



JAGUAR

XJ220



CORE

JAGUAR XJ - 220

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JAGUAR XJ - 220

INTRODUCTION

In December 1989, Jaguar announced that a limited production run of its XJ - 220 concept car would go ahead. A mere 350 units of the four hundred thousand pound super-car are to be built by a newly formed Jaguar subsidiary, Project XJ - 220 Ltd. The car borrows heavily from the XJR - 11 race car, using the twin-turbo V6 engine as well as many chassis and suspension components. Its light weight and tremendous power (over 500 BHP) result in performance to humble the greatest efforts of Ferrari, Lamborghini and Porsche. Despite its light weight, the XJ - 220 is no spartan racing car, full leather interior, air-conditioning and electric windows are all standard features.

Jaguar XJ - 220 Racing gives you the chance to test your skill driving against the cream of world sports cars in the Sports Car Racing (S.C.R.) Challenge, a fictitious international race series. Battle to victory over 36 rounds to take the chequered flag against a field of determined and skilled opponents.



S.C.R. CHALLENGE

The S.C.R. Challenge is open to all road-legal sports cars and consists of 12 international rounds each with 3 races. Each race take place on a different circuit making a total of 36 courses. Each cars chassis and suspension may be modified freely, roll cage and fuel cell being mandatory. Minor engine modifications are also permissible but the car may produce no more than 15% extra power. Fuel is regulated to 98 Octane and all cars must use road legal tyres.

To ensure fair competition a slide-rule of minimum weights are employed derived from the cars maximum power output. During the series, engine, suspension and drive-train components may be replaced but the chassis must remain original (i.e. competitors may not change cars mid-season!).

VIRUS WARNING

To avoid the risk of infecting this product with a virus, always follow this simple procedure:

1. Always keep your XJ-220 disks write protected. This will prevent any virus from copying itself onto the disks.
2. Always switch off your computer for at least 30 seconds before you switch on and load XJ-220.
3. **NEVER RUN THE XJ-220 DISKS THROUGH A VIRUS CHECKER AS THIS WILL DESTROY THE INFORMATION ON THEM.**

LOADING INSTRUCTIONS

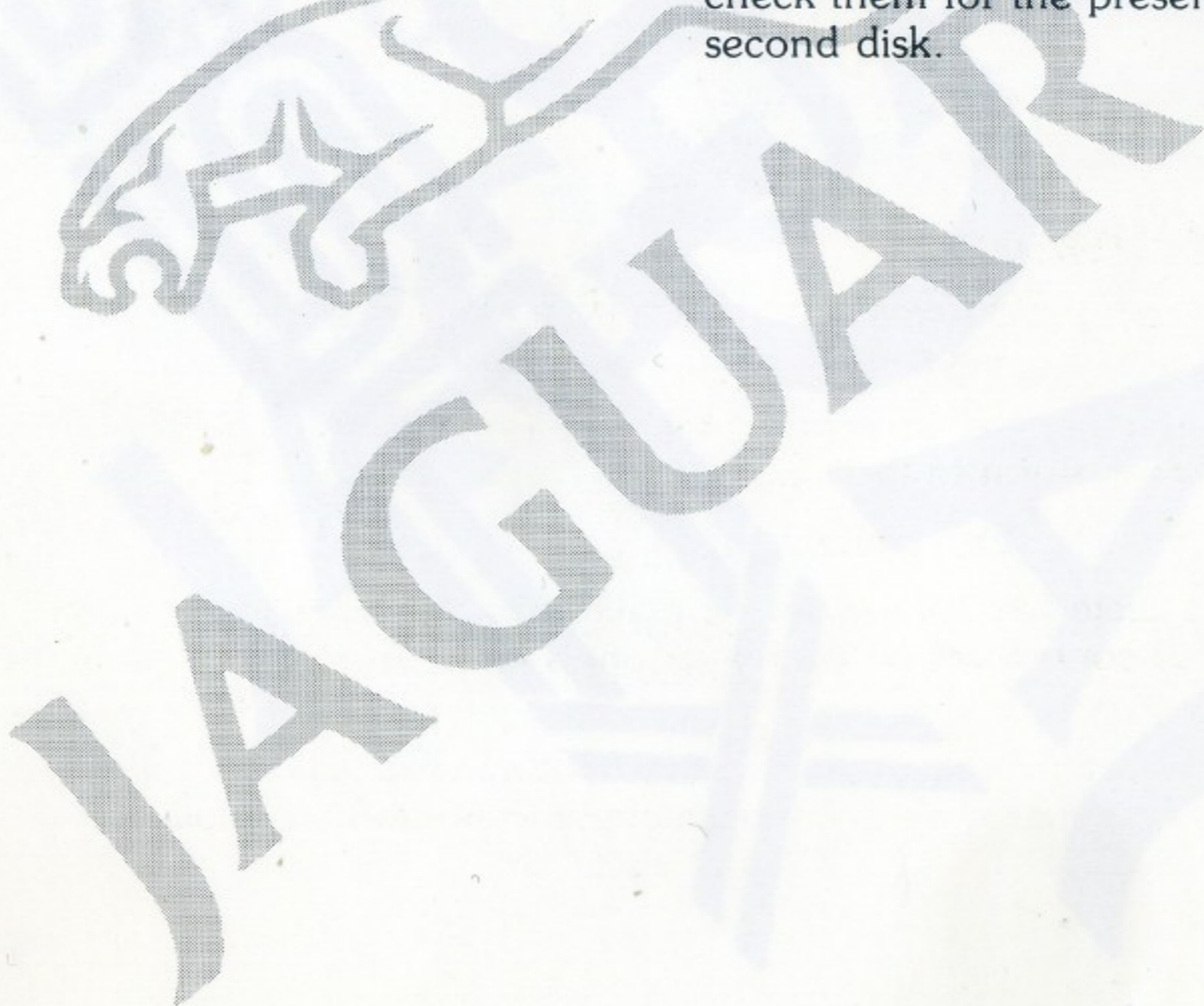
COMMODORE AMIGA:

JAGUAR XJ-220 requires an Amiga with a minimum of 1 meg. of RAM, a colour monitor or television and a mouse or joystick.

1. Turn off your computer.
2. Plug a mouse into port 1 and a joystick into port 2 (the normal port).
3. Turn on the computer.
4. Insert Amiga KICKSTART disk into the disk drive (Amiga 1000 only).
5. When the 'Workbench' icon appears, insert XJ-220 DISK 1. The game will load and run automatically. Exchange disks only when instructed to do so.

NOTE:

JAGUAR XJ-220 supports extra drives. Simply place XJ-220 DISK 2 into any external drive before booting the game. The game will detect the presence of the extra drives and will check them for the presence of the second disk.



GETTING STARTED

After the game has loaded, you will be required to consult the manual for the purpose of a protection check. You will be asked to input a word from the manual which will be referenced by page number, line number and word number.

e.g. Please enter the word at: Page 3
 Line 1
 Word 1

the word is: After

N.B. Titles and headings are not included as lines.

After completing the manual protection, the game will enter a title sequence. Pressing fire on the joystick or mouse at any time will exit to the main game menu.

CONTROL METHODS

JOYSTICK

Accelerate	—	Up/Fire (depending on setup).
Brake	—	Down.
Steer Left	—	Left.
Steer Right	—	Right.
Change Up	—	Up + Fire (manual gear change only).
Change Down	—	Down + Fire (manual gear change only).

MOUSE

Accelerate	—	Left Button.
Brake	—	Right Button.
Steer Left	—	Left.
Steer Right	—	Right.

KEYBOARD CONTROLS

P	—	Pause Game — On/Off
Escape	—	Abort race.

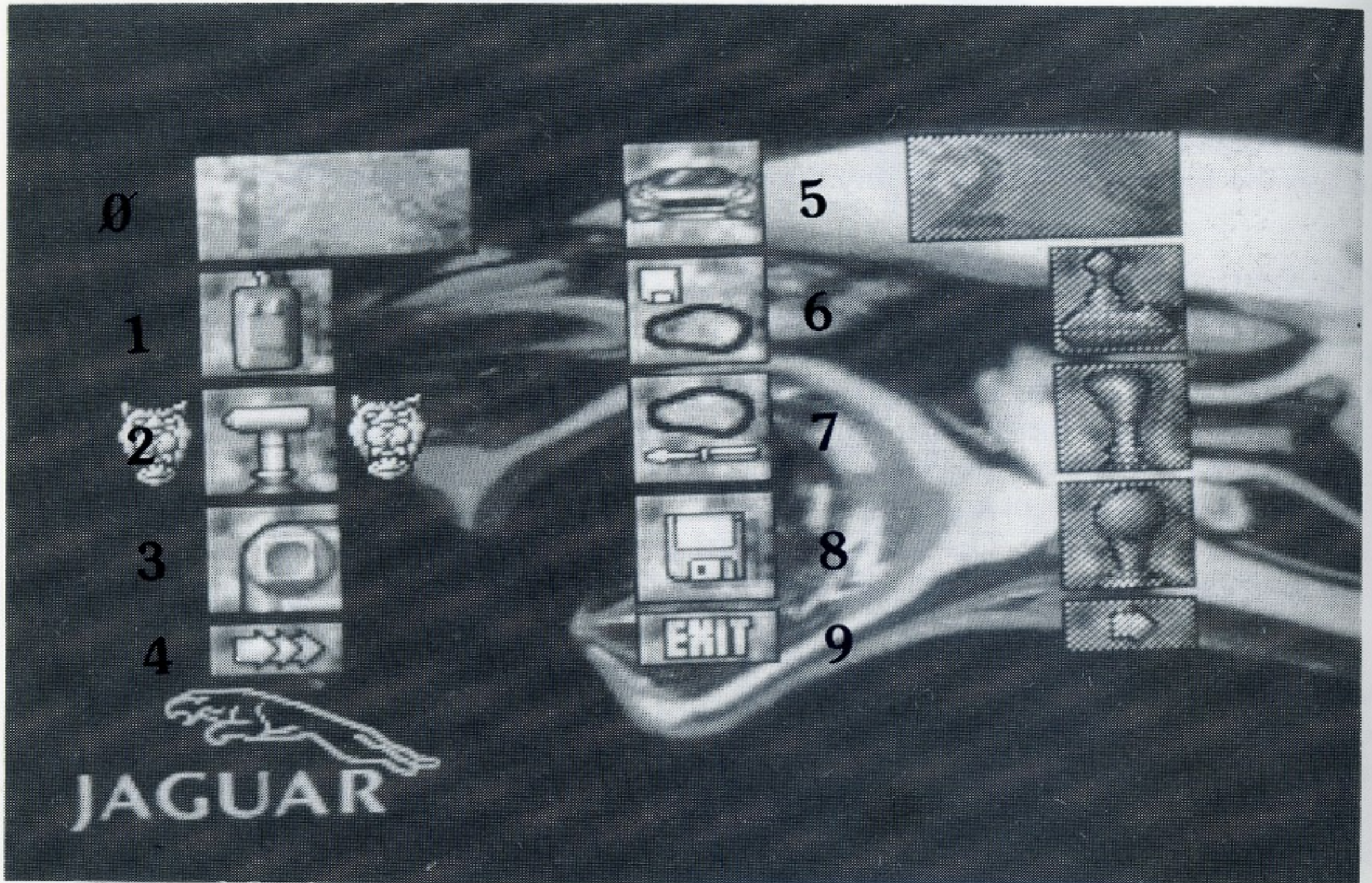
Pressing the Escape key within a menu, e.g. File Requester will abort the current operation and take you on to the next one.

Shift & Escape — End game.

If the mouse is selected for player one or player two, all menus will be under mouse control, otherwise control will be via player one's joystick.

THE MAIN MENU

The Main Menu allows the player to modify the car controls and to access the track editing facilities. To select an option, simply move the cursor to the appropriate icon and click the fire button. The cursor can be controlled by the current input device or by using the cursor keys and the spacebar.



1. Player name: Clicking over this option allows the player to enter his/her name. Names can be up to 10 characters long.
2. Control Method: This icon allows the player to select mouse or joystick control.
3. Gear shift type:
N.B. Select either manual or automatic gearbox.
Joystick control only.
4. Throttle control:
N.B. Switches between fire button and up for accelerate.
Joystick control only.
5. Sensitivity: Chooses Low, Medium or High steering response.
6. Number of
players: This selects either a 1 or 2 Player game.
7. Load all Tracks: Load full set of player constructed tracks.
8. Edit Tracks: Enters the built-in track editor.
9. Load Game: Load saved game.
10. Exit: Start/Enter racing season.

FILE REQUESTER

The File Requester appears when choosing the load game icon from the main menu, or after the damage screen, following a race.

The requester will ask you to select the disk drive in which your data disk will be inserted (if the data disk is not formatted you will be given the option to format the disk). On selecting a drive, a directory of the disk will appear. To load a saved game, simply press the button at the side of the required file (the button should light up) and then move the mouse to the LOAD button and press fire. After loading, the game will return you to your last saved position in the game.

To save your position (this option only appears after the damage screen), press on the button next to a name block, and enter a file name (up to 12 characters long). It is possible to save the game over one previously saved, but bear in mind that this will erase the saved game you are writing over. Move pointer down to the SAVE button, and press fire.

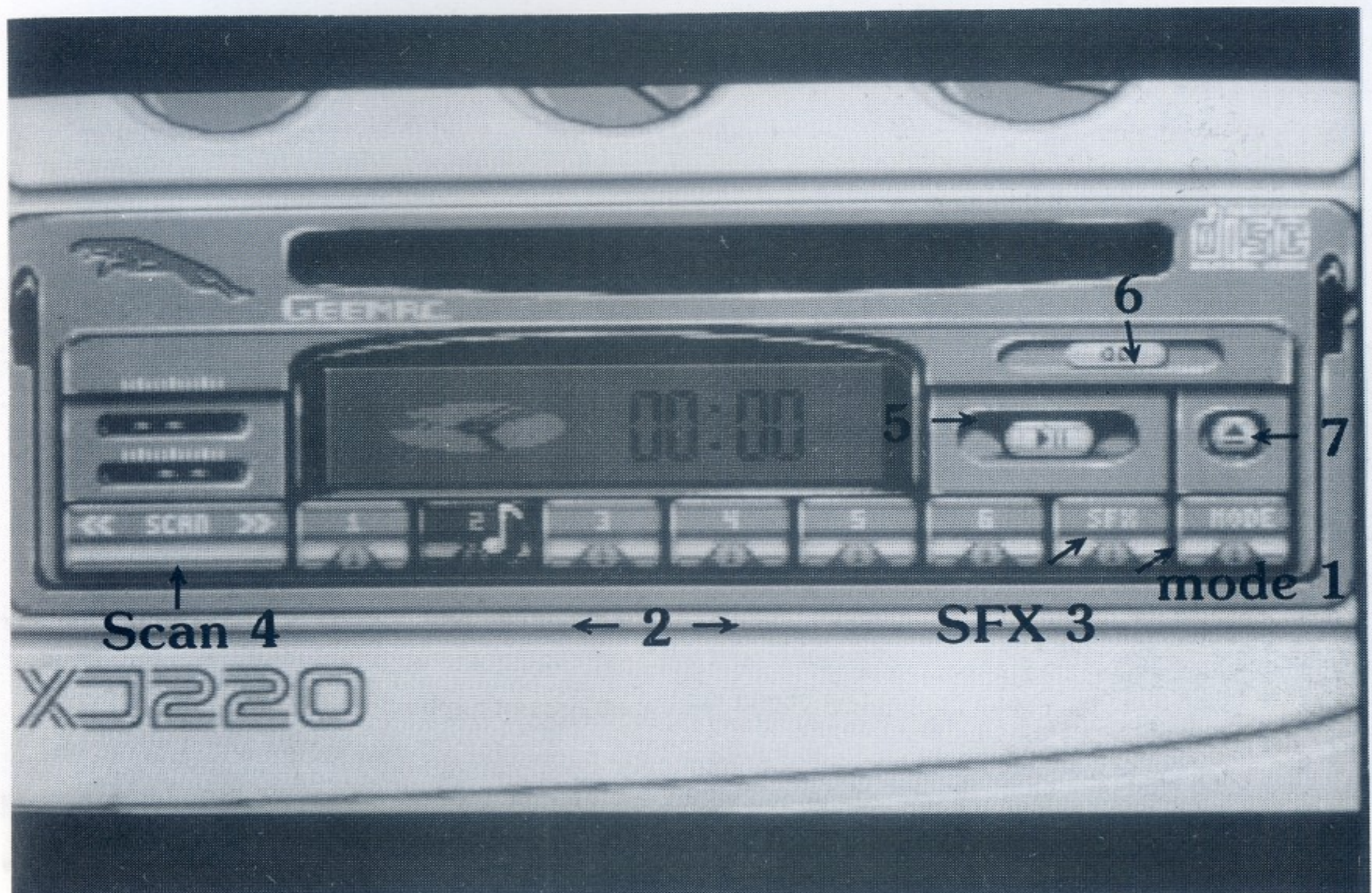
N.B. If at any time you wish to skip or cancel saving, move the pointer over the exit button and press the fire button.



IN-CAR ENTERTAINMENT

With the deafening hum of a large engine just behind the driver, you may want to listen to music as you race towards the finish line. Using the excellent in-car CD player, you will be able to select a variety of music tracks or radio stations.

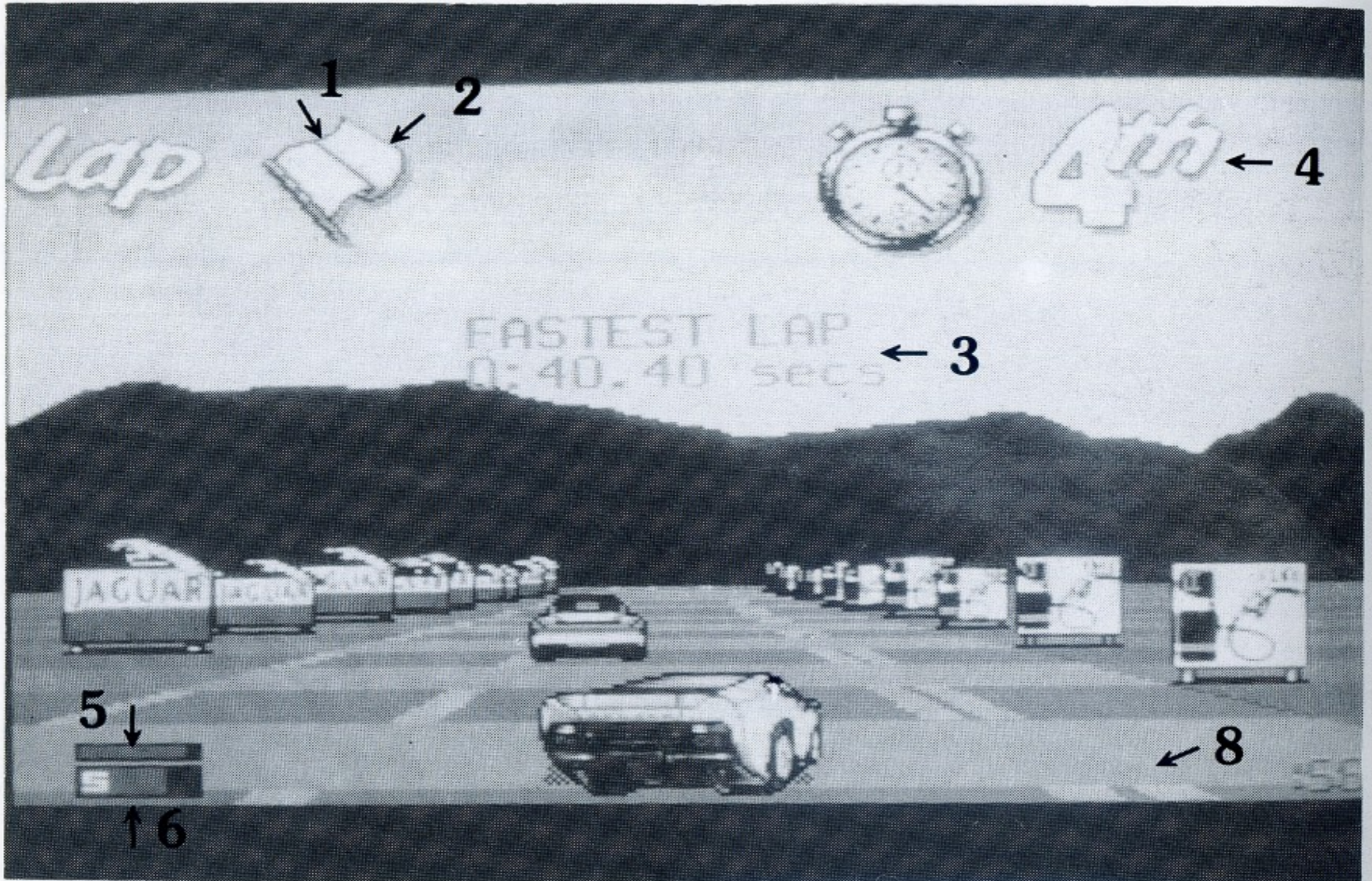
N.B. Due to the very poor radio reception, sound will automatically default to sound effects during the race.



- | | | |
|-------------------|---|---------------------------------------|
| 1. Mode | - | Switches between CD and Radio. |
| 2. Track Select | - | Select one of the 6 tracks on the CD. |
| 3. SFX Select | - | Select Sound-Effects. |
| 4. Scan Frequency | - | Searches for a radio-station. |
| 5. Play/Pause | - | Play/Pause CD track. |
| 6. Noise Filter | - | Noise reduction on/off. |
| 7. Eject | - | Exits to race. |

PLAYING THE GAME

While the current track is being loaded, information concerning the track will be displayed. This will be shown as a series of top down views along with vital track condition information. After the track has loaded you will see your car on the grid. As the flag drops, the race begins.



1. Laps Remaining.
2. Flags (White flag for last lap, Chequered flag for end of race).
3. New lap record.
4. Current position in race.
5. Fuel remaining.
6. Current gear + r.p.m.
7. Present speed.
8. Pit lane.

To refuel simply pull into the pit lane and apply the brake until you come to a halt. The refuel procedure will then start. Watch for the fuel gauge level and use your discretion on how much or how little fuel is needed to complete your race. To stop the refuelling procedure, simply accelerate away. Watch out for other opponents when pulling in or out of the pit lane.

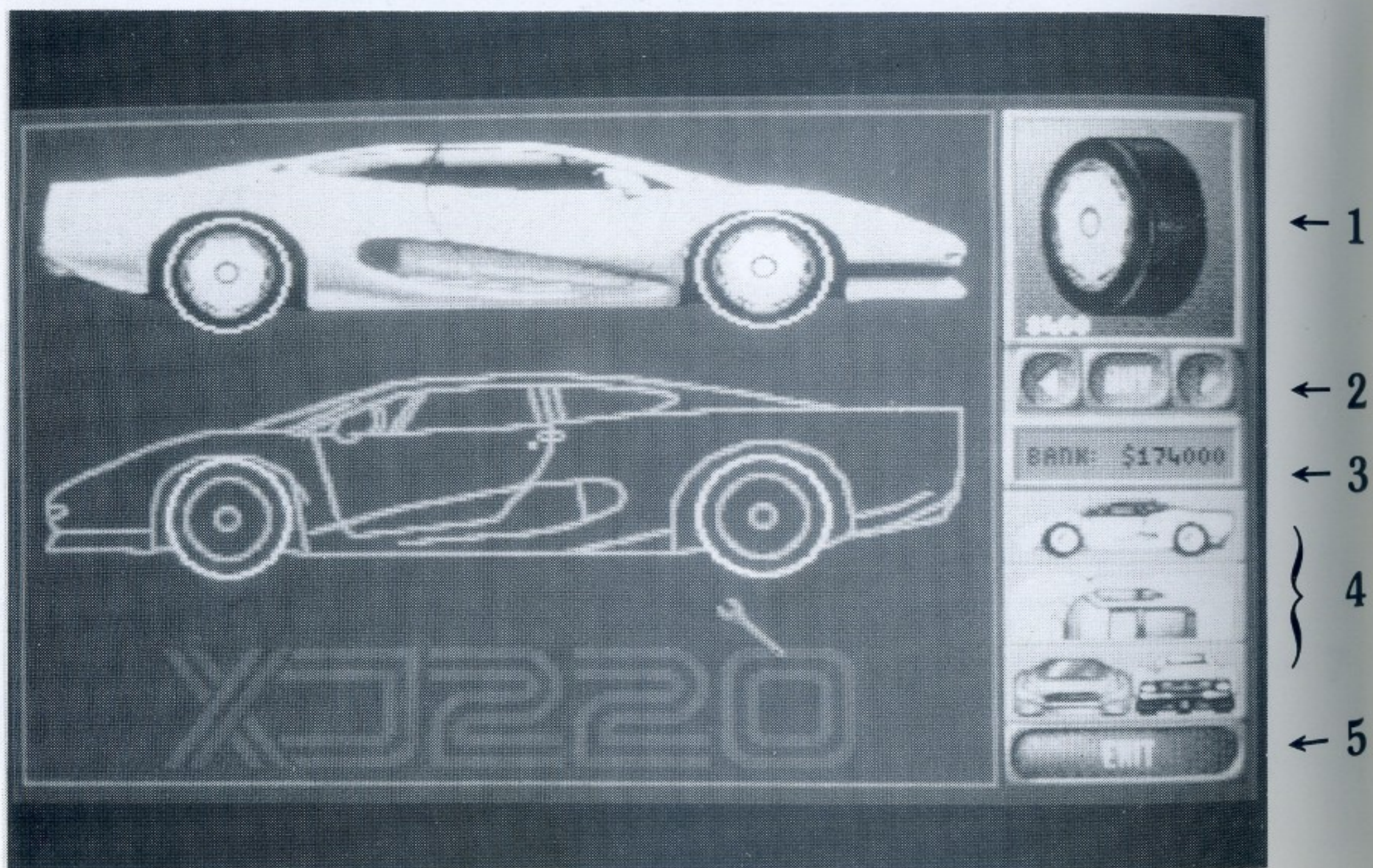
THE WINNERS ROSTRUM

After each race, the winning drivers mount the Rostrum to receive their trophies. After the winning ceremony, the race results and championship positions are displayed. The race results show the points and the winnings earned in the last race (points and monies are awarded for a placing between 10th and 1st position). The championship positions, show the seasons top 10 drivers along with their current points total. The constructors championship positions, show the manufacturing teams position in the season.

Pos	Name	Pts	Cash
1.	Player 4	25	\$50000
2.	Player 2	20	\$45000
3.	Player 6	15	\$40000
4.	Player 7	10	\$35000
5.	Player 1	8	\$30000
6.	Player 10	6	\$25000
7.	Player 3	4	\$20000
8.	Player 9	3	\$15000
9.	Player 5	2	\$10000
10.	Player 14	1	\$5000

THE REPAIRS SCREEN

During the course of a race series many car components will wear out and need replacing as well as the likelihood of some collision damage occurring. After each race a display of the cars condition is shown. Components displayed in red **MUST** be replaced, those displayed in orange are worn by serviceable (although may result in some loss of performance). Components displayed in green are in good condition and do not need replacing. You will not be allowed to exit this screen until all red condition parts have been replaced. Careful note must be made of the bank balance when making none essential repairs as travel costs must also be taken into account.



WARNING

Careful monitoring of your bank balance is essential. If you are extravagant with your money then bankruptcy will soon follow. Thus ending your career as a race driver.

- | | | |
|----------------|---|--|
| 1. Component | - | Current selected spare-part along with its cost. |
| 2. Select item | - | View the current condition of each component on the car and buy replacement parts if required. |
| 3. Bank | - | Amount of monies player has left. |
| 4. Viewpoint | - | Select top, side, front or back view of car. |
| 5. Exit | - | Exit repair screen. |

RACE SELECTION

Before racing, the player must choose a country from the world map. When selecting a country, the travel costs must be taken into account. The cost of travel depends upon the distance between venues. The racing season always starts from England, so country selection is not required at the beginning a new game.



1. World map – Holding the mouse button down and moving while over this will allow the player to move the main map screen freely in any direction.
2. Destination country – Using the mouse pointer, click on any of the country buttons to select your destination. The cost of travelling will be displayed in the small world map (1) along with your current bank balance. The current tracks available will be displayed on the large map as flashing symbols. Completed tracks will be displayed as a chequered flag symbol on the main map and their country buttons will not be selectable.
3. Exit – After selecting your destination country. Clicking on this will allow you to proceed to the next section.

N.B. The map screen will not appear until you have completed all three tracks of the chosen countries stage.

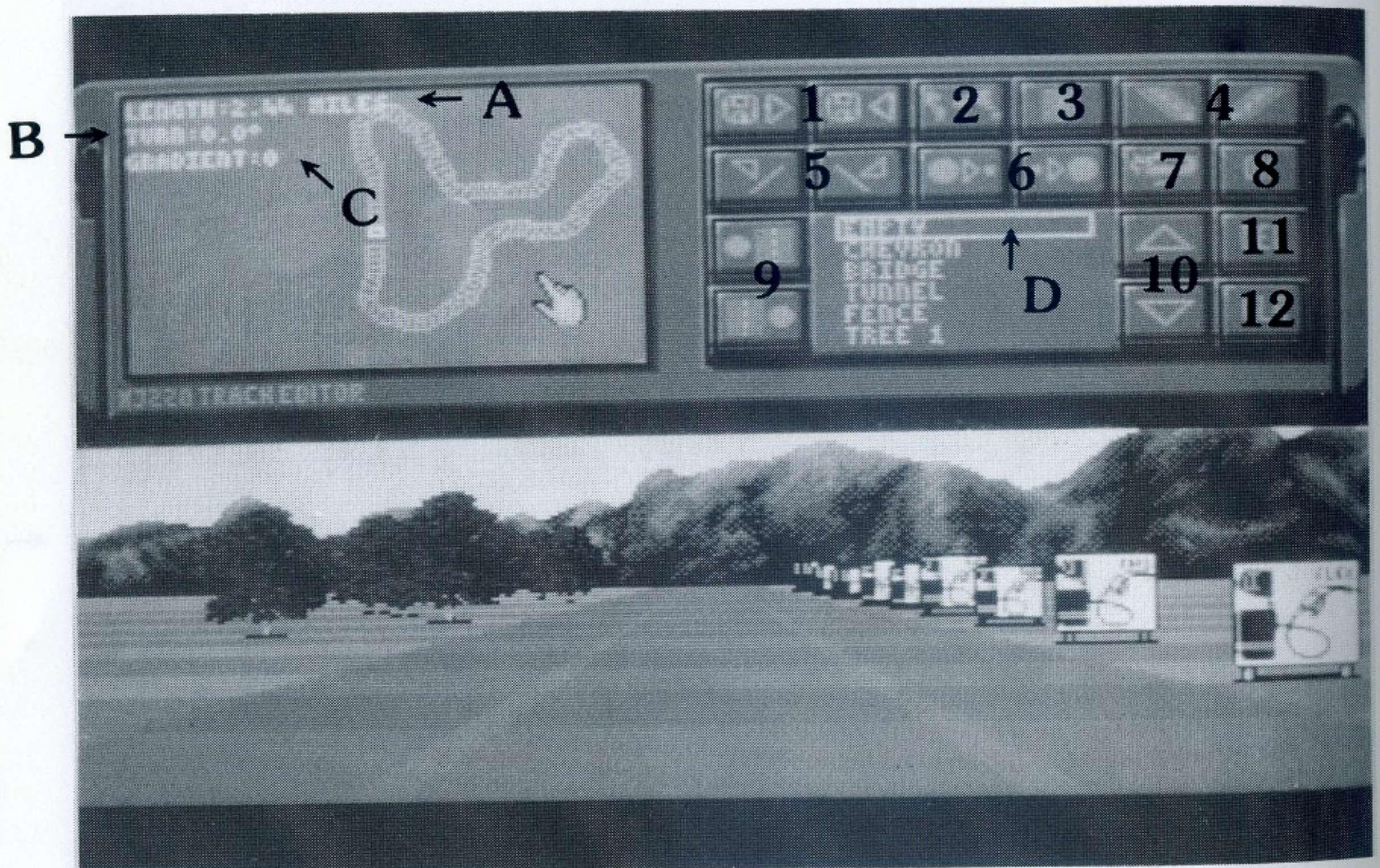
THE TRACK EDITOR

The track editor allows you to construct your own tracks from scratch or modify any of the 36 available.

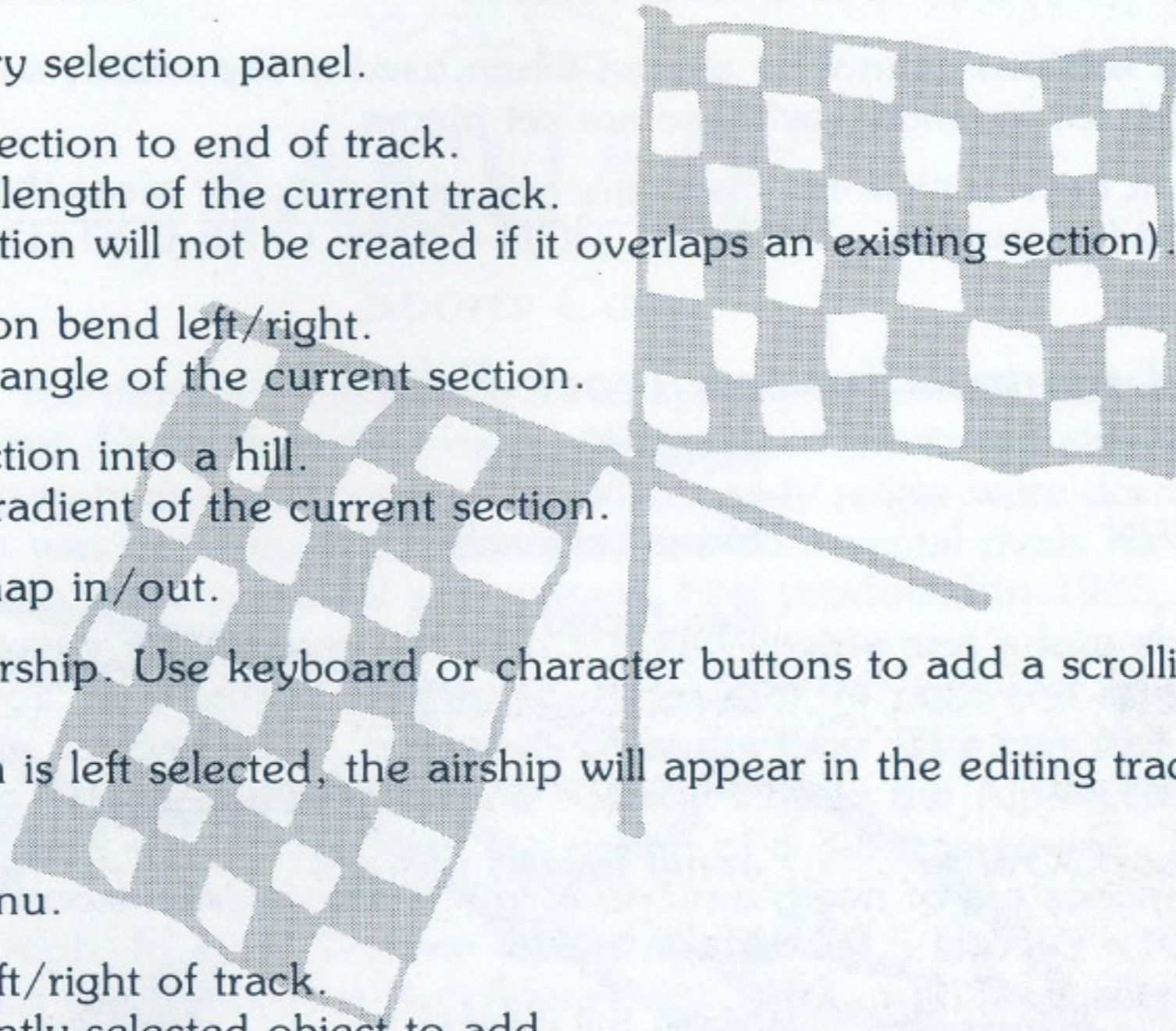
Upon entering the editors main screen, you will be presented with a country selection panel with each country marked on a button. Also three separate buttons are available for selecting tracks 1-3.

You should select a country and then a track number, using the mouse pointer. To edit the selected track, just click on the button marked 'OK'.

To practice on the currently selected track – press F1.



1. Load track/Save track.
2. Return to country selection panel.
3. Add new road section to end of track.
(A) displays the length of the current track.
(N.B. a new section will not be created if it overlaps an existing section).
4. Make road section bend left/right.
(B) displays the angle of the current section.
5. Make a road section into a hill.
(C) shows the gradient of the current section.
6. Zoom view of map in/out.
7. Switch on/off airship. Use keyboard or character buttons to add a scrolling message.
(N.B. If this icon is left selected, the airship will appear in the editing track when saved.)
8. Exit to main menu.
9. Add object to left/right of track.
(D) shows currently selected object to add.
10. Scroll object menu up/down.
11. Delete last track section.
12. Clear current track.



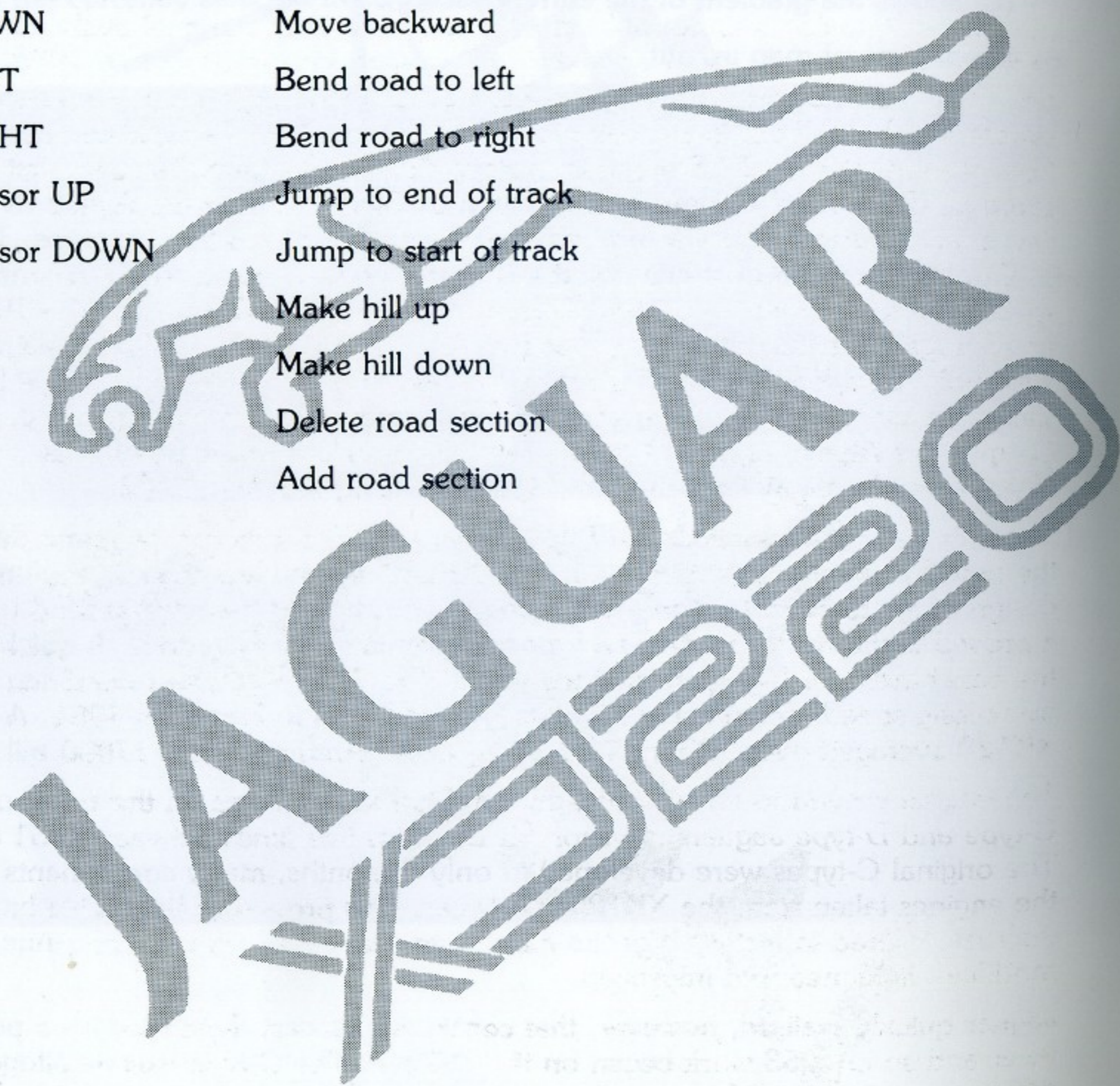
ROAD SECTION INFORMATION

Certain road sections cannot be altered when used in the editor, such as waterfalls or marsh villages for example, as these are set pieces.

N.B. When a track is cleared, the editor will automatically place the pits lane and start/finish line in position. **THIS SECTION CANNOT BE EDITED.**

Keyboard controls for the Track Editor

Cursor UP	Move forward
Cursor DOWN	Move backward
Cursor LEFT	Bend road to left
Cursor RIGHT	Bend road to right
Shift + cursor UP	Jump to end of track
Shift + cursor DOWN	Jump to start of track
+	Make hill up
-	Make hill down
Del	Delete road section
Help	Add road section





Sports Cars

For over 50 years, the name of Jaguar has been synonymous with performance, luxury and refinement. From its earliest days, Jaguar have produced cars with the power and handling to match any competitor. Many early rallies were dominated by the SS-100 which was not only much cheaper than continental rivals, (a princely 395 pounds), but also more powerful and rugged. First produced in 1935, the SS-100 was a 2 seater open sports car with 2.5 litre engine and a four-speed synchromesh gearbox. In standard form it was capable of 94 mph and accelerating from 0 to 60 mph in 12.8 seconds, outstanding for the time. The cars first success came in 1936 when Tommy Wisdom won a Glacier Cup in the Alpine Rally. The car was soon improved and was offered with the option of a 3.5 litre engine. This gave a useful performance boost bringing the 0-60 mph time down to ten seconds and a top speed of over 100 mph. In 1937 Tommy Wisdom's tuned 3.5 litre SS-100 recorded an average lap speed of 118 mph at Brooklands. By 1939, modifications raised that to 125 mph. Development was halted by the war, but on its return the SS-100s successes continued, the greatest when Ian Appleyard's 3.5 litre version gained a Coupes des Alps in the 1948 Alpine rally. The car continued its successes well into the fifties driven by many famous race drivers including Stirling Moss.

The fifties saw the introduction of the classic XK120 sports car, its name derived from the new XK engine it incorporated. The XK120 was no less than a revolution in the design of sports cars. Not only did it possess power and handling second to none, but it proved comfortable, reliable and most importantly, easy to drive. It quickly became the benchmark for high-performance sports cars. Reliability was underlined by the week-long speed record set at Montlhery Autodrome in France in 1951. A modified XK120 averaged over 100 mph for seven days covering almost 17000 miles.

The engine proved to be as successful on the track as it was on the road, powering C-type and D-type Jaguars to victory at Le Mans five times between 1951 and 1957. The original C-types were developed in only 8 months, many components including the engines taken from the XK120 sports car. This proved to be of little hindrance and the team soared to victory. For the next three years the cars were continuously modified, lightened and improved.

Jaguar quickly realised, however, that continued success depended on a purpose-built racer and so in 1953 work began on the D-Type. The D-type was an altogether different machine with breathtaking performance. The car proved a huge success taking three successive Le Mans victories. The cars were eventually retired in 1958 when new regulations restricted engine size to 3 litres, an engine capacity to which the race modified XK was unsuited.

The sixties saw the advent of the historic E-type Jaguar. Never before had a car made such an impact with motoring press and public.

Its design was obviously inspired by the D-type racers and indeed its chassis and engine owed much to the Le Mans winner. Once again the Jaguar not only undercut its obvious rivals, the Aston Martin DB4 and the Mercedes 300SL, but also proved to be more comfortable and flexible. The 3.8 engine was soon replaced by a 4.2 litre version and allied to a new gearbox the E-type retained its position as the worlds most desirable sports car.

Although not raced by Jaguar itself, the factory did support John Coombs and between 1961 and 1963 the car took many victories against cars such as the Ferrari GTO. The cars continued to be successful in the US and between 1964 and 1966 they won 39 races out of 42 entered.

As Jaguars success on the road continued, the racing division of the company was busy developing a new 5 litre V12 engine for a new Le Mans contender. The XJ-13 was to be Jaguars statement of technological superiority. With its aerodynamic mid-engine layout and over 500 bhp the XJ - 13 was capable of over 175 mph. Distrastrously the car was involved in an accident during a high-speed test. The car was travelling at around 140 mph on a banked track when the huge G-forces caused the offside rear wheel to collapse. The car was badly damaged but miraculously the driver, Norman Dewis, escaped virtually unscathed. Sadly, although the car was rebuilt, the project was scrapped but many components developed for the XJ - 13 were incorporated into Jaguar road cars including the powerful V12 engine.

By 1971 over 57,000 E-types had been built, more than 80% being exported. Due to new emission and safety regulations, though, the cars performance was restricted. To maintain Jaguars status, a new version of the V12 engine was chosen. The 5.3 litre V12 was installed in the new Series 3 variant and the option of an automatic transmission boosted sales dramatically. In fact the car was tested against the cream of Italian sports cars and only the exotic Maserati Bora proved slightly faster. The V12 E-type proved another success in US racing, winning virtually every race they entered sometimes lapping the entire field. The cars remained competitive for many years after production of the road cars had ceased, Bob Tullius winning the drivers and manufacturers titles in the 1977 Trans Am championship.

Production of the E-type finally ceased in 1975 after 72,000 had been built. Its replacement, the XJ-S continuing the line of powerful sports cars.

Jaguar re-entered Group C racing in 1985 after an absence of 27 years. The V12 so successful on the road proved to be just as at home on the track. After only three years the partnership of Jaguar and TWR were crushing the opposition, winning 8 of the 10 of the World Championship rounds including Le Mans, to take the manufacturers title. 1989 saw the introduction of the Twin Turbo V6 engine which proved successful in the shorter races. The groundwork led to today XJ - 14, currently the most advanced Group C car in the world.

THE TEAMS

Corvette:

Factory sponsored team running '91-spec ZR1's. The cars massive 5.7 litre engines are both powerful and reliable although rather thirsty and heavy. The cars traditional front-engine, rear wheel drive set-up limits cornering ability somewhat.

Stuck/Porsche:

Last years winning team, factory sponsored and for the first time running 959's. The cars twin-turbo engines provide masses of power and the four-wheel drive produces spectacular cornering although the rear-engine layout makes it twitchy on the limit.

Lorenzo/Bugatti:

New for this race season, using the all new EB110 sports car. Capable of a top speed of over 200 mph and the handling to match. This should prove to be a tough contender to all those racing this season.

Morello/Ferrari:

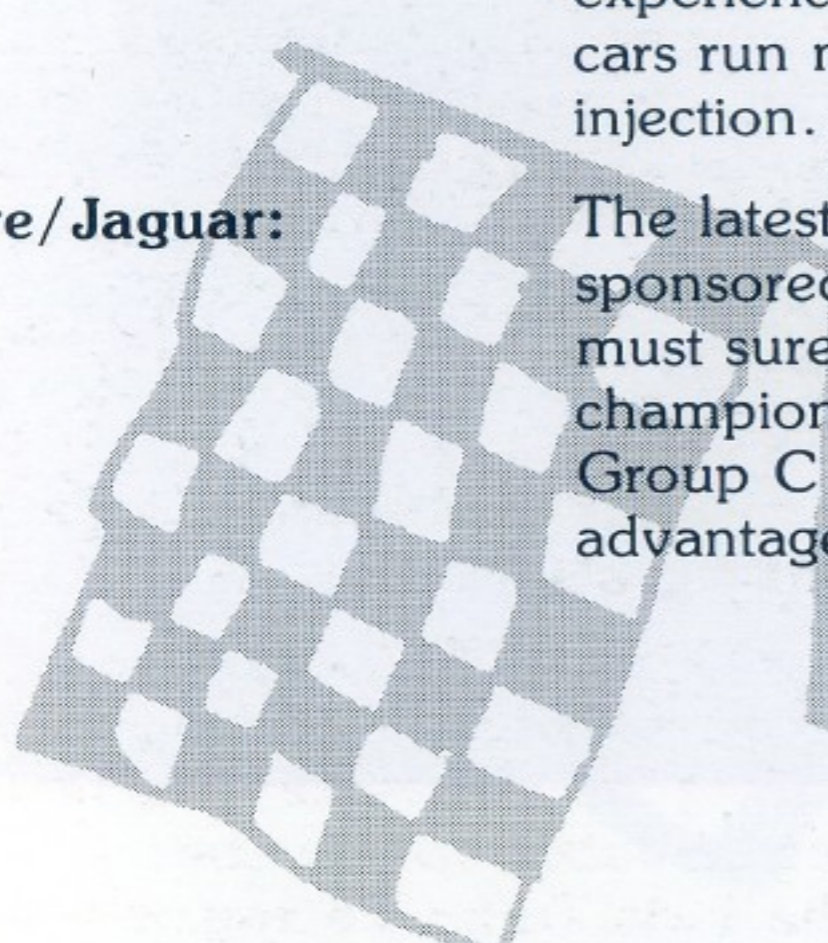
A new private team running the legendary F40. Producing almost 500 BHP in a lightweight body gives the car slingshot acceleration and a top speed of over 200 mph. The mid-engine layout provides balance in cornering although being only 2-wheel drive the car is a handful in the wet.

Kyle/Lamborghini:

The Kyle team return running ex-factory Countachs due to reliability problems with the Diablos. After a strong showing last season the team must be strong contenders with experienced drivers and well developed cars. The mid-engine cars run modified 5.2 litre V12 engines now fitted with fuel injection.

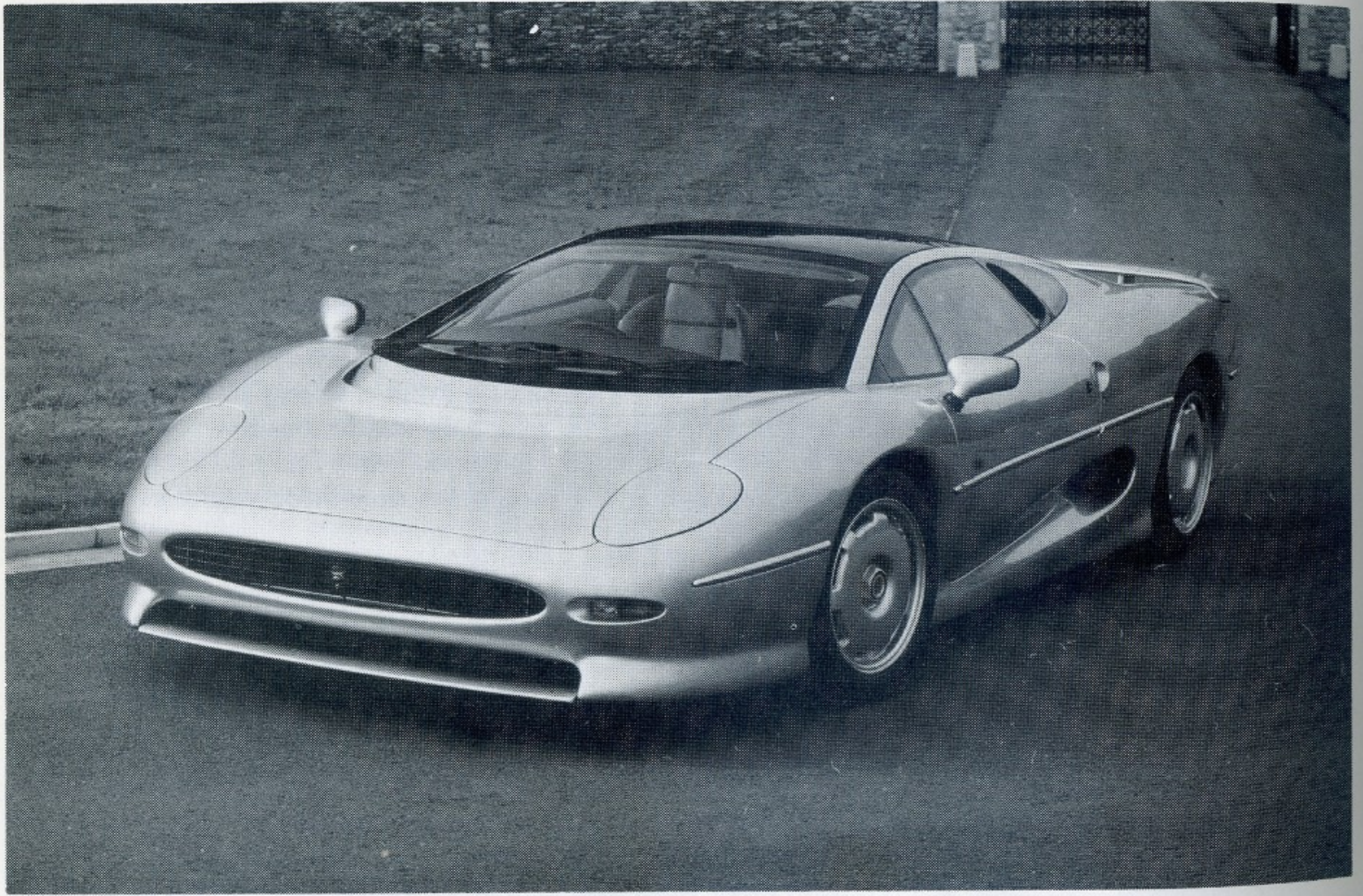
Core/Jaguar:

The latest team to enter the S.C.R. Challenge. Partly sponsored by Jaguar and running the new XJ-220 the team must surely be a strong contender for this years championship. Although the car is still in development, its Group C derived power-plant gives it an obvious speed advantage over most of the field.



XJ220

Specification Outline



- Construction** - Bonded and riveted lightweight aerospace aluminium/aluminium honeycomb body and chassis.
Aluminium body panels.
Group C race-derived aerodynamics including front and rear aerofoils and underbody venturi for optimum down-force.
- Engine** - Race developed 3.5 litre twin-turbo V6.
3498 cc (94mm bore x 84mm stroke).
24 valves, four camshafts.
Twin water-cooled turbochargers.
Twin air-to-air intercoolers.
Multi-point fuel injection.
Electronic engine management.
542 bhp (404 Kw) at 7200 rpm.
475 lb ft (642 Nm) at 4850 rpm.
- Drive-train** - Rear wheel drive.
5 speed transaxle gearbox with full synchromesh.
Limited slip differential.
Twin plate 8.5 inch AP racing clutch.
- Braking system** - Power assisted ventilated disks with 4-pot callipers all round.
- Steering** - Manual rack and pinion.
- Suspension** - Group C race-derived double unequal length wishbones.
Inboard concentric coil spring dampers.
Rear toe-control links.
Front and rear anti-roll bars.
- Wheels & Tyres** - 9" x 17" with 245/40 tyres (front).
14" x 18" with 345/35 tyres (rear).
- Performance** - Maximum speed over 213 mph.
0-60 mph in 4.0 seconds.
0-100 mph in 8.0 seconds.
- Dimensions** - Length 4860mm/191".
Width 2000mm/79".
Height 1150mm/45".
Wheelbase 2640mm/104".
Weight 1350 kg.

TACTICS

While racing always keep an eye on your fuel reserve (the faster you drive, the more fuel the car will use). On most tracks you will need to refuel at least once throughout the race.

Avoid opponent cars and any objects on the track as collisions lose speed and cause damage which you will have to pay to repair.

Keep an eye on the weather reports before racing, as bad weather can hinder your progress in a race. Rain makes for slippery tracks, crosswinds can affect cornering and top speed.

To keep costs down, plan your route through the season to minimise transport expenses. Bad results and expensive crash damage will quickly drain a teams bank balance.

Try to learn the course you are racing on, knowing where a sharp corner is can be a BIG help. (A brake in time saves damage!, and money!).

CREDITS

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Special thanks to:—

John Maries and all at Jaguar Sport. The garage for their 24 hour service throughout the long, cold nights. Nicky (patient) Collett, Jeremy for not changing the game too often (ha!), Sean for being such an excellent tea-boy! Thanks Kev for the TOTALLY BODACIOUS False Wall for blocking the rays man! Martin (Nobody loves me!) Iveson for not Bitching (ha!). Mac & Jay would like to thank G' n 'R for their awesomely loud music late at night (but the neighbours don't!). Mark says, 'Mr Fibble says "game over boys", as usual (ED). Amiga for such a lovely computer. Blerrgh! (Mark). Mac's brothers (Anthony & John) for contributing ideas. And obviously our parents for without whom we wouldn't be here to create such a wonderful game (Mac & Jay boasting again...). Thank Crunchie its Friday! and to all the top reviewers who gave us the reviews we deserved. Last, but by no means least, Jaguar for creating such an awesome car (and allowing Mac & Jay to sit in it!). Huh! sniff! (Mark).



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