



Kawasaki

TECATE



#31
Jimmy White

Build your own
Jimmy White Replica

ELECTRICAL SYSTEM

Ignition

Use the stock Tecate ignition. Replace the Tecate ignition coil with a KX motocross coil because the ground system is more reliable under racing conditions.

Kawasaki P/N	Description
21121-1077	COIL, ignition

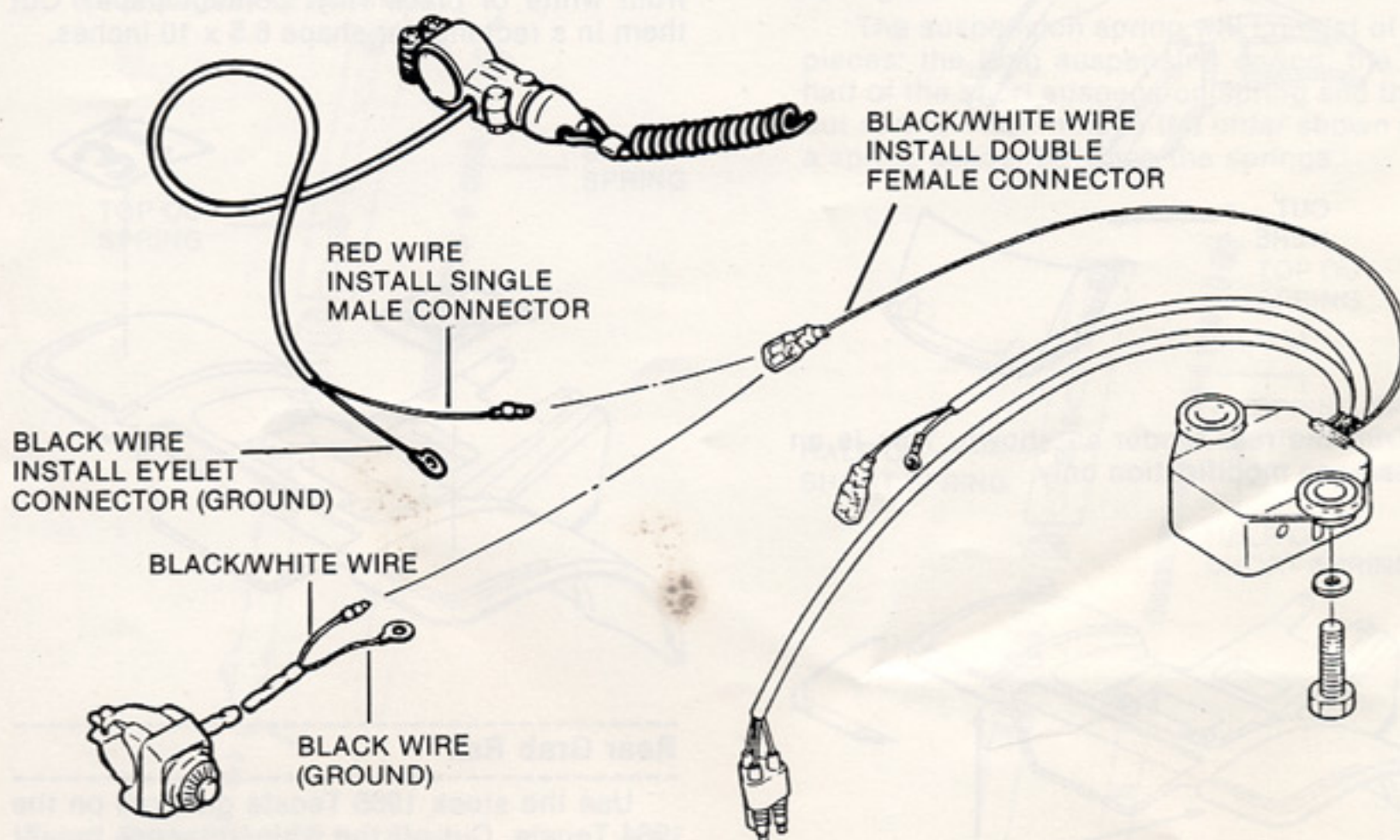
Engine Stop Switch

Use the 1985 Tecate engine stop switch on the 1984 Tecate. Wiring connections are color coded.

Kawasaki P/N	Description
27010-1161	SWITCH, engine stop

Tether Engine Stop Switch

Most racing organizations require a tether type stop switch that stops the engine if the rider leaves the vehicle. This is a safety requirement. The Preston Petty Products switch mounts on the lower part of the handlebar between the fork clamps. Install as shown.



Spark Plug

Use an NGK B8EV spark plug. Plug gap should be 0.027-0.031 inches (0.7-0.8 mm).

MISCELLANEOUS

200cc Kits

The 250cc Tecate can be easily modified into a competitive 200cc racer. We have used modified engine kits available from Klemm Research with excellent results. All of the chassis modifications described in this manual apply to the 200cc Tecate.

Rear Shock "Short and Medium" Settings

Rear shock travel changes must be performed by a qualified professional. Contact Kelvin Franks Racing Products for shock modifications.

Once the shock travel has been shortened it should not be returned to standard travel. Obtain additional shock(s) if you desire modified shock travel.

Do not use a tie down strap or a shortened link (strut) to lower the rear of the Tecate. The result is poor suspension quality and drastically changed suspension characteristics.

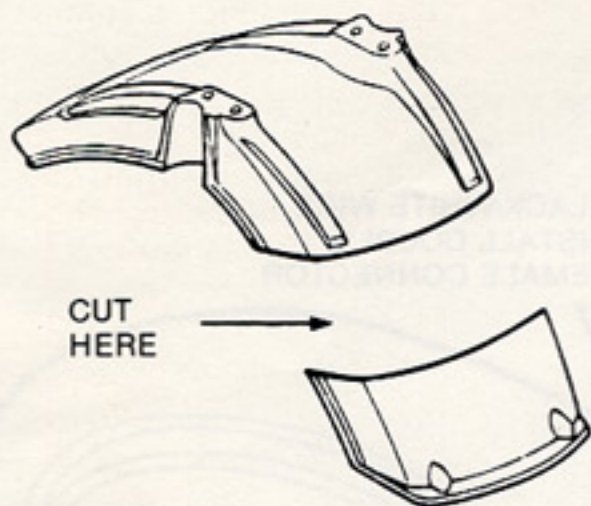
FRAME

Seat

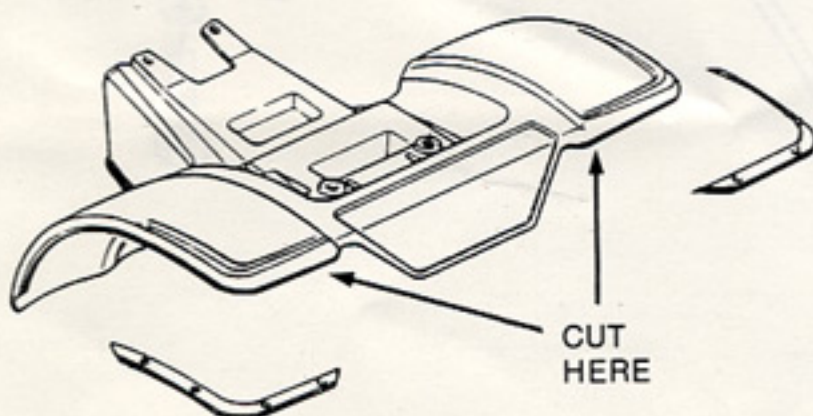
Safety wire each side of the seat latch to the latch pins on the frame to secure the seat under severe racing conditions.

Fenders

Trim the front fender as shown to increase air flow to the engine. Keep a spare untrimmed front fender for muddy and wet conditions.

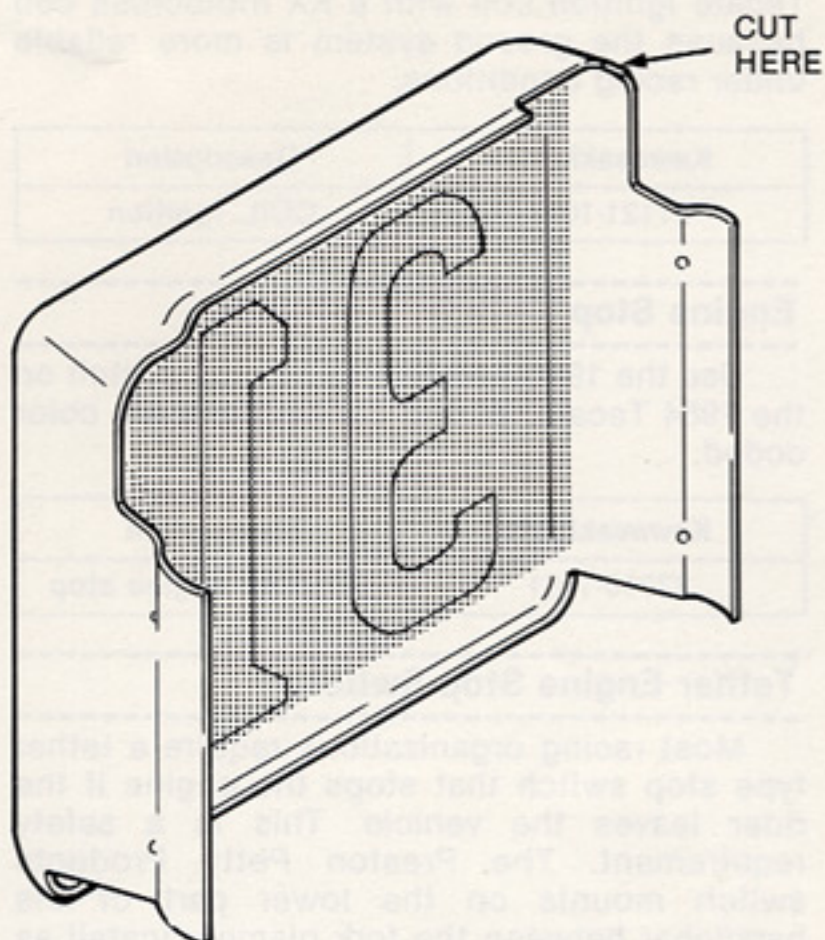


Trim the rear fender as shown. This is an appearance modification only.

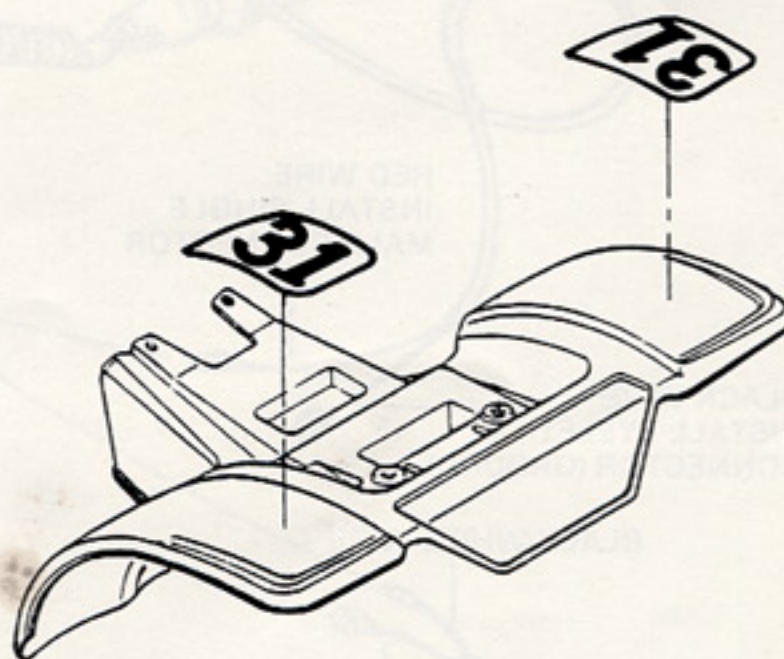


Number Plates

The front number plate is available from U.F.O. Designs. Trim the area around the radiator cap for easier access.



Rear number plate backgrounds are cut from white or black vinyl contact paper. Cut them in a rectangular shape 6.5 x 10 inches.



Rear Grab Rail

Use the stock 1985 Tecate grab rail on the 1984 Tecate. Cut off the whip antennae mount and grind smooth.

Kawasaki P/N	Description
55020-1179	GUARD, rear

The shock oil should be changed after every 10 hours of riding. Use Bel-Ray SE2, MC2040(5) special synthetic racing suspension fluid. This is a 5 weight oil.

Optional Rear Shock Spring

The optional heavy-duty dual-rate rear shock spring is designed to prevent suspension bottoming under severe conditions. With a two inch longer than stock swingarm, the optional spring is necessary for riders over 140 pounds.

Kawasaki P/N	Description
92081-1857	SPRING, optional

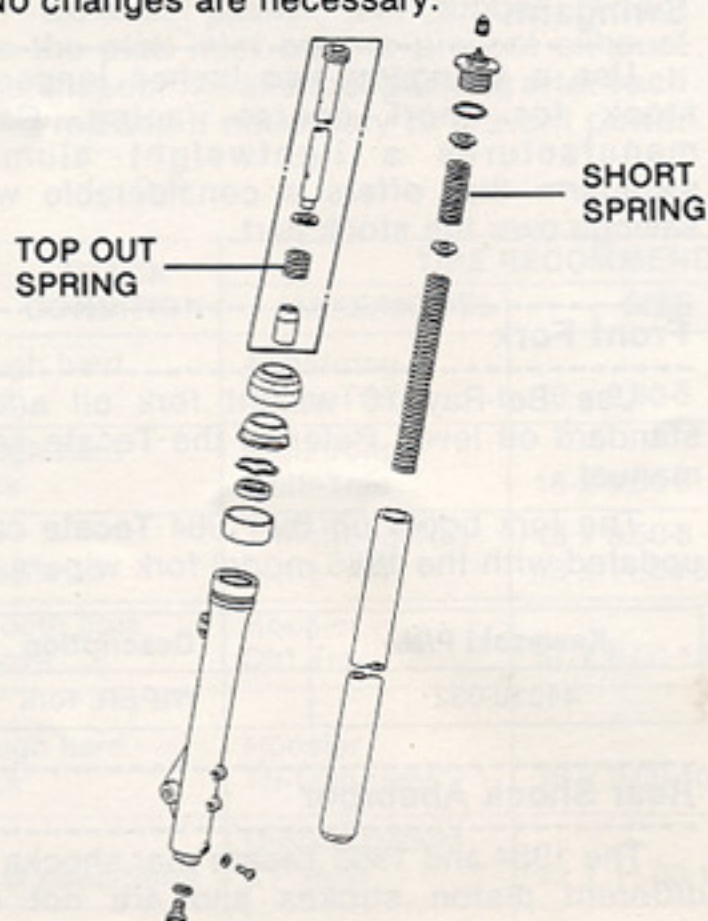
Suspension Travel Lowering

We use three different suspension travel settings depending on track type and condition. Lower suspension settings provide better handling and faster cornering on smoother tracks.

Track Type	Suspension Setting	Suspension Travel
Motocross, Rough TT	Standard	8.5 inches
Smooth TT	Medium	5.0 inches
Short Track	Short	3.0 inches

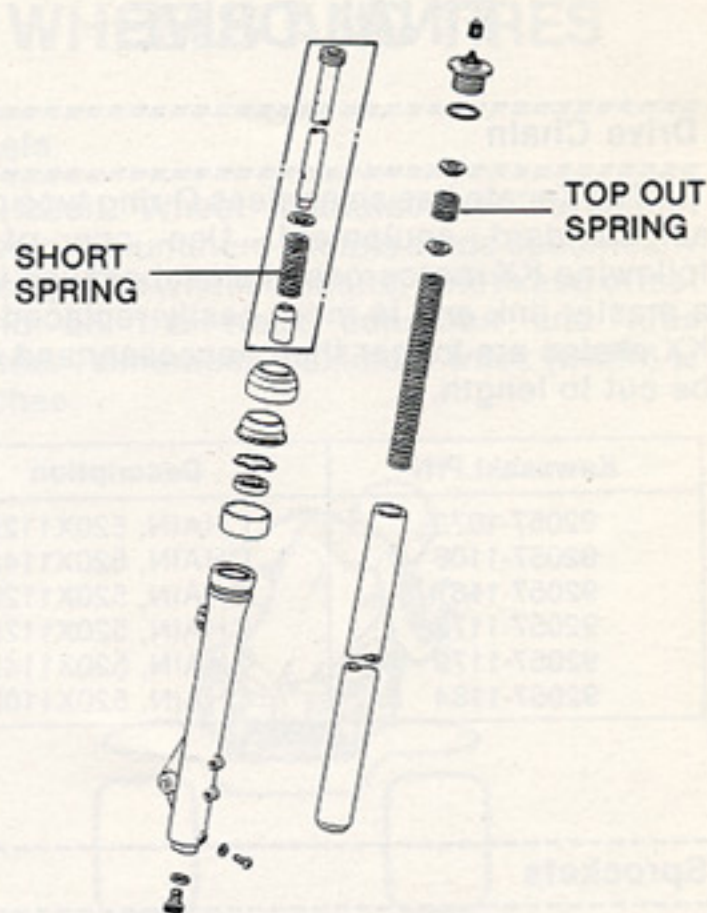
Front Fork "Standard" Setting

No changes are necessary.



Front Fork "Short" Setting

Switch the positions of the **short** suspension spring with the top out spring located on the damper rod. Grind the inner diameter of the short suspension spring so it fits freely on the damper rod.

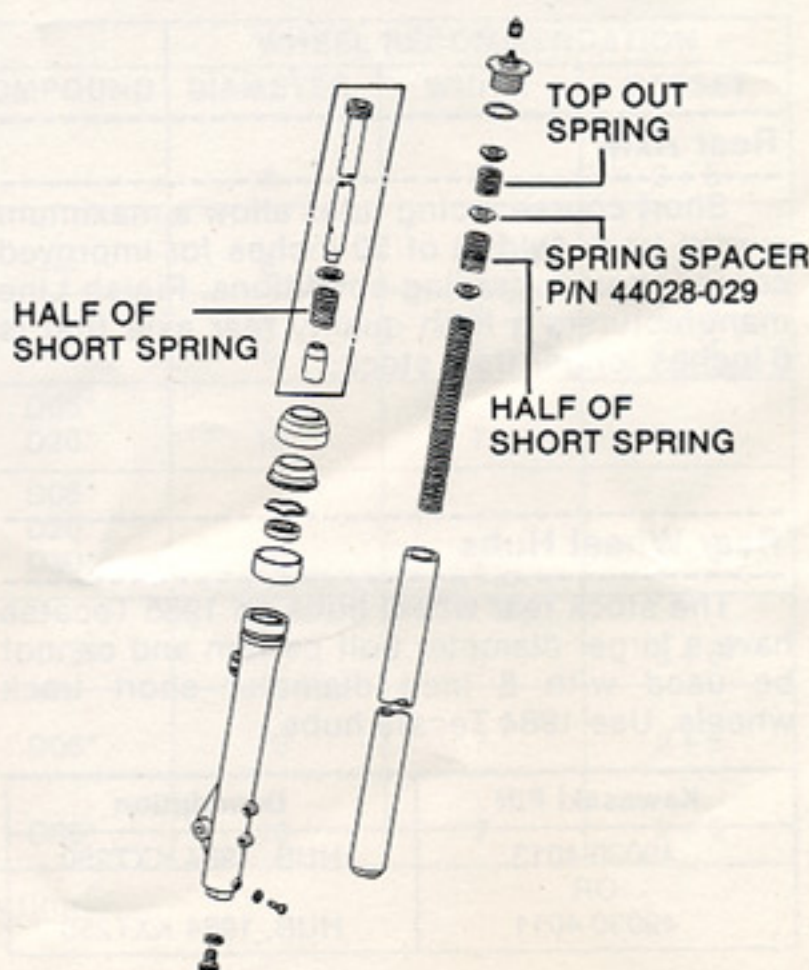


Front Fork "Medium" Setting

Cut the **short** suspension spring in half. Heat the cut end of both spring pieces and bend down to the next coil. Grind flat.

Install one of the new spring halves on the damper rod. Grind the inner diameter so the spring fits freely on the damper rod.

The suspension spring will consist of three pieces: the long suspension spring, the other half of the short suspension spring and the top out spring. Assemble in the order shown using a spring spacer between the springs.



FINAL DRIVE

Drive Chain

The Tecate has an endless O-ring type chain as standard equipment. Use one of the following KX motocross chains, because it has a master link and is more easily replaced. The KX chains are longer than necessary and must be cut to length.

Kawasaki P/N	Description
92057-1073	CHAIN, 520X112L
92057-1108	CHAIN, 520X114L
92057-1167	CHAIN, 520X112L
92057-1178	CHAIN, 520X112L
92057-1179	CHAIN, 520X114L
92057-1184	CHAIN, 520X110L

Sprockets

With short course racing tires installed the final drive sprockets must be changed to compensate for the smaller diameter tires. For most tracks, use a 14 tooth engine sprocket and a 36 tooth rear sprocket. Engine sprockets of 13-15 teeth are available from Kawasaki. Rear sprockets are available from Circle Industries in a wide variety of sizes. We suggest that you have a range of rear sprockets from 34 thru 38 teeth.

Kawasaki P/N	Description
13144-055	ENGINE SPROCKET, 13T
13144-1006	ENGINE SPROCKET, 14T
13144-1026	ENGINE SPROCKET, 15T

Rear Axle

Short course racing rules allow a maximum overall track (width) of 50 inches for improved cornering under racing conditions. Finish Line manufactures a high quality rear axle that is 6 inches longer than stock.

Rear Wheel Hubs

The stock rear wheel hubs on 1985 Tecates have a larger diameter bolt pattern and cannot be used with 8 inch diameter short track wheels. Use 1984 Tecate hubs.

Kawasaki P/N	Description
49030-4013 OR 49030-4011	HUB, 1984 KXT250
	HUB, 1984 KXT250

BRAKES

Brake Fluid

Use Bel-Ray Dot 5 brake fluid to eliminate sponginess in the front and rear brakes. Make sure to drain the brake system completely. Do not mix two brands of fluid.

Front Brake Cable/Hose Guide

The stock Tecate front brake cable/hose guides bolted to the radiator guard should be removed and replaced with the following guides.

Kawasaki P/N	Description
92072-1082	GUIDE, cable

Rear Brake Hose

A longer rear brake hose must be used with a longer than stock swingarm. Russell makes a braided stainless steel brake hose in extended lengths.

SUSPENSION

Swingarm

Use a swingarm two inches longer than stock for short course racing. Cal-Fab manufactures a lightweight aluminum swingarm that offers a considerable weight savings over the stock part.

Front Fork

Use Bel-Ray 10 weight fork oil and the standard oil level. Refer to the Tecate service manual.

The fork boots on the 1984 Tecate can be updated with the 1985 model fork wipers.

Kawasaki P/N	Description
44010-032	WIPER, fork

Rear Shock Absorber

The 1984 and 1985 Tecate rear shocks have different piston strokes and are not interchangeable. However, the '84 reservoir can be updated to the '85 reservoir which has adjustable compression dampening.

Kawasaki P/N	Description
52001-1056	RESERVOIR, 1985 KXT250

Cylinder Head

Use the stock Tecate cylinder head.

Cylinder

The KX motocross cylinder provides the best overall powerband for short course racing. Either the 1983 or 1984 KX250 cylinder can be used.

Kawasaki P/N	Description
11005-1207	CYLINDER, 1983 KX250
11005-1347	CYLINDER, 1984 KX250

Piston/Rings

Change the piston and rings to the 1983-84 KX parts when using the KX motocross cylinder. The piston pin, bearing and clips are interchangeable on the KX and KXT. Please do not reuse piston pin clips.

Kawasaki P/N	Description
13001-1004	PISTON, KX250
13008-5008	RINGS, KX250

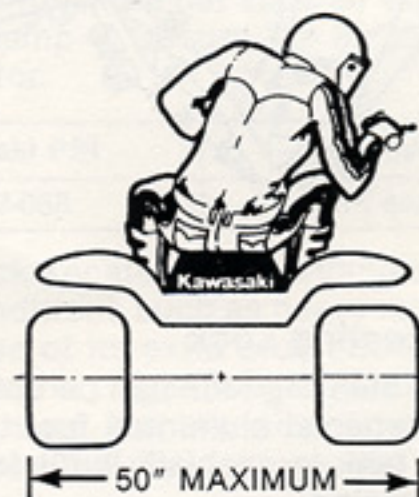
Exhaust System

Replace the stock exhaust system with the "Jimmy White Replica" pipe available from Bassani Manufacturing. Be sure to replace the copper exhaust gasket and rubber O-ring. Grease the pipe inlet area to prevent exhaust leakage. Inspect the silencer packing after each race and replace if necessary to prevent power loss.

WHEELS AND TIRES

Wheels

Mitchell Wheel manufactures excellent lightweight aluminum wheels made specifically for racing. The wheel diameter, width and offset depend on the track condition and tires selected. Remember maximum track (width) is 50 inches.



Tires

Short course racing requires several different tire sizes, tread patterns and tire compounds. Hoosier Racing Tire and Armstrong Tire offer a fine selection of short course racing tires.

	TRACK CONDITION	TIRE RECOMMENDATION			WHEEL RECOMMENDATION		
		MAKE/MODEL	SIZE	COMPOUND	DIAMETER	WIDTH	OFFSET
REAR	Rough hard pack	Armstrong Super Turf	18 x 9.50-8	---	8	8	3 + 5
	Rough hard pack	Armstrong Multi-Trac	18 x 9.50-8	---	8	8	3 + 5
	Sand/Mud	Armstrong Turf Tamer A.T.	18 x 9.50-8	---	8	8	3 + 5
			18 x 11.00-8	---	8	8	4 + 4
	Smooth blue groove	Hoosier Dirt Track**	57 x 8.00-10	D05* D20*	10	7	3 + 4
FRONT	Rough hard pack	Hoosier Tri-Trac Rear***	18 x 9.00-10	D05* D20* D30*	10	7	3 + 4
	Most conditions	Dunlop (stock) KT 461A	22 x 11.00-10	---	10	9	3 + 6
	Most conditions	Hoosier Tri-Trac Front***	21 x 6.00-10	D05*	10	7	2 + 5
	Most conditions	Hoosier Tri-Trac Front***	21 x 8.00-10	D05*	10	7	2 + 5

*Hoosier tire compounds: D05 = soft, D20 = medium, D30 = firm

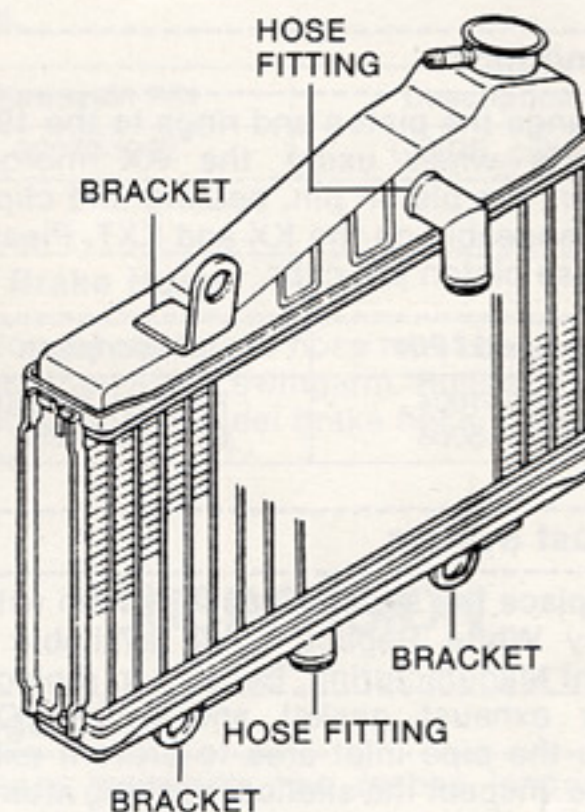
**Hoosier Dirt Track tires are not grooved.

***Hoosier Tri-Trac tires are grooved.

ENGINE TOP END/ RADIATOR

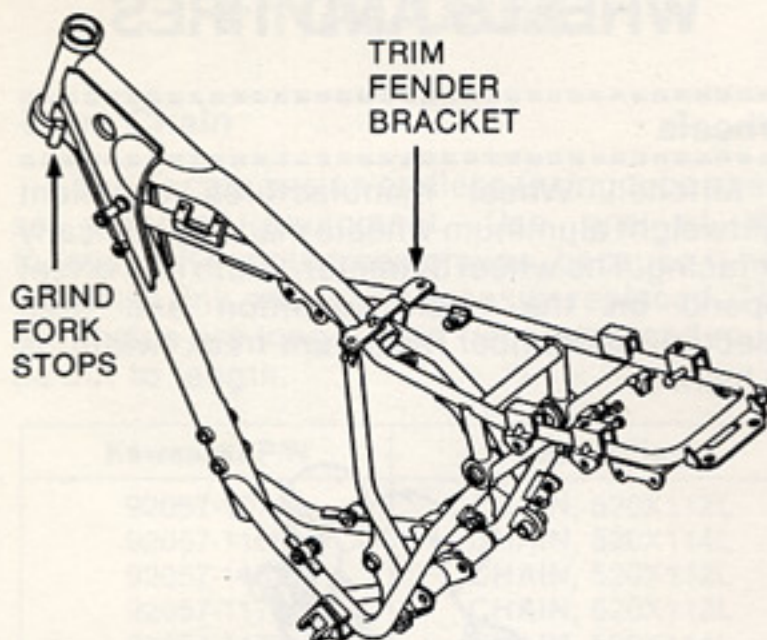
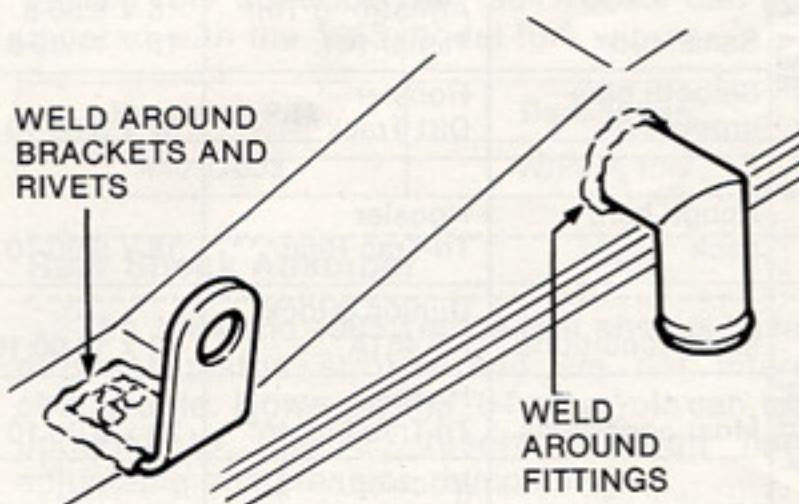
Cooling System

Heli-arc weld the radiator mounts and the radiator hose inlet/outlet fittings to reinforce the radiator and reduce the possibility of leakage. The radiator is constructed of aluminum.



WELD AROUND
BRACKETS AND
RIVETS

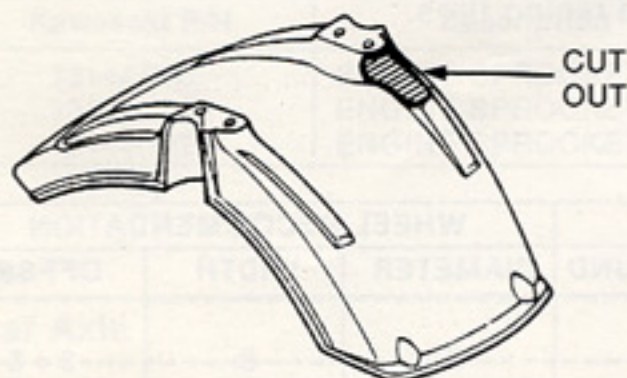
WELD
AROUND
FITTINGS



Maximum Steering Lock

Maximum steering lock can be obtained by purchasing a special aluminum fuel tank from Cal-Fab. The tank is specially built for Tecate short course racing.

Two modifications are necessary to get the benefits of the Cal-Fab short course tank. The steering stops on the frame must be ground down so the forks will travel from side to side as far as possible without hitting the aluminum tank. The front fender will have to be cut out as shown so the lower radiator hose will not be crimped.



Fuel Cap Vent Tube Clamp

Use the following handlebar mounted vent tube clamp. On 1985 Tecates, remove the small plastic clamp that holds the front brake hose and the vent tube in position.

Kawasaki P/N	Description
92037-1377	CLAMP, tube

Fuel Mixture

We recommend Kawasaki Racing Oil and Trick Racing Gas mixed in a 32:1 fuel/oil ratio.

Kawasaki P/N	Description
K61020-022A	Kawasaki Racing Oil

Removal of Parts

Remove the following parts and set aside as they will not be used. Other components will be removed and replaced with specialized racing parts as you proceed with building your short course Tecate.

- Headlight
- Radiator Guard
- Headlight Switch
- Lighting Wiring Harness
- Taillight
- Rear Fender Mud Flaps
- Chain Guard
- Rear Brake Disc Guard

FUEL SYSTEM

Carburetor

Use a 38mm Mikuni flat slide carburetor with the settings listed. These carburetor specifications are based on the modifications and recommendations described in this manual such as fuel mixture, cylinder head, cylinder, exhaust system, gearing, ignition and spark plug heat range.

Any jetting recommendation should be considered only as a starting point. Carburetor jetting should be checked and changed as required to suit various conditions such as the following:

- Use of different types of fuel
- Use of different fuel/oil ratios
- Use of different gear ratios
- Operation at different elevations
- Operation in extreme temperatures
- Operation in extremely damp or dry weather
- Operation under "high engine load" conditions
- Operation in muddy conditions when engine cooling may be impaired

Carburetor	Specification (Sea Level)
Make & Type	Mikuni VM38FS
Main Jet	360-380
Jet Needle	6FJ40-2 (2nd pos. from top)
Needle Jet	389, Q-6
Cutaway	4.0
Pilot Jet	35
Airscrew	1.5-2.0 turns out

Throttle Cable

With the 38mm Mikuni flat slide carburetor and the stock Tecate throttle use the following throttle cable and hardware.

Kawasaki P/N	Description
54012-1211	CABLE, throttle
16002-011	ADJUSTER, cable
92036-018	RING, snap
49006-1085	BOOT, carburetor

Air Cleaner

For short course racing the side breather air box available from U.F.O. Designs offers improved air flow and easier maintenance. Specify 38mm Mikuni flat slide air box. Use the following clamp to secure the air box boot to the carburetor.

Kawasaki P/N	Description
92037-068	CLAMP, carburetor

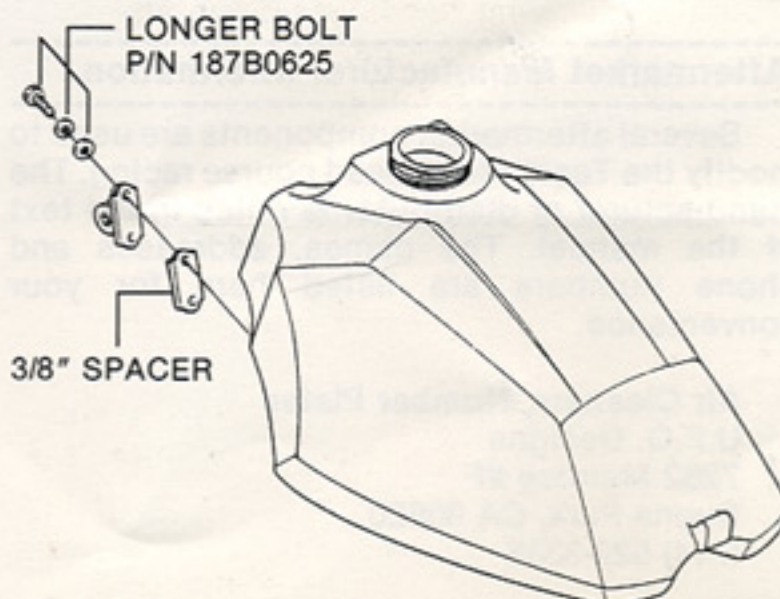
The stock Tecate airbox should be used in extreme conditions such as heavy rain, snow or dust because of its extra protection for the air cleaner element. Regardless of the air box you use, make sure the air cleaner element is cleaned, inspected for damage and oiled after each race.

Fuel Tank

Short course racing requires a tighter turning radius than the steering stops on the frame allow. In other words, the steering lock needs to be increased. Two methods of increasing steering lock are described here.

Increased Steering Lock

The easiest way to increase steering lock is to move the stock fuel tank back with the addition of spacer plates between the front tank mounts and the fuel tank. Make the spacer plates by scribing the outline of a tank mount on a piece of 3/8" aluminum plate. Cut out and install as shown. Trim the fender mounting bracket so the rear of the fuel tank will not hit it. The steering stops on the frame must be ground down so the forks will travel from side to side as far as possible without hitting the fuel tank.



GENERAL INFORMATION

Purpose of Manual

The modifications described in this manual are designed to help you modify the Kawasaki Tecate for short course racing such as short track, TT and motocross. Kawasaki OEM parts are used wherever possible. Follow the manual closely and complete all modifications for best results.

Warranty Exclusions

Please be aware that any KXT250 engaged in competitive racing or related use or modified as outlined in this manual, is specifically **excluded** from the terms and provisions of the Kawasaki Limited Warranty.

Also, please note that the Kawasaki Limited Warranty does **not** extend to non-standard, aftermarket parts. Failure of such parts is the responsibility of the product's manufacturer.

Kawasaki is not responsible for any consequential damages due to the failure of any aftermarket part or the incorrect installation of such part.

Tecate Service Manual

This Tecate modification manual does not completely describe the installation or assembly of every component. We recommend that you obtain the Tecate service manual (P/N 99924-1046-02) and thoroughly familiarize yourself with it before starting work. Be sure to heed all cautions and warnings in the service manual.

Special Tools

Some procedures described in this manual may require the use of special tools or professional know how. Consult your Kawasaki dealer or a qualified professional for best results.

Aftermarket Manufacturer Information

Several aftermarket components are used to modify the Tecate for closed course racing. The manufacturer or distributor is noted in the text of the manual. The names, addresses and phone numbers are listed here for your convenience.

Air Cleaners, Number Plates

U.F.O. Designs
7282 Melrose #F
Buena Park, CA 90620
(714) 522-3336

Aluminum Fuel Tanks, Swingarms

Cal-Fab
4527 E. La Palma
Anaheim, CA 92807
(714) 779-0123

Racing Fuel, Fuel Containers

Trick Racing Fuel
11005 Imperial Hwy.
Norwalk, CA 90650
(213) 863-4801

Exhaust Systems, Mikuni Carburetors

Bassani Manufacturing
3726 E. Mira Loma
Anaheim, CA 92806
(714) 630-1821

Aluminum Racing Wheels

Mitchell Wheel
15430 Cabrito, Unit 5
Van Nuys, CA 91406
(818) 782-8030

Racing Tires

Hoosier Racing Tire
65465 U.S. 31
Lakeville, IL 46536
(219) 784-3152

Racing Tires

Armstrong Tire and Rubber Co.
Modene Road
Clinton, TN 37716
(800) 251-9354

Finish Line Axles

J.P. Racing
P.O. Box 198
Troutdale, OR 97060
(503) 667-8852

Bel-Ray Oil Products

See your local ATV dealer

Rear Shock Absorber Service

Kelvin Franks Racing Products
3446 W. Harvard
Santa Ana, CA 92704
(714) 546-3484

200cc Engine Kits

Klemm Research
2761 E. Regal
Anaheim, CA 92806
(714) 630-9420

Circle Industries sprockets, Preston Petty engine stop switches, Russell brake hoses and other accessory parts are available at your local ATV dealer.

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Circle Industries sprockets, Precision City engine stop switches, Pussell brake hoses and other accessory parts are available at your local ATV dealer.

Meet Jimmy White

Jimmy White and the Kawasaki KXT250 Tecate got off on the right foot together. They won!

The Des Moines, Iowa native signed a professional contract with the newly formed Kawasaki three-wheel racing team in June of 1983 when the company brought out its first high-performance three-wheeler. With only a few days of preparation time, Jimmy debuted his new Tecate racer at the Off-Road Nationals in Santa Cruz, California . . . and won the first time out!

Jimmy went on to win the Mickey Thompson Series, Baja Cross Series, CRA Smooth Track Nationals, AATVA Motocross Nationals and many other championships. He emerged as a top competitor in three-wheel racing and became one of the most popular riders with the fans. However, the road to the top wasn't always that easy.

Jimmy began racing motorcycles at the age of fourteen in his home state of Iowa.

"I raced motocross in the midwest and did fairly well. My interest in three-wheelers began about the same time but I didn't start racing them until I was nineteen."

He raced three-wheelers locally that first year. Then in 1982 he entered two stadium exhibition events and finished third both times behind factory team riders. Encouraged, Jimmy ventured to California.

"I knew I could compete with the top riders. But if I wanted to become the best, I would have to race against them more often . . . and win!"

Jimmy's first break came right before the 1982 CRA Smooth Track Nationals held in San Jose, California.

"That's when Darryl Bassani started supporting me 100%. Darryl was my tuner and advisor. He gave me confidence in my ability."

Jimmy rode the best race of his career winning the 250cc class against the best racers in the business.

"San Jose was my first major race win. I hoped my results would help me get factory support."

But the factory ride didn't materialize. Jimmy went back to Iowa to pack his belongings. He and his wife Rhonda moved to California permanently in January of 1983. He pursued his racing career with a vengeance. Then in May his second break came. Kawasaki asked him to do some test riding on a new high-performance three-wheeler nicknamed the Tecate.

"It was real fast! I knew I could win on it."

A month later Jimmy signed his first factory contract and started making history for Kawasaki. Now in his third racing season for Kawasaki Team Green, the twenty-four-year-old is well established as a top three-wheel star. He credits a lot of his success to his father, Jim Sr., and his wife Rhonda whom he married on May 31, 1981, hence his racing number 31.

Jimmy and Team Green have learned a lot about the Tecate in three racing seasons.

"With a few modifications, the Tecate makes a great racing three-wheeler. I've had a lot of success with my Tecate and you can too."



31

Jimmy White

WARNING
THIS VEHICLE IS A COMPETITION MODEL ONLY AND WAS NOT MANUFACTURED FOR, NOR SHOULD IT BE USED ON, PUBLIC STREETS, ROADS, OR HIGHWAYS. THE USE OF THIS VEHICLE SHOULD BE LIMITED TO PARTICIPATION IN SANCTIONED COMPETITION EVENTS UPON A CLOSED COURSE. THIS VEHICLE SHOULD NOT BE USED FOR GENERAL OFF-ROAD RECREATIONAL RIDING.

IMPORTANT

Off-road riding is a wonderful sport, and we hope you will enjoy it to the fullest.

However, if improperly conducted, the sport has the potential to cause environmental problems as well as conflicts with other people. Responsible use of your off-road vehicle will ensure that these problems and conflicts do not occur.

TO PROTECT THE FUTURE OF YOUR SPORT, MAKE SURE YOU USE YOUR BIKE LEGALLY, SHOW CONCERN FOR THE ENVIRONMENT, AND RESPECT THE RIGHTS OF OTHER PEOPLE.

MODEL APPLICATION

Year	Model	Beginning Frame No.
1984	KXT250-A1	JKAXTMA1*EB000001
1985	KXT250-A2	JKAXTMA1*FB000001

*This digit in the frame number changes from one machine to another.

Kawasaki Motors Corp., U.S.A.