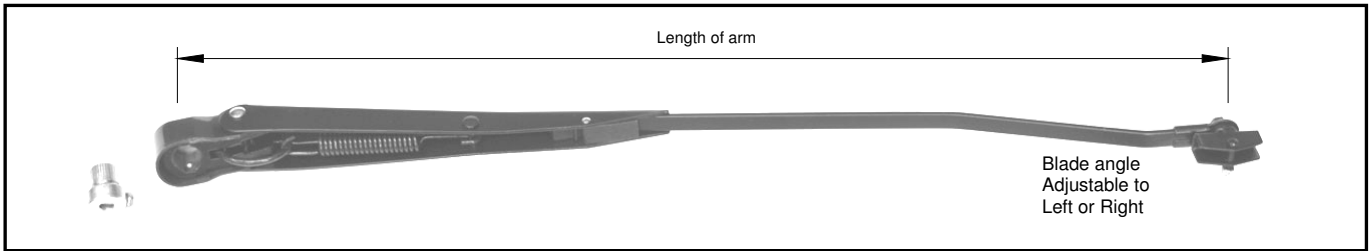
Part No.	Length	Head	Blade Fit
33012A	255-355mm	13.6mm	7mm Bayonet
33014A	355-510mm		
33070A	460-610mm		

supplied with idle spindle  
reducing L1 & L2 by 2mm

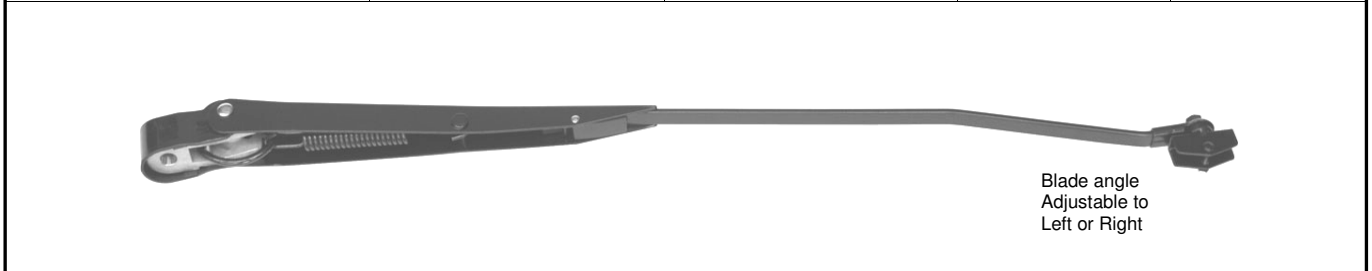


Part No.	Length	Head	Bridge cr	Blade Fit
33032A	305-430mm	13.6mm	45mm	7mm Bayonet
33037A	430-550mm			

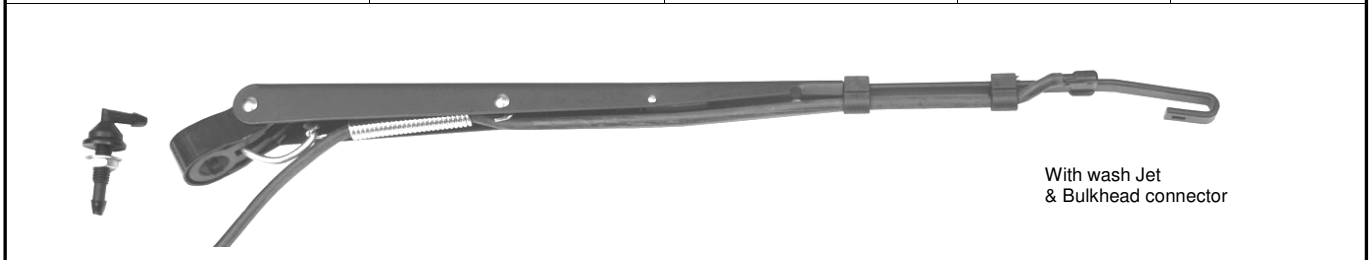
# TRU VISION COMMERCIAL RADIAL ARMS



Part No.	Length	Head	Blade Bolt	Blade Clip
TC034	Adjustable to 560mm	6.35, 8, 13.6 mm	4mm	6mm



Part No.	Length	Head	Blade Bolt	Blade Clip
TC076	Adjustable to 560mm	M6-8mm taper	4mm	6mm
TC078	Adjustable to 560mm	M8-10mm taper		



Part No.	Length	Head	Blade Hook
TC444-35-45	Adjustable 350-450mm	13.6mm	9mm
TC444-45-55	Adjustable 450-550mm	13.6mm	9mm

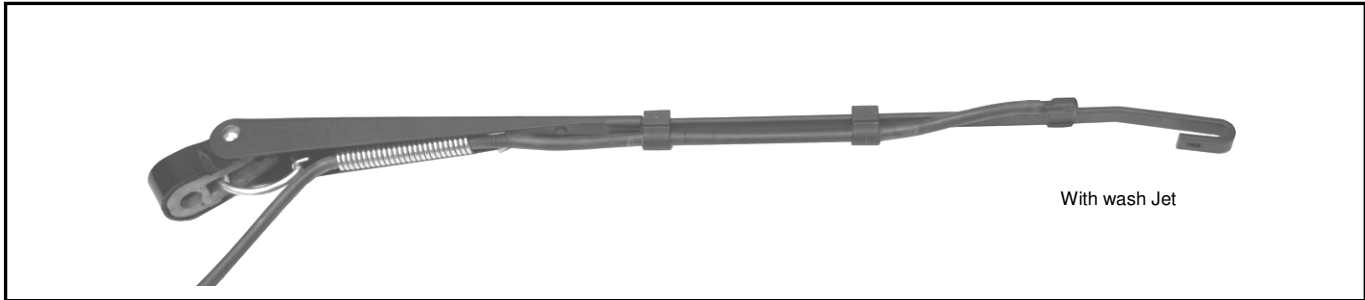


Part No.	Length	Head	Blade Bolt	Blade Clip
TC380	Adjustable to 510mm	14.5-17.5mm Knurled driver	4mm	6mm



Part No.	Lengths xx	Head	Blade Bolt	Blade Clip
301-7xx0	16, 18, 20, 22, 24, 26, 28"	14.5-17.5mm Knurled driver	4.8mm	14mm

# TRU VISION COMMERCIAL ARMS



With wash Jet

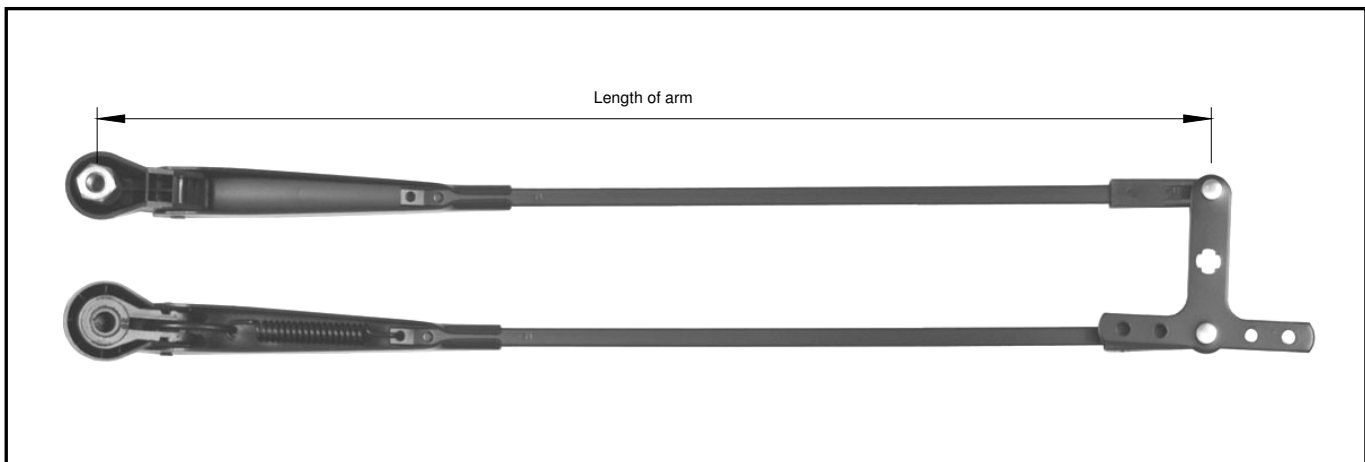
Part No.	Lengths xxx	Head	Blade Hook
ZD1230B-xxx	450, 500mm	M8-10mm	9mm



With wash Jet

Part No.	Lengths	Main Head	Idler head	Bridge cr	Blade Bolt	Blade Clip
ZD1230-xxxP	400, 450, 500mm	M8-10mm	M8 thread	50	4mm	14mm

# DOGA COMMERCIAL ARMS



Part No.	Lengths	Main Head	Idler Head	Bridge Cr	Blade Clip
121.0224.GA.04	400	M6-8mm	M8 Thread	57mm	Use "K" Adapter
121.0225.GA.04	450				
121.0226.GA.04	500				

# DENSO COMMERCIAL ARMS



Part No.	Length	Head	Blade Bolt	Blade Clip
857030-0090	450mm	10mm straight	4mm	6mm



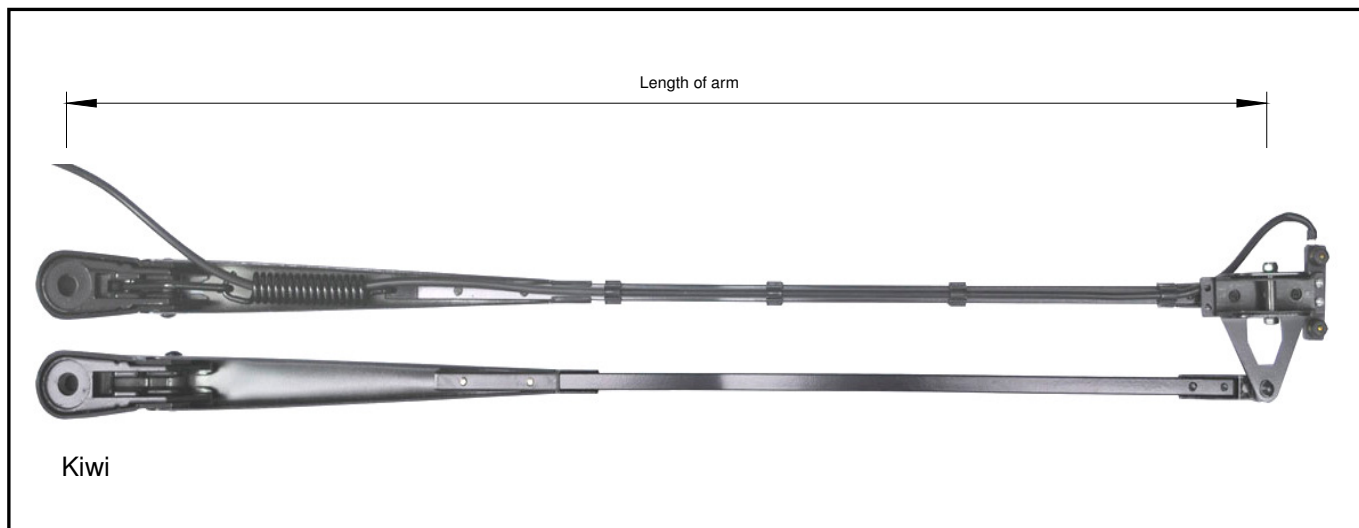
Part No.	Length	Main Head	Idler head	Bridge cr	Blade Bolt	Blade Clip
857050-1001	450mm	10mm straight	Pivot block	50	4mm	6mm

# DENSO STYLE JAPANESE BUS ARMS

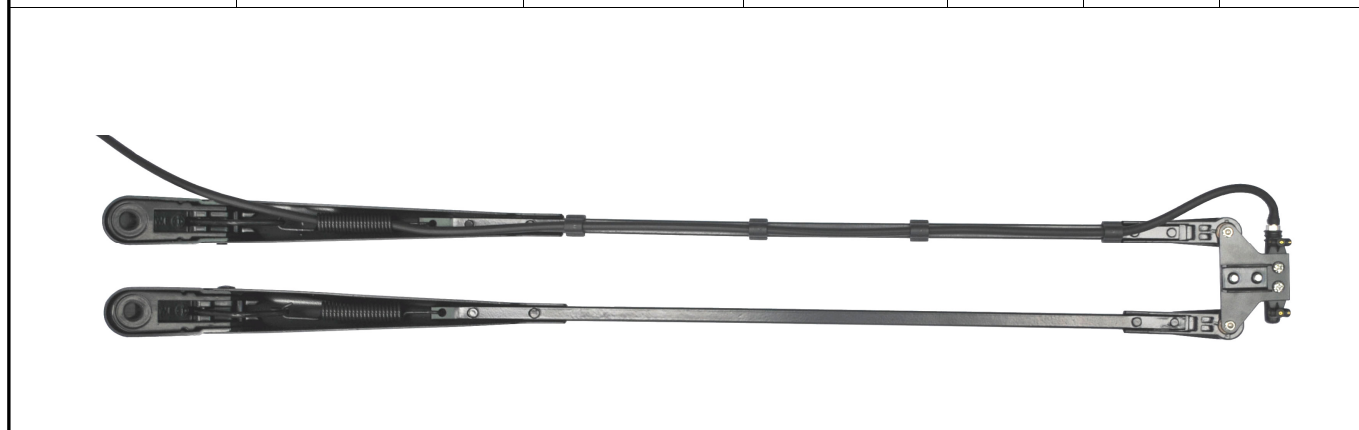


Part No.	Lengths xxx	Main Head	Idler head	Blade Bolt	Blade Clip
A908-xxx	700, 750mm	M10-12 Taper	Pivot Block	4.8mm	14mm

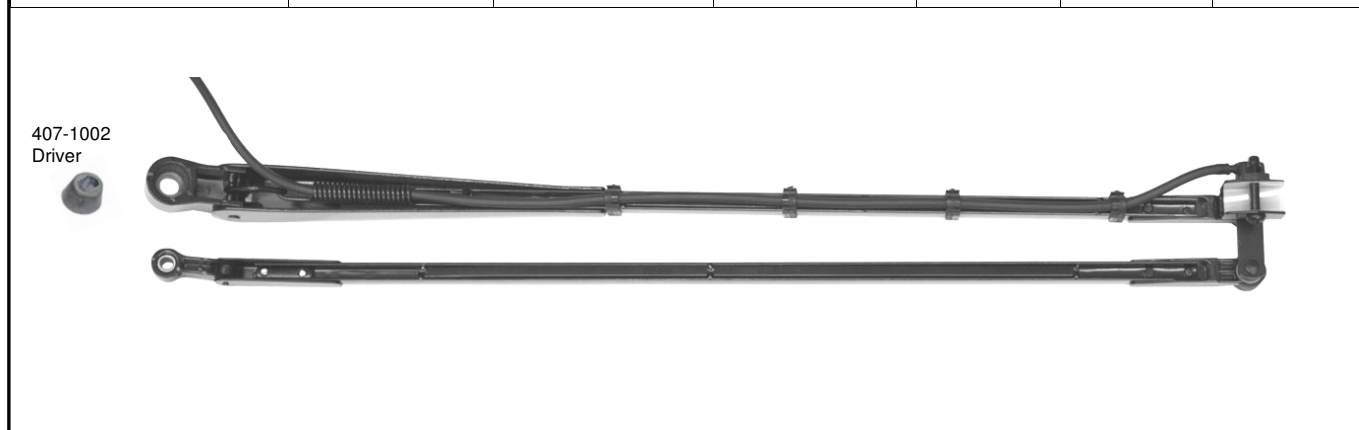
# TRU VISION BUS / COMMERCIAL ARMS



Part No.	Lengths xxx	Main Head	Idler Head	Bridge cr	Blade bolt	Blade Clip
TC777-xxx	800, 850mm	M8-12 taper	M8-12 taper	60mm	8mm	22mm
TC999-xxx	800, 850, 870mm	M10-16 taper	M10-16 taper			
TC881-xxx	750, 800, 850, 900mm	M12-16 taper	M12-16 taper		6mm	16mm
TC881-700	700mm					



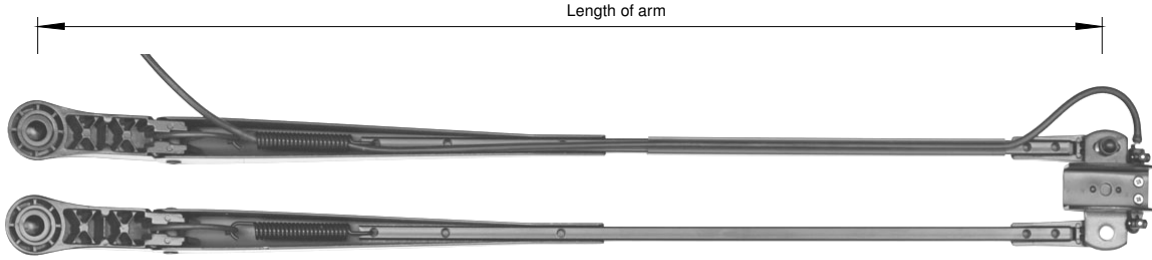
Part No.	Lengths xxx	Main Head	Idler Head	Bridge cr	Blade bolt	Blade Clip
ZD1530-Pxxx	400, 450, 500, 550, 600, 650, 700mm	M8-12 taper	M8-12 taper	60mm	4.8mm	14mm



Part No.	Lengths xx	Main Head	Idler Head	Bridge cr	Blade bolt	Blade Clip
301-3xx0	16, 18, 20, 22, 24, 26, 28"	14.5-17.5mm Knurled driver	6mm	32mm	4.8mm	14mm



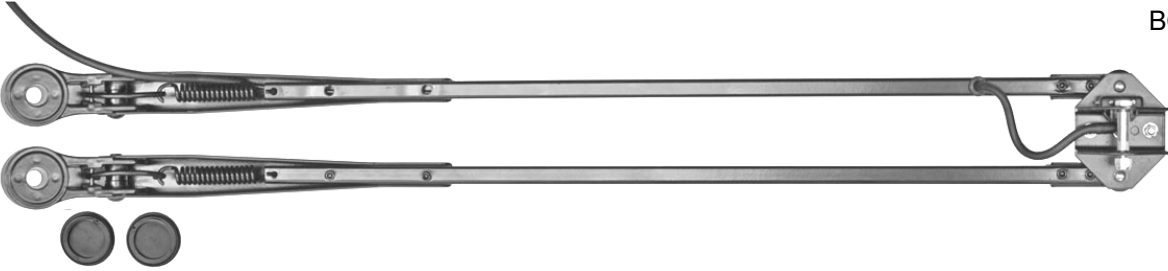
# DOGA BUS ARMS



BCI

Part No.	Length	Main Head	Idler head	Bridge cr	Blade Bolt	Blade Clip
128.2102.GA.04	750mm	M10-16 taper	M10-16 taper	60	8mm	26mm
128.2107.GA.04	800mm					

# TRANSWIPERS BUS ARMS



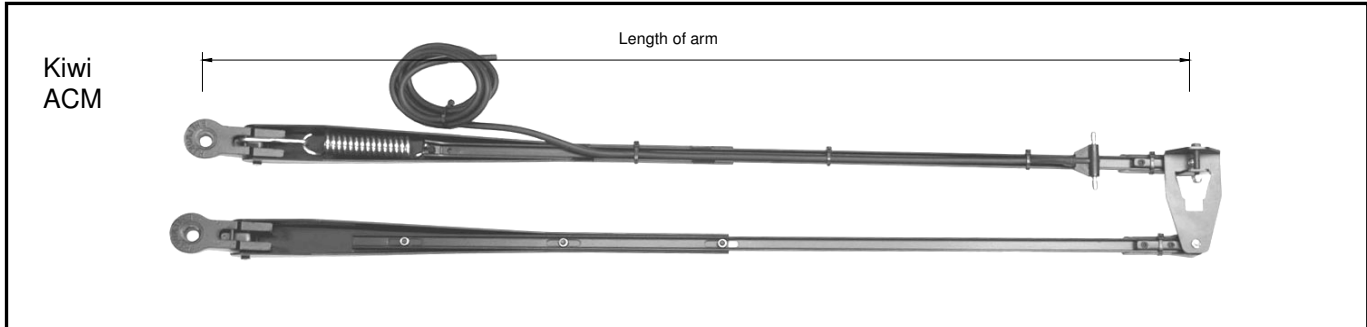
BCI

Part No.	Length	Main Head	Idler head	Bridge cr	Blade Bolt	Blade Clip
87756020	750mm	M10-16 taper	M10-16 taper	60	8mm	26mm
87756021	800mm					
87756022	900mm					

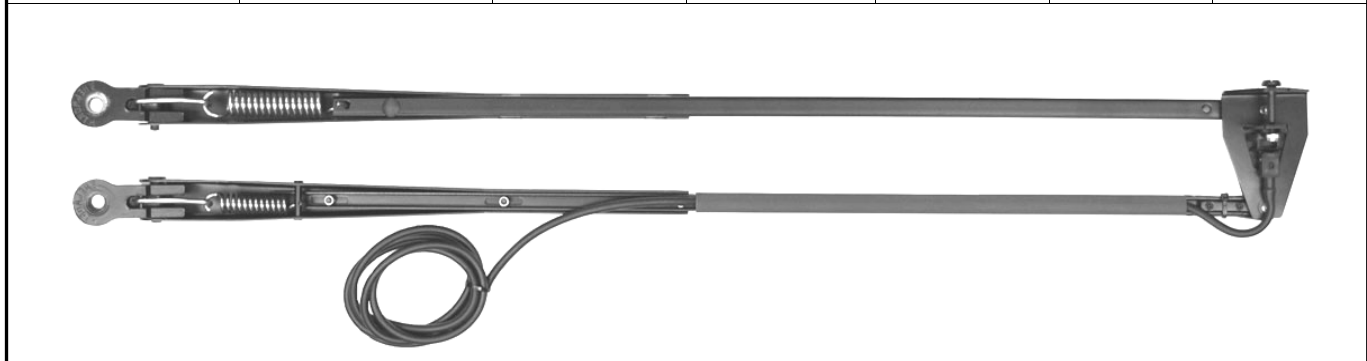
  

Part No.	Length	Main Head	Idler Head	Bridge cr	Blade bolt	Blade Clip
106.080TW	710mm	M10-16 taper	M10-16 taper	60	8mm	26mm
107.515TW	795mm					
106.671TW	870mm					
87506311	1000mm					

# HEPWORTH BUS ARMS



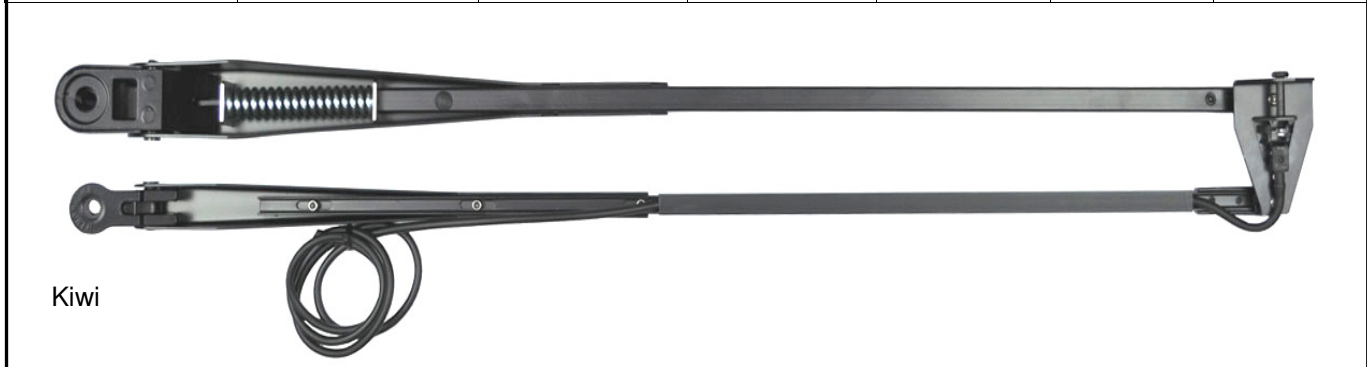
Part No.	Lengths xx	Main Head	Idler Head	Bridge Crs	Blade Bolt	Blade Clip
P153-xxTJ	24, 26, 28" (610, 660, 710mm)	M8-12 taper	M8-12 taper	60mm	4.8mm	14mm
P162-xxTJ				50mm		



Part No.	Lengths xxx	Main Head	Idler Head	Bridge Crs	Blade Bolt	Blade Clip
P175-xxxTJ	750, 850, 1000mm	M8-12 taper	M8-12 taper	60mm	6mm	20mm

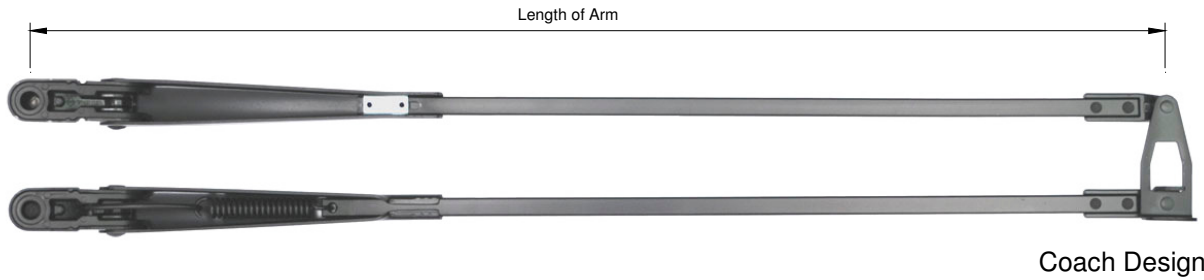


Part No.	Lengths	Main Head	Idler Head	Bridge Crs	Blade Bolt	Blade Clip
P90-xxTJ	28, 30" (710, 760mm)	M10-16 taper	M8-12 taper	60mm	6mm	14mm
P95-xxTJ			M10-16 taper			

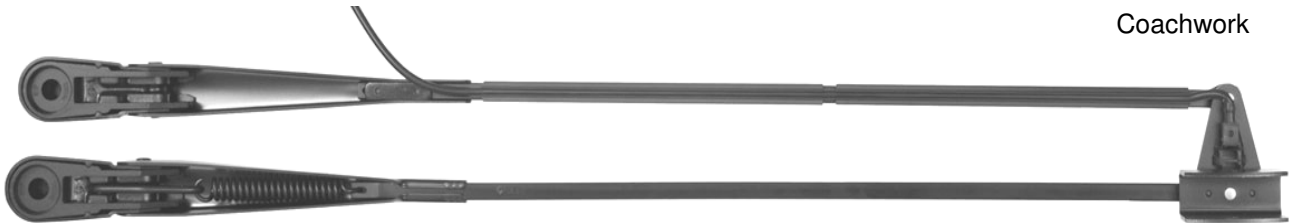


Part No.	Lengths xx	Main Head	Idler Head	Bridge Crs	Blade Bolt	Blade Clip
P85-xxTJ	32, 34" (810, 860mm)	M10-16 taper	M8-12 taper	60mm	6mm	20mm

# SWF BUS ARMS



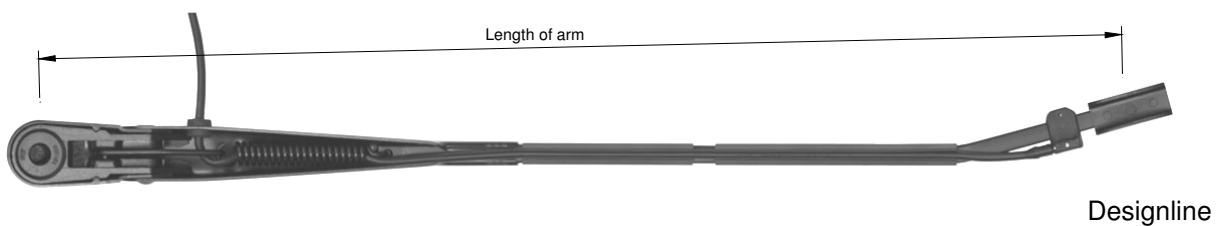
Part No.	Lengths	Main Head	Idler head	Bridge cr	Blade Bolt	Blade Clip
103.980	700mm	M8-12 taper	M8-12 taper	60mm	6mm	16mm
104.580	750mm					



Part No.	Lengths	Main Head	Idler Head	Bridge Cr	Blade Bolt	Blade Clip
106.080	710mm	M10-16 taper	M10-16 taper	60mm	8mm	25mm
107.515	795mm					
106.671	870mm					



Part No.	Side	Length	Head	Blade Bolt	Blade Clip
104.711	Left	700mm	M10-16 taper	6mm	16mm



Part No.	Side	Length	Head	Blade Bolt	Blade Clip
104.710	Right	700mm	M10-16 taper	6mm	16mm

# HEPWORTH & TRANSWIPERS BUS ARMS

Optare Excel



Part No.	Side	Length	Head	Blade Bolt	Blade Clip
803184	Left	740mm	M10-16 taper	6mm	20mm

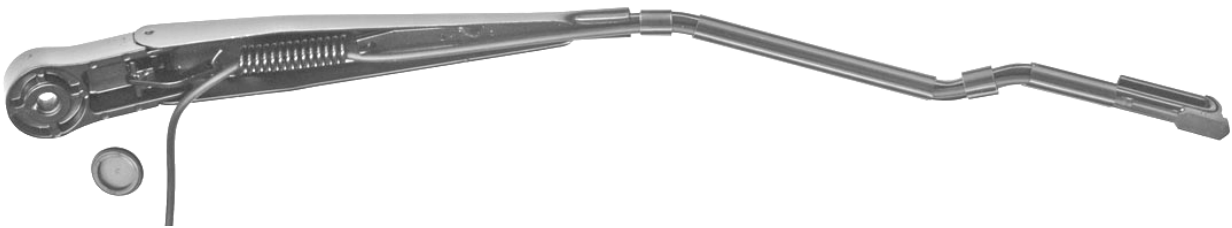
Length of arm



Optare Excel

Part No.	Side	Length	Head	Blade Bolt	Blade Clip
803183	Right	740mm	M10-16 taper	6mm	20mm

Irizar



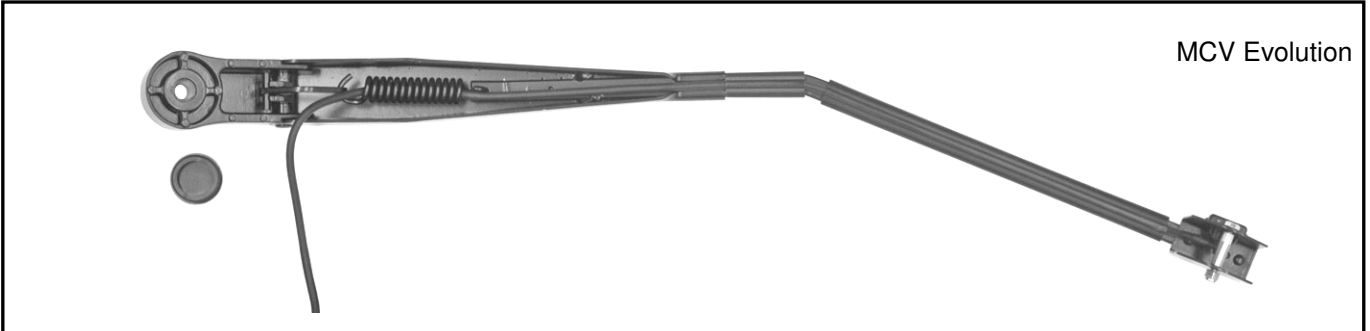
Part No.	Side	Length	Head	Blade Clip
88752604	Left	775mm	M10-16 taper	Underhook

Irizar

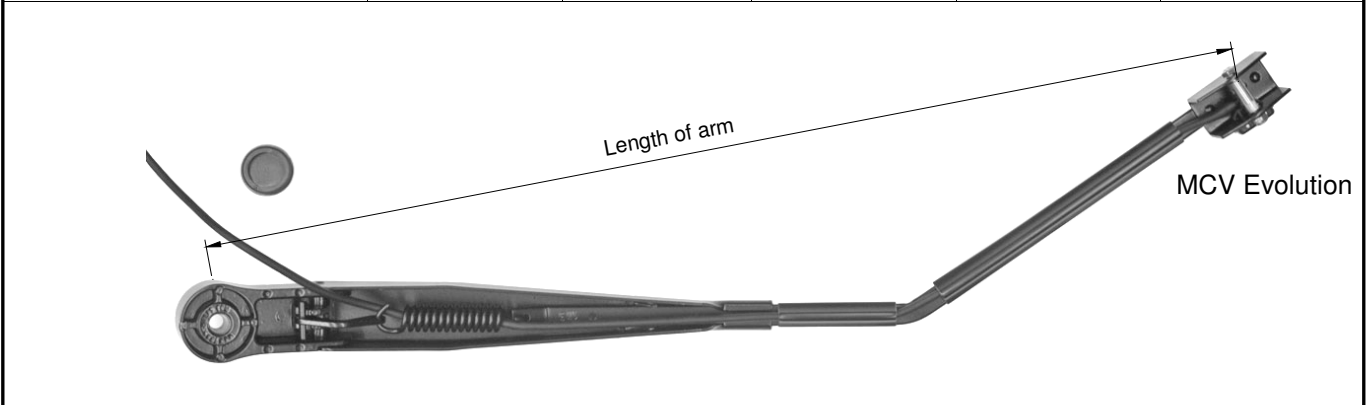


Part No.	Side	Length	Head	Blade Clip
88752603	Right	740mm	M10-16 taper	Underhook

# TRANSWIPERS BUS ARMS



Part No.	Side	Length	Head	Blade Bolt	Blade Clip
88644091	Left	750mm	M10-16 taper	8mm	26mm



Part No.	Side	Length	Head	Blade Bolt	Blade Clip
88644090	Right	750mm	M10-16 taper	8mm	26mm



Part No.	Side	Length	Head	Blade Bolt	Blade Clip
106.294TW	Left	675mm	M10-16 taper	8mm	26mm



Part No.	Side	Length	Head	Blade Bolt	Blade Clip
106.293TW	Right	675mm	M10-16 taper	8mm	26mm

# TRANSWIPERS BUS ARMS

ADL E200



Supplied with  
Slide Key  
14202206

Part No.	Side	Length	Head	Blade Clip
7820801D10	Left	740mm	12-16 taper	Slide Key

ADL E200



Supplied with  
Slide Key  
14202206

Part No.	Side	Length	Head	Blade Clip
7820800D10	Right	710mm	12-16 taper	Slide Key

ADL E500



Part No.	Side	Length	Head	Blade Bolt	Blade Clip
7820805L101	Left	870mm	12-16 taper	8mm	26mm

ADL E500



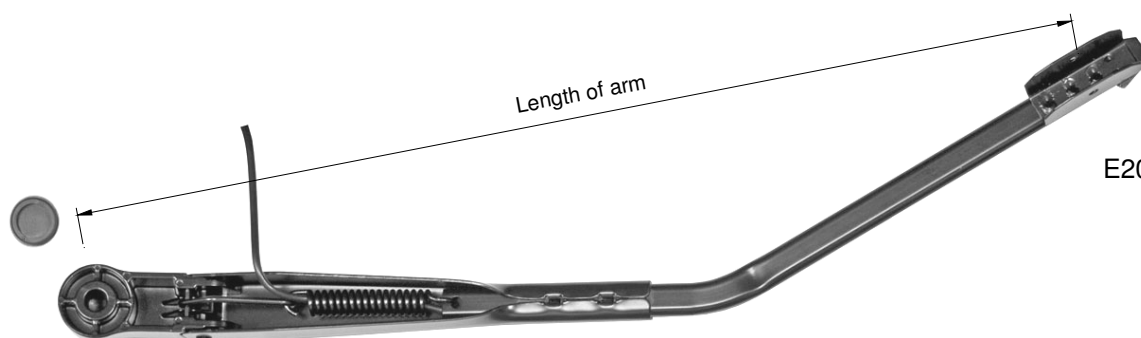
Part No.	Side	Length	Head	Blade Bolt	Blade Clip
7820804L101	Right	750mm	12-16 taper	8mm	26mm

# TRANSWIPERS & DOGA BUS ARMS



E200MMC  
XLB

Part No.	Side	Length	Head	Blade Bolt	Blade Clip
88435632	Left	750mm	M12-16 taper	8mm	26mm



E200MMC  
XLB

Part No.	Side	Length	Head	Blade Bolt	Blade Clip
88435631	Right	750mm	M12-16 taper	8mm	26mm



E200MMC  
XLB

Part No.	Side	Length	Head	Blade Bolt	Blade Clip
120.3219.GA.I4	Left	750mm	M12-16 taper	8mm	26mm



E200MMC  
XLB

Part No.	Side	Length	Head	Blade Bolt	Blade Clip
120.3220.GA.D4	Right	750mm	M12-16 taper	8mm	26mm



# DOGA BUS ARMS



Part No.	Side	Length	Head	Blade Bolt	Blade Clip
120.3202.GA.I4	Left	750	M12 to 16 taper	8mm	26mm



Part No.	Side	Length	Head	Blade Bolt	Blade Clip
120.3201.GA.D4	Right	750	M12 to 16 taper	8mm	26mm

Designline



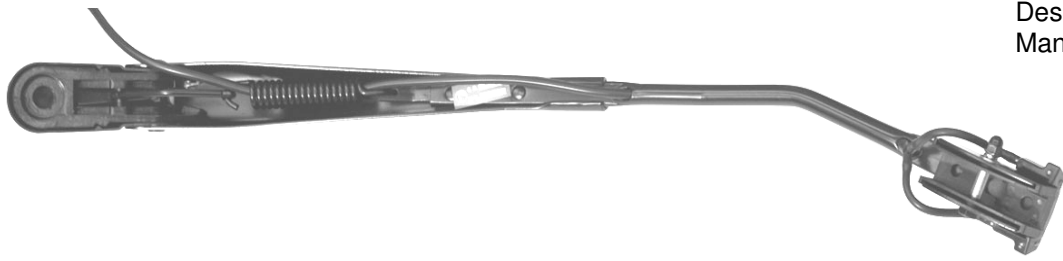
Part No.	Side	Length	Head	Blade Bolt	Blade Clip
120.6717.GA.I4	Left	850mm	M10-16 taper	8mm	26mm

Designline



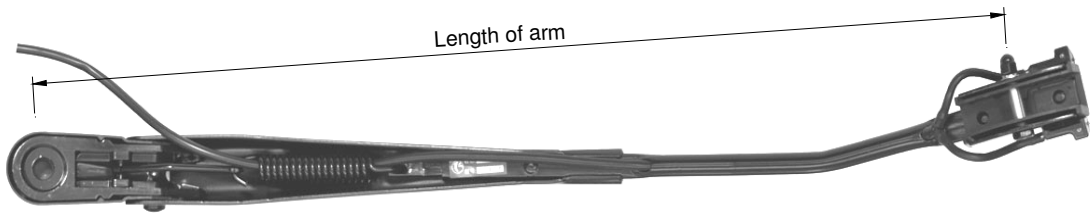
Part No.	Side	Length	Head	Blade Bolt	Blade Clip
120.6723.GA.D4	Right	850mm	M10-16 taper	8mm	26mm

# FEIPENG BUS ARMS



Designline  
Man A80

Part No.	Side	Length	Head	Blade Bolt	Blade Clip
FPDYG-01	Left	675mm	M12-16 taper	8mm	20, 26mm



Designline  
Man A80

Part No.	Side	Length	Head	Blade Bolt	Blade Clip
FPDYG-02	Right	675mm	M12-16 taper	8mm	20, 26mm



BCI

Part No.	Side	Length	Head	Blade Bolt	Blade Clip
FPYTR-01	Left	850mm	M12-16 taper	8mm	20, 26mm



BCI

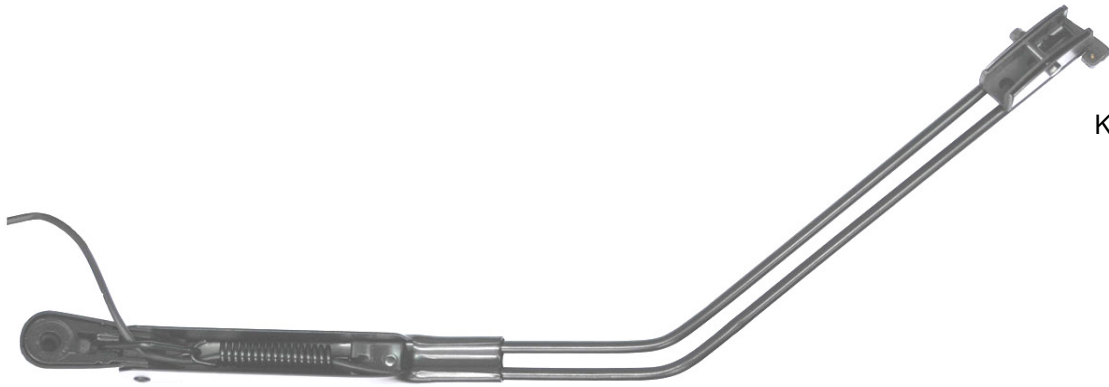
Part No.	Side	Length	Head	Blade Bolt	Blade Clip
FPYTR-02	Right	900mm	M12-16 taper	8mm	20, 26mm

# TRU VISION BUS ARMS



Kiwi

Part No.	Side	Length	Head	Blade Bolt	Blade Clip
TC702GAI4	Left	750mm	M10-16 taper	8mm	20, 26mm



Kiwi

Part No.	Side	Length	Head	Blade Bolt	Blade Clip
TC701GAD4	Right	750mm	M10-16 taper	8mm	20, 26mm



Part No.	Side	Length	Head	Blade Bolt	Blade Clip
TCCUSNS	Left	750mm	M12-16 taper	8mm	20, 26mm



Part No.	Side	Length	Head	Blade Bolt	Blade Clip
TCCUSOS	Right	750mm	M12-16 taper	8mm	20, 26mm

# TRU VISION MARINE ARMS



Part No.	Lengths xxx	Head	Blade Hook
WEM1230B-xxx	400, 450, 500mm	M8-10mm	9mm



Part No.	Lengths xxx	Main Head	Idler Head	Bridge cr	Blade Clip
WEM1230-P-xxx	450, 500mm	M8-10 taper	M8 thread	50mm	14mm



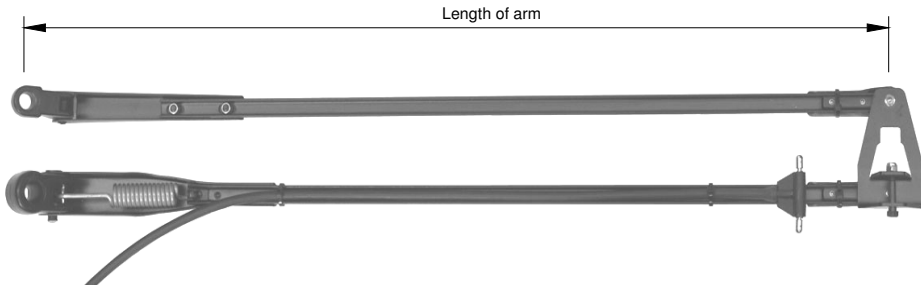
Part No.	Lengths xxx	Main Head	Idler Head	Bridge cr	Blade Clip
WEM1530-P-xxx	500, 550, 600, 650, 700mm	M8-12 taper	M8-12 taper	60mm	14mm



Adjustable 50mm increments

Part No.	Lengths	Main Head	Idler Head	Bridge cr	Blade Clip
WEM2930-80-100	800 to 1000mm	M8-12 taper	M8-12 taper	60mm	26mm

# HEPWORTH MARINE ARMS



Part No.	Lengths xx	Main Head	Idler Head	Bridge Centres	Blade Clip
P612-xxTJ	12 to 22" 310 to 560mm	M8-12 taper	Thread	50mm	14mm
P613-xxTJ			M8-10 taper	50mm	
P611-xxTJ			M8-10 taper	60mm	



Part No.	Lengths xx	Main Head	Idler Head	Bridge Centres	Blade Clip
P612-xxTJ	20 to 28" 510 to 710mm	M8-12 taper	Thread	50mm	14mm
P613-xxTJ			M8-10 taper	50mm	
P611-xxTJ			M8-10 taper	60mm	



Part No.	Length xx	Head	Blade Clip
F63-xx	12 to 27" 310, to 690mm	M8-12 taper	14mm



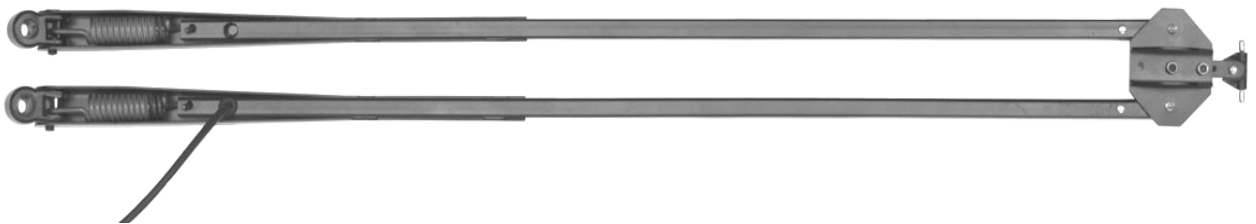
Part No.	Length xx	Head	Blade Clip
F73-xx	20 to 38" 510, to 960mm	M8-12 taper	14, 20mm

# HEPWORTH MARINE ARMS

Note: When ordering, include the length ( 2" increments ) in the Part number. e.g. P613-28TJ  
TJ, Denotes Travelling Jet, ( Arms normally supplied without travelling jets, can have them fitted )



Part No.	Length xx	Main Head	Idler Head	Bridge Centres	Blade Clip
P614-xxTJ	14 to 22" 360 to 560mm	M8-12 taper	M8-12 taper	50mm	14mm




Part No.	Lengths xx	Main Head	Idler Head	Bridge Centres	Blade Clip
P615-xxTJ	24 to 39" 610 to 990mm	M8-12 taper	M8-12 taper	50mm	14mm
P620-xxTJ					20mm
P655-xxTJ				60mm	14mm
P635-xxTJ					20mm
P680-xxTJ		M10-16 taper	M10-16 taper	20mm	



Part No.	Length xx	Main Head	Idler Head	Bridge Centres	Blade Clip
P84-xxTJ	24 to 72" 610 to 1830mm	M10-16 taper	M10-16 taper	60mm	14, 20mm


# HEAD CAPS & WEATHER SEALS

Head Cap



Part No.	Arms
14754702	Transwipers

Head Cap



Part No.	Arms
TC153053	Trico

Head Cap



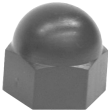
Part No.	Arms
TCRSA-1	Tru Vision Large

Head Cap




Part No.	Arms
80005100	Hepworth Large

Nut Cap



Part No.	Nut
10060300	M8 13mm

Weather Cap



Part No.	Shaft	Liner
60034600	12mm	M20
60054600	16mm	M26

Nut Cap




Part No.	Nut
10063500	M10 17mm

Weather Cap



Part No.	Shaft	Nut
22067358	12 DIN	M20

Pivot Cap



Part No.	Arms
80002200	P612, P613, P153, P162


Weather Cap



Part No.	Shaft	Liner
10095100	16mm	M20




# ASSORTED SMALL PARTS

SS Cover 


Part No.	Shaft	Liner
10067320	12mm	M20

Nut 


Part No.	Size
908.040	M26
10011900	M20

Washer 


Part No.	Size
907.918	M26 alloy
10024300	M20 SS

Rubber Washer 

Part No.	Size
908.525	M26
10020600	M20

Link Rod Cap 


Part No.	Links
14434808	Doga, Transwipers

Lock Washer 


Part No.	Size
910.700	M26

Link Rod Fitting Kit 

Part No.	Links	Pin
100.5214.09.00	Panto Crank Inner	12mm

Link Rod Fitting Kit 

Part No.	Links	Pin
100.5157.09.00	Crank Outer, Spindle	12mm

Link Rod Fitting Kit 

Part No.	Links	Pin
100.5154.09.00	Wrapover Crank	12mm

Link Rod Cup Bush 

Part No.	Cup	Ball Size
LRC16	Closed	16mm
LRC16-O	Open	

# HEPWORTH LINKAGE SYSTEMS

**Spindle Drive Assembly (Bus)**  
Kiwi

Same side shown

Part No.	Shafts	Liner	Bearing	Pivot cr
60598802	16DIN Drive 12DIN Idler	90	12mm Same side	89
60598702	16DIN Drive 12 DIN Idler		12mm Opp side	

**Spindle Drive (Bus)**  
Optare Excel  
ADL E200

Part No.	Shaft	Liner	Pivot cr	Pin
60934600	16DIN	140	54	M12
60934700			67	
61210800		115	59	
61210900			65	

**Spindle Drive Vari Arc**

Adjustable in 5 degree increments

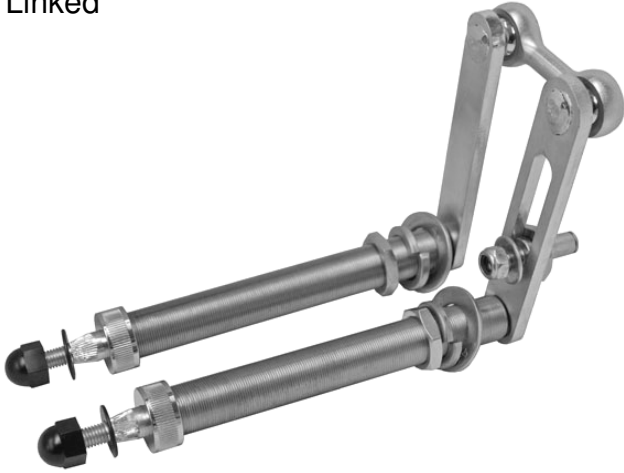
Part No.	Shaft	Liner	Bearing	Usage
68005001	16 DIN	57	12mm	Marine
68005002		85		Marine
68005013		90		Bus
68005003		110		Marine
68005018		120		Bus
68005004		135		Marine

**Spindle Drive Vari Arc**  
Kiwi

Part No.	Shaft	Liner	Bearing	Usage
60650200	12 DIN	90	3/8"	Bus
60650201		125		
65008701		57		Marine
65008703		110		
65008709		125		
65008704		135		
65008705		160		
65009009	200	110SS		
65008403				

# HEPWORTH LINKAGE SYSTEMS

Spindle Drive Vari Arc  
Linked



Part No.	Shafts	Liner	Bearing	Pivot cr
61101510	12DIN	155	3/8	Variable

Spindle Drive



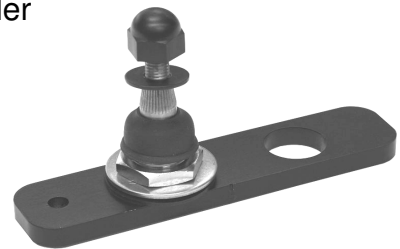
Part No.	Shaft	Liner
65006407	12 DIN	70mm
65006408		80mm
65006410		100mm

Spindle Idler



Part No.	Shaft	Liner	crs
60044401	7/16-24NS	25mm	50

Spindle Idler

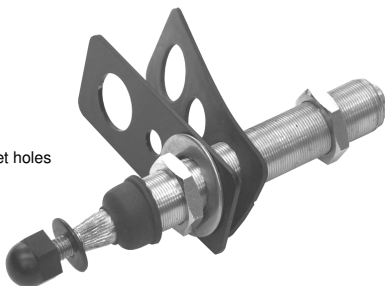


Part No.	Shaft	Liner	crs
60847202	12 DIN	25mm	50

Spindle Idler

Kiwi

Plate & gasket holes  
60 crs



Part No.	Shaft	Liner	Usage
60650300	12 DIN	90mm	Bus
60650301		125mm	
68003401	16 DIN	57mm	Marine
68003402		85mm	
68003413		90mm	Bus
68003416	120mm		

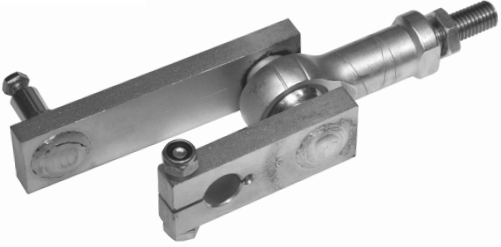
Spindle Idler



Part No.	Shaft	Liner	Usage
60122611	12 DIN	40mm	Bus
60119512		80mm	Marine
60119513		110mm	
60119506		150mm	
60119812		80mm SS	

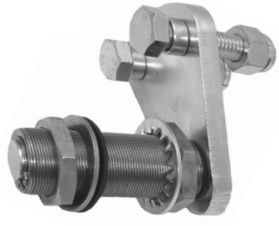
# HEPWORTH LINKAGE SYSTEMS

**B / Pedal Crank**  
ADL



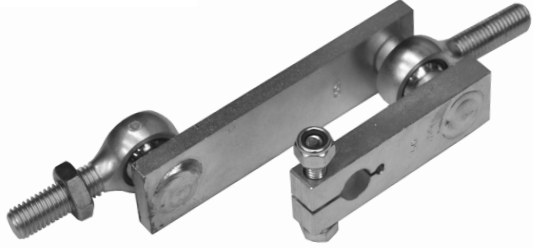
Part No.	Centres	Bearing	Mount
61248910	45-90	12mm	15.8

**Decelerator (Bus)**  
Optare  
ADL



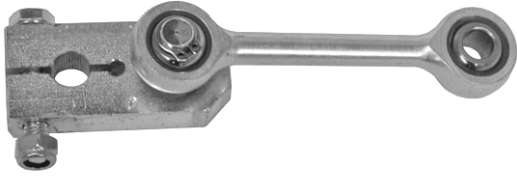
Part No.	Bus	Shaft	Pin
60935000	Optare	M26	M12
61210600	ADL		

**B / Pedal Crank**  
Kiwi




Part No.	Centres	Bearing	Mount
60264900	40-80	12mm	13.26
60981600	45-90		13.26
60256110	50-100		13.26
60420100	55-110		13.26
60794100	40-80	3/8"	13.26
60649100	40-80		9.3
60934801	45-90	12mm	15.8

**Crank 20Nm**




Part No.	Centre	Bearing	Mount
60846800	30	8mm	9.3

**Crank 20Nm**




Part No.	Centre	Bearing	Mount
60846900	30	8mm	8-10 Taper

**Single Crank 30 & 50 & 80Nm**



Part No.	Centre	Bearing	Mount
60261600	40	12mm	13.26
60496301		3/8"	13.26
60619801	30	3/8"	9.3

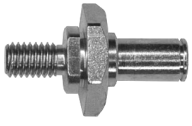
**Single Crank 30 & 50Nm**



Part No.	Centre	Bearing	Mount
60124201	30	3/8"	8-10 taper
60620701			10-12 taper


# HEPWORTH LINKAGE SYSTEMS

**Bearing Pin**



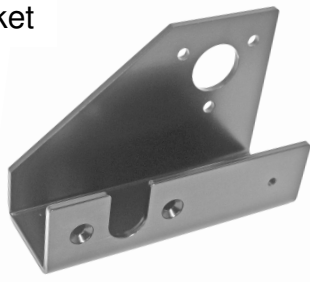
Part No.	suit	Bearing	Thread
60532700	Double bearing	3/8"	M8
60532300	Single bearing	3/8"	

**Rose Bearing**




Part No.	Size	Centres
60504200	3/8"	50
60503500		60

**Motor Bracket**



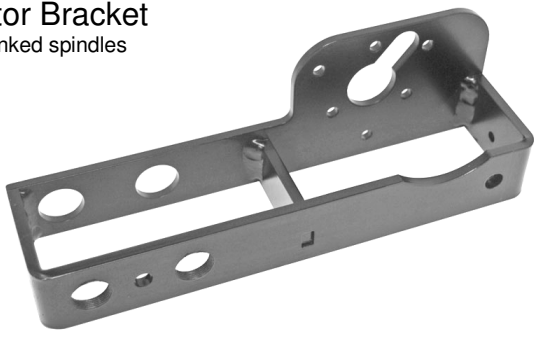
Part No.	Motor	crs
60847100	30Nm	50mm

**Rose Bearing**



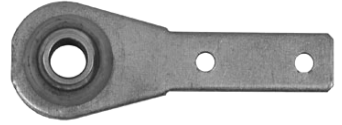
Part No.	Size	Thread
10057600	10mm	RH
10057700		LH
10055401	12mm	RH
10055501		LH
10055200	3/8"	RH
10055300		LH

**Motor Bracket**  
For linked spindles



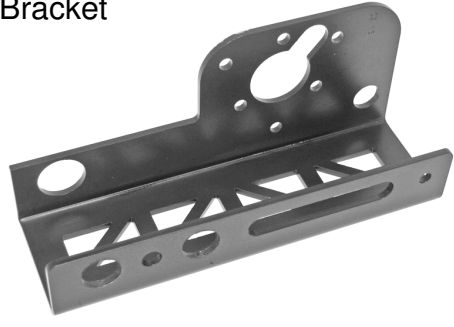
Part No.	Motor	crs
61092000	30, 50Nm	50mm

**Rose Bearing**



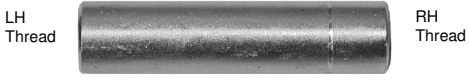
Part No.	Size	Centres
60044000	3/8"	2-M5 @ 26

**Motor Bracket**



Part No.	Motor	crs
60663840	30, 50Nm	50mm
60663841		60mm

**Tie Bar / Link Rod**



More lengths available

Part No.	Bearing	Length
60009372	3/8"	60
60009324		500
60904906	10mm	455
60904911		600
60121355	12mm	115
60121302		460
60121314		500

# SWF LINKAGE SYSTEMS

## Spindle Drive

Designline A80  
Fairfax



Part No.	Shaft	Liner	Pin	Pivot cr
105.585	16DIN	80	12mm	85.6
105.586				70

## Decelerator

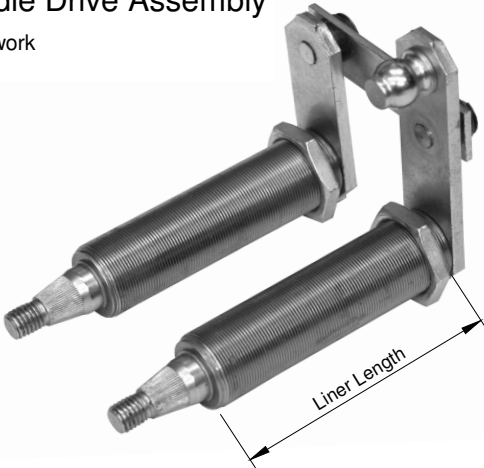
Designline A80



Part No.	Shaft	Pin	Pivot crs
104.596	M26	12mm	50.5, 46, 46mm

## Spindle Drive Assembly

Coachwork



Part No.	Shafts	Liner	Ball	Pivot cr
107.313	16 DIN	90	16mm	71.3mm

## Crank

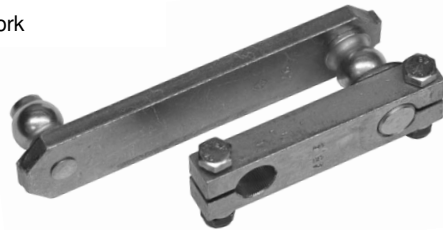
Designline A80  
Fairfax



Part No.	Shaft	Pin	Pivot cr
104.293	13.26mm	12mm	57.5mm

## B / Pedal Crank

Coachwork



Part No.	Shaft	Ball	Pivot crs
106.711	13.26mm	16mm	48.5x97mm

## Spindle Drive Assembly

Coach design



Part No.	Shafts	Liner	Pin	Pivot cr
107.137	12 DIN	90	10mm	72.5mm

## B / Pedal Crank

Coach Design



Part No.	Shaft	Pin	Pivot crs
102.700	9.3mm	10mm	40x80mm
104.773	13.26mm		48.5x97mm

# SWF LINKAGE SYSTEMS



Coachwork

Part No.	Length cr-cr	Ball
107.317	583mm	16mm Dia closed / closed
107.318		16mm Dia closed / open



Coachwork

Part No.	Length cr-cr	Pin
102.819	497-513mm	10mm
102.820	615-632mm	



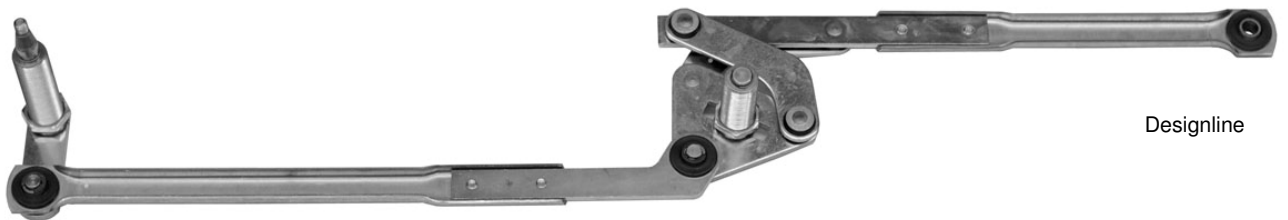
Coach Design

Part No.	cr-cr	Pin
103.646	575-590mm	10mm



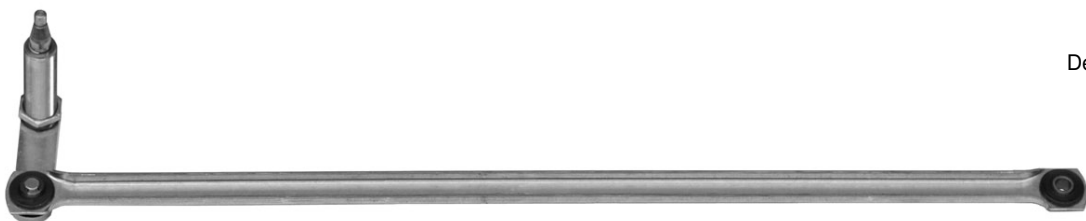
Irizar

Part No.	Shaft	Pin	Pivot crs
47742417	M26	12mm	50.5, 46, 46



Designline

Part No.	Decelerator	Spindle	Connects to crank	Pin
105.583	104.596	105.586	104.293	12mm

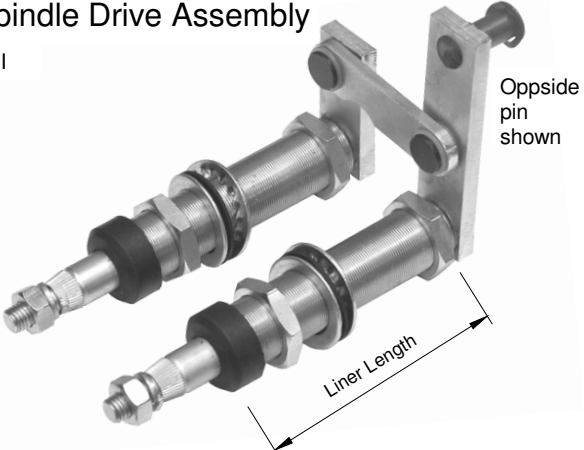


Designline

Part No.	Spindle	Connects to crank	Pin
105.584	105.585	104.293	12mm

# TRANSWIPERS BUS LINKAGE SYSTEMS

**Spindle Drive Assembly**  
BCI




Oppside pin shown

Liner Length

Part No.	Shafts	Liner	12mm Pin	Pivot cr
45436027	16 DIN	108	Sameside	96
46436028			Oppside	
45435867			Sameside	84
46435867			Oppside	

**Spindle Drive**  
ADL



Part No.	Shaft	Pin	Liner	Pivot cr
7820801L101	M10 12-16mm Taper	M12	130	64
7820800L101			130	66
7810802D10			115	64
7810801D10			115	59

**Spindle Drive**  
Geminlang



Part No.	Shaft	Liner	Pin	Pivot cr
45436021	M10 12-16mm	130	12mm	67

**Spindle Drive**  
MCV Evolution




Part No.	Shaft	Liner	Pin	Pivot cr
46644092	16DIN	96	12 mm	85
46644093				90
46742606		105		88

**Spindle Drive Assembly**



Part No.	Shafts	Liner	Ball	Pivot cr
107.313TW	16 DIN	90	16mm	71.3

**Spindle Drive**

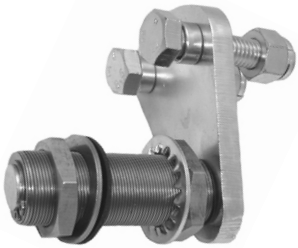


Part No.	Shaft	Liner	Pin	Pivot cr
45436239	M12-16 Taper	130	12 mm	83
45436240				67




# TRANSWIPERS BUS LINKAGE SYSTEMS

**Decelerator**  
ADL E200




Part No.	Shaft	Pin
7810803D10	M26	M12

**B Pedal Crank**  
ADL E200




Part No.	Centres	Bearing	Mount
77204838	45-90	12mm	15.8

**Decelerator**  
MCV Evolution



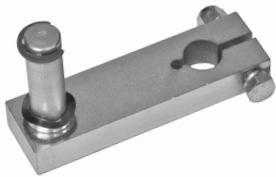
Part No.	Shaft	Pin
47644094	M26	12mm

**B Pedal Crank**  
BCI



Part No.	Centres	Pin	Mount
77436039	56-112	12mm	13.26

**Crank**  
MCV Evolution




Part No.	Centres	Pin	Mount
77644095	57.5mm	12	15.8

**Crank**  
ADL E500




Part No.	Centres	Bolt	Mount
7820804L69	44	M12	13.26

**Link Rod**  
ADL  
MCV



Part No.	Lengths xx cr-cr	Pin
781080xxD10	305, 400, 410, 440, 460, 585, 610, 675mm	12mm

**Link Rod**  
MCV  
BCI



Part No.	Lengths cr-cr	Pin
5475560	513-556mm	12mm
5475630	628-635 mm	
5475645	630-653 mm	

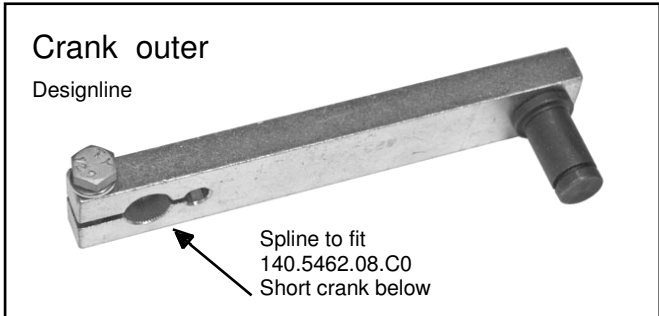
# DOGA BUS LINKAGE SYSTEMS



**Spindle Drive Assembly**

Designline

Part No.	Shafts	Liner	Pin	Pivot cr
140.5950.08.C0	16 DIN	86	12mm	89

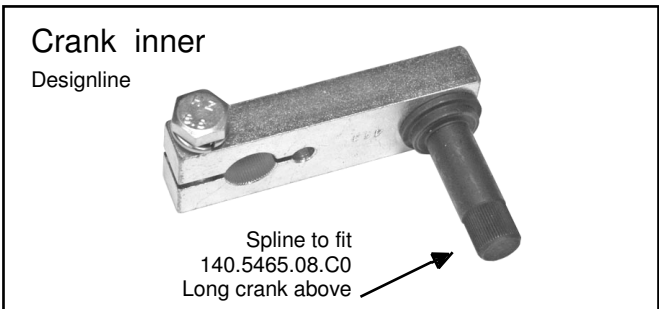


**Crank outer**

Designline

Spline to fit  
140.5462.08.C0  
Short crank below

Part No.	Centres	Pin	Mount
140.5465.08.C0	102	12mm	11.26

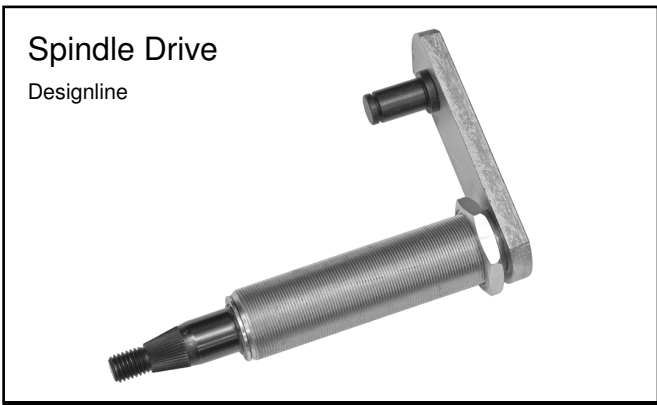


**Crank inner**

Designline

Spline to fit  
140.5465.08.C0  
Long crank above

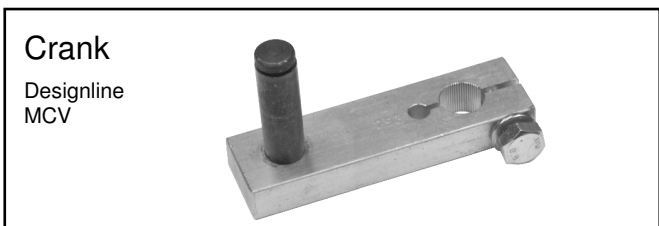
Part No.	Centres	Pin	Mount
140.5462.08.C0	51	12mm	13.26



**Spindle Drive**

Designline

Part No.	Shaft	Liner	Pin	Pivot cr
140.5466.08.C0	16 DIN	97	12mm	62
140.546708.C0				88
140.5370.08.C0		108		68.3
140.5371.08.C0				90



**Crank**

Designline  
MCV

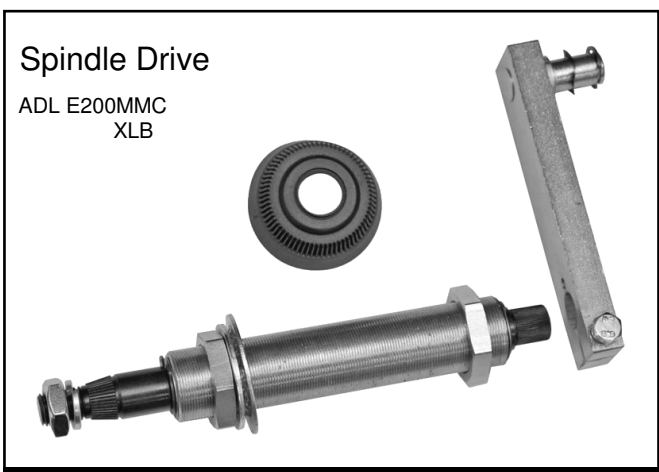
Part No.	Centres	Pin	Mount
140.5290.04.C0	56mm	12mm	13.26
77434867			15.8



**Spindle Drive**

MCV

Part No.	Shaft	Liner	Pin	Pivot cr
140.5562.08.C0	M12-16	97	12mm	62
140.5835.08.C0				83.5



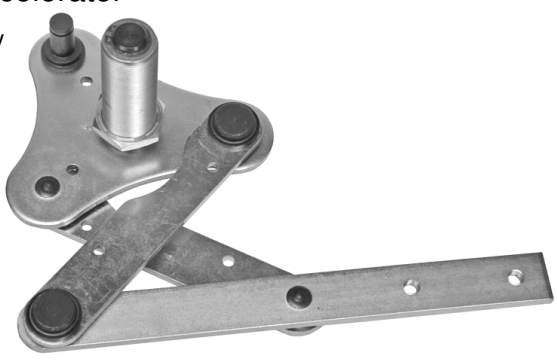
**Spindle Drive**

ADL E200MMC  
XLB

Part No.	Shaft	Liner	Pin	Pivot cr
46435633	M12-16	120	12mm	116
46435634				88

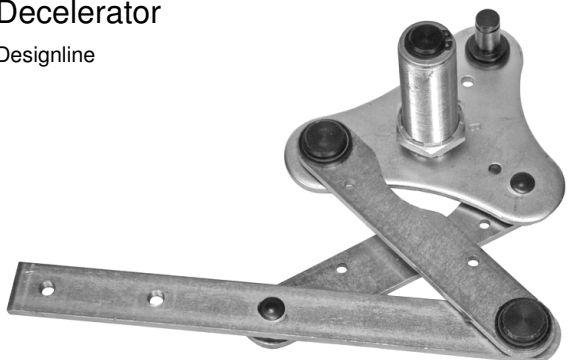
# DOGA BUS LINKAGE SYSTEMS

**Decelerator**  
MCV




Part No.	Shaft	Pin	Pivot centres
140.5009.3B.00	M26	12mm	50,50,55mm

**Decelerator**  
Designline




Part No.	Shaft	Pin	Pivot centres
140.5009.01.00	M26	12mm	50,50,55mm

**Link Rod**  
MCV




Part No.	Lengths cr-end	Pin
5343305-1	304mm	12mm

**Linkage Set**  
ADL E200MMC  
XLB



Part No.	Motor Shaft	Crank cr	Spindle taper	Spindle crs
49435639	15.8	61	M12-16	88, 116mm


**Linkage Set**  
Designline



Part No.	Motor Shaft	Crank cr	Spindle taper	Spindle Liner	Spindle crs
140.2322.00.00	13.26	56	M10-16mm	97mm	62, 88mm

# FEIPENG BUS LINKAGE SYSTEMS

Use 10095100 Weather caps



Designline  
Man A80

ZD2733A motor to suit  
See page 58

Part No.	Motor Shaft	Crank cr	Spindle taper	Spindle Liner	Spindle crs
FPLDG-0001	13.26 coarse	57.5mm	M12-16mm	95mm	70mm 85.6mm


Use 10095100 Weather caps



BCI

ZD2733 or TC180-24C  
motor to suit  
See pages 58

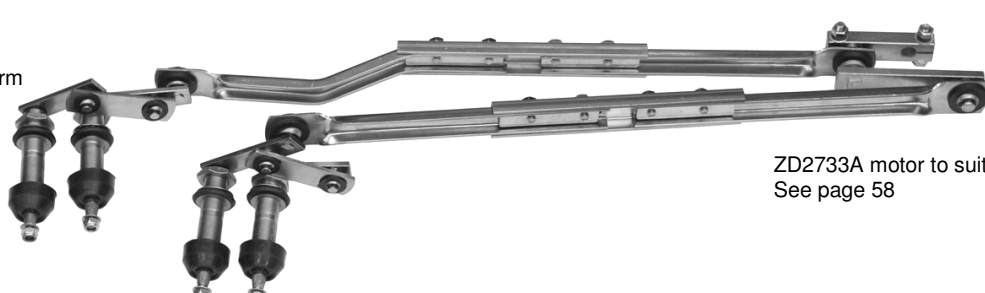
Part No.	Motor Shaft	Crank cr	Spindle Taper	Spindle Liner	Spindle crs
FPLDG-0002	15.3 coarse	57.5mm	M12-16mm	100mm	72mm 92mm



ZD2733 or TC180-24C  
motor to suit  
See pages 58

Part No.	Motor Shaft	Crank crs	Spindle taper	Spindle Liners	Spindle crs
FPLDG-0003R	15.3 coarse	58 x 116	M8-12mm	110, 100mm	119mm
FPLDG-0003S	15.3 coarse	58 x 116	M12-16mm	115, 100mm	119mm

Use with Hepworth pantograph arm P153-28TJ - page 20



ZD2733A motor to suit  
See page 58

Part No.	Motor Shaft	Crank crs	Spindle taper	Spindle Liner	Spindle crs
FPLDG-0003	13.26 coarse	48.5 x 97	M8-12mm	90mm	73mm

# TRU VISION LINKAGE SYSTEMS


**Crank**  
inner



Kiwi  
Scania

Part No.	Shaft	cr
TC189472	13.26	43
TC CRANK		75

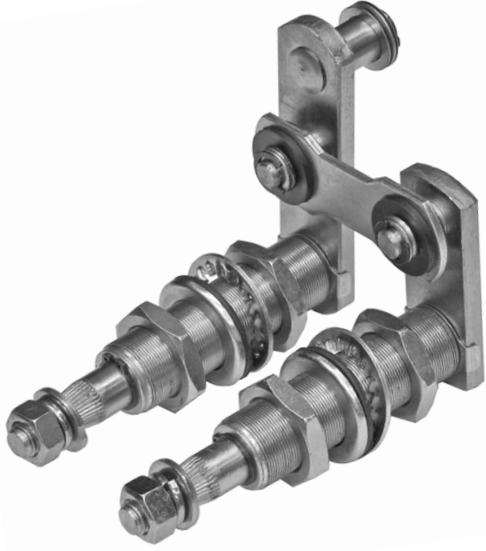
**B / Pedal Crank**  
outer



Kiwi  
Scania


Part No.	Shaft	Ball	crs
TC189117	13.26mm	16mm Dia	86
TC189118			97

**Spindle Drive Assembly**  
Kiwi



Part No.	Shafts	Liner	Pin	Pivot cr
TC456-60-90	M12-16mm	85	16mm	83

**B / Pedal Crank**  
Kiwi




Part No.	Shaft	Pin	Pivot cr
TC459-44.5-89	13.26	16mm	44.5x89
TC459-47.5-95			47.5x95
TC459-53.4-106.8			53.4x106.8



Adapts from straight shaft to Std 13.6mm Drum spline

Part No.	Spline	Fit Spindle
TV99	13.6mm	6.4mm

**Knurled Driver**



Part No.	Spline	Fits
TC324	14.5-17.5mm	Flatted Shaft
407-1002	15-18mm	Flatted Shaft

**Knurled Driver**

Adapts from straight shaft to Std 13.6mm Drum spline



Part No.	Spline	Fits
TC465	13.6mm straight	6, 8mm shaft
TV466	13.6mm	6, 8mm shaft

# TRU VISION LINKAGE SYSTEMS

## Spindle Drive Assembly

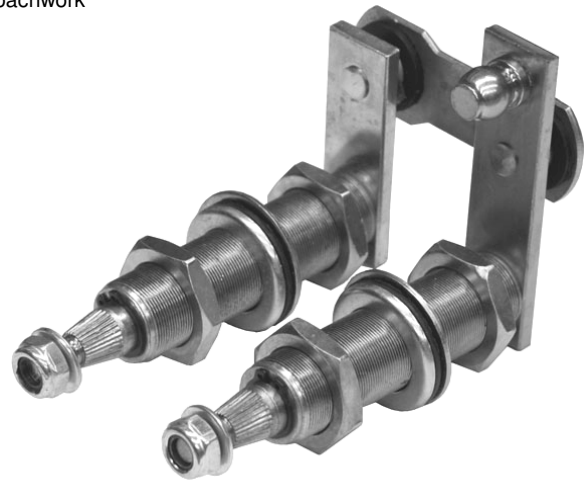
Colt



Part No.	Shafts	Liner	Ball	Pivot cr
TC456-60-89.6	12 DIN	95	14.4mm	89.6
TC456-60-102.8				102.8

## Spindle Drive Assembly

Coachwork



Part No.	Shafts	Liner	Ball	Pivot cr
TC107313	16 DIN	90	16mm	71.3

## Spindle Drive

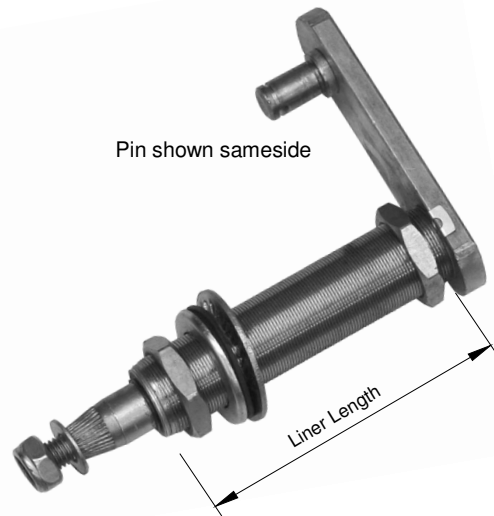
Coachwork



Part No.	Shaft	Liner	Pin	Pivot cr
TV102666	12 DIN	130	10mm	65.5

## Spindle Drive

Pin shown sameside



Part No.	Shaft	Liner	Pin	Pivot cr		
TC610800	16 DIN	108	12mm sameside	66		
TC620800				85.6		
TCK-NS				68		
TCK-OS				90		
TCEX85.6	12-16 Taper	100	12.7mm opposite	85.6		
TCEX68.2				68.2		
TV78000	16DIN			100	12.7mm opposite	73.7
TV78001						73.7

## Spindle Idler

Coachwork



Part No.	Shaft	Liner
TV102665	12 DIN	100mm

# TRU VISION LINKAGE SYSTEMS

Coachwork



Part No.	Length cr-cr	Ball
TC107317	583mm	16mm Dia closed / closed
TC107318		16mm Dia open / closed

Kiwi



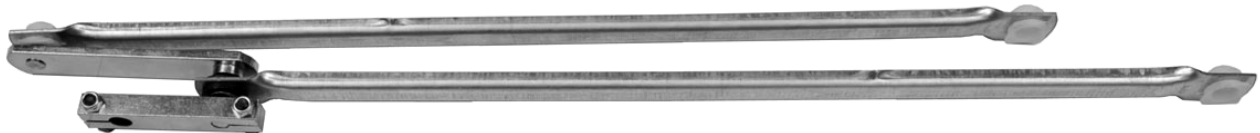
Part No.	Length cr-cr	Pin
TC458-510	510mm	16mm
TC458-525	525mm	

Kiwi



Part No.	Motor Shaft	Crank crs	Link rod lengths	Pin
TCK-750LINK	13.2 Fine	55.4	530, 585, 600mm	12mm

Colt



Part No.	Motor Shaft	Crank crs	Link rod lengths xxx cr-cr	Ball
TC75366-xxx	11.8mm	51.4 x 102.8	525, 550, 635mm	14.4mm Dia

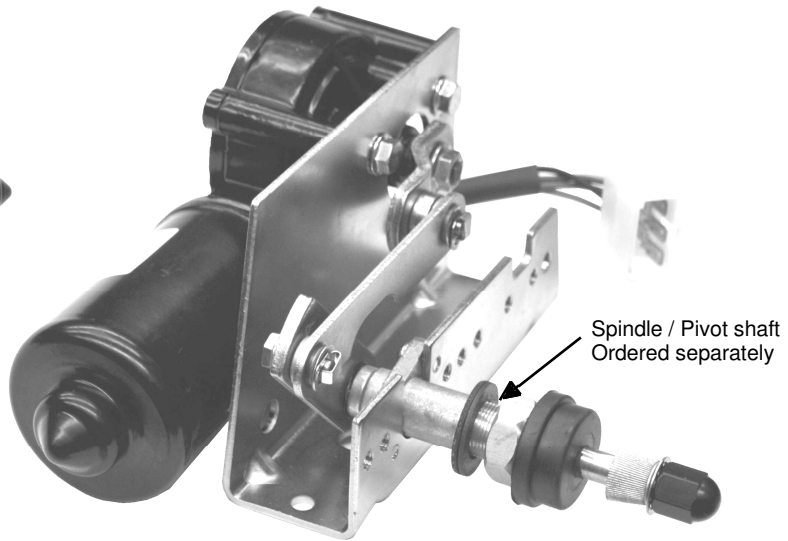
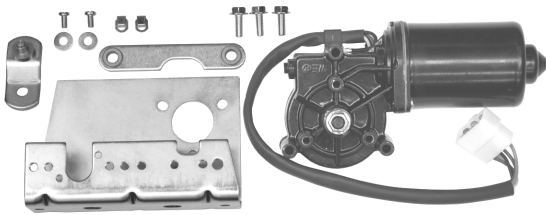
Brumby



Part No.	Motor Shaft	Crank crs	Link rod length cr-cr	Pin
TV75663	15.8mm	51.5 x 103	770mm	12mm

# TRU VISION 35Nm WIPER SYSTEMS

**Motor kit**  
Includes bracket, crank, & link



See pages 15 & 18  
For arms to suit  
TC380 & 301 series

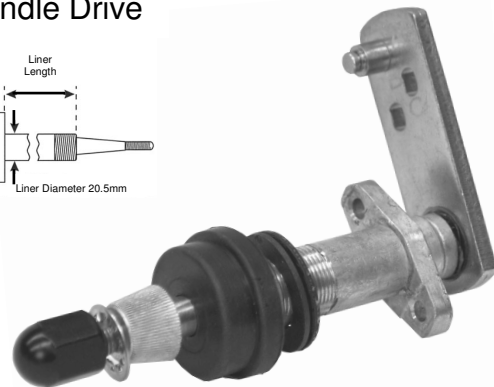
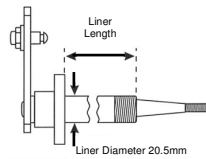
Part No.	Voltage	Speeds	Dynamic Park	Nm (starting)	Degree
230-2014	24v	2 + park	Yes (5 wire)	35	68, 85, 93, 108, 127
230-2015	12v				

**Crank**



Part No.	Angles	Drive
308-1051	68, 85, 108	Single
308-1052	93, 127	
308-1059	68, 85, 108	Dual
308-1063	93, 127	
308-1005	10-80 adjustable	Single

**Spindle Drive**



Part No.	Shaft	Pin	Liner	Pivot cr
304-1201	Knurled Driver	7.9mm	25	33, 40, 48,
304-1202			32	
304-1203			51	
304-1206			76	

**Link Rod**



Part No.	Length cr-cr
307-1022	86mm
307-1083	Adjustable 550-600mm

**Pantograph Plate**



Part No.	cr-cr	Shaft
305.1002	32	M6

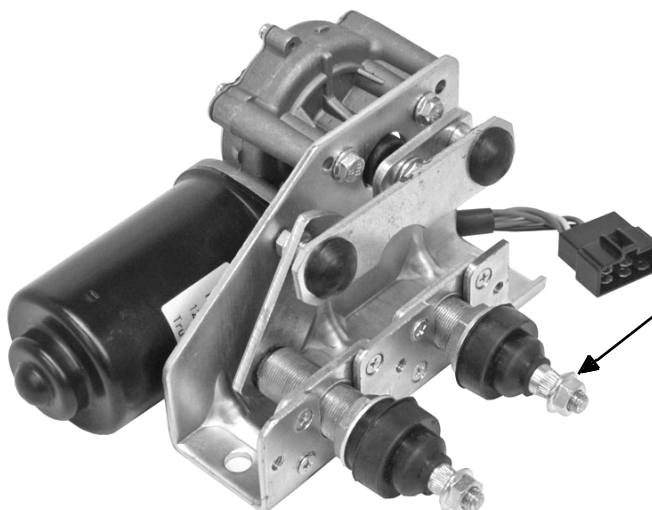


# TRU VISION 35Nm WIPER SYSTEMS

Motor only



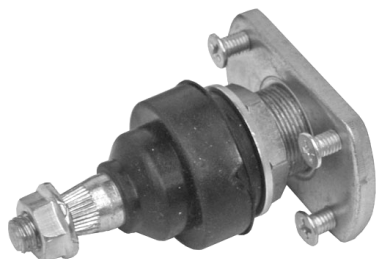
See pages 18  
For arms to suit  
ZD1530-P series



Spindle / Pivot shafts,  
Crank with link,  
And Bracket  
Ordered separately

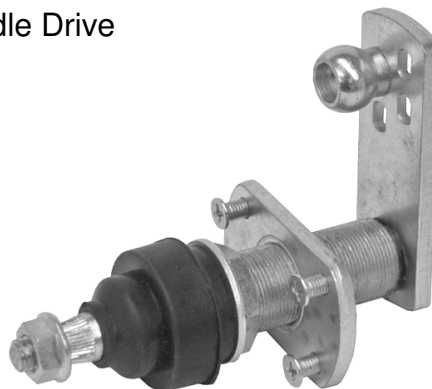
Part No.	Voltage	Speeds	Dynamic Park	Nm (starting)	Degree
TV5200	24v	2 + park	Yes (5 wire)	35	65, 72, 80, 100
TV5100	12v				

Spindle Idler



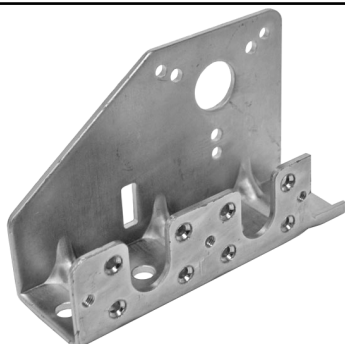
Part No.	Shaft	L1	L2
TV5401	12DIN	25mm	12mm
TV5402		32mm	20mm
TV5403		50mm	35mm
TV5404		75mm	60mm

Spindle Drive



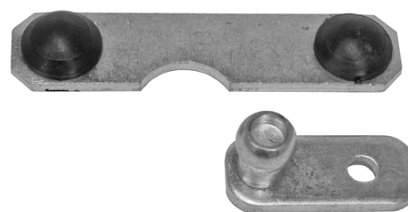
Part No.	Shaft	Ball	L1	Pivot cr
TV5301	12DIN	16mm	25mm	35, 42, 47, 53,
TV5302			32mm	
TV5303			50mm	
TV5304			75mm	

Bracket



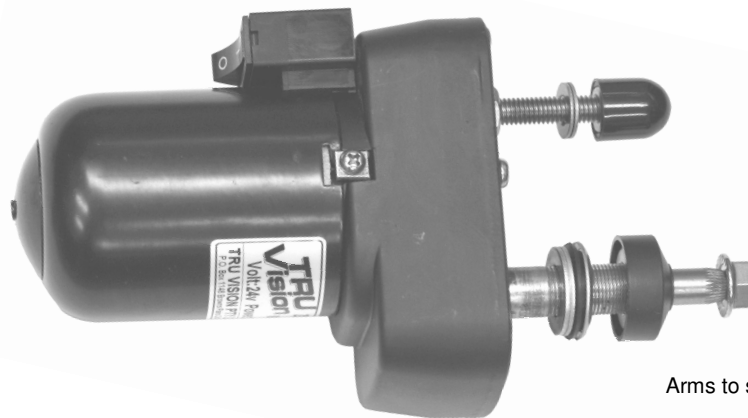
Part No.	Spindle cr-cr
TV5210	60mm

Crank & link



Part No.	cr	Ball	Shaft
TV5220	28	16mm	M8-10 taper

# TRU VISION 9NM WIPER MOTORS



Arms to suit see page 16

Part No.	Voltage	Degree	L1	L2	Switch	Speed	Spindle taper	Spindle crs
ZD1230B-12V-60-48	12V	60	20mm	8mm	Built on	1	M8-10mm	50mm
ZD1230B-12V-60-68			40mm	28mm				
ZD1230B-12V-90-48		90	20mm	8mm				
ZD1230B-12V-90-68			40mm	28mm				
ZD2230B-24V-60-48	24V	60	20mm	8mm				
ZD2230B-24V-60-68			40mm	28mm				
ZD2230B-24V-90-48		90	20mm	8mm				
ZD2230B-24V-90-68			40mm	28mm				



Arms to suit see page 16

Part No.	Voltage	Degree	L1	L2	Switch	Speed	Spindle taper	Spindle crs
ZD1230BA-12V-60-48	12V	60	20mm	8mm	Remote supplied	2 + park	M8-10mm	50mm
ZD1230BA-12V-60-68			40mm	28mm				
ZD1230BA-12V-90-48		90	20mm	8mm				
ZD1230BA-12V-90-68			40mm	28mm				
ZD2230BA-24V-60-48	24V	60	20mm	8mm				
ZD2230BA-24V-60-68			40mm	28mm				
ZD2230BA-24V-90-48		90	20mm	8mm				
ZD2230BA-24V-90-68			40mm	28mm				

# DOGA 10NM MOTOR

Part No.	Voltage	Degree	L1	L2	Speed	Spindle taper	Spindle crs
316.9683.3B.D4	24	160	34mm	16mm	1 + park	M8-10mm	60mm

# MITSUBA STYLE LITE MOTOR

sweep angle 110 degrees.

With automatic stopper, 2 terminal, and manual switch.

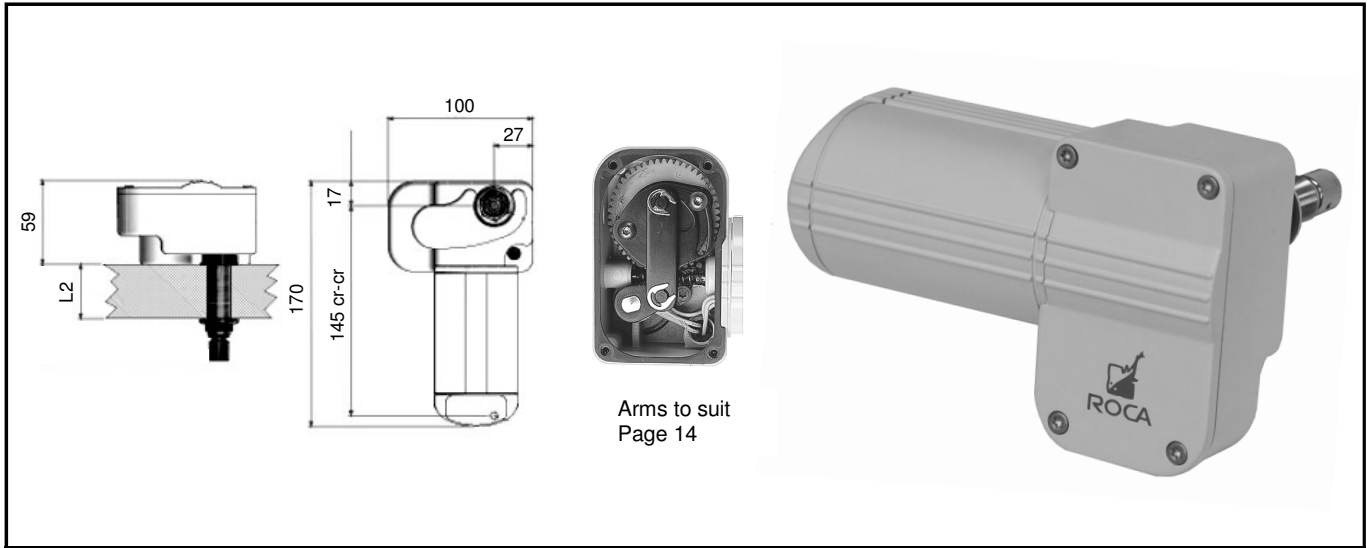
With reciprocating shaft end 6mm diameter, thread 8.8mm diameter.

Easily shortened shaft to suit thin mounting surfaces.

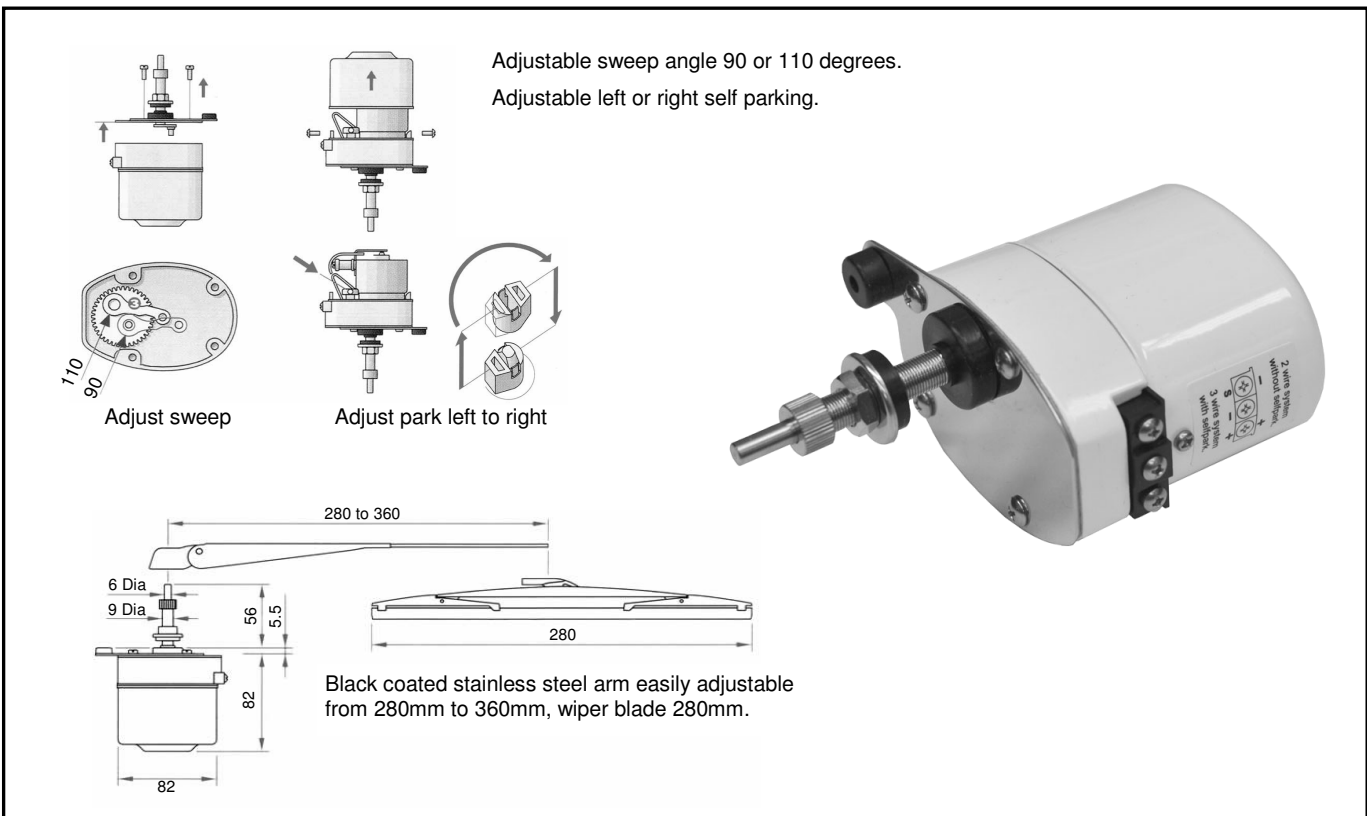
See page 3 for arm and blades to suit

Part No.	Voltage	L1	Speed	Degree of Arc
CL3010	12v	50mm	1 + park	110
CL3013	24v			
CL3012	12v	105mm		
CL3015	24v			

# ROCA SMALL MARINE 12NM WIPER MOTORS

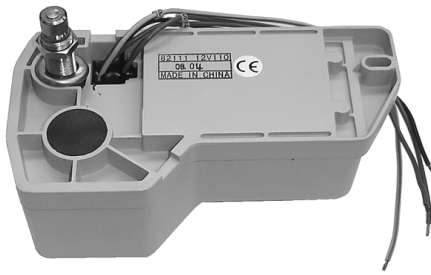


Part No.	Voltage	L1 (Thread Length)	L2 (Max bulkhead)	Speeds	Degree of Arc
533011	12v	25mm	16mm	2 + park	Preset to 45 45-110 variable
533012	24v				
533021	12v	51mm	41mm		
533022	24v				
533031	12v	76mm	66mm		
533032	24v				

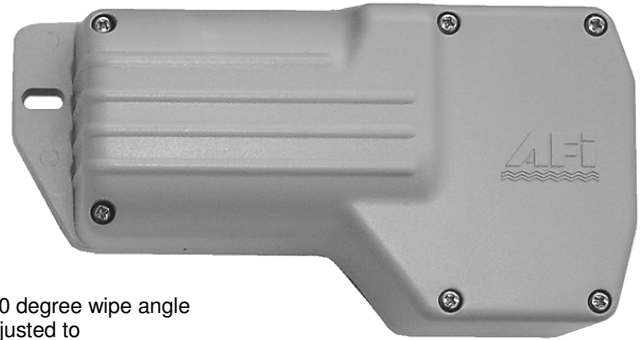


Part No.	Voltage	Arm & Blade	L1 (Thread L)	Speed	Degree Arc
521001	12v	No	42mm	1 + park	90, 110
521011		Yes			

# MARINCO AFI SMALL MARINE 12.3NM & 15.7NM WIPER MOTOR



Arms to suit  
Page 14



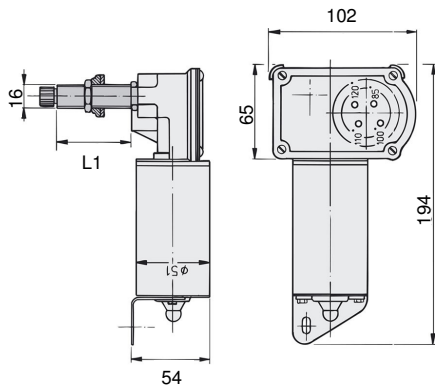
Dimensions

12.3Nm = 197 L    15.7Nm = 200 L  
 100 W            107 W  
 71 D                76 D

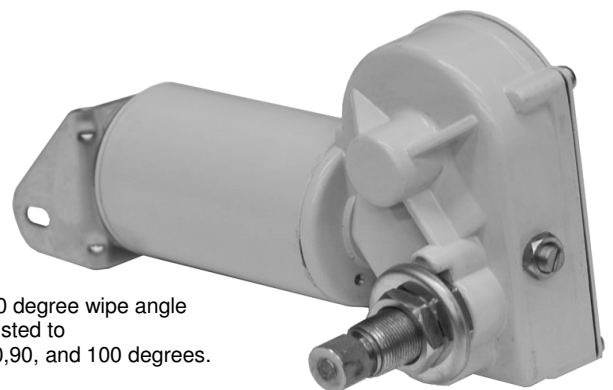
Pre set for a 80 degree wipe angle  
that can be adjusted to  
45, 60 and 110 degrees.

Part No.	Nm	Voltage	L1 (Thread Length)	L2 (Max bulkhead)	Speeds	Degree Arc
71081	12.3	12v	25mm	16mm	2 + park	45, 60, 80, 110
71082		12v				
82082	15.7	12v	51mm	41mm		
82312		24v				

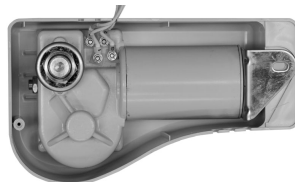
# VETUS SMALL MARINE 12NM WIPER MOTOR



Arms to suit  
Page 13



Pre set for a 110 degree wipe angle  
that can be adjusted to  
40, 50, 60, 70, 80, 90, and 100 degrees.

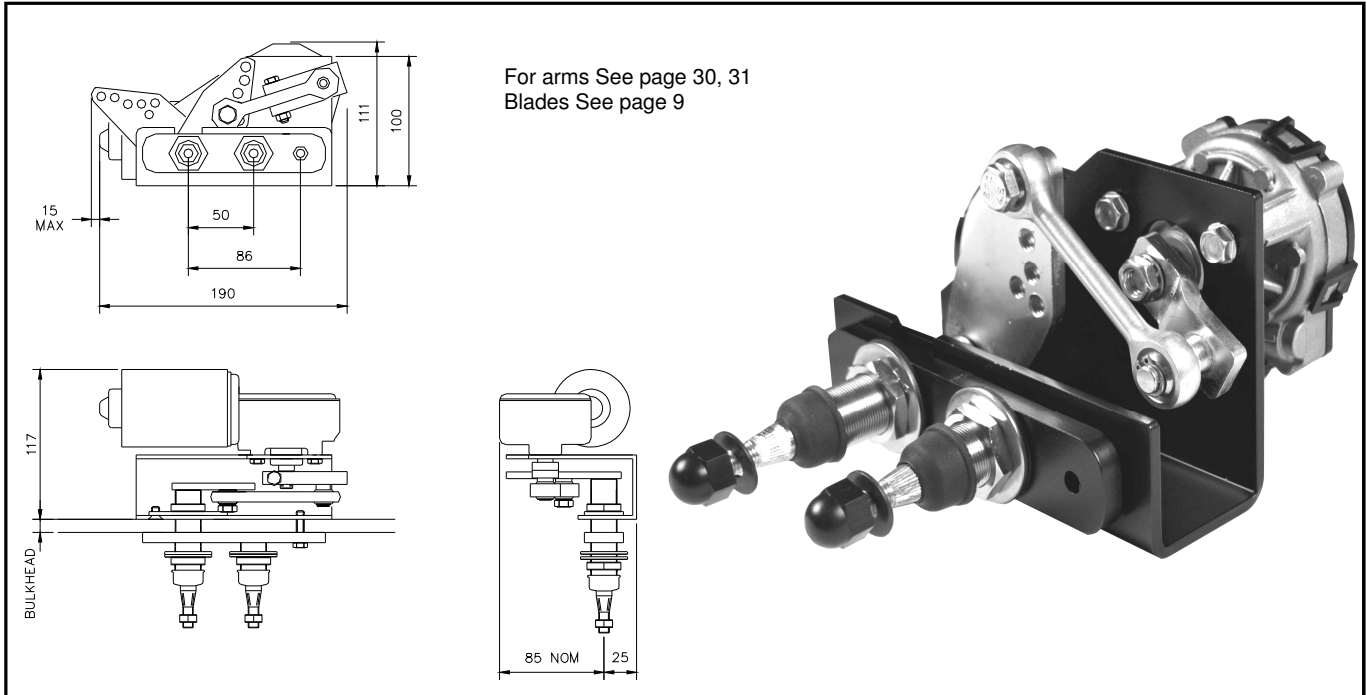


Shown without bottom plate

Installation of RWCG reduces L1 & L2 by 3mm

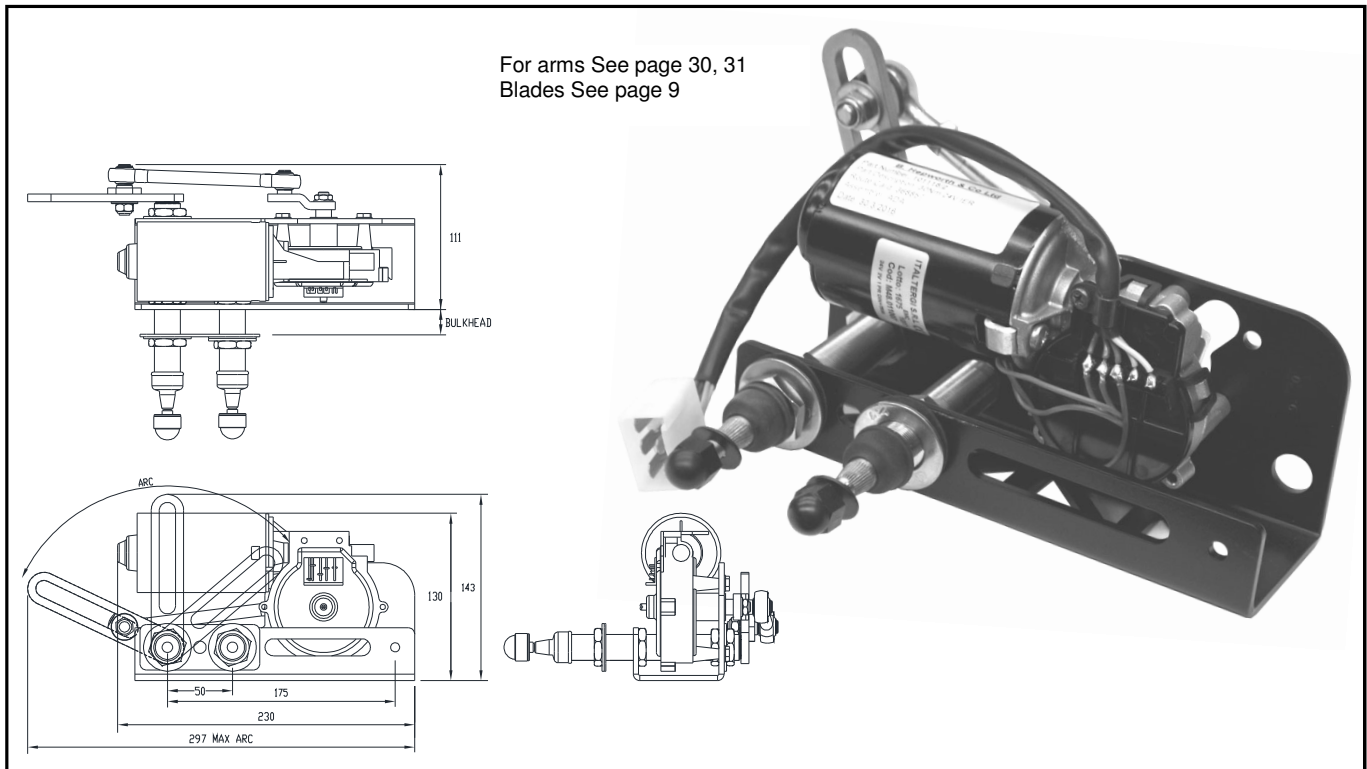
Part No.	Voltage	L1 (Thread Length)	L2 (Max bulkhead)	Speeds	Degree of Arc
RW08A	12v	25mm	16mm	2 + park	Preset to 110
RW09A	24v				
RW01A	12v	51mm	41mm		40, 50, 60, 70, 80, 90, 100, 110
RW02A	24v				

# HEPWORTH MARINE 20Nm MEDIUM DUTY WIPER MOTOR



Arms	Blades	Voltage	Speed	Degree of Arc	L2 (Max Bulkhead)
310-710mm	300-600mm	12, 24v	2 + Park	45, 50, 60, 70, 80, 90	30, 60 Pendulum 22, 52 pantograph

# HEPWORTH MARINE 30Nm MEDIUM DUTY WIPER MOTOR



Arms	Blades	Voltage	Speed	Degree of Arc	L2 (Max Bulkhead)
310-710mm	300-600mm	12, 24v	2 + Park	Variable 35-120	6, 20, 30, 55, 95mm longer special order

# HEPWORTH MARINE 50Nm HEAVY DUTY WIPER MOTOR

For arms See page 30, 31  
Blades See page 9

Arms	Blades	Voltage	Speed	Degree of Arc	L2 (Max Bulkhead)
460-990mm	300-800mm	12, 24v	2 + Park	Variable 35-120	6, 20, 30, 55, 95mm longer special order

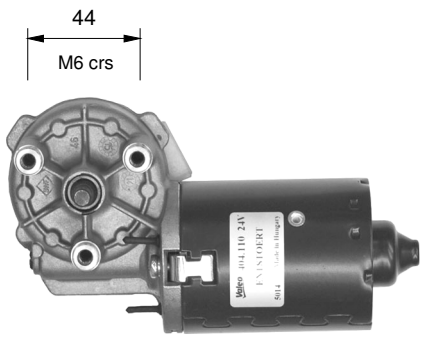
# HEPWORTH MARINE 80Nm HEAVY DUTY WIPER MOTOR

For arms See page 31  
Blades See page 9

Arms	Blades	Voltage	Speed	Degree of Arc	L2 (Max Bulkhead)
610-1525mm	300mm-1m	12, 24v	2 + Park	5 Deg steps 40-115	15, 45, 60mm longer special order

# SWF VALEO MOTORS

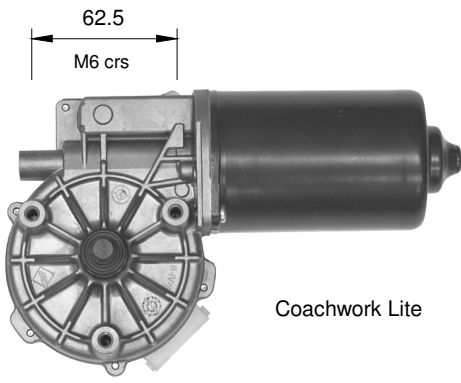
**26Nm**



44  
M6 crs

Part No.	Voltage	Shaft	Speed
404.110	24	M8-10mm taper	2
404.109	12		

**50Nm**

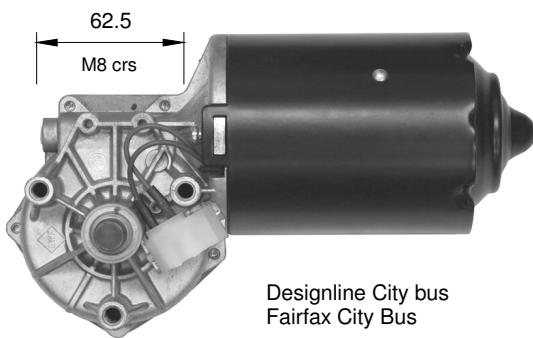


62.5  
M6 crs

Coachwork Lite

Part No.	Voltage	Shaft	Speed
403.873	24	9.3mm	2
403.872	12		

**65Nm**

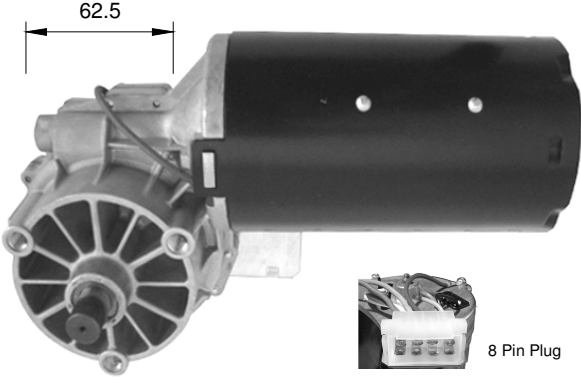


62.5  
M8 crs

Designline City bus  
Fairfax City Bus

Part No.	Voltage	Shaft	Speed
403.195	24	13.26mm	2

**120Nm**




62.5

8 Pin Plug

Part No.	Voltage	Shaft	Speed
403.809	24	15.8mm	2

**26Nm**



Replacement motor only  
Use  
404.110 24v  
404.109 12v

Park viewed from outside

Part No.	Park	Voltage	Shafts	L1 Thread	L2	Degree	Speed
110.350 / 107.862	LH	24	M8-12mm	75mm	60mm	75	2
110.348 / 107.854	RH		M8-10mm				



# BOSCH — HEPWORTH MOTORS

**30Nm** Replace Bosch No.  
0 390 241 338

Part No.	Voltage	Shaft	Speed	IER
65008800	12	9.3mm	2	Yes

**30Nm** suit Kenworth Replace Bosch No.  
0 390 246 319 12v  
0 390 242.060 24v

Part No.	Voltage	Shaft	Speed	IER
101208/1	12	M8-10 taper	2	No
65008900	24			Yes

**50Nm** Replace Bosch No.  
0 390 441 400 12v

Part No.	Voltage	Shaft	Speed	IER
65008500	12	10-12 taper	2	Yes

**50Nm** Replace Bosch No.  
0 390 242 400 24v

Part No.	Voltage	Shaft	Speed	IER
100865/1	24	9.3mm	2	No
65008600				Yes

**110Nm** Bosch 0 986 337 451

ADL E200

Part No.	Voltage	Shaft	Speed	IER
100726/1	24	15.8mm	2	No
100726/2				Yes

**80Nm** Bosch 0 986 337 401  
Replaces Bosch  
0 390 442 401

ADL E500

Part No.	Voltage	Shaft	Speed	IER
101149/1	24	13.26mm	2	No
100712/2				Yes
100714/2	12			

# TRU VISION / MAOYI & FIEPENG MOTORS

**30Nm**

Part No.	Voltage	Shaft	Spd
TV5200	24	M8-10mm tapered	2
TV5100	12		

**65Nm**

Part No.	Voltage	Shaft	Speed
TC325T Replaces # 53787402	24	11.8mm	2

**150W**

Part No.	Voltage	Shaft	Speed
TC150-12	12	13.2mm	2
TC150-24	24	13.2mm	2

**180W**

Part No.	Voltage	Shaft	Speed
TC180-24C Replaces # ZD2733	24	15.3mm coarse	2
TC180-16 Replaces # ZD2838		15.8mm fine	2

**125W**

Part No.	Voltage	Shaft	Speed
ZD2733A	24	13.26mm coarse	2

**150W**

Part No.	Voltage	Shaft	Speed
ZD2733	24	15.3mm coarse	2

# DOGA & TRANSWIPERS / SG MOTORS

130Nm

Part No. Voltage Shaft Speed

259.3705.3B.00	24	13.26mm	2
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130Nm

BCI single & double Deck 13.26  
ADL E200 MMC XLB 15.8

Part No. Voltage Shaft Speed

259.2708.3B.00	24	13.26	2
259.2728.3B.00		15.8	

50Nm

Part No. Voltage Shaft Speed

319.3723.3B.00	24	9.3mm	2
319.3723.2B.00	12		

110Nm

Part No. Voltage Shaft Speed

93756022	24	13.26mm	2
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80Nm

Bosch 0 986 337 401  
Replaces Bosch 0 390 442 401

ADL E500

Part No. Voltage Shaft Speed

78100020	24	13.26mm	2
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110Nm 150W

ADL E200

Part No. Voltage Shaft Speed

7820801F01	24	15.8mm	2
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# WASH BOTTLES & PUMPS



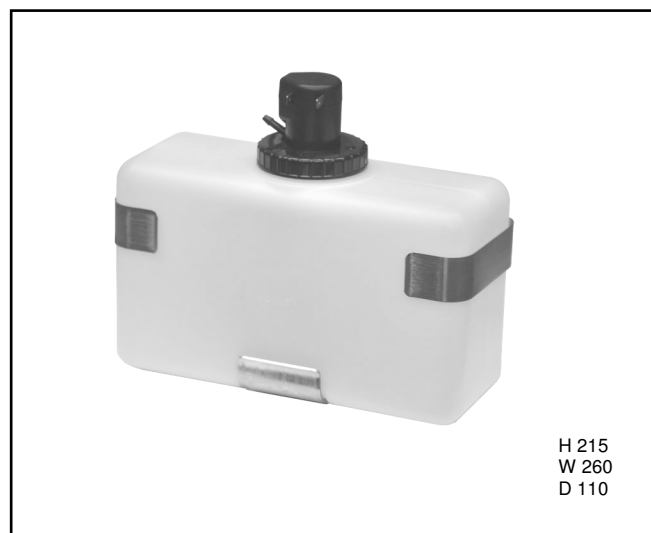
Part No.	Voltage	Litres
W5000	12	1.7
W515	24	



Part No.	Voltage	Litres
W501	12	1.45
W514	24	



Part No.	Voltage	Litres
531161	12	2.5



Part No.	Voltage	No. pumps	Litres
103.765	24	1	3.2



Part No.	Voltage	No. pumps	Litres
15057400	12	1	5
15057500	24		
15057600	12	2	
15057700	24		



Part No.	Length
230.5169.39.00	750 O/A
230.5170.39.C0	950 O/A

# WASH BOTTLES & PUMPS


Complete with tubing, wiring pigtail, T piece, Jets, switch, mounting bracket



H 285  
W 208


Part No.	Voltage	litre
EWP16	12	1.0

Complete with tubing, wiring pigtail, T piece, Jets, switch, mounting bracket



H 180  
W 138  
D 78


Part No.	Voltage	litre
1.2LTR	12	1.2



H 170  
W 260  
D 110

Part No.	Voltage	No. pumps	litre
FPWYG-L	24	1	3.5


Replacement cap TCWC-4L



H 170  
W 260  
D 110


Part No.	Voltage	No. pumps	litre
TCXD-4-12	12	1	3.5
TCXD-4-24	24		

Replacement pump Part # 15029900



H 310  
W 300  
D 160

Part No.	Voltage	No. pumps	litre
6845000N242	24	2	8

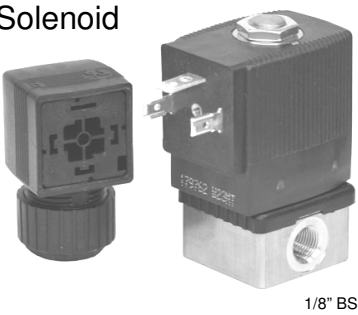


H 302  
W 330  
D 125

Part No.	Voltage	No. pumps	litre
238.1001.30.00	24	1	8
238.2001.30.00		2	

# WASH PUMPS MOTORS

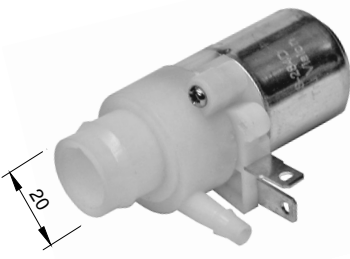
**Solenoid**



1/8" BSP

Part No.	Voltage	Bar
433839	12	0-10
134237	24	


Suit Kenworth KW600228S



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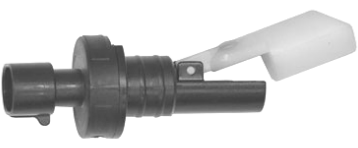
Part No.	Voltage	Tube
TV284D	12	3mm

Replaces VDO  
246075015001 12v gear driven  
246075010001 24v gear driven




Part No.	Voltage	Tube
TV010-001-12	12	4mm
TV010-001-24	24	

Fits bottles  
15057400  
15057500  
15057600  
15057700




Part No.	Voltage
100.5061.39.C0	12, 24


Fits bottles  
TCXD-4-12  
TCXD-4-24



Part No.	Voltage	Tube
TCWP-12	12	3mm
TCWP-24	24	



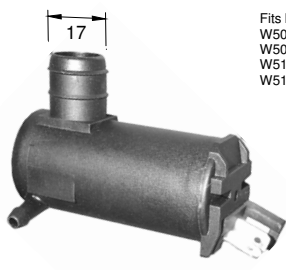
Part No.	Voltage	Tube
15029900	24	3mm
15029800	12	



17

Part No.	Voltage	Tube
EWP25	24	3mm

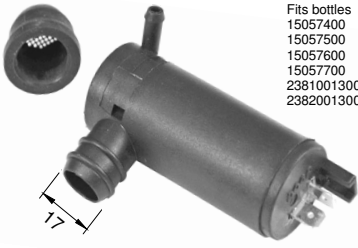
Fits bottles  
W5000  
W5010  
W514  
W515



17


Part No.	Voltage	Tube
CL508M12V	12	3mm
CL508N24V	24	

Fits bottles  
15057400  
15057500  
15057600  
15057700  
23810013000  
23820013000




17

Part No.	Voltage	Tube
201.0002.20.00	12	3mm
201.0002.30.00	24	



Part No.	Voltage	Tube
CL209M	12	3mm
CL209N	24	




Part No.	Voltage	Tube
EWP14	24	3mm
EWP13	12	3mm



Part No.	Voltage	Tube
TC109905-24V	24	3mm

# WASH TUBE CONNECTORS

**Connector Brass**




Part No.	Thickness
TBF03	6mm
TBF02	27mm
TBF01	42mm

**Connector**




Part No.	Thickness
60250401	6mm
60250402	27mm
60250403	42mm
60250405	82mm

**Connector**




Part No.	Thickness
TCEC-01	5mm
TCEC-02	12mm
TCEC-03	42mm

**Straight Connector**




Part No.	Tube
12937	3mm

**Tee Connector**




Part No.	Tube
15000500	3mm

**1 Way Valve**




Part No.	Tube
15001400	3mm

**Tube Clip**



Part No.	Fit
192.584	12 x 4 Flat Bar

**Y Connector**




Part No.	Tube
TVP-03	3mm in, 2mm out

**Tail Barb**



Part No.	Thread	Tube
2090302	1/8" BSP	3mm

**Tube**




Per meter  
Up to 50m  
lengths

Part No.	Tube ID
80200400	3mm
80200500	4mm

# WASH JETS ARM FIT

**Twin Jet**



Part No.	Fit
15030600	Pivot Head

**Twin Jet**



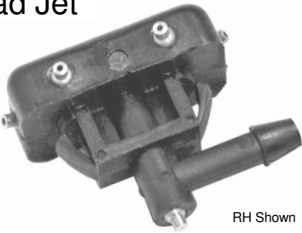
Part No.	Fit
80201001	Channel

**Twin Jet**



Part No.	Fit
80200100	Bracket

**Quad Jet**



RH Shown

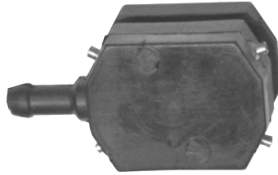
Part No.	Fit
1464443	20 x 8 slot RH
1464444	20 x 8 slot LH

**Six Jet**



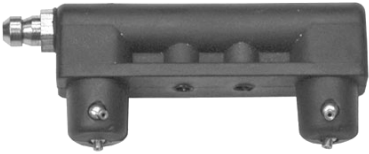
Part No.	Fit
14202206	15 x 6 Flat Bar

**Quad Jet**



Part No.	Fit
TCJET	15 x 6 Flat Bar

**Six Jet**




Part No.	Fit
TCJET881	Pivot Head

**Six Jet**



Part No.	Fit
14206037	16 x 5 Bar

**Triple Jet**



Part No.	Fit
120.5107.39.C0	10 x 4 Bar

**Triple Jet**



Part No.	Fit
120.5005.39.00	Left Head
120.5025.39.00	Right Head

**Triple Jet**



Part No.	Fit
TCWJ-01	Left Head
TCWJ-02	Right Head

**Triple Jet**

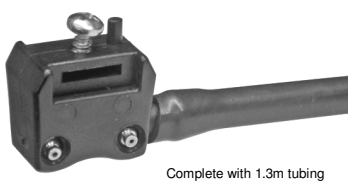


Part No.	Fit
TCJET777	12 x 4 Flat Bar



# WASH JETS ARM FIT

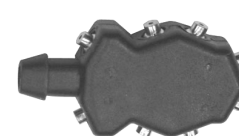
Quad Jet



Complete with 1.3m tubing


Part No.	Fit
TV75400	9 x 1.5

Octo Jet




Part No.	Fit
14206009	Stick on

Octo Jet



Part No.	Fit
1443161	22 x 9 oval hole

Twin Jet



Complete with 1m tubing

Part No.	Fit
531157	9 x 3 Flat Bar

# BULKHEAD FIT

Twin Jet Tall



Up to 26mm bulkhead thickness


Part No.	Fit
100.5035.39.C0	M8 Hole

Twin Jet



Part No.	Fit
121.5005.39.C0	M8 Hole

Twin Jet




Part No.	Fit
WP7	M8 Hole

Single Jet




Part No.	Thread	Finish
WP10	M6	Chrome

Twin Jet



Part No.	Thread	Finish
WP11	M8	Chrome

Twin Jet



Part No.	Thread	Finish
WP12	M8	Chrome

# CONTROL SWITCHES AND ACCESSORIES

OFF / PARK, INTERMITTENT, LOW, HIGH

Negative ground only

Push—to—wash  
(one to three wipes after the knob is released)

Die cast case 56.4mm square, 46mm long.

Mounting stem 11.4mm long.

## Heavy Duty Wiper Switches

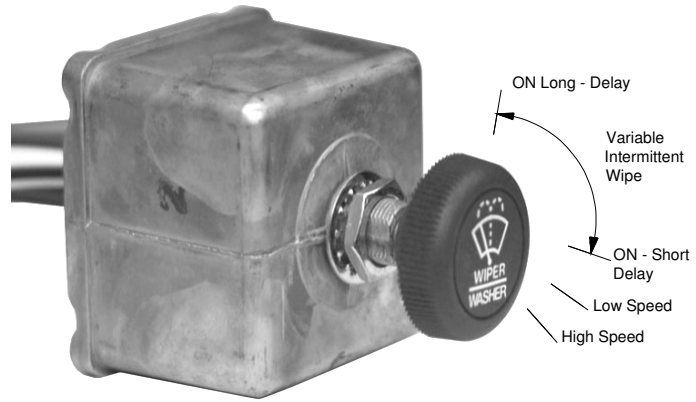
Dynamic park, single motor control



Face plate  
10095400



Additional relay  
1016662430 for 24v 30Nm  
1016662450 for 24v 50Nm



Part No.	Voltage	Intermittents	Wash	Speeds	Face Plate
75600-04	12	Variable	Wash Wipe	2	No
75602-04	24				Yes
90087010					Yes

## Heavy Duty Wiper Switches

Non Dynamic park, single motor control



OFF / PARK, LOW, HIGH

Push-to-Wash™ to actuate washer pump

Plated steel case  
35mm dia 10mm long.

Mounting stem 10mm long.

## Heavy Duty Wiper Switch

Dynamic park, single motor control



OFF / PARK, LOW, HIGH

Push-to-Wash™ to actuate washer pump

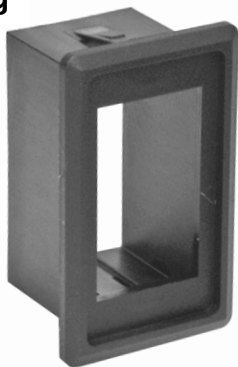
Die cast case  
41mm dia 22mm long.

Mounting stem 11mm long.

Part No.	Voltage	Wash	Speeds
75221-09	12, 24	Yes	2

Part No.	Voltage	Wash	Speeds
75228-03	12, 24	Yes	2

## Switch Housing



Part No.	Hole size
32-143	27 x 50mm

## Lite Duty Wiper Switch

Non Dynamic park, single motor control



Part No.	Voltage	Wash	Speeds
466208WP	12, 24	No	2

# INTELLIGENT SWITCHES AND ACCESSORIES

## Multi-Function Wiper Switch

Non Dynamic park, and Dynamic park, single motor control



- OFF / PARK, INTERMITTENT, LOW, HIGH
- Negative ground only
- Size compatible with standard switches
- Synchronised motors

For larger motors with Dynamic park use CT41-P & CT42-P supplied with relay

Part No.	Voltage	Wash	Intermittents	Speeds	mtrs
CT41DBHITA	12, 24	Wash Wipe	1	2	1
CT42DBHITA					2
CT41DBHXXA			3		1
CT42PBHXSC					2

## Multi-Function Wiper Switch

Dynamic park, larger single motor control



Part No.	Voltage	Wash	Intermittents	Speeds	mtrs
CT41-P	12, 24	Wash Wipe	3	2	1

## Multi-Function Wiper Switch

Dynamic park, larger two motor control



- OFF / PARK, INTERMITTENT, LOW, HIGH
- Negative ground only
- Size compatible with standard switches
- Synchronised motors

Part No.	Voltage	Wash	Intermittents	Speeds	mtrs
CT42-P	12, 24	Wash Wipe	3	2	2

# INTELLIGENT SWITCH CONTROL PANEL

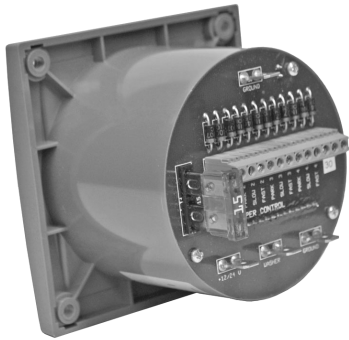
One continuous speed, self parking, three step intermittent, and wash / wipe.

Wipers can be switched in two groups.  
Group 1 and Group 2.  
These groups can be controlled individually and also together.

In intermittent mode all wipers run synchronised.

Size 90mm x 90mm

Mounting Hole Dia 76mm



## Multi-Function Wiper Control Non Dynamic park, 4 wire motor.



Part No.	Voltage	Wash	Intermittents	Speeds	mtrs
210604	12, 24	Wash Wipe	3	2	Up to 4

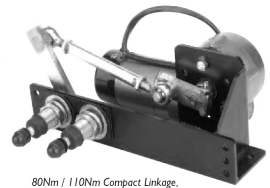
# HEPWORTH RAIL



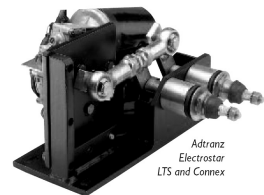
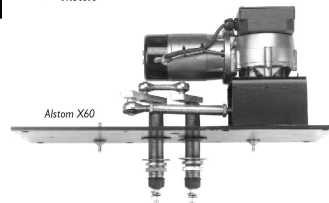
### SYSTEMS

The wiper system is designed for each customer's specific requirements to give maximum effective swept area, utilising the best combination of components from the following ranges:

- > Linkage systems and assemblies
- > Suppressed systems
- > Wash equipment
- > Blades & Arms
- > Custom built systems
- > Motors



80Nm / 110Nm Compact Linkage, similar to that used across many of the projects detailed in the table overleaf.



Nedtrain Plug-and-Play System

- Linkage systems
- Suppressed systems
- Custom built systems
  
- Motors
- Arms
- Blades
- Wash equipment
  
- Diesel Multiple Units
- Metros
- Trams





# INSTALLATION

This Catalogue has been made with updated information at the time of printing. Due to the consistent evolution and development of our products, we reserve the right to modify the product and this catalogue without notice. If you have any questions about our products, please contact us.

## **General**

As we have no influence on the installation of complete windscreen wiper systems, we are unable to accept liability for installation errors.

The composition and installation of freely selected wiper systems lie within the sole responsibility of the customer. We are therefore unable to accept liability.

## **Caution!**

Most wiper systems have a park setting, which permits them to operate in the parked position if connected to the vessels electrical system, even if the wiper is switched off. For this reason, at this point in time, neither may the wiper arm be mounted, nor may any person have hands, fingers etc anywhere near the wiper system. Even small wiper systems can neither be braked nor stopped by hand.

## **Never reach into the area of the rod linkage when the system is running!**

When putting into service (ie. when connecting the wiper motor to the vessels electrical system, even if the wiper switch is in the 0 position), never leave any loose items such as screwdrivers in the area of the wiper system, as flying objects could lead to injury.

## **Installation**

When planning a system, make sure there are no obstructing elements (such as water tanks, ventilation pipes, blowers, etc.) located where you wish to install the linkage rods, motor, spindles.

The wiper spindles must be fixed to the cab wall ensuring sufficient rigidity at the mounting point. If necessary, the cab wall may require appropriate reinforcement. Do not fasten the nuts too tightly as otherwise the wiper shaft will bind and overload the motor.

The surfaces formed by the motor crank and the spindle drive lever must be on a level. However a deviation of 6 percent is permissible

Mount wiper arms in the hinged-up position.

## **Wash Systems**

Outside the cab, only rubber hoses and never PVC hoses to be used. PVC hoses quickly become hard and brittle under UV rays in sunlight.

Rubber hose must be protected using grommets from the effects of sharp elements, use connectors to join through the cab body.

In the feeder hose to the nozzle, always use a non-return valve! This prevents the feeder hose being drained during travel and having to fill again before water will spray when actuated.



For further information and pricing please feel free to contact **Rob Schrickel** via the contact details below:

**Contact:** Rob Schrickel  
**Address:** 2 L Edinburgh St  
Penrose  
Auckland, 1061  
**Phone:** 0221 405 347  
09 600 1423  
**Email:** [rob@wipersystems.co.nz](mailto:rob@wipersystems.co.nz)

[www.wipersystems.co.nz](http://www.wipersystems.co.nz)