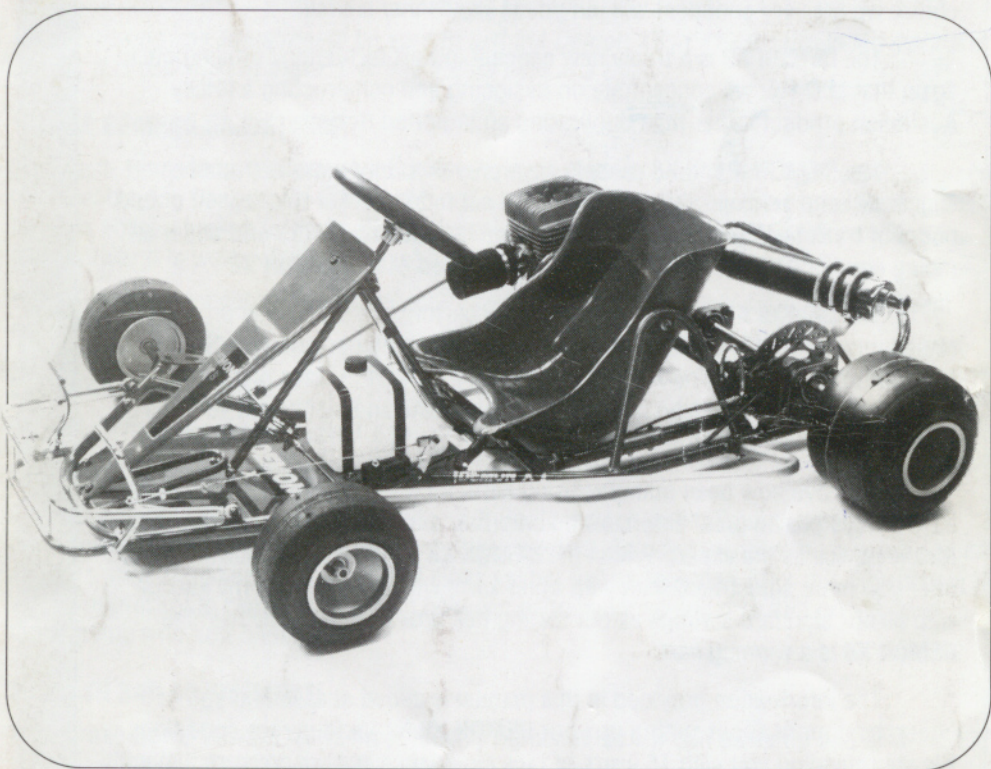


DEMON X8

A NEW CONCEPT IN KART TECHNOLOGY



DPE KARTS
AUSTRALIA'S No. 1.

DEMON X8

"CONGRATULATIONS ON CHOOSING A DEMON X8"

We would like to thank you for choosing a D.P.E. **DEMON X8** Kart. A choice we are very confident will put you in the winner's circle.

The **DEMON X8** is a truly new concept in Kart technology proving once again that at D.P.E. we concentrate on designing and constructing a totally Australian product rather than duplicating an imported design.

The DEMON X and X6 models have proven to be Australia's most successful and versatile karts – a very hard act to follow. For this reason untold hours of track testing with various drivers on several race tracks and under all racing conditions, have resulted in the introduction of the **DEMON X8**.

The **DEMON X8** is extremely versatile, performing excellently on open class tyres, current type SL tyres and also the new high performance SL tyres to be introduced in 1988. The X8 is an extremely easy kart to drive providing very neutral handling. You will be amazed how immediate and significant your lap time improvement will be.

We have now been manufacturing karts for 15 years and during this time have always placed great emphasis on ensuring our karts are as easy to set up for the novice as the expert. Whilst the **DEMON X8** incorporates features which offer you more adjustment than with other karts we ask you to set the kart up with all our standard settings as our testing has proven that in this trim the **DEMON X8** is a winning kart.

The information provided in this manual is aimed at assisting you to understand more about setting up your **DEMON X8** for various race conditions. We are providing you with 15 years of race experience and we are sure that with the combination of your **DEMON X8** and this information a win is just around the corner.

DREW PRICE ENGINEERING PTY. LTD.

DREW PRICE.

DEMON X 8 OWNERS MANUAL.

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"TAKE NOTE:"

Before making any adjustments be sure to test the Demon X8 in its recommended standard set up. It is essential to make only one adjustment at a time.

1. AXLE BEARING ADJUSTMENT:

SL Tyres:- Remove bolts from centre axle bearing and place both 10mm washers in between the steel bearing flanges. Re-tighten the bolts only lightly. Effectively the centre bearing will have no effect allowing for more flex in the axle. On an extremely grippy track or with a heavy driver it is worthwhile testing with the centre bearing tightened securely.

Open Tyres:- Leave centre bearing securely fastened to offer ultimate rigidity and prevent axle whip.

2. BRAKE ADJUSTMENT:

SL Tyres:- fit brake cable to lower hole on master cylinder actuating arm.

Open Tyres:- fit brake cable to top hole.

Adjusting for Pad Wear:- Pad wear on the X 8 Brake is very minimal compared to mechanical calipers so adjustment is not often required. To adjust loosen the two main bolts and turn alloy adjusting nuts which will close caliper halves together. After this adjustment it will be necessary to centralise the disc between pads by loosening disc hub on axle and tapping hub with soft hammer.

3. CRASH BAR ADJUSTMENT:

Side Crash Bars:- Always leave these loosely tightened so bar can move up and down in the side bar mounts.

Rear Crash Bar:- It is not recommended to loosen the rear bar as this can result in the bar coming adrift from the frame completely. Check occasionally to ensure bolts are fastened securely.

Front Crash Bar:- SL Tyres:- Ensure the tie rod joints are adjusted so there is no strain on the mounting bolt. Bolt should be only lightly tightened.

Open Tyres:- Front bar should be securely tightened at all four mounting points.

"TUNING TIP":- *A loosely fitted front bar will enable the front of the chassis to flex more easily and provide more front grip.*

4. FRONT TRACK:

SL Tyres:- Fit one 20mm spacer on the inside of the wheel on each side.

Open Tyres:- Fit one 20mm and one 10mm spacer on the inside of the wheel on each side.

"Tuning Tip":- Widening the front track will make the steering more direct and assist in eliminating understeer. Narrowing the front track will make the steering less direct. If you find the front is too sensitive or twitchy narrowing the front track will assist.

5. FRONT END ALIGNMENT:

SL Tyres:- 2 to 3 mm toe out.

Open Tyres:- Neutral or 1mm toe in.

When checking front end alignment be sure that the steering shaft drop arm is positioned centrally under the steering shaft. It is a good idea to lock the steering shaft in this position by tightening a pair of vice jaw pliers around the top nylon steering bush thus preventing the shaft turning while you are adjusting the tie rods. Adjust the tie rods to desired setting making sure that both front wheels are pointing straight ahead. (ie Avoid having toe in on one wheel and toe out on the other). This is easily checked with front end aligning plates however if you do not have these simply sight up the front wheels compared to the rear wheels or rear axle.

6. GENERAL MAINTENANCE:

Components to check regularly to ensure they are securely tightened.

Rear wheel hubs,

Sprocket hub,

Disc hub,

Axle bearing lock screws,

King pins. Note:- the X 8 has precision ground king pins which should not be over tightened.

Fuel Tank Outlet. Note:- occasionally check that the fuel tank pick up hose inside the tank has not come adrift as this can cause fuel starvation problems.

Tie Rod End Wear. Note:- When the front end has any wear in excess of 1mm it is time to replace the tie rod ends.

Front Wheel Bearings. Note:- Approx. every six months remove wheel bearings, wash out with clean petrol and lubricate with a small amount of engine oil. If the bearings still feel or sound rough replace them.

Engine Mount Rail Material. Note:- It is very important to regularly check and if necessary replace this material. When in good condition the mount material assists in absorbing harsh engine vibration which is the common cause for chassis fatigue.

7. REAR TRACK:-

SL Tyres:- Set the rear hubs 10mm in from the end of the axle on each side.(1 mt. long axle)

Open Tyres:- Set the rear hubs 10mm in from the end of the axle on each side.
(1.05 mt long axle)

"Tuning Tip":- Widening the rear track will,

A. Reduce bounce in the rear,

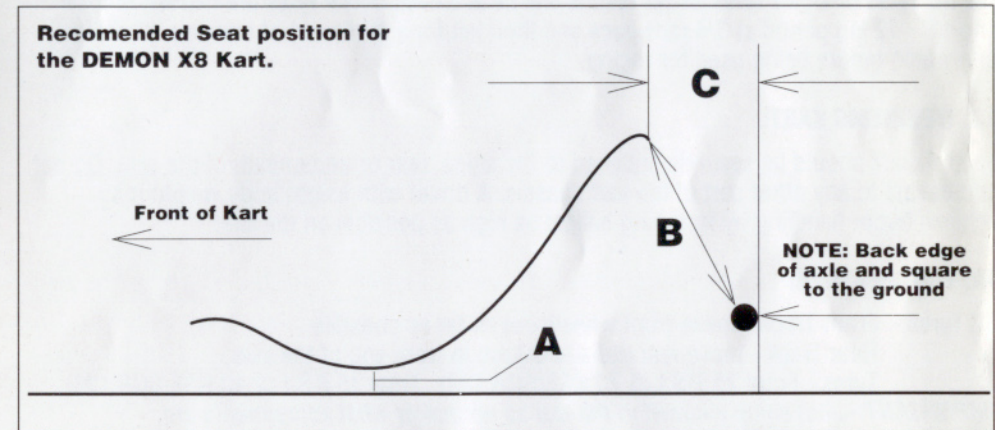
B. Provide a smoother ride, especially on bumpy tracks,

C. Prevent the tendency for the kart to lift up onto two wheels when cornering.

Narrowing the rear track will, Make the rear bite into the track harder and sometimes provide more rear grip. However avoid continually narrowing the rear track to obtain more grip as you will find that only so much grip can be obtained and you will then be upsetting the balance of the kart making it much more unstable and difficult to drive.

IMPORTANT: Rear Track is probably the most important single variable in a kart chassis. Different driving styles and different tracks will require different settings. The X 8 standard setting is the best starting point and we suggest you vary the rear track by no more than 10mm each side per change.

8. SEAT POSITION:



A = Height of seat to ground in mm's.

B = is measured from top of axle to lip of seat in mm's.

C = is measured from rear of axle forward to lip of seat in mm's.

Tyre type.	Driver Size.	A.	B.	C.
SL	Junior or Small size Adult	30	270	70
SL	Larger Adult	19	260	70
Open	All	19	230	50

Note: All measurements are to be taken with the kart on a flat surface and tyres must be at correct pressures.

9. TORSION BAR CENTRE:

SL Tyres:- Loosen bolts completely so that Torsion bar is not effective.

Open Tyres:- Two settings are available. In simple terms loose or tight. Testing has proven that different drivers and different tracks require different settings. To start with loosen the bar completely.

10. TORSION BAR REAR:

SL Tyres:- Loosen bolts completely so clamp is not fastened onto chassis rail. If desired clamp can be removed.

Open Tyres:- Securely tighten clamp onto chassis rail.

11. TYRE PRESSURE:

SL Tyres:-	Front 14 - 16 P.S.I.	1.0 - 1.1 KGF/SQR CM.
	Rear 17 - 19 P.S.I.	1.2 - 1.3 KGF/SQR CM.
Open Tyres:-	Front 12 - 13 P.S.I.	.85 - .90 KGF/SQR CM.
	Rear 14 - 15 P.S.I.	1.0 - 1.05 KGF/SQR CM.

12. TYRE PREPARATION:

For SL Tyres or Open Tyres better results will be achieved if new tyres are bedded in for a short 8 - 12 lap period at 3/4 race pace and then left for a minimum of one day. (Preferably one week) before being used for racing.

13. WEIGHTING KART:

Lead Ballast should be securely fastened to the sides, rear or underneath of the seat. Do not add ballast to any other part of the kart chassis. A driver with a light body weight may achieve better handling by fastening ballast as high as possible on the seat.

14. WET WEATHER:

SL Tyres:- Front Track - move front wheels out as far as possible.

Rear Track - move rear hubs to 30mm in from end of the axle.

Tyres - Front 25 P.S.I.(1.70 KGF/SQR CM). Rear 35 P.S.I.(2.40 KGF/SQR CM).

IMPORTANT:- *Just enjoy yourself in the wet as no matter what adjustments are made - a kart with slick tyres and a wet track are a bad combination.*

Wet Tyres:- Front Track - move front wheels out as far as possible.

Rear Track - 1 metre axle, move hubs to 30mm in from end of axle.

1.05 metre axle, move hubs to 55mm in from end of axle.

Torsion Bars - loosen off completely.

Tyres- Front 18 P.S.I.(1.20 KGF/SQR CM). Rear 22 P.S.I.(1.50 KGF/SQR CM).

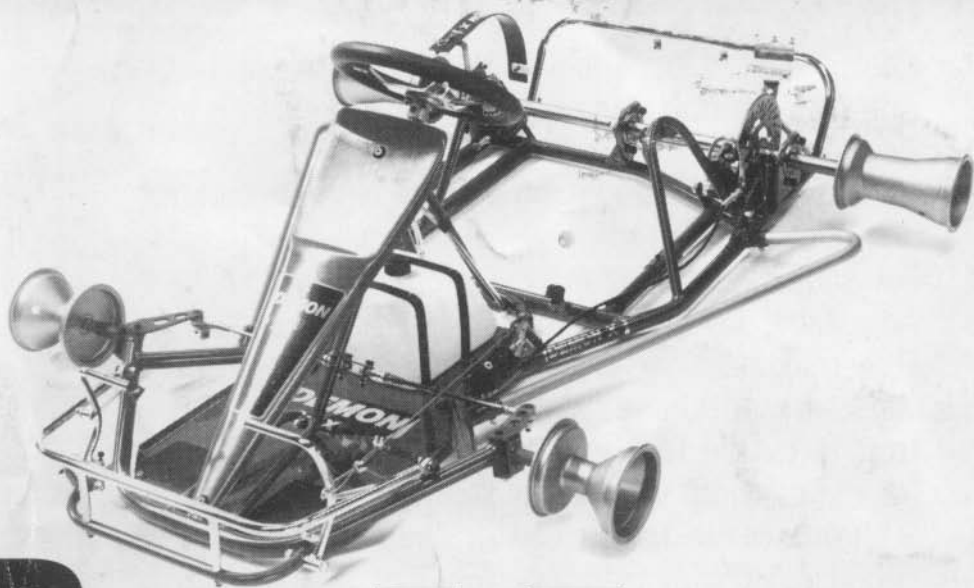
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FEATURES:

1. Centre located 3rd axle bearing for ultimate axle rigidity.
2. Adjustable centre torsion bar.
3. Adjustable rear torsion bar.
4. New special front end geometry for ultimate steering and minimal tyre wear.
5. Fully adjustable front and rear track.
6. Adjustable seating position.
7. Fully machined one piece wheels – gold anodised.
8. Wheel, sprocket and disc hubs and engine mount from hi-tensile T6 die cast alloy – gold anodised.
9. New hi-strength steel frame steering wheel.
10. 5 Litre floor fuel tank.
11. Hi-tensile chrome manganese tubing.
12. Tie rod end joints to front bumper.
13. Unique rear wheel studs and nuts – "No more stripped hubs".
14. Hi-tensile 30 mm hollow ground axle.
15. Hydraulic brake system with quick-change pads and simple adjustment.
16. Ventilated meonite cast iron brake disc.
17. Precision ground king pins and pedal pivots.
18. 2 position adjustable steering ackermann.
19. Non skid foot pads.
20. Non slip / anti-vibration engine mount rails.
21. Soft neoprene seat inserts.
22. New design Nassa panel as standard equipment.

DEMON X8



DPE KARTS

AUSTRALIA'S No. 1.

MANUFACTURED BY DREW PRICE ENGINEERING PTY. LTD. (03) 543 7218

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