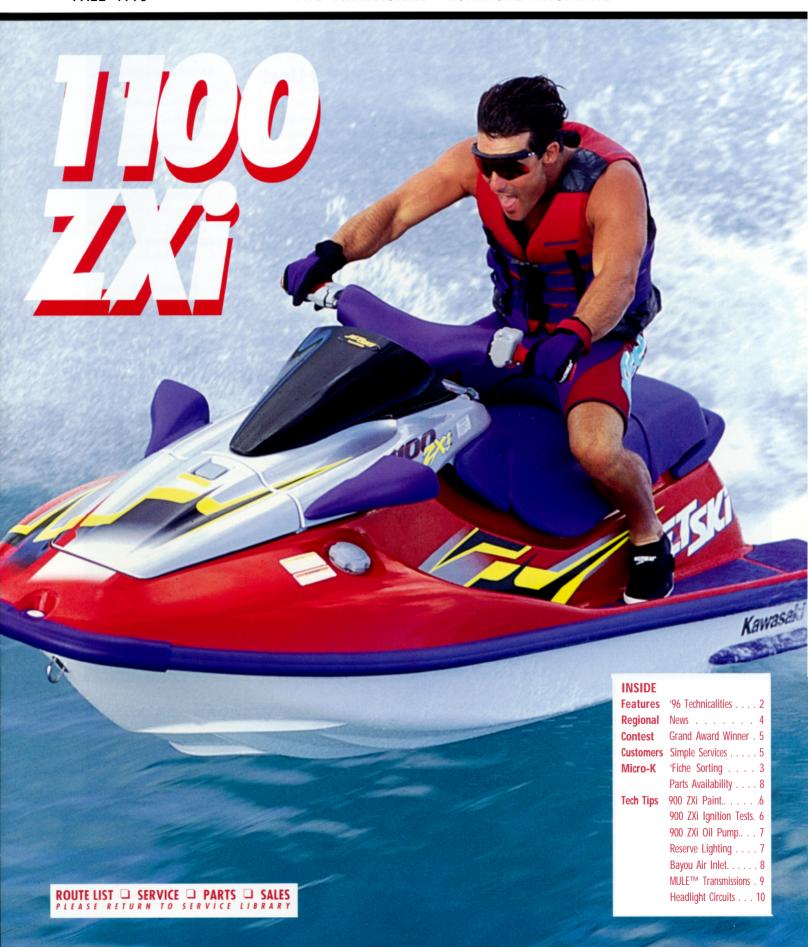
K-TECH NEWS

FALL 1995

THE KAWASAKI TECHNICAL MAGAZINE

VOL. 8 NO. 3





New & Different

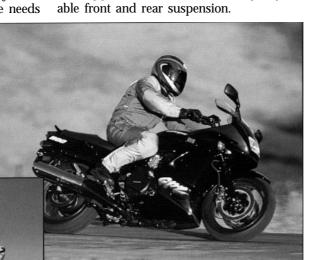
◆ There's Too Much To Talk About in the '96 Model line!

by Patrick Kelly Instructional Designer/Instructor

Nineteen ninety-six is an exciting new year for Kawasaki. We have many new and revised models to help meet the needs

of the diverse market place. In fact, we have so many new models and so many new and revised items that it would be impossible to cover all of them in depth here. But, we can cover some of the technology that is entirely new for '96.

Let's take a look at just a few of these advances ...



of the front forks is adjustable by using

replaceable eccentric collars. And remem-

ber, this adjustment is in addition to the 7RR's adjustable swingarm pivot, adjust-

able upper shock mount and fully adjust-

(ABOVE) Not just "Any Brake System" for GPZ 1100 ABS \dots (LEFT) ZX-7R features six-piston front brake calipers.

Six-Piston Brake Calipers

The new ZX-7R and ZX-7RR bring in their share of the new technology. Both of these sporty new machines feature sixpiston front brake calipers, a first in Kawasaki history. Each caliper has three pistons on each side of the disc. These calipers offer improved braking performance by increasing the effective brake diameter.

The brake discs on the new 7's are unchanged in outer diameter at 320mm, but, since the six individual pistons are smaller in diameter, the majority of the braking pressure is applied at the outermost edge of the disc. This increases the caliper's leverage on the wheel for increased stopping power.

The ZX-7RR also brings in a new feature that will make nearly infinite chassis tuning possible: adjustable rake. The angle

GPZ ABS

The ZX-7s are not the only new motor-cycles with stuff to brag about. There is also a new version of the GPZ 1100- the GPZ-1100 ABS. You guessed it: the ABS stands for "Antilock Brake System." The GPZ's ABS uses a system unit that contains a pump, a direction control valve and numerous other valves and components all in one compact hydraulic unit.

The ABS unit is controlled by a computerized control module. The control module receives signals from sensors located in the front and rear wheel hubs. The sensors contain a magnet and a coil, and generate a signal as each tooth on a wheel-mounted rotor passes. The signal's frequency is in direct proportion to wheel speed. The control module monitors these signals from the wheels to determine wheel speed. If the control module senses that the wheels are about to lock when the rider is applying the brakes, it signals the hydraulic unit to hold, then reduce brake

Continued on page 12

K-TECH News

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Micro-K

◆ Get Your 'Fiche in Order

by David Pyle Parts Publications Specialist

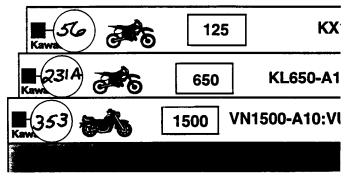
Here is a tip that is a real time saver when trying to get your microfiche back into the deck — especially when you have several people using the same deck reader.

First, go to the local stationary or business supply and buy a few boxes of self-adhesive, colored paper "dots" or stickers. Many of you may already use these stickers for inventory, repair orders, etc. The more colors

you can find the better.

Next, use your Micro-K index and start at the beginning of your Deck (AR50-A1), putting one of the stickers in the upper left comer over the Kawasaki logo. Now, write a "1" on the sticker and continue the process (2,3,4,5, etc.) on all of the pink 0-100cc microfiche. You can continue using the same color sticker all the way through the deck, or you can change colors to signify product type. (For example, all ATV microfiche get yellow stickers; dirt bikes get green; JET SKI® watercraft, blue; etc.) Multi-line dealers may want to have one color per line.

Don't worry about leaving spaces for future microfiche being added. When they come, you just the first letter of the OEM to the number to help keep the fiche separated (K124, H52, S27, Y81, etc.)



Dots It! Numbered colored stickies can really speed up microfiche sorting chores.

add a letter to the number (151,15lA, 151B, etc.) and insert the 'fiche as needed.

Here is another tip for you multi-line dealers: Add

Wish I could take credit for this idea, but it came from Bob Cochran at Whittier (Calif.) Kawasaki. Thanks, Bob! ◆

Parts Not Previously Available ...

Take a look at your latest microfiche for the JH900-A and JH750-C and you will find that a new part has been added to the Hull grids. The new port is the Exhaust Outlet or "Tail Pipe," P/N 59156-3711.

In the past, this type of part was

not available because the back of the hulls were blocked off by a bulkhead and foamed in. On these new-style hulls, there is nothing to obstruct access to this fitting-no foam around the outlet-so there is access for replacement.

We will also be adding the **"Ex-haust Pipe,"** P/N 18049-3751 (JH750-C) or P/N 18049-3755 (JH900-A). This is the tube that is

glued and riveted to the Tail Pipe.

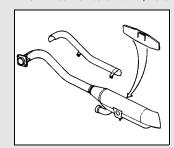
The Tech Hot Line guys say a heat gun will soften the factory glue and help in getting the old tube out.

● The VN800-A/B uses a **heat shield** on each muffler body to protect the rider and passenger's foot. Previously these were not available as spare parts, but they will be added to the microfiche on the next revision.

Until then here are the part numbers:

◆P/N 49106-1179 Cover muffler, rear

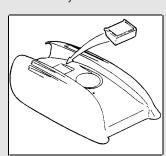
◆P/N 49106-1182 Cover muffler, front

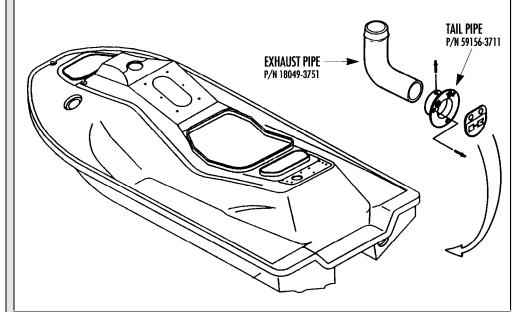


● The JS750-A/B has a **handle** that is glued into the renter top area of the hood. This part (P/N 46075-3722-8C Grip, Engine Hood, White) has not been available until now.

Be sure to advise your customers that this handle is there to help lift the hood up, not the entire boat.

-David Pyle







NORTH & EAST
I would like to take this opportunity to extend a warm welcome to all the former

RMK dealers who have just become part of Kawasaki Motors Corp.'s North Region. We look forward to working with you and talking with you on the phone and at our training centers.

This season, we are trying something new with the training schedule. The entire season schedule (listing all of the training classes scheduled between Nov. '95 and April '96) will be printed in a single bulletin. This will give you a chance to look ahead and pick the best dates for the classes you want to attend.

As you are making your plans for training, keep in mind that you can attend classes at any of our training centers. For whatever reason, you may find it more convenient to attend a class in another region. To make your reservation, just call the regional office where the class you want to attend is going to be held.

If you want to sign up for a class and can't find your training schedule, just call K-FAX at (714) 458-5663, and order



Document #1310, the Training Season Schedule.

I look forward to talking with you at one of our seminars soon! ◆

Fred DeHart 201 Circle Drive N. #107 Piscataway, NJ 08854 (201) 469-1221



SOUTH & CENTRAL

Do you hate the thought of replacing a JET SKI watercraft cylinder because of

all the studs you'll have to pull out and put into the *new* cylinder? If so, maybe you are using the wrong procedure. It seems there are still a lot of technicians out there double-nutting or even using vise grips (*ugh!*) to remove studs from a damaged cylinder or crankcase.

This is one of those situations where a special tool nearly pays for itself the first time you use it. In this case, the special tool is call a "stud puller" and there are several tool companies that carry them.

If you don't already have some of these handy tools, you should get some. The ones I use are available from Precision Manufacturing and Sales Co. (call [800] 237-5947). They look like deep well sockets but have rollers inside that grip the stud as you

rotate the tool.

(It's the same principle as used in our one-way starter clutches.)

These special sockets are open at both ends with a 21mm hex on the

outside so you can slide them over and down to the base of a long stud. In that case you use an open end or box wrench to turn the tool.

For short studs that don't protrude through the tool, you can attach it directly to your 1/2-inch drive

ratchet.

When you use one of these tools, a stud is no more difficult to remove or install than a regular bolt. Precision Mfg. offers them in 6mm, 8mm, 10mm and 12mm sizes. Impact or air wrenches are not recommended with these pullers. The intermittent torque applied by power tools is not compatible with the Sprague clutch inside the puller. ◆

Walter Rainwater 6110 Boat Rock Blvd. S.W. Atlanta, GA 30378 (404) 349-2000



WEST The news in training is pretty slim this month, but there is some good news in special tools:

First, the impeller tool for the 750 ZXi and 900 ZXi (P/N T57001-1393) has been redesigned. The revised tool is

smaller and lighter, making it more portable and therefore more useful for impeller changes at the races.

Another change made to help out racers was milling the flats for holding the tool closer together. A 12-inch crescent wrench will now hold the tool.

But the best news is that the redesign allowed Kawasaki to lower the price by \$4.

The double-ended bolts that Kawasaki technicians have used for years as the working part of flywheel pullers have been redesigned using tougher steel and a modified end. The new design gets a new part number (T57001-290A) and now fits the 900 ZXi without grinding any

threads from the 20mm end (see *K-Tech News*, Vol. 8 No. 2–Ed.).

Less money for this one, too: This tool costs about a buck less than it did before the redesign. ◆

Jerry Heil 9950 Jeronimo Road Irvine, CA 92718 (714) 770-0400

Customer SERVICE

by Jill A. Dunning Customer Service Representative

There is a saying that goes like this: "It's the little things that count the most." This is especially true when it comes to customer service. It is the little things and simple services that you as a dealer provide that keep the customer satisfied and returning to your store for business.

Here are two "simple services" you can provide for your customers:

New Vehicle Release Info Are you aware that Vehicle Customer Service has a new phone number? It's (800) 777-9088 (dealers only). Those folks can provide you, the dealer, with estimated times of arrival for the units your cus-

tomers are anxiously awaiting. Then you can provide the customer with this information. This will not only keep him or her informed but will show that your dealership is "on top of the situation."

K-Share Vehicle Locator This service is available on your K-Share terminal. If a customer is looking for a particular model of motorcycle or watercraft which you do not have in stock or is no longer available from Kawasaki, a want ad can be placed through K-Share. The ad is \$3 and will run for 10 days.

Remember that there are many resources available to you, the dealer, to which the customer does not have access. Knowing about and taking advantage of these services will benefit your business and your customer. •





Now, when your customer wants to know exactly when his new Vulcan 1500 (ABOVE) or 1100 ZXi (LEFT) will be arriving, you can tell him.

Guest SPOT

Announcing the 1995 Service Contest Grand Award Winner!

by Don Church

Manager, Service Training and Communications Dept.

Congratulations to Daniel Harrington from Kawasaki of Ocala in Ocala, Fla. Daniel put his extensive knowledge developed over 24 years in the motorcycle industry to work and posted the highest overall cumulative score in all three quizzes to win Kawasaki's '95 Service Contest.



Daniel started working in his father's motorcycle dealership at the age of 15. Two years later, he was hired on at Kawasaki of Ocala where he works today.

Congratulations are also in order to Jeff Lewis of Kawasaki of Ocala for his support in maintaining a well-equipped service area and for recognizing that the greatest asset in service is a well-trained and efficient staff.

The Grand Award, as in past service contests, was to be a VIP tour of the Kawasaki factory in Lincoln, Neb. However, because Daniel is not able to take this trip, we have sent him a certificate for some items of his choice from the Kawasaki accessories catalog.

Special thanks to all of you who competed in the '95 Service Contest for your commitment to service excellence and your dedication to improving your knowledge and skill. You are the people industry needs to prosper. ◆

900 ZXi Paint Match

by Gregg Thompson Product Support Supervisor

Are you looking for matching paint for the red or violet hulls on the 900 ZXi JET SKI watercraft? Kawasaki does offer matching urethane paint for both of these colors in quart or pint quantities. Here are the part numbers:

Firecracker Red

JET SKI Violet

This paint does not need a catalyst. When you order a quart, you get a quart of paint and nothing else; the painter will have to supply his own acrylic urethane reducer and follow the instructions on the can.

This paint does not require a primer if painted over a properly prepared JET SKI watercraft hull. It also does not require a clear topcoat.

DuPont Imron

Also, if you or your painter prefer, DuPont has recently made JET SKI Violet Imron paint available in quart quantities through its automotive paint suppliers. This is the same Imron paint that the factory uses to paint these boats. It can be used for spot repairs or full bottom repainting.

DuPont has been unable to come up with a formula for JET SKI Violet that could be mixed at the paint

wires you're checking

disconnected):



The factory ton help you color match the OEM 900 ZXI violet or red. If you're doing up a Kawasaki Racing Derek Punthard-replica ZXI in purple end green, though, you're on your own ...

stores and would be a good enough match to do spot repairs. So, the company will supply the factory color already mixed.

By ordering DuPont P/N N3460H from your local supplier, you will get a quart can of the color (3/4 full) and 1/2 pint of 193S hardener. The color and catalyst combine to make a quart of

"ready-to-shoot" paint.

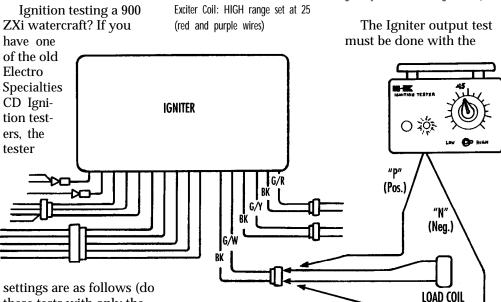
The paint will have to be shipped to your local Dupont store from one of four Dupont warehouses around the country.

The Firecracker Red color has been available from your DuPont supplier for years. The Dupont paint code for Firecracker Red is N4989H. ◆

900 ZXi Ignition Tests

by Fred DeHart Technical Services Instructor

these tests with only the



Pick Up Coil: LOW range set at 35-40 (green and blue wires)

Igniter Output to coils: HIGH 45 (black to green/white; black to green/yellow; black to green/red)

tester load coil in parallel with the tester and the negative lead of the tester always connected to the Black wire as shown. ◆

But, What Are The Specs?

As usual, the new 900 ZXi JET SKI® watercraft service manual doesn't give voltage specs for testing the exciter or pick-up coils. So, we checked some good ones and compiled our own measurements.

Do these tests with the spark plugs out and grounded, the handlebar tether in place and all the ignition wires plugged in.

Exciter Coil: 50-60 VAC (red and purple wires)

Pick-Up Coil: 1.0-1.5 VAC (green and blue wires)

Watercraft Hull Glue

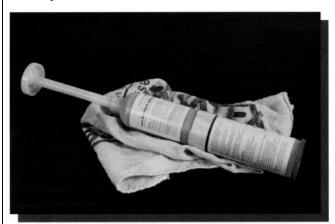
◆ Did you Miss This News the First Time Around?

We printed this information in the last issue of *K-Tech News*, but apparently we "hid" it a little too well: Many people didn't even see our little page 9 sidebar.

For years dealers have

when doing a repair.

Well, this hard-to-get substance has finally been made available to you. You can order it using Part Number 99996-5501. Be aware that this 7.25oz (214 ml) tube costs about



been asking for the glue that the factory uses to assemble the JET SKI watercraft hulls. This is a two part epoxy-type adhesive that in the past has not been available to you dealers. Sometimes it is very difficult to come up with a substitute for it

\$25 and must be used all at one time. (The two parts of the glue must be mixed together inside the tube that they come in.)

Be sure you read the instructions on the container carefully before using this glue. – *Ed.*

900 ZXi Oil Pump Change

by Gregg Thompson Product Support Supervisor

There has been a midproduction change in the oil pump on the '96 JH900-A2. If you

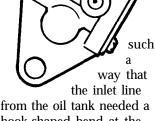
order the old oil pump part number, it will substitute to the new one (P/N 16082-3719).

The changes in the oil pump include a relocation of the center cylinder oil line outlet fitting. With the older style pump, there is very little slack in the oil line to the center carburetor. When replacing the older style pump with the new type, it can be difficult to make that oil line reach to the new fitting on the oil pump.

The new style oil pump uses a longer oil line (P/N

92190-3967) for the center cylinder. Whenever you order a new oil pump for a JH900-Al or early A2, you should order this oil line to go with it.

Also, the inlet spigot has been relocated on the new pump. The old style was pointed in



from the oil tank needed a hook-shaped bend at the oil pump end. The oil line came shaped that way. The new oil pump doesn't need that bend in the oil pipe. When replacing an old style pump with a new style one, just cut off the bent portion of the oil inlet pipe. •

Reserve Lighting ... Out of the Dark

by Steve Rice & Gregg Thompson Product Support

It used to be that most of our mid-size and larger street bikes had a feature called the "Reserve Lighting Device." About 1990, it began to disappear from most of our bikes. But it still remains on some of our bigger touring and cruiser models. (You can tell if a unit is equipped with this feature by looking for a white "headlight" indicator in the instrument panel.)

It seems that since this feature is not as common as it used to be, quite a few of the newer people at our dealerships don't have any idea how it works. If you are one, then read on.

The Reserve Lighting Device (RLD) can detect a failed filament in the headlight bulb. If it does, it switches to the other filament whenever the rider selects the beam that is burned out. If the high beam is burned out, the RLD unit simply uses the low beam regardless of which beam the rider selects. If the low beam is out and the rider has the dimmer switch on "LO", the RLD unit uses the high beam but sends reduced voltage so the beam is dim. That way the rider can tell when he is using his low

beam and it won't blind oncoming drivers. The high beam works normally.

Whenever a filament bums out, the white "headlight" indicator lamp in the dash comes on. It's a fairly bright indicator light and it's hard to miss at night. Hopefully the customer knows what this indicator means and replaces his headlight right away (i.e. before the other filament fails). •



KLF400-B Air Inlet Snorkel Kit

◆ Update Older Bayous Used in Dusty Conditions with the New B4-Style Air Intake

by Gregg Thompson Product Support Supervisor

The '96 KLF400-B4 Bayou comes with an improved air intake system for the engine.

Earlier models take air directly into the top of the air box under the seat. This can be a very dirty environment in dusty conditions. The new B4 has a snorkel tube that goes forward and upward from the airbox and draws air from under the fuel tank. In dusty conditions, the air under the fuel tank stavs much cleaner than under the seat.

Obviously, less dirt entering the air box means less air cleaner maintenance. But, more importantly, it reduces the chances of

P/N

11010-1562

14073-1638

16009-1870

16146-1175

49006-1292

92037-1860

92063-1118

671B2550

Ref. No.

2

3

7

KL400-B ATV Snorkel Kit (P/K 999951350)

Qty

1

1

1

2

2

1

accelerated engine wear when air cleaner maintenance isn't as frequent or thorough as it should be.

The good news is that all the parts needed to update a KLF400-Bl, B2 or B3 are available in kit form. If you have customers with '95 or earlier model KLF-400s who are encountering

much dirt in the air box, we suggest you recommend this kit to them. The kit is reasonably priced and includes a new air box assembly (complete with air filter): the snorkel tube

problems with too

new carburetor jets. NOTE: If you install one of

Description

Jet needle. N2LF

Cover Assembly

Main Jet,#115

Duct

Boots

Clamps

0-Ring

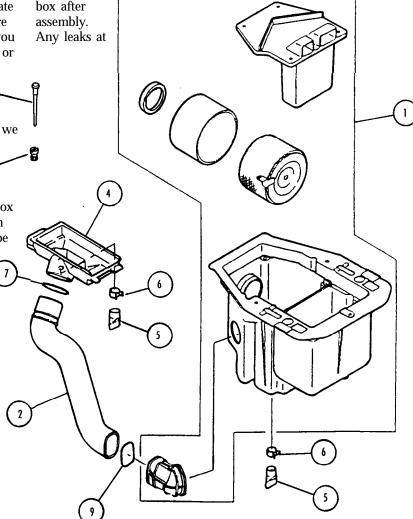
and inlet tray; and

Air Cleaner Housing Assembly

these kits, pay close attention to the condition of all the duct connections between the new air inlet

and the air box after assembly. Any leaks at

these connections will reduce the effectiveness of the kit. ◆



92081-1638 Spring Band 2500 High Altitude Jetting

Recently, some of our MULETM dealers began requesting high altitude jetting specs for KAF620 (2500 series) MULEs. At first, our response was mostly silence since we didn't have that information. However, asking the right questions of the right people finally produced the info we were lacking, and now we are happy to pass it along to you (see chart at right)...

The information in the table at right is valid for all 2500-series MULEs. - Tevis Moffett

Altitude Range (ft)	Main Jet Size	Part Number	Remarks
sea level - 1,600	#115	92063-141	standard
1,600 - 4,900	#112.5	92063-2010	optional
4,900 - 8,200	#110	92063-2099	optional
8,200 - 11,500	#107.5	92063-2100	optional
11,500 - 14,800	#105	92063-2142	optional

MULE™ 2510 Transmission **Repair**

by Fred DeHart Technical Services Instructor

If you ever have to do a repair on a four-wheel drive KAF620-Al MULETM transmission failure that includes broken or stripped gears, don't forget about the front drive bevel gear case and the 4WD-2WD case. These two cases both share the same oil as the main transmission case. If there is a failure in the main transmission that puts metal debris into the oil, that metal will probably make its way into the other two cases. Even though some repairs in the main transmission can be performed without removing

or inspecting the other two cases, this is not recommended. Take the bevel gear case and 4WD-2WD case off and carefully clean and inspect all the gears and bearings for metal debris.

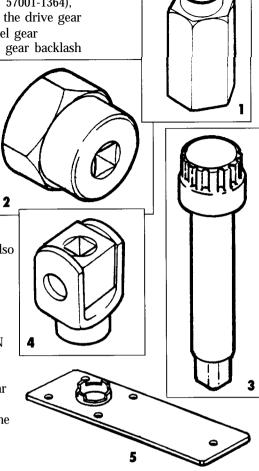
Five special tools are needed to disassemble and then reassemble these transmissions. If you do MULE service work regularly, you should have all these tools in your service department. The tools and their application are listed here:

- **1** A 35mm hex wrench (P/N 57001-1194), used to remove the retaining ring that holds the drive bevel gear shaft bearing.
- **2** A 40mm hex wrench (P/N 57001-1324), used to remove the retaining ring that holds the bearing in the bevel gear case.
 - 3 Transmission gear

holder (P/N 57001-1364), used to hold the drive gear shaft for bevel gear removal and gear backlash measurement.

4 Pinion gear holder (P/N 57001-1281), used to hold the driveshafts for pinion gear and nut removal. This tool is also used in front differential disassembly.

5 Socket wrench (P/N 57001-1363), used to hold the bevel gear case for removal of the driven bevel gear nut. ◆



Service Library: The K-Tech News Collection

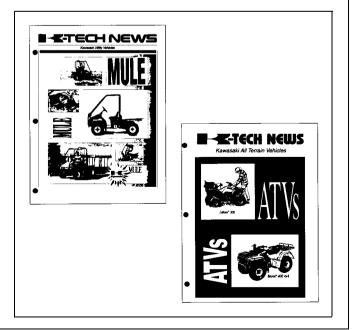
Kawasaki's Technical Training Department staffers use sets of *K-Tech News* articles from back issues that have been collected into "books" as training aids.

These four separate collections of published articles on portable generators, MULEs, ATVs and KX/KDX motorcycles make great sources of practical information for the Kawasaki technician. Each collection contains all the articles on a particular product segment that have ever appeared in *K-Tech*. Many of these articles are

from issues no longer available in paper form. Each one has a table of contents designed to help in finding just the right info.

Now, for the first time, the Tech Training Dept. is making these collections of articles available to all Kawasaki technicians. Call Kawasaki at (714) 770-0400, x2463, and order the *K-Tech News* article collections of your choice. We'll bill your dealer parts account \$2.95 (plus applicable sales taxes) for each book. Kawasaki will pick up the postage.

- Ray St. John





Kawasaki Motorcycle Headlight Circuits

◆ Let's Try to Clear Up the Confusion about Automatic Headlight Systems

by Gregg Thompson Product Support Supervisor

If you have ever gotten confused trying to diagnose a headlight problem on a Kawasaki street bike, you are definitely not alone.

Since the early '80s, all of our street-legal (electricstart) motorcycles have had an automatic headlight system. This system turns the headlight on automatically after the bike has been started. Actually, on most models, once the start button has been pushed and then released (even just momentarily), the headlight will go on even if the engine doesn't start. If the start button is pushed again, the light will go off until the start button is released again.

This system is designed to reduce the load on the battery while cranking the engine. It is also designed so that once it is turned on, the headlight will stay on even if the engine stalls. There are differences in some of the components and circuitry from model to model, but the function is always the same.

The following are some details that will help you understand and diagnose these systems:

The headlight relay, located in the junction box, turns the headlight on by sending power to the headlight dimmer switch (or the reserve lighting device). It receives an "ON" signal (through either a Y or BK/BL wire) when the start button is pushed and/or the engine begins

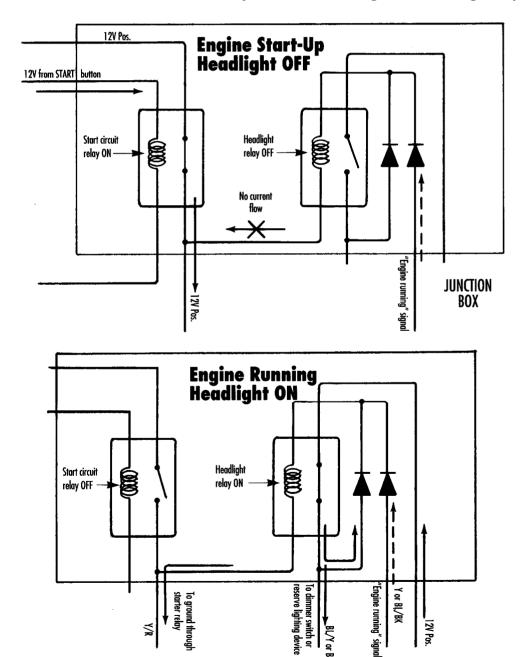
rotating. The signal is either AC voltage from one leg of the alternator; DC voltage from the starter motor side of the starter relay; or DC voltage from another relay outside the junction box.

However, this "ON" signal cannot turn the head-

light relay on while the start button is being pushed. This is because the headlight relay uses the Y/R wire (going from the starter circuit relay to the starter relay) as a ground wire. As long as the start button is pushed, this Y/R

wire has positive polarity and cannot function as a ground wire. So, the headlight stays off.

The moment the start button is released, the Y/R wire becomes a good ground and any "ON" signal to the headlight relay



(no matter how brief) will turn it on. Once it's turned on, the headlight relay holds itself on. A circuit inside the junction box routes current from the switched side of the relay back around to hold it on. Pushing the start button turns the headlight off again because the Y/R wire ceases to be a ground. Without a ground, the headlight relay goes off.

Many of the failures that cause the headlight not to work are in the junction box which is usually available only as an assembly. To determine whether the problem is inside or outside the junction box, perform the following tests with the engine running. (Of course don't forget to check the headlight bulb and fuse first.)

1 Is there power (12V+) coming out of the junction box on the Blue/Yellow wire going to the headlight dimmer switch or Blue wire going to the Reserve Lighting Device?

If "yes", the junction box is working fine. Check the handlebar switches, wires and reserve lighting device if the bike has one.

2 Is the junction box receiving the "ON" signal?

On all models with permanent magnet-type alternators, the "ON" signal is AC voltage on a Yellow wire coming from one leg of the alternator. This voltage is present any time the engine is rotating.

On larger bikes with field excited-type alternators, the "ON" signal is DC voltage on either a Yellow or Blue/Black wire. On some models, this wire comes from the starter motor side of the starter relay (or solenoid). In this case the Yellow wire only has power while the starter motor is running.

The mechanical delay in the heavy starter relay allows for a momentary signal on the yellow wire after the start button is released. On other models, the "ON" signal comes from either the fuel pump relay or another headlight relay outside the junction box. In this case, battery voltage should be present on the Yellow or Blue/Black wire any time the engine is running.

3 Is the Yellow/Red wire to the starter relay providing a good ground?

In most cases, if this wire isn't providing a good ground for the headlight relay, the starter won't work. But, check it even if the starter is working. Run a jumper lead from the Y/R lead at the junction box to ground with the engine running. If the headlight goes on, the starter relay (solenoid) is most likely the problem. ◆

IMPORTANT NOTICE!

On October 13, 1995, Kawasaki mailed Recall Bulletins JS95-10 and JS95-11 to all JET SKI® watercraft dealers.

Inspect 750 ZXi and 900 ZXi models within given HIN ranges *immediately* for possible fuel leakage

from the filler spigot-tofuel tank joint.

Please note that even though the percentage of defective watercraft is very low, the potential consequences are so serious that they cannot be ignored! Owners are being encouraged to have inspection done prior to winter storage. Dealers are being offered an additional 0.2 hours for inspection on warranty claims submitted prior to December 31, 1995. – *Ed.*

A Very Special Feeler Gauge ...

by Joe Nowocinski Product Support Specialist

Have we got a special tool for you! By special request, we've had a unique set of feeler gauges custom made for all you mechanics out there who do lots of valve adjustments on late model Ninjas.

As you know, it's not easy getting a feeler gauge down into today's very compact cylinder heads with their tiny valves, cams and rocker arms. Most of you probably have a drawer full of trimmed, bent and/ or soon-to-be broken feeler gauges in your tool box.

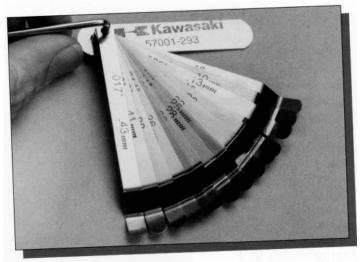
Recently, we asked a tool company to make a full set of feeler gauges, pre-bent and shaped for the job. The set includes 15 gauges in .001" increments from .004" to .018".

These slim gauges come on a ring that allows you to remove one or more from the set for easier handling.

Because they are specially made in relatively small

quantities for us, they are not cheap. But, compared to buying, modifying and then breaking those overthe-counter feeler gauges again and again, these gauges are a bargain.

To get a set, order P/N T57001-293. ◆



New& Different

Continued from page 2

pressure. As the wheel starts acclerating again, the control module signals the hydraulic unit to hold, then increase brake pressure. The cycle repeats continuously to keep the optimum amount of braking force applied. The system is completely self-diagnosing, too. If a problem with the ABS occurs, the normal brake system will still continue to function but a light on the instrument panel will come on, indicating a problem. The system will show the source of the trouble using codes flashed by the light on the instrument panel. (The service manual lists the keys to deciperhing the codes and finding the source of the problem.)

Watercraft, Too

Don't think JET SKI watercraft have been ignored for '96 as they also get their share of all-new technology. One of the most interesting new advances in watercraft for '96 is the temperature-compensating ignition system on the new 1100 ZXi. This system is designed to reduce power fade on hot summer days by adjusting the ignition timing to compensate for the higher air temperatures. The digital igniter has two ignition timing data maps, one for high air temperature and one for low. The timing maps are switched when a signal from an air temperature sensor in the engine compartment senses that the air temperature has risen above approximately 95° F.

The 750 ZXi also gets a new ignition system, used for the first time on a Kawasaki watercraft. It's the DC-CDI, or direct current capacitor discharge ignition system. This system is very similar to the one introduced on the Bayou 220 this year and used on the Bayou 400 4x4. The benefits of this system include improved reliability and a strong ignition spark at low engine rpm for excellent starting and low-rpm throttle response. Since this system is powered directly from the battery, no exciter coil is required. And no exciter coil means there is one less component that could potentially fail.

Other interesting miscellaneous watercraft items for '96 include a new trim system on boats so equipped. The ZXis all get a faster-operating trim system, and all of the trim systems get new electronic sensors to limit travel in each direction, preventing the possibility of jamming.

The '96 STS also receives a switch on the reverse system to automatically raise the nozzle when engaging reverse for improved reverse performance.

The ZXis also get new ignition switches with a built-in timer that will shut off all electrical systems automatically after a period of time, preventing the battery from going dead even if the switch is left in the "on" position.

Sign Up for Training Now!

This is just a small sample of all the neat new things in our product line for '96. For complete details on all of the changes to our product line, be sure to review the '96 Product Sales Guides and the Tech Features sheets contained within.

And, for more information on how some of these items work, be sure to attend '96 Product Update training classes. Complete schedules for the training season in all regions will be mailed to your dealership in October. Sign up early; there will be a limited number of '96 Product Update classes offered. ◆





New '96 1100 ZXi gets a temperature-compensating ignition system and more!

