# 2024

# Product Catalogue

# **Rod End Supplies**

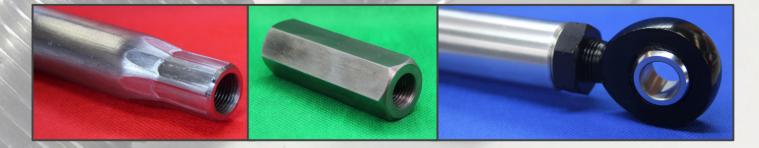
# **Custom Linkage Solutions**

# More

From our fully equipt machine shop we make custom length suspension, steering, brake arms, linkages, and adaptation tubes tapped to take the specified rod end. Give us a call to discuss your requirements.

Material available:

- Hollow 7075 T6 aluminium tube
- Seamless 1020 carbon steel tube
- Aluminum hex
- Carbon steel hex



Phone - 027 243 0675

SuspensionDevelopments.co.nz Suspensiondevelopments@gmail.com 5 Maraeroa Road, Mamaku, Rotorua 3020

#### **Chromoly Imperial - Two Piece**

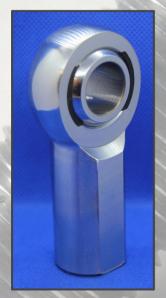
Body Material: 4130 Chromoly Protective coating: Chrome plated Lining: Nylon/PTFE - self lubricating Threads: Rolled threads on male Ball: 52100 steel, heat treated and hard chrome plated

#### Male

Part # Left Hand	Part # Right Hand	Eye	Thread	Misalignment Angle +/-	Ball Width
XML 3	XMR 3	3/16	3/16	13	0.3120
XML 4	XMR 4	1/4	1/4	15	0.3750
XML 4-5	XMR 4-5	1/4	5/16	13	0.3750
XML 5	XMR 5	5/16	5/16	14	0.4370
XML 5-6	XMR 5-6	5/16	3/8	12	0.4370
XML 6	XMR 6	3/8	3/8	12	0.5000
XML 6-7	XMR 6-7	3/8	7/16	10	0.5000
XML 7	XMR 7	7/16	7/16	14	0.5620
XML 7-8	XMR 7-8	7/16	1/2	12	0.5620
XML 8	XMR 8	1/2	1/2	12	0.6250
XML 8-10	XMR 8-10	1/2	5/8	10	0.6250
XML 8-12	XMR 8-12	1/2	3/4	13	0.7500
XML 10	XMR 10	5/8	5/8	15	0.7500
XML 10-12	XMR 10-12	5/8	3/4	13	0.7500
XML 12	XMR 12	3/4	3/4	14	0.8750
XML 12-14	XMR 12-14	3/4	7/8	13	0.8750
XML 14	XMR 14	7/8	7/8	8	0.8750
XML 16	XMR 16	1	1	17	1.3750
XML 16-20	XMR 16-20	1	1 1/4	13	1.3750
N/A	XMR 10-12 Long Shaft	5/8	3/4	13	0.7500
XML 10-8 HM *	XMR 10-8 HM *	1/2	5/8	21	0.7500
XML 12-10 HM *	XMR 12-10 HM *	5/8	3/4	19	0.8750



\* must be used with spacers



#### Female

Part # Left Hand	Part # Right Hand	Eye	Thread	Misalignment Angle +/-	Ball Width
N/A	XFR 4	1/4	1/4	16	0.3750
N/A	XFR 5	5/16	5/16	14	0.4370
N/A	XFR 6	3/8	3/8	12	0.5000
N/A	XFR 7	7/16	7/16	14	0.5620
XFL 8	XFR 8	1/2	1/2	12	0.6250
N/A	XFR 8-10	1/2	5/8	10	0.6250
N/A	XFR 10	5/8	5/8	16	0.7500
N/A	XFR 10-12	5/8	3/4	13	0.7500
XFL12	XFR 12	3/4	3/4	14	0.8750

#### **Chromoly Metric - Two Piece**

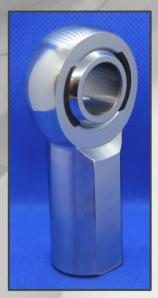


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Part # Left Hand	Part # Right Hand	Part # Right Hand	Thread	Misalignment Angle +/-	Ball Width
M XML 5x0.8	M XMR 5x0.8	5mm	5 x 0.8mm	13	8mm
M XML 6x1.0	M XMR 6x1.0	6mm	6 x 1.0mm	13	9mm
M XML 8x1.25	M XMR 8x1.25	8mm	8 x 1.25mm	14	12mm
M XML 10x1.25	M XMR 10x1.25	10mm	10 x 1.25mm	13	14mm
M XML 10x1.5	M XMR 10x1.5	10mm	15 x 1.5mm	13	14mm
M XML 12x1.25	M XMR 12x1.25	12mm	12 x 1.25mm	13	16mm
M XML 12x1.5	M XMR 12x1.5	12mm	12 x 1.25mm	13	16mm
M XML 12x1.75	M XMR 12x1.75	12mm	12 x 1.75mm	13	16mm
M XML 14x1.25	M XMR 14x1.25	14mm	14 x 1.25mm	16	19mm
M XML 14x1.5	M XMR 14x1.5	14mm	14 x 1.5mm	16	19mm
M XML 14x2.0	M XMR 14x2.0	14mm	14 x 2.0mm	16	19mm
M XML 16x1.5	M XMR 16x1.5	16mm	16 x 1.5mm	15	21mm
M XML 16x2.0	M XMR 16x2.0	16mm	16 x 2.0mm	15	21mm
M XML 18x1.5	M XMR 18x1.5	18mm	18 x 1.5mm	15	23mm
M XML 20x1.5	M XMR 20x1.5	20mm	20 x 1.5mm	14	25mm

#### Male

#### Female

Part # Left Hand	Part # Right Hand	Eye	Thread	Misalignment Angle +/-	Ball Width
N/A	M XFR 6x1.0	6mm	6 x 1.0mm	13	9mm
M XFL 8x1.25	M XFR 8x1.25	8mm	8 x 1.25mm	14	12mm
N/A	M XFR 10x1.25	10mm	10 x 1.25mm	13	14mm
N/A	M XFR 10x1.5	10mm	10 x 1.5mm	13	14mm
N/A	M XFR 12x1.25	12mm	12 x 1.25mm	13	16mm
N/A	M XFR 12x1.5	12mm	12 x 1.5mm	13	16mm
N/A	M XFR 14x1.25	14mm	14 x 1.25mm	16	19mm
N/A	M XFR 14x1.5	14mm	14 x 1.5mm	16	19mm
N/A	M XFR 16x1.5	16mm	16 x 1.5mm	15	21mm
N/A	M XFR 18x1.5	18mm	18 x 1.5mm	15	23mm
N/A	M XFR 20x1.5	20mm	20 x 1.5mm	14	25mm



# Tube bung

#### Material: Carbon Steel

Part # Left Hand	Part # Right Hand	Thread	To fit tube OD	With Wall Thickness
BUNL 8	BUNR 8	1/2 UNF	1.00	0.065
BUNL 10	BUNR 10	5/8 UNF	1.25	0.120
BUNL 12	BUNR 12	3/4 UNF	1.25	0.120
BUNL 14	BUNR 14	7/8 UNF	1.50	0.150
M BUNL 10x1.25	M BUNR 10x1.25	10 x 1.25mm	0.75	0.065
M BUNL 12x1.25	M BUNR 12x1.25	12 x 1.25mm	0.875	0.065
M BUNL 14x1.5	M BUNR 14x1.5	14 x 1.5mm	1	0.065

#### **Carbon Steel**

**Body Material:** Carbon Steel **Protective coating:** Zinc **Lining:** None - press fit race for smooth operation **Threads:** Rolled threads on male **Ball:** 52100 steel, heat treated ande hard chrome plated

#### Male

Part # Left Hand	Part # Right Hand	Eye	Thread	Misalignment Angle +/-	Ball Width
CML 3	CMR 3	3/16	3/16	10	0.312
CML 4	CMR 4	1/4	1/4	14	0.375
CML 5	CMR 5	5/16	5/16	11	0.437
CML 6	CMR 6	3/8	3/8	11	0.500
CML 7	CMR 7	7/16	7/16	11	0.562
CML 8	CMR 8	1/2	1/2	10	0.625
CML 8-10	CRM 8-10	1/2	5/8	8	0.625
CML 10	CMR 10	5/8	5/8	13	0.750



PC - Body material 4130 Chromoly for extra strength, same rod end design.

Part # Left Hand	Part # Right Hand	Еуе	Thread	Misalignment Angle +/-	Ball Width	Colour
PCML 10-12	PCMR 10-12	5/8	3/4	23	0.750	Black
PCML 12	PCMR 12	3/4	3/4	21.5	0.875	Black

#### Female



Part # Left Hand	Part # Right Hand	Eye	Thread	Misalignment Angle +/-	Ball Width
CFL 3	CFR 3	3/16	3/16	10	0.312
N/A	CFR 4	1/4	1/4	14	0.375
N/A	CFR 5	5/16	5/16	11	0.437
N/A	CFR 6	3/8	3/8	11	0.500
N/A	CFR 7	7/16	7/16	11	0.562
N/A	CFR 8	1/2	1/2	10	0.625
N/A	CFR 10	5/8	5/8	13	0.750
N/A	CFR 12	3/4	3/4	12	0.875
	Manual Contraction	9			
Part # Left Hand	Part # Right Hand	Part # Right Hand	Thread	Misalignment Angle +/-	Ball Width
N/A	M CFR 8x1.25	8mm	8 x 1.25mm	14	14mm

#### Aluminium

Body Material: Aluminium 7075 T6 Protective coating: Anodized in various colours Weight: Roughly half the weight of Chromoly 2 piece Lining: Nylon/PTFE - self lubricating Threads: Rolled threads on male Ball: 52100 steel, heat treated and hard chrome plated





#### Male

Part # Left Hand	Part # Right Hand	Eye	Thread	Misalignment Angle +/-	Ball Width	Colour
AML 3	AMR 3	3/16	3/16	13	0.312	Natural
AML 4	AMR 4	1/4	1/4	15	0.375	Natural
AML 5	AMR 5	5/16	5/16	14	0.437	Natural
AML 6	AMR 6	3/8	3/8	12	0.500	Natural
AML 6-7	AMR 6-7	3/8	7/16	10	0.500	Black, Red
AML 7	AMR 7	7/16	7/16	14	0.562	Natural
AML 8	AMR 8	1/2	1/2	12	0.625	Black
AML 8-10	AMR 8-10	1/2	5/8	10	0.625	Natural, Black
AML 10	AMR 10	5/8	5/8	15	0.750	Red
AML 10-12	AMR 10-12	5/8	3/4	13	0.750	Black
AML 12	AMR 12	3/4	3/4	14	0.875	Red

#### Female

Part # Left Hand	Part # Right Hand	Eye	Thread	Misalignment Angle +/-	Ball Width	Colour
N/A	AFR 3	3/16	3/16	13	0.312	Natural
N/A	AFR 4	1/4	1/4	15	0.375	Natural
N/A	AFR 5	5/16	5/16	14	0.437	Natural
N/A	AFR 6	3/8	3/8	12	0.500	Natural
N/A	AFR 7	7/16	7/16	10	0.562	Natural
N/A	AFR 8	1/2	1/2	14	0.625	Natural
N/A	AFR 10	5/8	5/8	15	0.750	Natural

Туре	Part # Left Hand	Part # Right Hand	Eye	Thread	Misalignment Angle +/-	Ball Width	Colour
Female	M AFL 6x1.0	M AFR 6x1.0	6mm	6 x 1.0mm	13	9mm	Red
Male	M AML 6x1.0	M AMR 6x1.0	6mm	6 x 1.0mm	13	9mm	Red
Female	N/A	M AFR 8x3/16	8mm	3/16 UNF	21	12mm	Black
Female	N/A	M AFR 8x1/4	8mm	1/4 UNF	21	12mm	Black
Male	M AML 8x1.25	M AMR 8x1.25	8mm	8 x 1.25mm	13	14mm	Black
Male	M AML 10x1.5	M AMR 10x1.5	10mm	10 x 1.5mm	13	14mm	Black

#### **Rod Eye**



Material	Part # Right Hand	Eye	Thread	Mounting Width	Colour
Carbon Steel	XMR RE 8-1 5/8	1/2	5/8	5/8	Zinc
Carbon Steel	XMR RE 8-10 7/8	1/2	5/8	7/8	Zinc
Carbon Steel	XMR RE 10 5/8	5/8	5/8	5/8	Zinc
Carbon Steel	XMR RE 10 7/8	5/8	5/8	7/8	Zinc
Carbon Steel	XMR RE 10-12	5/8	3/4	7/8	Zinc
Carbon Steel	XMR RE 12	3/4	3/4	7/8	Zinc
Aluminium	AMR RE 8-10	1/2	5/8	5/8	Red

#### **Urethane Ends**

Part #	Eye	Thread	Thread Direction	Mounting Width	Chromoly Grade
URE 10-12	5/8	3/4	Right	1.7500	4130
URE 10-12	5/8	3/4	Left	1.7500	4130



#### **Spherical Bearing**

**Lining:** hidden teflon mat for self-lubrication **Ball:** 52100 steel, heat treated and chrome plated



Part #	Eye	Ball Width	Race OD	Race Width	Misalignment Angle +/-	Race Material	Spacers on Ball
COM 8 DS	0.5000	1.0000	1.0625	0.3900	12	Stainless Steel	No
COM 8T-CS	0.5000	0.5000	1.0000	0.3900	9.5	Carbon Steel	No
COM 10T-SS	0.6250	0.6250	1.1875	0.5000	8.5	Stainless Steel	No
COM 12T-SS	0.7500	0.7500	1.4375	0.5930	9.0	Stainless Steel	No
COM 14T-SS	0.8750	0.8750	1.5625	0.7030	8.5	Stainless Steel	No
HIN 8T	0.5000	0.9730	1.1250	0.4010	25	Stainless Steel	Yes
HIN 10T	0.6250	1.2500	1.3750	0.5670	20	Stainless Steel	Yes
HIN 12T	0.7500	1.3250	1.5625	0.6200	18	Stainless Steel	Yes
WPB 10T	0.6250	0.7500	1.1875	0.5670	12	Stainless Steel	No
WPB 12T	0.7500	0.8750	1.3750	0.6300	13	Stainless Steel	No
WPB 16T	1.000	1.3750	2.1250	1.000	12	Stainless Steel	No
GEK 8T	8.0mm	19.0mm	12.0mm	9.0mm	14	Stainless Steel	No
GEK 12T	12.0mm	16.0mm	26.0mm	12.0mm	10	Stainless Steel	No
GEK 18T	18.0mm	35.0mm	23.0mm	16.5mm	15	Stainless Steel	No
GEK 20T	20.0mm	40.0mm	25.0mm	18.0mm	14	Stainless Steel	No

#### **Standard Spacer**

Part #	To fit eye size of	Width	Finish
SP 8-4.7	1/2	4.7mm	Zinc Plated
SP 8-8	1/2	8mm	Zinc Plated
SP 10-5.5	5/8	5.5mm	Zinc Plated
SP 10-10.5	5/8	10.5mm	Zinc Plated
SP 12-8	3/4	8mm	Raw
SP 12-10.5	3/4	10.5mm	Zinc Plated



#### **High Misalignment Spacer**

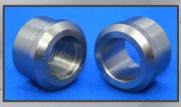
Custom spacers available on request



	Fart #		DOIL HOIC SIZE	Width	Angle +/-	rmsn
	HM 5/1-12mm	XMR/L 10	12mm	44.5mm	32	Zinc Plated
	HM 5/8-1/2	XMR/L 10	1/2 inch	44.5mm	32	Zinc Plated
13	HM 3/4-12mm	XMR/L 12	12mm	47.5mm	32	Zinc Plated
	HM 3/4-1/2	XMR/L 12	1/2 inch	47.5mm	32	Zinc Plated
	HM 3/4-5/8	XMR/L 12	5/8 inch	47.5mm	25	Zinc Plated
	HM 1-3/4	XMR 16, XMR/L 16-20	3/4 inch	59mm	33	Stainless Steel

#### **Chassis mounts**

**Body Material:** 4140 chromoly **Feature:** stepped flange for easy welding, designed for maximum rod end misalignment.



Part #	For bolt size	Thread	Overall Length	Flange Dia	Flange	Step Dia
CM8B	1/2	Blank	16mm	24mm	5mm	20mm
CM8RH	1/2	Right UNC	16mm	24mm	5mm	20mm
CM10B	5/8	Blank	16mm	26mm	6mm	24mm
CM10RH	5/8	Right UNF	16mm	26mm	6mm	24mm
CM12B	3/4	Blank	20mm	30mm	8mm	28mm
CM12RH	3/4	Right UNF	20mm	30mm	8mm	28mm

#### Rod end boots



Made to assist the longevity of rod ends in muddy/dusty conditions by keeping contaminants away for the ball and race.

The use of ties is recommend on the moulded grove at all three openings to seal the boot from contaminants entering.

Fit is best when used with high misalignment spacers but can be used with standard spacers.

Part #	To fit Rod End
Boot8	1/2 bodied rod ends
Boot10	5/8 bodied rod ends
Boot12	3/4 bodied rod ends

#### **Three Piece**

For those looking for a premium and/or high misalignment rod end you can not go by our three piece rod ends. As an outcome of precise tight tolerance construction methods and a hidden teflon mat these rod ends have a precision fit even with hours of use. With the double spiggott's no spacers are required when mounting.

**Protective coating:** Chrome plated, **Lining:** Hidden teflon mat for self-lubrication and smooth running **Threads:** Rolled threads, **High Misalignment:** Prefixed with an "H"

Ball: 52100 steel, heat treated and hard chrome plated, double spiggotted

Part # Left Hand	Part # Right Hand	Eye	Thread	Misalignment Angle +/-	Ball Width	Chromoly Grade
HML 5-6 YS	HMR 5-6 YS	5/16	3/8	26	0.8125	4140
HML 6-7 YS	HMR 6-7 YS	3/8	7/16	27	0.8125	4140
HML 7-8 YS	HMR 7-8 YS	7/16	1/2	26	0.8750	4140
HML 8-10 YS	HMR 8-10 YS	1/2	5/8	25	0.9375	4140
HML 10 YS	HMR 10 YS	5/8	5/8	26	1.2000	4140
N/A	HFR 10 YS SS	5/8	5/8	25	1.2000	4140
HXXML 10-12 YS	HXXMR 10-12 YS	5/8	3/4	25	1.2000	4340
PXXML 8	PXXMR 8	1/2	1/2	12	0.6250	4340
PXML 8-10 DS	PXMR 8-10 DS	1/2	5/8	18	0.9375	4140
PXML 8-10 DS1	PXMR 8-10 DS 1	1/2	5/8	18	1.0000	4140
PXXML 10	PXXMR 10	5/8	5/8	14	0.7500	4340
PXXML 10-12	PXXMR 10-12	5/8	3/4	16	0.7500	4340
PXXML 12	PXXMR 12	3/4	3/4	14	0.8750	4340



#### **Rebuildable Joint**

Known by many as the "O'Halloran Joint" due to the extensive research and development undertaken by John O'Halloran over many years. These joints are rebuildable allowing you to remove any dirt and when the time comes replace the inserts. Featuring a grease nipple and a housing made from Carbon Hollow Bar. The ball is manufactured to achieve a low friction high sheen finish.

Part #	Housing Style	Housing Width	Housing OD	Ball Eye Hole	Misalignment Angle +/-
C/M10 24-50	Circlipped	24mm	50mm	5/8	15
C/M10 28-50	Circlipped	28mm	50mm	5/8	10
C/S10 28-56	Circlipped	28mm	56mm	5/8	22
C/S10 32-56	Circlipped	32mm	56mm	5/8	15
C/S10 28-60	Circlipped	28mm	60mm	5/8	22
C/S12 28-56	Circlipped	28mm	56mm	3/4	17
C/S12 32-56	Circlipped	32mm	56mm	3/4	10
C/S12 28-60	Circlipped	28mm	60mm	3/4	17

Phone - 027 243 0675

### **Torsion Bar Control Arm Pivot & Stops**

Designed in-house to solve the problem of a torsion bar control arm's lack of lateral movement, this product eliminates the need to slide the control arm along a bolt thus eliminating binding under load.

Material: 7075 T6 Aluminium, or 4140 Chromoly Spline: Sprint car bar spline -  $48 \times 1 \frac{1}{8}$ Mounting width: To fit an arm that is maximum of 2 inches high





# Aluminium Radiators, Weld Ons, Honeycomb &

#### **Honeycomb Ties**

Universal three core race radiator, ideal for Superstocks, Stockcars and Ministocks.

A dual pass radiator has increased the cooling as the coolant enters via the top hose, passes across the top half of the core, returns via the bottom half of the core and out the bottom hose.

Stockcar & Superstock Radiator: Dual Pass Blank Ministock Radiator: Single Pass with Fittings

Sold as a blank with hose fitting options of Weld Ons , Pipes & Filler Neck (AN 4, AN6, AN8, AN10, AN12, AN16, AN20), (32mm, 35mm, 38mm, 40mm, 45mm)

We also offer the option of customising the radiator to suit your needs.









Part #	Width (mm)	Height (mm)	Depth (mm)	Specification
URAD001	560	480	70	Dual Pass (blank)
URAD002	575	585	80	Dual Pass (blank)
URAD003	450 (including mounts)	370 (including filler)	70	Top right inlet, bottom left outlet
Honeycomb	500	625	12	Polycarbonate

#### **Beam Axle and Stubs for Stockcar & Superstock**



# Residual Brake Pressure Valve

Ultra Race Products residual pressure valves retain a minimum brake line pressure to help eliminate excessive pedal travel in disc brakes. The 2PSI valve is used in disc brake applications where the brake master cylinder is mounted below the horizontal plane of the calipers and fluid drain back occurs from gravity and vibration.



Our Beam and Stubs have been designed and selected with performance, strength and budget in mind.

The advantages are huge:

- A larger diameter kingpin (25mm) for strength
- A considerably lower scrub radius lighter steering and the exposed wheel area is shorter
- Lower profile reducing clearance issues
- They are universal between sides only have to carry one spare
- They use an easily available standard Ford hub/rotor making sourcing of the wearable part easy

Bare beam Axle & Stub

- 1x beam axle High strength seamless steel -60 x 60 x 4 box section - made to customer specified length
- 2x stub axles made from high tensile steel 40Cr, heat treated with an angle of 11.5 degrees

Also available:

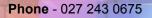
- Bolt on steering arms
- Hub and vented rotors Ford 5 stud pattern (5 x 114.3) 287mm diameter, 24mm thick, included x10 chrome wheel nuts
- Wheel bearing inner & outer

# GM Fitment Brake Calipers & Pads

Ultra Race Products GM fitment Stockcar Calipers Will fit up to 1" wide rotor. Inlet thread is 10 mm x 1.5 pitch

LH & RH side available Brake pads to suit also available

Caliper mounts can also be provided by request.





#### **Steel & Aluminium Steering Wheels**



15" Steel & Aluminium 2" Dished Steering Wheels with rubber grips.

Multiple 3 bolt centres with 3 x 1/4 diameter holes and 3 x 5/16 diameter holes.

#### **Steering Universal Joint**

For race applications only.

#### Sizes:

- 3/4 smooth 3/4 smooth
- 3/4 smooth 30 spline





#### **Steering Wheel Quick Release**

Push button release hub available in two shaft styles, splined or hex. Designed to be welded onto a 3/4" steering shaft.

Also available is an adaption plate to take the hub from 3 bolt to 6 bolt 70mm PCD e.g. Momo









#### **Hydraulic Release Bearing**

Direct replacement for a Howe Hydraulic Release Bearing.

Designed for racing classes that require a stock type clutch. Easy to install by replacing one bolt at the front of the transmission. Designed to sit on the transmission snout. Bearing comes with conical shims for static height adjustment.

The I.D of the bearing is 1.379". Compressed it is 1.688" thick and extended it reached 2.375" providing the .688" of travel.

Comes with flat faced thrust bearing, however a domed thrust bearing is available for purchase separately.

#### **Stagger Tape**

Used to measure tyre circumference.

10' long 1/4 " wide steel tape





# Ultra Race Products Hat Coilover Spanner

Coilover adjustment tool.

# Polyurethane 3 Cell Inflatable Lumbar Pad

This lumbar pad allows the driver to control the specific amount of inflation within the 3 cells. During the inflation, the driver can apply pressure onto the pad therefore directing air to the required areas.

This fills the empty space between the race seat and your back.

300mm x 160mm

