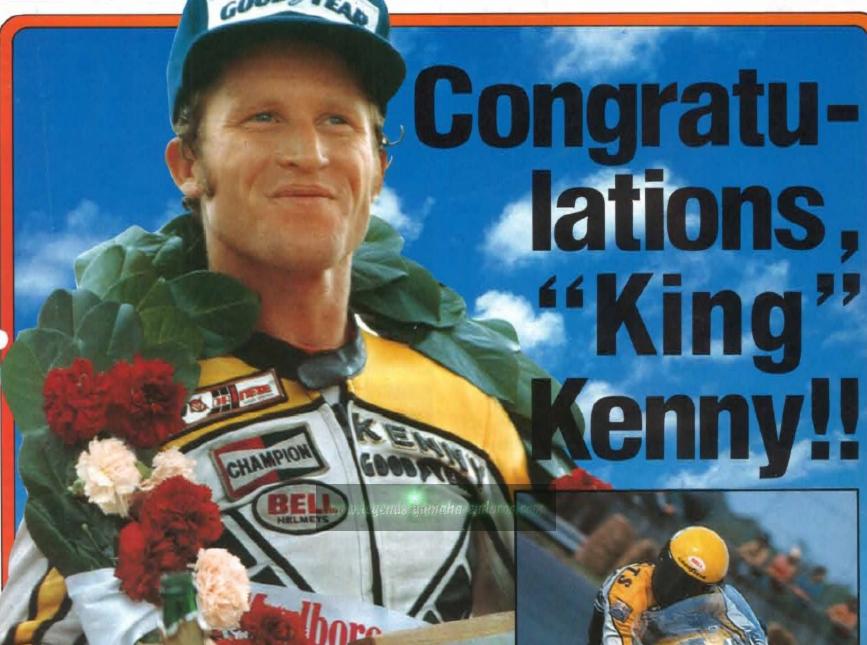


1979 No. 10

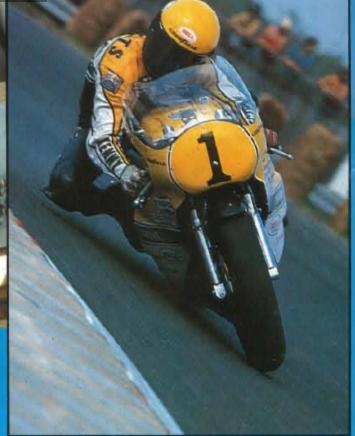


500cc crown clinched for the second consecutive year

Kenny Roberts (Yamaha YZR500) clinched the 500cc world championship title when he finished 3rd at the French GP, the final round of the series held at Le Mans on Sept. 2.

He snatched 5 wins of the 10races he contested and collected 113 championship points to defend his title.

(See page 6 for more details)



New

New Yamaha Diesel Engines ME60, ME120,

and ME180 make their debut!

(See page 4 for more details)



supply system

(See page 12-13 for more details)



Around the World

No restriction on motorcycles!



A street in Colombo at dusk.

More and more working people will come to switch to motorcycles or scooters from

From Sri Lanka: The government of Sri Lanka has recently decided to keep private cars off the road with all petrol sheds closed between 8 a.m. and 2 p.m. on Sunday every

The government has also decided to allow motorcycles and public transport to operate without any restriction on Sundays. This move by the government is intended to cope with a recent 30% increase in fuel prices imposed by the OPEC

No duty on bikes and scooters

Another noteworthy decision taken by the government was the

From New Zealand: Moller

Yamaha in New Plymouth recently

organized a motorcycle licence

school in Christchurch in co-

operation with their dealers-Jack's

Tommy's Yamaha. The aim of this

school was to introduce new

customers to the Yamaha dealers

by assisting non motor-

cyclists to obtain their

Some days earlier, the

students had attended

an evening lecture to

learn how to go about

obtaining their licence

and mastering basic

On the riding day, the

students were shown

the fundamentals of

riding a bike on new

Yamaha machines sup-

plied by the above

riders passing the test

dealers, and

licence to ride.

riding skills.

Norjo Motors and

prices of these vehicles are expected to fall and be within the reach of many more people. The majority of working people will prefer to use scooters or motorcycles as low-cost means of daily transport.

"We must back the government on this. We are able to import bikes government policy. As it is the government's wish to conserve fuel and help middle class people to own vehicles, we must do everything possible to help", says Mr. Brian Lourensz, Managing Director of Consolidated Engineering Company, importers of Yamaha motor-





Kunur Wellavinghe

schemes will be run again in sum-

abolishment of the Customs duty on

the import of bicycles, motorcycles

and scooters, with immediate ef-

There will be no duty on the import

of spare parts for these vehicles

Motorcycles and scooters were

formerly charged a duty of 50% and

The headline from the "Ceylon Daily

Sundays: cars off

road for 6 hours

· Petrol sheds closed all day

News" reporting Sunday restriction

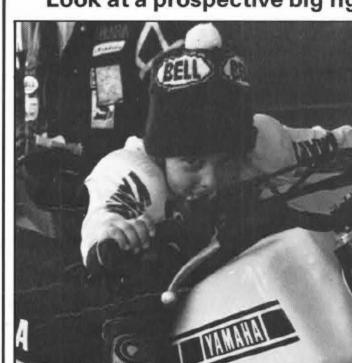
and components for bicycles.

Yamaha Licence School the executives of Yamaha Motor. It is reported that the production and sales figures for last year reached were given their Provisional Licence 115 000. If traffic controls in the by the Ministry of Transport. congested downtown area are Weather condition was unforstrengthened and restrictions are tunately bad but all students tackled imposed on 4 wheelers entering the curriculum with ardor. Similar such areas, dependence on bikes

will be even greater and the production and sales record of 160,000 in 1977 can easily be renewed. Against such a market background,

both D.M.I. and C.P.C. sent Yamaha a following message; Since ikes are regarded as handy and essential means of transportation due to their low and economical unning cost, their market will be sure to expand in future, reflecting various advantages, but, at the same time, we can not forget our important task of giving further deliberation to safety, including service follow-up.

Look at a prospective big figure!



Iranian market is picking up! Production and sales are expanding at high pitch

From Iwata: According to the latest news from Iran, the demand for bikes is shifting favorably in various parts of Iran even after the recent political turmoil. D.M.I., an assembly plant, continues its 100% operation but still cannot fully satisfy the demand while C.P.C... sales distributor, also holds a considerable backlog of orders. Now

those

bikes have become an established part of Iranian life in and play an important role as a means of transportation especially for those actively engaged in industrial activities.

President Tale of D.M.I. and President Tavassol of C.P.C. visited Japan in Febuary and April respectively, and each had a meeting with

Finland: A little rider on a Yamaha works motocrosser is posing dearest son of Heikki Mikkola. It is no for a camera. Who is he? He is too wonder that he has learned his father's small for the machine but his posture top form having watched it in actual is truly that of a motocross com- competition.

This is five-year old Antti Mikkola, the

A big topic

Yamaha outboard motors



Costa Rica: A new range of Yamaha outboard motors which was shown by Motorcentro S.A. provided a big topic for conversation among marine pleasure seekers and commercial users at the Torneo Nacional de Ski Acuátion recently held at the Hotel Colonial, San Jose, Costa Rica.

There is notable new tendency that

big power models make a good appeal to customers and the Yamaha 85, the largest of the Yamaha range, is becoming one of the best sellers in its own class.

Yamaha importer Motorcentro S.A. is seizing every possible chance to launch sales drives in close cooperation with all affiliated dealers.

Make full use of "Service Shop Equipment"

From Iwata: No.1 and No.2 issues of Service Equipment" have been distributed for wide use by Yamaha distributors and dealers. No.1 issue shows of special and standard tools togethe with their individual applications while No.2 issue explains various workshop equipment and Both facilities. issues are now being

ully utilized. The production of No.3 issue providing a general guide for workshop layout has also got under way. Sale and service are, as it were, the

two wheels of a machine. Both are closely connected with each other for the sound growth of

business. A great number of orders have been placed with us for the above two issue as the contents of them are very instrumental.

You are also cordially requested to make full use of "Service Shop Equipment" for your better service

Numerous questions come out of the enthusiastic members, concerning the ex-planation given by Yamaha on factory scale and production system at the Hamakita factory.

For better after-sale service and

No.1 and No.2 issues are very favorably received by

▲ After recognizing Yamaha's capability in the field of marine equipment, the members enjoy a trial cruise at the Yamaha

President Koike of Yamaha Motor welcomes the group and changes greetings with President





Oil mixing bottle



From Holland: Yamaha Motor N.V. in folland has recently prepared a very handy oil mixing bottle for use by every outboard

three different ratios of fuel/oil mixing. The lower part of this gourd-shaped bottl holds one liter of oil while the upper par has three different sorts of fue

graduations, that is, 1 to 5 liters (25:1), 2 to 10 liters (50:1) and 4 to 20 liters (100:1).

Oil is sucked through a tube into the upper

1. One liter of oil is held.

2. Apply finger-pressure to the lower part. Oil has reached the intended level.

Oil is poured into fuel.

Please contact the following address: Yamaha Motor N.V. Postbus 7829, PROF. E.M. Meyerslaan 3, Amstelveen, Holland

Family bike show

From Tokyo: The Japan Industrial Design Promotion Association sponsored the first family bike show held recently at the Japan Industrial Design Hall in Tokyo. This was part of their design promoting campaign program and emphasized the true pleasure of safe family bike riding. All the family bike models available on the market were exhibited and the G-mark (good design) awarded Yamaha Passol and Passola



especially pleased a number of spectators throughout the session.

A first-hand view on Yamaha's Capability 11 Indonesian dealers visit Yamaha



Lively conversation goes on in front of the new bikes being assembled one afte another and waiting for shipment at the main factory.

From Iwata: As reported already, using the catch phrase of "KELUARGA BUSAR YAMAHA (Big Family Yamaha)," an extensive sales campaign is under way on a nationwide scale in Indonesia, with steadily increasing sales. It was quite timely, therefore, that, through the good offices of P.T. Harapan, sales distributor and assembler, 11 dealers who had never been to Japan and wanted to know more about Yamaha were chosen and paid their first visit to Yamaha head office.

The Yamaha headquarters extended a big welcome to these guests, and showed them around the main factory, the Hamakita factory, Yamaha Marina, etc. Furthermore, the group had a chance to drop in to Yamaha Hamamatsu Company, one of the local dealers, and exchanged a wide range of views on Japanese sales conditions, sales system, and actual after-sale services provided.

At the main factory, they saw the whole process of production from the birth of various bikes rolling off respective assembly lines classified by size and color, to completion in-

spection and finally to the system of packing and shipping. At the Hamakita factory, they observed the processing and assembly of various engine parts close at hand and grasped Yamaha's true capability to produce high quality and high performance products. At the Yamaha Marina, the group witnessed the true picture of Yamaha's popularized marine equipment such as powerboats, sailboats, and outboard motors, and even went on a trial cruise on one of the boats.

At Yamaha Hamamatsu Co., being engaged in the same line of business, they were quite enthusiastic in exchanging views especially on the Japanese system of sales and after-sale service, maintenance of users, as well as the future prospect of bike sales including the market trends in Japan. After completing this busy schedule, they left Japan with a good understanding of Yamaha.

Around the World

Contributions to the mental and physical growth of children

Yamaha Mini-cycle Motocross School

63 28.5

As reported already, Yamaha Mini-Cycle Motocross School enjoyed a good response from children and their parents or guardians, and the results of the questionnaire were partly introduced in our No. 6 issue. The full results of it are introduced

1. At what age did your child ride a mini-cycle for the first time? No. collected: 221

		No.	%
a.	7 years or younger	47	21.3
b.	8 years	32	14.5
C.	9 years	19	8.6
d.	10 years	31	14.0
e.	11 years	31	14.0
f.	12 years	31	14.0
g.	13 years	17	7.7
h.		12	5.4
i.	15 years	1	0.4
2.	How old is your child	?	
	No. collected: 221		
a.	7 years or younger	1	0.4
b.	8 to 10 years	40	18.0
C.	11 to 13 years	96	43.3

21 e. over 16 years 3. How many months ago did you purchase the mini-cycle currently used by your child? No. collected: 221

d. 14 to 15 years

3 or less months ago 60 27.1 4 to 6 months ago 48 21.7 21.7 7 to 12 months ago 68 30.8 45 d. 13 or more months

4. Had you bought a mini-cycle or mini-cycles for your child before the above currently used one?

No	. collected: 209)	
a. No		38	18.2
b. On	е	49	23.4
c. Tw	0	71	34.0
d. Th	ree or more	51	22.4

5. Please indicate the reason for purchase.

	No. collected: 234	- 2 0 2 1	1000 121	
a.	Asked by your child	112	47.9	
b.	Influenced by other children	14	6.0	
c.	At your own discre- tion	73	31.2	
d.	Recommended by a friend	13	5.6	
e.	Transferred from a friend	2	8.0	
f.	Recommended by a dealer	4	1.7	
g.	Other	16	6.8	

6. How do you think of your having purchased the mini-cycle for your child?

No. collected: 221 a. Definitely good 211 95.0 0 0 Definitely wrong c. Indefinite

7. On what standards did you purchase the present mini-cycle for your child. Please mark all applicable items.

No. collected: 318 Child's own choice 134 42.1 b. Some club member's 31 9.7

18 5.7 c. Dealer's recommendation d. Comparative study 34 10.7 of catalogs e. Through advertise-10 3.1

ments and accounts on newspapers or magazines

f. Most popular among 56 17.6



4 1.2 child's friend 31 9.7

8. Do you (parent) own a bike? If ves, please state the type

	No. collected: 22	otres-	001
а.	Trial	5	5./
b.	Trail	30	34.1
3.	Motocrosser	16	18.1
d.	Street	31	35.2
e.	Mini-cycle	6	6.8

9. Please let us know your opinion on correct mini-cycling education for children.

No. collected: 221 216,97.8 Necessary Unnecessary 5 2.3

10. In case this education is considered necessary, who do you think is the most suitable teacher(s)?

No. collected: 287 a. Parents or guardians 29 10.1 41 14.3 b. Motorcycle-experienced friend c. Dealer d. Manufacturer's 136 47.4

instructor e. Self-governing body 14 4.9 f. Club leader or other responsible person

11. Please tell us your method of pre-riding safety inspection on machine and clothing for your child.

No. collected: 222 35 15.8 a. You do everything for your child b. Oral instruction to 181 81.5 keep him conscious of safety at all times

6 2.2 Leaving everything to your child without putting in a word

12. Has your child ever been involved in an accident causing an in

jury while riding a mini-cycle? No. collected: 220 Yes, seriously injured 21 Yes, slightly injured, 142 64.5 Mere bruise or scratch; without

57 25.9

surgical operation

13. Do your think that riding a minicycle is something dangerous to

No. collected: 222 a. Yes, definitely dange- 2 0.9



A Dynamic New Trio of Diesel Engines

Introduced here is a dynamic new trio of Yamaha diesel engines. ME60, ME120 and ME180, all of which are designed and constructed for small-sized coastal fishing and working boats. With these new models added, Yamaha now offers a complete line of six compact, lightweight, powerful and highspeed diesel engines ranging from 8 HP to 136 HP. The ME60 (singlecylinder), ME120 (twin-cylinder) and ME180 (three-cylinder) are Yamaha's positive answer to the always-growing demand for compact yet powerful engines.

The newly designed vertical 4stroke engines are available in two different types, standard and special. The standard type features higher power output while the special type is designed with extra durability in mind. They are further grouped into manual starter and electric starter (E) types. In addition, the heavy duty type (W) is also available in each model

Technical features

The following technical features are common

Lightweight and compact design Full consideration is given to a lightweight and compact design. Keystone type piston rings

hey seal in the compression pressure better and prevent the first ring from get ting stuck in the groove. Combustion chamber

A special profile combustion chamber is igned for better performance ntake system Each cylinder is provided with an independent intake pipe to ensure higher intake

efficiency. Water-cooled exhaust manifold This lowers exhaust noise and ensures safer engine operation.

Cooling system

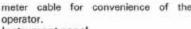
The engine is cooled by seawater directly. Power-take-off

The large crankshaft diameter and bear-ing capacity yield full strength and versatility in applications of the power-take-

Being equipped with an IC regulator, the alternator will not interfere with radio equipment. Hydraulic type "Reverse and Reduc-

tion" gear The gear is a hydraulic wet, multi-disc

Easy operation The throttle lever is equipped with a two-



The meter panel has warning lamps showing the cooling water temperature, oil pressure, state of the battery charge,

 Tachometer with hour-mete This indicates the engine speed and has a built-in hour-meter to show an accumulated time of operation.

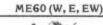
Remote control This is available as an option.

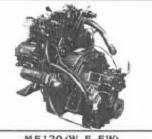
Clear indication of check-points Routine check-points are clearly indicated by an orange color paint and provide easy accessibility for service.

Inspection cover
This is installed on one side of the cylinder block to afford easy access to the inside of the engine.

Interchangeable parts The three models use many standardized

parts. Dry weight rating output (HP/rpm) Model MERO 10.5/2.900 162 8/2,400 ME60W ME60E 10.5/2,900 172 ME60EW 8/2,400 ME120 21/2,900 259 ME120W 15/2,400 21/2,900 15/2,400 ME120EW ME180 30/2,900 ME180W 25/2,400 30/2,900 ME180E ME180EW 25/2,400





ME120 (W. E. EW)





b. Yes, somewhat 198 89.2 dangerous. Special care must be taken 22 9.9

14. Please let us know your view on possible effect of mini-cycle sport on the mental or physical growth of your child. No. collected: 212

rous

No, not all

198 93.3 Desirable 0.9 5.7 12 Undesirable Indefinite

15. Has your child come to be more interested in science or technology since he owned a mini-cycle? No. collected: 214

138 64.5 a. Yes, indeed 34 42 No, not at all 15.9 19.6

16. If your son gets accustomed to riding a bike in his boyhood, then how do you think it will influence him for social nature or morality when he goes out into the world?

No. collected: 203 a. Riding a bike is 96 47.3 necessary for him to be a good mem-

ber of society Motorcycle sport is 12 5.9 not suitable for it 95 46.8 c. Indefinite

17. What changes have you noticed in your child's behaivour or thinking since he has had a

mini-cycle? No. collected: 440 157 36.9 more mechanically b. Increase in activity sense of responsibi-

lity and independence d. Improvement in phy- 79 17.9 9 2.0 No change

18. Please let us know your opinion on the establishment of free zone or facilities where children are allowed to ride their minicycle freely.

No. collected: 220 a. Public organizations, national or local, should be more positive enough to establish such zones or facilities

b. Things should be oft as they are 3 1.4 c. Avoid wasting tax

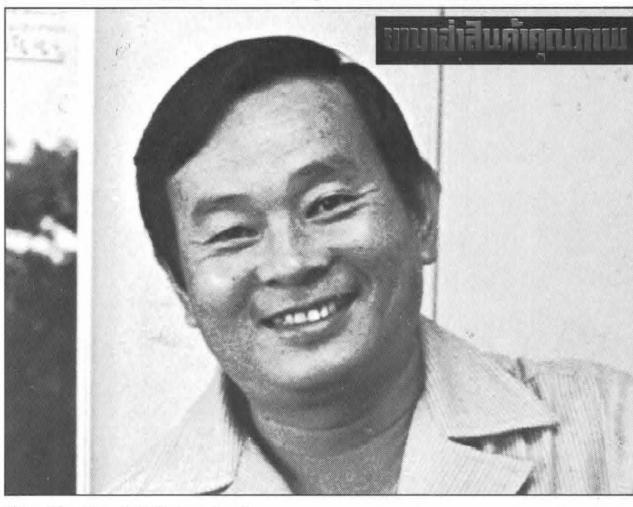
19. As you know already, most of the young men over 16 years of age (licence age) are greatly interested in motorcycles. Then, please let us know your opinion on when children should start riding a bike.

No. collected: 221 217 98.2 a. They should start riding a bike at the earliest possible time even before they reach the authorized age of licence acqui sition on the condition that riding is limited to offroad area alone. This will benefit their mental or physical growth. They should wait

3 1.3

Welcome to Yamaha

"YAMAHA, IT'S A QUALITY PRODUCT"



Mr. Suchati Hiranchai Spare Parts and Service Manager, SIAM YAMAHA

From Iwata: The above Siamese words mean "Love Thailand". SIAM YAMAHA is now developing a nationwide PR campaign, using these words as their catch phrase. Through this campaign, they are suggesting that Thai people reflect upon and take more pride in the splendor of their national tradition, and eventually, promoting the spread of Yamaha motorcycles as the products to raise the quality of their life. As part of these activities, SIAM YAMAHA established a new service center in Chieng-mai, the main city in northern Thailand, in order to provide thorough services to the users and at the same time, solidify the top position in the market even more firmly.

One of the guests we received at Iwata this month was Mr. Suchati Hiranchai, the newly assigned manager of SIAM YAMAHA North Spare Parts and Service Center, who came to Japan to study the status of Japanese service centers and receive some training. Taking the opportunity of his visit, we conducted the following interview.

- We hear that agriculture is guite prosperous in Chieng-mai.

Most of the parents want

motorcycle manufacturers to

establish many more motorcy-

cle clubs or schools for children

who are to be trained under the

guidance of expert instructors.

until they reach the

licence acquisition.

for boys and girls?

authorized age of

"That's right. Agriculture and fruit plantations as well. There is a big demand for bikes in this area. Limiting to the family bike Y-80, Chieng-mai holds the share as high as 40%, and of these, 80% are used by women.

-If that is the case, I should say that the establishment of the new spare parts and service center has a great significance.

'Yes, indeed. We have to sell more Yamahas, and simultaneously, more services. To achieve this, the spare parts and service center has a very important role to play. In Chieng-mai. we have a number of capable dealers, for example, Charoen Motor which sells over 6000 bikes per year. To support these dealers is another big mission assigned to this service

-In other words, you mean a good service system gives a great sence of reliability to the users, and, in turn, creates an environment to make selling easier. By the way, when will it open?

"This coming October. My responsibility at this service center will be, to

sum up in one word, to support the sales of the dealers. More specifically, to extend sufficient services to the users in northern Thailand will be our main task. In order to realise this, we must maintain ever closer communica tions with the dealers, combine efforts to raise the level of technology of the service mechanics, and establish a speedy supply system of spare parts. This, I believe, will also diminish the problem of immitation parts. With these works well under way, we wish to support the motor sports activities by sponsoring the popular Yamaha

Motocross School. Mr. Suchati Hiranchai is a Yamaha veteran affiliated with SIAM YAMAHA for 14 years. He has worked through the areas of assembly, completion inspection and quality control, became the Spare Parts and Service manager at SIAM YAMAHA head office in Bangkok, and recently was promoted to the manager of the new center in Chieng-mai. He has an overwhelming confidence in the spirit of "YAMAHA. It's a Quality Product." At home, he has a wife and two children, a 7 year old daughter and a 1

Contributions wanted

We hope that the redesigned make-up 20. What do you want motorcycle "Yamaha News" has been manufacturers to do for the favorably received and that it will now spread of correct motorcycling better serve your purposes. It is emphasized again that we are always

Every sort of news or information concerning Yamaha will do a great deal to help us further brushup "Yamaha

Address: Editorial Room of Yamaha News Yamaha Motor Co., Ltd. 2500 Shingai, Iwata-shi, Shizuoka-ken (Japan)

*This issue also contains 16 pages thanks to many more contributions from various parts of the world.

'KING' KENNY DOES IT AGAIN!

500cc Class 78-79 Victory

"King" Kenny after leading V. Ferrari (Suzuki), his nearest 500cc title challenger, rode his high-performance Yamaha YZR500 to the safest third spot in the French GP, the final round of the series organized at Le Mans on Sept. 2, thus clinching the title for the second successive year. Ferrari made a desperate effort to win the race but his faintest title hope was gone when he crashed during lap 13. B. Sheene (Suzuki) was an eventual winner and R. Mamola (Suzuki), runner-up.

Overcoming an injury handicap

Kenny missed the opening round of the 1979 world championship in Venezuela and quite incredibly it was on his comeback ride in Austria with lingering affects of his broken vertebrae and ruptured spleen that he scored his first win of the series. He followed it up with a second in the West German GP and first in the Italian GP. He continued his triumph march by winning the Spanish and Yugoslavian rounds to lead the Suzuki ace by 3 points.

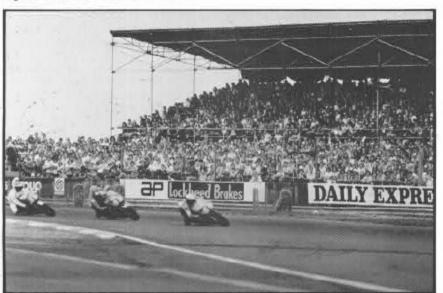
In the Dutch TT he could finish no higher than 8th due to a machine

trouble, and refused to take part in the Belgian GP as the revised Spa-Francorchamps circuit was too

He finished 4th and 6th respectively in Sweden and Finland while Ferrari failed to score points in both rounds.

The British GP which was held at Silverstone on August 12, became an exceptionally important race for

Kenny displayed his real ability to win the race and Ferrari only managed to finish 4th. Kenny widened his lead to a seemingly unsurpassable 14 points.





As mentioned earlier, Kenny finished 3rd in the French GP by keeping the safest pace as he knew that one point would be quite enough, even errari could win the race.

DED IV. 12921108 1177 GH Of final round held on August 12.

RESULTS

Race-to-race results

Rider GP	٧	A	G	1	S	Yu	D	В	Sw	F	Br	Fr	Total
1. (Yamaha)	1	15	12	15	15	15	3	-	8	5	15	10	113
2. V. Ferrari (Suzuki)	12	12	10	12	8	12	15	_	-	-	8	-	89
3. B. Sheene (Suzuki)	15	_	_	8	_	_	12	_	15	10	12	15	87

Y = Venezuelan, A = Austrian, G = German, I = Italian, S = Spanish, Yu = Yugoslavian, D = Dutch, B = Belgian, Sw = Swedish, F = Finnish, Br = British, Fr = French

World Championship Road Racing French GP (Final)

500cc
. B. Sheene Suzuki
2. R. Mamola Suzuki
3. K. Roberts Yamaha
I. F. Uncini Suzuki
J. Cecotto Yamaha
S. P. Coulon Suzuki
350cc
P. Fernandez Yamaha R. Freymond Yamaha W. Villa Yamaha
l, W, Ville
. H. Guilleux
K. Ballington Kawesaki M. Rougerie Birnote
250cc
K. Ballington Kawasak
P. Fernandez Yamaha R. Mamola Yamaha
R. Marnola
A. Meng

	50			_		_	_		_	_	
G. Hansford				٠.		٠.					Kawasak
G. Hansford									ï		. Yamaha
P. Korhonen										414	Ternahe
A. Mang											Kawasak
A. Mang R. Freymond	7		4								Yamaha
C. Estrosi											Kowasak
2	50	nn.	_		200	_	-		_		District of
K. Ballington											
G Hansford	•••	٠.					•	٠.	•	٠.	Kawanak
G. Hansford	0.7		-						٥		Yamahi
R. Freymond			6				•		1	7	Varnah
W. Ville			7.5		7				1		Vamahi
TYPE VARIABLE STREET	•										Vomoho

British GP-August 12-Round 11

	30000	
1.	K. Roberts	
2.	B. Sheene.	
3	W. Hartog	
A	V. Ferrari	
	B. V. Dulmen	
0.	C. Sarron	
6.	C. Serron	***********
_	350cc	
1.	K. Ballington	K
2	K. Balington	
9	J. Sayle	THE REAL PROPERTY.
	M. Frutschi	
25	M. Protection.	
о.	R. Freymond	*********
9.	M. Hougens	
_	250cc	
1.	K. Ballington	
2	R. Mamola	and a district of
2	A Mana	· ·
4	G McGregor	
5	G. McGregor R. Freymond	
ě.	O. Chevallier	
Q.	O. Grievaner,	CETEMBER LINES INC.
0	zechoslovakian GP-	August 18
-		Muguet 10
-	Round 12	
	350cc	
_		

3,	P. Fernandez G. Hansford E. Saul	1	8					1							, Yamah Kawasak
6.	R. Freymond	١													. Yamah
-															
1.	K. Ballington	2	*	ä	ï			·	1	í.	4	è		4	Kawasak
2,	G. Rossi			+				÷	. ,		ï		. ,	į.	Morbidell
3.	P. Pilari				,					ċ.		ī			. Yamah
4.	A. Mang	2	,		ï		65				,	ï		í,	Kawasak
6.	R. Mamola				ï			-			ï				Bimot
ā.	P. Fornandoz										2			5	Vamply

RESULTS

World Championship Motocross	
500cc	-
Belgian GP - August 5 - Round 11	
1st race	
1. R. De Coster Suzuki	
1. R. De Coster	
3. G. Noyce	4.
4. H. Schmitz	5.
5. G. Rond Suzuki	6.
6. F. Kobele Maico	- 50
2nd race	Fi
1. A. Malherbe Honda	1
2. G. Rond Suzuki	
3. I. Van Den Broeck Maico	2
4. J. J. Bruno KTM	
5. R. De Coster Suzuki	3
6. A. Vromans Suzuki	
Luxembourg GP - August 12 - Final Round	4
1st race	5
1. B. Lackey Kawasaki	6
2. A. Malherbe Honda	0
3. H. Schmitz	7
4. G. Noyce	,
5. A. Bromans Maico	8
6. I. Van Den Broeck Maico	0

World Championship Motocross

A
C ²¹
4. H. Mikkola Yamaha
5. H. Andersson Husquvarna
6. J. Weinert Kawasaki
Final championship positions
1. G. Noyce
(Britain, Suzuki)
2. G. Wolsink 177 points
(Holland, Suzuki)
3. A. Malherbe 176 points
(Belgium, Honda)
4. B. Lackey 173 points
(U.S.A. Kawasaki)
5. H. Mikkola 147 points
(Italy, Yamaha)
6. R. De Coster 125 points
(Belgium, Suzuki)
7. A. Vromans 86 points
(Belgium, Maico)
8. J. J. Bruno 85 points
(France, KTM)
9. I. Van Den Broeck 75 points
(Belgium, Maico)
10. G. Rond
(Holland, Suzuki)

Rahier's safest third

'79 125cc series

Gaston Rahier (Yamaha) secured G. Rahier, Yamaha's sole title his 3rd spot in the 125cc championship positions when he finished 3rd in both heats of the Spanish GP, the

1. A. Malherbe Honda 2. B. Lackey Kawasaki

RESULTS

	trace																					
1.	H. Everts			e		à					é								,			Suzuk
2.	A. Watenabe		٠,			-			١.						65			è				Suzuk
3.	G. Rahier					į,						ä										Yamahi
4.	P. Pippola												Ų							. 1	H	usqvami
5.	P. Gruneveld.													ï				ì.				. Honda
6.	G. Liljegren							8		-	3											Aprili
2n	d race																					
	H. Everts																					
2.	A. Watanabe																					. Suzuk
3.	G. Rahier						į.						Ĺ					Ü				Yamahi
5	Y. Khudiakov			-			ì						í				ĺ,					C2
	P. Gruneveld.	4		٠.	M			*		 0	ń		1	1		1			ń			Mande

B. Glover is the youngest ever AMA

motocross champion

the title

AMA Motocross Championships

B. Glover (Yamaha) captures

- 125cc class -

26. Young reigning champion B. M. Bell (Yamaha) Glover (Yamaha) finished second in finishes 2nd overall both heats while M. Barnett The final round of the 500cc series (Suzuki) monopolized both first places. With these results, Glover was also organized at St. boosted his championship tally to Petersburg on August 26. 369 against Barnett's 299 and clinched the title for the third con-Yamaha's title contender M. Bell

1. M. Barnett	Suzuki	1-1
2. B. Glover	Yamaha	2-2
3, S, Martin	Yamaha	4-4
4. G. Denton	Yamaha	5-4
5, R. Coon	Yamaha	9-6
6. D. Moroney	Suzuki	6-8
Final championship po	eitions	
1, B. Glover	Yamaha	369 pts.
2. M. Barnett	Suzuki	299 pts.
2 D D Management	Corneld	200 nts

RESULTS lead from Bell.

The final round of the AMA 125cc motocross championship took place

4. W. Reid
5. D. Cantu

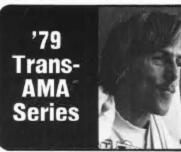
second and first in both heats. Championship battle leader D. LaPorte (Suzuki) finished first and fifth and maintained his 3 points

won this round overall by finishing

RESULTS

No. of Concession, Name of Street, or other Designation of Concession, Name of Street, Name of		
1. M. Bell	Yamaha	1
2. D. LaPorte	Suzuki	
3. M. Kessler	Yamaha	
4. S. Stackable	Yamaha	
5. C. Sun	Husgvama	
6. M. Moates	Yamaha	3
Final championship	positions	
1. D. LaPorte	Suzuki	399 p
2. M. Bell	Yamaha	396 p
3. G. Semios	Honda	233 p
4. A. Englund	Yamaha	219 p
5. R. Staten	Yamaha	217 p
6 G Moleur	Kawanaki	213 0

Hannah aims at the crown again!



at St. Petersburg, Florida on August

Yamaha's double class champion Bob Hannah is aiming at his second successive crown of the Trans-AMA motocross series which has just

By doing so, he will complete an incredible record of winning three AMA titles for the second year in succes-

New Berlin, NY St. Peters, MO

Buchanan, MI

The development of the series will be reported in the forthcoming issues



this system, thus enhancing

You are requested to know

more about this wonderful ig-

nition system in order to

develop your business

possibilities to a maximum.

Characteristics of the

As you know, a conventional igni-

tion system uses a contact breaker

Unit housing a

condenser to

store electricity

Ignition coil

CC.D.I. magnet

C.D.I. system

the brand image of Yamaha.

Win a one-week trip to Japan!

Service Contest Goes Smoothly June '79 - May '80

One of the contest

this type magneto.

inertia and is used exclusively for ignition purpose. Road race and motocross machines are fitted with

Did you know that the following Yamaha models feature a C.D.I.

YZ125X, YZ250D, YZ400D/E/F,

RD400E/F/G, SR500E/F/G

YZ250F, TA125, TZ250/350

Introduced here is a special igthe primary winding of the ignition nition system gaining coil. When the current flow is cut, a popularity among both sersurge of high voltage is produced in vicemen and customers. It is the secondary winding, thus causcalled the C.D.I. (capacitor ing a spark to jump across the spark discharge ignition) system The C.D.I. system has been needing no maintenance ex-

developed and engineered so that it cept when the engine itself is can reduce time and labor required disassembled. for maintenance. The performance of this In addition, this system can better system has already proven exmeet the requirements of modern cellent on Yamaha's road rachigh-performance engines. That is, in a conventional ignition ing and motocross machines.

system the contact breaker works to Many of the street, off-road interrupt the primary current in the and family bikes also feature ignition coil. In this case, contact points may be damaged by electric arcs, thus causing a drop in secondary voltage or misfiring.

In order to avoid such troubles, contact points must be periodically inspected for necessary adjustment or replacement.

The contact breaker functions on a This method bakelite cam. sometimes results in an undesirable phenomenon called "chattering" (point jump) to prevent the smooth increase of engine's rpm. This also causes a drastic drop of secondary

Construction

maintenance-free.

The C.D.I. system consists mainly of a magneto, C.D. ignition unit and ignition coil.

to these problems. This system

uses a capacitor in place of the con-

tact breaker and is virtually

In this system, the magneto charges

the ignition condenser up to a few

hundred volts. When the pulse coil

incorporated in the magneto gives a

signal, almost instantly the semi-

conductor element (S.C.R.) allows

the electric charge to flow from the

condenser to the ignition coil, thus inducing a surge of high voltage in

the secondary winding. In short,

the C.D.I. is an electronic ignition

system that produces a spark in the

spark plug without using a

mechanical contact breaker.

The magneto functions as a power source. On an outer rotor type magneto, the rotor rotates along the outer side of the stator. An inner type magneto features the inner rotating rotor. The construction of an outer rotor type magneto gives a greater moment of inertia.

charging coil for easier supply of respective electricity. These coils are also used on the multi pole 3phase A.C. type.

On the other hand, the inner rotor type features a smaller moment of

Outer rotor type C.D.I.

YZ100C/D/E, YZ125C/D/E, IT175D/E/F, IT250D/F/E, IT400D/F/E, DT175E/F, DT250E/F, DT400D/F/E, V80, QT50F

Multi pole 3-phase A.C. type RD250E/F/G,

YZ250E, MX125C, YZ80F, YZ100F,

△ Ignition

plug

electricity quickly. This

induces high voltage in-

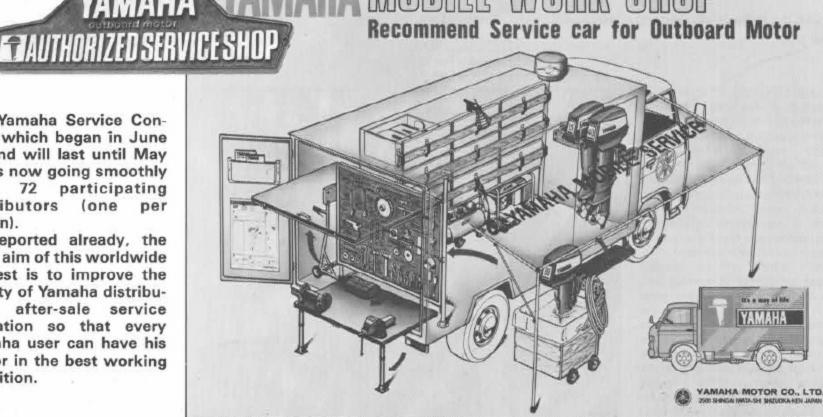
to the secondary win-

ding, thus producing a

positive spark.

The Yamaha Service Contest, which began in June '79 and will last until May '80, is now going smoothly with 72 participating distributors (one per nation).

As reported already, the main aim of this worldwide contest is to improve the quality of Yamaha distributors' after-sale service operation so that every Yamaha user can have his motor in the best working condition.

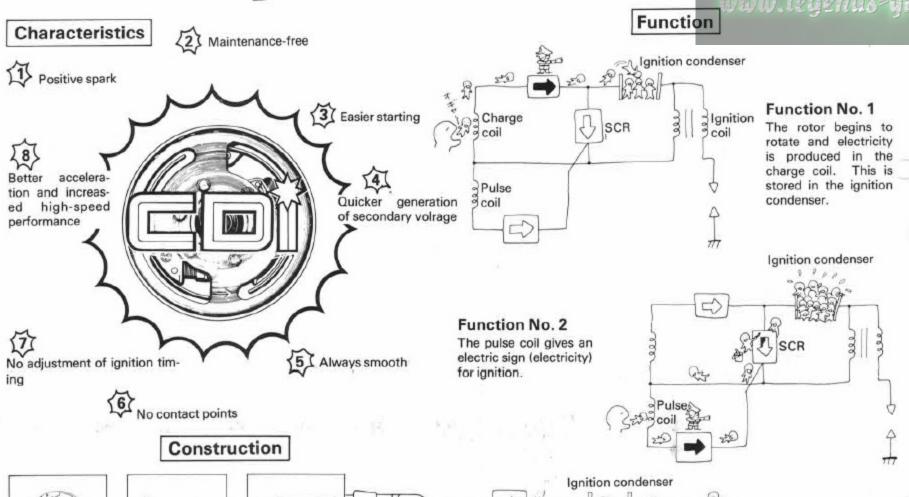


A recommended "mobile workshop" to move quickly to any place whenever necessary

C.D.I. System is wonderful!

High performance and maintenance-free

► FOR YOUR BETTER BUSINESS ◀



Function No. 3 The ignition condenser discharges its stored

117.12021108-411716HU-Distributors' interest

80 selected distributors were invited to participate in this contest and 72 of them sent applications to Yamaha. This was a very favorable response and reflects worldwide Yamaha distributors' keen interest in the improvement of their after-sale service operation and parts supply system in order to meet an always-growing demand for Yamaha outboard motors.

Four fundamental factors which are to serve as the basis for this contest are: Organization and control of service and spare parts; Set-up of the workshop; Treatment of service and spare parts information; Sales promotion.

The above factors are arranged into the following contest items

- Workshop C. Servicemobile and/or service boat
- D. Service equipment and facilities
- E. Information
- G. Sales promotion
- A-1. How many servicemen are there who are exclusively in charge of outboard motor service?
- How long has the most experienced serviceman been working on outboard motor service? How long has he been in charge
- of Yamaha outboard motor service?
- Do you have a workshop prepared for outboard motor ser-

- B-2. Is the workshop exclusively prepared for outboard motor ser-
- C-1. Do you have a servicemobile and/or boat for field service?
- Is the mobile and/or boat painted
- or displayed with Yamaha name? Do you have the following tools and facilities in your workshop?
- Test tank (not drum-can) Yamaha Outboard Motor Special Tool Kit (Kit A, B and
- * Workstand for outboard motor
- Workbench for outboard motor service
- * Container for disassembled
- parts Outboard motor storage rack
- (available for more than 5 units) Air compressor
- Measuring instruments (engine tachometer and pocket tester)
- Hydraulic press machine
- How many times have you sent 'Market information" to Yamaha in the past one year (from May 78 to April '79)?
- Are the P.S.I. bulletins (Parts Service Information) kept in file? Is the file of P.S.I. usually kept in
- the parts shop? Are the T.S.I. bulletins (Technical
- Service Information) kept in file? Is the file of the T.S.I. usually
- kept in the workshop? Are the P.S.I. bulletins transcribed to the parts lists con-
- Are all the service manuals for outboard motors kept in complete set?
- Is the complete set of parts lists usually kept in the workshop?
- Are the Assembly Charts for outboard motors displayed in the
- workshop? Is there anyone exclusively in charge of spare parts?
- F-2. Are there any spare racks ex-

clusively for outboard motor parts? What kind of system is employed

- for spare parts control? Is a periodic parts stock inventory
- carried out in your parts shop?
- Do you know the total cost of outboard motor spare parts imported from Yamaha in '78?
- Do you know the total cost of Yamaha outboard motors imported in '78?
- Do you know the gross profits of outboard motors and the parts respectively imported from
- Yamaha in '78? Does the parts section take note of the monthly sales figures for Yamaha outboard motors for
- each model. How many times have you had the following events in the past
- year (from May '78 to April '79)? Participation to exhibition (example: outboard motor show) Field service activity (training)
- for local sub-dealers * Demonstration of driving out
- board motors * Free check service for servicing local users' outboard motors on

the spot Each participant filled in all items and submitted the first report for evaluation

by Yamaha. Scores and suggestions will be forwarded so that participants can improve their

parts supply and after-sale service system. Participants are to fill in the Periodic

report 1 and submit it to Yamaha by Oc-In addition, Yamaha will furnish them

with service promotional tools from time to time during the contest session.



YAMAHA PARTS DIVISION

Perfect Promise Tactics

 Put yourself in the shoes of your customers

* Keep the delivery deadline to customers' full trust

The Parts Division of Yamaha is launching a big-scale campaign under the above slogans. The campaign designated "Perfect Promise Tactics", which started on July 1 and will last until October 31, aims at perfecting the parts control and supply system by calling all Yamaha people's closer attention to the trends of international replacement parts markets and keeping strictly to the deadline on parts delivery.

Specific efforts will be directed toward the control of working process from reception of parts order down to shipment of parts in close co-operation with all affiliated parts suppliers throughout the above campaign period. Those suppliers who have attained excellent results of parts delivery, will be awarded special prizes so that all Yamaha people will renew their recognition of the importance of parts supply

Introduced here is the outline of Yamaha's general parts control and supply system working in close linkage with worldwide importers.

23 days required for shipment by sea

Fig. 1 shows the general working process from reception of parts order down to shipment of parts. with a time schedule appearing on the right.

Yamaha receives 12,000 orders from worldwide distributors a month.

These orders are grouped into three different categories, that is, monthly order, emergency order and critical back order.

The modern on-line computer system is always working to process all the data and information concerning parts reception, inspection, stock control, shipment, etc. so that every order is processed in the smoothest and quickest manner.

The computer system which was first introduced in 1968, was put online in 1970 and then the ultramodern software was induced in the system for the perfection of parts control and supply operation in

Yamaha Parts Center

The Yamaha Parts Center, which adjoins the main office building of Yamaha, is the headquarters of Yamaha's worldwide parts supply operation.

The Parts Center consists of the No.1 and No.2 buildings and covers 27,799m2 in total floor area. The Center handles 128,180 different

Smooth, speedy supply of replacement parts Center and the



Lofty racks around which 8 stacker cranes are in constant action, are used for storing parts with high turnover rates.

items and supplies more than 90% of total parts demand.

As mentioned above, the on-line computer system quickly and smoothly processes all the data and information concerning parts reception, stock control, shipment, etc. with four on-line terminals located

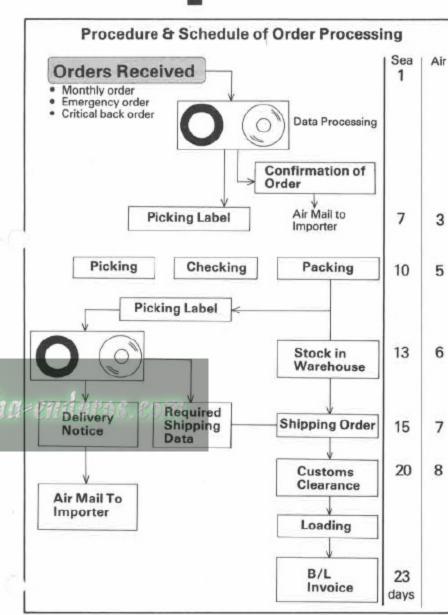
Parts with high turnover rates are mostly stored in lofty racks with height of 12 meters, depth of 80 meters, 16 rows of racks, 8 cranes and 53,760 storage buckets. This method greatly increases handling efficiency.

In addition, a well coordinated convevor system for receiving and shipment of parts is almost completely automated.

As shown on fig.1, Yamaha makes it a policy to complete parts shipment by sea within 23 days after an order is received, with the backing of the above highly efficient supply system, in order to expedite the

parts supply and after-sale service operations of 400 Yamaha distributors all over the world.

The Parts Sales Overseas Operations of Yamaha is running a system of monthly parts marketing information in order to collect various important data concerning market trends. In this way timely measures can be taken to meet the particular needs of each local market.



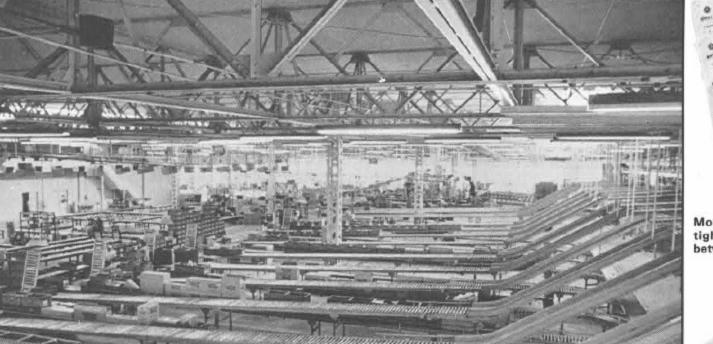


Computer center. The system consists of an inquiry terminal, receiving terminal, inventory register terminal and shipment terminal.





These parts are ready for shipment.



Shipment processing is almost completely automated. All parts are sent to the packing line after they undergo a



Monthly reports are expected to tighten cooperative relations Yamaha and importers.



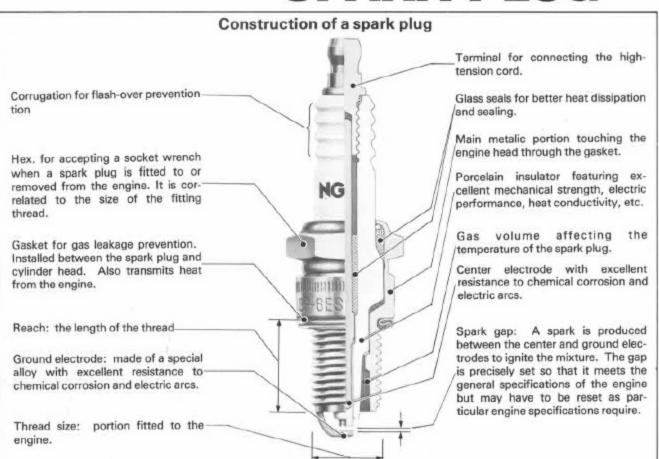
Technical series

Service & Maintenance

You should strive to maintain a positive attitude toward improving your level of repair/service techniques and knowledge so that you can see every customer use his or her Yamaha bike in the best operative condition. This technical series has been designed with this in mind and provides proper coverage of the fundamentals required for every Yamaha serviceman. Gain more through elevating the brand image of Yamaha!

(These pages should be kept long and fully utilized for your better service work.)

SPARK PLUG



The spark plug is one of the most familiar engine parts. Not only bike users but car drivers will first of all check to see if the function of this part is correct, when the engine does not start or becomes inoperative. You are active in the first line of selling and servicing Yamaha motorcycles and requested to become proficient in the technical diagnosis of spark plugs. That is, you should be able to pass accurate judgement on the condition of the engine or to guess how the bike has been used when you take a look at a spark plug. The spark plug is the only part that is always "peeping" into the engine and the appearance of its electrode tells the condition of the engine.

Spark ignites the mixture

The spark plug produces a spark to ignite the air/fuel mixture in the combustion chamber. To ignite the mixture, a high voltage is needed. The spark plug employs a flywheel magneto or battery as its power source and transforms a low pressure flow of 6V or 12V into a high pressure flow of several thousand volts by making use of the function of an ignition coil so that a spark is produced to ignite the mixture. The mechanism of a spark plug, however, is not so simple as that of a cigarette lighter. The air/fuel mixture which is compress-

ed in the combustion chamber, explodes at a high temperature of 2,000 to 3,000°C. In this case, air pressure also becomes extremely high. This phenomenon takes place several hundred times per second in the combustion chamber. Thus, the tiny spark plug with its simple construction has to work under exceptionally severe conditions. It must be superior in both electrical and mechanical aspects at the same time it must endure the high temperature of the engine and its electrodes must have excellent resistance to electric arcs. Furthermore, it must quickly discharge at high explosion temperature that will burn the carbon and oil completely. Otherwise, the engine could not

Heat range is important

Heat range is a means of designating how hot a spark plug will run in operation. All spark plugs may look the same but some are designed for low speed operation (hot type) and others for high speed operation (cold type) . Both types have various heat ranges. Even a spark plug in the same engine will be exposed to varying temperatures according to operating conditions. For this reason, it is impossible to manufacture a spark plug which can meet all the varying heat conditions of an engine. Accordingly, suitable spark plugs are designated for each motorcycle model. For example, Yamaha models use the spark plugs of NGK, Champion, Hitachi or Den-

The designation of heat range differs from one to another as enus yamaha

*NGK BP6ES

*Champion N-10Y

*Denso W20EP

The method of designating heat ranges is not standardized. That is, larger figures show a colder type in the case of the products of NGK, Denso, Bosch and KLG while they mean a hotter type as for those of Champion, Hitachi and AC. These methods may allow you to set your own standard for choice of suitable spark plugs. As mentioned above, NGK BP6ES corresponds to Champion N-10Y but even in this case the former has not the same range of temperatures as the latter. In addition, heat range has much to do with the temperature of the electrodes. To burn the carbon and oil completely, the temperature of the electrodes must be higher than This is called a "selfcleaning" temperature.

Different types of spark plugs Cold type

Gas volume enables you to set a standard for suitable heat range.

Good Carbon accumulated around The ground electrode the threaded portion. may get overheated or touch the piston. Carbon accumulated around the protruded Both heat range and reach must be correct

Spark plug tells the condition of an engine

The spark plug does not always function in the prescribed range of temperatures as each rider wants to ride his bike in his own way. In brief, the heat range that is needed varies according ro actual operating conditions. Inspect the condition of the electrodes to grasp how the engine has been used. If the electrodes are burnt light grey, tan or white, the engine is in good working condition and the spark plug also performs well. We often see motocross or road race mechanics inspect the condition of the electrodes carefully when they change a spark plug. It tells them how the engine has been used.

Sooty electrodes

Causes:

The electrodes are sometimes found to be sooty. This is caused by the following factors:

*Long idling or riding at low speed

*Misuse or incorrect setting of the carb. starter

*Faulty air cleaner or clogged

*Too slow ignition timing faulty contact points *Faulty condenser or high-

tension cord *Incorrect carb. setting or too

rich a mixture *Incorrect Autolube setting or

excessive oil supply

*Worn or oilless cylinder, piston or piston ring

*Incorrect spark gap

*Too high a heat range

In case the heat range is found to be too high, use the next colder type plug. On the other hand, if the electrodes are burnt bleached white or if the electrodes have worn or the insulator has cracked, the following causes should be considered:

*Insufficient engine cooling or carbon accumulation in the combustion chamber

*Incorrect carb. setting or too thin a mixture

*Too fast an ignition timing

*Too low a heat range In case the heat range is too low, a colder type plug should be used.

Clean contact points and correct spark gap

The contact points, high-tension cord and plug cap on the ignition system must be kept clean. Make sure that the spark gap is correct. The spark gap should be periodically inspected. On all motorcycle spark plugs, the gap should be 0.6 to 0.7mm. The spark gap of a battery type spark plug is larger than that of a magneto type one. In case the heat range is found unsuitable, the spark plug should be replaced with a



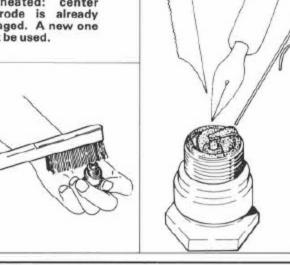
Proper burning: electrode is dry

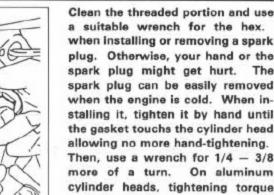


Incorrect burning: electrode is sooty or sometimes wet.



Overheated: center damaged. A new one must be used.



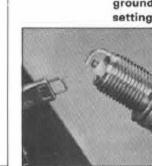


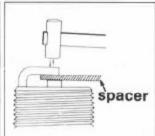
a suitable wrench for the hex. when installing or removing a spark plug. Otherwise, your hand or the spark plug might get hurt. The spark plug can be easily removed when the engine is cold. When installing it, tighten it by hand until the gasket touchs the cylinder head allowing no more hand-tightening. Then, use a wrench for 1/4 - 3/8 more of a turn. On aluminum cylinder heads, tightening torque must be correct.

Clean the spark plug by using a plug cleaner as illustrated

Use a wire brush to clean the metalic portion of the spark plug. Clean the gas volume by using a pen Clean the gas volume by using a sharp-pointed article, such as a pen, hairpin or the like. Spark gap should be kept correct.

In case it is too large, discharge potential will rise too high and badly affect the starting performance of the engine or cause misfire at highspeeds or during acceleration. If the gap is too small, spark energy will be reduced, causing misfire, too. The spark gap should be 0.5 to 0.6mm for a magneto type ignition and 0.7 to 0.8mm as for a battery type ignition. A gauge must be used to adjust the spark gap. Insert the spacer between the center and ground electrodes for correct gap setting





colder or hotter type. In this case, the condition of the fuel feeding system and general ignition system should also be inspected. The life of a spark plug varies according to actual operating conditions. Roughly speaking, the motorcycle spark plug which is always exposed to highspeed operation, has a life of

What the signs mean

Signs showing the size, heat range and grade of a spark plug are not standardized but differ from one brand to another. Introduced on table 1 are the signs used by some leading manufacturers:

In addition, individual manufacturers use their own numerical signs to designate the heat ranges of spark plugs. Their correlation is stated on talbe 2.

As to thread size and reach, individual manufacturers use the signs on table 3.

Each manufacturer designates Model No. of a spark plug by combining the above signs.

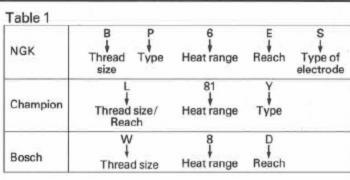


Table 2 Manufacturer 9 Denso 22 24 Hitachi 5 4 3 2 Champion 6.89 5,86 4,81 3 8.90 Bosch 5

Table 3

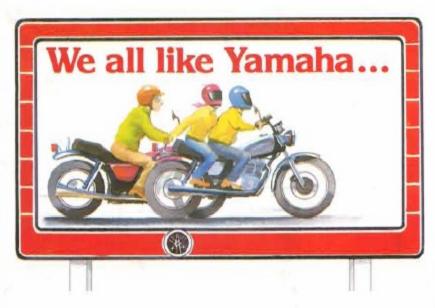
Manufacturer	Thread size		Reach	
	14mm	12mm	12.7mm	19mm
NGK	В	D	Н	E
Denso	W	X	F	E
Hitachi	4	2	M	L
Champion	N.L	P.R		R.N
Bosch	W	Х	A.B	C.D

*Q & A corner is kept for the next issue.

Outdoor advertising

Entrance to apartment complexes of housing areas

The outdoor billboard with residential areas as the target can be divided into two main types. One is the family bike, and the other is the commuter or sport bike.



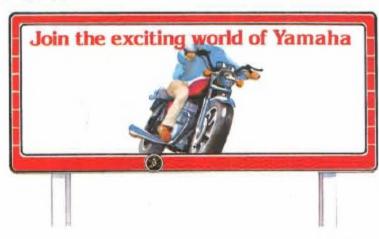
Near motorcycle race areas

The racetrack where motorcycle fans gather is the ideal place for outdoor billboards. Billboards should be placed along the street approaching the race track, and near the gate, as well as within the racetracks. Within the racetracks, select the spot that will bring about the highlight of the race. Make sure that the Yamaha billboard will be caught by TV, movie, and press coverage. For example, there is a racetrack with a highlight point called the "Yamaha Corner"

MYAMAHA



The characteristics of the needs in the bike for the student bracket are that they seek a bike that can be used for commuting as well as sports riding. Outdoor billboards located near schools must naturally consider these characteristics. This is an ideal spot for announcing the release of a new sporty product.



Along roads in general

The important points regarding outdoor billboards along roads are its expression content, and its location. Here, we introdudce representative samples, and recommend that you use them as a reference in selecting locations that suit the circumstances of your territory.



Be sure to make presentations during events such as trade fairs, festivals, and motor shows. To suit the occasion, billboards with a fesive atmosphere, of with a race image would be appropriate.

