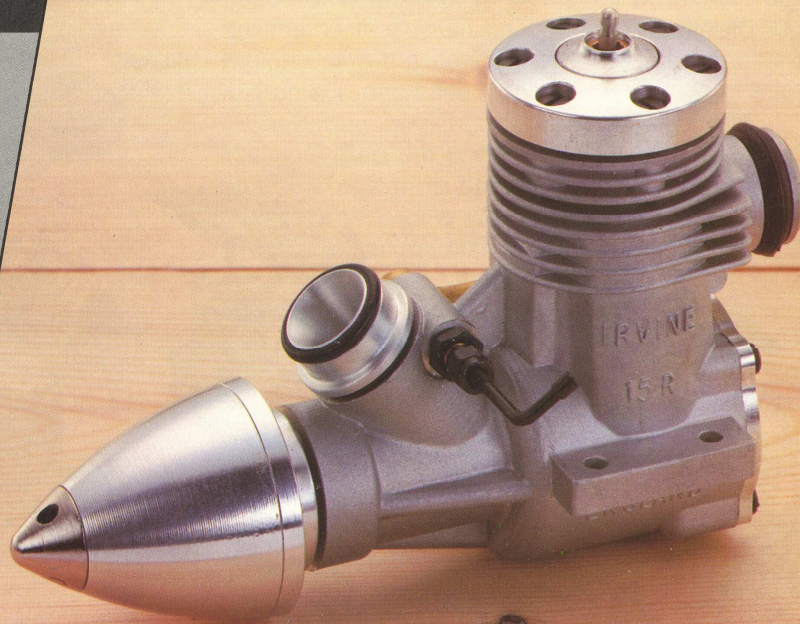
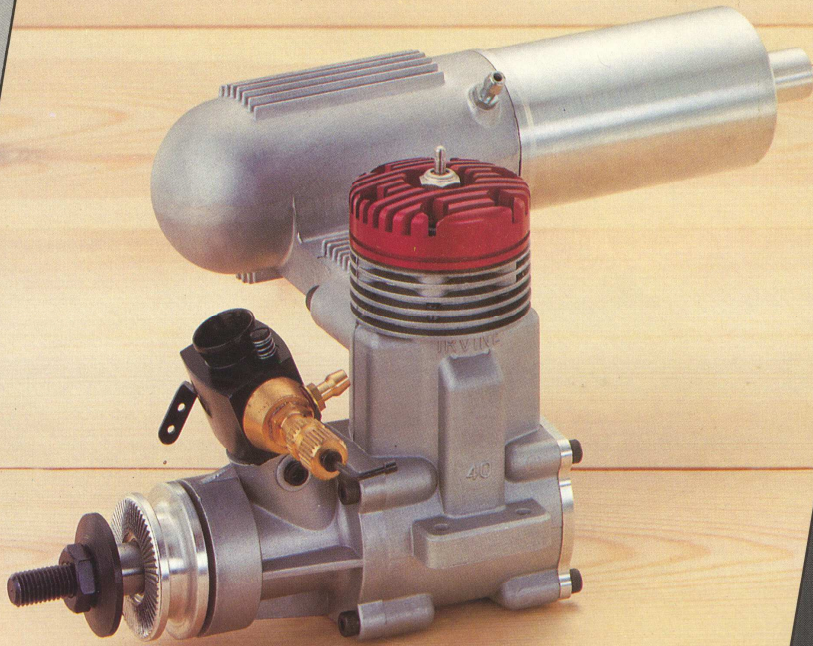


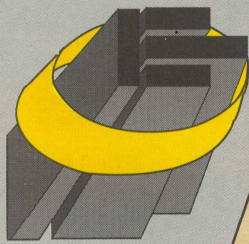
# **IRVINE**

## **ENGINES**



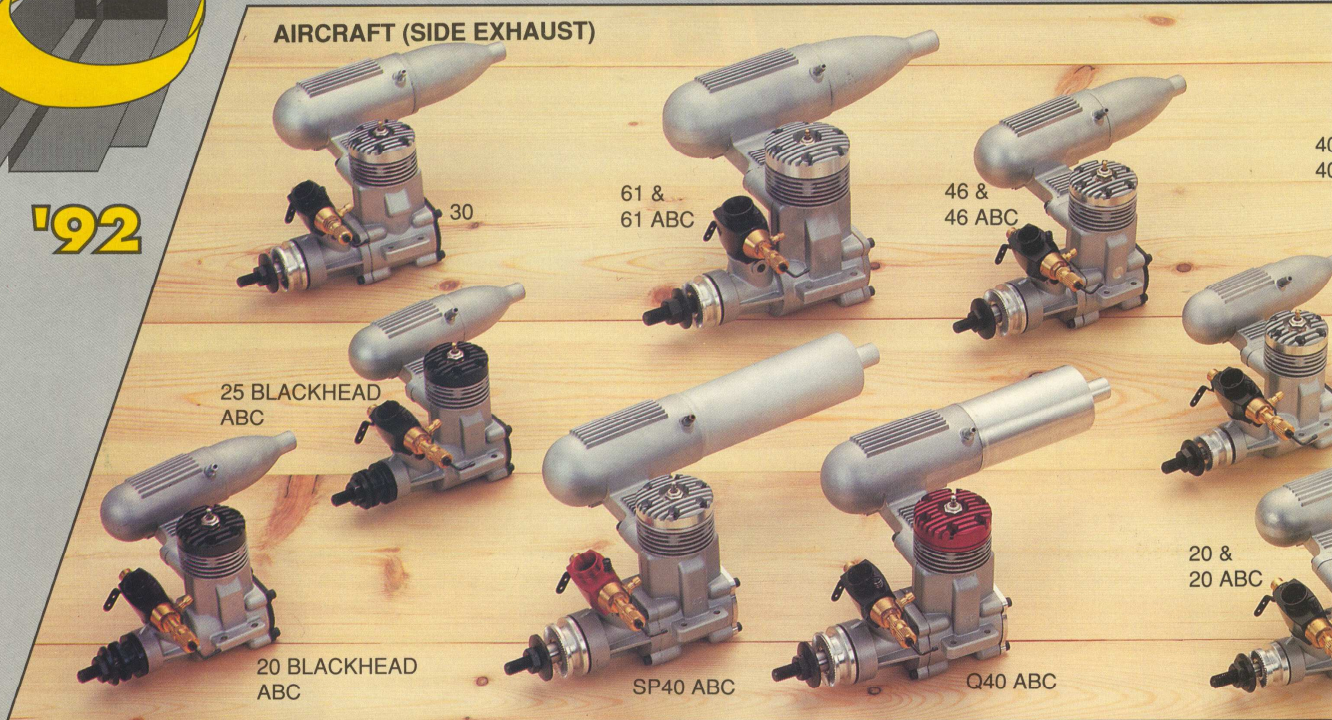
**1992**  
**Range**





'92

**AIRCRAFT (SIDE EXHAUST)**



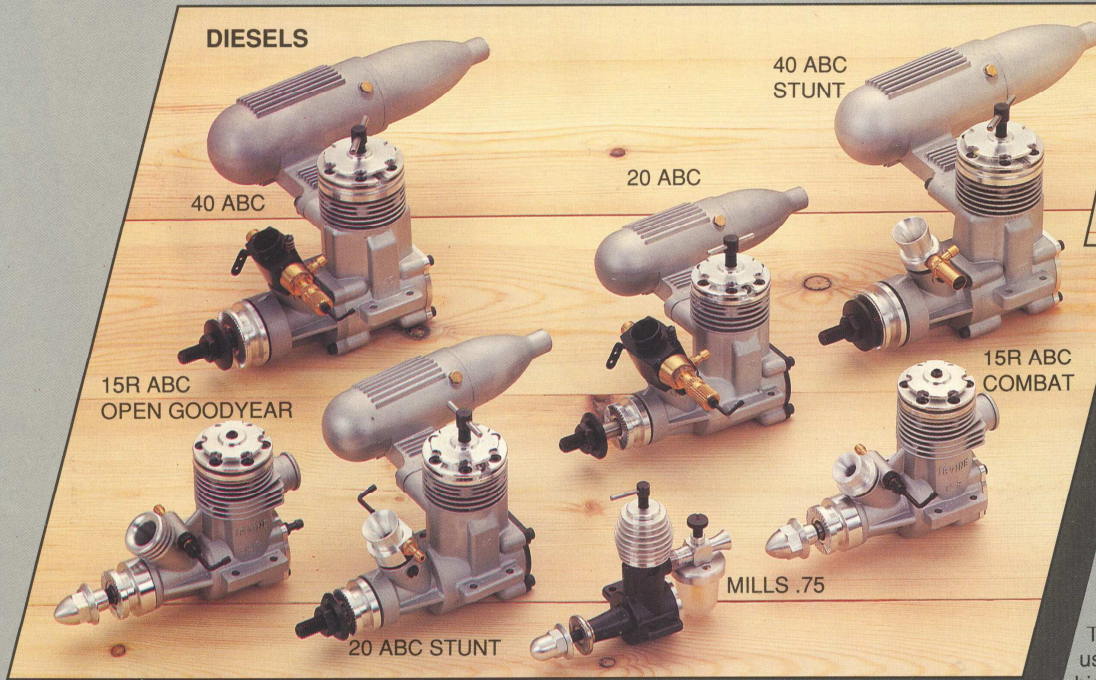
**AIRCRAFT (SIDE EXHAUST)**

From the basic 20 ABC Blackhead to the superb 61 ABC the Irvine side exhaust aero engine range covers no less than 15 individual models. All feature Schneurle porting for high power, twin ball races (except Blackheads) and high precision machined components. All ABC engines have 'true' ABC metallurgy and special chrome plating to improve lubrication.

The 20 and 25's are basically the same physical size as are the 30, 40 and 46's so you can choose the right power for your model without worrying about enlarging the model for bigger capacities.

The very latest high-tech Q40 is the first of a new generation of 'Quiet' engines. With an APC 10 x 9 propeller we obtained a low of 76 Dba @ 7 metres and it will still turn this propeller at over 11,000 rpm! With its advanced 8 port liner and machined cylinder head (anodised red) it shows the quality apparent on all Irvine engines.

**DIESELS**



**DIESELS**

The resurgence in ('ignition') engines has a diesel engine range. More are planned!

All are highly advanced and twin ball races. The brass contra piston endo most attractive qualities, the propeller sizes. In the case

The 15R ABC features a re uses and the special 15R 'C high rpm control line racing.



## RACING

The reputation of Irvine racing engines is legend. The 15R ABC Speed is the fastest production 2.5cc engine in the world and the 21R ABC Speed holds the world open record at 194 mph. Solid proof of the design and quality production that makes Irvine engines world leaders.

The 15R ABC speed comes equipped with its own tuned pipe machined from solid bar. This provides the complex shape that is almost impossible to simulate by spinning techniques and provides the optimum qualities needed at high rpm's (35,000-40,000).

There's a 20 pylon engine and a 40 rear induction, rear exhaust (Racing), for either pylon or control line speed applications.

Needless to say only the very best materials are used and the degree of precision necessary involves extensive selection and matching of components to provide the ultimate performance combination.

## RACING

### 21R ABC SPEED

### 15R ABC SPEED

## AIRCRAFT (REAR EXHAUST)

### 61R & 61R ABC

### 21R ABC

## AIRCRAFT (REAR EXHAUST)

Three rear exhaust engines compliment their side exhaust counterparts by offering an exhaust position suitable for an in-cowl silencer or, alternatively, the fitment of a tuned pipe. The diminutive 21R ABC was developed from the world record breaking speed engine but with 'milder' timings for the requirements of R.C. carburettor use.

Both the 40R and 61R are available in either ringed or ABC format and are ideal for scale or aerobatic applications.

## HELICOPTER

Four different 40 & 46 size helicopter engines with fully machined and anodised cylinder heads offer the sports helicopter flyer of machines such as the Morley range, MFA 500 and (with modification to the mounts) the X-Cell 40 superb power and throttle response. Each one has been optimised to give smooth progressive power, particularly in the mid range where it is needed.

The new 61 Helicopter engine has the brute power & torque necessary for larger machines such as the new Morley 'Maverick', which it fits perfectly.

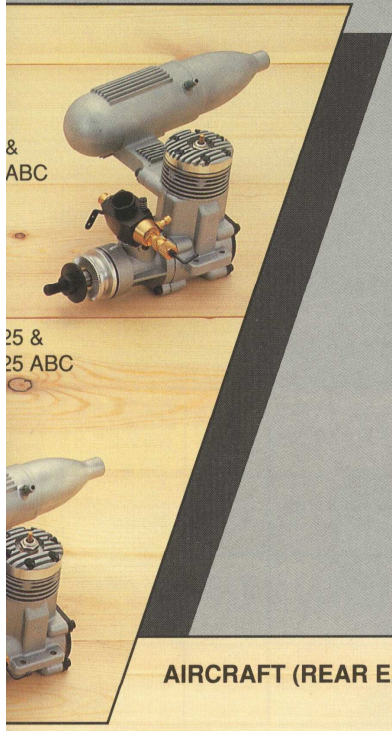
Their large heat-sink cylinder heads control the high temperatures achieved by this type of engine to ensure consistent smooth running.

esels (more correctly 'compression  
been led by the exciting new Irvine  
rrently there are just six versions but

ABC engines with Schneurle porting  
vel cylinder head design with integral  
s the Irvine diesels with one of their  
ability to turn a very large variation of  
the 40ABC, from 10" to 16"!

exhaust layout and is best for combat  
en Goodyear' is an all out racer for





## RACING

The reputation of Irvine racing engines is legend. The 15R ABC Speed is the fastest production 2.5cc engine in the world and the 21R ABC Speed holds the world open record at 194 mph. Solid proof of the design and quality production that makes Irvine engines world leaders.

The 15R ABC speed comes equipped with its own tuned pipe machined from solid bar. This provides the complex shape that is almost impossible to simulate by spinning techniques and provides the optimum qualities needed at high rpm's (35,000-40,000).

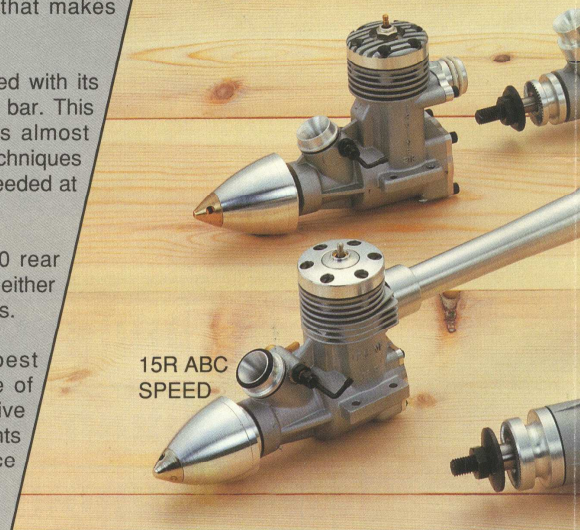
There's a 20 pylon engine and a 40 rear induction, rear exhaust (Racing), for either pylon or control line speed applications.

Needless to say only the very best materials are used and the degree of precision necessary involves extensive selection and matching of components to provide the ultimate performance combination.

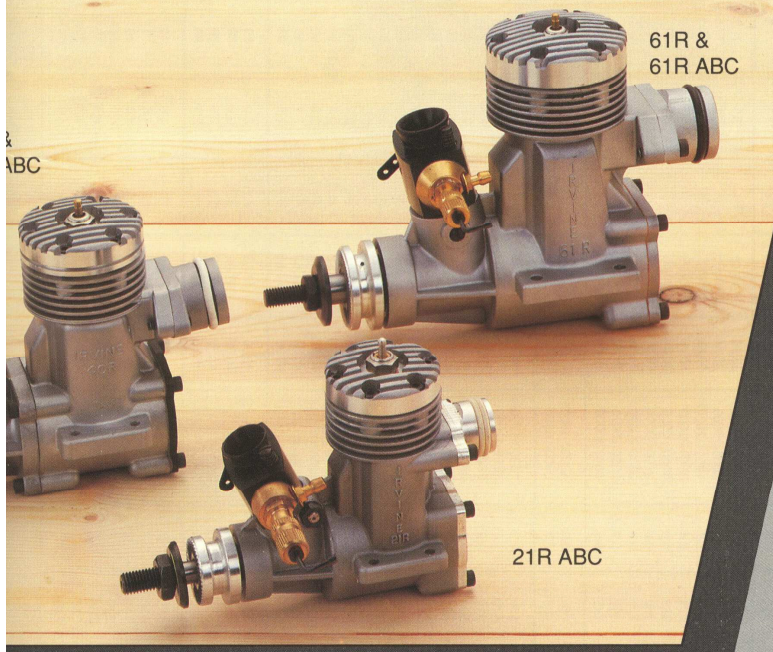
## RACING

21R ABC SPEED

15R ABC SPEED



## AIRCRAFT (REAR EXHAUST)



61R & 61R ABC

21R ABC

## AIRCRAFT (REAR EXHAUST)

Three rear exhaust engines compliment their side exhaust counterparts by offering an exhaust position suitable for an in-cowl silencer or, alternatively, the fitment of a tuned pipe. The diminutive 21R ABC was developed from the world record breaking speed engine but with 'milder' timings for the requirements of R.C. carburettor use.

Both the 40R and 61R are available in either ringed or ABC format and are ideal for scale or aerobatic applications.

## HELICOPTER

Four different 40 & 46 size helicopter engines with fully machined and anodised cylinder heads offer the sports helicopter flyer of machines such as the Morley range, MFA 500 and (with modification to the mounts) the X-Cell 40 superb power and throttle response. Each one has been optimised to give smooth progressive power, particularly in the mid range where it is needed.

The new 61 Helicopter engine has the brute power & torque necessary for larger machines such as the new Morley 'Maverick', which it fits perfectly.

Their large heat-sink cylinder heads control the high temperatures achieved by this type of engine to ensure constant smooth running.

esels (more correctly 'compression  
been led by the exciting new Irvine  
rently there are just six versions but

ABC engines with Schnurle porting  
vel cylinder head design with integral  
s the Irvine diesels with one of their  
ability to turn a very large variation of  
the 40ABC, from 10" to 16"!

exhaust layout and is best for combat  
en Goodyear' is an all out racer for



# IRVINE

## ENGINES

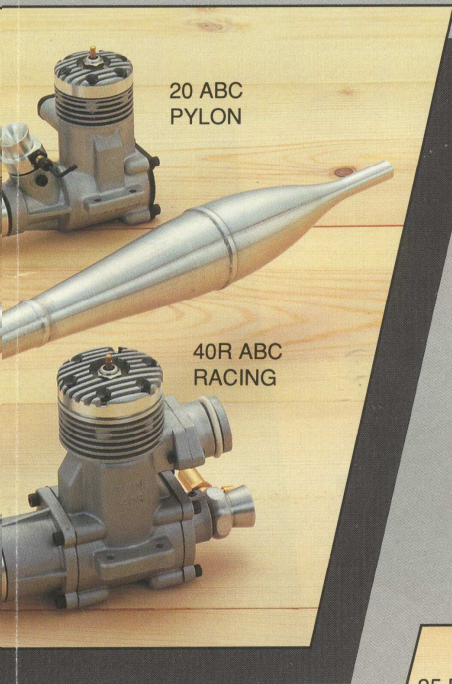
*Power for the future*

Irvine engines have been powering models all over the world for over 20 years. With our advanced CNC production machines and innovative designs, based on solid development and rigorous testing, you can be assured of the highest quality and long life.

All Irvine R.C. engines are now equipped with the acclaimed 'Jetstream' all metal carburettor for precise fuel metering and throttle response.

We design our engines to be non critical to operate and to use 'standard' type fuels. as we believe it is important that our engines should be easy to operate and more importantly, enjoyable to use, the 'essence' of our hobby!

With nearly 60 different versions you can be sure of finding one to suit your need.



20 ABC  
PYLON

40R ABC  
RACING

### CONTROL LINE AND FREE FLIGHT

For free flight there is the 15R ABC standard and for C/L there are four side exhaust ringed engines from 20 to 40 size. The two economic 'Blackheads' offer real entry level value with their ABC piston/liners and give a good head start to the C/L beginner.

The smooth reliable power of these ball raced engines has made them the first choice for many control line modellers the world over. No other manufacturer supports the world of control line flying like Irvine.

#### CONTROL LINE/FREE FLIGHT

25 BLACKHEAD  
ABC

40

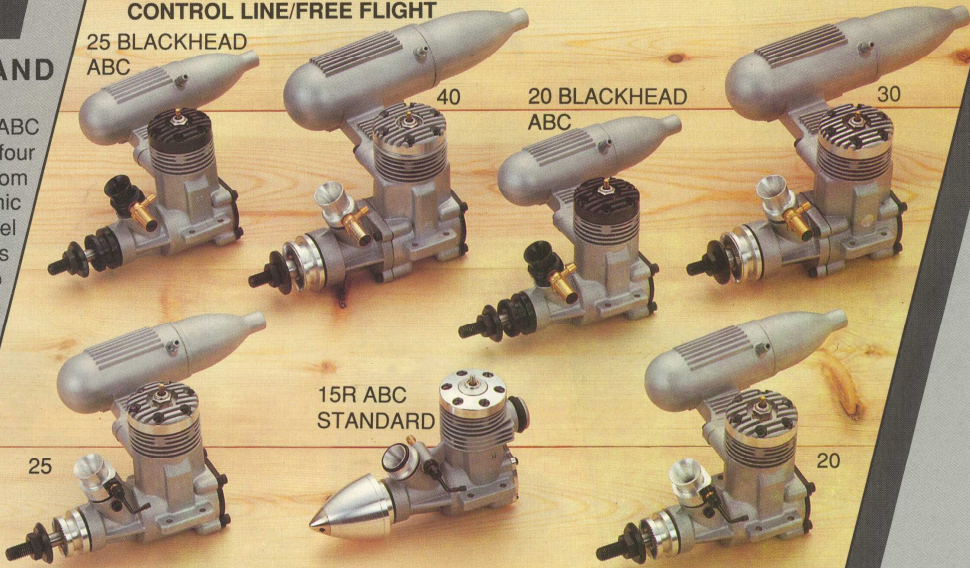
20 BLACKHEAD  
ABC

30

25

15R ABC  
STANDARD

20

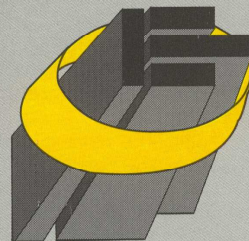
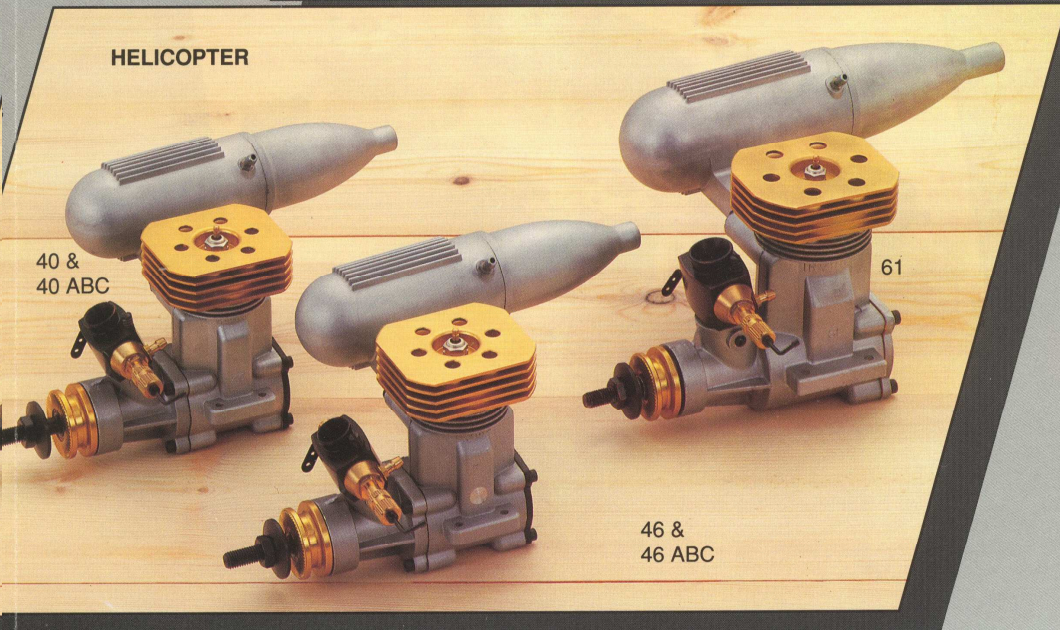


### HELICOPTER

40 &  
40 ABC

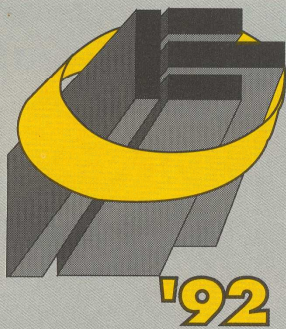
61

46 &  
46 ABC



'92





'92

### CAR/BUGGY

For car enthusiasts the Irvine range has become a household name, particularly in oval stock car racing. The Irvine 20 and 20 ABC's reign supreme, with their crisp throttle response, high power and renowned reliability. The specially designed carburettor allows easy adjustment of main needle settings via the vertical screw (especially when a body is in place) and all versions are equipped with twin ball races and schnuerle porting.

For those wanting a little more power there are 25 size versions and in common with the 20's they have precision machined heat sink heads to make sure everything stays cool.

For all-out power and competition use there is the 21R ABC. Producing over 1.5 Bhp and with its rear exhaust layout it is ideal for the best racing cars and buggys of today.

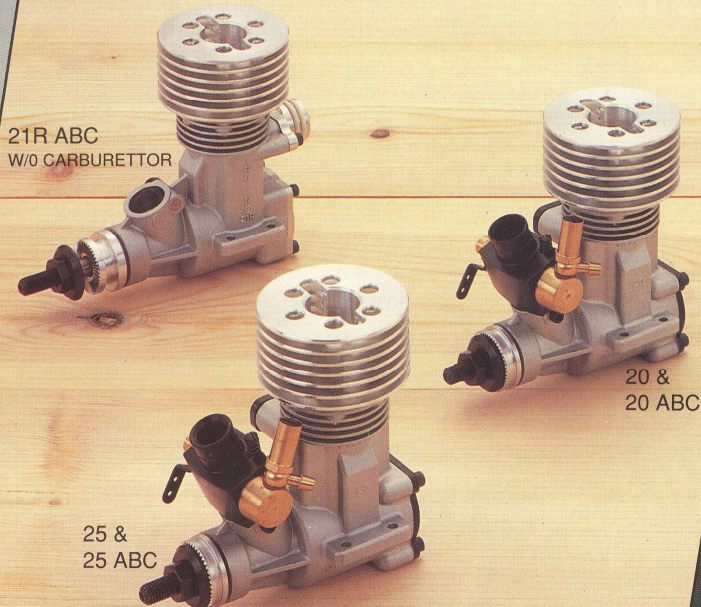
### MARINE

Probably the finest range of sports marine engines available anywhere in the world. The side exhaust versions range from 20 size to 61 size and come complete with a manifold and steel flywheel. The beautiful machined, watercooled head and all metal carburettor exhibit the quality of manufacture developed over 20 years of production.

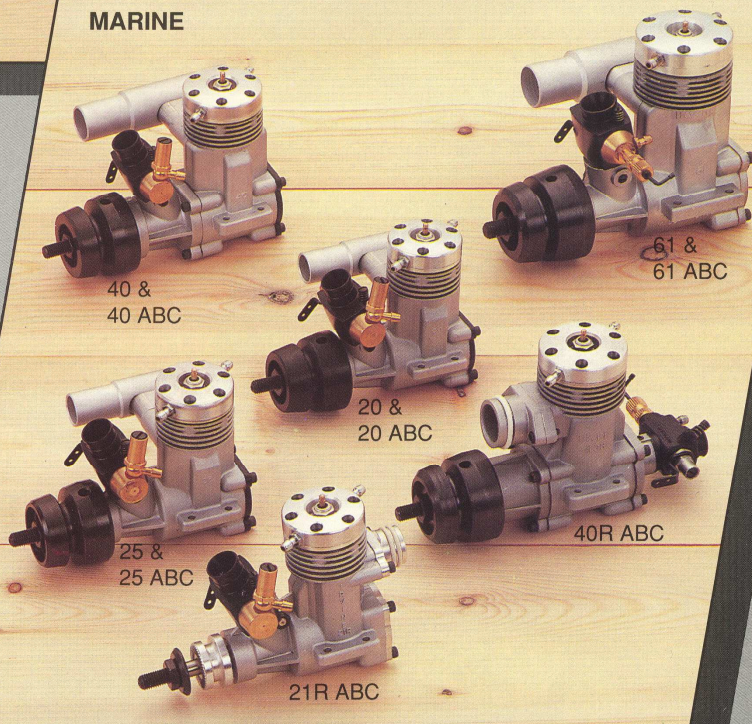
Once again the main mixture is adjusted via a vertical screw which can easily be accessed from the top of the boat.

For racing enthusiasts there is the 21R ABC (without flywheel) for gearbox use and the 40R ABC front exhaust model for direct drive multi-racing. The drum valve rear induction on the 40R offers easy access to the carburettor and superior power. The timing on both the 21R and 40R has been optimised for tuned pipe use.

### CAR/BUGGY



### MARINE



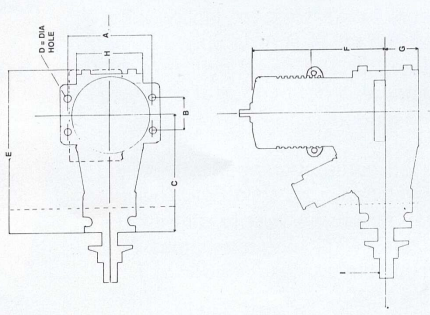




# TECHNICAL SPECIFICATIONS

# IRVINE ENGINES

ENGINE	BORE m.m.	STROKE m.m.	DISP. c.c.	WEIGHT grms	MAX BHP	RPM RANGE	DIMENSIONS (m.m.)								
							A	B	C	D	E	F	G	H	I
Irvine Mills 75	8.5	13.2	.75	60	N/A	6000-11000	28.6	9.5	28	2.75	38.7	46.7	10.2	22.0	3mm
Irvine 15R ABC Standard	15.0	14.0	2.5	210	1.0	2500-33000	36.0	16.0	49	3	67	51.2	15	30.0	6mm
Irvine 15R ABC Speed	15.0	14.0	2.5	210	N/A	3300-40000	36.0	16.0	49	3	67	51.2	15	30.0	6mm
Irvine 15R ABC diesel Combat	15.0	14.0	2.5	190	0.6	11000-22000	36.0	16.0	49	3	67	51.2	15	30.0	6mm
Irvine 15R ABC diesel Goodyear	15.0	14.0	2.5	190	N/A	17000-27000	36.0	16.0	49	3	67	51.2	15	30.0	6mm
Irvine 20 Blackhead ABC stunt	16.66	16.41	3.48	250	0.6	10000-19000	36.86	16.03	55	3.1	77.5	56	14.62	29.5	1/4UNF
Irvine 20 Blackhead ABC	16.66	16.41	3.48	275	0.6	3000-19000	36.86	16.03	55	3.1	77.5	56	14.62	29.5	1/4UNF
Irvine 20 stunt	16.66	16.41	3.48	250	0.7	10000-21000	36.86	16.03	55	3.1	77.5	56	14.62	29.5	1/4UNF
Irvine 20	16.66	16.41	3.48	275	0.7	3000-22000	36.86	16.03	55	3.1	77.5	56	14.62	29.5	1/4UNF
Irvine 20 marine	16.66	16.41	3.48	385	0.7	3000-23000	36.86	16.03	67.3	3.1	90	56	14.62	29.5	1/4UNF
Irvine 20 carbuggy	16.66	16.41	3.48	280	0.7	3000-23000	36.86	16.03	49.5	3.1	72	72.3	14.62	29.5	1/4UNF
Irvine 20 ABC	16.66	16.41	3.48	385	0.8	3000-23000	36.86	16.03	55	3.1	77.5	56	14.62	29.5	1/4UNF
Irvine 20 ABC marine	16.66	16.41	3.48	385	0.9	3000-26000	36.86	16.03	67.3	3.1	90	56	14.62	29.5	1/4UNF
Irvine 20 ABC carbuggy	16.66	16.41	3.48	280	0.9	3000-26000	36.86	16.03	49.5	3.1	72	72.3	14.62	29.5	1/4UNF
Irvine 20 ABC pylon	16.66	16.41	3.48	215	0.9	3000-26000	36.86	16.03	55	3.1	77.5	56	14.62	29.5	1/4UNF
Irvine 20 ABC diesel stunt	16.66	16.41	3.48	285	0.4	10000-18000	36.86	16.03	55	3.1	77.5	57	14.62	29.5	1/4UNF
Irvine 20 ABC diesel	16.66	16.41	3.48	280	0.4	3000-18000	36.86	16.03	55	3.1	77.5	57	14.62	29.5	1/4UNF
Irvine 21R ABC	16.66	16.41	3.48	265	1.0	3000-23000	36.86	16.03	55	3.1	77.5	56	14.62	29.5	1/4UNF
Irvine 21R ABC marine	16.66	16.41	3.48	280	1.0	3000-23000	36.86	16.03	55	3.1	65	56	14.62	29.5	1/4UNF
Irvine 21R ABC carbuggy	16.66	16.41	3.48	250	1.5	3000-31000	36.86	16.03	49.5	3.1	72	72.3	14.62	29.5	1/4UNF
Irvine 21R ABC speed	16.66	16.41	3.48	240	N/A	3000-36000	36.86	16.03	55	3.1	77.5	56	14.62	29.5	1/4UNF
Irvine 25 Blackhead ABC stunt	18.08	16.41	4.09	250	0.7	10000-19000	36.86	16.03	55	3.1	77.5	56	14.62	29.5	1/4UNF
Irvine 25 Blackhead ABC	18.08	16.41	4.09	275	0.7	3000-19000	36.86	16.03	55	3.1	77.5	56	14.62	29.5	1/4UNF
Irvine 25 stunt	18.08	16.41	4.09	250	0.8	10000-20000	36.86	16.03	55	3.1	77.5	56	14.62	29.5	1/4UNF
Irvine 25	18.08	16.41	4.09	275	0.8	3000-20000	36.86	16.03	55	3.1	77.5	56	14.62	29.5	1/4UNF
Irvine 25 marine	18.08	16.41	4.09	385	0.8	3000-20000	36.86	16.03	67.3	3.1	90	56	14.62	29.5	1/4UNF
Irvine 25 carbuggy	18.08	16.41	4.09	280	0.8	3000-20000	36.86	16.03	49.5	3.1	72	72	14.62	29.5	1/4UNF
Irvine 25 ABC	18.08	16.41	4.09	275	0.9	3000-20000	36.86	16.03	55	3.1	77.5	56	14.62	29.5	1/4UNF
Irvine 25 ABC marine	18.08	16.41	4.09	385	0.9	3000-20000	36.86	16.03	67.3	3.1	90	56	14.62	29.5	1/4UNF
Irvine 25 ABC carbuggy	18.08	16.41	4.09	280	0.9	3000-20000	36.86	16.03	49.5	3.1	72	72	14.62	29.5	1/4UNF
Irvine 30 stunt	18.72	18.46	4.94	450	0.9	10000-16000	40.36	17.62	66	2.9	89	65	16.92	34.5	1/4UNF
Irvine 30	18.72	18.46	4.94	485	0.9	2800-16000	40.36	17.62	66	2.9	89	65	16.92	34.5	1/4UNF
Irvine 40 stunt	21.54	18.46	6.54	430	1.2	10000-17500	40.36	17.62	66	2.9	89	65	16.92	34.5	1/4UNF
Irvine 40	21.54	18.46	6.54	430	1.2	2800-17500	40.36	17.62	66	2.9	89	65	16.92	34.5	1/4UNF
Irvine 40 marine	21.54	18.46	6.54	610	1.2	2800-18000	40.36	17.62	66	2.9	103	65	16.92	34.5	1/4UNF
Irvine 40 helicopter	21.54	18.46	6.54	500	1.1	2800-17000	40.36	17.62	66	2.9	89	65	16.92	34.5	1/4UNF
Irvine 40 ABC	21.54	18.46	6.54	465	1.2	2800-18000	40.36	17.62	66	2.9	89	65	16.92	34.5	1/4UNF
Irvine 40 ABC marine	21.54	18.46	6.54	610	1.2	2800-18000	40.36	17.62	66	2.9	103	67	16.92	34.5	1/4UNF
Irvine 40 ABC helicopter	21.54	18.46	6.54	500	1.1	2800-17000	40.36	17.62	66	2.9	89	65	16.92	34.5	1/4UNF
Irvine C40 ABC	20.57	19.48	6.48	475	1.0	2800-14000	40.36	17.62	66	2.9	89	65	16.92	34.5	1/4UNF
Irvine SP40 ABC	21.54	18.46	6.54	515	1.3	3000-18500	40.36	17.62	66	2.9	89	65	16.92	34.5	1/4UNF
Irvine 40 ABC diesel stunt	20.57	19.48	6.48	465	0.8	8000-14000	40.36	17.62	66	2.9	89	65	16.92	34.5	1/4UNF
Irvine 40 ABC diesel	20.57	19.48	6.48	500	0.8	2800-14000	40.36	17.62	66	2.9	89	65	16.92	34.5	1/4UNF
Irvine 40R	21.54	18.46	6.54	375	1.2	2800-17500	40.36	17.62	66	2.9	89	65	16.92	34.5	1/4UNF
Irvine 40R ABC	21.54	18.46	6.54	375	1.2	2800-18000	40.36	17.62	66	2.9	89	65	16.92	34.5	1/4UNF
Irvine 40R ABC marine	21.54	18.46	6.54	385	2.0	3000-27000	40.36	17.62	66	2.9	96	67	16.92	34.5	1/4UNF
Irvine 40R ABC racing	21.54	18.46	6.54	345	N/A	24000-28000	40.36	17.62	59	2.9	82	65	16.92	34.5	1/4UNF
Irvine 46	22.60	19.48	7.81	455	1.3	2800-17000	40.36	17.62	66	2.9	89	65	16.92	34.5	1/4UNF
Irvine 46 helicopter	22.60	19.48	7.81	490	1.3	2800-17000	40.36	17.62	66	2.9	89	65	16.92	34.5	1/4UNF
Irvine 46 ABC	22.60	19.48	7.81	455	1.3	2800-17000	40.36	17.62	66	2.9	89	65	16.92	34.5	1/4UNF
Irvine 46 ABC helicopter	22.60	19.48	7.81	490	1.3	2800-17000	40.36	17.62	66	2.9	89	65	16.92	34.5	1/4UNF
Irvine 61	24.10	22.05	9.78	705	1.7	2800-17000	49.36	27.18	70	4.0	101.5	82	19.1	39.0	5/16UNF
Irvine 61 marine	24.10	22.05	9.78	880	1.7	2800-17000	49.36	27.18	86	4.0	117	82	19.1	39.0	5/16UNF
Irvine 61 ABC	24.10	22.05	9.78	705	1.7	2800-17000	49.36	27.18	70	4.0	101.5	82	19.1	39.0	5/16UNF
Irvine 61 ABC marine	24.10	22.05	9.78	880	1.7	2800-17000	49.36	27.18	86	4.0	117	82	19.1	39.0	5/16UNF
Irvine 61 helicopter	24.10	22.05	9.78	760	1.7	2800-16000	49.36	27.18	70	4.0	101.5	79	19.1	39.0	5/16UNF
Irvine 61R	24.10	22.05	9.78	565	1.7	2800-17000	49.36	27.18	70	4.0	101.5	82	19.1	39.0	5/16UNF
Irvine 61R ABC	24.10	22.05	9.78	565	1.7	2800-17000	49.36	27.18	70	4.0	101.5	82	19.1	39.0	5/16UNF



Please note: Dimension C is measured from the face of the propeller driver & front of flywheel for aero & marine respectively and from the front of the crank case/front bearing for all others.



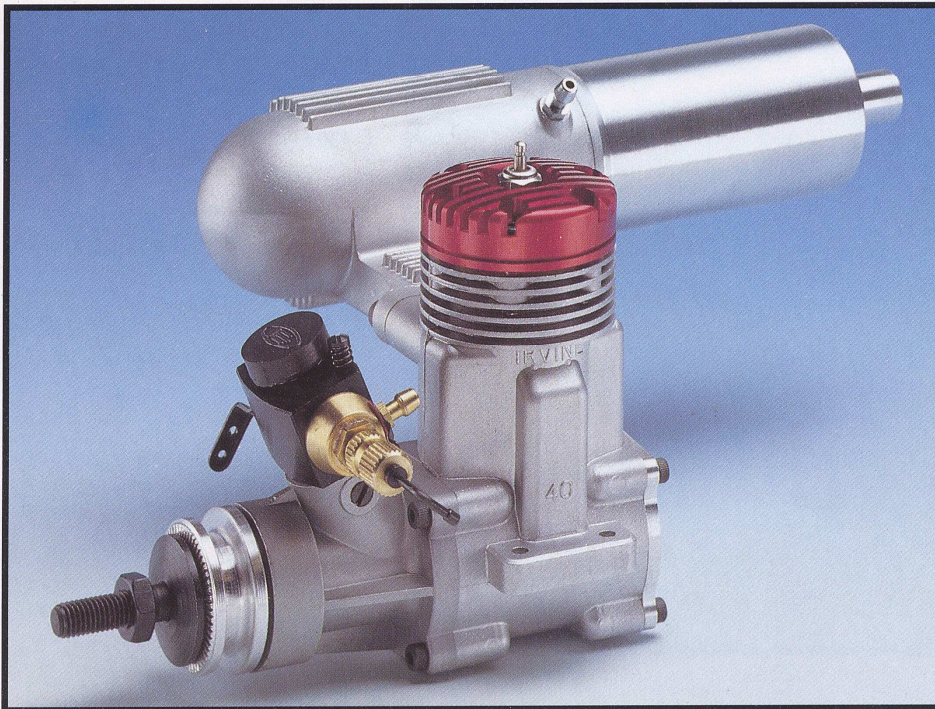
# IRVINE

# Q40

# ABC

76dB  
@ 7 metres

'THE QUIET  
SOLUTION'



BORE: 20.57mm  
STROKE: 19.48mm  
CAPACITY: 6.48cc  
MAX POWER: 1.0 Bhp  
@14000 rpm  
RPM RANGE: 2500 - 14000  
PROPELLERS: APC 10 x 8  
10 x 9  
11 x 7  
11 x 8

- **UNIQUE PATENTED QUIET SILENCER**
- **MACHINED RED CYLINDER HEAD**
- **SPECIAL 8 PORT PISTON/LINER (ABC)**
- **LONGER STROKE AND SMALLER BORE THAN STANDARD 40 ABC**
- **'O' RING CRANKCASE SEALS**
- **ALL METAL 'JETSTREAM' CARBURETTOR**

The new Irvine Q40 has been created to prove that power does not automatically mean noise. We set out to produce an engine that could be operated in the 10,500-12,000 rpm region using the new advanced APC propellers, yet produce a dramatic decrease in noise compared to standard engines.

We optimised the porting, timing and cylinder combustion chamber design to operate strongly at these more modest RPM's. The engine was then mated to our revolutionary new Quiet silencer (patented) and using an APC 10 x 9 propeller (11,000 rpm) we achieved a low of 76 dB. at 7 metres (loudest point). Sound is dependent on the conditions of the day but this exceptionally low level shows the kind of figure that can be achieved.

The distinctive machined cylinder head (red), silencer components and back plate are indicative of the standards of craftsmanship that we build into all IRVINE engines and are part of our policy to provide high quality engines at competitive prices.

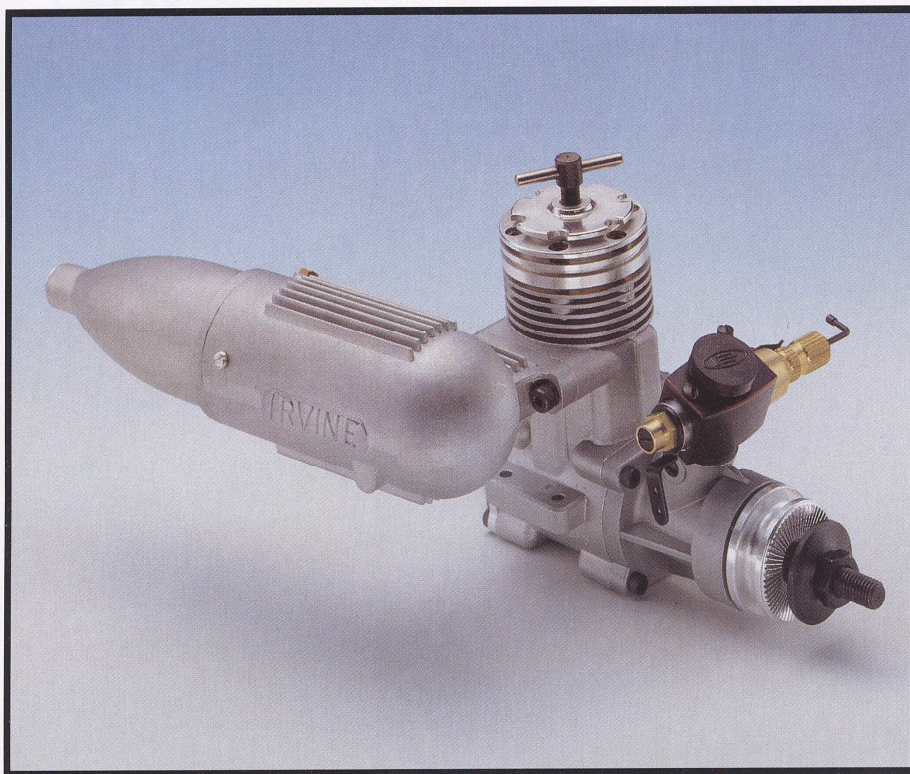


**IRVINE ENGINES LTD**

Unit 2, Brunswick Ind Park, Brunswick Way, New Southgate, London N11 1JL.



# **IRVINE** **40** ABC *'POWER TORQUE'* **DIESEL**



BORE:	20.57mm
STROKE:	19.48mm
CAPACITY:	6.48cc
MAX POWER:	0.8 Bhp @14000 rpm
RPM RANGE:	2500 - 14000
PROPELLERS:	11 x 7 12 x 6 13 x 4 16 x 4

After the amazing success of our 20 ABC diesel the development of the 40 ABC diesel was pursued with great expectancy. We totally redesigned the engine to bring the kind of performance to diesels which is normally associated with glow engines.

The specially designed, close tolerance, ABC piston/liner set has been optimised for low RPM running and high torque. The effortless way in which the IRVINE 40 DIESEL will turn even a 16 x 4 propeller is solid proof of its success.

With an APC 11 x 7 propeller you would be hard pushed to tell the difference between the 40 diesel and its glow stablemate.

The old myth that diesels do not throttle is totally destroyed by this latest version of the acclaimed 'Jetstream', all metal carburettor which provides optimum mixture over the whole RPM range.

Add twin ball bearings and Schnuerle porting and you can see the kind of engine a modern diesel can be. What's more, you consume about half the fuel per flight!

See one now at your local model shop.

- **UNIQUE CYLINDER HEAD DESIGN**
- **SPECIAL 8 PORT PISTON/LINER (ABC)**
- **LONGER STROKE AND SMALLER BORE THAN STANDARD 40 ABC**
- **MACHINED BACK PLATE**
- **'O' RING CRANKCASE SEALS**
- **HIGH TORQUE AT LOW RPM**
- **ALL METAL 'JETSTREAM' CARBURETTOR**



**IRVINE ENGINES LTD**

Unit 2, Brunswick Ind Park, Brunswick Way,  
New Southgate, London N11 1JL.