Kawasaki

Ninja ZX-7R
ZXR 750R

'93 Racing Kit Manual

This Manual contains only the information of the racing kit parts. Refer to the base manual listed below for information of the original model.

Base Manual	Part Number
Ninja ZX-7R/ZXR750R Motorcycle Service Manaul	9924-1139-01
Service Manual Supplement	99924-1160-51

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Congratulation on your purchase of racing kit parts for the '93 ZXR750R.

IMPORTANT

This manual provides how to install racing kit parts for the '93 ZXR750R and how to tune up basically.

As for the basic knowledge, refer to the Service Manual for the ZXR750R (P/No. 99924-1139-01).

When you participate in a race, it is necessary to modify the machine for the regulation. So we want you to ask for the tuning up shop.

In this manual, the following abbreviations are used.

SB	:	Super Bike racing
Enduro	:	Enduro racing

⚠WARNING

AFTER ANY MODIFICATION TO TURN THE VEHICLE TO A COMPETITION MACHINE, IT SHOULD NOT 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.

⚠CAUTION

When operating the engine, be careful not to trouble persons with noise. Do not run the engine with loud engine and exhaust noise.

DISCLAIMER OF WARRANTY

ON OPTIONAL TURNING PARTS FOR RACING ARE NO WARRANTIES EXPRESSED OR IMPLIED.

BASIC WORKS IN INSTALLING KIT PARTS

We are going to make up the original ZXR750R for the racing machine. We recommend that the rider himself should do the basic works, removing parts or installing parts etc., given advices from the tuning shop. In a race, although trouble will be apt to happen, if you participate in basic works, you can discriminate causes of trouble, so you can return the race soon.

But concerning difficult technical works, you should ask tuning shop.

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General Specifications

Item			'93 ZXR750R Racing
Engine :			
Compression ratio	Kit STD		13.2
	Option		13.5
Maximum horsepower	Kit STD		103 kW (140 PS) or more/13 000 r/min (rpm)
	Option		105 kW (143 PS) or more/13 000 r/min (rpm)
Maximum torque			84 N-m (8.6 kg-m, 62 ft-lb)
Igniter			Digital Igniter
Ignition timing			5° BTDC @500 rpm
			10° BTDC @1 000 rpm
			45° BTDC @5 000 ~ 9 000 rpm
			42.5° BTDC @9 500 rpm
*Clearance between piston head and valve:			
	Inlet		0.70 mm or more (Crankshaft timing @12° ATDC)
	Exhaust		1.30 mm or more (Crankshaft timing @12° BTDC)
Valve timing :	Inlet	Open	44° (BTDC)
		Close	68° (ABDC)
		Duration	292°
	Exhaust	Open	69° (BBDC)
		Close	39° (ATDC)
		Duration	288°
*Camshaft timing (Cam lift center):			
	Inlet		102 ± 2° (ATDC)
	Exhaust		105 ± 2° (BTDC)
Fuel			Racing gasoline
Engine oil:	Brand (Recommended oil)		CASTROL "Formular RS" or SYNTRON
	Viscosity		SAE 15W-50, 20W-50
	Level		Between upper and lower levels of oil level gauge.
Drive Train:			
Transmission gear ratio :		1st	2.375 (38/16)
		2nd	1.895 (36/19)
		3rd	1.619 (34/21)
		4th	1.409 (31/22), Optional 1.500 (33/22)
		5th	1.292 (31/24), Optional 1.391 (32/23)
		6th	1.200 (30/25), Optional 1.292 (31/24)
Final drive reduction ratio			2.294 (39/17) ~ 2.933 (44/15)
Overall drive ratio	(Top gear)		4.831 ~ 6.177
	(Optional top gear)		5.201 ~ 6.649

* When the clearance between the valve and the piston head is smaller than the standard specification, turn the installed position of the camshaft sprocket on the camshaft and change the camshaft timing.

Item		'93 ZXR750R Racing		
		Type A	Type B	Type C
Transmission gear ratio:	1st	2.471 (42/17)	2.529 (43/17)	2.400 (48/20)
	2nd	2.056 (37/18)	2.105 (40/19)	2.000 (40/20)
	3rd	1.750 (35/20)	–	–
	4th	1.577 (41/26)	1.609 (37/23)	1.542 (37/24)
	5th	1.455 (32/22)	1.481 (40/27)	1.429 (40/28)
	6th	1.400 (35/25)	1.429 (40/28)	1.360 (34/25)
Frame :				
Steering damper :	Damper force	8 kg		
Front wheel :	Type	Dry slick tire		
	Rim size	Width 3.5 x inner diameter 17 in		
Rear wheel :	Type	Dry slick tire		
	Rim size	Width 5.5 x inner diameter 17 in		
Electrical Equipment:				
Spark plug		NGK R016-10		
Battery :	without alternator	12 V 7 Ah or more		
	with starter motor	12 V 9 Ah or more		
Alternator (for enduro) :	Type	Single-phase AC		
	Rated output	14.5 A-12 V/6 000 rpm ~ 16.5 A-12 V/10 000 rpm		
	Voltage regulator	Separated from alternator		

Racing Kit Service Data

Item		Standard
Carburetor (All Racing):		
For machine with STD air cleaner housing mounted:		
Main jet		#165 (standard), 160, 162, 168, 170
Jet needle mark		OBFMM
Jet needle clip position		5th groove from top
Pilot screw		1.0 turns out
Air screw		1-1/2 turns out
Main air jet		#200
Slow jet		#60
for machine with Optional air cleaner housing mounted:		
Main jet		#150 (standard), 145, 148, 152, 155
Jet needle mark		OBFML (standard), OBFMK
Jet needle clip position		5th groove from top
Pilot screw		1.0 turns out
Air screw		1½ turns out
Main air jet		#200
Slow jet		#60
Camshaft:		
Cam height:	Inlet	36.88 ~ 37.09 mm
	Exhaust	36.63 ~ 36.84 mm
Cylinder Head, Valves:		
Valve clearance:	Inlet	0.16 ~ 0.21 mm
	Exhaust	0.21 ~ 0.25 mm
Valve seat surface outside diameter:		
	Inlet	28.3 ~ 28.7 mm
	Exhaust	24.3 ~ 24.7 mm
Squish:		
(between piston shoulder and cylinder head):		0.65 ~ 0.80 mm
Drive Chain:		
Chain slack		20 ~ 25 mm (No load --- 1G)
Front Fork:		
Rebound dumping		4th click from fully seated position (full clockwise until the adjuster stops)
Ignition System:		
Spark plug	Kit STD	NGK R016-10 (racing plug)
	Optional	NGK R0045J-10 (for CDI racing plug)
Spark plug tightening torque		13 N-m (1.3 kg-m, 113 in-lb)
IC igniter		Timing advance curve is modified for high speed engine rpm
Overrev limit		14 000 rpm (standard: 12 200 rpm)

Periodic Maintenance Chart (for SB)

The scheduled maintenance must be done in accordance with this chart to keep the motorcycle in good running condition. The initial maintenance is vitally important and must not be neglected.

FREQUENCY / OPERATION	Each race (300 km)	Every 3 races (1 000 km)	Every 5 races	Every 10 races	As required
Engine					
Clutch plate -- check*		●			
Oil pump chain -- check		●			
Throttle grip play -- check*	●				
Spark plug -- clean/gap*	●				
Carburetor -- check*/adjust	●				
Engine oil -- change		●			
Oil filter -- replace					●
Valve lapping			●		
Cylinder head/valve -- decarbonization			●		
Piston -- clean/check*			●		
Cylinder -- check			●		
Piston/cylinder clearance -- check*			●		
Piston ring -- replace			●		
Crankshaft main bearing -- check*				●	
Connecting rod big end bearing -- check*				●	
Engine sprocket -- check*	●				
Coolant -- change					●
Radiator hoses, connections -- check*	●				
Frame					
Brake operation -- check*	●				
Brake lining or pad wear -- check*	●				
Brake fluid level -- check*	●				
Brake fluid -- change					year
Brake master cylinder cup and dust seal -- replace					year
Brake caliper piston seal and dust seal -- replace					year
Brake hose -- replace					2 years

FREQUENCY / OPERATION	Each race (300 km)	Every 3 races (1 000 km)	Every 5 races	Every 10 races	As required
Frame					
Drive chain -- adjust	●				
Drive chain -- lubricate	●				
Drive chain wear -- check*	●				
Drive chain guide -- replace	if damaged				
Front fork -- clean/check*	●				
Front fork oil -- change	First change after 2 races, then every 5 races				
Nut, bolt, and fastener tightness -- check*	●				
Fuel system -- clean	●				
Fuel hose, fuel filter -- replace					●
Steering play -- check*	●				
Steering stem bearing -- grease			●		
Rear sprocket -- replace					●
General lubrication of chassis -- perform	●				
Wheel bearing (rear) -- grease				●	
Swing arm pivot, uni-trak linkage -- grease			●		
Swing arm pivot, uni-trak linkage -- check*			●		

* : Replace, add, adjust, clean, or torque if necessary.

Preparation

Before Installing:

- Refer to the regulations because the parts are different depending on each races. Modify the parts based on your race regulation.
- Main Removal Parts for both Super Bike and Enduro Races.
  - Lights, Cooling fan
  - Rear View Mirror
  - Side stand
  - Starter lockout switch
  - Starter motor (Super Bike only)
- Remove the side stand switch. When the optional main harness is not used, connect removing Black/Yellow and Green/White Leads directly.
- Required Parts in Enduro Racing:
  - Electric Starter
  - Alternator
  - Regulåtor/Rectifier
  - Head light (Check on your regulation)
  - Tail light (Check on your regulation)
  - Optional Main harness
  - For the others, use the same parts as the Super Bike version.
- Gaskets are also included in this racing kit parts, use them as follows.
  - Head Gaskets.....for squish adjustment
  - Other Gaskets .....for spare

'93 Racing Parts Information for '92 Racing Machine

'92 racing machine can be tuned engine performance up equally to the '93 machine by installing the following '93 kit parts.

Item	Parts	P/No.	Q'ty	Point
Piston (Optional)	Piston	13001-1394	4	Forged Piston with top and oil rings
	Piston Ring Set	13008-1154	4	
Connecting Rod	Connecting Rod Assembly	13251-1104	4	For forged piston
Transmission Gear	Kit Gear (Type A) or Kit Gear (Type B) or Kit Gear (Type C)	13330-1004	1 set	Refer to pg.28
Alternator Gear Train	Sprocket	12046-1147	1	for oil pump
	Sprocket	12046-1148	1	for alternator
	Sprocket Assembly	21053-1062	1	for alternator shaft
	Chain Tensioner	12048-1127	1	
	Chain Guide	12053-1321	1	
	Chain Guide	12053-1322	1	
	Chain	92057-1372	1	
Ignition System	Igniter	21119-1391	1	
	Igniter	21119-1392	1	works as DC-CDI converter
	Ignition Coil	21121-1224	1	#1, 4 for CDI
	Ignition Coil	21121-1225	1	#2, 3 for CDI
	Spark Plug	92070-1211	4	for CDI
	Relay-Assembly	27002-1085	1	for fuel pump in CDI System
	Harness	26030-1207	1	for CDI
	Harness	26030-1208	1	for CDI
	Tachometer	25001-1931	1	for CDI

Carburetor Setting

Carburetor:

Replace the carburetor setting parts with the kit parts.

- The carburetor setting parts changes according to the air cleaner housing design as shown.

Air Cleaner Housing Design	Carburetor Setting
'93 Standard Kit	99997-1072
'93 Optional Kit	99997-1073

Carburetor Setting Parts

Items	'93 Standard Kit	'93 Optional Kit
Make, type	Keihin, FVK-D39	←--
Idle speed	1 050 ~ 1 150 r/min (rpm)	- - -
Carburetor synchronization vacuum	Less than 2.7 kPa (2 cm Hg) difference between any two carburetors	←--
Main jet	#165 (Kit standard setting)	#150
	#160, #162, #168, #170	#145, #148, #152, #155
Main air jet	#200	#200
Jet needle:	OBFMM with clip: 5th groove from top	OBFML with clip: 5th groove from top (Kit standard)
Slow jet	#60	←--
Pilot screw	1.0 turns out	←--
Slow air jet	1⅛ turns out out (Air screw)	←--
Starter jet	#52	←--
Service fuel level	5.0 mm below the mark	←--
Float height	13.0 mm	←--

○ An optional throttle valve is available as an optional parts, see page 43 for installation.

Idle Speed Adjustment

- Turn the adjusting screw in or out to obtain suitable engine revolution.

  Turn Clockwise : increase engine revolution

  Turn Counterclockwise : decrease engine revolution

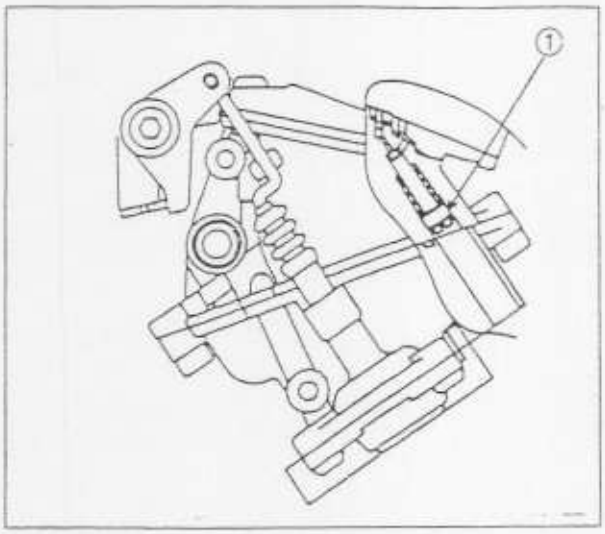
Adjustment of Idle Fuel/Air Mixture Ratio

- Turn the pilot screw in or out to obtain proper fuel/air mixture at idling.

  Turn Clockwise : lean mixture

  Turn Counterclockwise : rich mixture

A proper fuel/air mixture ratio can be obtained by using CO meter.

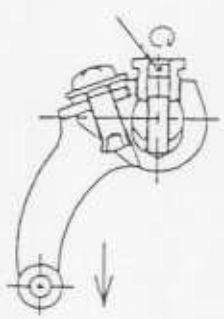
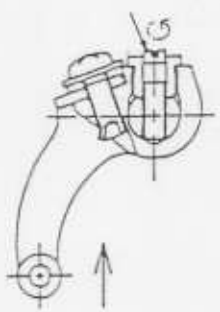


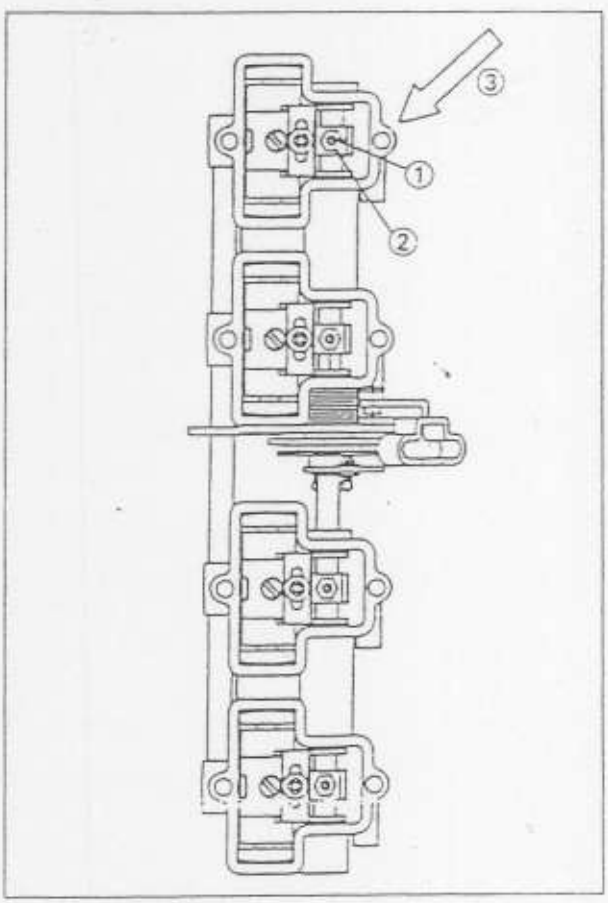
1. Pilot Screw

Initial Synchronization

If engine idling is especially rough , it may be necessary to synchronize the throttle valves with synchronization screw and nut before making the idling adjustment.

Function

Synchronization Screw	Synchronization Screw
	
Screw Position: Turn the synchronization screw clockwise	**Screw Position:** Turn the synchronization screw counterclockwise.
Situation: The throttle valve comes down.	**Situation:** The throttle valve comes up.



1. Synchronization Screw 3. Master Carburetor
2. Synchronization Nut

There are two ways to obtain initial synchronization. Choose one of the following two methods.

(1) Measure the carburetor intake vacuum. If the difference in vacuum readings between any two cylinder is greater than 2 cm Hg reset synchronization screw.

(2) Inspect throttle valve clearance of all four carburetors. If the clearance between the throttle valve and the bottom of carburetor is different, adjust the throttle level.

Procedure

(1) #4 Master Carburetor

#4 synchronization screw should not be adjusted since this screw is adjusted at the factory as a master carburetor.

If the idle adjustment is needed, adjust it with the throttle stop screw.

(2) #1, #2, #3 carburetors

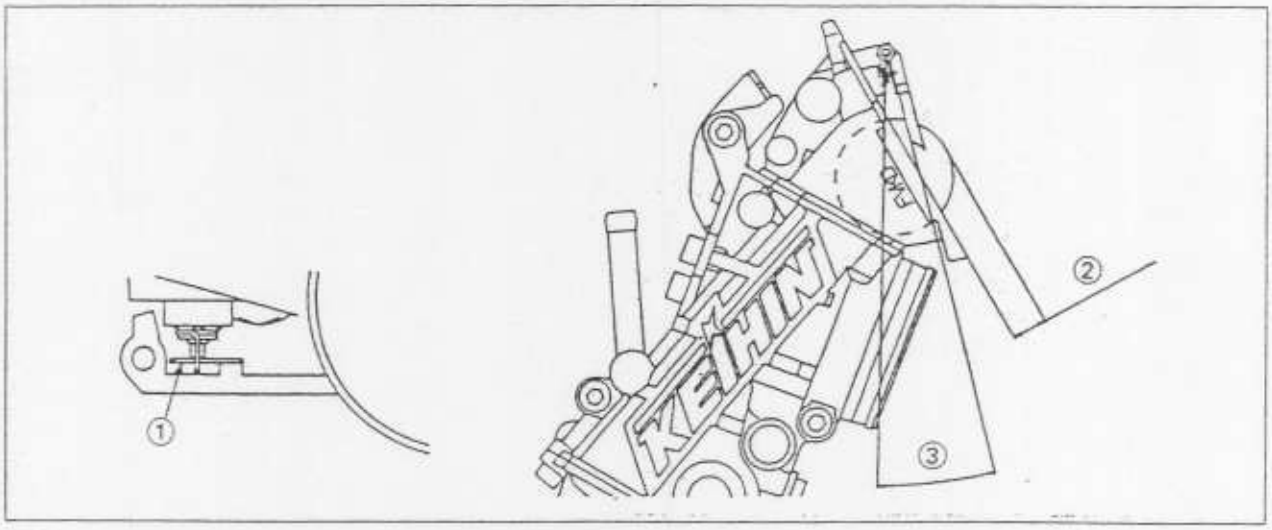
Adjust the idle speed with the synchronization screw on each carburetor.

If the throttle valves of #1, #2 and #3 are positioned too low, the throttle stop screw on #4 carburetor will not be effected.

Float Height

With the carburetors inclined as shown, measure the float height.

If the measurement is out of specification, adjust it by bending the tongue on the float arm.



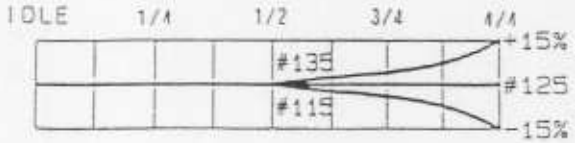
1. Tongue 2. Float Height 3. Approx. 15 degrees

Working Range of Each Carburetor Component

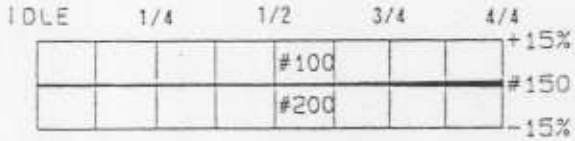
Carburetor setting changes are made by changing or adjusting the following carburetor components.

The following components, the jet needle, main jet and slow jet, regulate the flow of fuel; main air jet, slow air jet, and pilot screw regulate the flow of air. The following charts indicate the working range of each components.

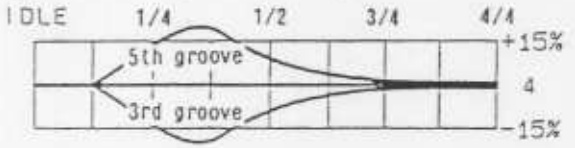
(1) Main Jet



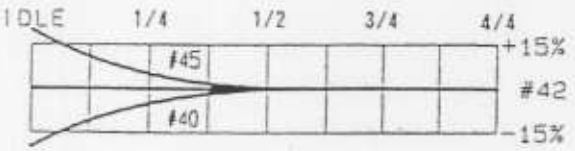
(2) Main Air Jet



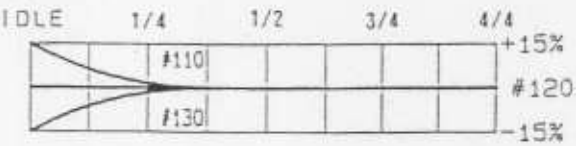
(3) Jet Needle (with groove)



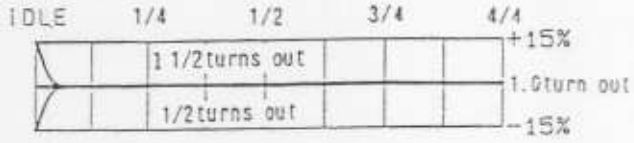
(4) Slow Jet



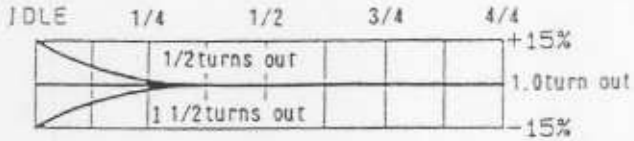
(5) Slow Air Jet



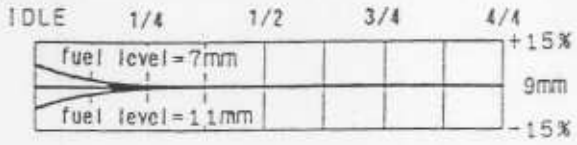
(6) Pilot Screw



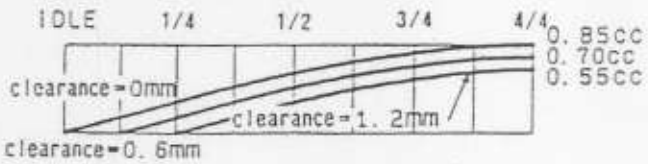
(7) Air Screw



(8) Fuel Level



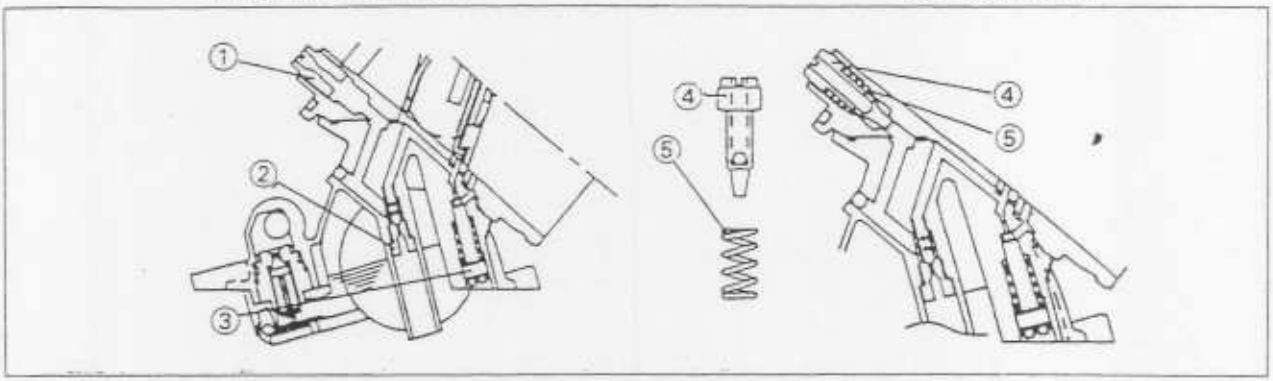
(9) Accelerator Pump Output Timing



Pilot System Setting Parts

- Replace the slow jet with the kit.
- Replace the slow air jet with the kit air screw and spring.

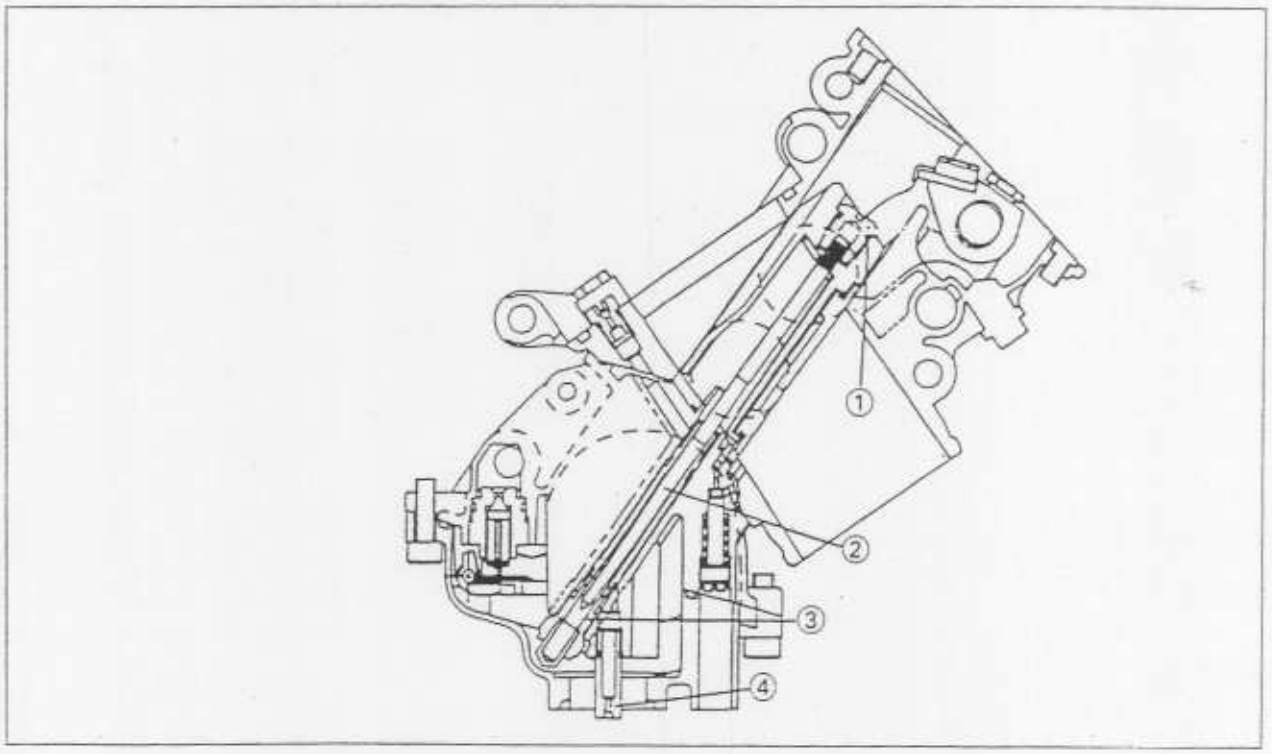
Original Carburetor | Kit Carburetor



1. Slow Air Jet
2. Slow Jet
3. Pilot Screw
4. Air Screw
5. Spring

Main System Setting Parts

- Replace the main air jet, main jet, and jet needle with each kit.



1. Needle Set Screw
2. Jet Needle
3. Needle Jet
4. Main Jet

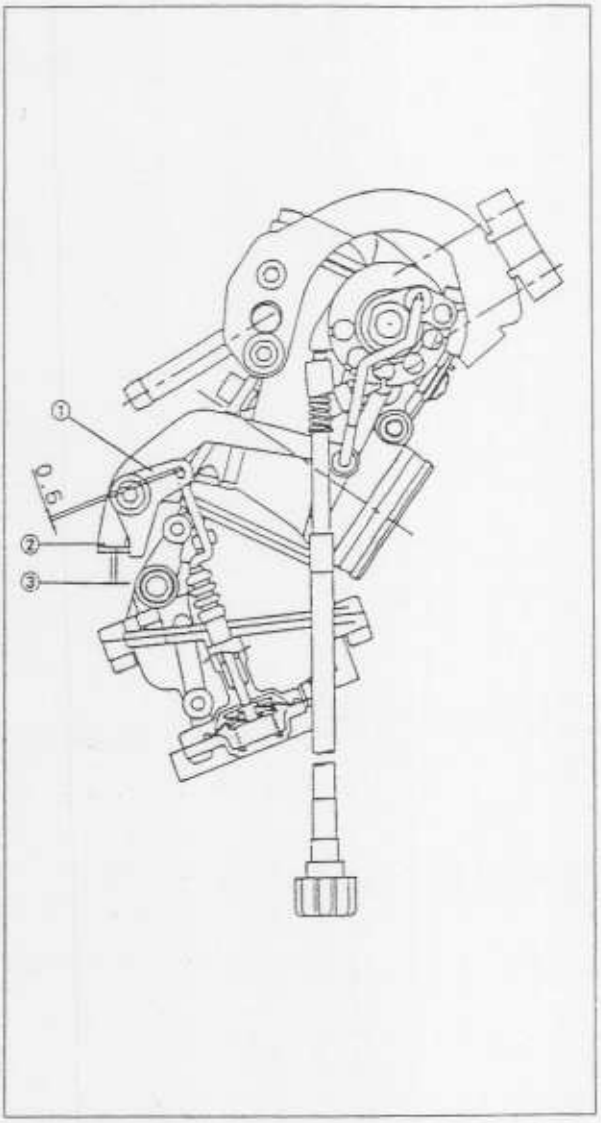
Accelerator Pump Adjustment

The fuel output timing of fuel pump can be changed by changing clearance between pump rod and link lever A.

The link lever standard clearance is 0.6 mm.

Decreasing the clearance makes faster the output timing and increasing it makes slow the timing.

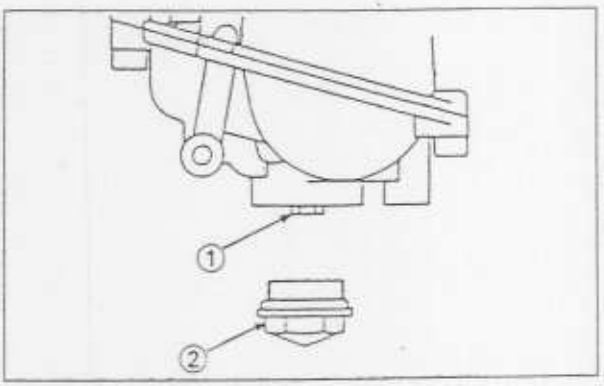
The clearance can be changed by getting wider or narrower the link lever B opening.



1. Link Lever A
2. Link Lever B
3. Link Lever B Opening

Main Jet (MJ) Replacement

(1) Remove the holding bolt at the lower part of the float bowl.
(2) The top of the main jet can be seen. Remove it with a wrench.
(3) Installation is reverse of the removal.



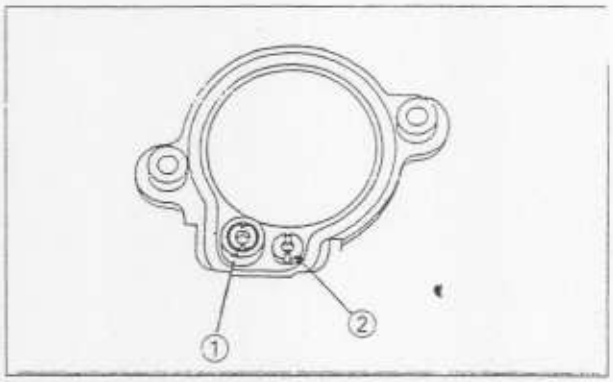
1. Main Jet
2. Holding Bolt

Jet Needle (JN)

(1) Remove the carburetor top cover.
(2) With the throttle grip fully opened, unscrew the jet needle set screw with a minus screw driver.
(3) Pull out the jet needle.
(4) Installation is reverse of the removal.

Main Air Jet, Slow Air Jet (MAJ, SAJ)

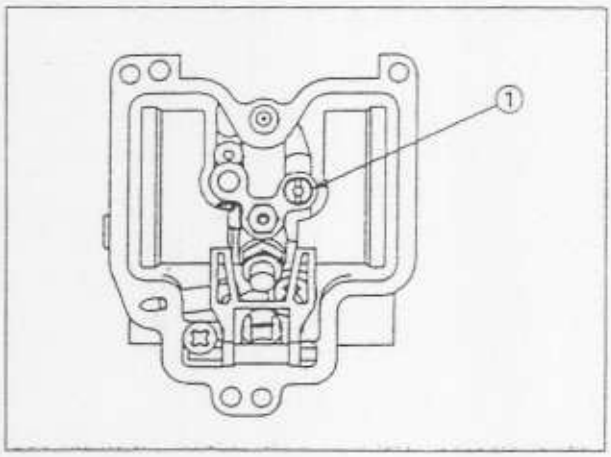
These are installed in front part of the carburetor intake port. Be careful not to take the main air jet for slow air jet.



1. Slow Air Jet 2. Main Air Jet

Slow Jet (SJ)

(1) Remove all four float bowls with fuel hoses connected.
(2) Remove the slow jet with minus screwdriver.
(3) Installation is reverse of the removal.
(4) Make sure that the O-ring is firmly seated in the groove.



1. Slow Jet

Air Cleaner Housing (SB):

1) '93 Standard Kit

This kit consists of the '93 original air cleaner housing and racing kit parts.

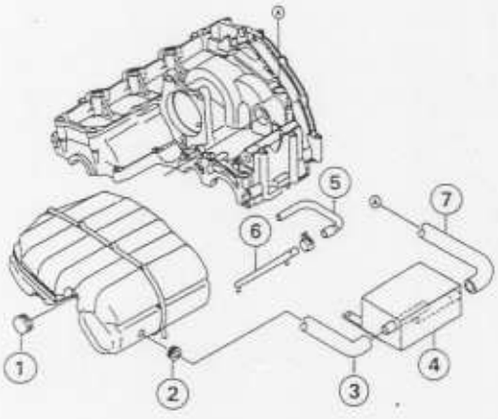
- Use the carburetor setting parts of 99997-1072.
- The air cleaner element is not necessary but the cap (11012-1828) must be in place.

Remove tubes attached to left and right sides of the air cleaner housing, then plug holes at the tube was attached with the following plugs.

Left Side Hole: Plug a hole with a kit plug (92066-1321).

Right Side Hole: Insert one end of tube (92059-1674) to this hole and then connect the other end to the carburetor air vent pipe.

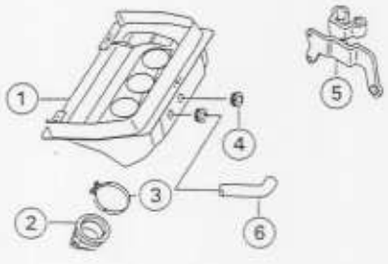
- Connect one end of tube (92190-1472) to one of oil catch tank output pipe and insert the other end to one more air cleaner housing hole located at carburetor side as shown.



1. Plug: 92066-1321
2. Grommet: 92-71-1028
3. Tube: 92190-1472
4. Oil Catch Tank: 52001-1090
5. Tube: 92059-1674
6. Carburetor Air Vent Pipe
7. Leaded from engine breather

2) '93 Optional Kit

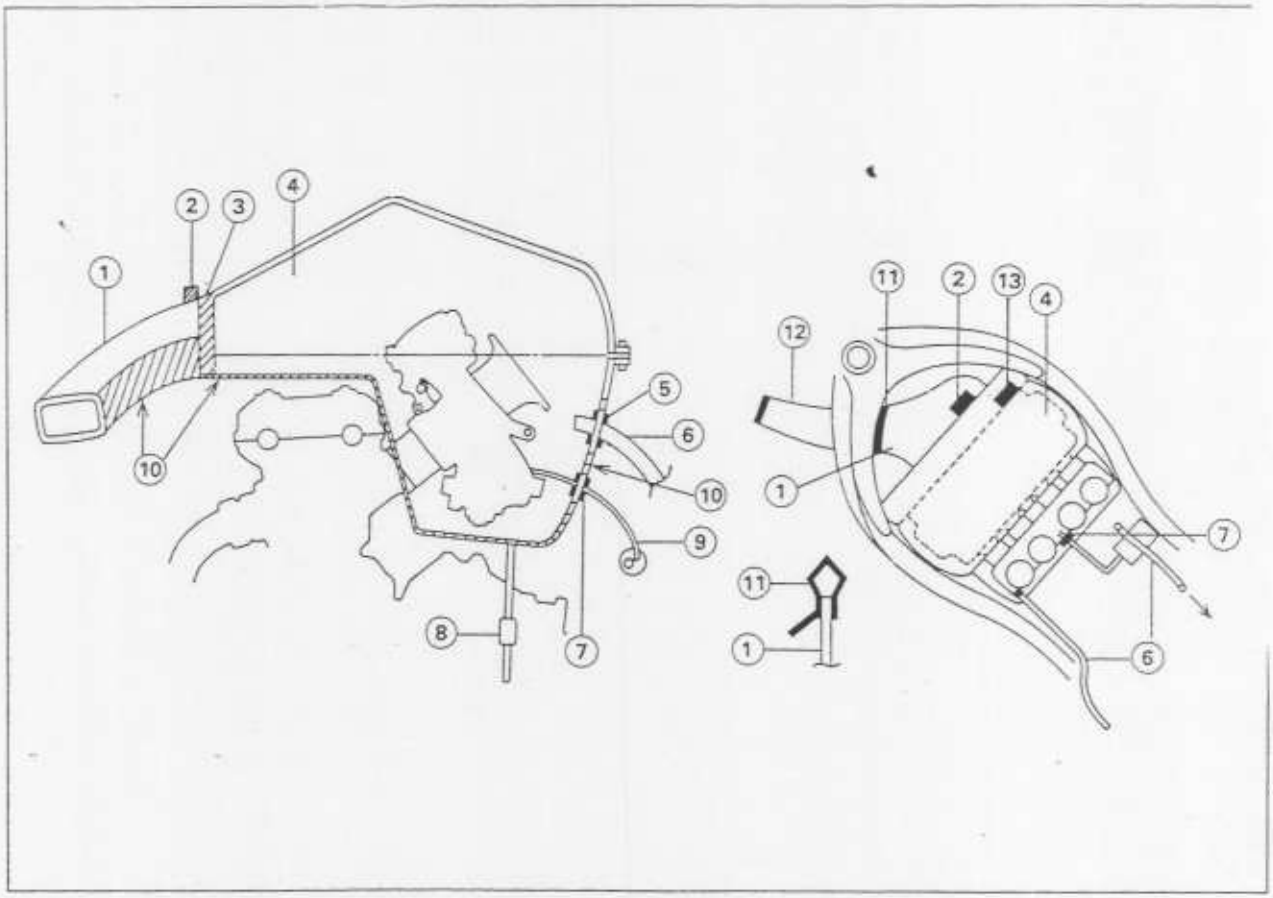
- A light weight optional air cleaner housing (Ram Air Box) formed by FPR (Fiberglass Reinforced Plastic) is also available, this also increases engine performance. Use the following together.



1. Lower Housing: 11011-1420
2. Carburetor Holder: 16065-1290
3. Clamp: 92170-1403
4. Damper: 92075-294
5. Throttle Cable Stay: 35011-1661
6. Tube: 92190-1472

Installation

- For heat prevention, an attachment of heatshield to the bottom plate of the air cleaner housing recommended.
- Attach a trim (11) to a small opening end of the duct (1) in order to shield gap between hole of frame a duct.
- It is wise to put a small tip of rubber (2) on the duct at boundary line of inside and out side of ram air box.
- Drill a hole in the air cleaner housing to route the fuel hose (9) in it, place a damper rubber (7) on the hole.
- Place a grommet (14) at the rear left part of the air cleaner housing and route the breather tube which returns from the oil catch tank in the grommet.
- Inspect the condition of the fuel hose before racing.



1. Air Duct: 14073-1583
2. Rubber
3. Wind heatshield around air duct
4. Air Cleaner Housing (Ram Air Box)
5. Grommet: 92071-1028
6. Tube: 92190-1472
7. Damper: 92075-294
8. breather
9. Fuel Pipe
10. Attach Heatshield to these area
11. Trim: 53044-1204
12. Air Duct: 14073-1584
13. Grommet: 92071-1217

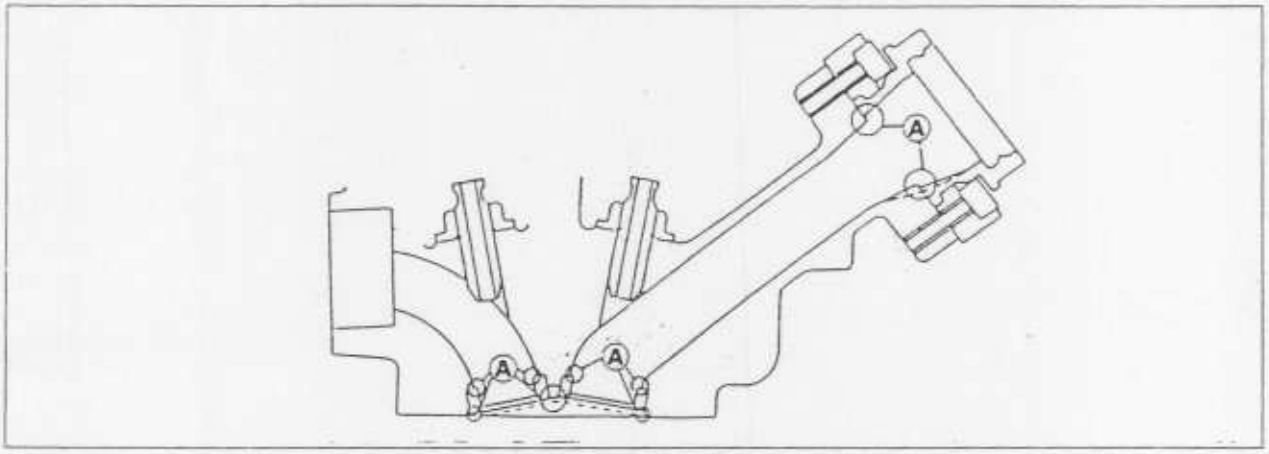
Engine Parts Installation

Cylinder Head:

Modify the cylinder head according to the piston type.

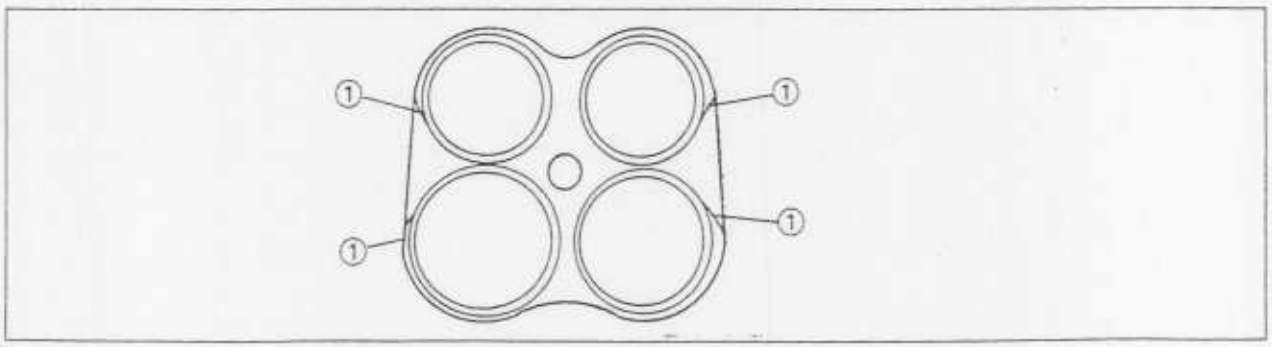
1) When the piston is standard kit.

- Grind off and Smooth any stepped portion in the following area.
  Inside of the intake port
  Inside of the exhaust port
  Mating surface between the valve seat and ports
  Mating surface between the carburetor holder and inlet port
- Chamfer the machining edge of the cylinder head where the valve seat is installed, also smooth the dome of the combustion chamber.
- Use the following tools for these cylinder head modifications.
  Hand Grinder
  Oil stone for eliminating any sharp edge
  Emery cloth for smooth any shapes as final process



A : Stepped Portions - - - : Combustion Chamber Dome

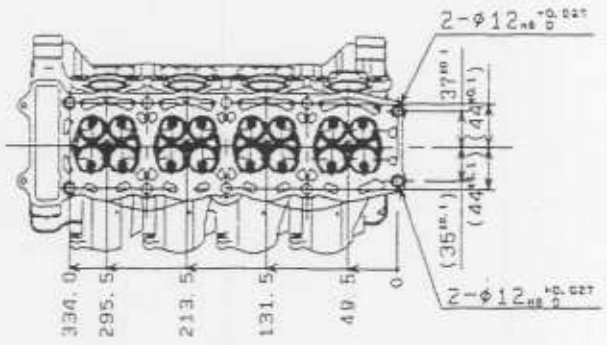
- The combustion chambers are modified by cutting work but the edges shown must be hand finished for smooth corner.



1. Edges (4)

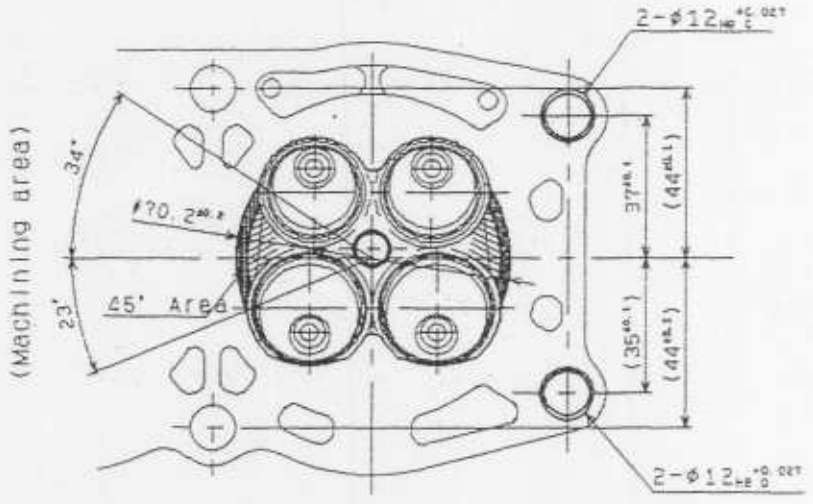
2) When the piston is optional type.
The cylinder head must be modified as shown.

Cylinder Head Dimension



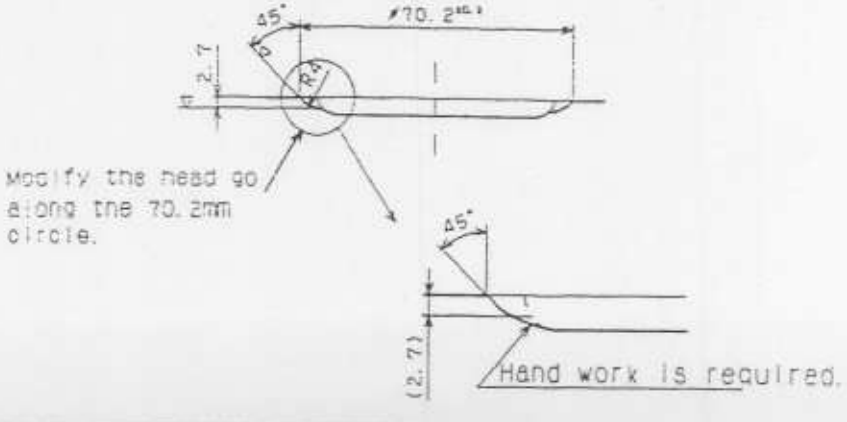
Grind shaded area

Enlarge the chamber to 70.2 mm of diameter.
Do not grind valve seat area.

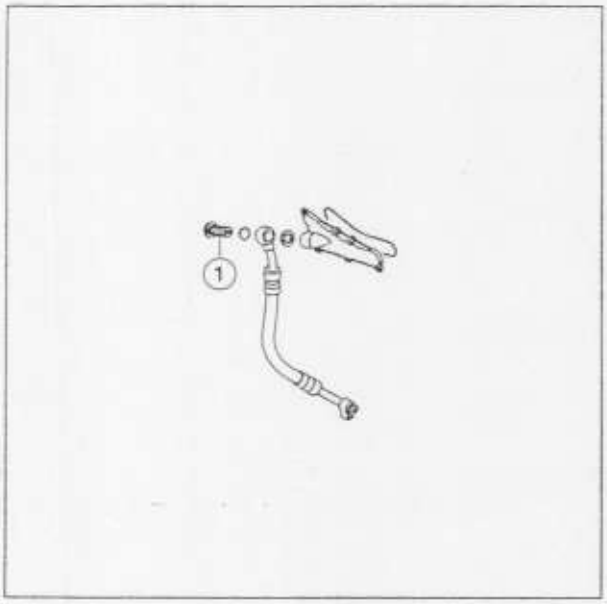


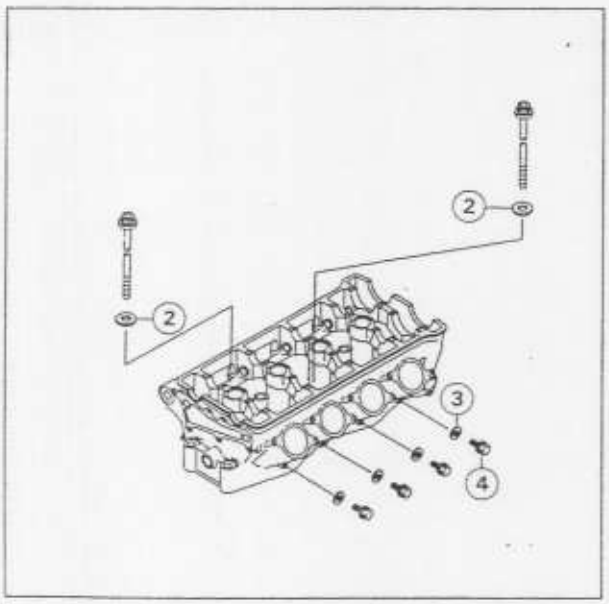
Details of shaded area

The 70.2 mm circle part must be formed in 45 degrees.



- Replace the oil pipe banjo bolt with the kit (92150-1700) for reducing oil flow rate to the cylinder head.
- Replace 8 pcs of washers for the cylinder head bolts with the kit (92200-1182) which have protrusions on the surfaces.
- Remove the vacuum pipes on the cylinder head and plug the holes with kit bolts (132G0612) and washers (92022-304).

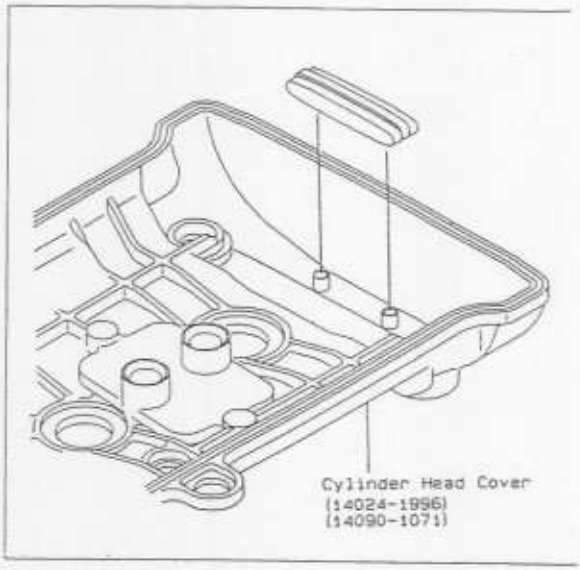




1. Banjo Bolt: 92150-1700
2. Washer: 92200-1182
3. Washer: 92200-304
4. Bolt: 132G0612

Cylinder Head Cover:

Install the STD camshaft chain guide in place.

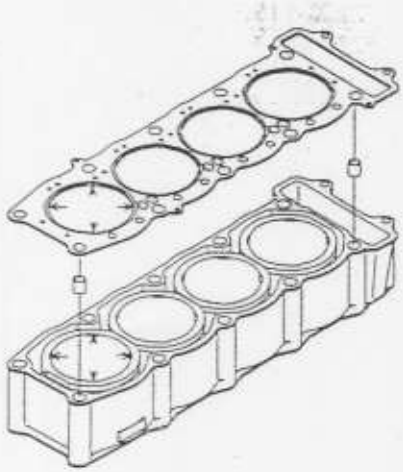


Cylinder:

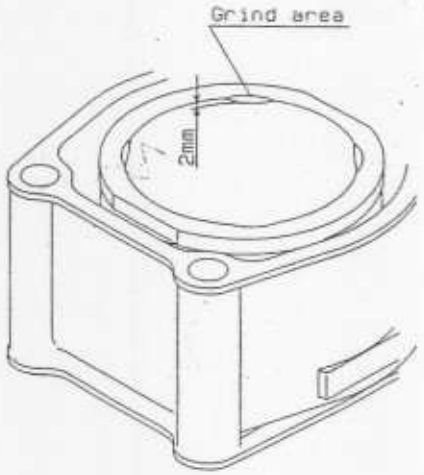
Reshape top of the cylinder bore in order to have the same bore shape as the head gasket as shown.

- Put the cylinder head gasket on the cylinder surface and mark-off the shape at the four recessed portions each bore, then grind the marked-off areas as shown.

Mark-off gasket shape



Grind four areas



Valves:

Replace the valves with the kit parts.

The original part can be used as it is. But there are the following difference between the original parts and kit parts.

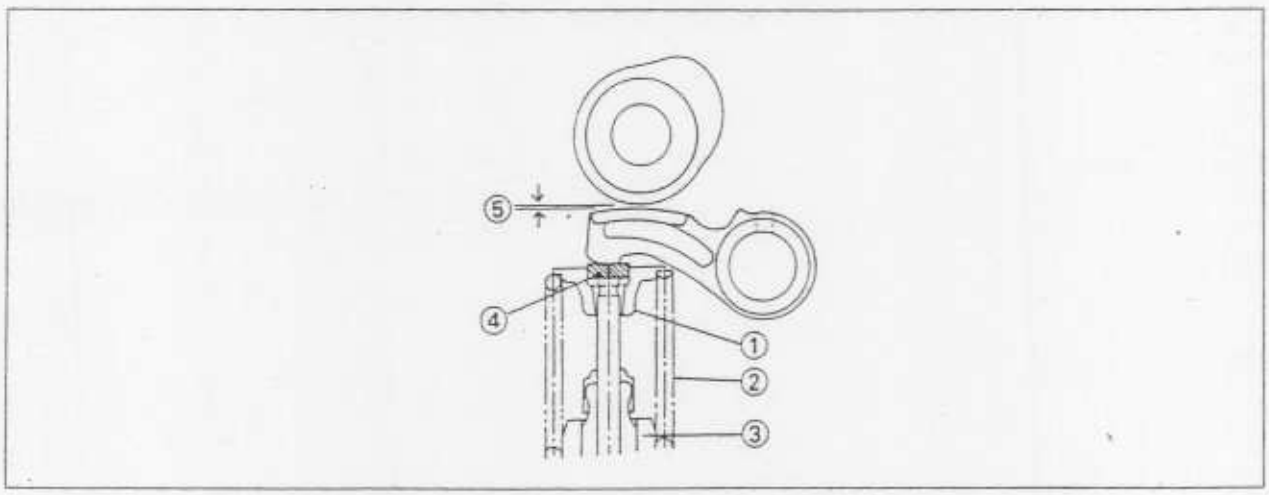
- Changed the valve head angle to reduce its weight.
- Flatten the valve head surface to increase compression ratio. This valve matches the shape of the combustion chamber well.

Replace the valve spring, spring sheet, and spring retainer with the kit parts.

- The spring is a single spring. Install the spring so that the closed coil end is facing toward the valve seat down wards.
- The retainer is made of an aluminum forging. This reduces the inertial mass of the valve train .
- Check the valve clearance using the thickness gauge. If the clearance is out of the limit, change the shim and adjust it. (Measure the clearance when the engine is cool.)
- Measure the clearance when the cam lobe top is opposite side of the rocker arm.
- To prevent engine trouble, adjust the valve clearance within the specified value. However you can get best performance when the intake is 0.21 mm and exhaust is 0.25 mm.

Valve Clearance

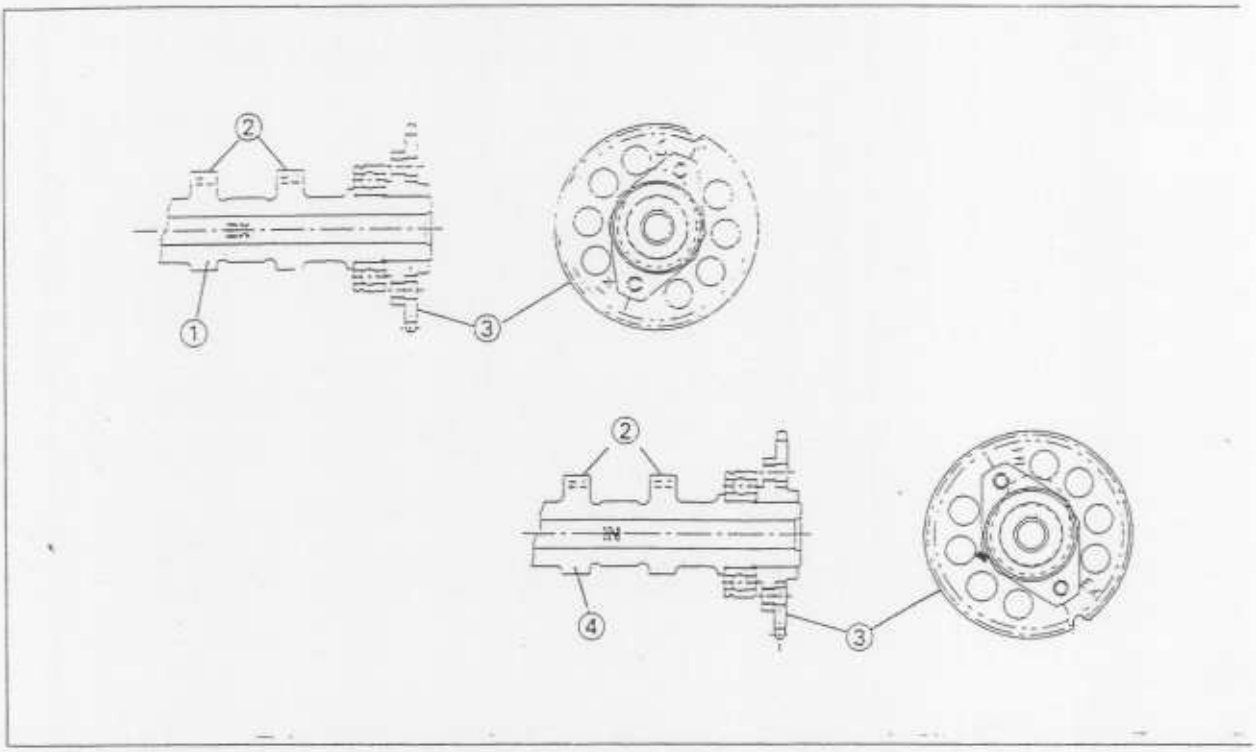
Intake : 0.16 ~ 0.21mm
Exhaust : 0.21 ~ 0.25 mm



1. Spring Retainer: 12009-1071
2. Spring: 49078-1118
3. Spring Seat: 16007-1165
4. Shim (STD part)
5. Clearance

Camshaft:

- The kit camshaft has bigger valve lifter and wider valve timing than the original one.
- Replace the camshaft sprocket for the kit parts. The intake camshaft sprocket is the same as the exhaust camshaft sprocket. It has long holes and is bolted on the camshaft so as to be able to adjust the valve timing.
- Install the camshaft as follows.
- The illustrations shows camshaft sprockets positions when the top section of both exhaust and inlet #4 cam lobe is upward.
- Install the exhaust camshaft sprocket so that the EX mark is top.
- Install the inlet camshaft sprocket so that the IN mark is top.



1. Exhaust Camshaft 2. Inlet Camshaft 3. Sprocket 4. No. 4 Cam

Piston:

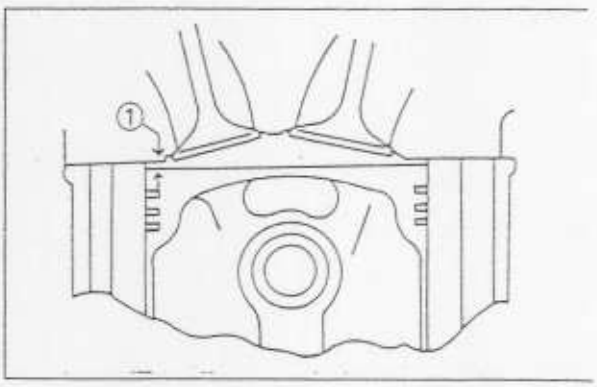
1) Standard Kit Piston (13001-1387)

- ●The shape of the piston head is changed to set the compression ratio 13.0.
- ○The high compression ratio causes engine knocking. Use the high octane number gasoline (racing gasoline; ex. Shell AV-100 etc.) for preventing engine knocking.
- ●Use the original piston rings and piston pins.
- ●When replacing for the kit piston, inspect the piston squish.
- ○Position the piston at the Top Dead Center, and put the small piece of the solder on the shoulder of the piston. Install the cylinder head gasket and cylinder head, and tighten the head bolt with the specified torque. The thickness of the collapse solder is the size of the squish.
- ○Remove the cylinder head and measure the thickness of solder.

Squish Measurement

0.7 ~ 0.85 mm

- ○The most preferable squish measurement is 0.7 mm.
- ○When the squish is less than 0.7 mm, replace the head gasket with a kit (P/No. 11004-1243, ID mark "70") and measure the squish again, if the squish is still under the specification, smooth the piston shoulder.
- ○When the squish is more than 0.7 mm, replace th head gasket with a kit (P/No. 11004-1242 i mark "60") and measure the squish again, if th squish is still over 0.7 mm, smooth the cylinder to surface.



1. Squish

2) Optional Piston (13001-1394)

For reducing mechanical friction and pistor weight, the optional piston has the followinc features.

- ○An aluminum forging piston is used.
- ○2nd piston ring is not used.
- ○Compression height (between piston pin center and piston shoulder) is short.
- ○Cylinder compression becomes higher than the standard piston (13.2 to 13.5).

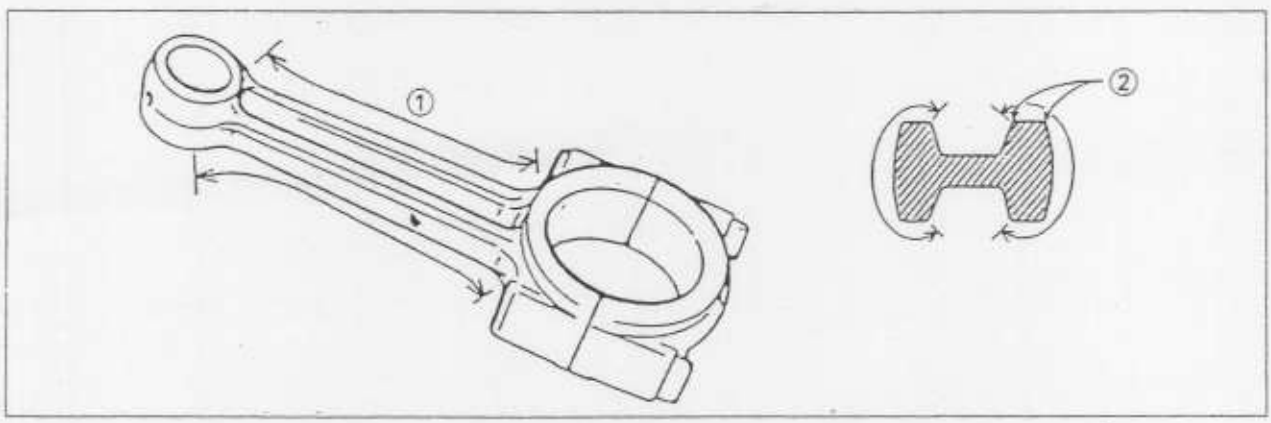
Installation

- The optional piston must be used together with an optional connecting rod assembly (13251-1104).
- Any adge fitted at indentations on the piston crown for the valve head must be smoothly polished.
- The combustion chamber in the cylinder head must be modified (see pg.19).
- An optional piston ring set (13008-1154) must be used (Top Piston Ring is the same as the original one).

Connecting Rod:

To increase durability, further increase the inertial mass and keep balance between each cylinder, it had better modify the connecting rod as follows.

- When removing the connecting rod from the crankshaft, write the number of the cylinder on it, and keep it with the metal and connecting rod cap.
- The connecting rod body and it's cap are machined together at the factory in the assembled state, so they must be replaced as a set.
- The connecting rod weight marks on both the body and cap should be located on the same side.
- Using the oil stone (about #120), grind the connecting rod side faces for smooth surfaces.



1. Polishing Direction and Area (Move the oil stone in this direction)
2. Chamfer Edges

- Grind the connecting rods so that the difference of each connecting rod's weight must be within 4 g.
- Polish the connecting rod side faces and bosses with the buffing machine or oil stone (about #200 ~ #300).

A. Connecting Rod Big end Clearance

Making the big end clearance larger than the standard specification.
Larger clearance will reduce the mechanical loss and will improve higher the engine performance.

- Measure the clearance using a plastigauge.

Connecting Rod Big End Clearance

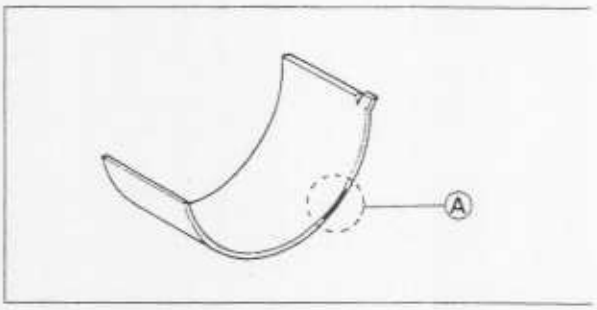
Original Machine:	**38 ~ 65 micron**
Racing Machine:	**50 ~ 70 micron**

● The clearance can be changed by replacing the big end bearing insert with one type of thinner one as shown.

Big End Bearing Insert Thickness

P/No.	Color Size Mark	Thickness
92028-1623	Blue	1.485 ~ 1.490 mm
92028-1624	Black	1.480 ~ 1.485 mm
92028-1625	Brown	1.475 ~ 1.480 mm

● In case of the thinner one has been installed on the original machine, use it as it is. Reboring of the big end does not required.



A. Size Color Mark

NOTE

○ *Never grind or polish the connecting rod so deeply since the modification lowers the connecting rod strength.*

Connecting Rod Bolts/Nuts Tightening (Plastic Region):

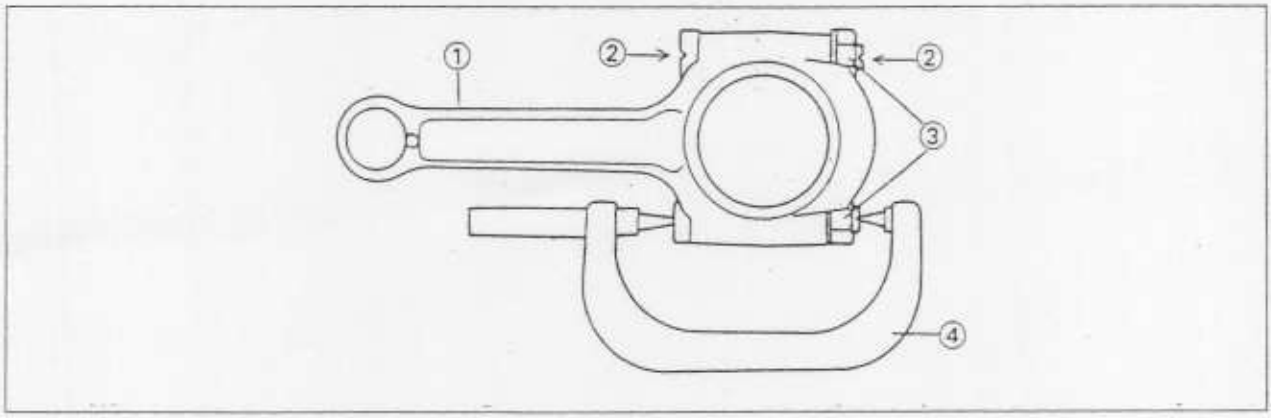
The connecting rod big end is bolted using the "plastic region fastening method" as introduced on this machine.

This method precisely achieves the needed clamping force without exceeding it unnecessarily, allowing the use of thinner, lighter bolts further decreasing connecting rod weight.

- There are two types of the plastic region fastening. One is a bolt length measurement method and other is a tightening torque method. Observe one of the following two but the bolt length measurement method is preferable.
- There are two values of the nut tightening torque as shown, select item according to your bolt conditions.
- Apply a thin coat of a molybdenum disulfide grease to seated surface of the connecting rod bolts and nuts.

(1) Bolt Length Measurement Method

- Install the connecting rod bolts in the connecting rod.
- Tighten the connecting rod nut temporarily.
- Make indent on both bolt head and bolt tip.
- Set a point micrometer as shown.
- Tighten the big end cap nuts until the bolt elongation is come to specified length as shown. This is a more reliable and preferable way to tighten the big end cap nuts.



1. Connecting Rod
2. Indent with a punch.
3. Nuts
4. Fit micrometer pins onto dents.

(2) Tightening Torque Method

- First, tighten the nuts to the specified torque, and then tighten the nuts 120° more.

⚠CAUTION

Plastic Region bolts are used, so, in case of disassembling connecting rod, replace bolts and nuts with new ones.
If you intend to reuse bolts and nuts, tighten then with different tightening torque as shown table.

Connecting Rod Tightening Method

Connecting rod bolt/nut condition	Tightening Method	
	Bolt Elongation	Tightening Torque
Non-used bolt and nut (Brand New)	0.3 mm ~ 0.32 mm	2.6 kg-m plus 120°
Ones mounted on newly obtained connecting rod assembly	0.26 mm ~ 0.28 mm	1.8 kg-m plus 120°
Ones mounted on stock machine	0.26 mm ~ 0.28 mm	1.8 kg-m plus 120°

Connecting Rod Bolt and Nut Useful Time Limit

Connecting Rod Bolt/Nut Condition	Useful Time Limit		
	1	2	3
Ones obtained only as single nut	possible	possible	possible
Ones mounted on newly obtained connecting rod assembly	possible	possible	impossible
Ones mounted on stock machine	impossible (exchange them for new ones)		

Transmission:

1) Optional gears for original gearing.
The original model has been mounted the cross ratio transmission so that it can be used in a race. Besides, You can select the following gears as optional parts.

	Input	Output (Ref.)	Gear Ratio	Stock Gear Ratio
4th	13260-1268	13260-1271	1.500 (33/22)	1.409 (31/22)
5th	13260-1269	13260-1362	1.391 (32/23)	1.292 (31/24)
Top	13260-1270	13260-1363	1.292 (31/24)	1.200 (30/25)

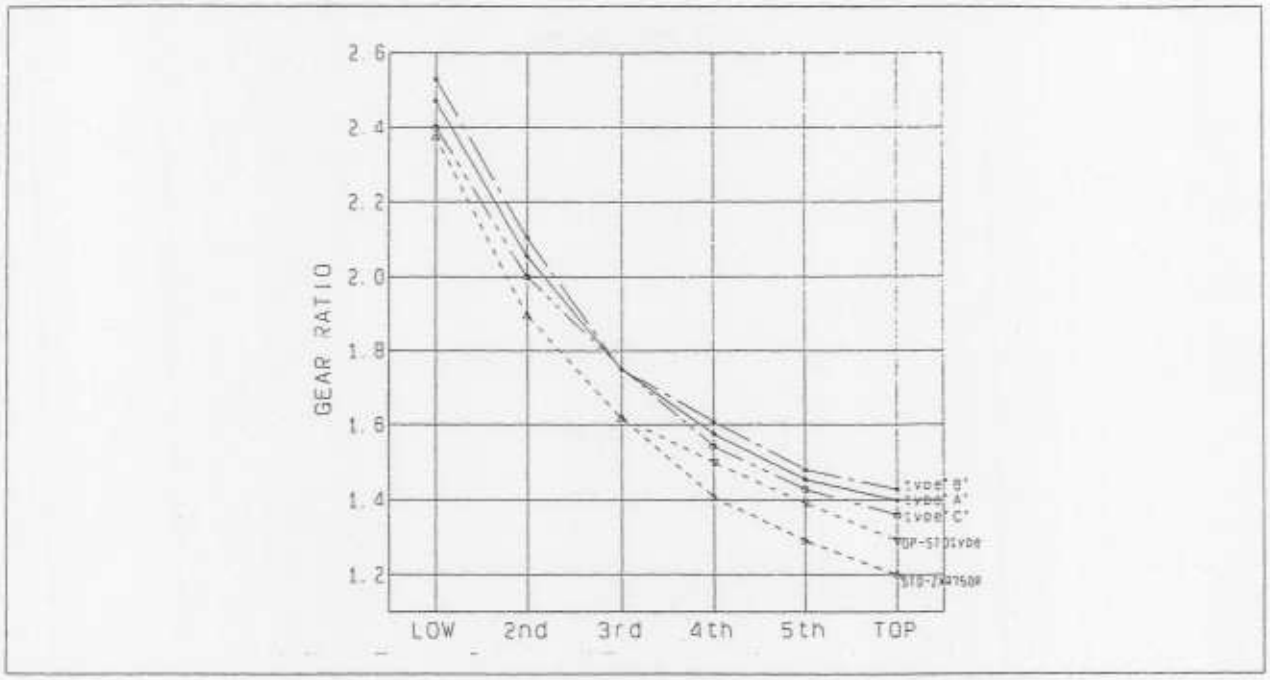
2) Optional Transmission Gear Kit
Three more types of the transmission gear kits are available as optional parts.

Gear Ratios	Type	A	B	C
	1st	2.471 (42/17)	2.592 (43/17)	2.400 (48/20)
	2nd	2.056 (37/18)	2.105 (40/19)	2.000 (40/20)
	3rd	1.750 (35/20)	←	←
	4th	1.577 (41/26)	1.609 (37/23)	1.542 (37/24)
	5th	1.455 (32/22)	1.481 (40/27)	1.429 (40/28)
	6th	1.400 (35/25)	1.429 (40/28)	1.360 (34/25)

Features

- Not only the optional transmission gears reduce gears weight, it has almost equal effect to reduce the engine sprocket teeth by three because of larger gear ratio.
- There are no parts interchangeability between the original transmission gears and the optional ones.
- Use only the optional change drum, the original one can not be used.
- As to the shift fork, the original one can be used.
- The optional transmission gears are made wider than the original ones to prevent burnt of the gear or wearing but in worst cases this may cause improper transmission engagement, in such a case modify the gear as shown.

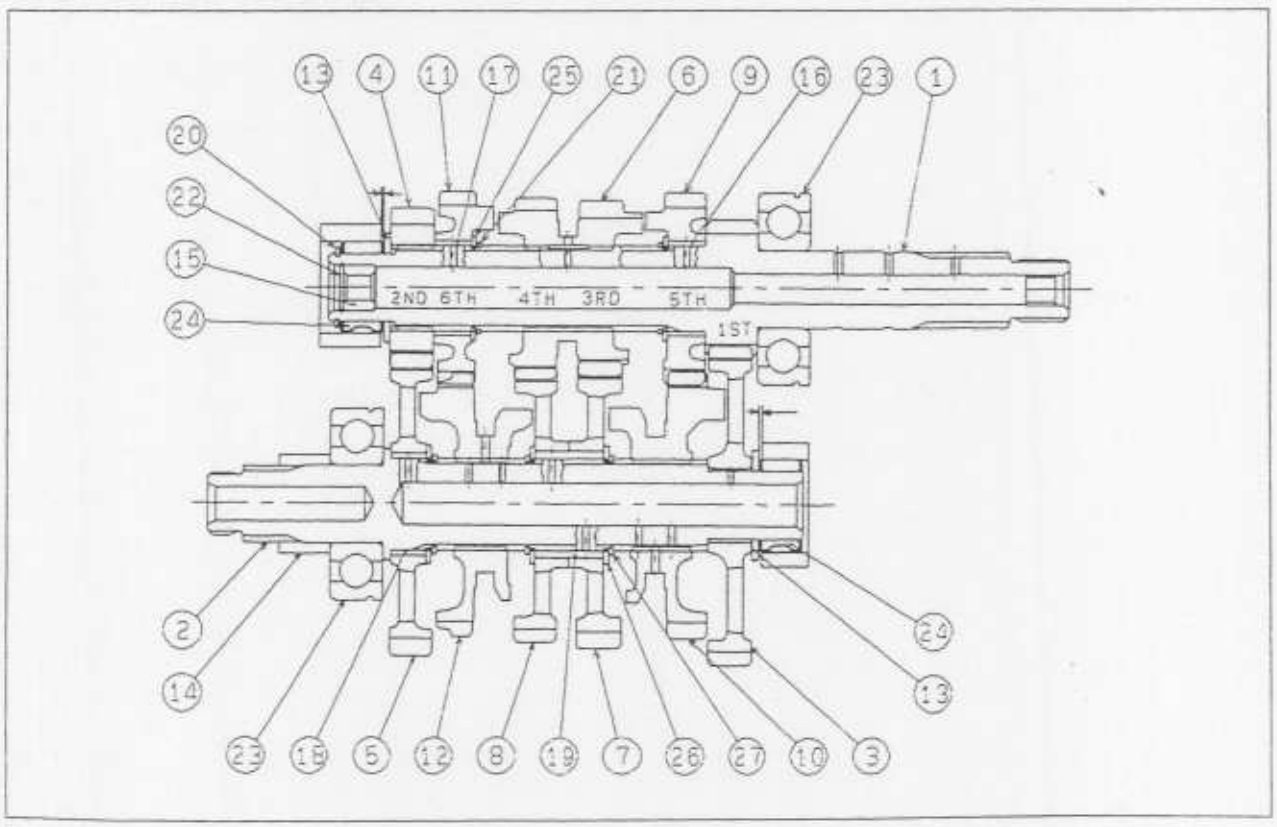
Gear Ratio Comparison Chart



Transmission Gear Engagement Inspection

1) Install the drive shaft and output shaft gear assembly in the upper crankcase then inspect clearance between the needle bearing outer race and spacer as shown.

Correct Clearance: 0.3 to 0.6 mm



No.	P/NO.	P/Name	Q ty
1	13127-1224	Shaft(17T)	01
2	13128-1198	Shaft	01
3	13260-1347	Gear(43T)	01
4	13260-1348	Gear(19T)	01
5	13260-1349	Gear(40T)	01
6	13260-1350	Gear(20T.23T)	01
7	13260-1341	Gear(35T)	01
8	13260-1351	Gear(37T)	01
9	13260-1352	Gear(27T)	01
10	13260-1353	Gear(40T)	01
11	13260-1354	Gear(28T)	01
12	13260-1355	Gear(40T)	01
13	92026-1224	Spacer	02
14	92027-1302	Collar	01
15	92028-1704	Bushing	01
16	92028-1705	Bushing	01
17	92028-1706	Bushing	01
18	92028-1707	Bushing	01
19	92028-1708	Bushing	01
20	92033-025	Circlip	01
21	92033-1037	Circlip	02
22	92036-005	Circlip	01
23	92045-1224	Ball Bearing	02
24	92046-031	Needle Bearing	02
25	92200-1183	Washer	02
26	92200-1184	Washer	03
27	480J2900	Circlip	03
28	13239-1190	Shift Drum	01

(Gear Ratio)

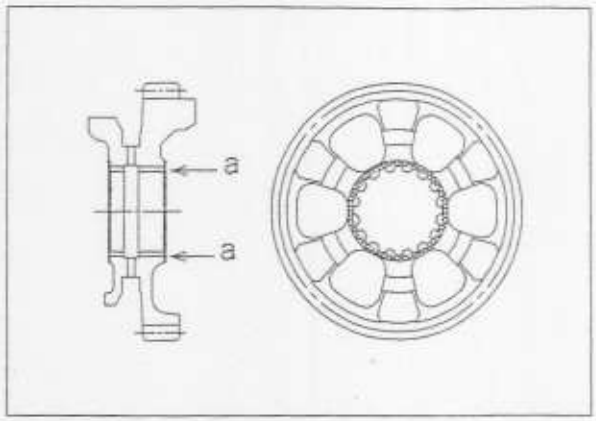
1ST	2.529
2ND	2.105
3RD	1.750
4TH	1.609
5TH	1.481
6TH	1.429

- If the clearance is incorrect, replace the spacer with one of three replacement spacers and inspect the clearance again.

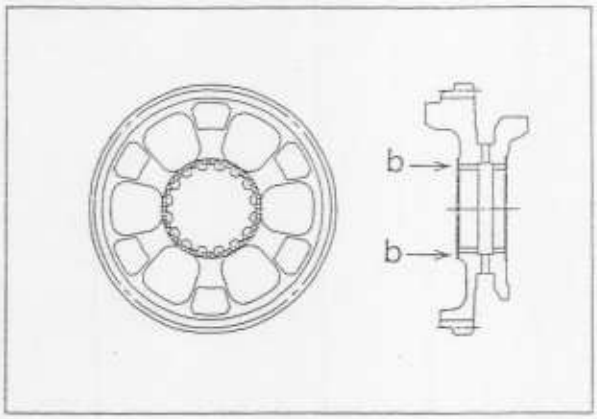
Replacement Spacer Thickness	**92026-1244**	**2.1 mm**
	92026-1225	**2.4 mm**
	92026-1226	**1.8 mm**

2) Install the shift drum and shift forks in the lower crankcase, then assemble the lower crankcase to the upper crankcase.
3) Check to see that the drive shaft and output shaft turn freely, and spinning the drive shaft, shift the transmission through all gears to make certain there is not binding and that all gears shift properly.
4) If not, modify gears as follows.

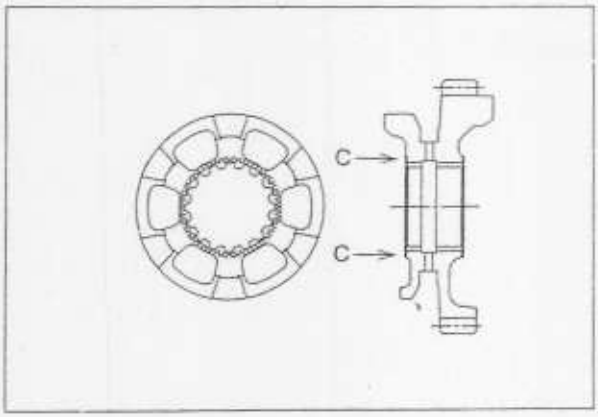
5) Neutral to 1st gear shift is wrong. Grind one side(a) of boss of output shaft 5th gear by 0.3 mm to narrow the output shaft 5th gear and inspect the shift condition again, if the shift is still wrong, grind the boss more until correct movement is obtained.



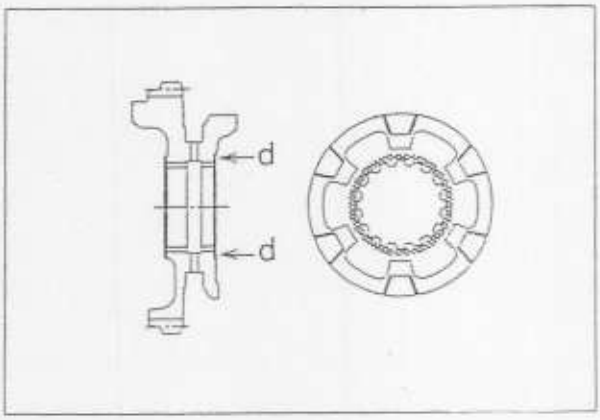
6) Neutral to 2nd gear shift is wrong. Grind one side(b) of output shaft 6th gear as the same manner as the above 5th gear.



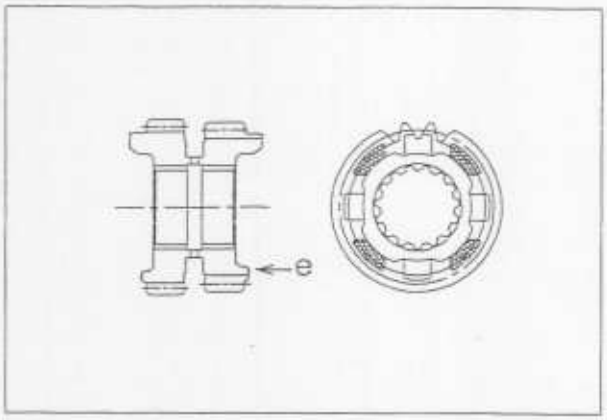
7) 2nd to 3rd gear shift is wrong. Grind the other side(c) of output shaft 5th gear boss as the same manner of the above gear.



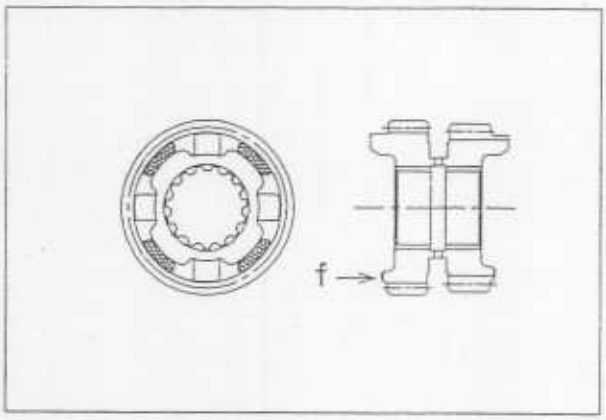
8) 3rd to 4th shift gear is wrong. Grind the other side(d) of the output shaft 6th gear as the same manner as the above gear.



9) 4th to 5th gear shift is wrong. Grind one side(e) of drive shaft 3rd/4th gear as the same manner as the former gears.

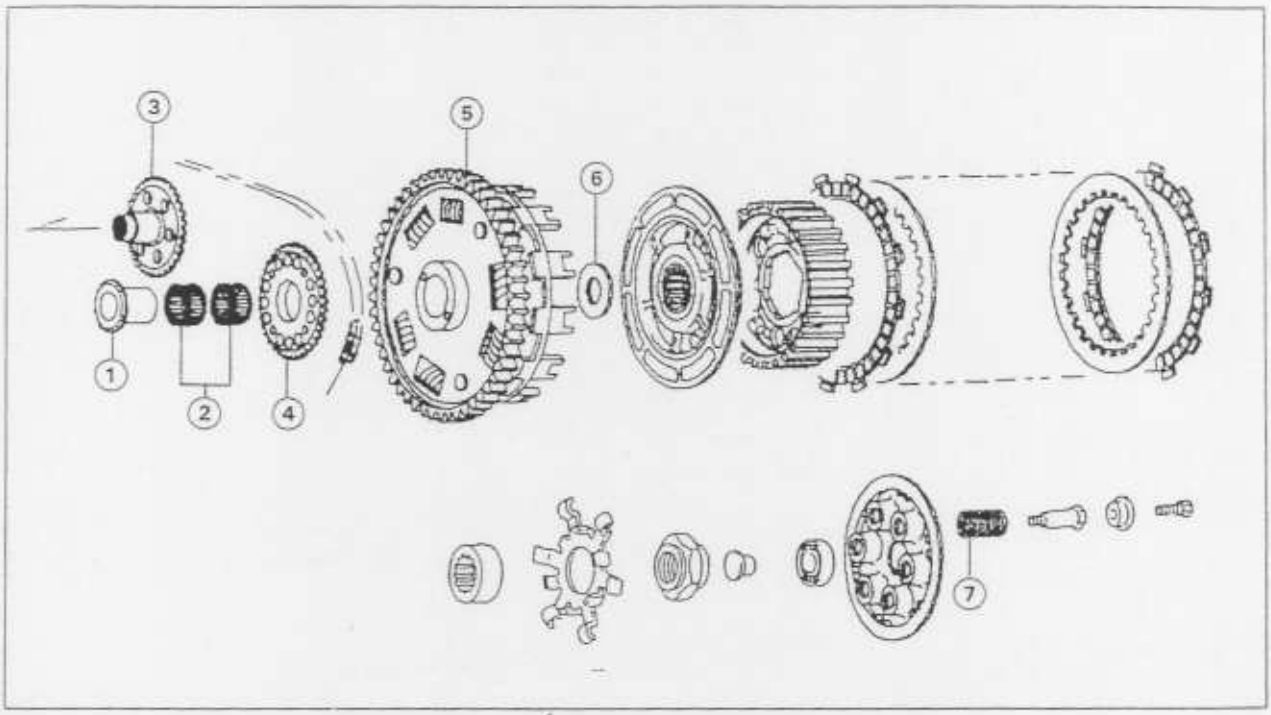


10) 5th to 6th gear shift is wrong. Grind the other side of the drive shaft 3rd/4th gear as the same as former gears.



Clutch:

- For the super bike racing, use the kit clutch housing (13095-1254), drive shaft sprocket (21053-1060) and oil pump sprocket (12046-1135) as a set. These parts set will lower the oil pump maximum rpm about 27% and reduce mechanical friction loss in the oil pump gear train. For the enduro racing, use the original clutch housing.
- The kit spring tension is up to about 30% and for reliable clutch functioning.



1. Collar: 92143-1579
2. Needle Bearing: 92046-1215
3. Oil Pump Sprocket: 12046-1135
4. Sprocket: 21053-1060
5. Clutch Housing: 13095-1254
6. Spacer: 92026-1422
7. Clutch Spring: 92081-1033

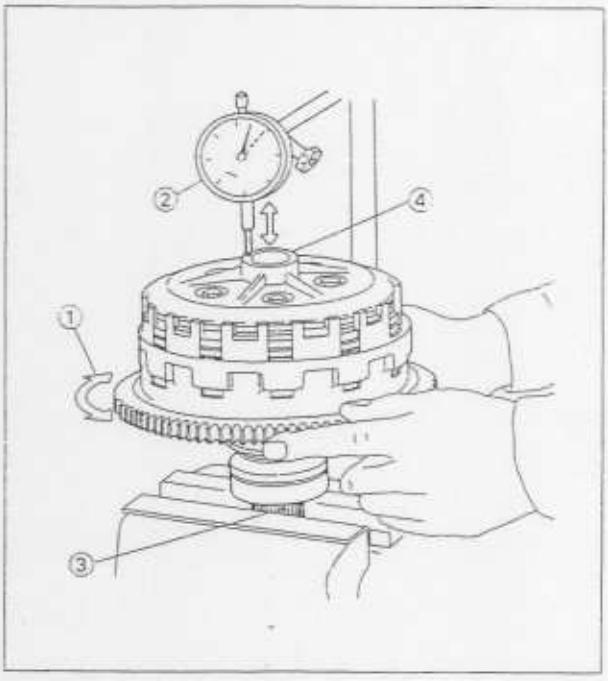
Clutch Plate Free Play Adjustment

The ZXR750R engine is equipped with the Kawasaki back-torque limiter mechanism in the clutch. The back-torque limiter works to reduce the chance of rear wheel hop caused by engine braking during hard braking and down shifting. The back-torque limiter operating condition can be changed by changing an initial clutch plate free play setting. The standard free play setting is 0.15 to 0.75 mm as shown in the ZXR750R service manual, but by changing it largely from 0.8 to 1.6 mm, the limiter condition shifts more closer to racing engine conditions.

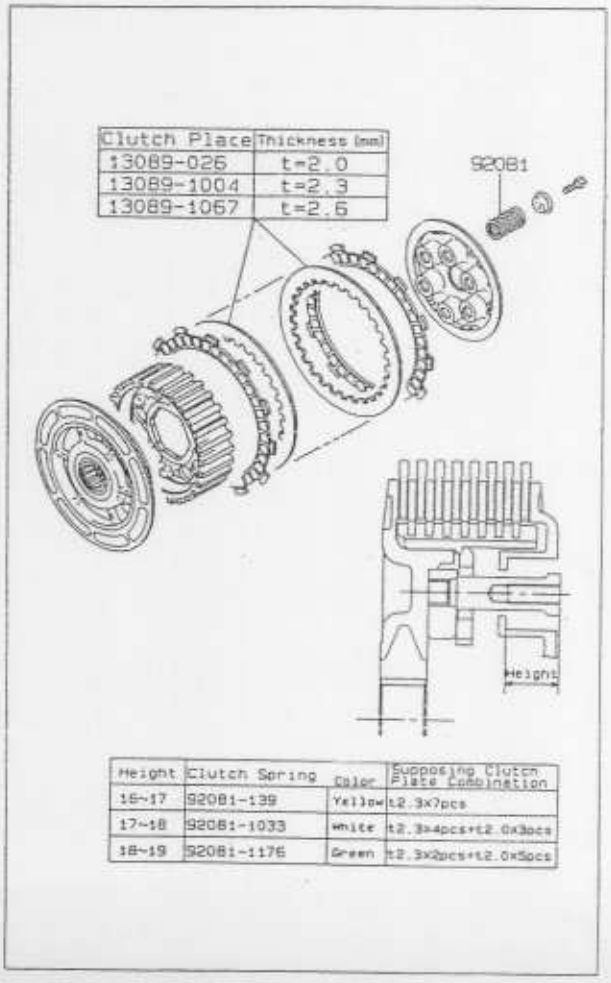
Try the setting change and select either condition.

- ●Replace one clutch plate with a thinner one then measure the free play. If the play is out of the specification, replace the other clutch plate with a thinner one again.
- ●After the free play is set, measure height from the spring seat position in the clutch operating plate to the top surface of the clutch hub bolt as shown for selecting one type of clutch spring out of the three shown in the table.
- ○Mixed use of different colors of the clutch spring in one clutch may affect the clutch function adversely.

Clutch Plate Free Play Measurement



1. Move back and forth.
2. Dial Gauge
3. Drive Shaft
4. Raised Center



Starter Motor, Alternator and Oil Pump Driven Mechanism:

For Super Bike Racing

- Remove the starter motor, alternator and their driven mechanism from the engine since these parts are not needed for the race. For the enduro racing, use either the original alternator or the kit one.
- Replace the oil pump gear train with kit parts.

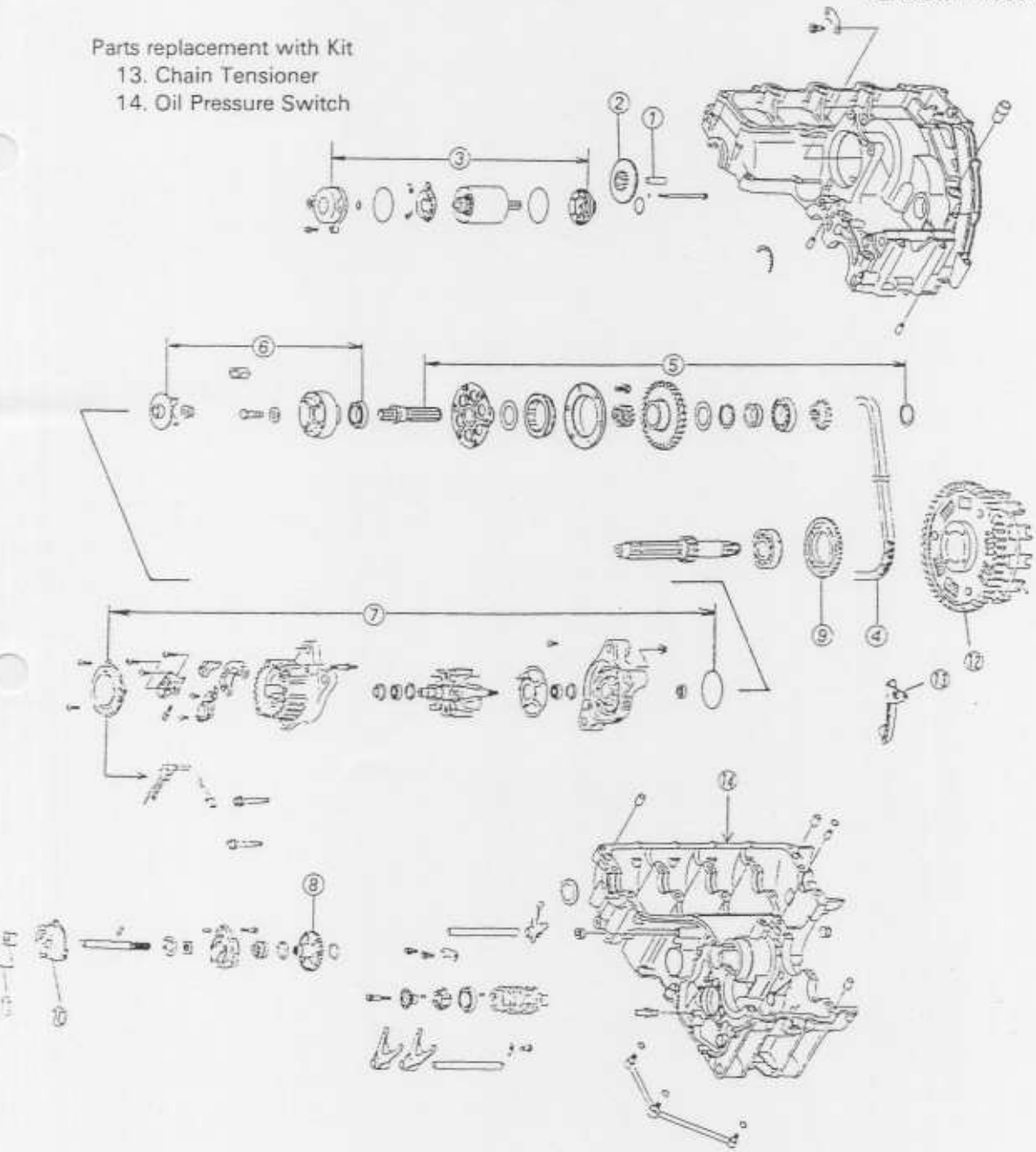
1) Removal Parts

Starter Motor related parts
1. Idle Gear Shaft
2. Idle Gear
3. Starter Motor

Alternator related parts
4. Chain
5. Starter Clutch
6. Coupling
7. Alternator

Oil Pump Driven Mechanism
8. Oil Pump Sprocket
9. Drive Shaft Sprocket
10. Oil Pump Body
11. Oil Pump Rotor
12. Clutch Housing

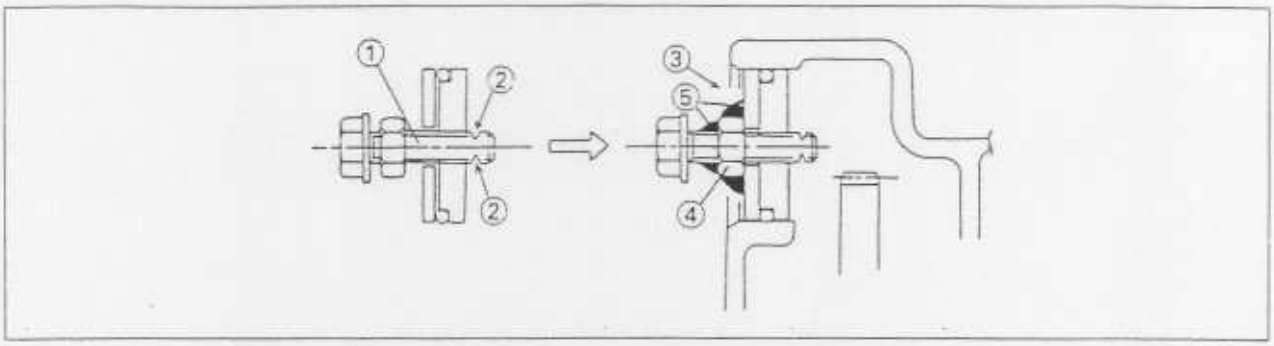
Parts replacement with Kit
13. Chain Tensioner
14. Oil Pressure Switch



2) Kit Parts Installation:

(1) Starter Motor Hole Plug

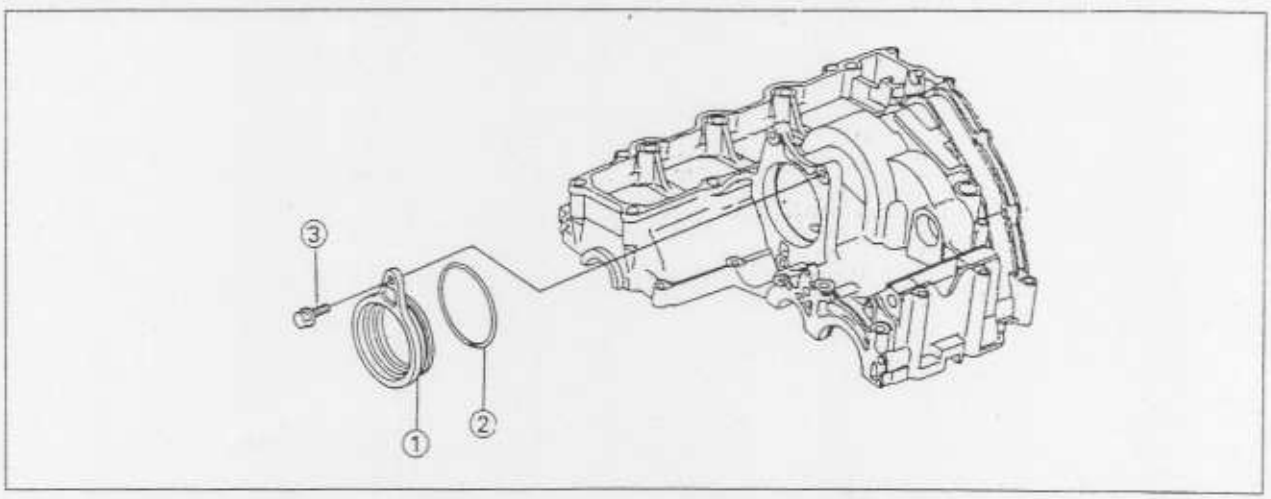
Using the kit parts, plug the hole where the starter motor was mounted on the crankcase.



1. Seal Plug for Starter Motor Hole
   Bolt: 130G0625
   Nut: 312G0600
   O-ring: 92055-1262
   Plug: 92066-1332
   Plug: 92066-1333
2. Stake the seal plug to prevent it from coming out.
3. Starter Motor Hole
4. Tighten the nut after seal plug installation.
5. Apply liquid gasket.

(2) Alternator Hole Plug

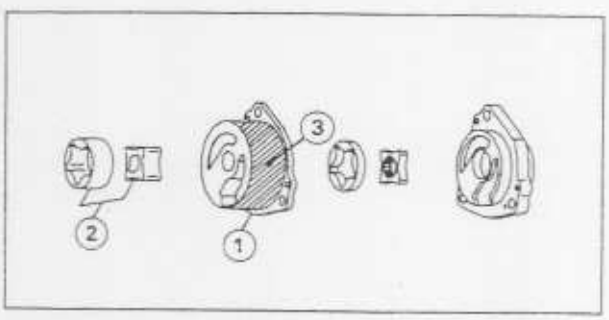
Using the kit parts, plug the hole where the alternator was mounted on the crankcase.



1. Plug: 92066-1363
2. O-ring: 92055-1357
3. Bolt: 132G0820

(3) Oil Pump Body, Rotor

- ● Replace the oil pump body and rotor with kit.
- ● The kit oil pump assy reduces mechanical friction loss of oil pump by lowering oil pressure at high speed engine rpm.
- ○ The kit oil pump body and rotor must be used as a set.
- ○ On some oil pumps, the body may not be installed in the oil pump housing of the crankcase. In such a case, make the following modification.
- ● Lap the circumference of the oil pump body for correct fitness.



1. Oil Pump Body: 16160-1192
2. Rotor: 16154-1102
3. Smaller the circumference by lapping.

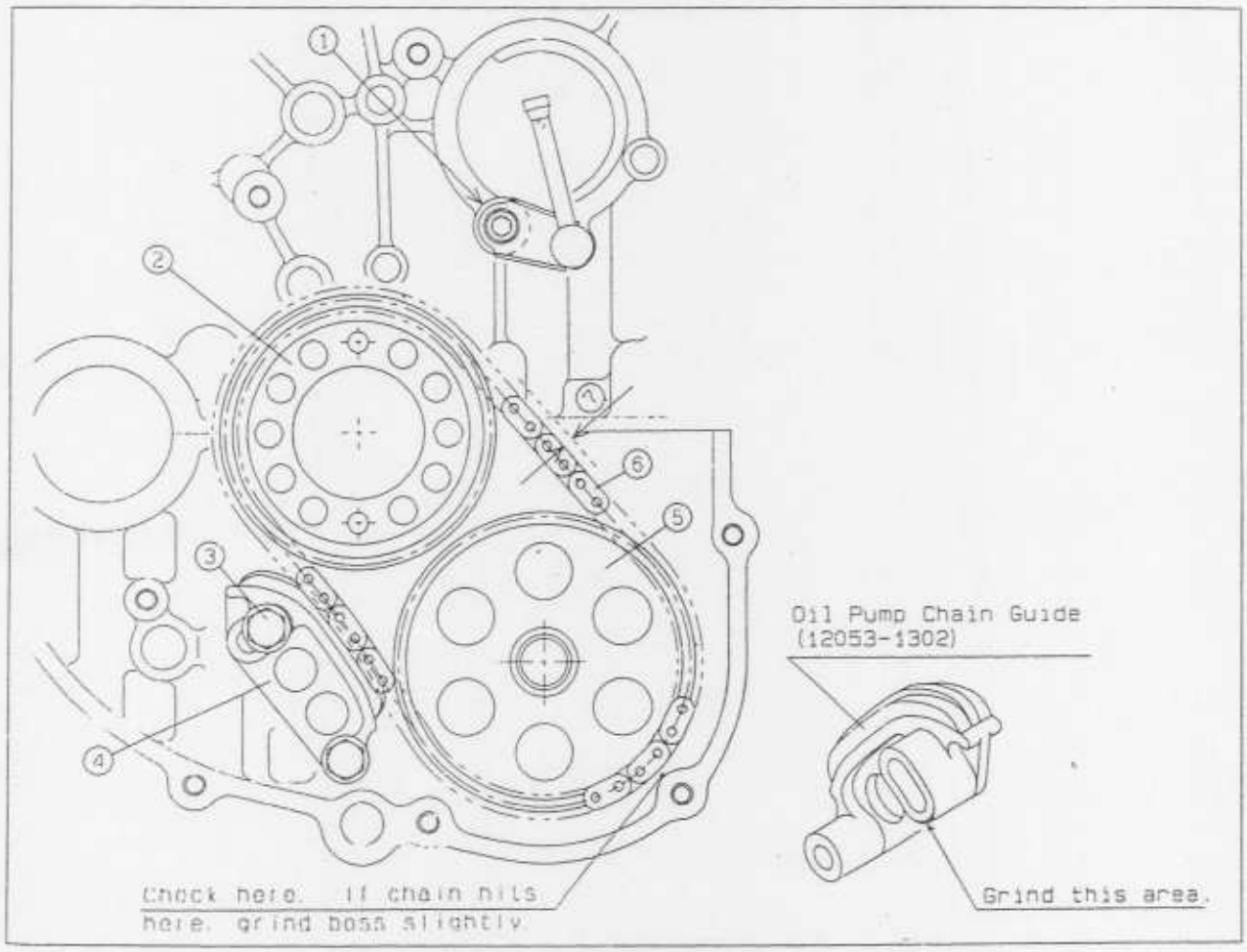
(4) Oil Pump Driven Mechanism

- Replace the oil pump sprocket on the oil pump shaft with a kit sprocket (12046-1135).
- Replace the drive shaft sprocket with a kit sprocket (21053-1060).
- Link the drive shaft sprocket and the oil pump sprocket directly with a kit chain (92057-1343).
- The chain can be installed on any sprockets timing.
- Install a kit chain guide (12053-1302).

On some oil pump chain guides, the guide mounting boss may hit against the crankcase rib when the guide is set at the rearmost position. In such a case, make the following modification.

- Grind lower part of the boss as shown.

Kit Oil Pump Gear Train Installation (SB)



1. Washer (92022-1691):
   Install a washer to fill gap where the original chain guide was installed.
2. Drive Shaft Sprocket (21053-1060)
3. Bolt (130P0630)
4. Chain Guide (12053-1302)
5. Oil Pump Sprocket (12046-1135)
6. Chain (92057-1343)
7. Chain Slack

- Chain slack adjustment

Install the chain guide (12053-1302) so that the chain slack on the opposite side to the guide is about 3 mm.

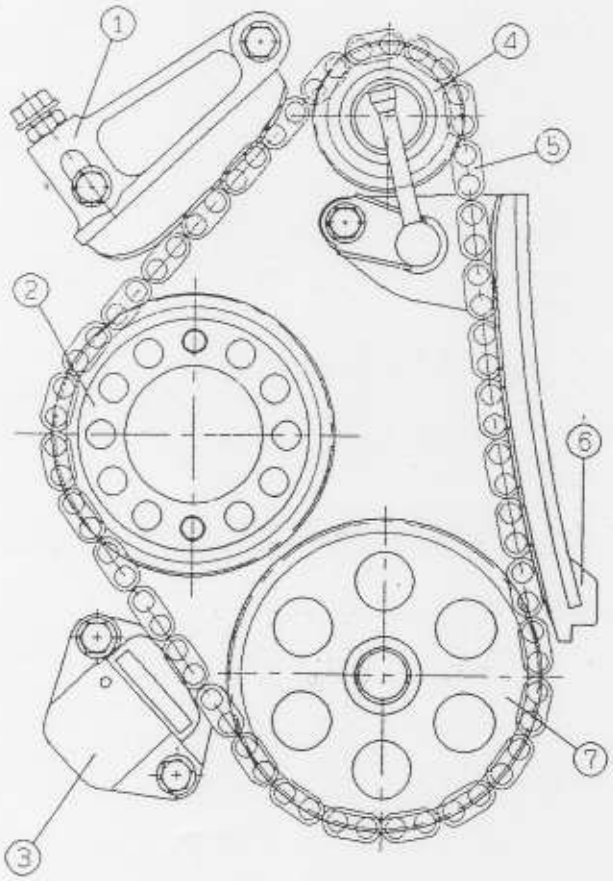
○ Periodical chain slack adjustment is not required, check it when the clutch is maintained.

For Enduro Racing

For enduro racing, select either the original gear train or the optional gear train shown below.

Optional Alternator Gear Train

The optional gear train is designed to use larger oil pump gear ratio than the original one to reduce mechanical loss in the train and to increase the engine performance.



1. Chain Guide: 12053-1322
2. Sprocket: 21053-1062
3. Tensioner Assembly: 12048-1127
4. Sprocket (Alternator Shaft): 12046-1148
5. Chain: 92057-1372
6. Chain Guide: 12053-1321
7. Sprocket (Oil Pump): 12046-1147

(5) Alternator (Enduro)

- Use either the set of the original alternator and regulator or the kit ones.

Combination	Alternator	Regulator
1	Original	built in alternator
2	Kit	Kit

(6) Plug

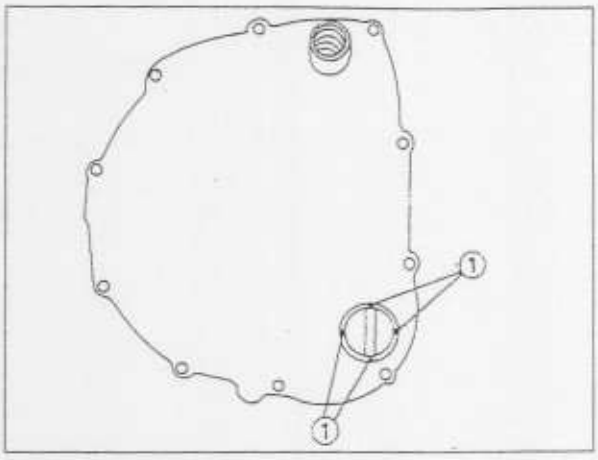
- Install the kit plug (92066-059) on the place where the oil pressure switch was installed.

Oil Level Gauge:

A high pressure inside the crankcase may push out the oil level gauge. To avoid this, caulking must be done at 4 points on the circumference of the oil level gauge.

NOTE

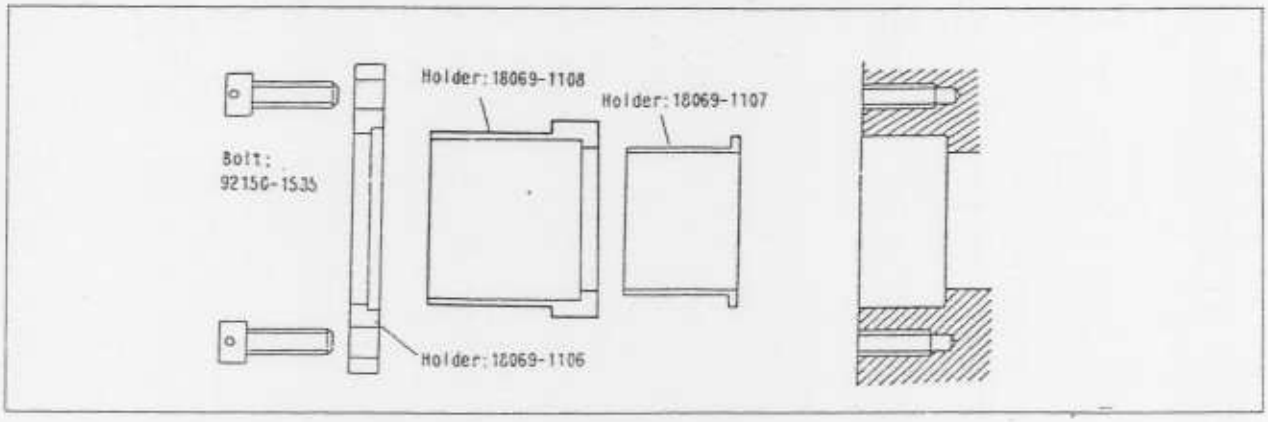
○ *The crankcase inside pressure of the '93 model became higher than the '92 model, make certain on this process.*



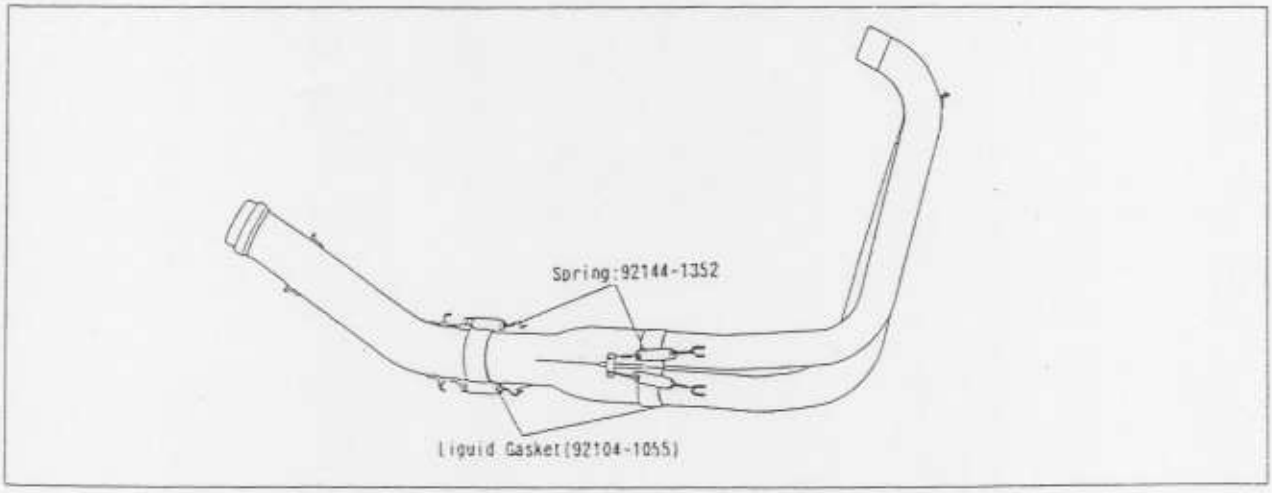
1. Caulk with Punch

Muffler:

- Install the following kit parts on the cylinder.
- Remove the original studs.
- Do not use the muffler gasket, this avoid looseness of the muffler bolts.

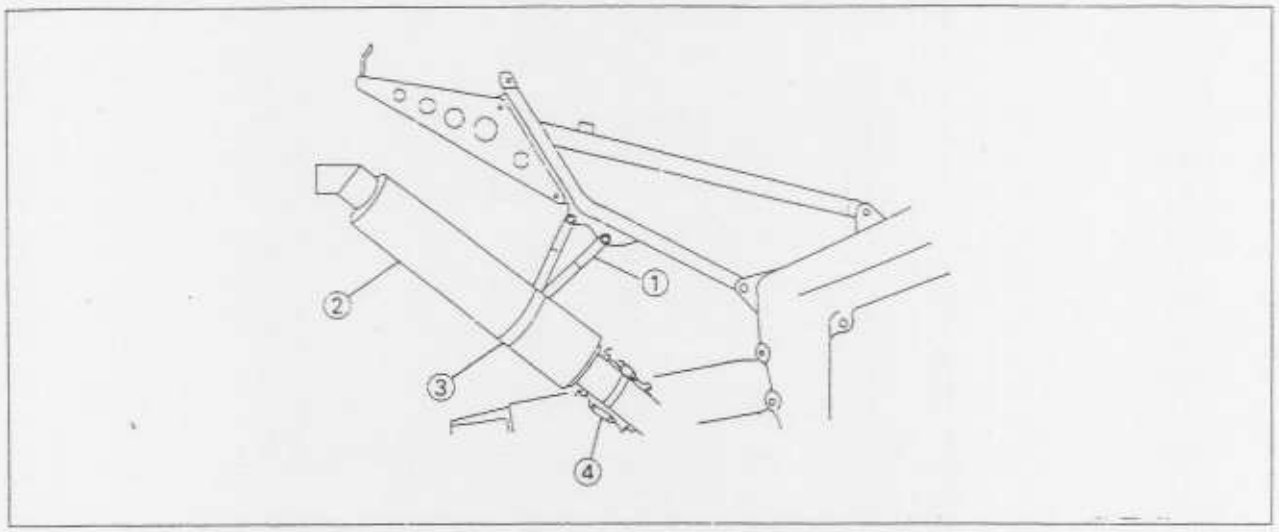


- Connect the kit exhaust pipe and muffler body as shown below.



● Mount the muffler assembly on the frame as shown below.

○ Inspect that the muffler has enough ground clearance when the rider is on the machine with the machine fully bottomed. If you find an abnormal condition from the inspection, modify muffler stay or muffler mounting parts.



1. Muffler Stay: 35011-1562
2. Muffler: 18090-1292
3. Clamp: 92170-1059
4. Spring: 92144-1352

● When running in rainy condition, water entering into the muffler get wet the glass wool. Because this let the sound absorbing efficiency reduce, the exhaust sound level may increase. To avoid this, apply the liquid gasket (black, 92104-1053), before assembling the muffler, to the following fittings.

Between the exhaust pipe and manifold
Between the manifold and joint pipe
Between the joint pipe and silencer
Also apply the liquid gasket to the circumference of the front and rear baffle plate of the silencer.

Silencer (18090-1303):

Although the '92 silencer for the racing kit can be used too, the silencer has been modified to increase wool durability and two kinds of materials are used for it, one is a stainless wire and the other is a grass wool. Wind the stainless wires under the grass wool.

Radiator:

Attaching a plastic board on the upper and both sides of the radiator is recommended to increase cooling effect, but no kit is available.

1) Original Radiator

The original radiator can be used but the following modifications are needed.

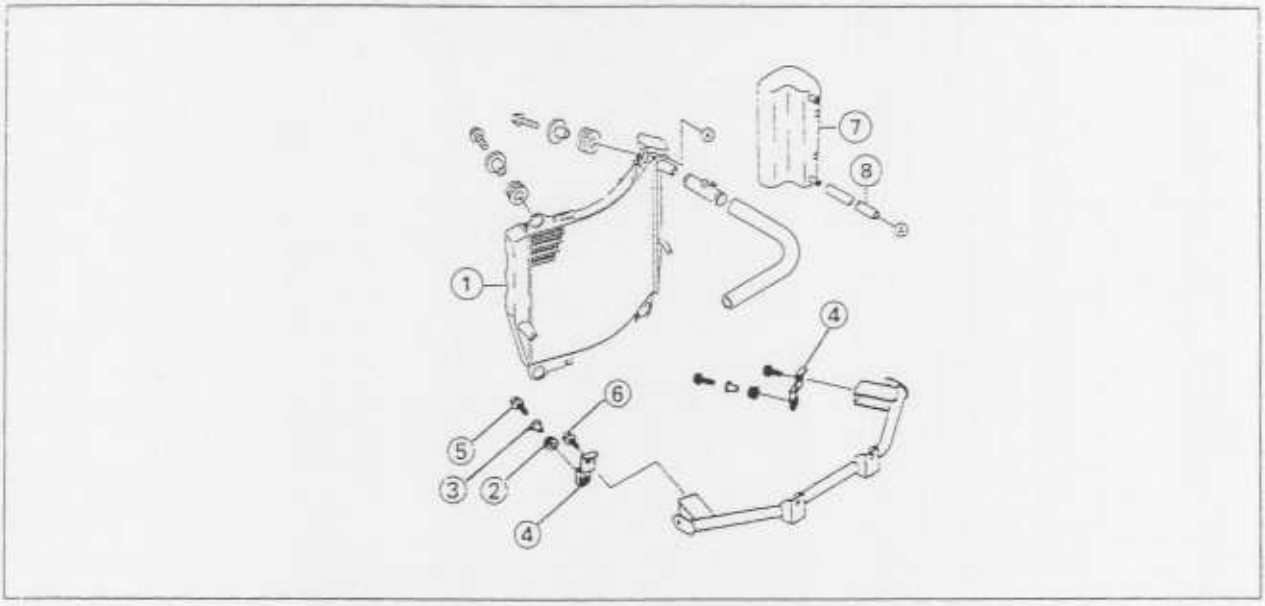
○ Remove the original thermostat and its housing then install the kit pipe (39192-1053) to where the thermostat housing was positioned and then attach the original water temperature sensor and earth lead to the kit pipe.

○ Replace the reservoir tank with the kit (43078-1136) and fasten it to the right hand of the radiator rear with a tie-lap.

2) Optional Radiator

An optional radiator has increased radiation efficiency by 12% than the original one.

- Follow the procedures shown below for installation.
- Remove the thermostat and it's housing to improve cooling effect.
- Install the original water temperature sensor on the right rear of the radiator.
- Replace the reservoir tank with the kit (Option: 43087-1136) to meet racing regulation.
- Using the kit stay (35011-1593) mount the radiator on the original radiator stay.

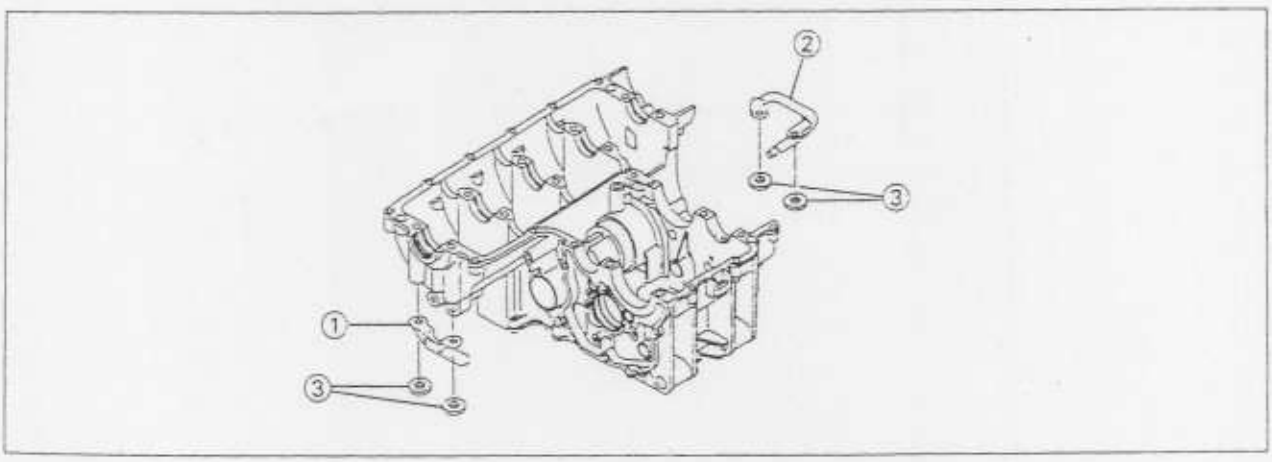


1. Radiator: 39061-1170
2. Damper: 92075-277
3. Collar: 92027-1651
4. Stay: 35011-1593
5. Bolt: 130J0620
6. Bolt: 130J0610
7. Reservoir Tank: 43078-1136
8. Pipe: 700Q07300

- Using the kit radiator hose (option: 39062-1481) and original lower radiator hose, route them to the engine.
  - Use the kit hose for the return hose (top of the radiator) and original hose for the main hose (lower of the radiator).

Engine Guard:

To protect the engine, install the kit engine guards both L.H. and R.H. of the engine.



1. Guard (left): 55020-1407
2. Guard (right): 55020-1408
3. Washers: 410B0800

Throttle Case (Optional Parts):

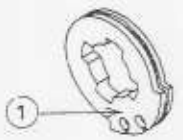
For following throttle cases, grips and reels are available as optional parts. These optional parts reduce the throttle opening degree.

Parts	P/No.
Throttle Case, Upper	32099-1148
Throttle Case, Lower	32099-1149
Throttle Grip, Right	31064-1151
Throttle Grip, Right	46075-1110
Throttle Grip, Left	46075-1109

Throttle Reel (Optional Parts):

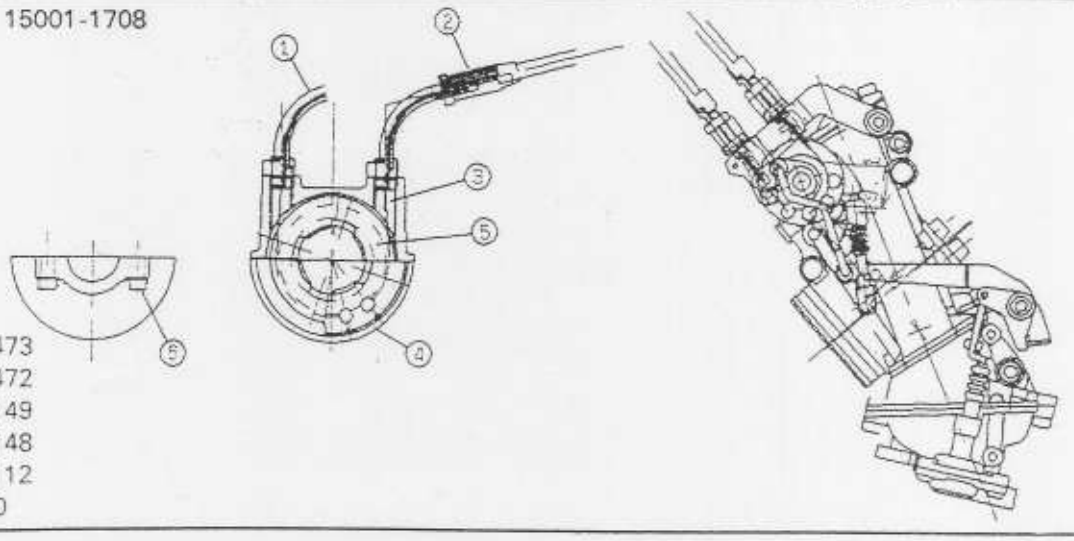
Three types are available.

P/No.	I.D. Mark	Throttle Opening	Remarks
59101-1111	2	48°	
59101-1112	4	52°	Standard in options
59101-1113	7, 6	62°	



1. Identification Mark

Carburetor: 15001-1708



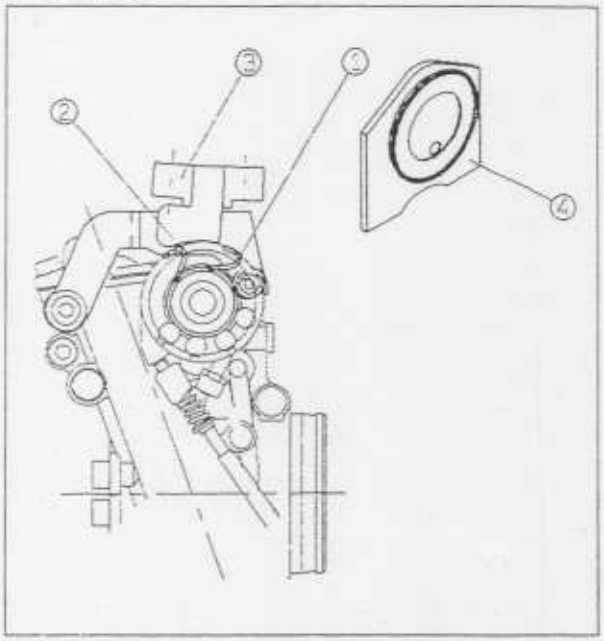
1. 54012-1473
2. 54012-1472
3. 32099-1149
4. 32099-1148
5. 59101-1112
6. 12090620

The throttle cables are also available as optional parts, use these parts when the above optional throttle reel is used.

Parts	P/No.
Throttle Cable, Acceleration	54012-1472
Throttle Cable, Deceleration	54012-1473

Throttle Valve (Optional Parts):

A light weight throttle valve is available as an optional part. Use this throttle valve with an optional throttle valve spring.



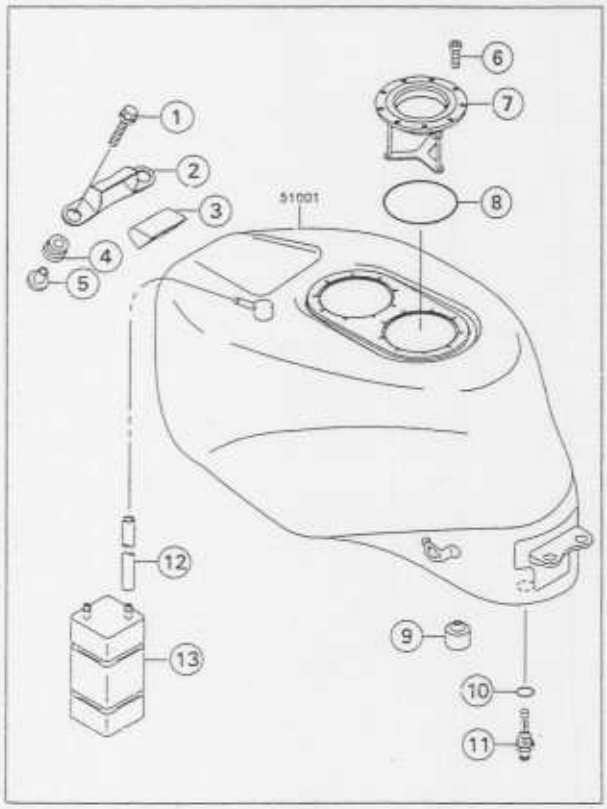
1. Throttle Valve Spring: 92144-1734
   Turning the spring about 1-1/5 from the free position, hook it at the throttle lever hooking position.
2. Spring free position
3. Throttle Cable Stay: 35011-1661
4. Throttle Valve: 16025-1181

Fuel Tank (Optional Parts):

A large capacity of the fuel tank is available as optional parts.

Parts	P/No.	Capacity
Fuel Tank	51001-1386	23.8L

●The following parts must be assembled to the optional fuel tank.



1. Bolt: 130J0645
2. Bracket: 32052-1382
3. Damper: 92160-1446
4. Damper: 92075-112
5. Collar: 92143-1515
6. Screw: 220B0514
7. Cap: 51048-1109
8. O-ring: 92055-1523
9. Damper: 92075-1002
10. O-ring: 92055-138
11. Tap: 49019-1070
12. Tube: 700Q07600
13. Reservoir: 43078-1120

- The air cleaner housing must be replaced with an optional part.

Parts	P/No.
Air Filter Case	11011-1419
Air Filter Case	11011-1420

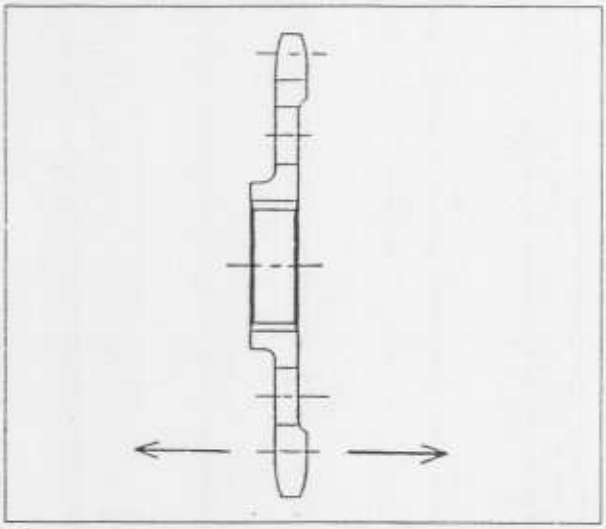
Final Drive:

The following two types of each engine sprocket and rear sprocket are available. Choose any necessary sprocket in the following table.

1) Engine Sprocket

Teeth	Parts Number	Applicable Drive Chain Size
15	13144-1191	#520
16	13144-1192	
17	13144-1193	

#520 Engine Sprocket Installation Direction



← Toward Outside → Toward Crankcase

2) Rear Sprocket

The rear sprocket are provided for the original wheel.
But only the optional wheel is suggested for the enduro race.

Teeth	For Original Wheel	For Optional Wheel	Applicable Drive Chain Size
37	–	42041-1426	#520
38	–	42041-1427	
39	42041-1394	42041-1388	
40	42041-1395	42041-1389	
41	42041-1396	42041-1390	
42	42041-1397	42041-1391	
43	42041-1398	42041-1392	
44	42041-1399	42041-1393	

3) Final Reduction Ratio

Engine \ Rear	37T	38T	39T	40T	41T	42T	43T	44T
15T	2.466	2.533	2.600	2.666	2.733	2.800	2.867	2.933
16T	2.312	2.375	2.438	2.500	2.563	2.625	2.2.688	2.750
17T	2.176	2.235	2.294	2.353	2.412	2.471	2.529	2.588

4) Drive Chain (Optional Parts)

#520 Joint endless drive chain (120 Links without O-ring) is available as an optional part.

Front Wheel, Rear Wheel (Optional Parts):

MARCHESINI or MARVIC wheel made of magnesium is available. Since the positions of disk brake bolt in it are different from KAWASAKI wheels, the standard disk brake plates can not be mounted on.

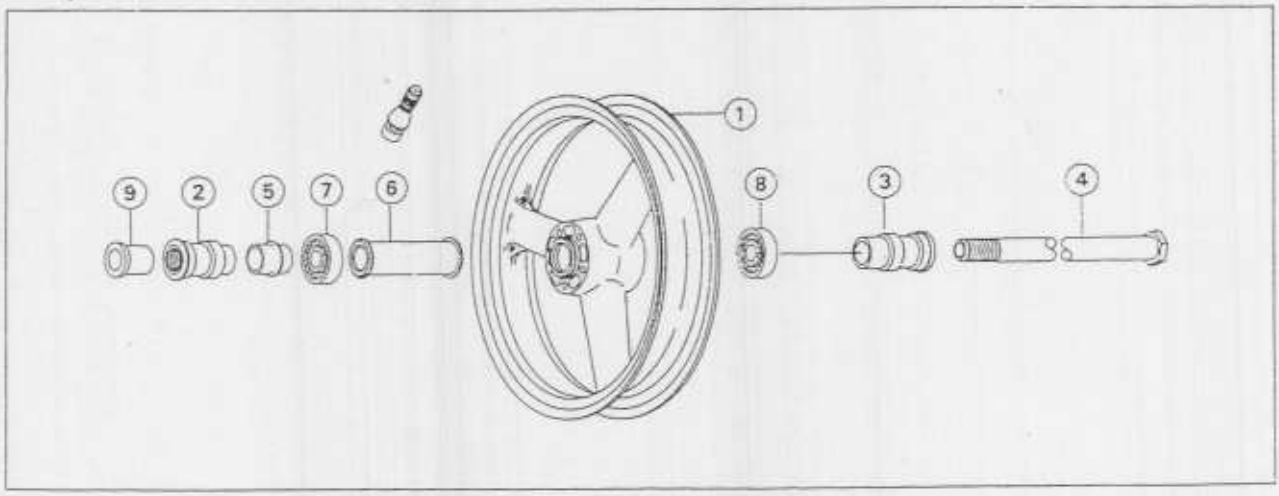
●Use MARCHESINI wheels and the optional disk brake plates, calipers and rear sprocket as a set.

1) Front Wheel

Two types of the wheel are available.

P/No.	Wheel Size	Applicable Tire
49058-1291	3.75-17	MICHELIN SLICK TIRE
		DUNLOP SLICK TIRE
49058-1292	3.50-17	RAIN TIRE

Component Parts



1. Front Wheel : 49058-1291 (3.50-17)
   : 49058-1292 (3.75-17)
2. Collar (L.H. Front Fork): 92143-1503
3. Collar (R.H. Front Fork): 92143-1502
4. Axle Shaft: 41068-1332
5. Collar (Press into No. 7 Bearing): 42143-1504
6. Collar (Wheel Center Collar): 92143-1501
7. Bearing: 601B6005UU
8. Bearing: 601B6204UU
9. Collar: 92143-1500

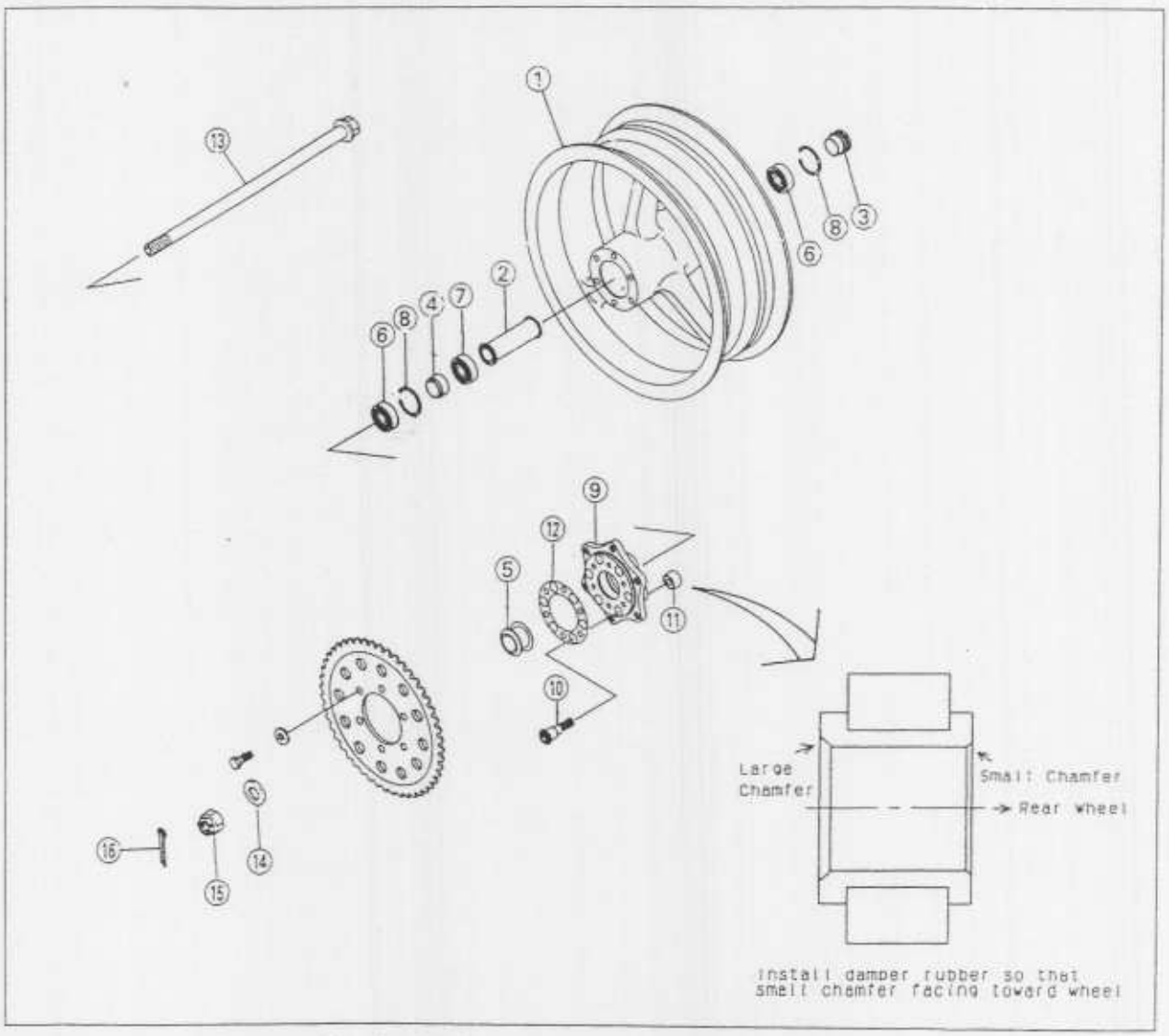
2) Rear Wheel

Five types of the wheel are available.

● Choose any suitable wheel in the table.

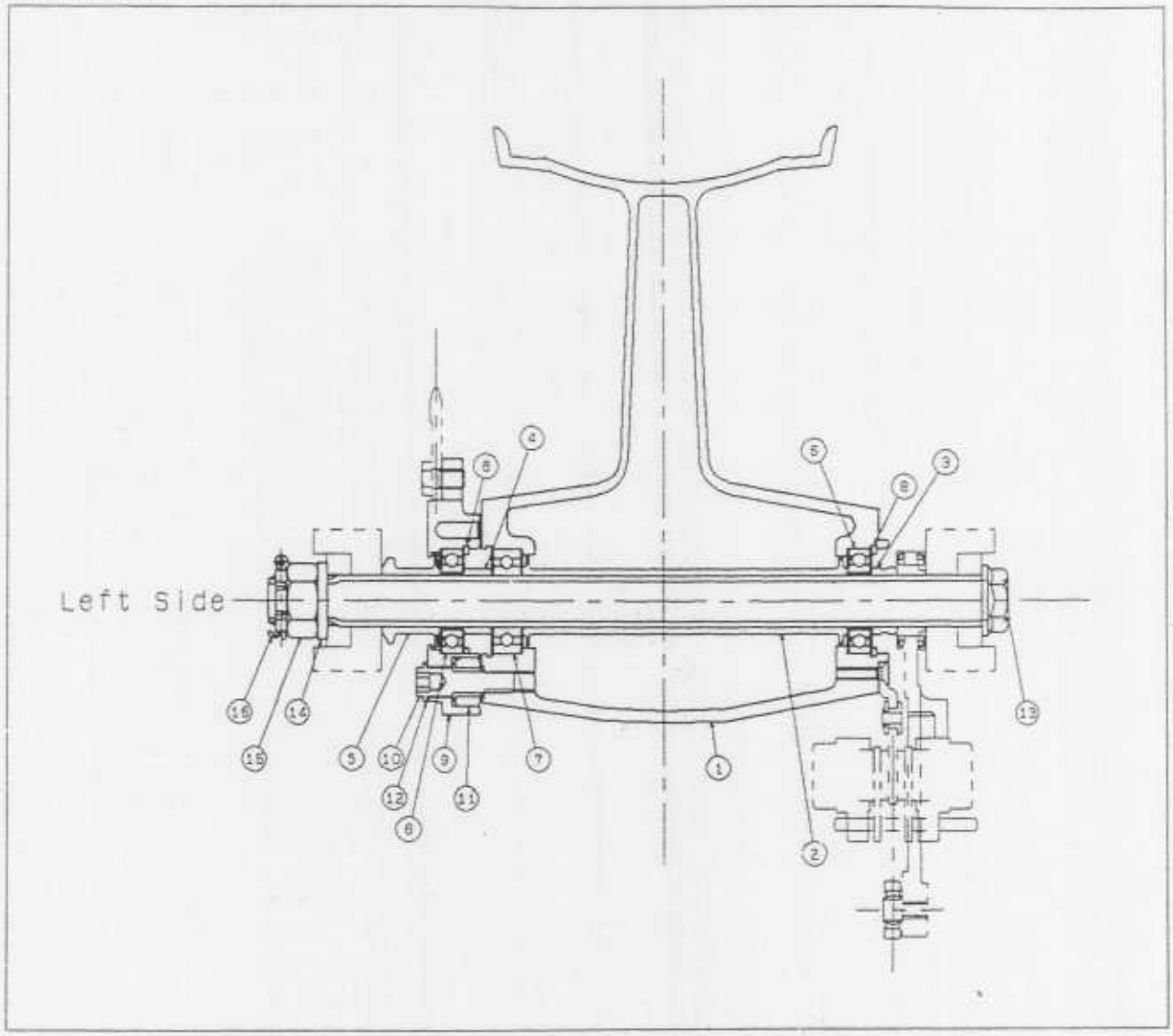
P/No.	Wheel Size	Applicable Tire
49058-1295	6.00-17	MICHELIN SLICK TIRE
		DUNLOP SLICK TIRE
49058-1293	5.50-17	MICHELIN RAIN TIRE
49058-1294	5.50-18	DUNLOP RAIN TIRE
49058-1311	5.75-17	MICHELIN, SLICK TIRE
49058-1310	6.25-17	DUNLOP, SLICK TIRE

Component Parts



Note) Install No. 11 damper rubber into No. 9 coupling so that small chamfer side faces toward the wheel.

Section View



1. Rear Wheel: 49658-1295
2. Collar: 92143-1505
3. Collar: 92143-1506
4. Collar: 92143-1550
5. Collar: 92143-1551
6. Bearing: 92045-1260
7. Bearing: 601B6205UU
8. Snap Ring: 92033-1043
9. Coupling: 42034-1123
10. Bolt: 92150-1609
11. Damper Rubber: 92160-1378
12. Washer: 92200-1141
13. Axle Shaft: 41068-1326
14. Washer: 92200-1081
15. Nut: 92015-1844
16. Cotter Pin: 550D4040

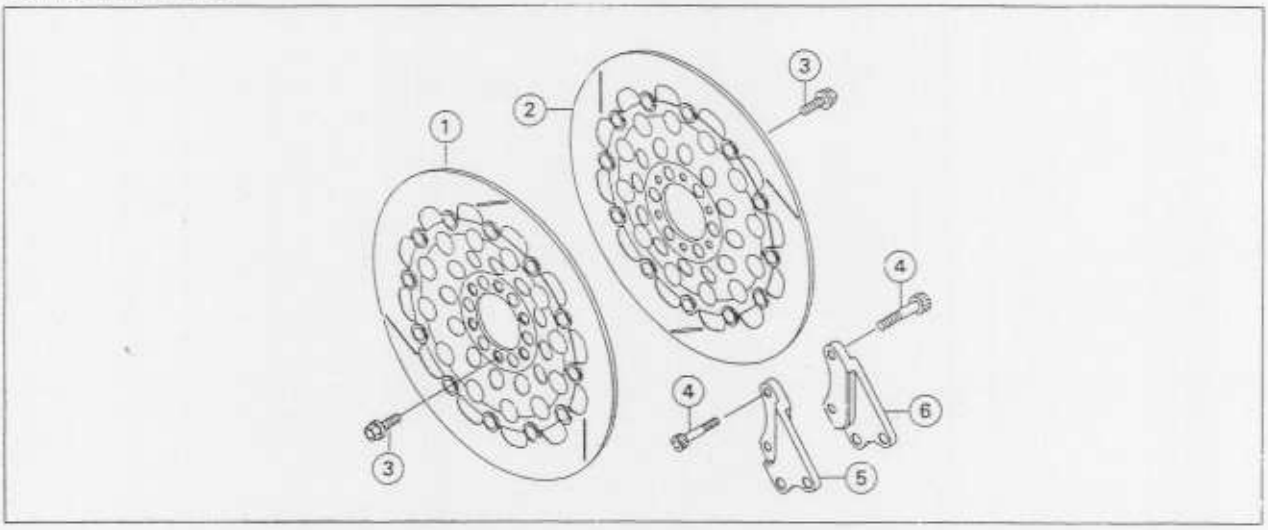
Disk Brake (Optional Parts):

The kit disk brakes are prepared only for mounting on the optional wheels.

- The coefficient of friction of kit pad is increased rather than the one of the original disk pad.

1) Front Brake

Component Parts

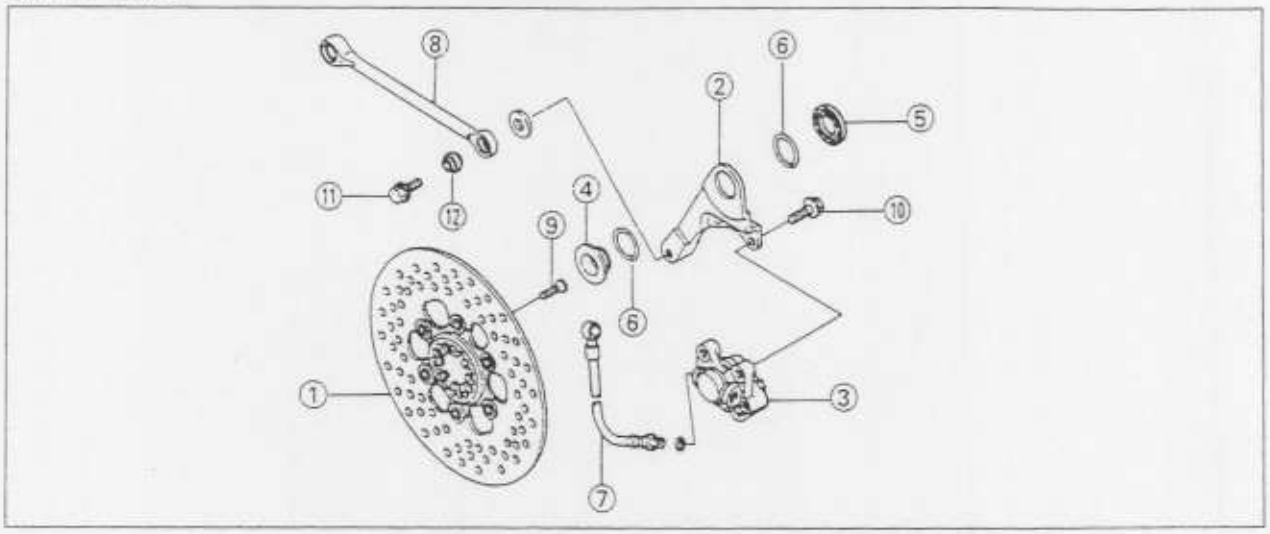


1. Disk Plate (L): 41080-1332
2. Disk Plate (R): 41080-1333
3. Bolt: 92150-1521
4. Bolt: 120P1030
5. Bracket (L): 11048-1230
6. Bracket (R): 11048-1231

NOTE

○ *Use the above brackets (1148-1230/1231) for BREMBO calipers (on the market).*

2) Rear Brake

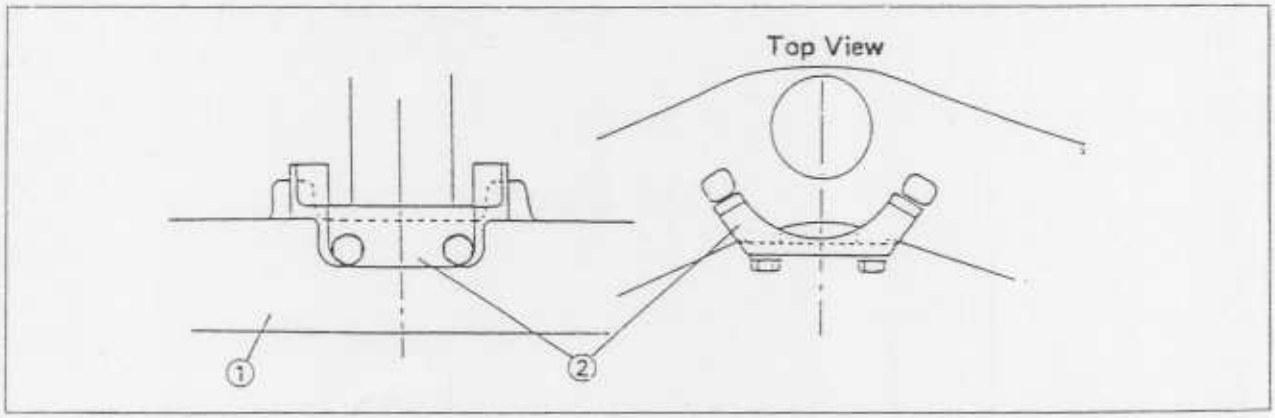


1. Disk Plate: 41080-1334
2. Bracket: 11047-1748
3. Caliper: 43041-1461
4. Collar: 92143-1583
5. Collar: 92143-1584
6. O-ring: 670C3039
7. Brake Hose: 43059-1709
8. Torque Rod: 43007-1164
9. Screw: 221R0625
10. Bolt: 92002-1417
11. Bolt: 92001-1691
12. Joint Ball: 59266-1094

Steering Stopper (All Racing):

The steering stopper is used for reducing steering angle (about 21 ~ 22°).

● Install the steering stopper on the front fork under bracket as shown.

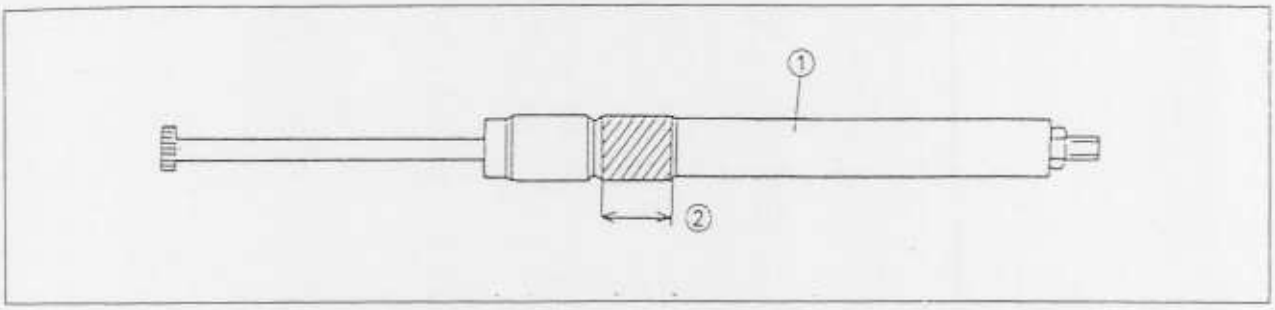


1. Front Fork Under Bracket
2. Bracket (Stopper): 111046-1753

Steering Damper (Optional Parts):

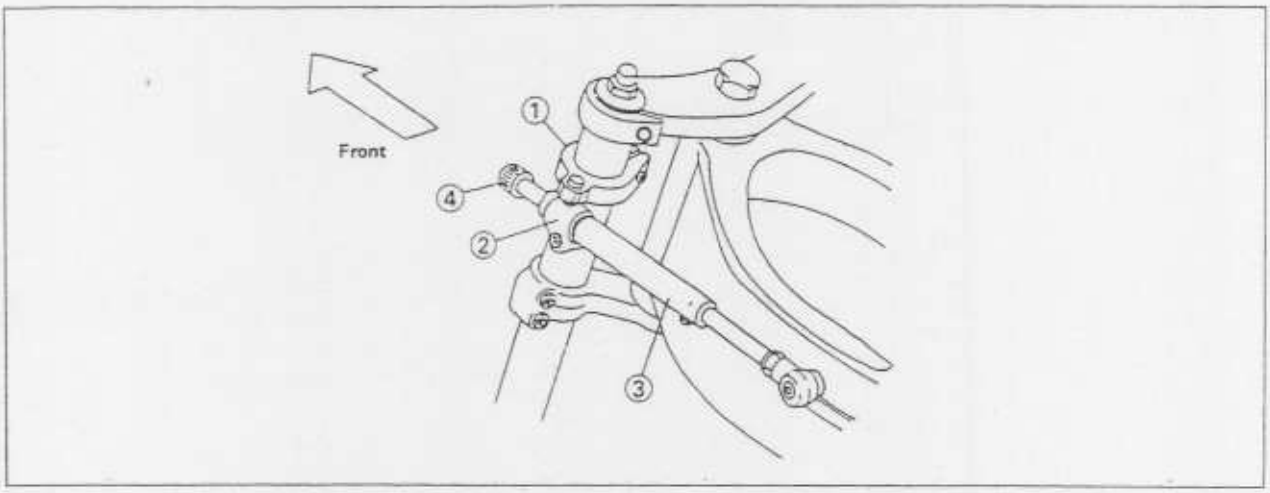
The steering damper is useful at high speeds to prevent handlebar vibration.

● Be sure to hold the grip area as shown with the clamp, or the steering damper will not work well.



1. Damper: 44003-1903
2. Grip Area

● Installing the steering damper as shown.
○ Clamp the holder (P/No. 13091-1836) on the left outer tube of the front fork.
○ Turn the handlebar back and forth, check that the steering damper (P/No. 44003-1903) operates without abnormal load.



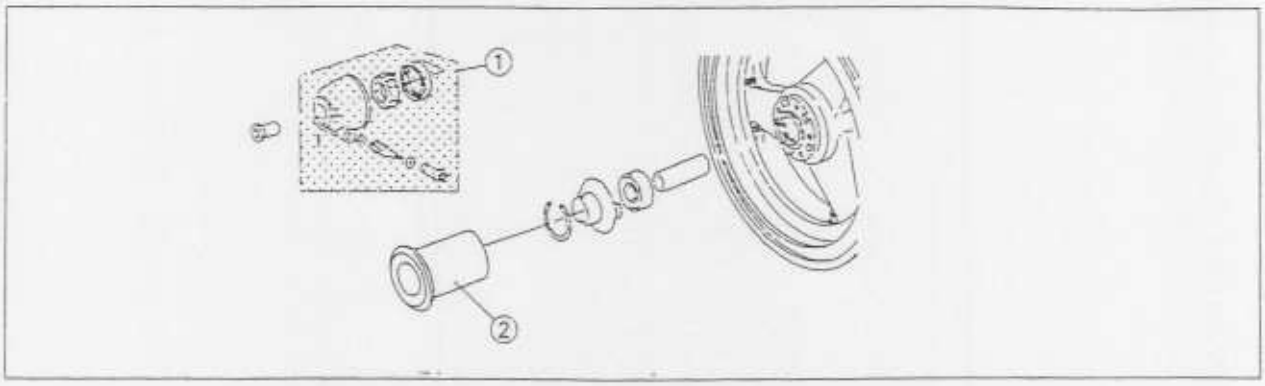
1. Holder: 13091-1836
2. Holder: 13091-1573
3. Steering Damper: 44003-1903
4. Adjuster

Damper Adjuster

Standard Position : 8th click (1st click is fully clockwise click)
Usable Range : 1st to 12 ~ 17th click

Front Hub:

Replace the speedometer gear unit with the kit collar (P/No. 92143-1500).

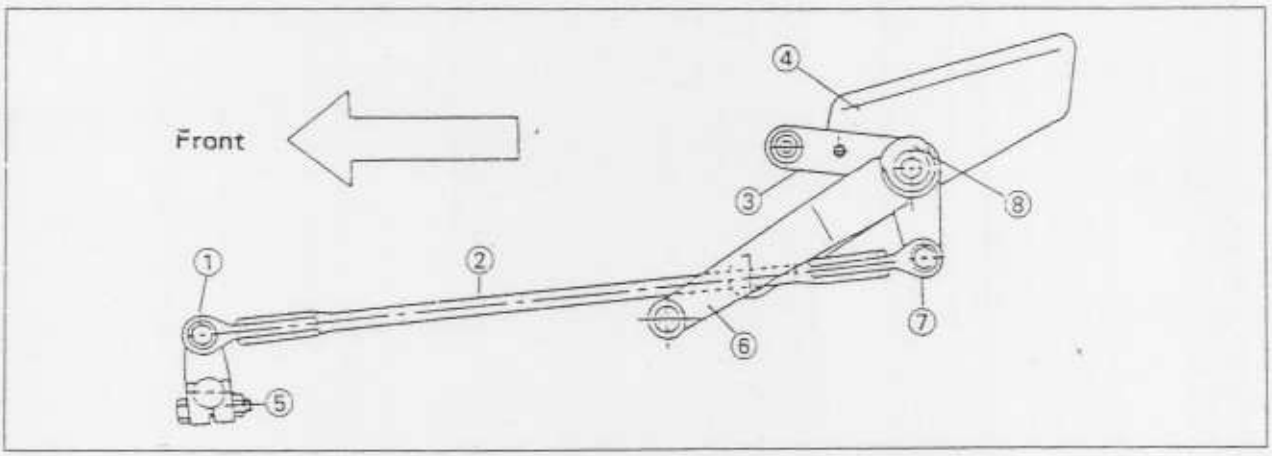


1. Removed Parts
2. Collar: 92143-1500

Shift Lever (Optional Parts):

The Shift Lever for racing use is available.

- Remove the following parts from the frame.
  Shift Rod, Shift Lever
  Left Front Footpeg, Bracket
- Install the left footpeg bracket (stay, guard) and the left front footpeg.
- Install the kit shift levers and kit shift rod lever on the shift shaft.



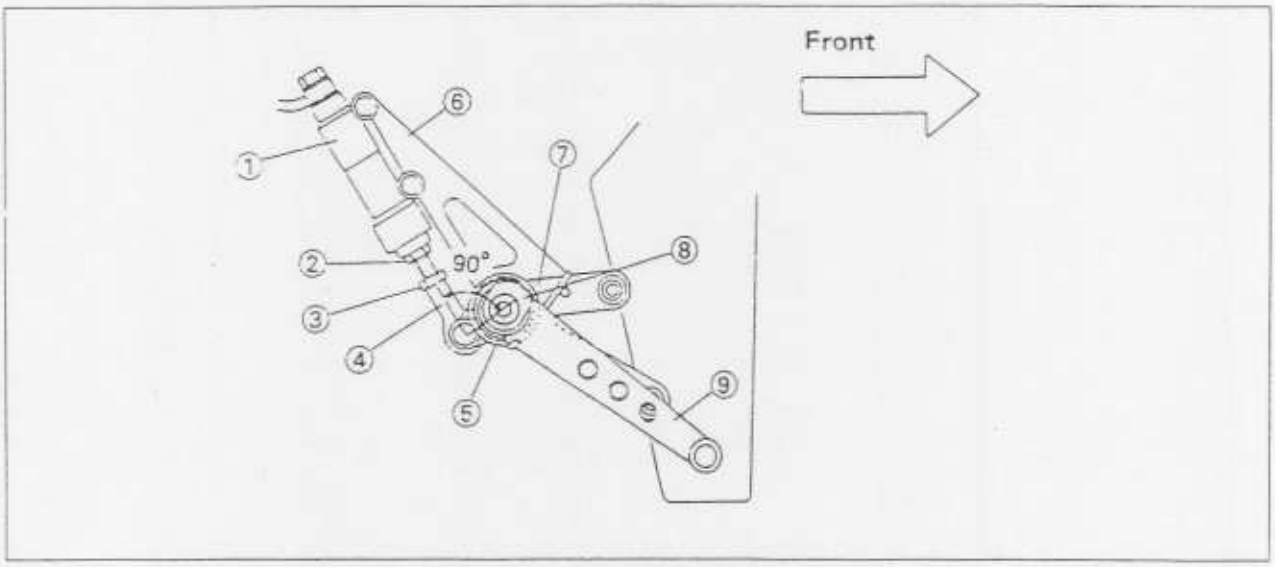
1. Knuckle Joint: 59266-1084
2. Shift Rod: 39111-1123
3. Stay: 35011-1625
4. Guard: 55020-1406
5. Shift Lever: 13156-1335
6. Shift Lever: 13156-1336
7. Knuckle Joint: 59266-1085
8. Left Footpeg: 34028-1342

Right Footpeg and Brake Pedal (Optional Parts):

The brake pedal for racing use is available.

- Removal Parts:
  Right Front Footpeg, Brake Pedal, Footpeg Bracket
- Original Parts:
  Rear Brake Master Cylinder
- Installed Kit Parts:
  Right Footpeg Bracket
  Right Footpeg Assembly
  Brake Pedal

- Install the brake master cylinder, removed from the frame, on the rear part of the right footpeg bracket. In this time, remove the bracket from the lower part of the master cylinder and remain the locknut.
- Link the knuckle joint in the lower part of the brake master cylinder with the rear end of the brake pedal with bolts and nuts.
- Adjust the height of the Brake Pedal
  - Using the adjuster locknut in the lower part of the master cylinder, set the suitable highest of the pedal.



1. Brake Master Cylinder (Original)
2. Adjuster (Original)
3. Locknut (Original)
4. Knuckle Joint (Original)
5. Return Spring (Original)
6. Bracket: 11047-1747
7. Stay: 35011-1625
8. Right Footpeg: 34028-1342
9. Brake Pedal: 43001-1317

Front Fork, Rear Shock Absorber (Optional Parts):

Each three kinds of springs are available for the front fork and rear shock absorber as optional parts. Select one of them in accordance with the rider's weight and track condition.

1) Spring Dimension

(1) Front Fork Main Spring

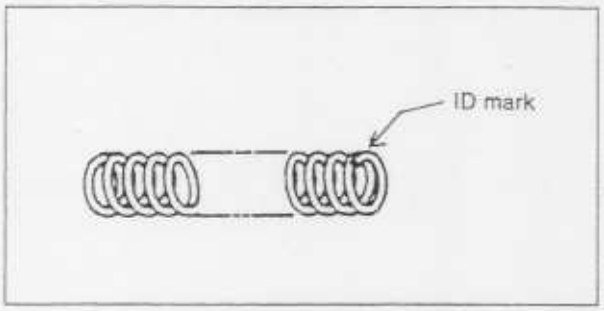
(Unit : mm)

P/No.	A x B x C	Number of winding	Spring constant
Original Spring	5.0 x 25.2 x 295.6	23.25	K = 1.0 kgf/mm
44026-1522	4.8 x 25.6 x 295.6	22.25	K = 0.85 kgf/mm
44026-1523	5.0 x 25.2 x 295.6	25.75	K = 0.90 kgf/mm
44026-1524	5.0 x 25.2 x 295.6	24.50	K = 0.95 kgf/mm

A : Coil Diameter B : Spring Inside Diameter C : Spring Free Length

Identification Mark:

The following ID marks is put on the springs.



One Slit (44026-1522)
Two Slit (44026-1523)
Three Slits (44026-1524)

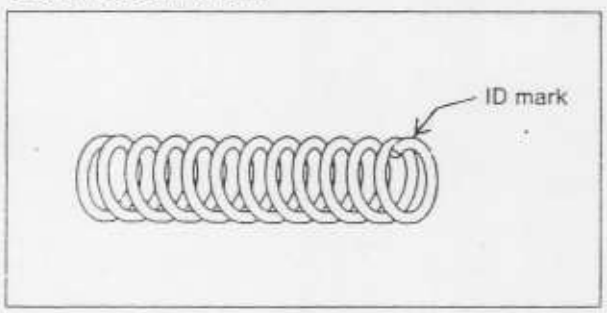
(2) Rear Shock Absorber

(Unit : mm)

P/No.	A x B x C	Number of winding	Spring constant
Original Spring	11.2 x 56 x 230	7	K = 7.5 kgf/mm
92144-1657	11.0 x 56 x 230	7	K = 6.75 kgf/mm
92144-1664	10.5 x 56 x 230	6.25	K = 6.5 kgf/mm
92144-1665	10.8 x 56 x 230	6.5	K = 7.0 kgf/mm

A : Coil Diameter B : Spring Inside Diameter C : Spring Free Length

Identification Mark:



Two White Lines (92144-1664)
Three White Lines (92144-1665)

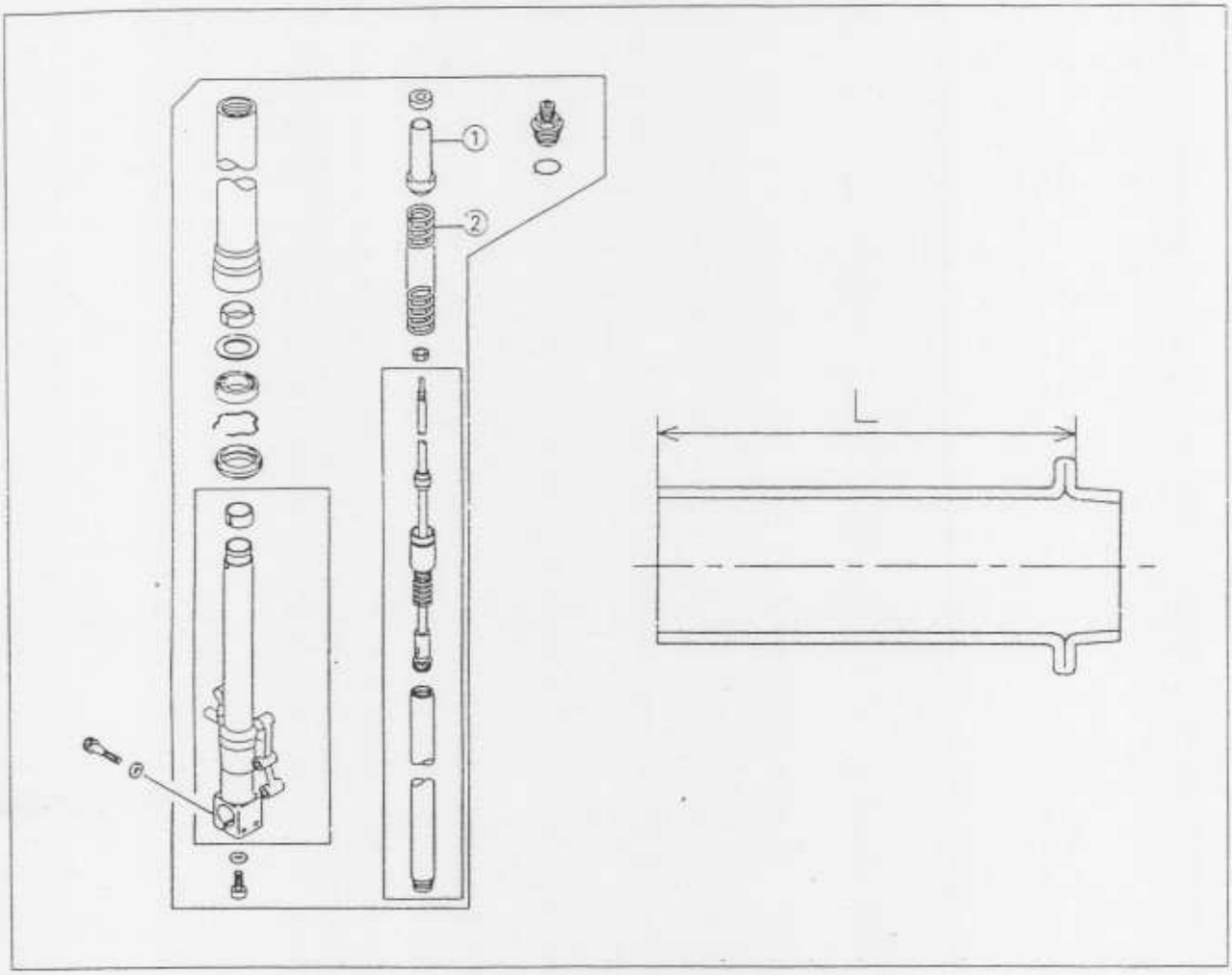
2) Spring Guide

An optional soft front fork main spring creates softer handling at the first spring stroke, if this condition does meet your requirement, adjust the spring preload using one of the two optional spring guides which are made longer than the original one.

Spring Guide Length

P/No.	Length
Original Part	50.0 mm
92026-1423	53.4 mm
92026-1424	58.4 mm

Front Fork Component Parts (Left Side)



1. Spring Guide
2. Main Spring

L: Spring Guide Length

2) Spring Replacement

(1) Front Fork Main Spring

Replace main the spring referring to the Fork Oil Change of the ZX750J/K Service Manual.

● The front fork main spring should be changed together with a spring guide as a set.

Service Data		Standard
Spring Preload Adjuster Position		Adjuster protrusion is 20 mm (8.5 Marks)
Rebound Damping Adjuster Position (Upper)		7th click from first click of fully clockwised position
Compression Damping Adjuster Position		4th click from first click of fully clockwised position
Front Fork Oil:	Type	KAYABA 01 (SAE5W)
	Capacity	380 ±4 mL
	Oil Level	112 ±2 mL (fully compressed without main spring)

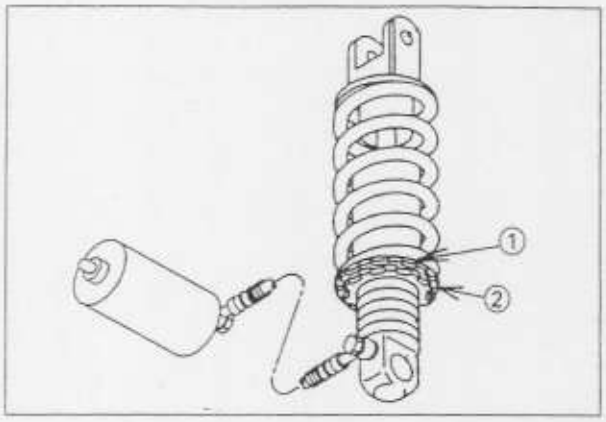
(2) Rear Shock Absorber

● Remove the rear shock absorber from the machine referring to the ZX750R-J/K Service Manual.

● Hold the oil pipe connected side of the rear shock absorber with a vise.

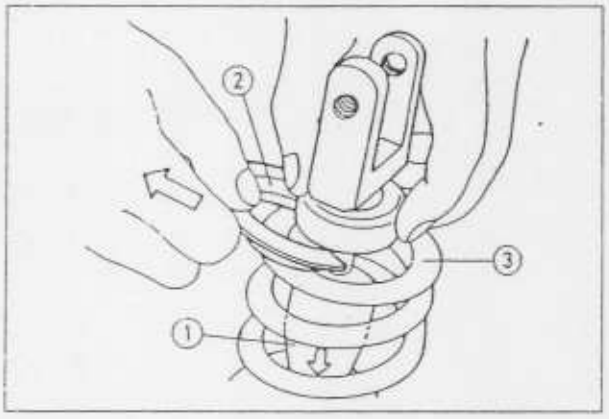
○ Do not disconnect the oil pipe from the rear shock body unless you change the oil capacity.
The standard oil capacity is 193 mL.
The standard gas pressure is 1,000 kPa (10.0 kg/cm²).

● Using the hook wrench (special tool: 57001-1101), loosen the locknut and turn the adjusting nut all the way down.



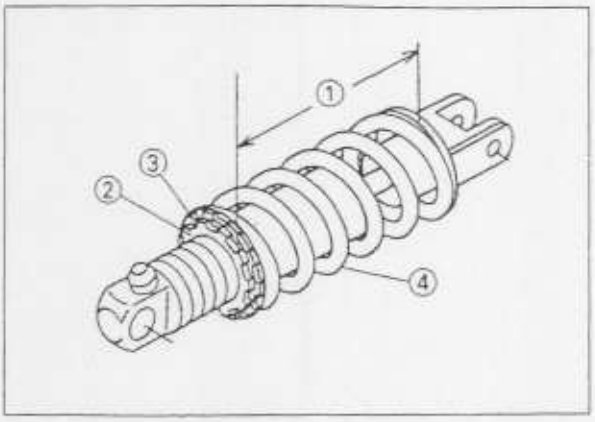
1. Adjusting Nut 2. Lock Nut

● Slip down the rubber bumper on the rear shock rod.
● Remove the spring retainer clip from the shock absorber and lift off the spring.



1. Rubber Bumper 3. Spring
2. Retainer Clip

● Replace the spring with one of the optional parts.
● Assembly is reverse order of the removal.
○ Position the adjusting and locknuts so that the spring length is 220 mm.



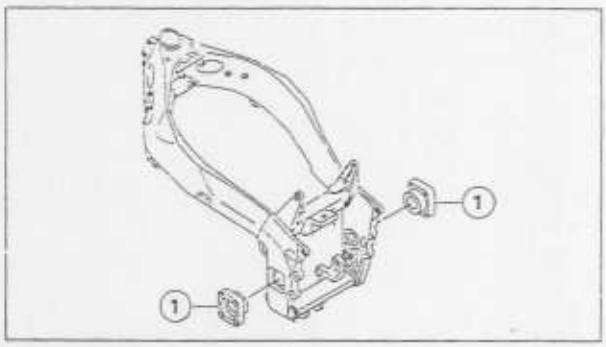
1. Spring Length 3. Adjusting Nut
2. Locknut 4. Spring

Swing Arm Bracket (Optional Parts):

- Swing arm brackets which can change the swing arm pivot height causing change of rear wheel traction are available as optional parts.

Parts	P/No.	Q'ty	Remarks
Swing Arm Bracket	32036-1275	2	Height changes plus or minus 1 mm.
Swing Arm Bracket	32036-1276	2	Height changes plus or minus 2 mm.

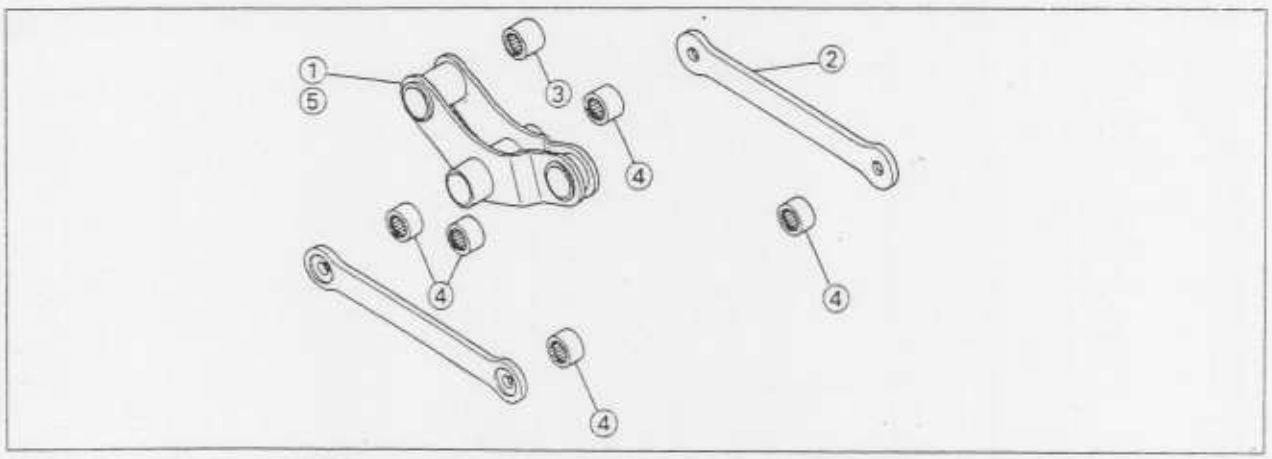
○ The optional swing arm brackets can be installed either directions, one direction increases the swing arm height 1 or 2 mm from the original but the other direction (up side down) lower the height 1 or 2 mm.



1. Swing Arm Brackets

Suspension Arm, Rod (Optional Parts):

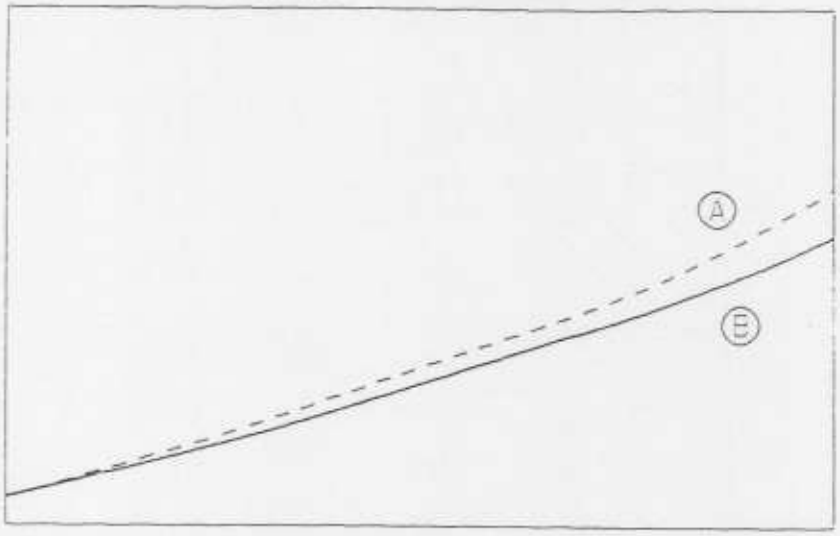
Light weight suspension arms and rods which are made by an aluminum plate are available as optional parts.



1. Suspension Arm (I): 39007-1214
2. Rod: 39111-1124
3. Bearing: 92046-1110
4. Bearing: 92046-1112
5. Suspension Arm (II): 39007-1227

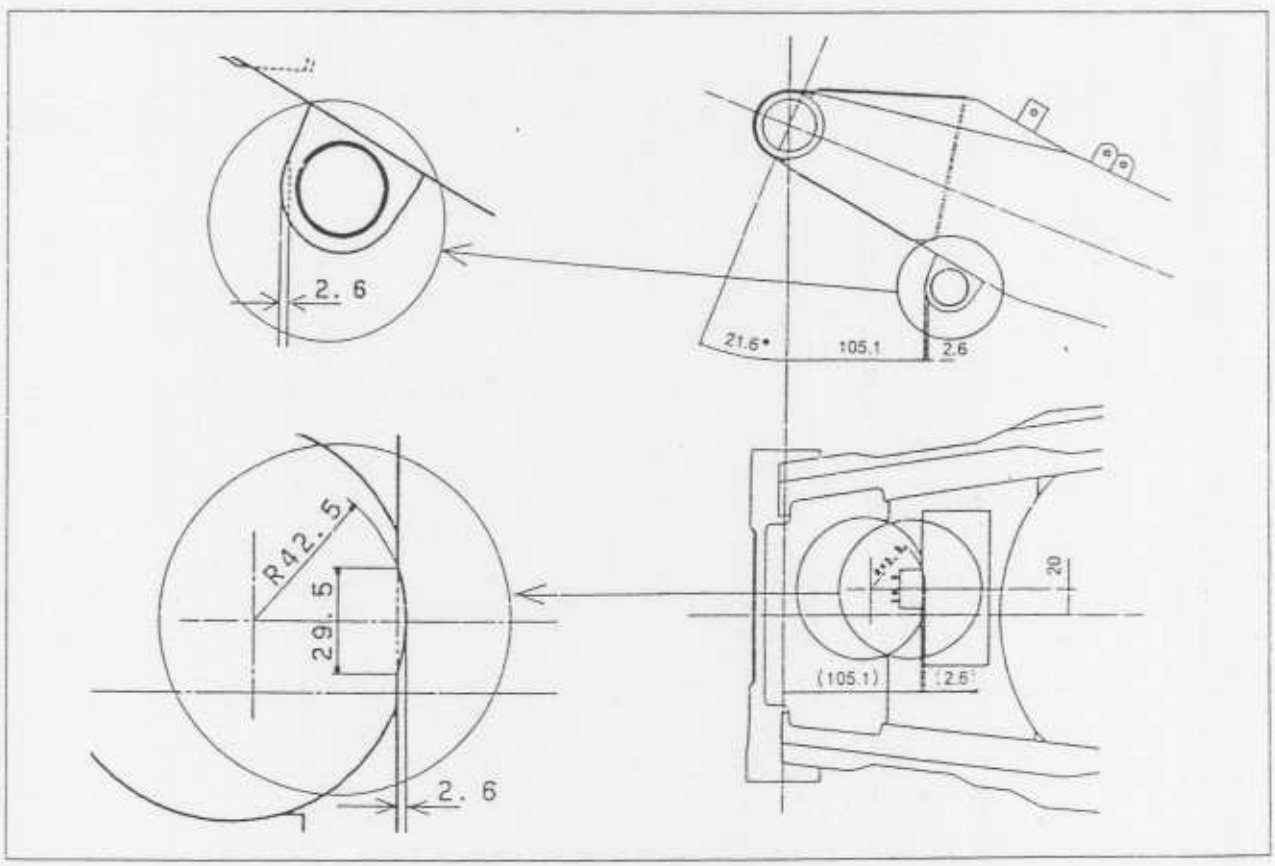
- The suspension arm (39007-1227) is designed for OHLINS rear shock, type KA2070, so do not use it for the original rear shock.
- Select 9.0 to 9.5 of the spring rate for the OHLINS rear shock.

Suspension Characteristic



Rear Wheel Travel

● The swing arm must be modified if any short suspension arm is intended to be used.
○ Grind the shaded area at the suspension arm bracket of the swing arm as shown.



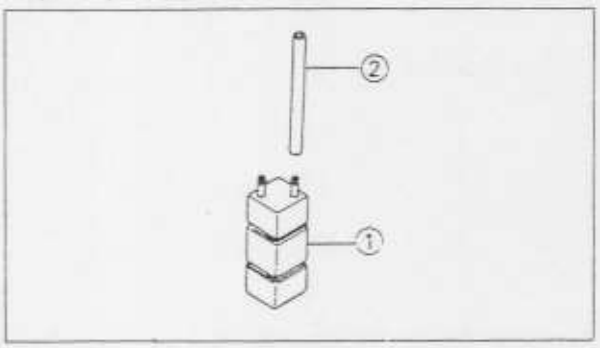
Catch Tank (Optional Parts):

The following catch tanks are available as optional parts.

1) Fuel Reservoir Tank

- Fasten the catch tank at suitable area of coupling.
- Route one part of the tube at the outside of the frame for visual inspection by the driver.

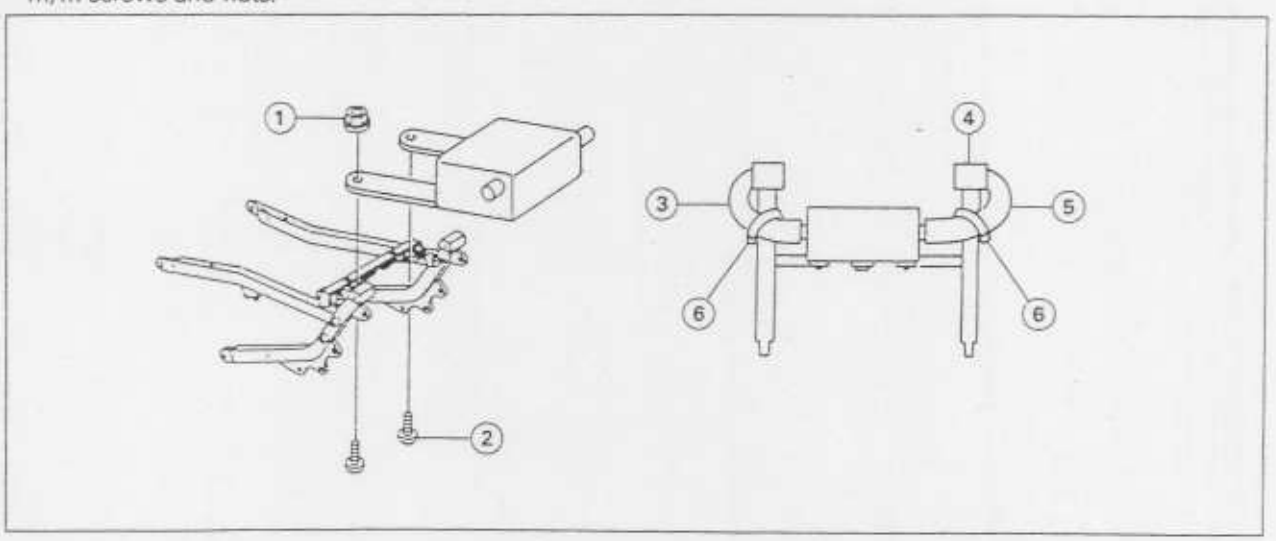
Capacity: Approx. 320 cc



1. Catch Tank: 43078-1120 2. Tube: 700Q07600

2) Oil Catch Tank

- Install a oil catch tank in the engine breather system. Oil Catch Tank Capacity: 800 cc.
- Mount the oil catch tank on the frame end with 6 m/m screws and nuts.



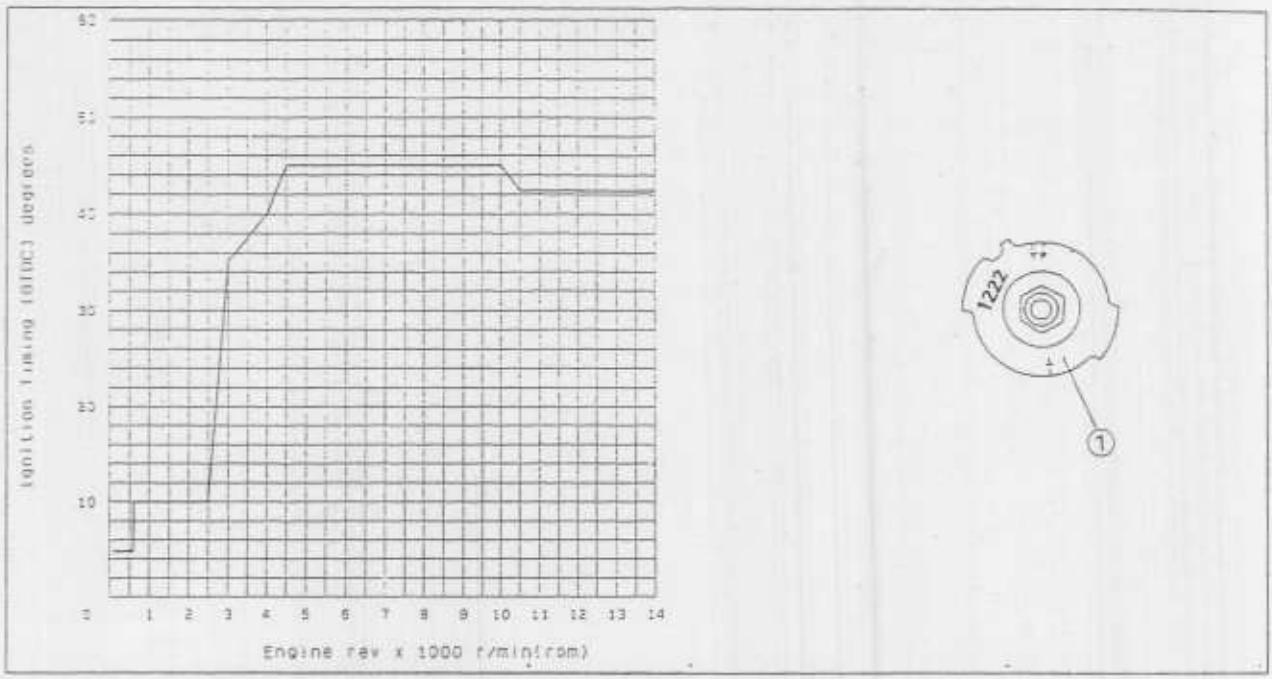
1. 6 m/m Screw
2. 6 m/m Nut
3. To Air Cleaner
4. Seat Rail
5. Tubes: 92190-1472
6. Fasten Tube with Tie-lap

- Connect the catch tank output and engine breather output with a tube (92190-1472).
- Connect the catch tank input and a hole of air cleaner housing with one more tube (92190-1472).
- A grommet (92071-1028) must be installed in the air cleaner housing for routing the tube in it.
- Plug a hole of oil catch tank with a 6 m/m bolt and wind the bolt with a wire.
- To avoid vibration, the tubes must be fastened with a tie-lap.

Electric Parts

Igniter:

- ● Use the kit igniter and the original timing rotor as a set.
- ○ Replace the valve spring with the kit part when using the kit igniter.

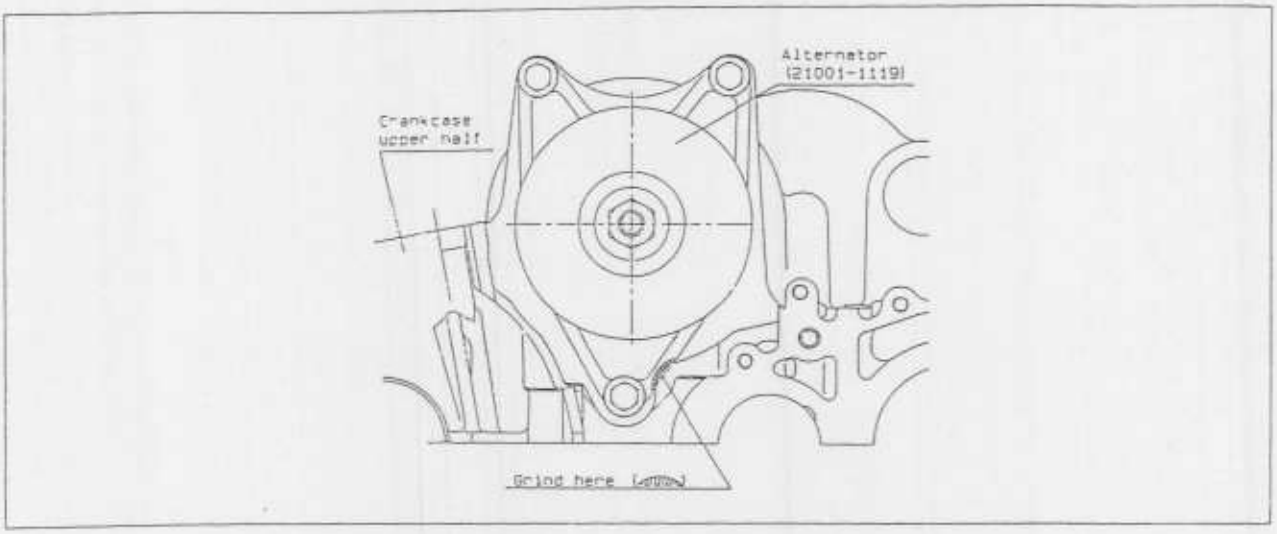


1. Timing Rotor (Original Part): 21007-1222

Alternator (Optional Parts):

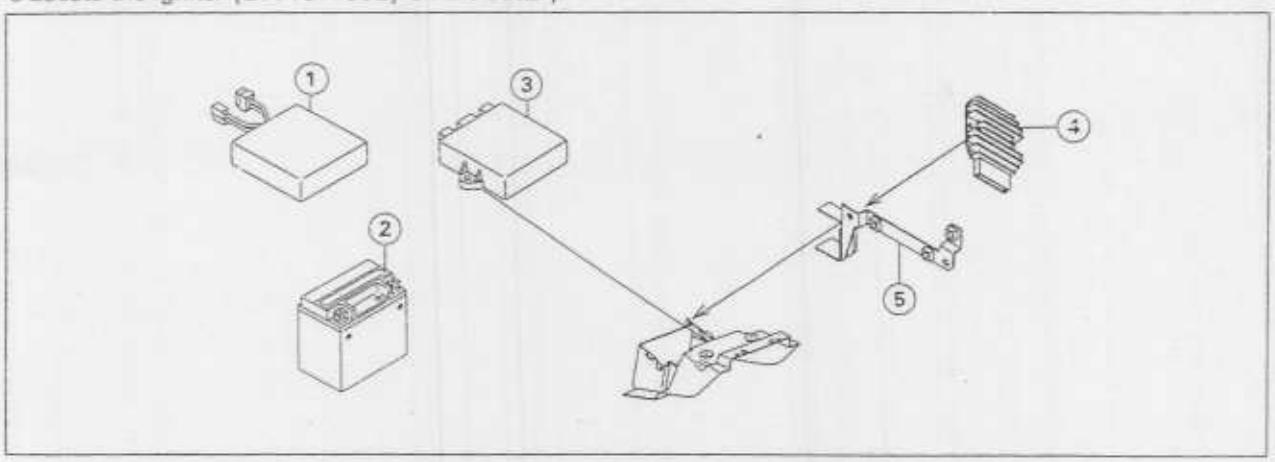
- ● For the Enduro Racing, use either the original alternator or the kit ones.
- ○ The kit alternator must be used together with the '93 kit regulator as a set.
- ○ The enduro machine should use the original oil pump gear train together with the original starter and starter clutch.

If the alternator lower flange hits against the crankcase rib when mounting on the crankcase, grind touching area of the lower flange.



Igniters and regulator location

- ●Locate the igniters (21119-1391, 21119-1392) and regulator as shown.
- ○Locate the igniter (21119-1392) on the battery.



1. Igniter (DC-CDI): 21119-1392
2. Battery
3. Igniter: 21119-1391
4. Regulator: 21066-1068
5. Bracket: 11048-1209

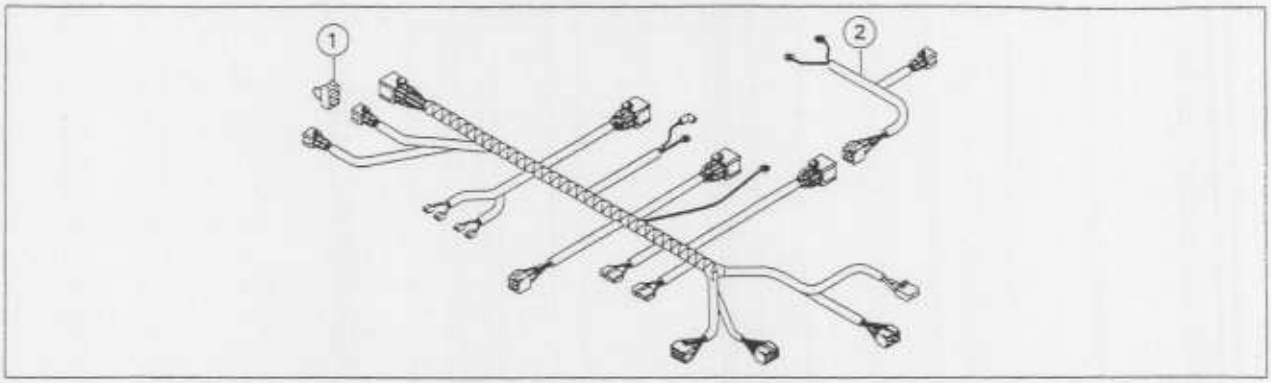
Battery (Optional Parts):

- ●Use the original battery or a battery with 12 V 7 Ah or more capacity.

Main Harness:

- ●Replace the main harness with the kit harness. The kit harness consists of the following two harness and leads.
  - **Wire Harness (with Transistor Igniter): 26030-1206**
  - **Wire Harness (with CDI Igniter): 26030-1207**
  - **Wire Harness (Enduro with CDI Igniter): 26030-1208**
  - **Wire Lead (Connection between Battery and Main Harness): 26011-1566**
  - **Wire Lead (Use only for engine starting): 26011-1567**

See pg.62 for the Wire Harness Combination Parts Table.



1. Wire Lead: 26011-1567
2. Wire Lead: 26011-1566

Removal Parts

When using the racing kit main harness, the following parts are not required.

Original Main Harness
Rear Brake Light Switch
Turn Signal Light Switch, Signal Relay
Side Stand Switch
Ignition Switch
Cooling Fan, Cooling Fan Switch
Oil Pressure Switch
Junction Box
Headlight, Tail/Brake Lights
High Beam Relay, Low Beam Relay
Speed Meter
Horn

Original Parts

The following parts are needed for the '93 racing machine.

Pickup Coil
Fuel Pump, Fuel Pump Relay
Water Temperature Sensor
Tachometer
Water Temperature Gauge
Ignition Coils

Optional Switches

The following parts are available.

Engine Stop Switch: 27010-1321
Starter & Light Switch: 27010-1322

Wire Harness Combination Parts Table

Use the three optional wire harness together with the following parts as a set.

	Wire Harness (26030-1206)	Wire Harness (26030-1207)	Wire Harness (26030-1208)
Tachometer (original)	x	–	–
Tachometer (option)	–	x	x
Engine Stop Switch (27010-1321)	x	x	x
Starter Switch (27010-1322)	–	–	x
Wire Lead (26011-1566)	x	x	–
Wire Lead (26011-1567)	x	x	x
Sensor (27010-1306)	x	x	x
Sensor Relay (27034-1467)	x	x	x
Igniter (21119-1391)	x	x	x
Igniter (21119-1392)	–	x	x
Pulsing Coil (original)	x	x	x
Ignition Coils (21121-1224) 21121-1225)	original ones	x	x
Regulator (21066-1068)	–	–	x
Alternator (21001-1119)	–	–	x
Fuel Pump Relay (27002-1085)	Original one	x	x
Spark Plug (92070-1211)	STD Kit (92070-1181)	x	x

NOTE

- *26030-1206: with Transistor Igniter*
- *26030-1207: with CDI Igniter*
- *26030-1208: Enduro with CDI Igniter*

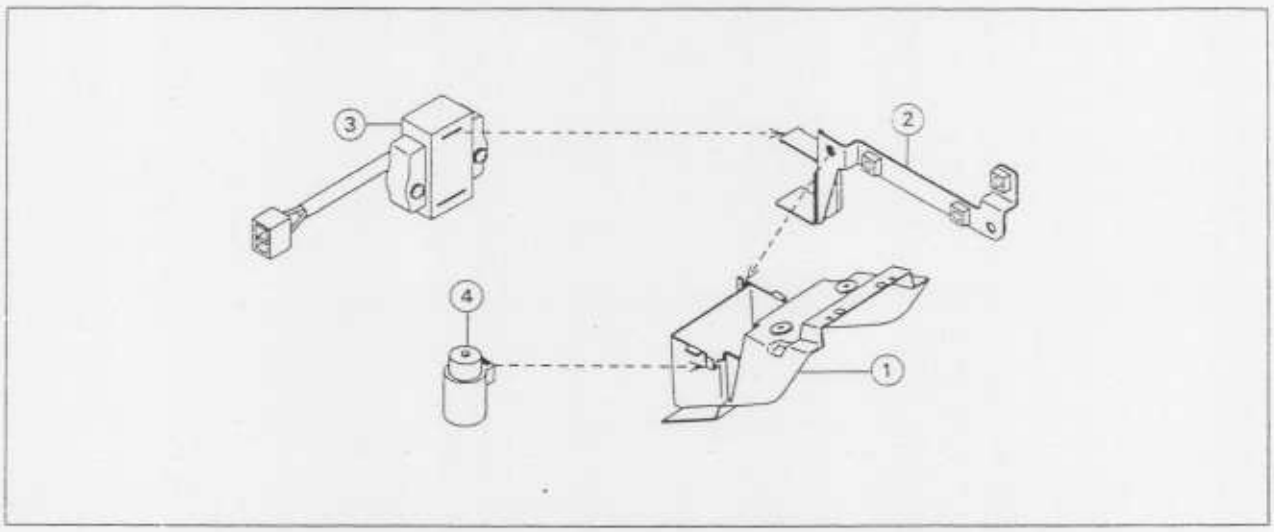
Fuel Pump Stop Switch Kit Parts Assembly (Optional Parts):

For an emergency situation, the following fuel pump stop switch kit is available.

Switch: 27010-1306
Relay: 27034-1056
Bracket: 11048-1209

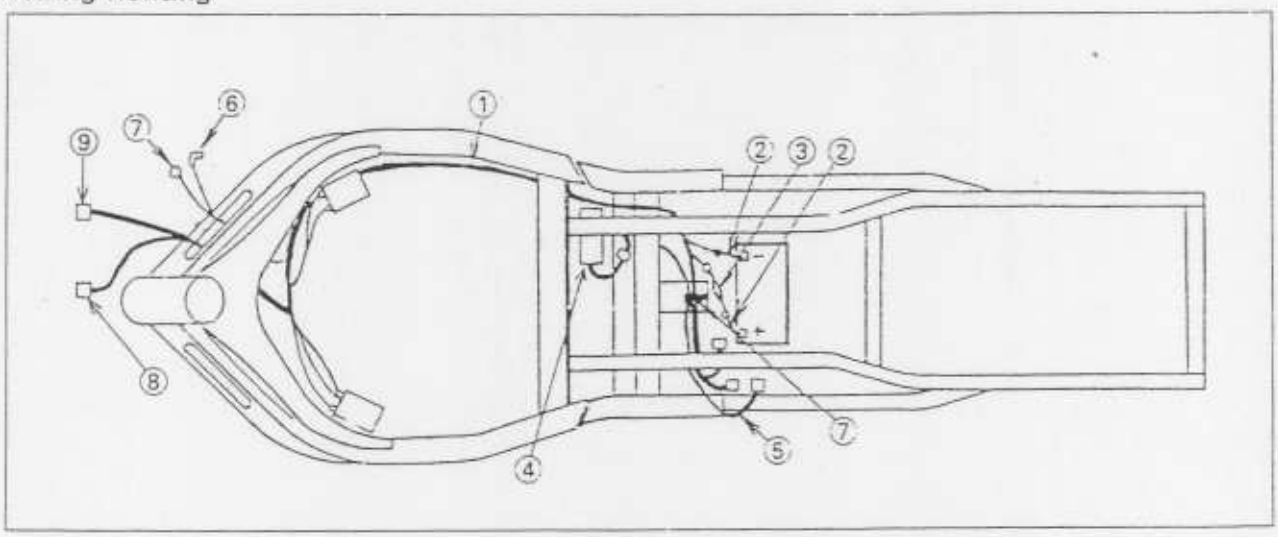
Installation

- Mount the kit bracket on the bolt hole, where the original junction box was tightened, at front right side of the battery case.
- Insert the kit sensor onto toes of the kit bracket.



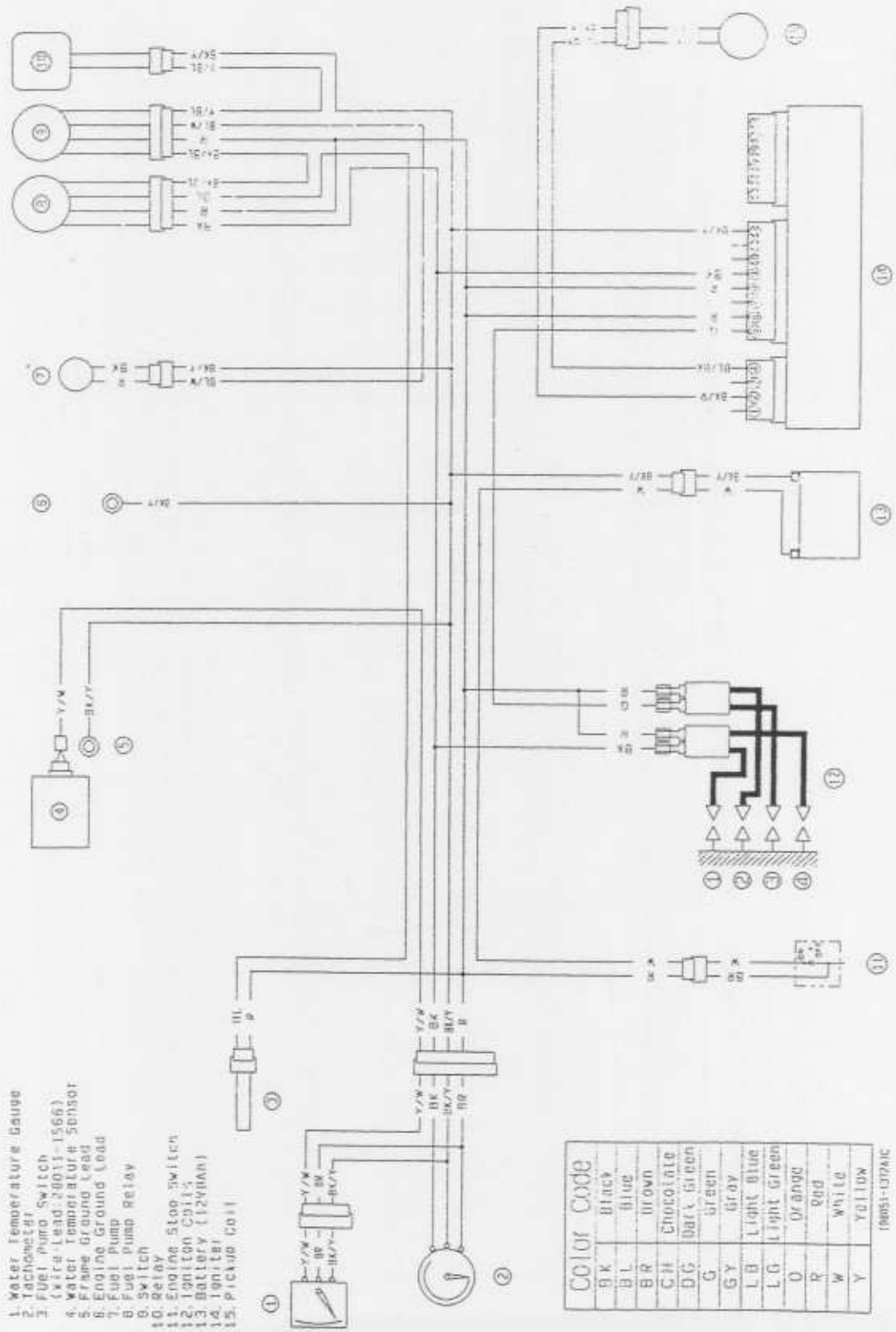
1. Battery Case (Original)
2. Bracket (11048-1209)
3. Sensor
4. Sensor Relay

Wiring Routing

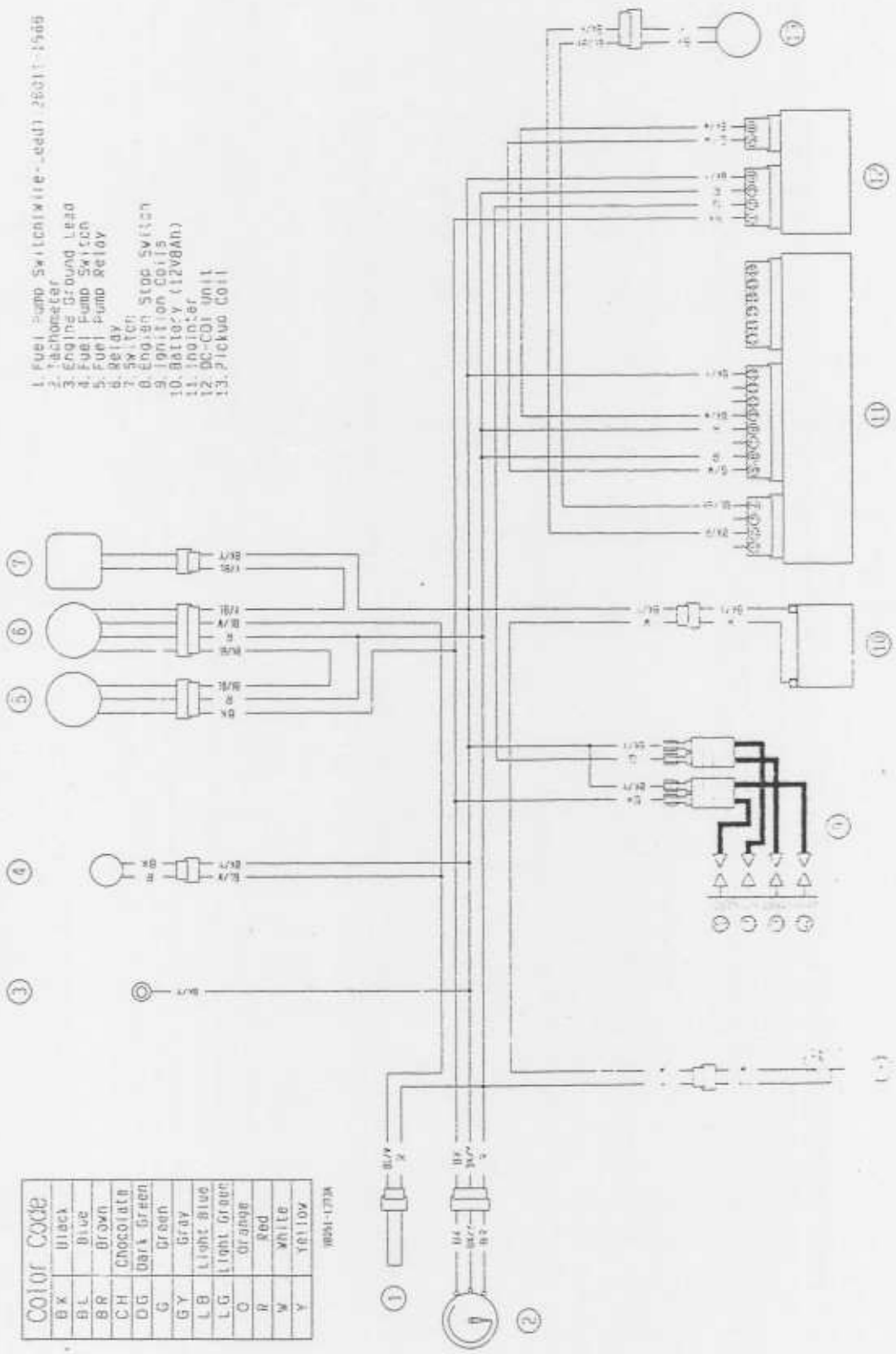


1. Main Harness: 26030-1206
2. Wire Lead: 26011-1566
3. Fuse Box
4. Fuel Pump
6. Water Temperature Sensor Lead
7. Clamp the main harness at the white taped position.
8. Meter Unit Connector
9. Connector for fuel pump lead

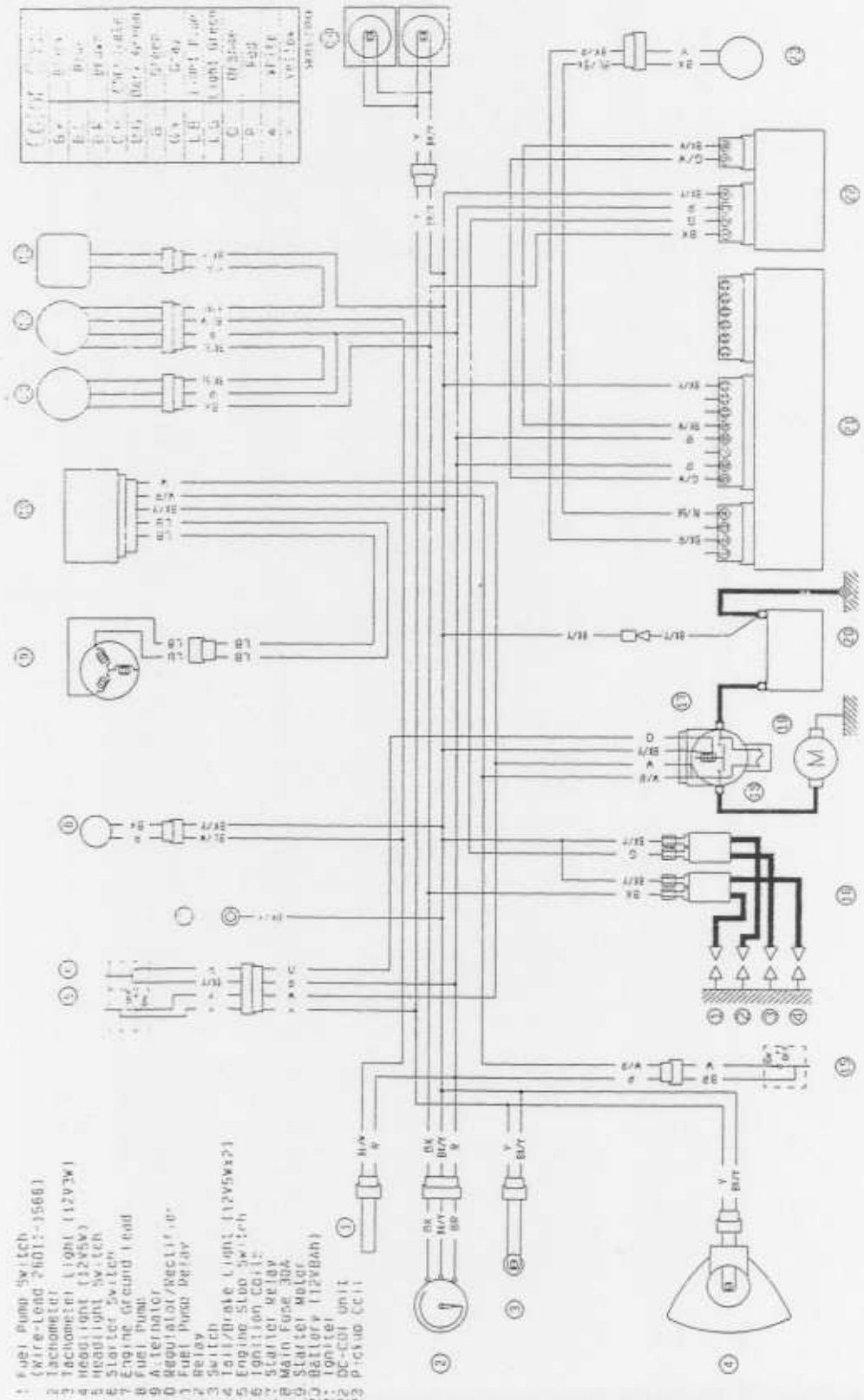
Wiring Diagram
(with Transistor Igniter)

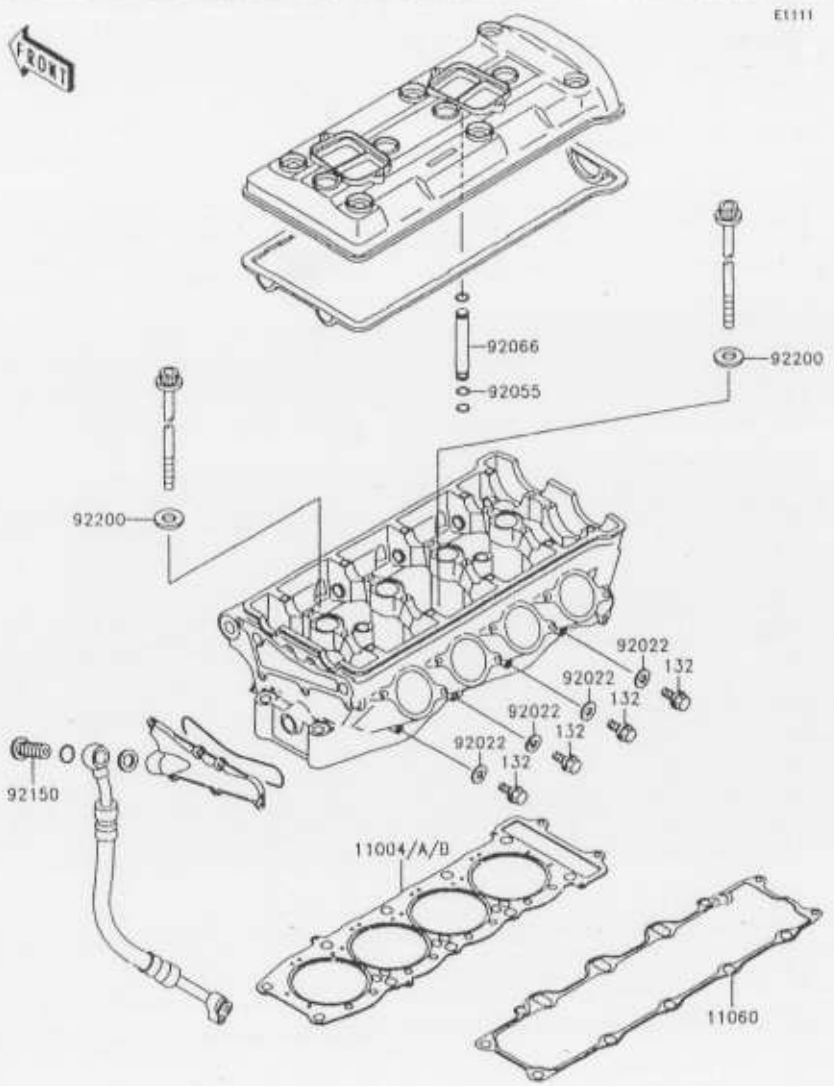


Wiring Diagram
(with CDI Igniter)



Wiring Diagram
(Enduro with CDI Igniter)





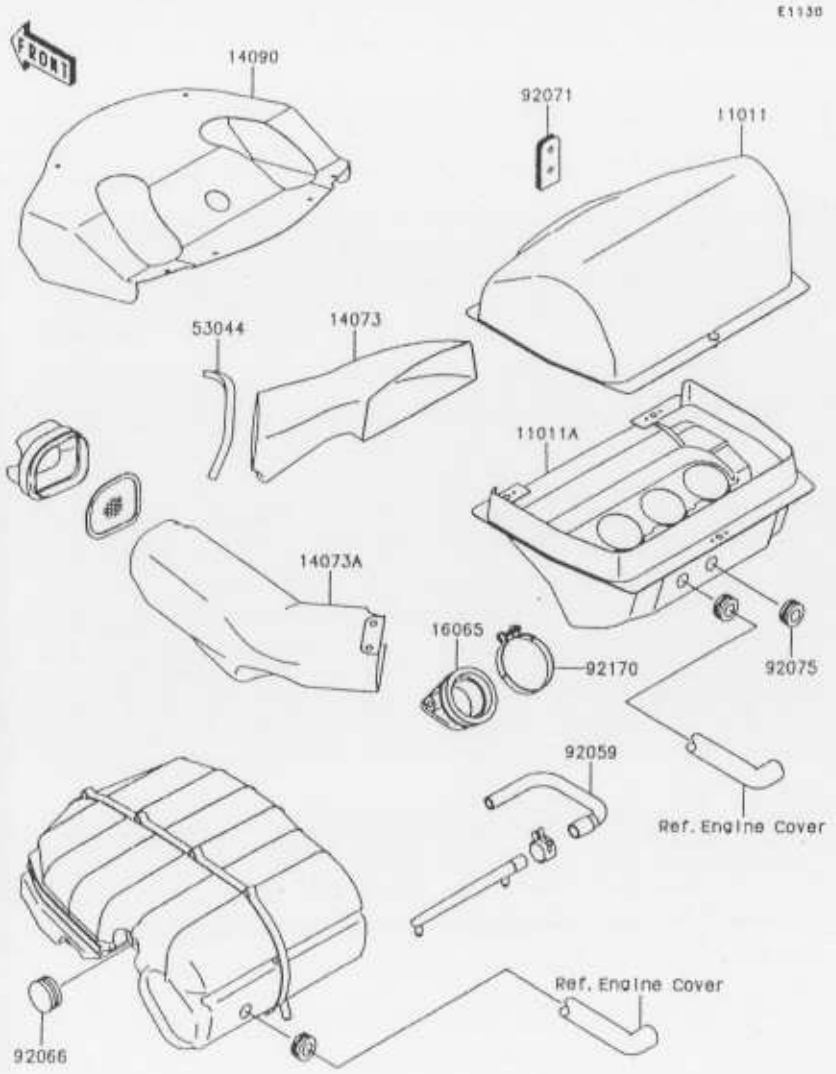
E1111

Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
11004	11004-1223	GASKET-HEAD,T=0.65,STD		3
11004A	11004-1242	GASKET-HEAD,T=0.60		3
11004B	11004-1243	GASKET-HEAD,T=0.70		3
11060	11060-1093	GASKET,CYLINDER BASE		3
92022	92022-304	WASHER,6.2X11X1		4
92055	92055-1023	RING-O		4
92066	92066-1387	PLUG		4
92150	92150-1700	BOLT		1
92200	92200-1182	WASHER		8
132	132G0612	BOLT-FLANGED-SMALL		4

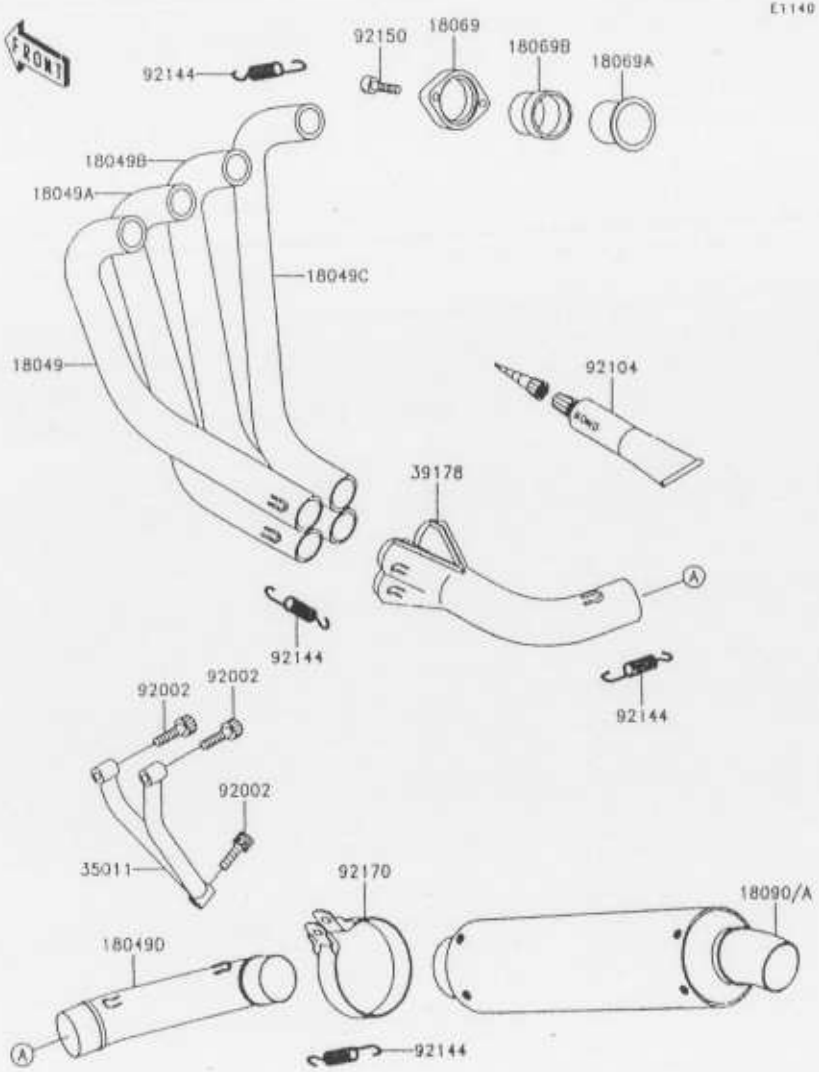
This catalog covers:
'93 ZX750-MR1 Engine

GRID NO. **B-4**

This grid covers:
Air Filter



Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
11011	11011-1419 (OPTION)	CASE-AIR FILTER,UPP		1
11011A	11011-1420 (OPTION)	CASE-AIR FILTER,LWR		1
14073	14073-1583 (OPTION)	DUCT		1
14073A	14073-1584 (OPTION)	DUCT		1
14090	14090-1345 (OPTION)	COVER		1
16065	16065-1290 (OPTION)	HOLDER-CARBURETOR		4
53044	53044-1204	TRIM,L = 460		1
92059	92059-1674	TUBE,AIR SWITCH VALVE,LH		1
92066	92066-1321	PLUG,25MM		1
92071	92071-1217 (OPTION)	GROMMET		1
92075	92075-294 (OPTION)	DAMPER		1
92170	92170-1403 (OPTION)	CLAMP		4



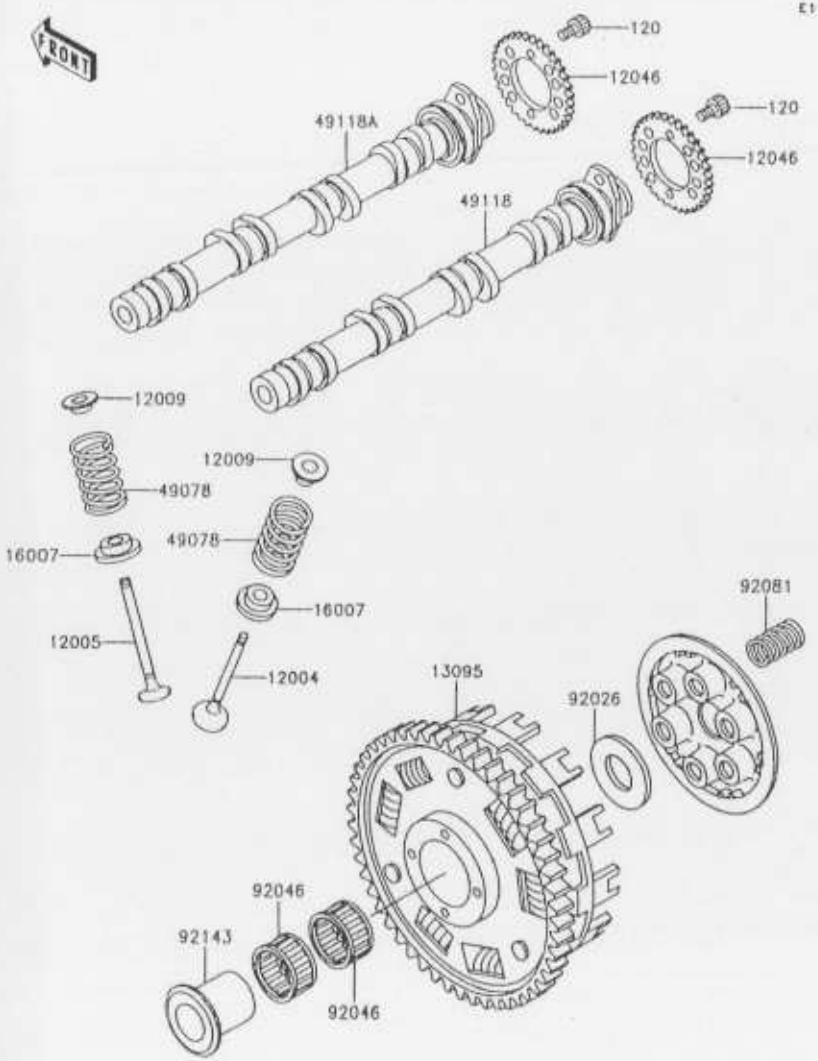
E1140

Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
18049	18049-1606	PIPE-EXHAUST,#1		1
18049A	18049-1607	PIPE-EXHAUST,#2		1
18049B	18049-1608	PIPE-EXHAUST,#3		1
18049C	18049-1609	PIPE-EXHAUST,#4		1
18049D	18049-1610	PIPE-EXHAUST,JOINT		1
18069	18069-1106	HOLDER-EXHAUST PIPE,PLATE		4
18069A	18069-1117	HOLDER-EXHAUST PIPE,INNER		4
18069B	18069-1118	HOLDER-EXHAUST PIPE,OUTER		4
18090	18090-1292	BODY-COMP-MUFFLER		1
18090A	18090-1303 (OPTION)	BODY-COMP-MUFFLER,DOMESTIC ONLY		1
35011	35011-1562	STAY,MUFFLER		1
39178	39178-1205	MANIFOLD-COMP-EXHAUST		1
92002	92002-1178	BOLT,SOCKET,8X20		3
92104	92104-1055	GASKET-LIQUID,3B#1209		1
92144	92144-1352	SPRING		12
92150	92150-1535	BOLT,SOCKET,8X20		8
92170	92170-1059	CLAMP		1

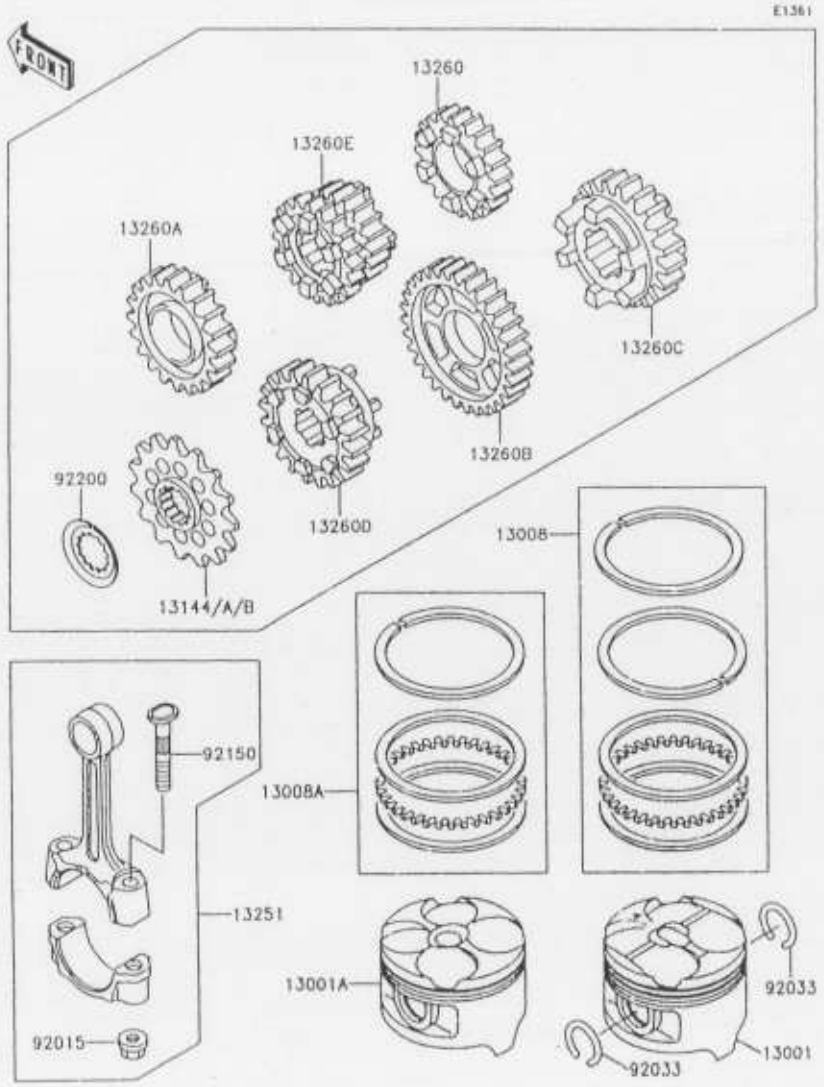
This catalog covers:
'93 ZX750-MR1 Engine

GRID NO. **B-6**

This grid covers:
Valve/Camshaft



Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
12004	12004-1104	VALVE-INTAKE		8
12005	12005-1164	VALVE-EXHAUST		8
12009	12009-1071	RETAINER-VALVE SPRING		16
12046	12046-1128	SPROCKET,CAMSHAFT,30T		2
13095	13095-1254	HOUSING-COMP-CLUTCH		1
16007	16007-1165	SEAT-SPRING		16
49078	49078-1118	SPRING-ENGINE VALVE		16
49118	49118-1096	CAMSHAFT-COMP,IN		1
49118A	49118-1097	CAMSHAFT-COMP,EX		1
92026	92026-1422	SPACER,CLUTCH,25X46X4.4		1
92046	92046-1215	BEARING-NEEDLE		2
92081	92081-1033	SPRING,CLUTCH		6
92143	92143-1579	COLLAR		1
120	120P0610	BOLT-SOCKET,6X10		4

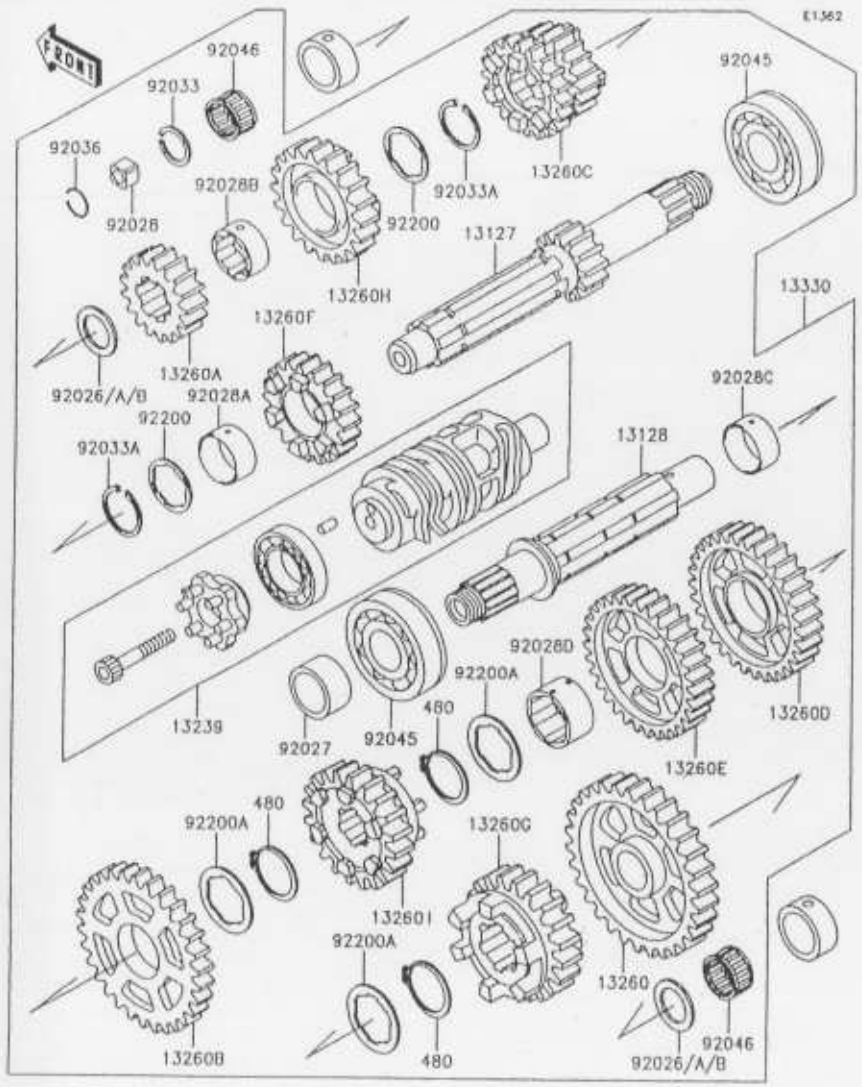


Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
13001	13001-1387	PISTON-ENGINE		4
13001A	13001-1394 (OPTION)	PISTON-ENGINE,FORGED		4
13008	13008-1136	RING-SET-PISTON,STD		4
13008A	13008-1154 (OPTION)	RING-SET-PISTON		4
13144	13144-1191	SPROCKET-OUTPUT,15T(#520)		1
13144A	13144-1192	SPROCKET-OUTPUT,16T(#520)		1
13144B	13144-1193	SPROCKET-OUTPUT,17T(#520)		1
13251	13251-1104 (OPTION)	ROD-ASSY-CONNECTING,LONG		4
13260	13260-1269 (OPTION)	GEAR,INPUT,5TH,23T		1
13260A	13260-1270 (OPTION)	GEAR,INPUT,TOP,24T		1
13260B	13260-1271 (OPTION)	GEAR,OUTPUT,4TH,33T		1
13260C	13260-1362 (OPTION)	GEAR,OUTPUT,5TH,32T		1
13260D	13260-1363 (OPTION)	GEAR,OUTPUT,TOP,31T		1
13260E	13260-1382 (OPTION)	GEAR,INPUT,3RD&4TH,21T&22T		1
92015	92015-1311	NUT,FLANGED,8MM		8
92033	92033-1099	RING-SNAP,20.5X1.2		8
92150	92150-1216	BOLT,CONNECTING ROD,8MM		8
92200	92200-1065	WASHER		3

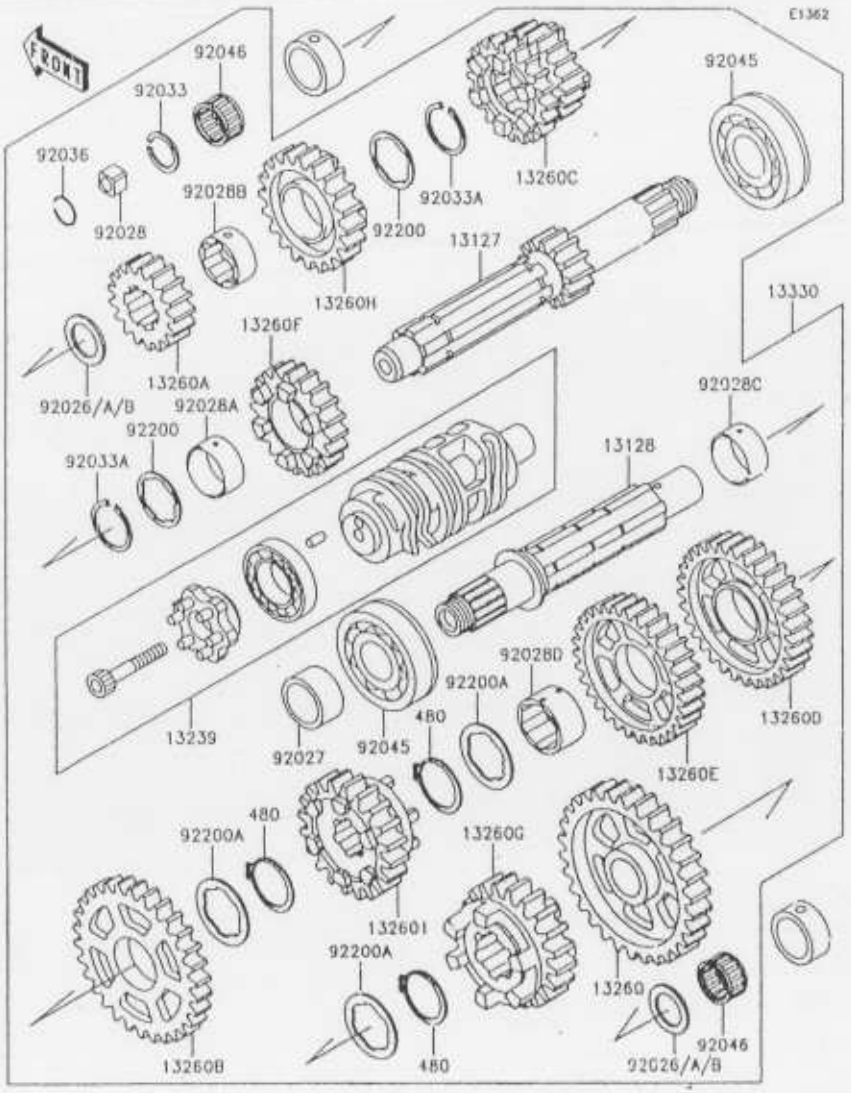
This catalog covers:
'93 ZX750-MR1 Engine

GRID NO.
B-8

This grid covers:
Transmission(A Type)(1/2)



Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
13127	13127-1224 (OPTION)	SHAFT-INPUT,LOW,17T		1
13128	13128-1198 (OPTION)	SHAFT-TRANSMISSION OUTPUT		1
13239	13239-1190 (OPTION)	DRUM-ASSY-CHANGE		1
13260	13260-1337 (OPTION)	GEAR,OUTPUT,LOW,42T		1
13260A	13260-1338 (OPTION)	GEAR,INPUT,2ND,18T		1
13260B	13260-1339 (OPTION)	GEAR,OUTPUT,2ND,37T		1
13260C	13260-1340 (OPTION)	GEAR,INPUT,3RD&4TH,20T/26T		1
13260D	13260-1341 (OPTION)	GEAR,OUTPUT,3RD,35T		1
13260E	13260-1342 (OPTION)	GEAR,OUTPUT,4TH,41T		1
13260F	13260-1343 (OPTION)	GEAR,INPUT,5TH,22T		1
13260G	13260-1344 (OPTION)	GEAR,OUTPUT,5TH,32T		1
13260H	13260-1345 (OPTION)	GEAR,INPUT,TOP,25T		1
13260I	13260-1346 (OPTION)	GEAR,OUTPUT,TOP,35T		1
13330	13330-1004 (OPTION)	KIT-GEAR		1
92026	92026-1224 (OPTION)	SPACER,22X35.5X2.1		2
92026A	92026-1225 (OPTION)	SPACER,22X35.5X2.4		2
92026B	92026-1226 (OPTION)	SPACER,22X35.5X1.8		2
92027	92027-1302 (OPTION)	COLLAR,ENGINE SPROCKET		1
92028	92028-1704 (OPTION)	BUSHING		1
92028A	92028-1705 (OPTION)	BUSHING		1
92028B	92028-1706 (OPTION)	BUSHING		1
92028C	92028-1707 (OPTION)	BUSHING		1

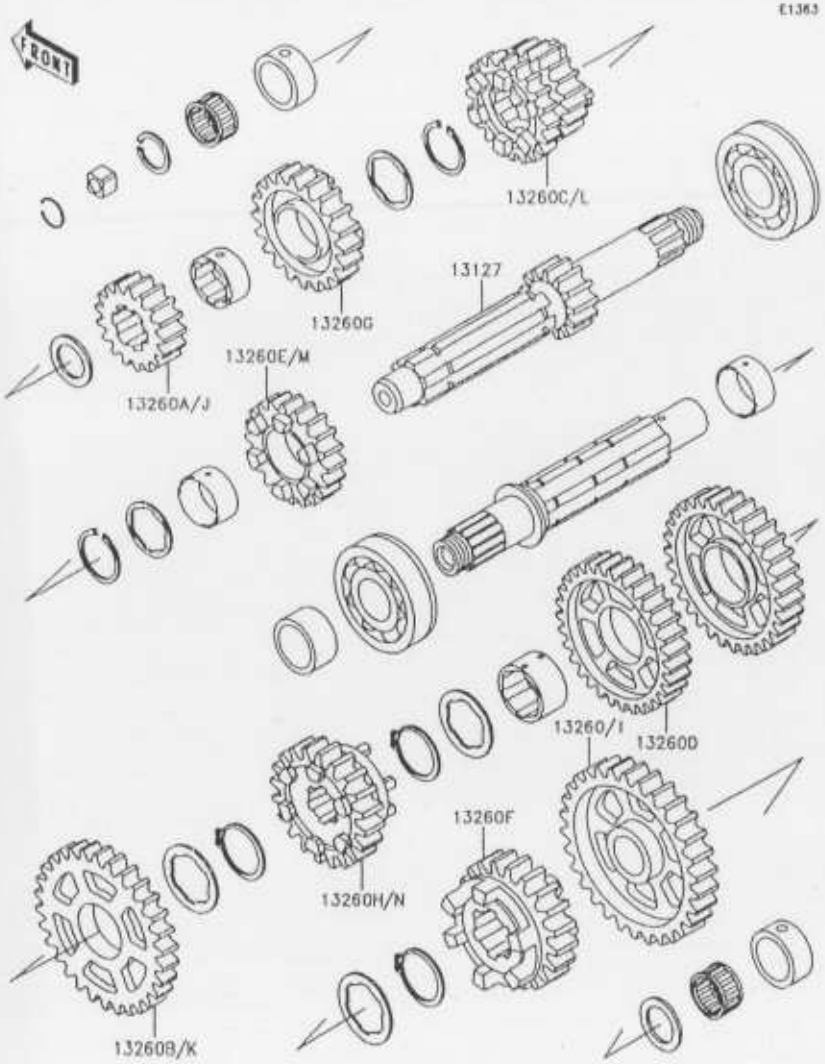


Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
92028D	92028-1708 (OPTION)	BUSHING		1
92033	92033-025 (OPTION)	RING-SNAP,20X25.5X1.2		1
92033A	92033-1037 (OPTION)	RING-SNAP,25.9MM		2
92036	92036-005 (OPTION)	RING-SNAP		1
92045	92045-1224 (OPTION)	BEARING-BALL,6305N2SH2		2
92046	92046-031 (OPTION)	BEARING-NEEDLE,FWF-223014		2
92200	92200-1183 (OPTION)	WASHER		2
92200A	92200-1184 (OPTION)	WASHER		3
480	480J2900 (OPTION)	CIRCLIP		3

This catalog covers:
'93 ZX750-MR1 Engine

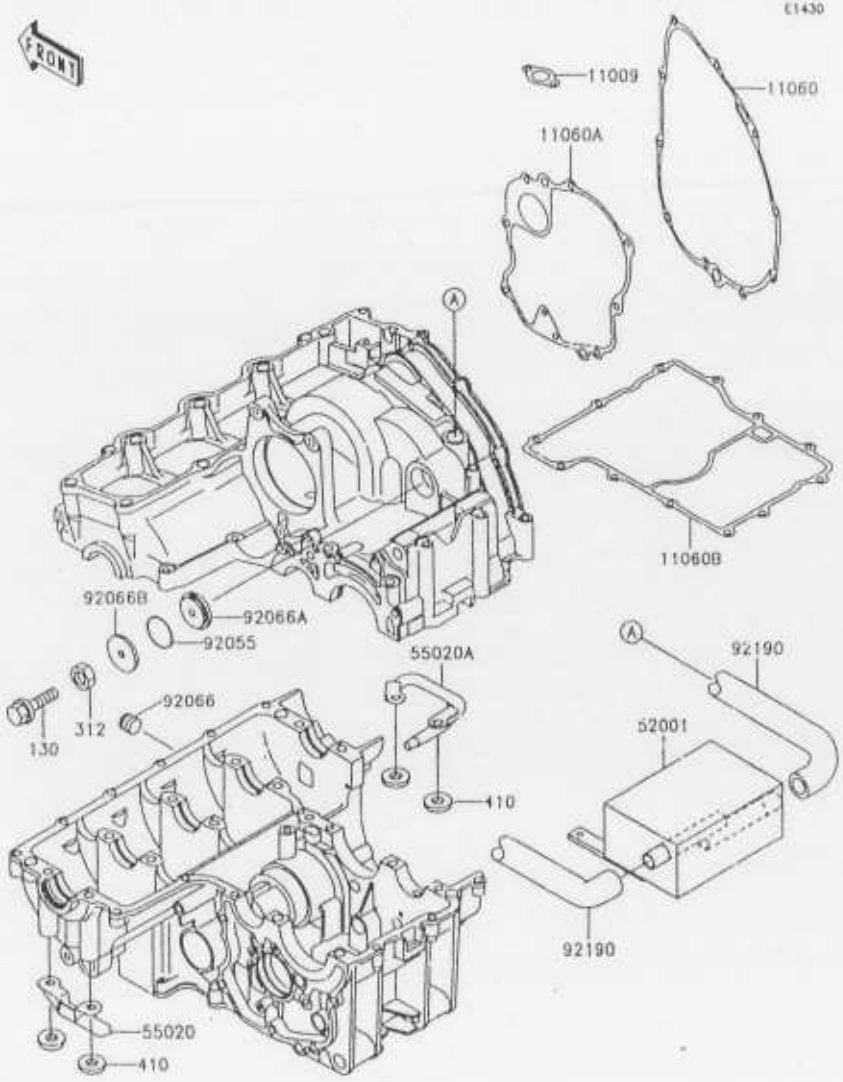
GRID NO.
B-10

This grid covers:
Transmission(B/C Type)

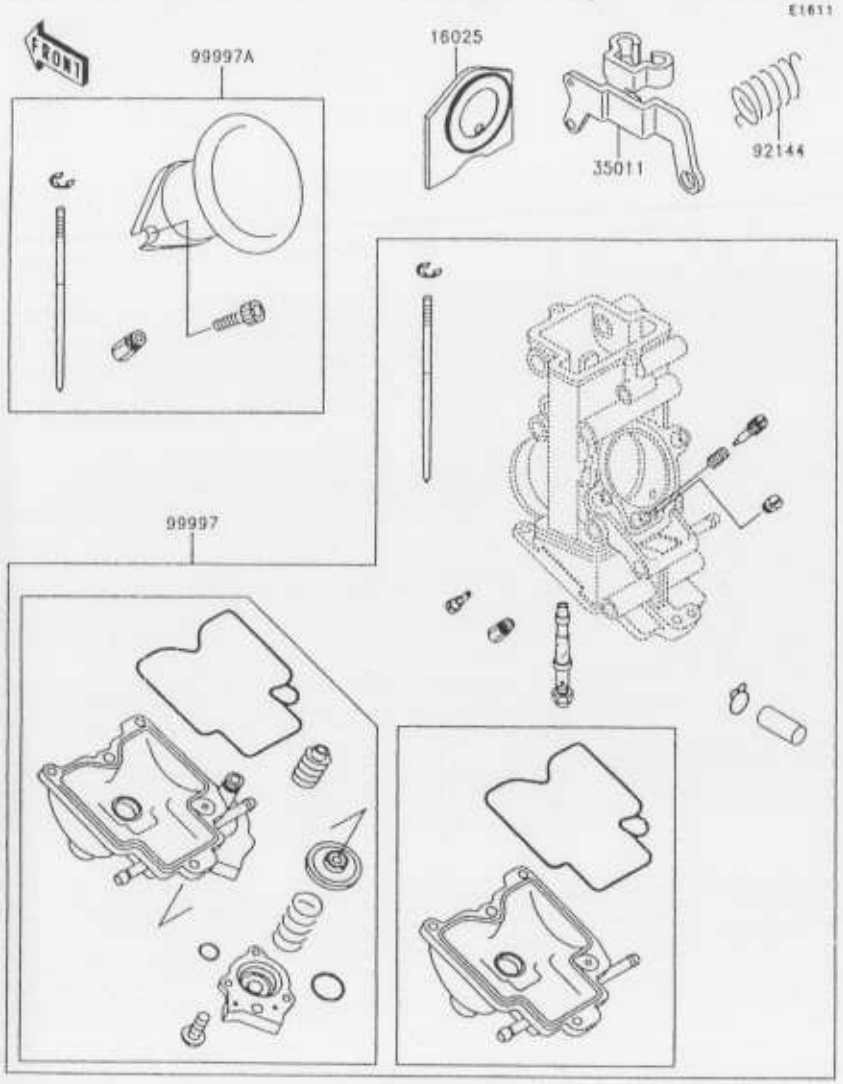


E1363

Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
13127	13127-1225 (OPTION)	SHAFT-INPUT,LOW,20T (C)		1
13260	13260-1347 (OPTION)	GEAR,OUTPUT,LOW,43T (B)		1
13260A	13260-1348 (OPTION)	GEAR,INPUT,2ND,19T (B)		1
13260B	13260-1349 (OPTION)	GEAR,OUTPUT,2ND,40T (B)		1
13260C	13260-1350 (OPTION)	GEAR,INPUT,3RD&4TH,20T/23T (B)		1
13260D	13260-1351 (OPTION)	GEAR,OUTPUT,4TH,37T (B)		1
13260E	13260-1352 (OPTION)	GEAR,INPUT,5TH,27T (B)		1
13260F	13260-1353 (OPTION)	GEAR,OUTPUT,5TH,40T (B)		1
13260G	13260-1354 (OPTION)	GEAR,INPUT,TOP,28T (B)		1
13260H	13260-1355 (OPTION)	GEAR,OUTPUT,TOP,40T (B)		1
13260I	13260-1356 (OPTION)	GEAR,OUTPUT,LOW,48T (C)		1
13260J	13260-1357 (OPTION)	GEAR,INPUT,2ND,20T (C)		1
13260K	13260-1358 (OPTION)	GEAR,OUTPUT,2ND,40T (C)		1
13260L	13260-1359 (OPTION)	GEAR,INPUT,3RD&4TH,20T/24T (C)		1
13260M	13260-1360 (OPTION)	GEAR,INPUT,5TH,28T (C)		1
13260N	13260-1361 (OPTION)	GEAR,OUTPUT,TOP,34T (C)		1

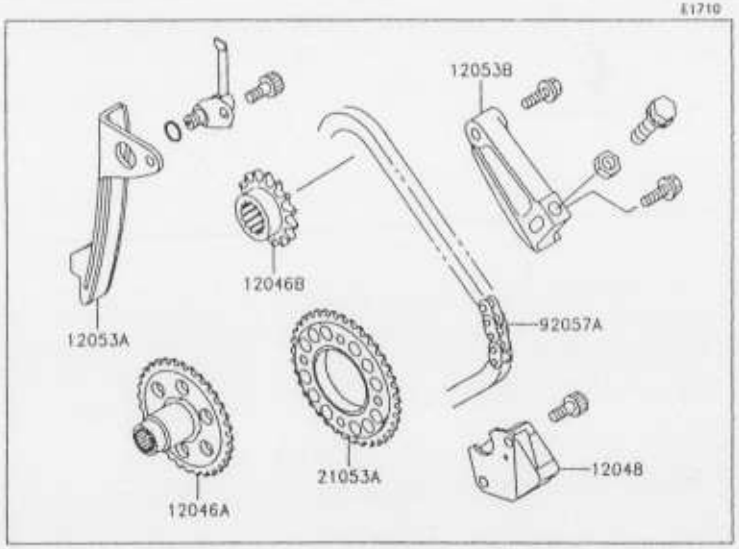


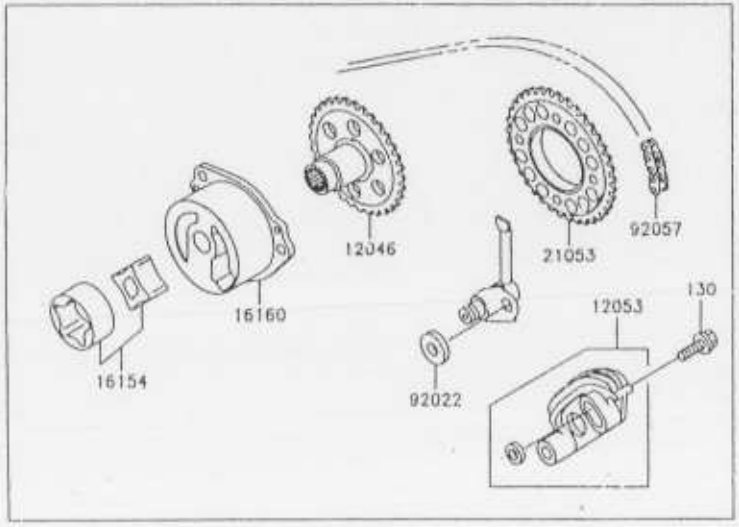
Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
11009	11009-1935	GASKET,ELBOW		3
11060	11060-1342	GASKET,CLUTCH COVER		3
11060A	11060-1353	GASKET,TRANSMISSION COVER		3
11060B	11060-1355	GASKET,OIL PAN		3
52001	52001-1090	TANK-OIL		1
55020	55020-1407	GUARD,CRANKCASE,LH		1
55020A	55020-1408	GUARD,CRANKCASE,RH		1
92055	92055-1262	RING-O,24.4MM		1
92066	92066-059	PLUG,OIL LINE,1/8X7		1
92066A	92066-1332	PLUG,STARTER HOLE		1
92066B	92066-1333	PLUG,STARTER HOLE		1
92190	92190-1472	TUBE		1
130	130G0625	BOLT-FLANGED,6X25		1
312	312G0600	NUT-HEX,6MM		1
410	410B0800	WASHER-PLAIN-SMALL,8MM		4



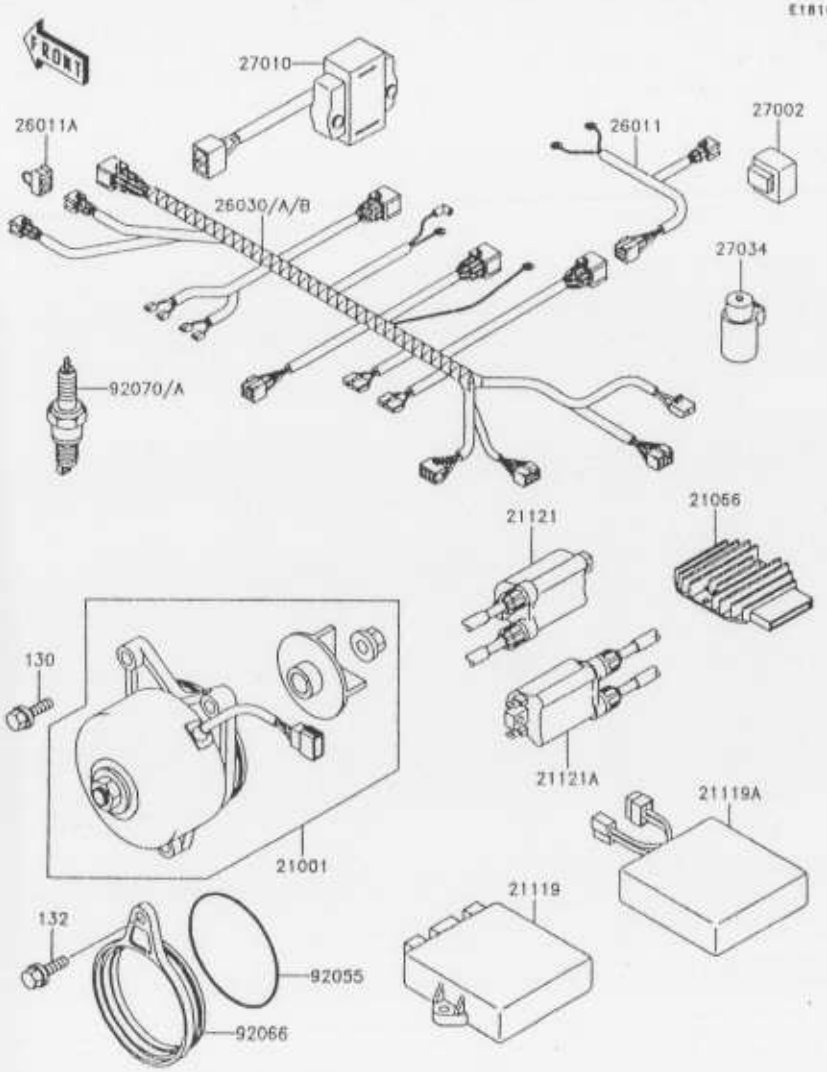
E1611

Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
16025	16025-1188 (OPTION)	VALVE-THROTTLE		4
35011	35011-1661 (OPTION)	STAY		1
92144	92144-1734 (OPTION)	SPRING		1
99997	99997-1072	KIT-CARBURETOR		1
99997A	99997-1073 (OPTION)	KIT-CARBURETOR		1

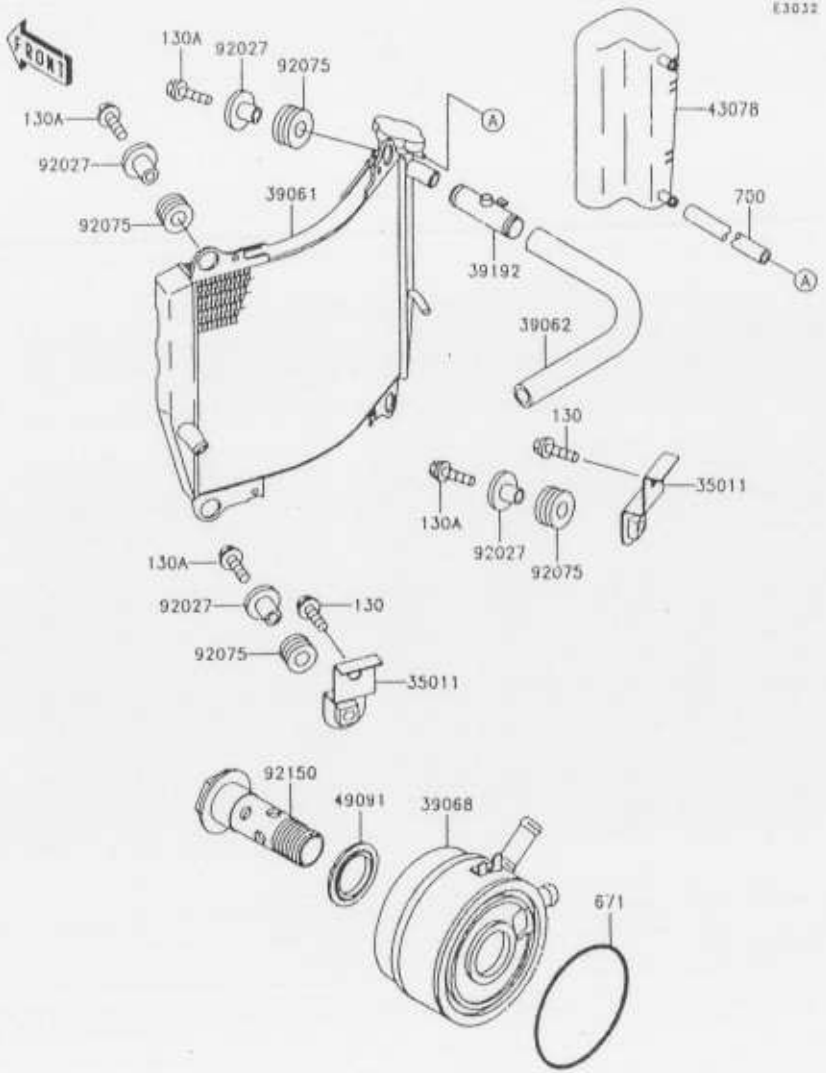




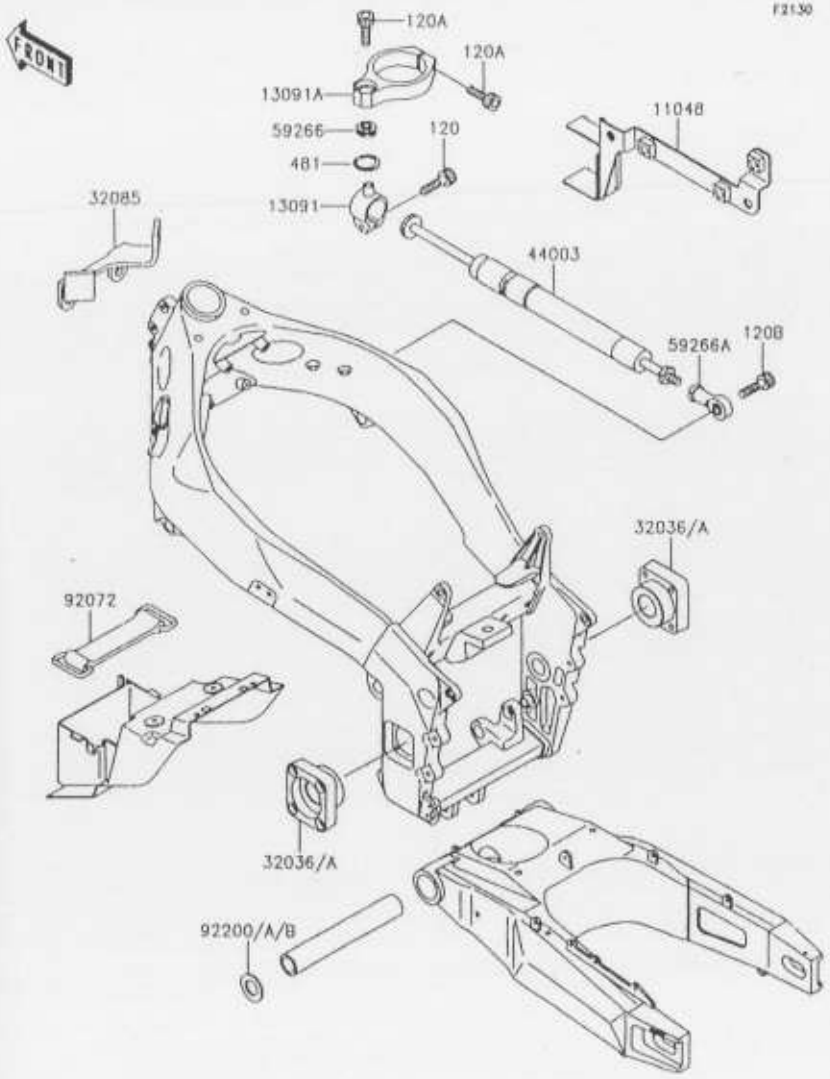
Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
12046	12046-1135	SPROCKET,36T		1
12046A	12046-1147 (OPTION)	SPROCKET,32T		1
12046B	12046-1148 (OPTION)	SPROCKET,15T		1
12048	12048-1127 (OPTION)	TENSIONER-ASSY		1
12053	12053-1302	GUIDE-CHAIN		1
12053A	12053-1321 (OPTION)	GUIDE-CHAIN,FR		1
12053B	12053-1322 (OPTION)	GUIDE-CHAIN,UPP		1
16154	16154-1102	ROTOR-PUMP,SET		1
16160	16160-1192	BODY,OIL PUMP		1
21053	21053-1060	SPROCKET-ASSY,DRIVE,33T		1
21053A	21053-1062 (OPTION)	SPROCKET-ASSY,DRIVE,29T		1
92022	92022-1691	WASHER,6.5X16X3.2		1
92057	92057-1343	CHAIN,OIL PUMP,BF04M-58L		1
92057A	92057-1372 (OPTION)	CHAIN		1
130	130P0630	BOLT-FLANGED,6X30		2



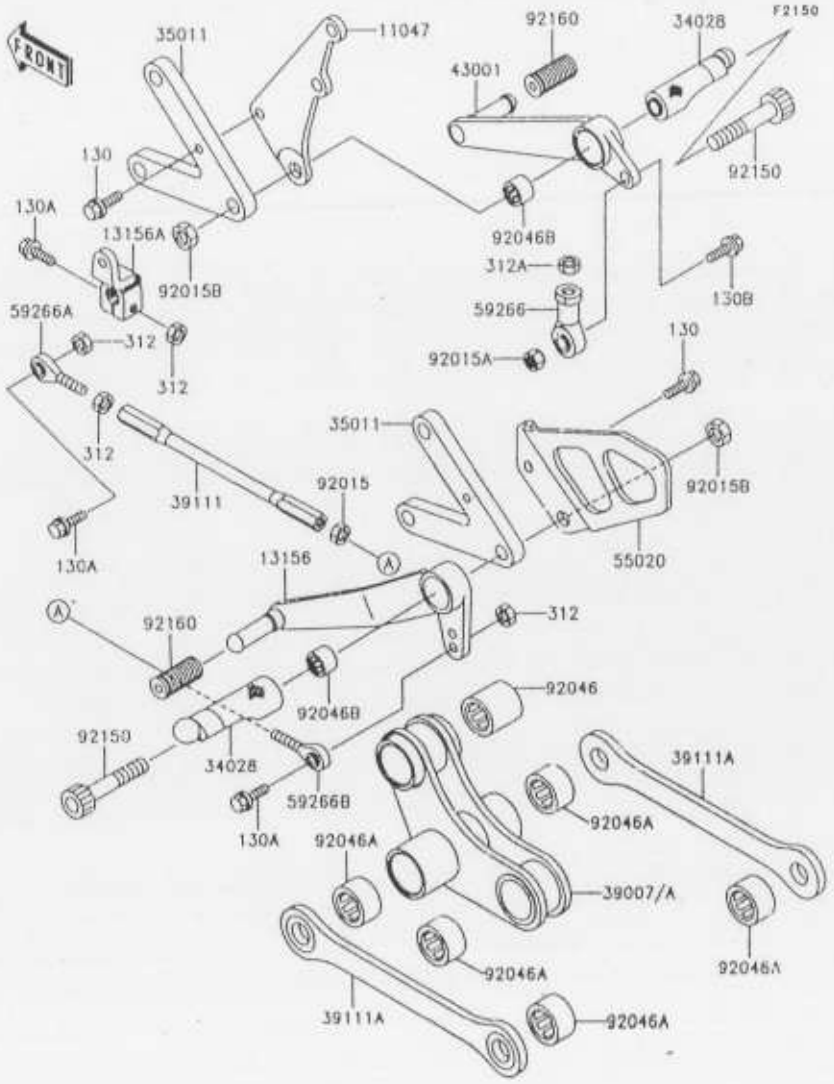
Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
21001	21001-1119 (OPTION)	GENERATOR		1
21066	21066-1068 (OPTION)	REGULATOR-VOLTAGE		1
21119	21119-1391	IGNITER		1
21119A	21119-1392 (OPTION)	IGNITER,CDI		1
21121	21121-1224 (OPTION)	COIL-IGNITION,CDI		1
21121A	21121-1225 (OPTION)	COIL-IGNITION,CDI		1
26011	26011-1566	WIRE-LEAD,BATTERY		1
26011A	26011-1567	WIRE-LEAD		1
26030	26030-1206	HARNESS,SPRINT		1
26030A	26030-1207 (OPTION)	HARNESS,SPRINT,CDI		1
26030B	26030-1208 (OPTION)	HARNESS,ENDURANCE		1
27002	27002-1085 (OPTION)	RELAY-ASSY		1
27010	27010-1306	SWITCH		1
27034	27034-1056	RELAY		1
92055	92055-1357	RING-O,74.6X2.4		1
92066	92066-1363	PLUG		1
92070	92070-1181	PLUG-SPARK,R016-10(NGK)		4
92070A	92070-1211 (OPTION)	PLUG-SPARK,R0045J-10(NGK)		4
130	130G0825 (OPTION)	BOLT-FLANGED,8X25		3
132	132G0820	BOLT-FLANGED-SMALL		1



Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
35011	35011-1593 (OPTION)	STAY		2
39061	39061-1170 (OPTION)	RADIATOR-ASSY		1
39062	39062-1481 (OPTION)	HOSE-COOLING		1
39068	39068-1056 (OPTION)	COOLER-ASSY-OIL		1
39192	39192-1053	PIPE-WATER		1
43078	43078-1136	RESERVOIR		1
49091	49091-1052 (OPTION)	WASHER-SEAL		1
92027	92027-1651 (OPTION)	COLLAR,FLANGED,L = 12.1,BLACK		4
92075	92075-277 (OPTION)	DAMPER		4
92150	92150-1529 (OPTION)	BOLT		1
130	130J0610 (OPTION)	BOLT-FLANGED		2
130A	130J0620 (OPTION)	BOLT-FLANGED		4
671	671B2565 (OPTION)	O RING,65MM		1
700	700Q07300	TUBE-PVC		1



Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
11048	11048-1209	BRACKET		1
13091	13091-1573 (OPTION)	HOLDER,STRG DAMPER		1
13091A	13091-1836 (OPTION)	HOLDER		1
32036	32036-1275 (OPTION)	BRACKET-SWINGARM,1MM-UP		2
32036A	32036-1276 (OPTION)	BRACKET-SWINGARM,2MM-UP		2
32085	32085-1336	STOPPER		1
44003	44003-1903 (OPTION)	DAMPER-ASSY,STEERING		1
59266	59266-1078 (OPTION)	JOINT-BALL		1
59266A	59266-1079 (OPTION)	JOINT-BALL		1
92072	92072-1188	BAND,BATTERY		1
92200	92200-1179 (OPTION)	WASHER,T=0.3		AR
92200A	92200-1180 (OPTION)	WASHER,T=0.5		AR
92200B	92200-1181 (OPTION)	WASHER,T=1.0		AR
120	120S0616 (OPTION)	BOLT-SOCKET,6X16,BLACK		1
120A	120S0620 (OPTION)	BOLT-SOCKET,6X20		2
120B	120S0820 (OPTION)	BOLT-SOCKET,8X20		1
481	481J1800 (OPTION)	CIRCLIP-TYPE-C,18MM		1

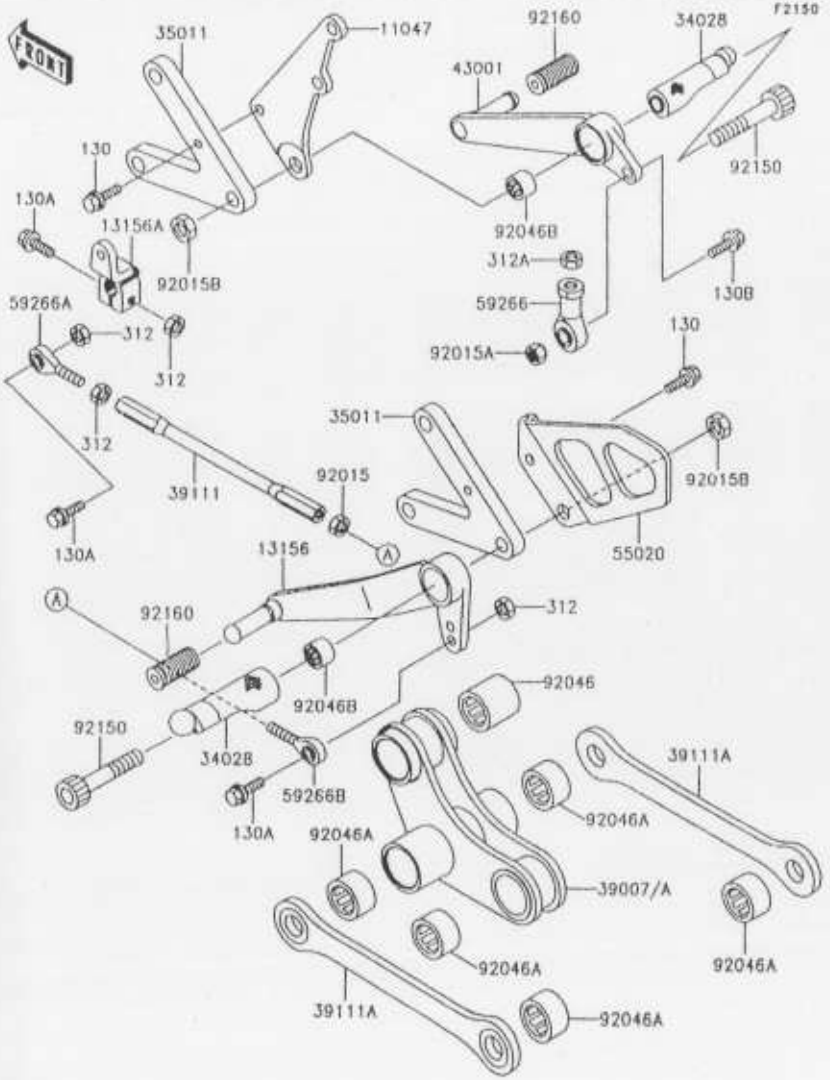


Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
11047	11047-1747 (OPTION)	BRACKET		1
13156	13156-1335 (OPTION)	LEVER-CHANGE		1
13156A	13156-1336 (OPTION)	LEVER-CHANGE		1
34028	34028-1342 (OPTION)	STEP		2
35011	35011-1625 (OPTION)	STAY		2
39007	39007-1203 (OPTION)	ARM-SUSP		1
39007A	39007-1227 (OPTION)	ARM-SUSP,OHLINS		1
39111	39111-1123 (OPTION)	ROD-TIE		1
39111A	39111-1124 (OPTION)	ROD-TIE		2
43001	43001-1317 (OPTION)	LEVER-BRAKE		1
55020	55020-1406 (OPTION)	GUARD		1
59266	59266-1079 (OPTION)	JOINT-BALL		1
59266A	59266-1084 (OPTION)	JOINT-BALL		1
59266B	59266-1085 (OPTION)	JOINT-BALL		1
92015	92015-1178 (OPTION)	NUT		1
92015A	92015-1205 (OPTION)	NUT,U,8MM,BLACK		1
92015B	92015-1494 (OPTION)	NUT,LOCK,10MM		2
92046	92046-1110 (OPTION)	BEARING-NEEDLE,BM202726		1
92046A	92046-1112 (OPTION)	BEARING-NEEDLE,BM202715		5
92046B	92046-1197 (OPTION)	BEARING-NEEDLE		2
92150	92150-1309 (OPTION)	BOLT		2
92160	92160-1150 (OPTION)	DAMPER		2

This catalog covers:
'93 ZX750-MR1 Chassis

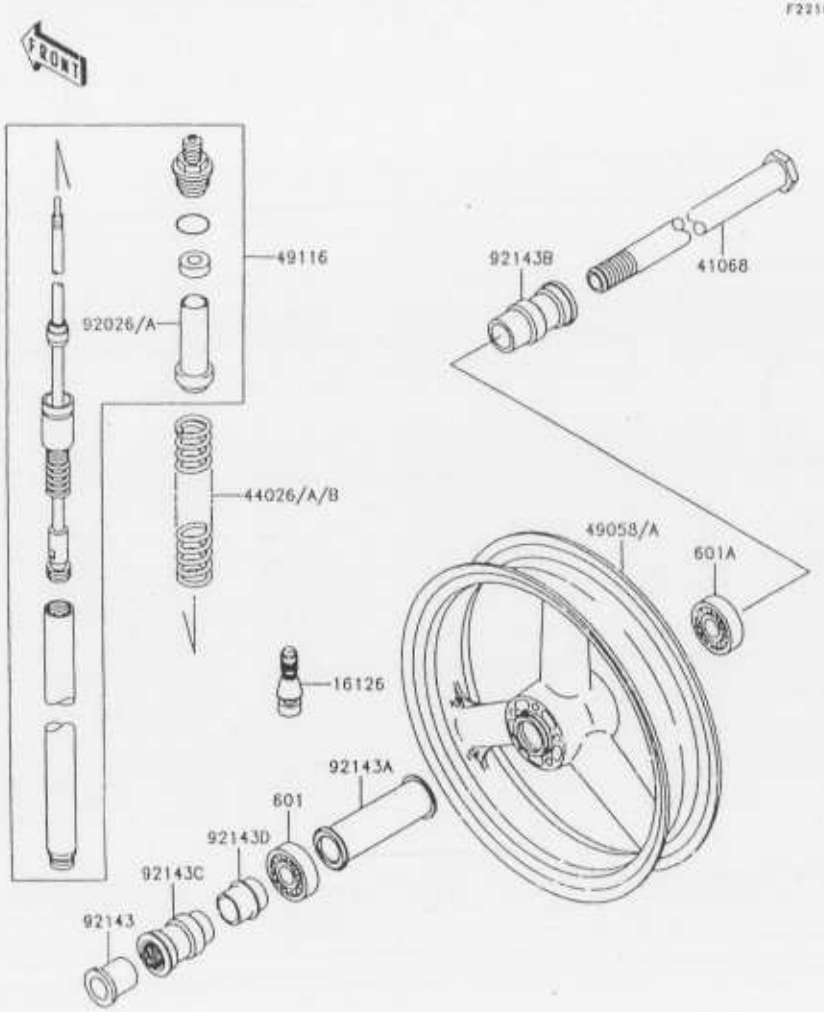
GRID NO.
D-5

This grid covers:
Suspension(2/2)



Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
130	130G0614 (OPTION)	BOLT-FLANGED,6X14		2
130A	130G0625 (OPTION)	BOLT-FLANGED,6X25		3
130B	130G0825 (OPTION)	BOLT-FLANGED,8X25		1
312	312B0600 (OPTION)	NUT-HEX,6MM		4
312A	312B0800 (OPTION)	NUT-HEX,8MM		1

F2210

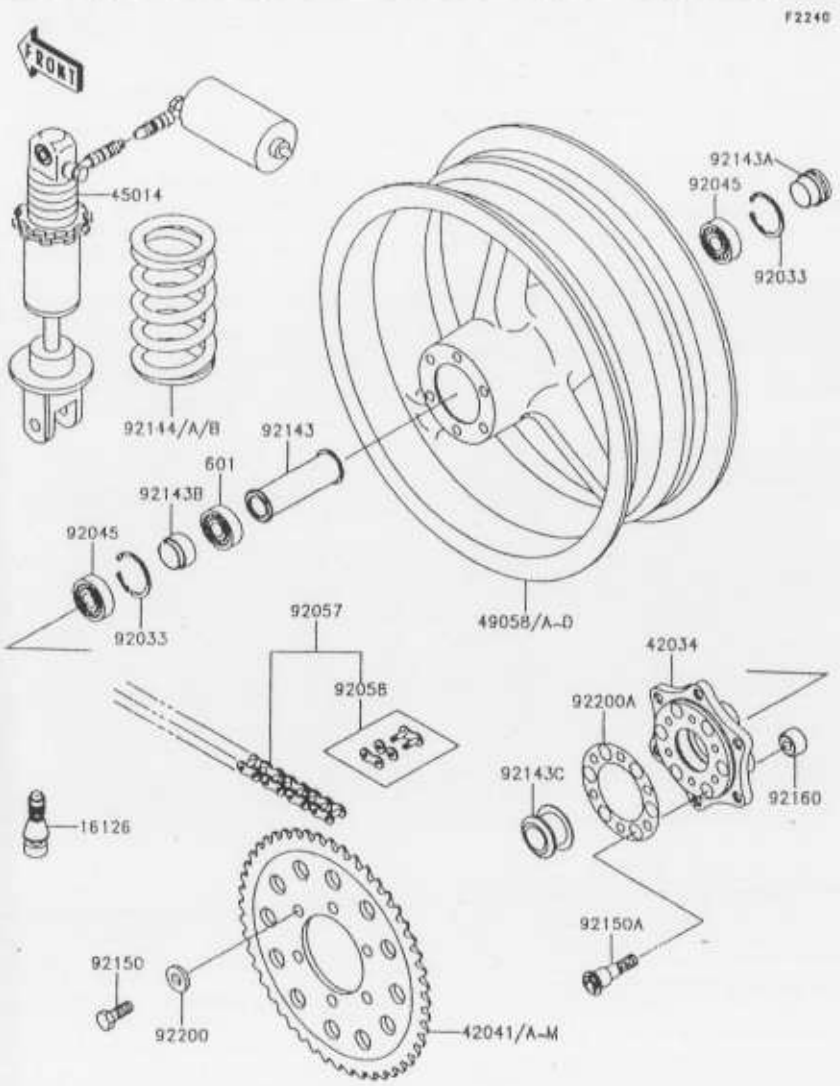


Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
16126	16126-1136 (OPTION)	VALVE,TIRE		2
41068	41068-1332 (OPTION)	AXLE		1
44026	44026-1522 (OPTION)	SPRING-FRONT FORK,K = 0.85		2
44026A	44026-1523 (OPTION)	SPRING-FRONT FORK,K = 0.90		2
44026B	44026-1524 (OPTION)	SPRING-FRONT FORK,K = 0.95		2
49058	49058-1291 (OPTION)	WHEEL,FR,3.50X17		1
49058A	49058-1292 (OPTION)	WHEEL,FR,3.75X17		1
49116	49116-1115 (OPTION)	VALVE-ASSY		2
92026	92026-1423 (OPTION)	SPACER,FR FORK,L = 55MM		2
92026A	92026-1424 (OPTION)	SPACER,FR FORK,L = 60MM		2
92143	92143-1500	COLLAR,L = 34.5		1
92143A	92143-1501 (OPTION)	COLLAR,L = 96		2
92143B	92143-1502 (OPTION)	COLLAR,L = 61.5		1
92143C	92143-1503 (OPTION)	COLLAR,L = 52.5		1
92143D	92143-1504 (OPTION)	COLLAR,L = 29		2
601	601B6005UU (OPTION)	BEARING-BALL,#6005UU		2
601A	601B6204UU (OPTION)	BEARING-BALL,6204UUC3		2

This catalog covers:
'93 ZX750-MR1 Chassis

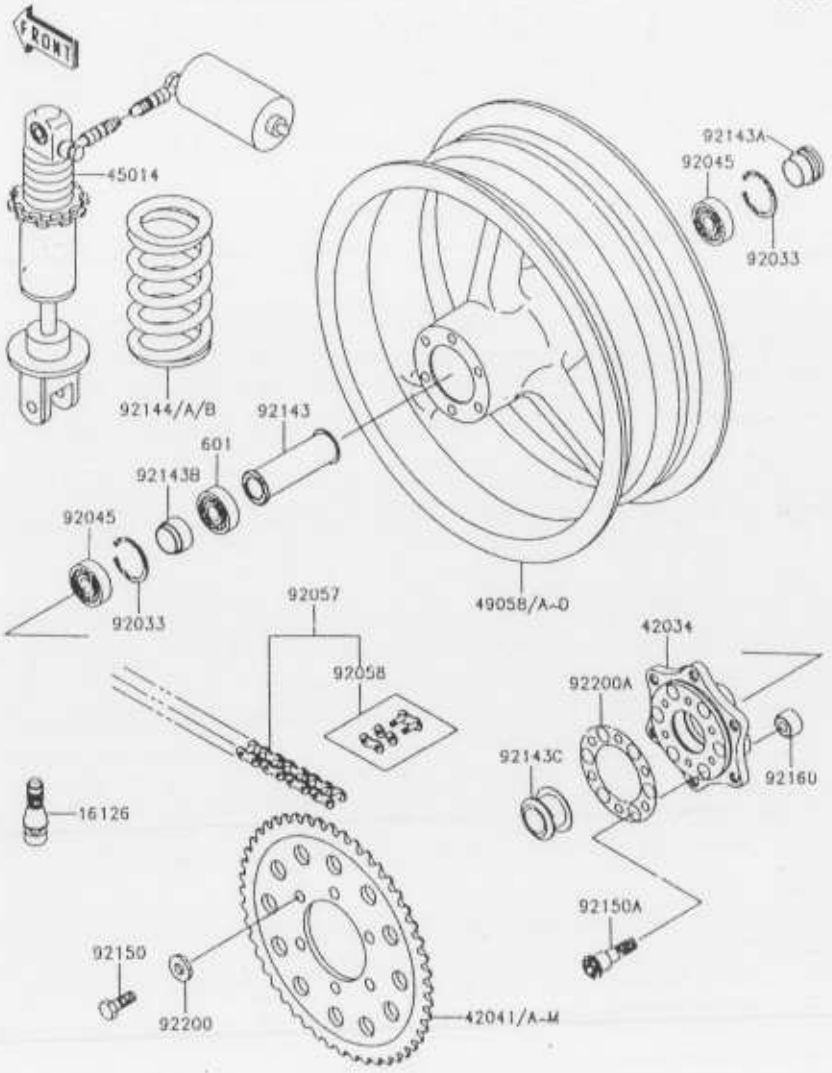
GRID NO. **D-7**

This grid covers:
Rear Hub/Shock Absorber(1/2)



F2240

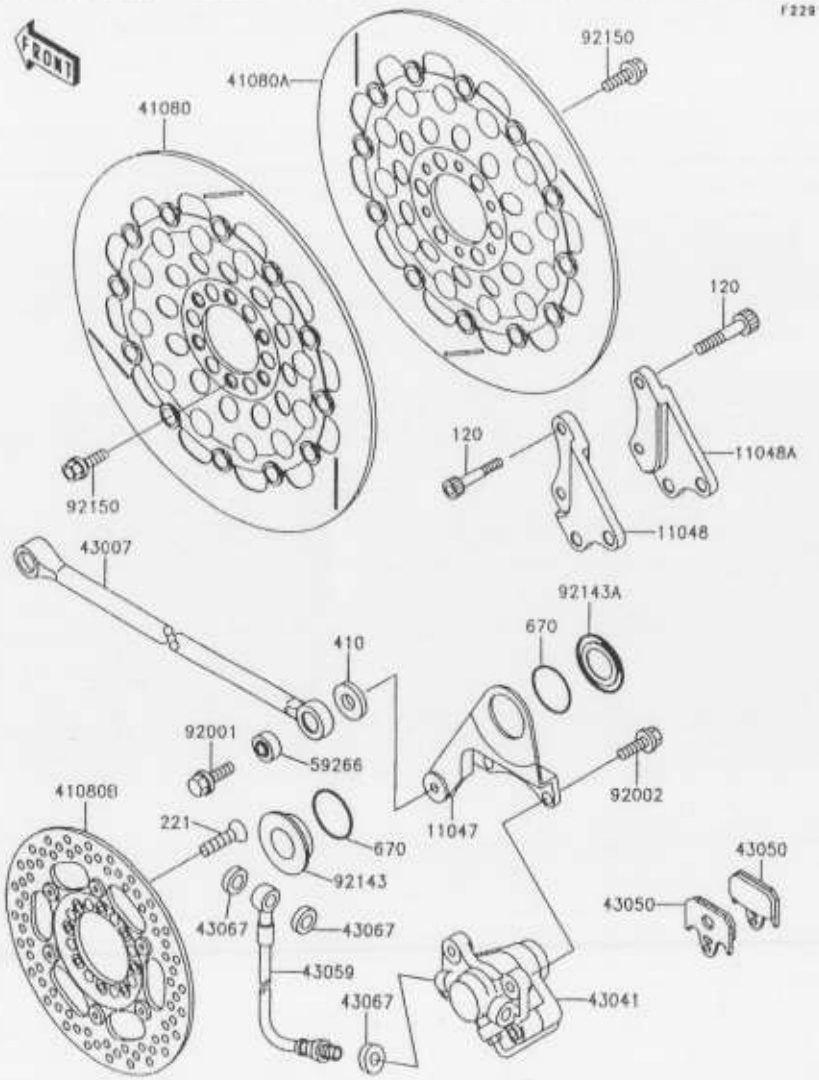
Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
16126	16126-1136 (OPTION)	VALVE,TIRE		5
42034	42034-1123 (OPTION)	COUPLING		5
42041	42041-1388 (OPTION)	SPROCKET-HUB,39T(#520)OP WHEEL		1
42041A	42041-1389 (OPTION)	SPROCKET-HUB,40T(#520)OP WHEEL		1
42041B	42041-1390 (OPTION)	SPROCKET-HUB,41T(#520)OP WHEEL		1
42041C	42041-1391 (OPTION)	SPROCKET-HUB,42T(#520)OP WHEEL		1
42041D	42041-1392 (OPTION)	SPROCKET-HUB,43T(#520)OP WHEEL		1
42041E	42041-1393 (OPTION)	SPROCKET-HUB,44T(#520)OP WHEEL		1
42041F	42041-1394	SPROCKET-HUB,39T(#520)		1
42041G	42041-1395	SPROCKET-HUB,40T(#520)		1
42041H	42041-1396	SPROCKET-HUB,41T(#520)		1
42041I	42041-1397	SPROCKET-HUB,42T(#520)		1
42041J	42041-1398	SPROCKET-HUB,43T(#520)		1
42041K	42041-1399	SPROCKET-HUB,44T(#520)		1
42041L	42041-1426 (OPTION)	SPROCKET-HUB,37T(#520)		1
42041M	42041-1427 (OPTION)	SPROCKET-HUB,38T(#520)		1
45014	45014-1563 (OPTION)	SHOCKABSORBER		1
49058	49058-1293 (OPTION)	WHEEL,RR,5.50X17		1
49058A	49058-1294 (OPTION)	WHEEL,RR,5.50X18		1
49058B	49058-1295 (OPTION)	WHEEL,RR,6.00X17		1
49058C	49058-1310 (OPTION)	WHEEL,RR,6.25X17		1
49058D	49058-1311 (OPTION)	WHEEL,RR,5.75X17		1
92033	92033-1043 (OPTION)	RING-SNAP,52MM		10
92045	92045-1260 (OPTION)	BEARING-BALL		10
92057	92057-1313	CHAIN,DRIVE,120L(#520)		1



Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
92058	92058-1087 (OPTION)	JOINT-CHAIN,DRIVE(#520)		1
92143	92143-1505 (OPTION)	COLLAR,L=158		5
92143A	92143-1506 (OPTION)	COLLAR,L=23		5
92143B	92143-1550 (OPTION)	COLLAR		5
92143C	92143-1551 (OPTION)	COLLAR		5
92144	92144-1657 (OPTION)	SPRING,SHOCKABSORBER,K=6.75		1
92144A	92144-1664 (OPTION)	SPRING,RR SHOCK,K=6.5		1
92144B	92144-1665 (OPTION)	SPRING,RR SHOCK,K=7.0		1
92150	92150-1522 (OPTION)	BOLT		30
92150A	92150-1609 (OPTION)	BOLT		30
92160	92160-1378 (OPTION)	DAMPER		30
92200	92200-1042	WASHER,10.5X19X2.3		6
92200A	92200-1141 (OPTION)	WASHER		10
601	601B6205UU (OPTION)	BEARING-BALL		5

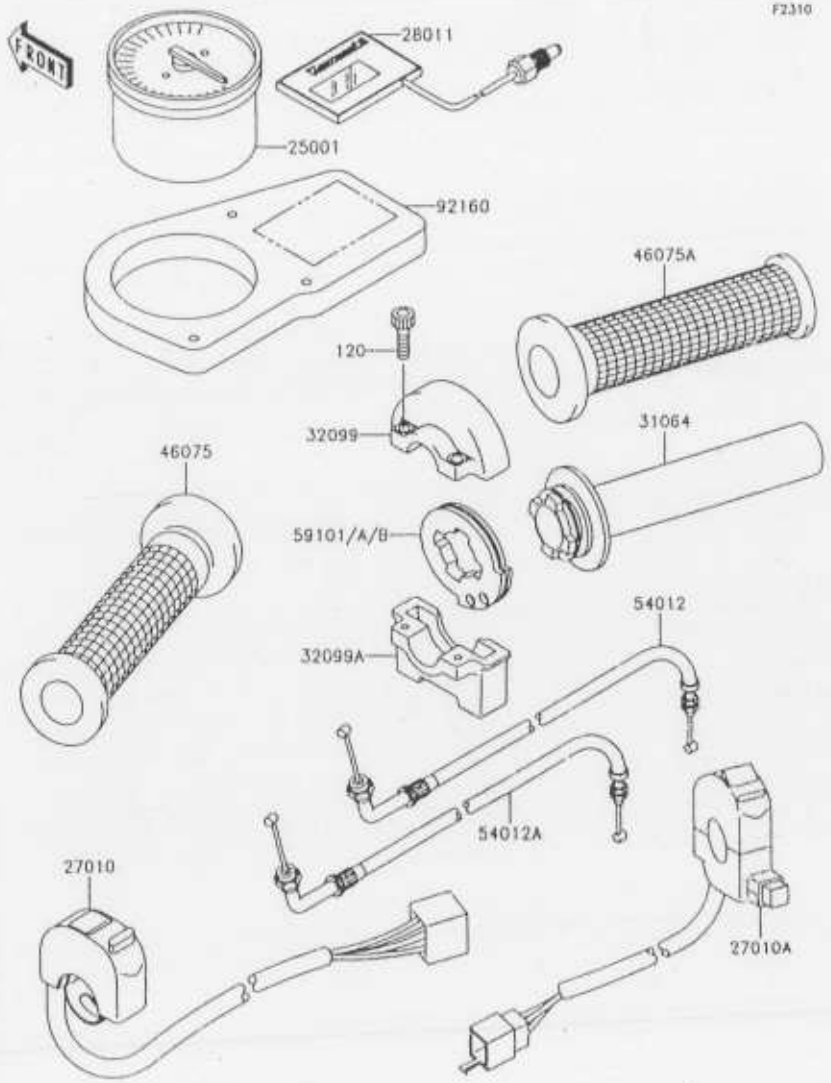
This catalog covers:
'93 ZX750-MR1 Chassis

GRID NO. **D-9** *This grid covers:* **Disc Brake**



F2291

Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
11047	11047-1748 (OPTION)	BRACKET		1
11048	11048-1230 (OPTION)	BRACKET,LH		1
11048A	11048-1231 (OPTION)	BRACKET,RH		1
41080	41080-1332 (OPTION)	DISC,FR,LH		1
41080A	41080-1333 (OPTION)	DISC,FR,RH		1
41080B	41080-1334 (OPTION)	DISC,RR		1
43007	43007-1164 (OPTION)	ROD-TORQUE		1
43041	43041-1461 (OPTION)	CALIPER-ASSY,RR		1
43050	43050-1235	PAD-BRAKE,REAR		2
43059	43059-1709 (OPTION)	HOSE-BRAKE		1
43067	43067-001 (OPTION)	WASHER,10.5X15X1.5		3
59266	59266-1094 (OPTION)	JOINT-BALL		1
92001	92001-1691 (OPTION)	BOLT,FLANGED,8X25		1
92002	92002-1417 (OPTION)	BOLT,FLANGED,8X20		2
92143	92143-1583 (OPTION)	COLLAR		1
92143A	92143-1584 (OPTION)	COLLAR		1
92150	92150-1521 (OPTION)	BOLT		12
120	120P1030 (OPTION)	BOLT-SOCKET,10X30		4
221	221R0625 (OPTION)	SCREW-CSK-CROS,6X25		8
410	410B0800 (OPTION)	WASHER-PLAIN-SMALL,8MM		1
670	670C3039 (OPTION)	O RING		2



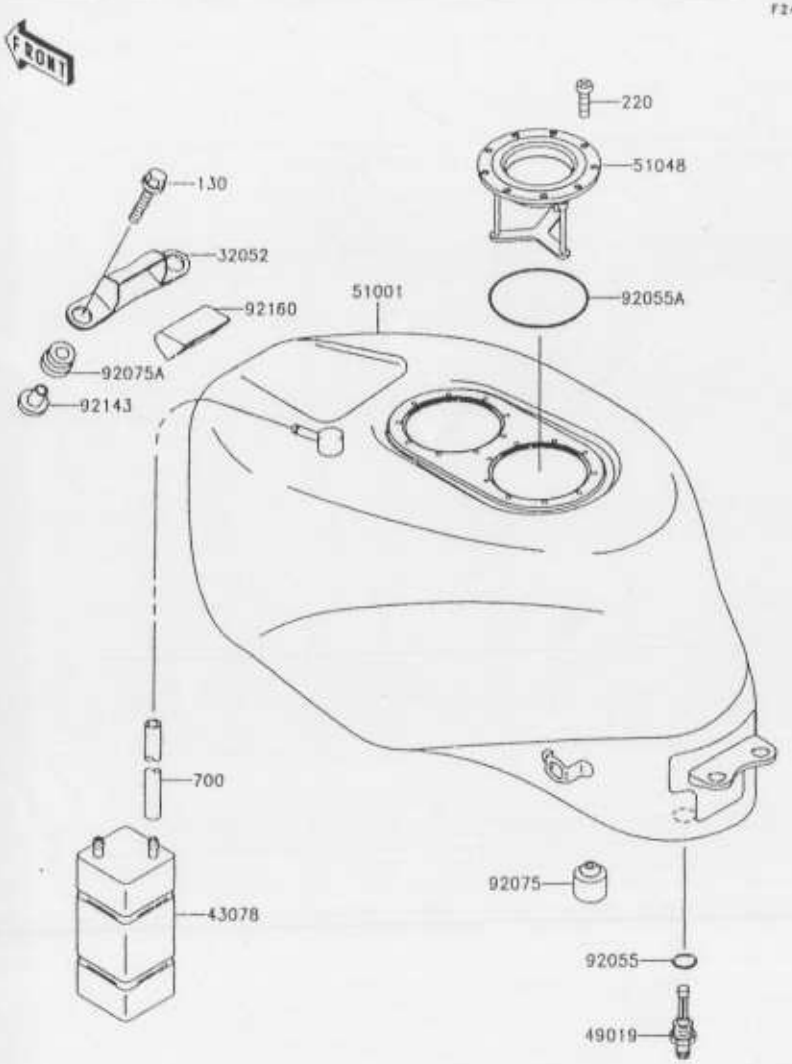
F2310

Rel. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
25001	25001-1931 (OPTION)	METER-ASSY		1
27010	27010-1321	SWITCH,LH		1
27010A	27010-1322 (OPTION)	SWITCH,RH		1
28011	28011-1139 (OPTION)	METER,TEMP		1
31064	31064-1151 (OPTION)	PIPE-COMP		1
32099	32099-1148 (OPTION)	CASE,UPP		1
32099A	32099-1149 (OPTION)	CASE,LWR		1
46075	46075-1109 (OPTION)	GRIP,LH		1
46075A	46075-1110 (OPTION)	GRIP,RH		1
54012	54012-1472 (OPTION)	CABLE-THROTTLE,OPEN		1
54012A	54012-1473 (OPTION)	CABLE-THROTTLE,CLOSE		1
59101	59101-1111 (OPTION)	REEL,2.0MM		1
59101A	59101-1112 (OPTION)	REEL,4.0MM		1
59101B	59101-1113 (OPTION)	REEL,7.6MM		1
92160	92160-1447 (OPTION)	DAMPER		1
120	120P0620 (OPTION)	BOLT-SOCKET,6X20		2

This catalog covers:
'93 ZX750-MR1 Chassis

GRID NO. **D-11** *This grid covers:* **Fuel Tank**

F2410



Ref. No.	Part No.	Description	Spec Code	Quantity-ZX750 '93 MR1
32052	32052-1382 (OPTION)	BRACKET-TANK		1
43078	43078-1120	RESERVOIR,FUEL TANK		1
49019	49019-1070 (OPTION)	FILTER-FUEL		1
51001	51001-1386 (OPTION)	TANK-COMP-FUEL		1
51048	51048-1109 (OPTION)	CAP-ASSY-TANK		2
92055	92055-1387 (OPTION)	RING-O,11.5X1.5		1
92055A	92055-1523 (OPTION)	RING-O		2
92075	92075-1002 (OPTION)	DAMPER,STAND,CNT		2
92075A	92075-112 (OPTION)	DAMPER		2
92143	92143-1515 (OPTION)	COLLAR		2
92160	92160-1446 (OPTION)	DAMPER		1
130	130J0645 (OPTION)	BOLT-FLANGED,6X45,BLACK		2
220	220B0514 (OPTION)	SCREW-PAN-CROS		18
700	700Q07600	TUBE-PVC		1