= Allard J2X @-@ C =

The Allard J2X @-@ C , or the Allard J2X as it is sometimes referred to , was a Group C sports racing car built by Allard in 1992 for use in international sports car racing events . It featured a 3 @.@ 5 @-@ litre Cosworth DFR V8 engine , capable of producing around 580 hp (432 @.@ 5 kW ; 588 @.@ 0 PS) . The J2X @-@ C had bodywork that is more reminiscent of modern Le Mans Prototypes than a conventional Group C car , but the engine proved too weak for the level of downforce , and this , coupled with the fact that Allard Holdings were liquidated during the car 's development , severely restricted the J2X and prevented it ever reaching its potential . One car was built .

= = Development = =

In the 1980s , Chris Humberstone , who had a history of designing cars for various Formula One teams , licensed the rights to the Allard name from Alan Allard , the son of the company 's founder , Sidney . After a few years of wrangling , the company hired Hayden Burvill from Brun Technics to begin developing the J2X @-@ C. He was joined in 1991 by John Iley , who was hired as the aerodynamicist , and the car was designed to have as little frontal area as possible , giving it a unique look . Although it was originally planned to use a Chevrolet small block @-@ derived V8 engine , the car was instead fitted with a 3 @.@ 5 @-@ litre Cosworth DFR V8 engine , derived from a Formula One engine , which produced about 580 hp (432 @.@ 5 kW ; 588 @.@ 0 PS) of power and 400 lb · ft (542 @.@ 3 N · m ; 55 @.@ 3 kg · m) of torque . The gearbox was also from an F1 car : a Leyton House @-@ March Engineering 6 @-@ speed sequential manual transmission modified for endurance racing . This transmission would prove to be problematic throughout the car 's lifetime .

The J2X @-@ C used double wishbone suspension , with push @-@ rod actuated coil springs over dampers at both ends of the car ; the front suspension was mounted on the carbon @-@ fibre monocoque , whilst the rear suspension was mounted to a carbon @-@ fibre sub @-@ structure that had been designed to allow quick transmission replacement . The car 's radical bodywork generated a high amount of downforce ; it was calculated to give approximately 5 @,@ 500 lb (2 @,@ 495 kg) of downforce at 150 mph (241 km / h) , and 9 @,@ 778 lb (4 @,@ 435 kg) at 200 mph (322 km / h) . However , some of the more conventional cars were able to match this level of downforce ; the works Toyota TS @-@ 010s had a claimed maximum downforce of over 9 @,@ 500 lb (4 @,@ 309 kg) , for example . It was , however , higher than the works Nissan R91CP , which had a claimed maximum of 6 @,@ 438 lb (2 @,@ 920 kg) at 200 mph (322 km / h) , whilst the 1993 Joest @-@ Porsche 962C had a claimed maximum of 5 @,@ 584 lb (2 @,@ 533 kg) at 200 mph (322 km / h) .

= = Racing history = =

Terai Engineering attempted to enter the J2X @-@ C at the 500 km of Suzuka in April 1992 , but the car was far from ready , and did not attend . The J2X @-@ C was first tested on 9 July 1992 , with Costas Los selected to drive it at Pembrey Circuit . He said of the car ; " the J2X felt very different to a regular Group C car ... Contrary to most Group C cars I had driven , it was a lot more tuneable than I was accustomed to . " However , he did state that the car 's lack of power @-@ assisted steering was a problem . The team struggled to find a buyer for the car , as the Group C era was drawing to a close by 1992 and 1993 ; the IMSA GTP Championship was on its last legs , and the World Sportscar Championship was beginning to shift away from the category .

With the J2X @-@ C far from being completely developed , Allard Holdings were liquidated in the first quarter of 1993 , and the car was sold to Robs Lamplough for £ 76 @,@ 000 . The car 's lack of straightline speed , due to a combination of undeveloped aerodynamics , the high level of downforce , and the low power of the engine , would restrict the car 's racing career even further . After Lamplough had bought the car , he ran the car in the test session for the 1993 24 Hours of Le Mans

; however , he was only able to finish 19th overall , and last in the car 's category , even lapping slower than four of the GT cars . The car was clocked at just 172 mph (277 km / h) down the Mulsanne Straight , and this led to Lamplough opting to not run in the 24 Hours of Le Mans race . Instead , Lamplough debuted the car , with assistance from Bob Pond Racing , at the ninth round of the IMSA GTP Championship , held at Laguna Seca Raceway ; ninth place overall , and last in the GTP category , was the best Lamplough could do with the car . The car never raced again .

= = Later history and legacy = =

Lamplough held onto the J2X @-@ C for a while , but eventually sold the car , which then passed through the hands of several owners before ending up in Canada . Although even conventional rivals such as the Toyota TS @-@ 010 were able to develop more downforce , the J2X @-@ C was far from the end of its development , and various other companies had considered developing a similar style of car . Most manufacturers considered the radical bodywork just too great a risk , as Spice Engineering 's lead designer , Graham Humphries , stated ; " With limited resources , it was decided instead to follow the more conventional route of further developing what we knew . " However , Le Mans Prototypes of the early 2000s and beyond , such as the Audi R8 , the Lola B01 / 60 and the Lola B05 / 40 have all been said to use some of the lessons learned in the J2X @-@ C. The J2X @-@ C was , as of 2008 , in running order having been fully restored , and ran in the 2007 Goodwood Festival of Speed , as part of the Group C 25th Anniversary celebration .