INTEGRA 4WD
VANNING★PRESTO
RADIO CONTROLLED OFFROAD RACING BUGGY KIT

- Sophisticated double-wishbone independent suspension on all four wheels with four-wheel drive for maximum traction.
- Race-proven square-section 17S aluminum alloy ladder frame is strong and light. Accurate alignment of all components is assured.
- Coil springs are in-unit with special oversize oil-filled shock absorbers for top handling on even the roughest tracks.
- Front suspension has compound caster of upper wishbone angle plus kingpin angle for top directional stability after jumps.
- Mid-ship engine position balances buggy perfectly, minimizes inertia for quick manoeuverability, and optimizes weight transfer for acceleration.
- Special lightweight three-piece wheels, custom fuel tank, custom heavy-duty servo saver and special high-grip knobby tires are included.

インテグラ4WD
バニング★プレスト

1:8 SCALE

ラジオコントロールエンジンバギー
エンジン:21クラス
プロポ:2チャンネル

プレスト
KIT No.3059

バニング
KIT No.3058

組立て説明書

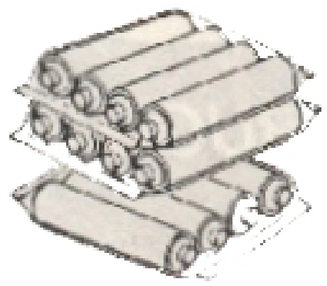
KYOSHO
THE FINEST RADIO CONTROL MODELS

マフラー・マニホールド・エンジンは別売です。
ENGINE .21 CLASS RADIO 2 CHANNEL MUFFLER & MANIFORLD NOT INCLUDED

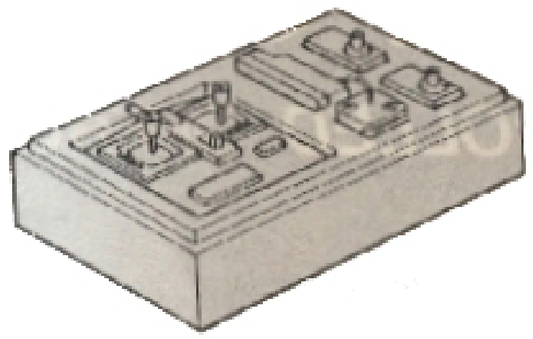
THINGS YOU WILL NEED BESIDES THIS KIT

[2 channel radio system]

A two channel, 2 servo radio control unit is required for running this car. This type of radio system can also be used for other models requiring only two channels of control. You will also need to supply your radio with the proper number of batteries (Usually 7 or 8 in the transmitter and 4 for the receiver.) A system with servo reversing (or simply using a reverse servo on the steering control) will be necessary.



Batteries

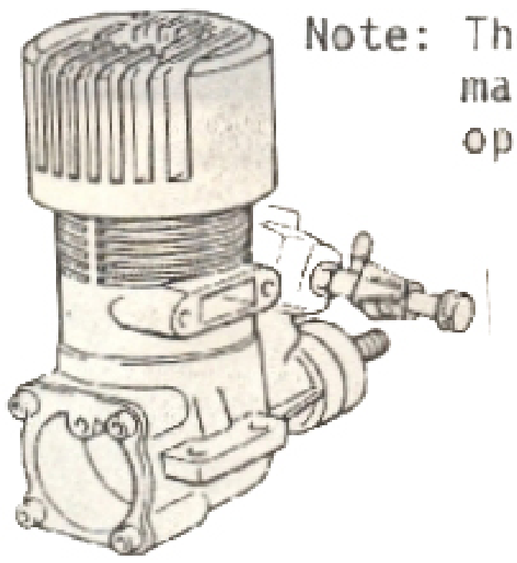


2 Channel Radio System

[Engine]

The Irvine 20 or 25 car engines, or the OS Max 21 FSR-B side exhaust car engine will mount with little or no modifications. The OS 21VF-B, OS 21VF-C, PICCO 3.5, Enya 21CX, 21CXS, 19X HP .25VT/car and others will require either additional parts or more than slight modifications. If you are planning to use an aircraft type engine you MUST supply it with a heat sink device to help cool the engine. Without a heatsink, the engine will overheat and be destroyed.

If you plan to use on OS MAX rear exhaust engine such as the 21VF-B or 21VR-C you will need the two parts listed below (See page 23.)



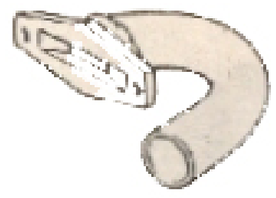
Note: The muffler and manifold are optional parts.

KC-32
Expert Muffler

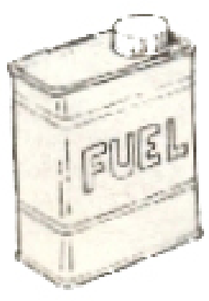
KC-31

These two items are required for OS MAX rear exhaust engines.

OS-21VFB
Manifold

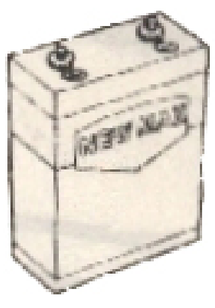


[Items Required for Running]

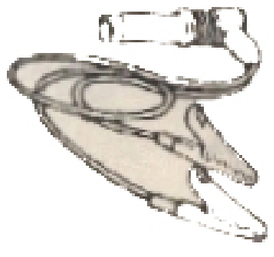


Glow

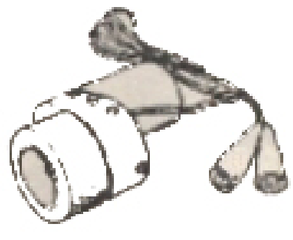
Fuel Bulb



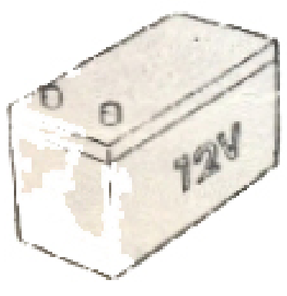
1.5V Battery for Glow Plug



Glow Plug



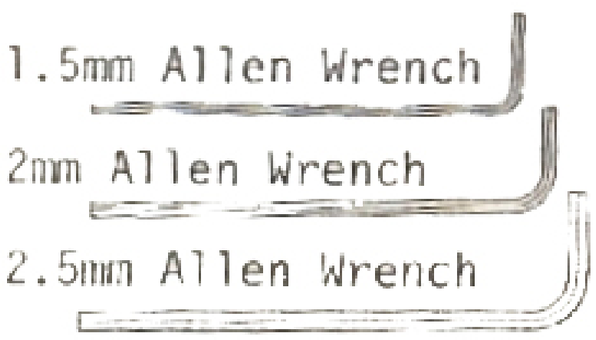
Starter w/"DONUT"



12V Gattery (FOR STARTER)

TOOLS REQUIRED

The following tools are included in kit.



The following tools are required for assembly.

Scissors

Needle Nose Pliers

Awl

Pliers

Cross Wrench

+ Driver (L,S

5.5mm & 7mm HEX Driver

Instant Cement

Rubber Cement

Brush

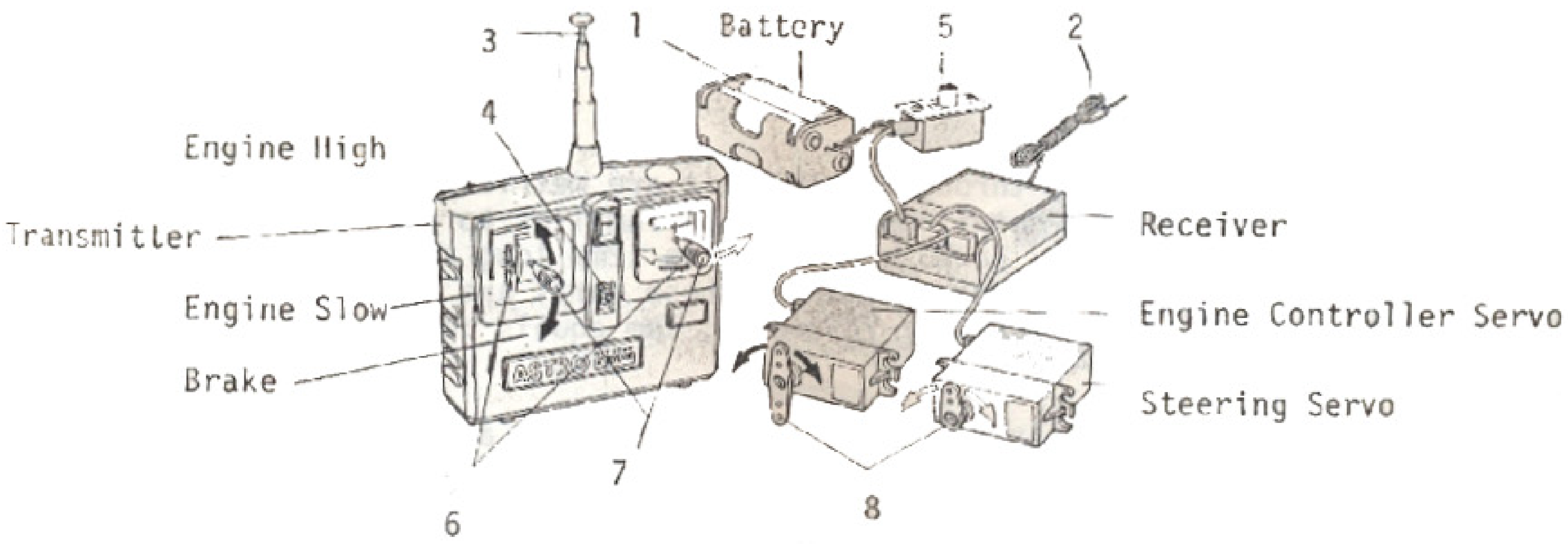
Paint

Masking Tape

HOW TO CHECK YOUR RADIO SYSTEM

Follow steps 1-8 in order.

1. Install the batteries into both the transmitter and receiver. If your radio is a reachargeable system, charge it as outlined in the manual that came with your set.
2. Unravel the receiver antenna and plug the servo and battery connectors into the receiver.
3. Extend the transmitter antenna.
4. Turn ON the power switch at the transmitter.
5. Turn ON the power switch for the receiver.
6. Set the small trim levers to the center position and make sure that both main control sticks are also centered.
7. Move both main control sticks slowly through their full travel. The servo horns should move in proportion to the movement of your sticks.
8. When the trim levers and sticks are at their neutral positions, the servo horns should be centered. You may now turn off the transmitter, then the receiver and unplug the servos and battery from the receiver.



*IT IS IMPORTANT TO ALWAYS SWITCH THE TRANSMITTER ON FIRST ... THEN THE RECEIVER. WHEN TURNING OFF THE SYSTEM TURN OFF THE RECEIVER FIRST AND THEN THE TRANSMITTERS.

A 2-channel radio control system is composed of a transmitter, a receiver, two servos, and a battery holder (for the receiver.)

*Transmitter..... This is the part of the system that you hold in your hands to control the model. Information is sent to the receiver and servos via radio waves.

*Receiver..... Receives the radio signals from the transmitter and sends them to the appropriate servo.

*Servos..... Can be thought of as the "muscle" of the system. They actually move the controls of the model. The receiver tells them which direction to move and how much.

*Antenna..... The transmitter antenna broadcasts the radio signal. The receiver antenna (which is no more than a small wire turned to a precise length) Picks up the signals so that the receiver can decode them.

*Trim Levers..... Adjust the neutral position of the servos from the transmitter. Trim levers provide fine tuning of the steering and speed control.

*Battery Meter... Allows you to see the condition of your transmitter batteries.

*Servo Horn..... A small arm or wheel on a servo that transfers the movement of the servo.

IMPORTANT! BEFORE YOU BEGIN

A WORD OF WARING is necessary, especially if this happens to be your first gas-powered vehicle. Gas-powered cars are subjected to unbelievable stress and strain due to high engine RPM, rough terrain and the racing/high performance usage that they receive. As a result, they need continual preventative maintenance to keep them in operating condition.

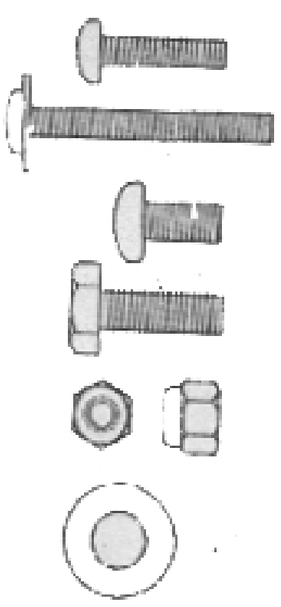
This is an extremely sophisticated model with a large number of moving parts. Assembly of the model by a completely inexperienced builder could turn out to be a very frustrating experience. Before you begin assembly, take a look through the box and these instructions carefully to decide whether or not you are ready for this challenge! If you do not feel that this type of model is for you, it may be returned to the dealer as long as it is NEW and UNUSED. UNDER NO CIRCUMSTANCES CAN YOUR DEALER ACCEPT A KIT FOR RETURN IF ASSEMBLY HAS ALREADY BEGUN' If this is not what you bargained for, then go no further and return this kit to the dealer immediately. BUT, if a little maintenance doesn't brother you and the thrill of high performance driving is for you, then don't hesitate another minute! Read through this entire manual thoroughly to familarize yourself with the parts and methods of construction used before actually starting to build.

*All nuts and bolts used throughout this kit are metric sized. Therefore, some of the notations may not be familiar to you. An M3 nut is a 3 millimeter (3mm) nut. An M3 x 12 screw is 12mm long and 3mm in diameter. At various points throughout the manual these parts are labeled and pictured in their actual size. For your reference, 1mm equals approximately .039 inches.

*In addition to the damper oil (read liquid) you will also find a small tube of "screw cement". This bluish-green cement should be used on all nuts and bolts in the car including those parts which are ALREADY ASSEMBLED. If you do not use the screw cement, all the nuts and bolts of the car WILL eventually fall out. This particular formula is safe for both nylon and metal parts. Use this type of cement only on the nuts and bolts. When it calls for cement in the manual, use an "instant" type of glue such as jet, CA or Hot Stuff.

1 ASSEMBLY OF MAIN CHASSIS

[Small Parts Used]



M3 x 10 Screw....2

M3 x 20 Flanged Screw....2

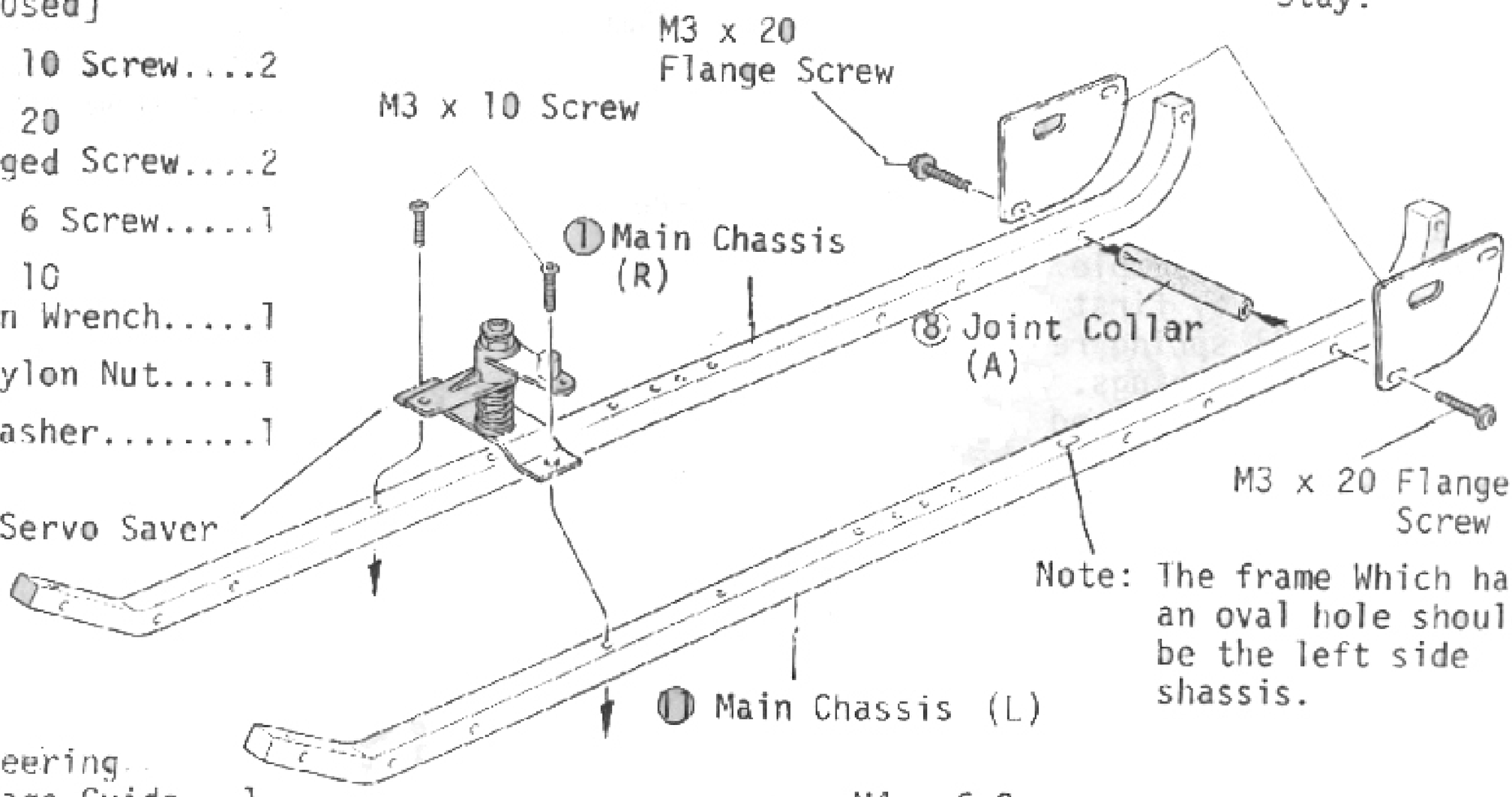
M4 x 6 Screw.....1

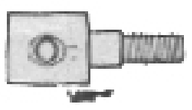
M4 x 10 Allen Wrench.....1

M3 Nylon Nut.....1

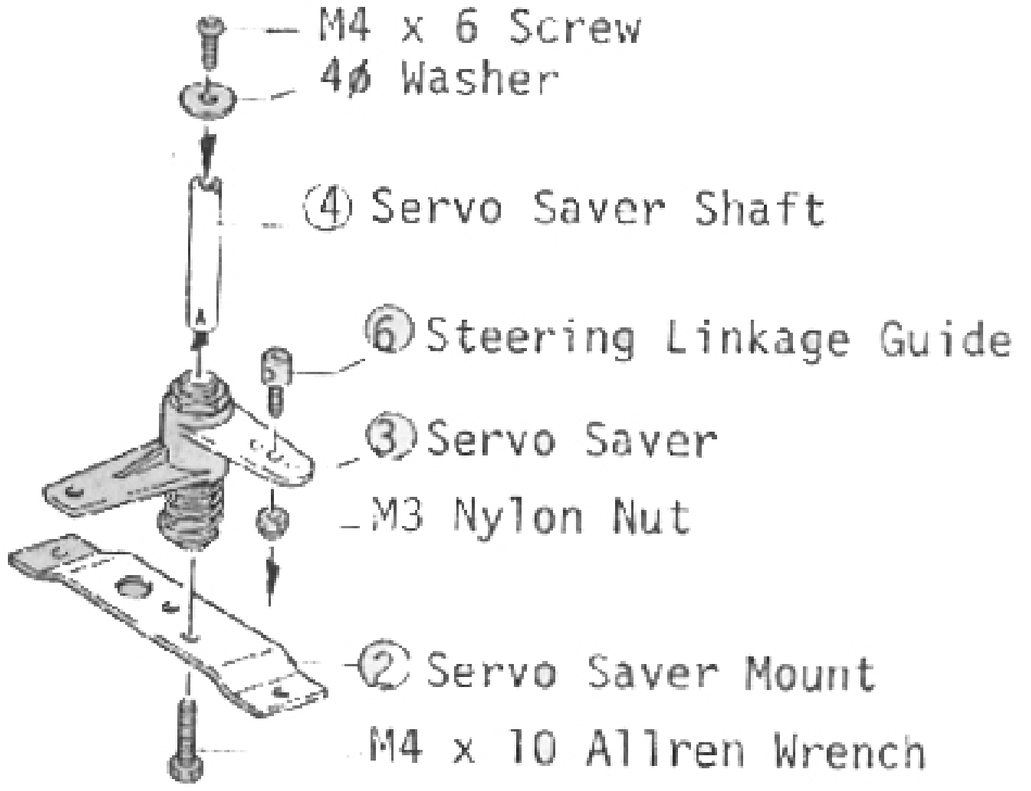
4ø Washer.....1

1 ASSEMBLY OF MAIN CHASSIS



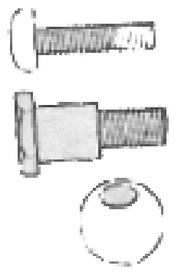


⑥ Steering Linkage Guide...1



2 INSTALLATION OF HUB CARRIER

[Small Parts Used]

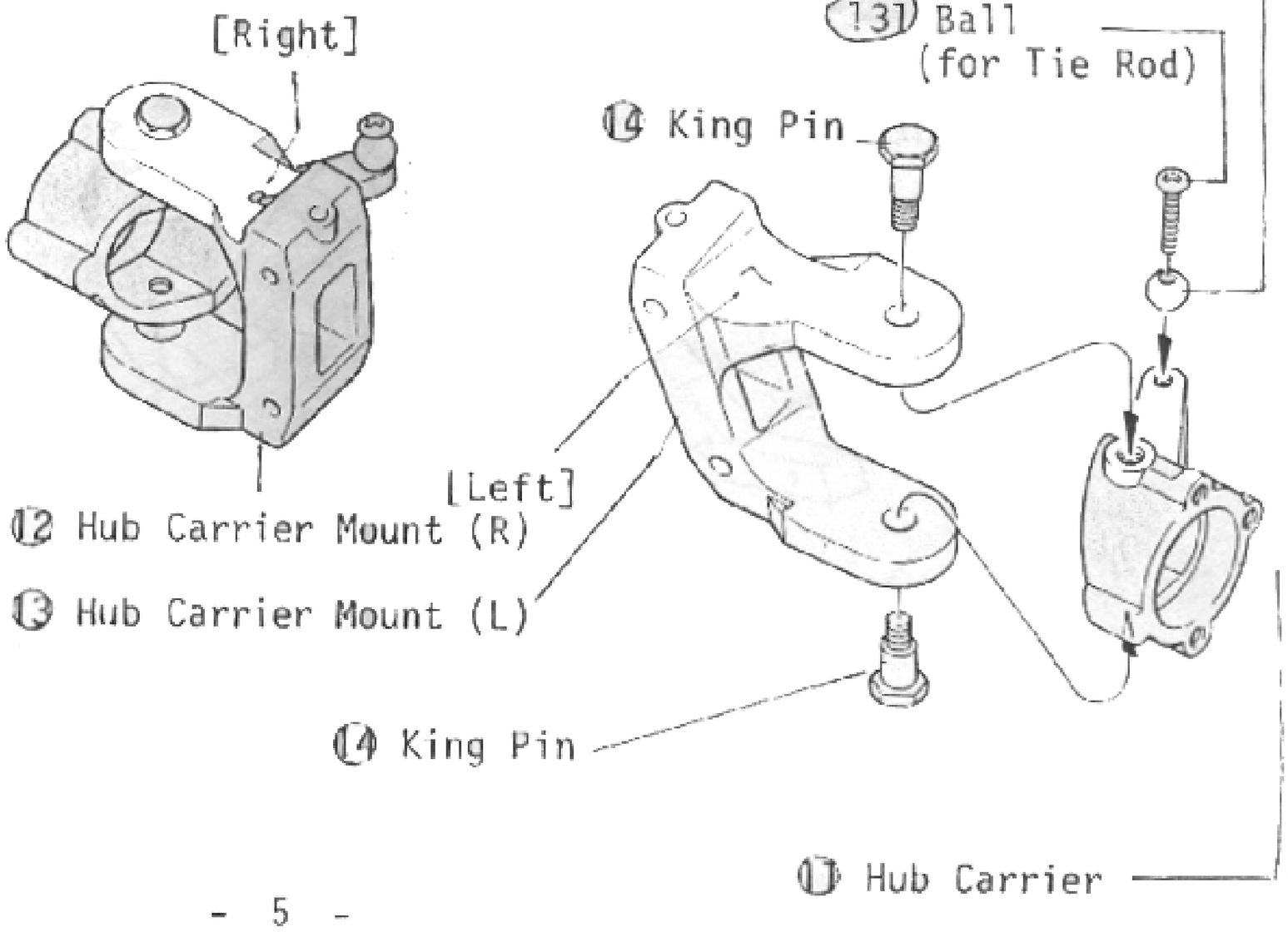


M3 x 10 Screw.....2

⑭ King Pin.....4

⑬ Ball (for Tie Rod).....2

2 INSTALLATION OF HUB CARRIER



3 POURING OIL INTO FRONT DAMPER

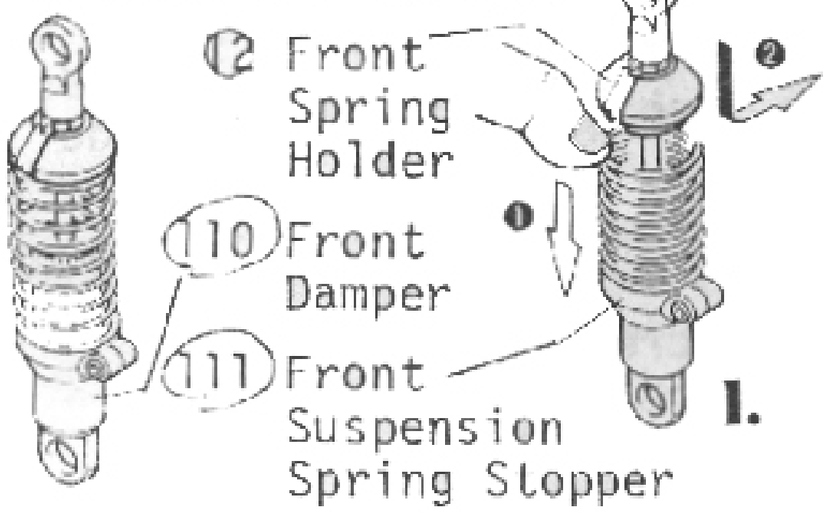
[Small Parts Used]

(15) Ball (for Damper)..2

[Disassembly of Front Damper]

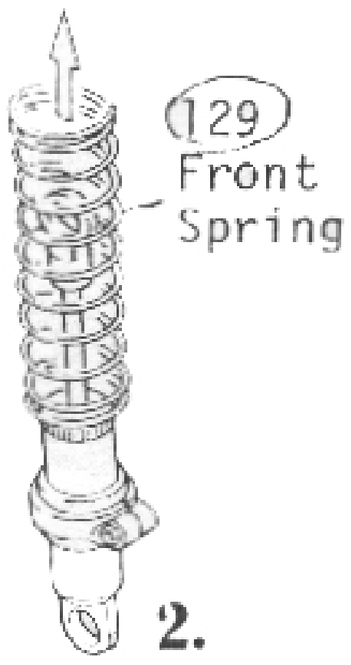
The fornt dampers are factory assembled, but not filled with oil. Disassemble the front shocks by first removing the coil spring retainer and then the springs. Unscrew the damper stopper and remove it.

Note: The rear dampers are already oil-filled.



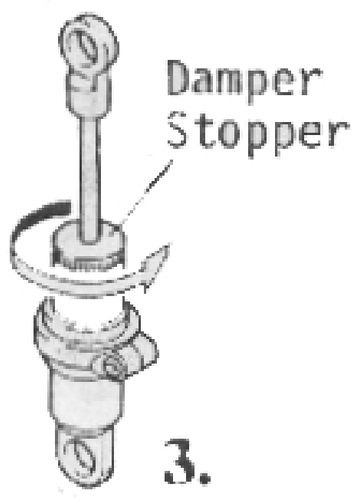
1.

Compress the spring as shown, then slide the spring holder sideways to remove it.



2.

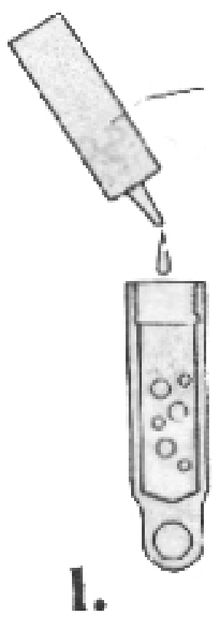
Detach the spring.



3.

Remove the damper stopper and pull out the piston.

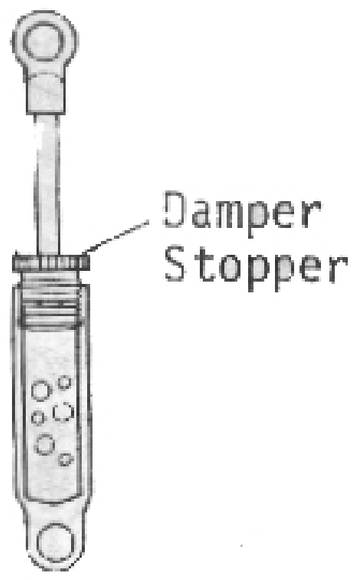
3 POURING OIL INTO FRONT DAMPER



1.

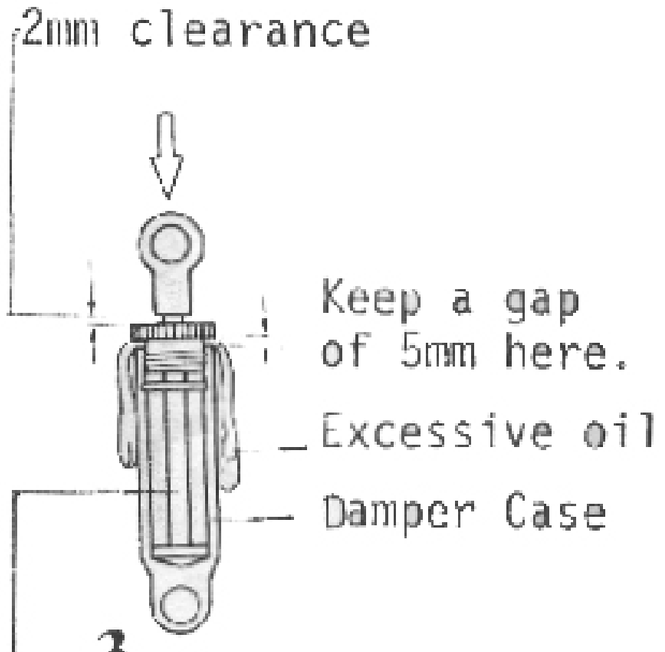
Pour the oil (red liquid) into the damper up to the point shown above.

(Prefer to use weak oil)



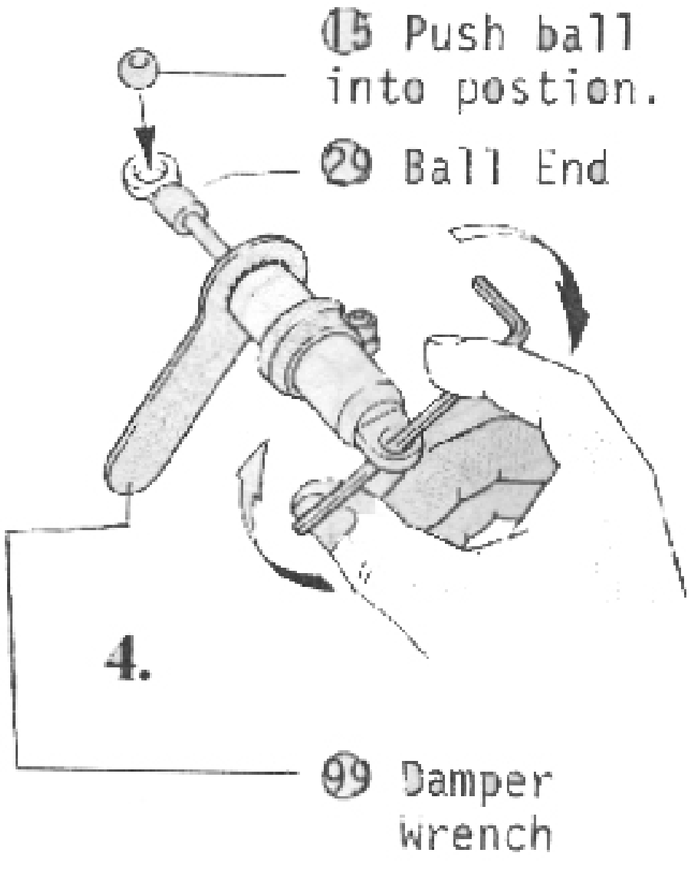
2.

Screw in the damper stopper.



3.

Keep a gap of about 5mm between the damper stopper and the damper case and push the piston all the way down to squeeze out any excess.

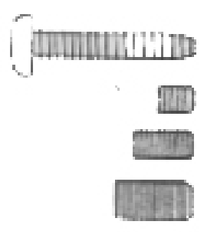


4.

Screw in the damper tightly by holding it with pliers as shown above. You may then install a ball into each front shock ball end.

4 ASSEMBLY OF FRONT SUSPENSION

[Small Parts Used]

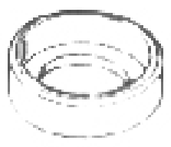


M3 x 14
Self Tapping Screw.2
M3 x 3 Set Screw...2
M3 x 5 Set Screw...4
M4 x 6 Set Screw...4

24 Damper Bushing 2

25 3ø Stopper...2

45 Damper Collar ...2

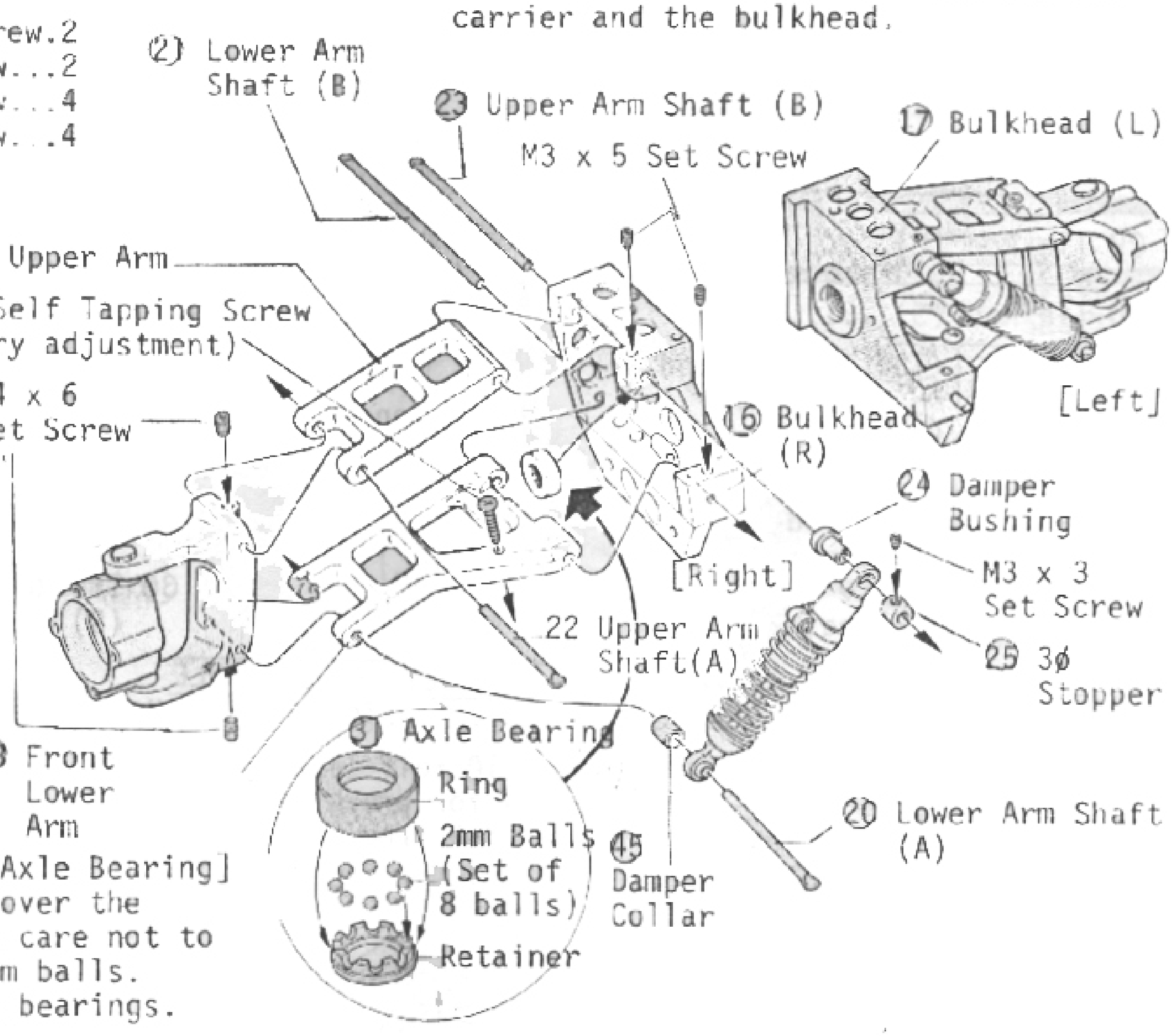


Ring.....2

2mm Balls...16 (Set of balls)

Retainer....2

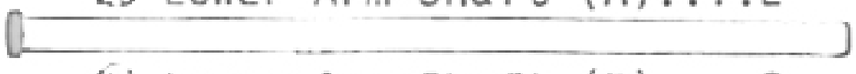
Note: Try not to use excessive force when screwing in the setscrews onto the hub carrier and the bulkhead.



[Assembly of Axle Bearing]
Put the ring over the retainer with care not to loose any 2 mm balls.
*Assemble two bearings.

5 INSTALLATION OF FORNT SUSPENSION

(20) Lower Arm Shaft (A)....2



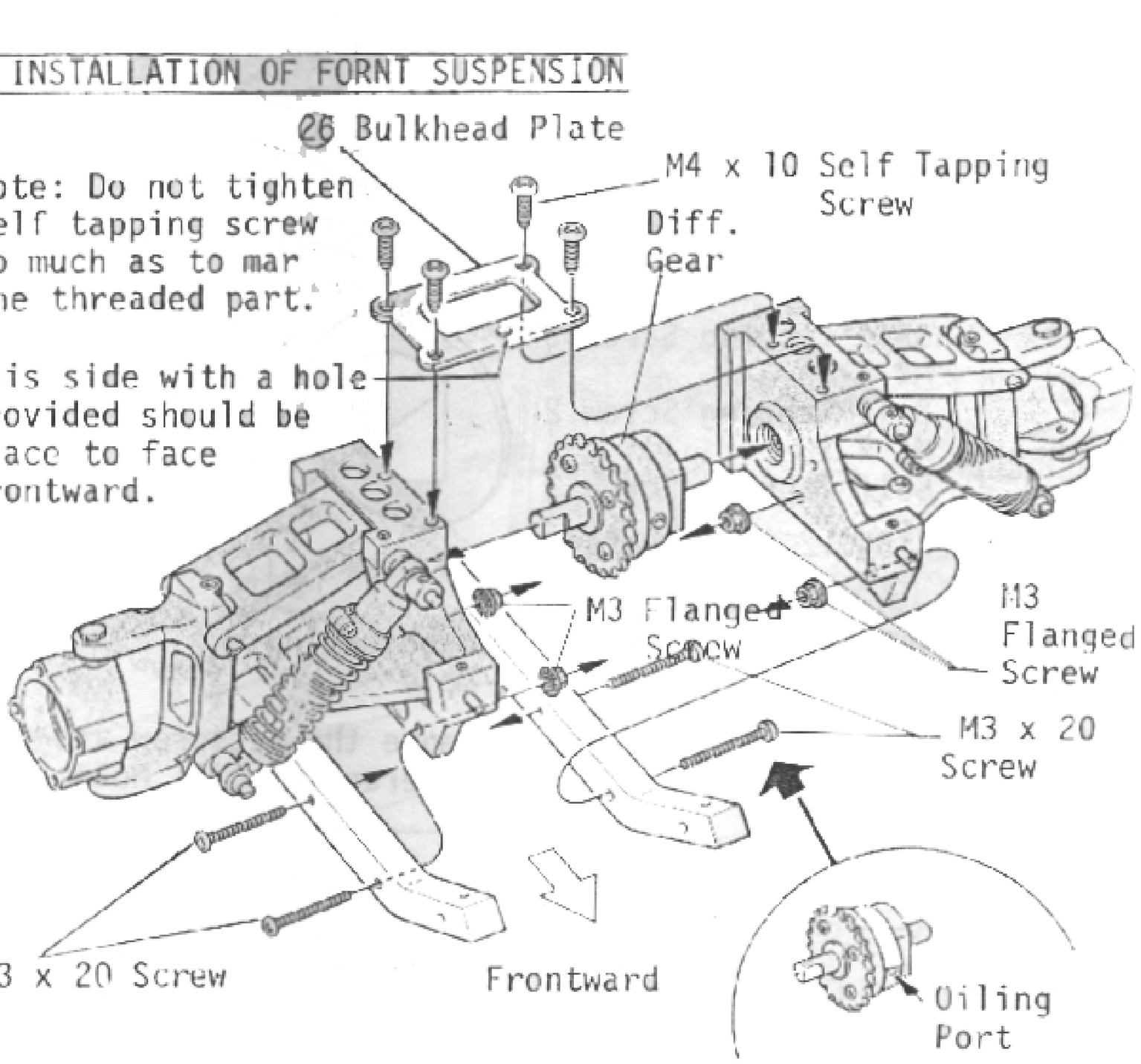
(21) Lower Arm Shaft (B)....2

(22) Upper Arm Shaft (A)....2

(23) Upper Arm Shaft (B)....2

Note: Do not tighten self tapping screw so much as to mar the threaded part.

This side with a hole provided should be place to face frontward.

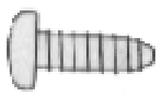


Remove the setscrew and pour some differential oil. Note: Thick Oil

5 INSTALLATION OF FRONT SUSPENSION

[Small Parts Used]

M3 x 25 Flange Screw....4



M4 x 10 Self Tapping Screw 4

M3 Flange Set

6 INSTALLATION OF TIE ROD

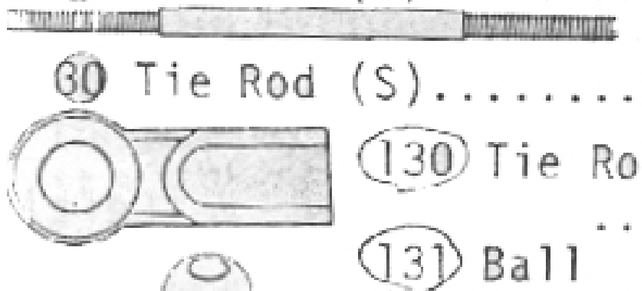
[Small Parts Used]

M3 x 25 Flanged Screw.1

M3 Nylon Nut...1

M3 Flanged Nut...1

29 Tie Rod (L).....1

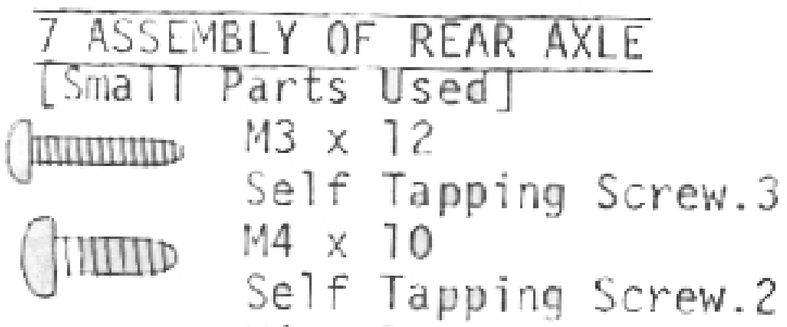


30 Tie Rod (S).....1

130 Tie Rod End 4

131 Ball (For Tie Rod).2

Screw in the tie rod end onto the tie rod in such a degree that the assembly should become in the length shown below.



7 ASSEMBLY OF REAR AXLE

[Small Parts Used]

M3 x 12 Self Tapping Screw.3

M4 x 10 Self Tapping Screw.2

M4 x 18 Self Tapping Screw.2

Ring..2

Retainer ...2

2mm Balls 16

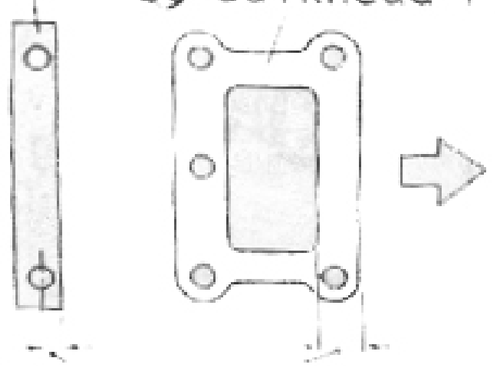
45 Damper Collar...1

4ø Washer(1mm).....1

[Fixing Direction]

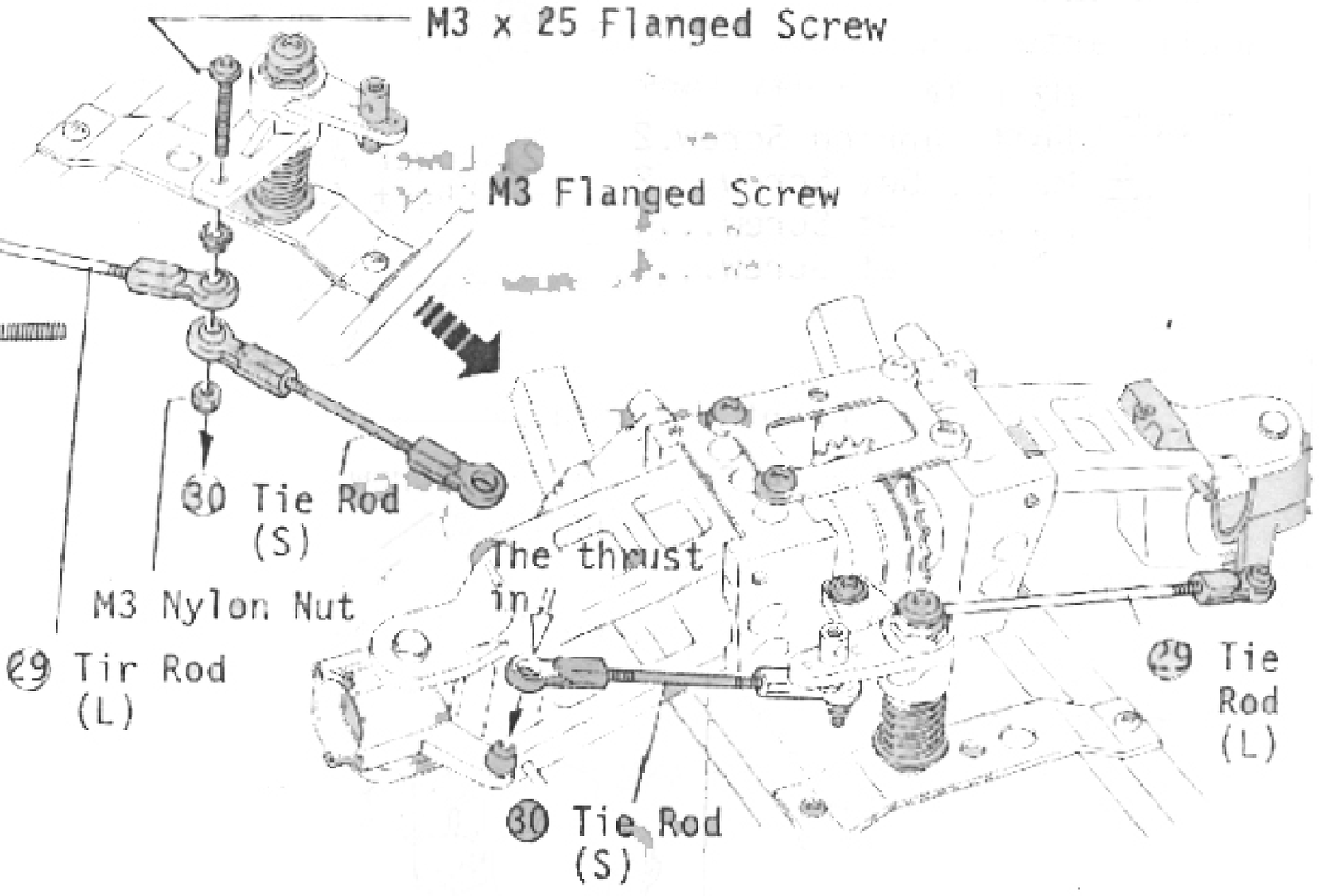
32 Damper Stay (A)

26 Bulkhead Plate



The narrower side should face front.

6 INSTALLATION OF TIE ROD

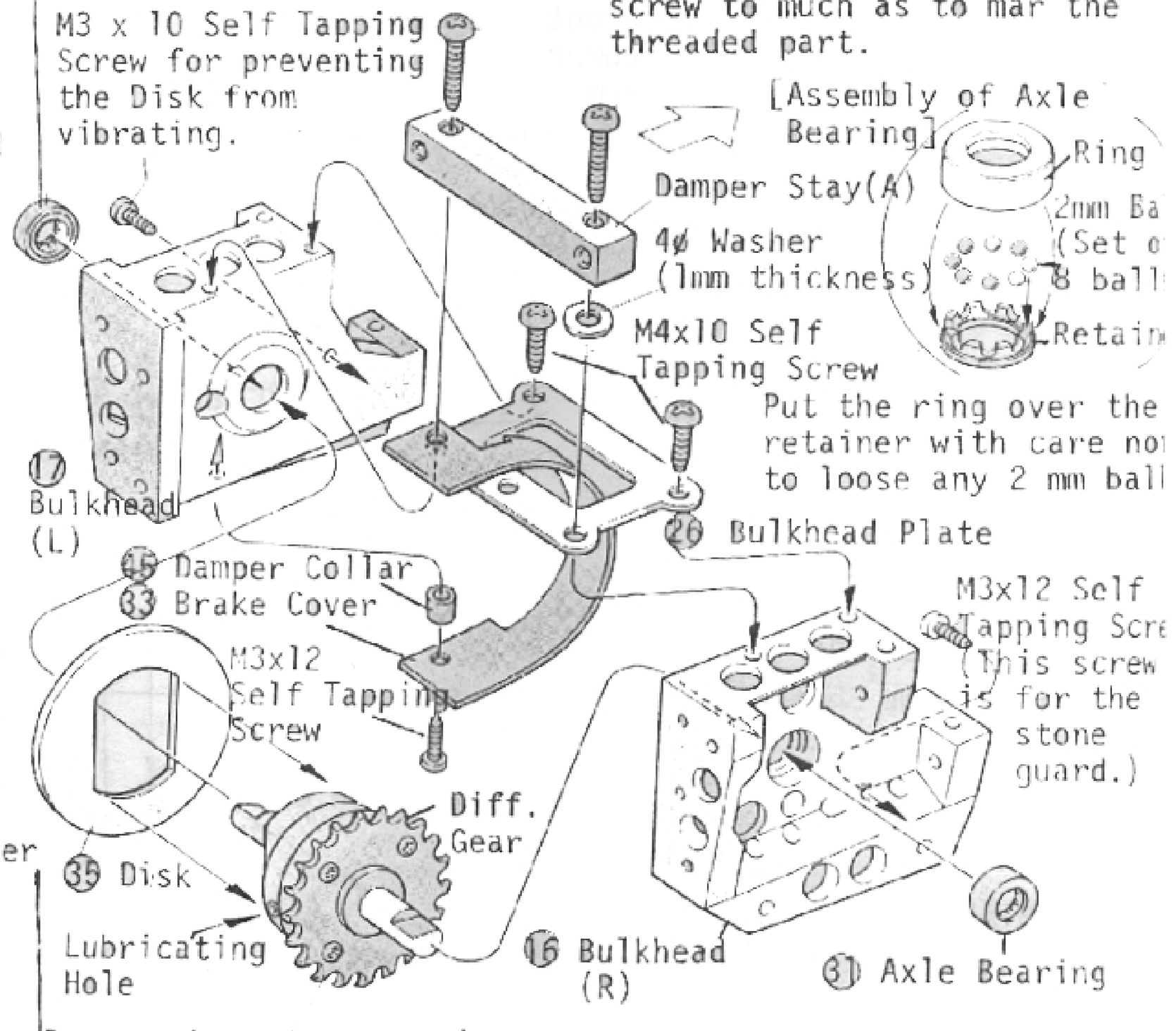


7 ASSEMBLY OF REAR AXLE

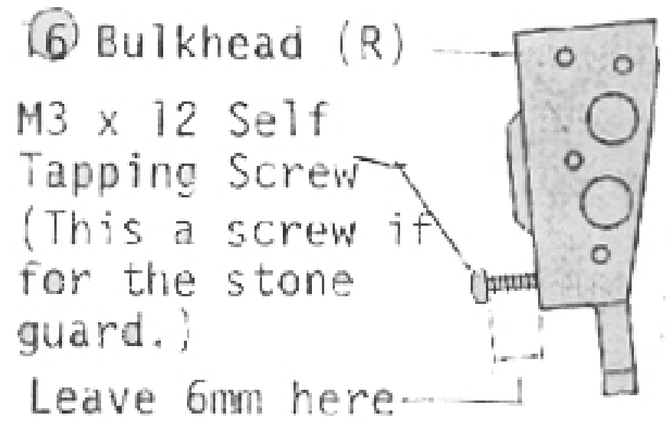
31 Axle Bearing

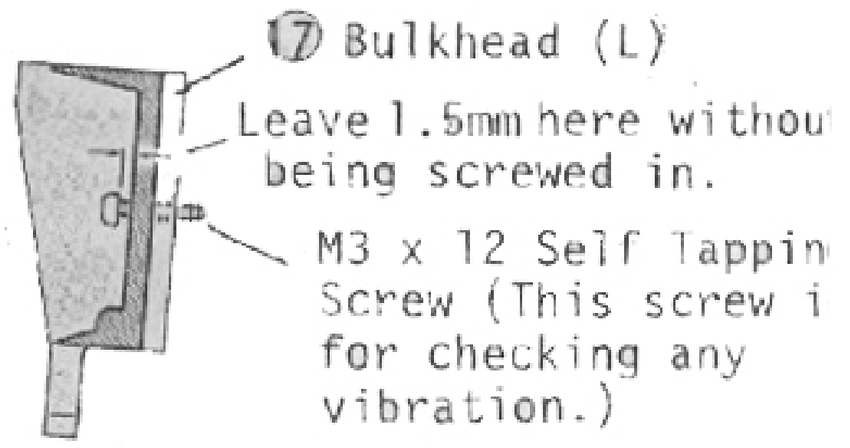
M3 x 10 Self Tapping Screw for preventing the Disk from vibrating.

Note: Do not tighten self tapping screw to much as to mar the threaded part.



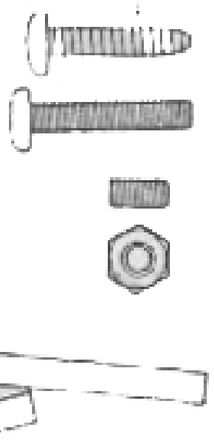
Remove the setscrew and pour some differential oil. Note: Thick Oil



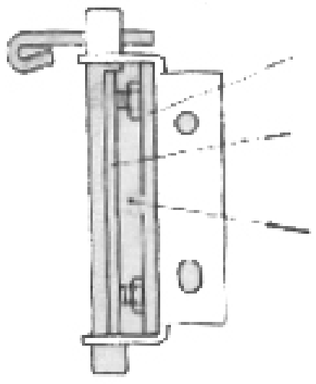


8 INSTALLATION AND ASSEMBLY OF BRAKE CALIPER

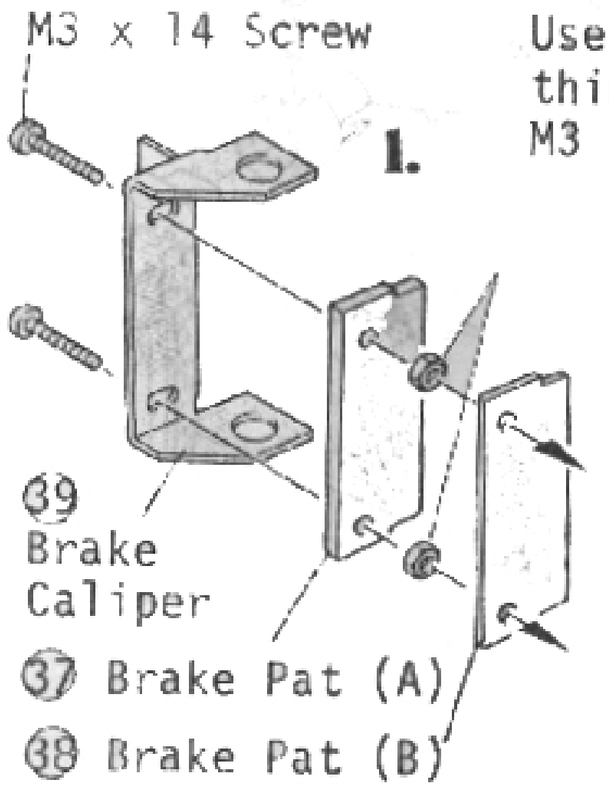
[Small Parts Used]



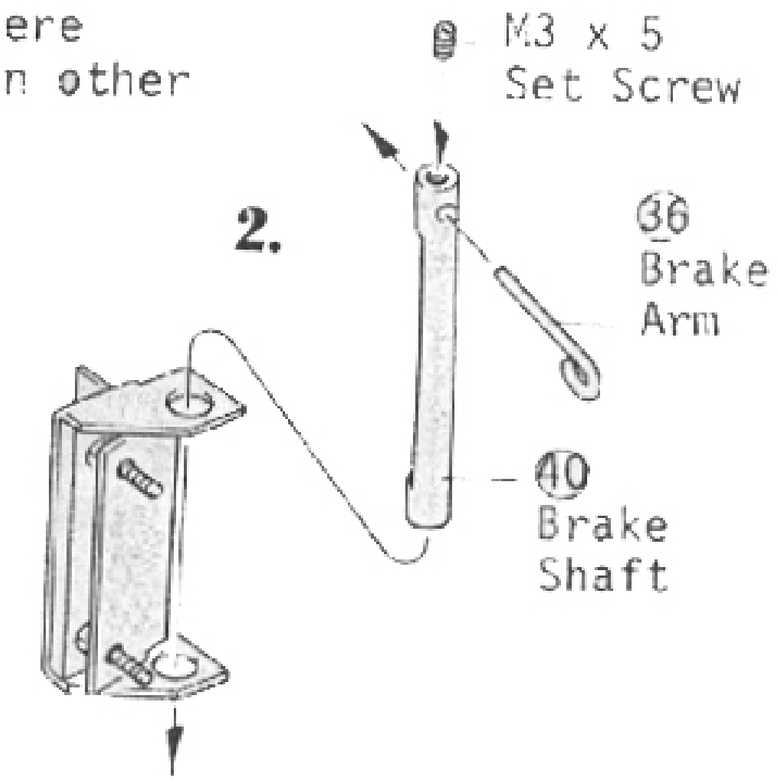
M3 x 12 Self Tapping Screw.2
M3 x 14 Screw.....2
M3 x 5 Set Screw...1
M3 Nut.....2
(Thinner Nut)
㊱ Brake Arm.....1

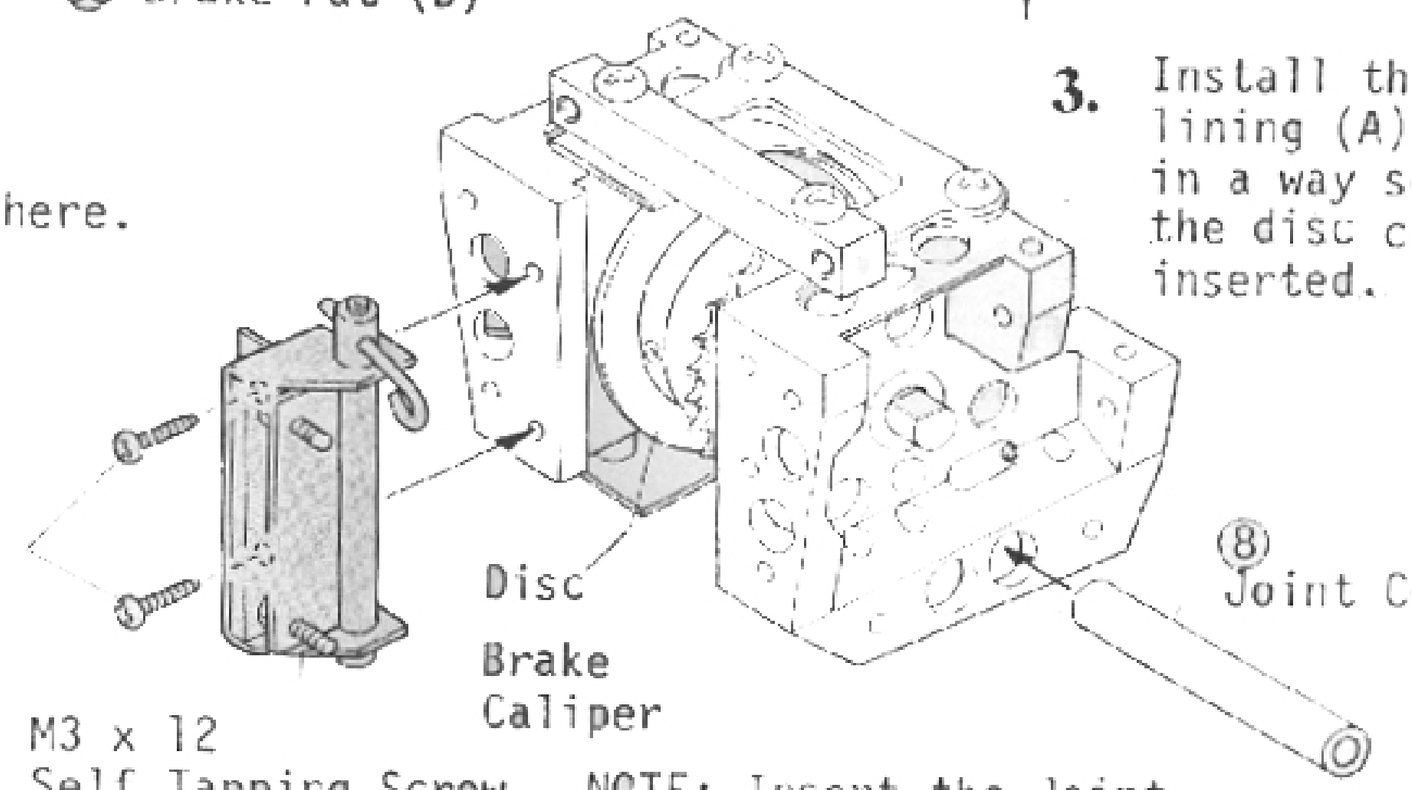


8 INSTALLATION AND ASSEMBLY OF BRAKE CALIPER



Use a nut here thinner than other M3 nuts.





M3 x 12 Self Tapping Screw (Do not tighten excessively.)

NOTE: Insert the Joint collar ⑧ through the bulkheads L ⑰ and R ⑯ previously.

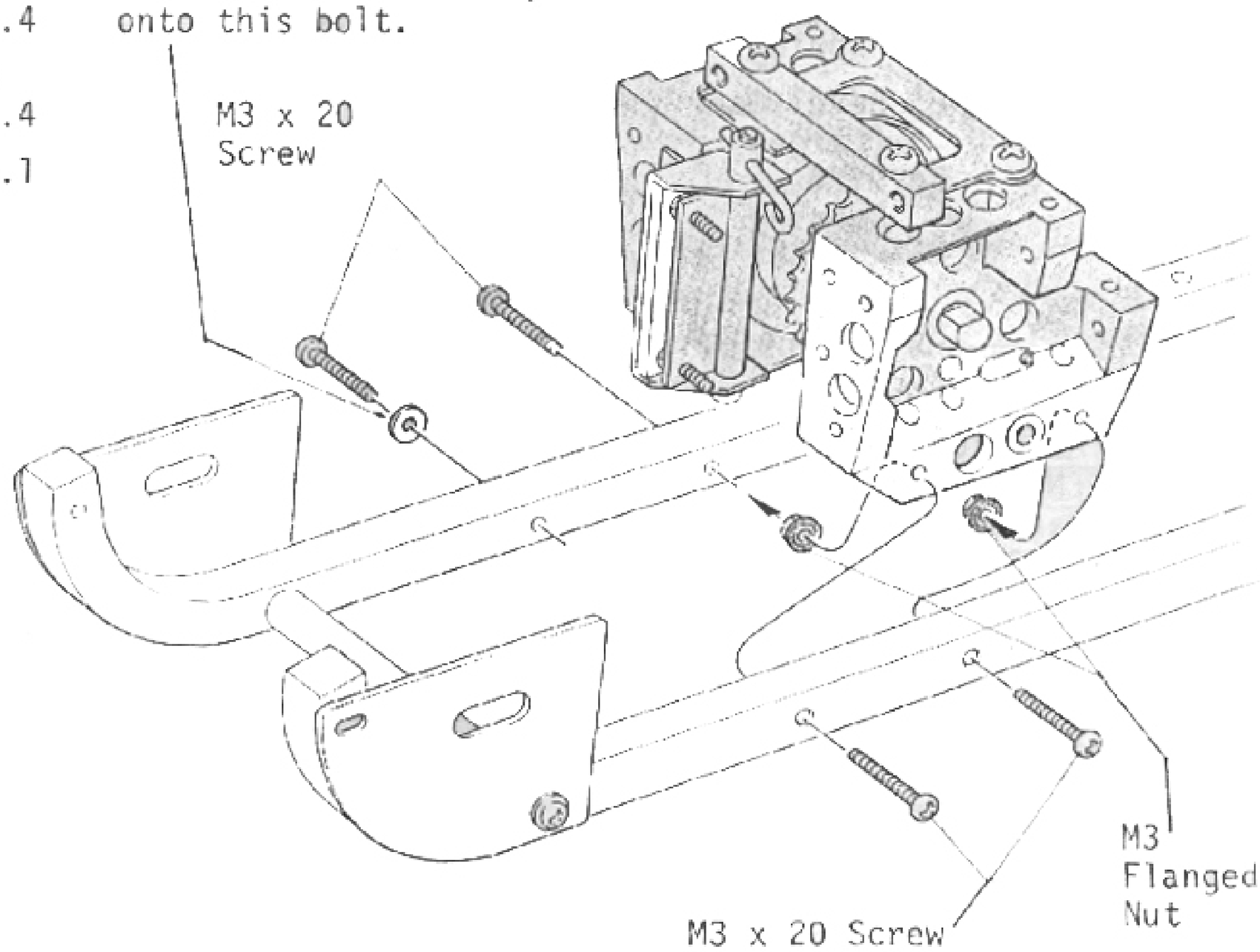
9 FIXING OF REAR AXLE

[Small Parts Used]

M3 x 20 Screw..4
M3 Flanged Nut 4
3ø Washer.....1

9 FIXING OF REAR AXLE

Put a 3 mm washer only onto this bolt.



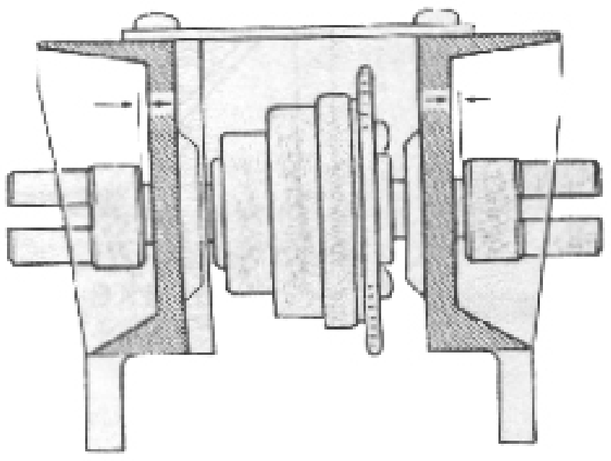
Fix the other side with a M3 flanged nut, too.

10 INSTALLATION OF JOINTS

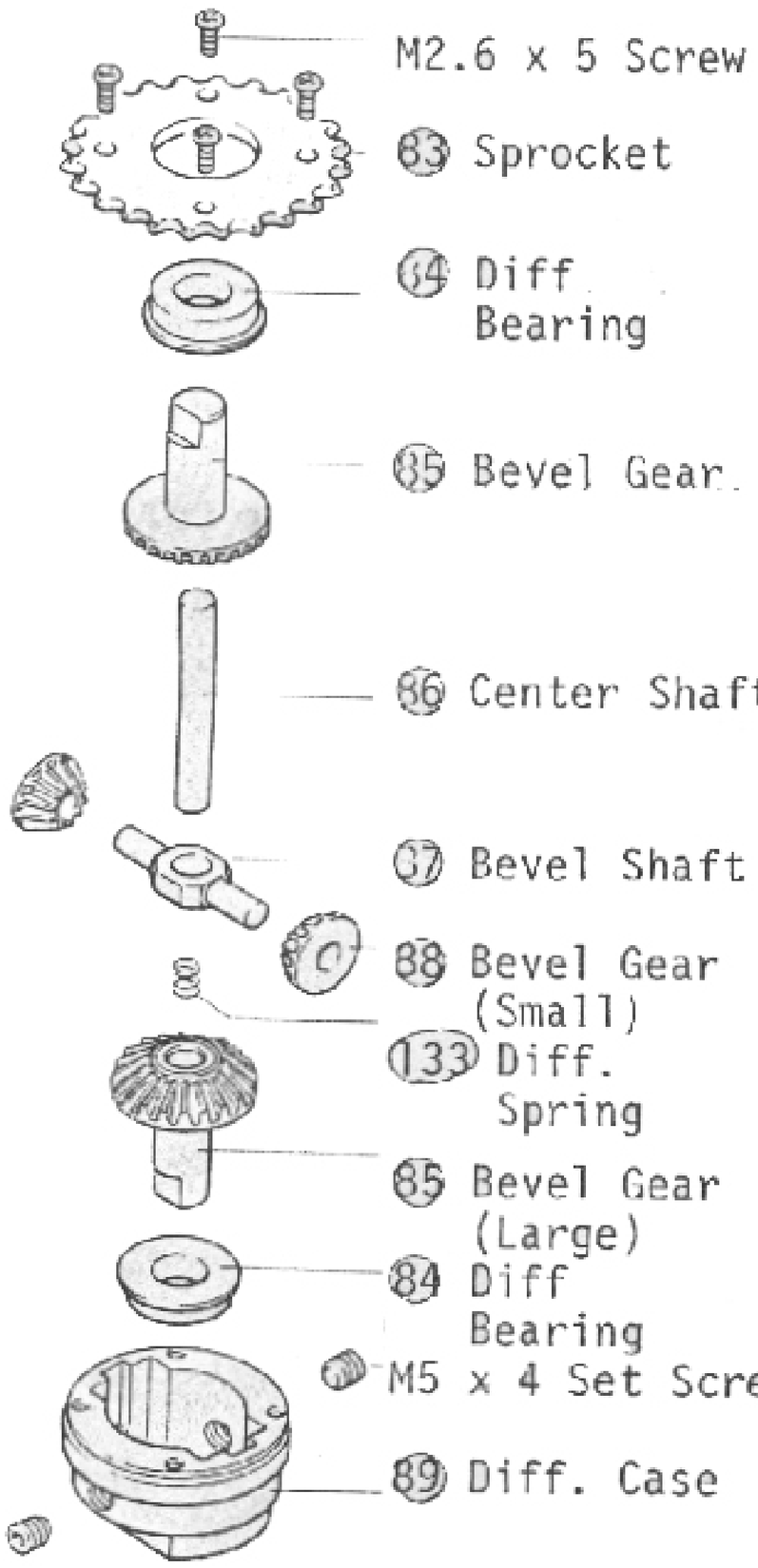
[Small Parts Used]

M5 x 5 Set Screw...4

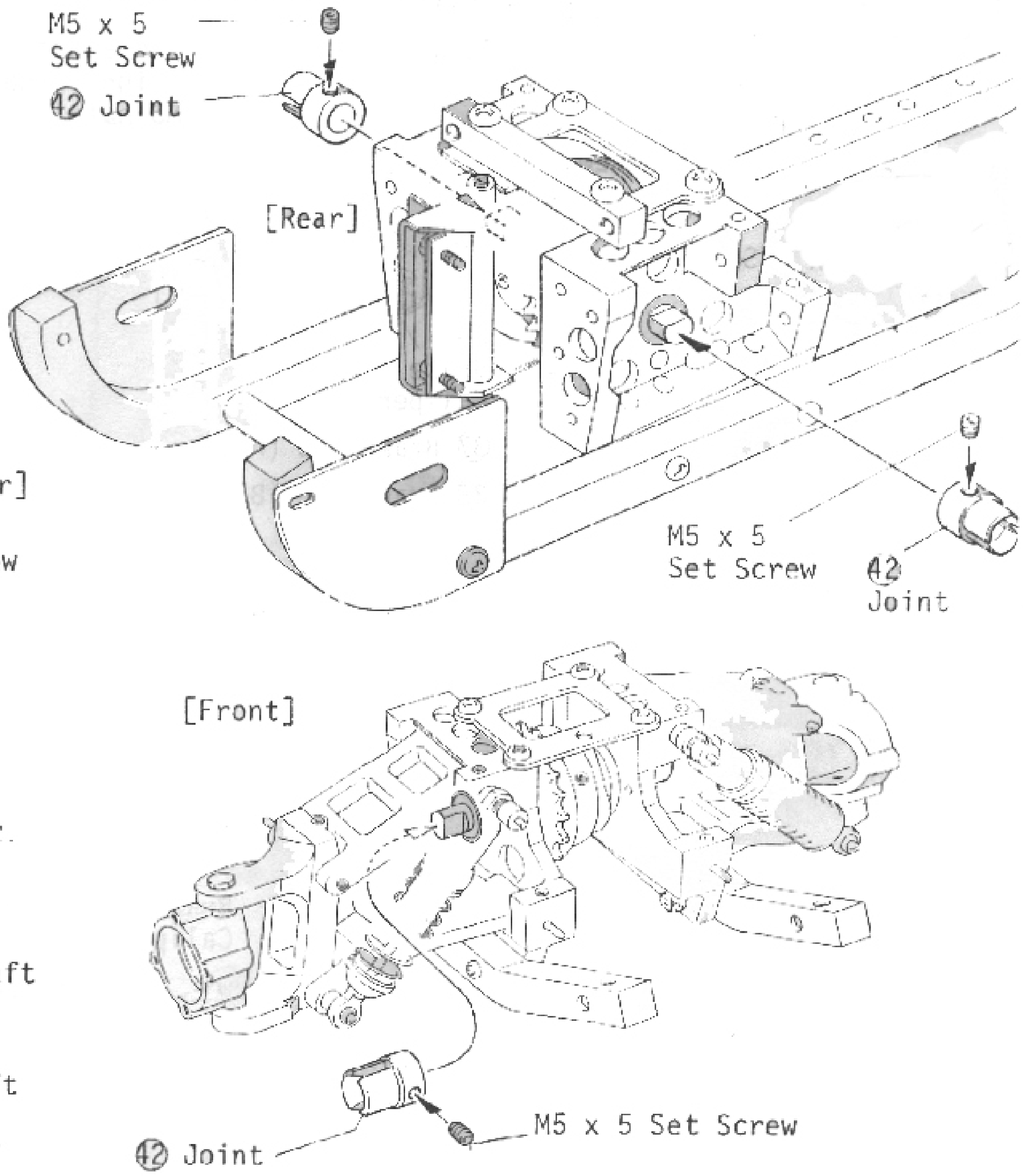
Fix the joint (42) with some play, like 0.5 to 1 mm.



[Exploded View of Diff. Gear]

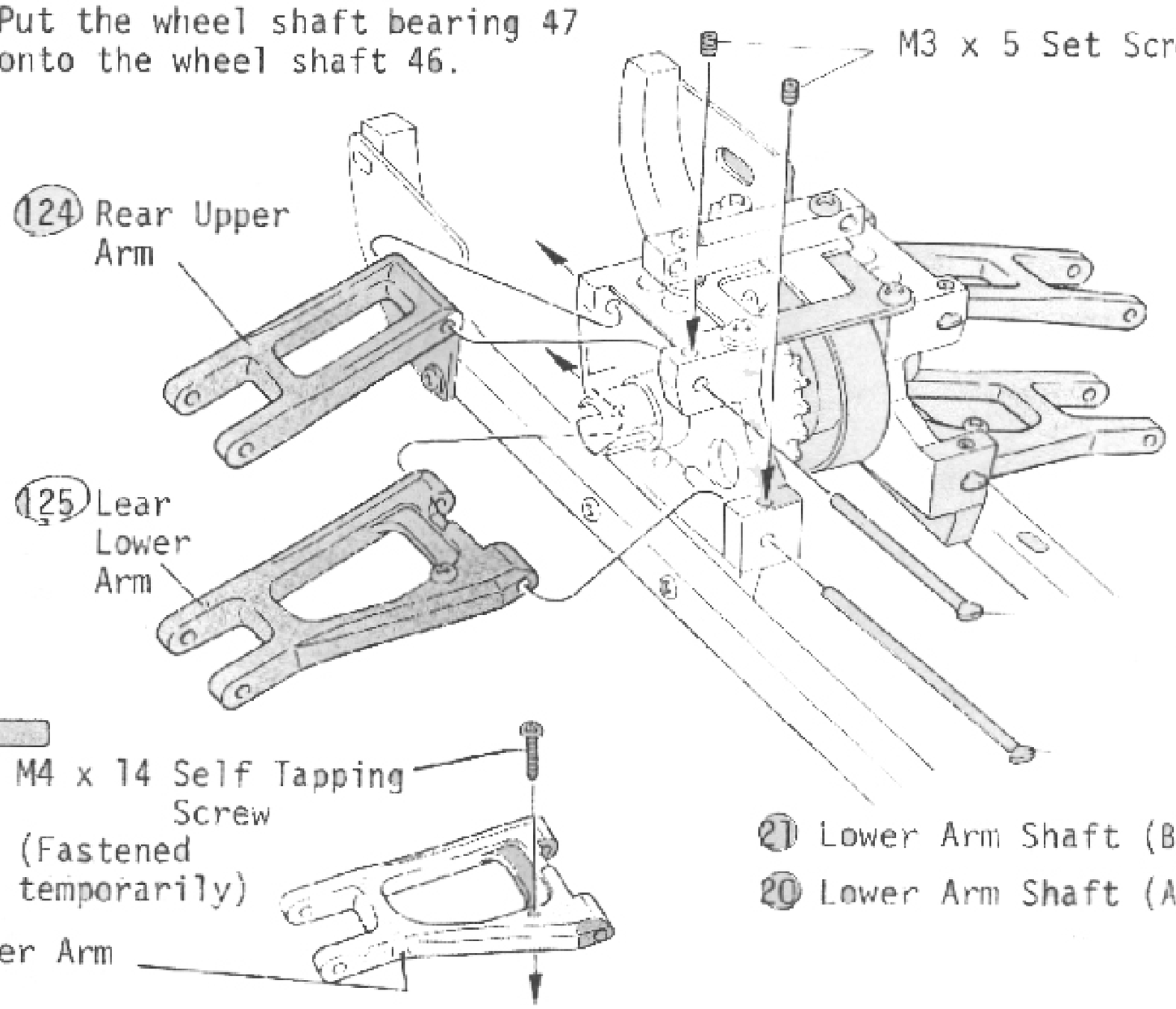


10 INSTALLATION OF JOINTS



11 INSTALLATION OF REAR SUSPENSION ARM

Put the wheel shaft bearing 47 onto the wheel shaft 46.

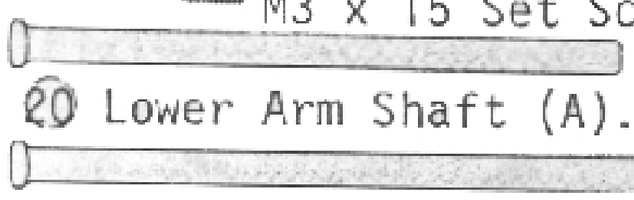


11 INSTALLATION OF REAR SUSPENSION ARM

[Small Parts Used]

M3 x 14 Self Tapping Screw.2

M3 x 15 Set Screw..4



(20) Lower Arm Shaft (A).....2

(22) Lower Arm Shaft (B).....2

[Installation of Height Adjustment Screw]

12 INSTALLATION OF DAMPER STAY (B)

[Small Parts Used]

M3 x 14 Screw...2

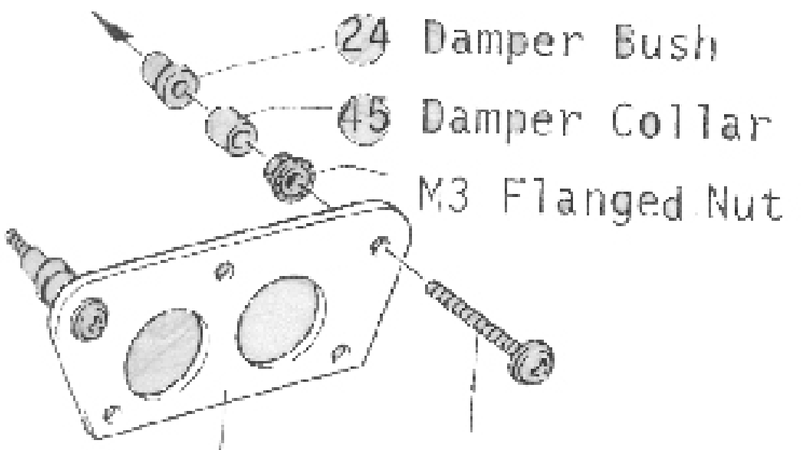
M3 x 25 Flanged Screw..2

M3 Nut.....2

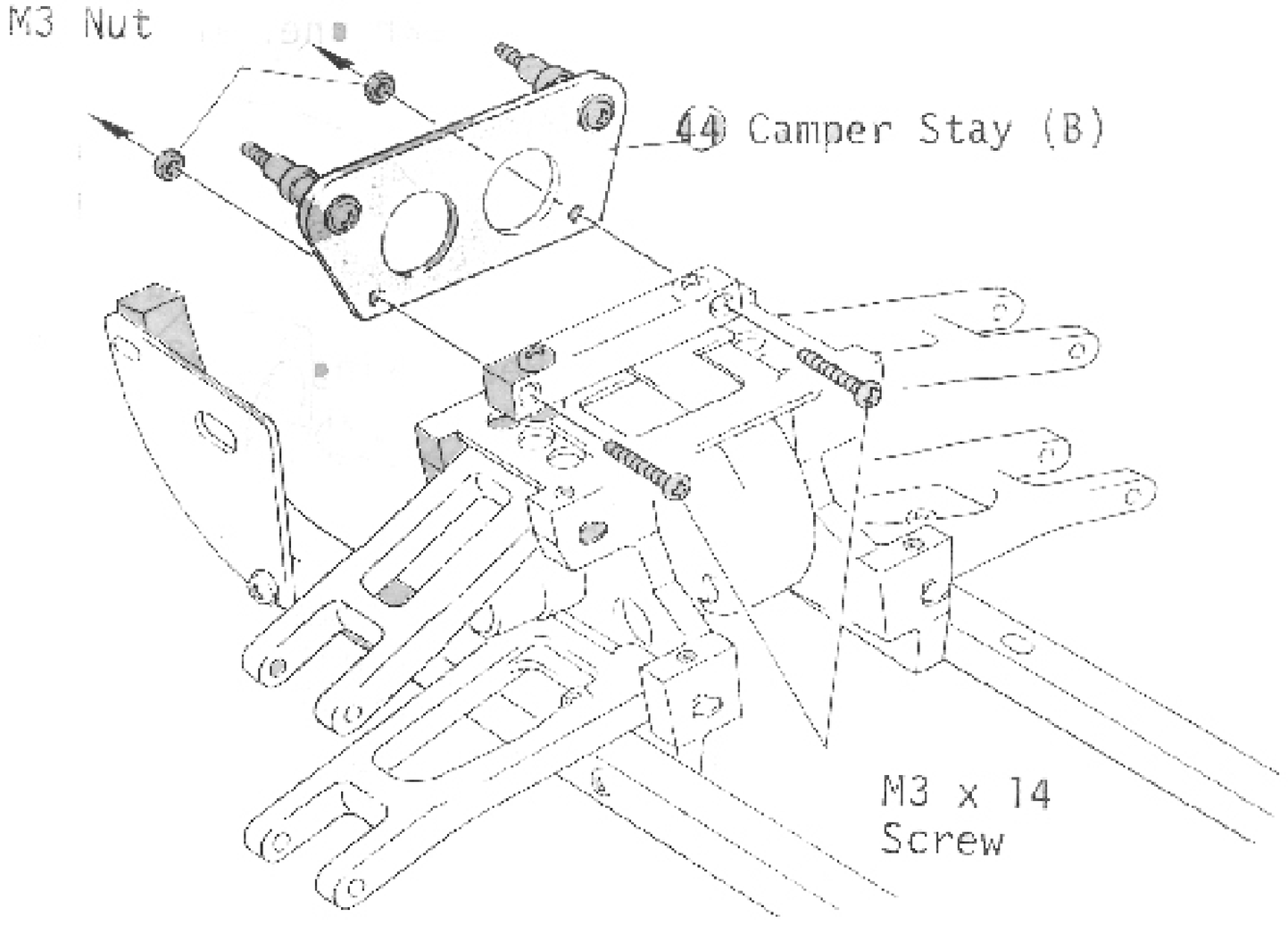
M3 Flanged Nut.2

24 Damper Bush.2

45 Damper Collar 2



12 INSTALLATION OF DAMPER STAY (B)



13 INSTALLATION OF REAR DAMPER

[Small Parts Used]

M4 x 6 Set screw...4

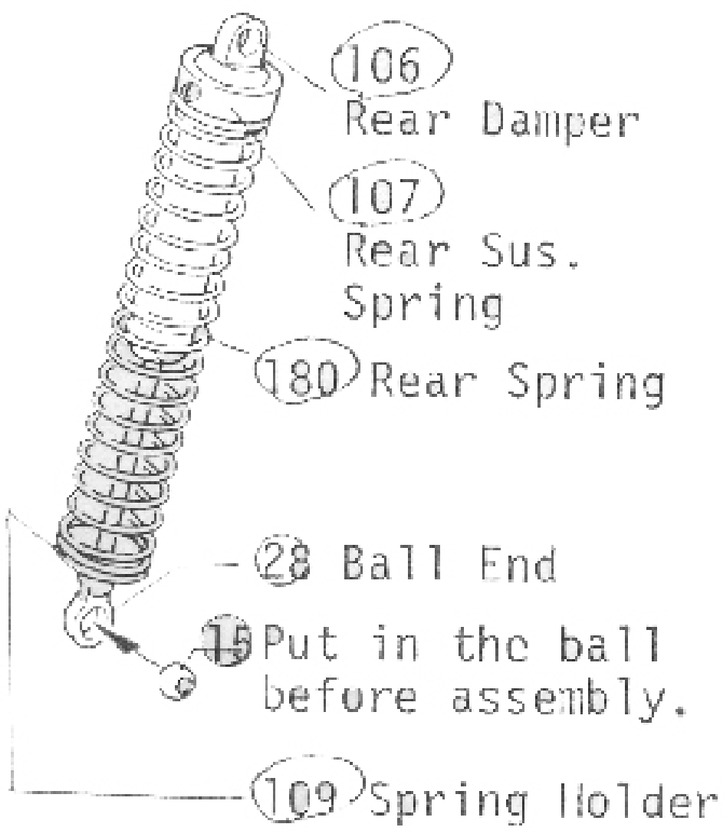
M3 Nylon Nut.....2

15 Ball (for Damper) 2

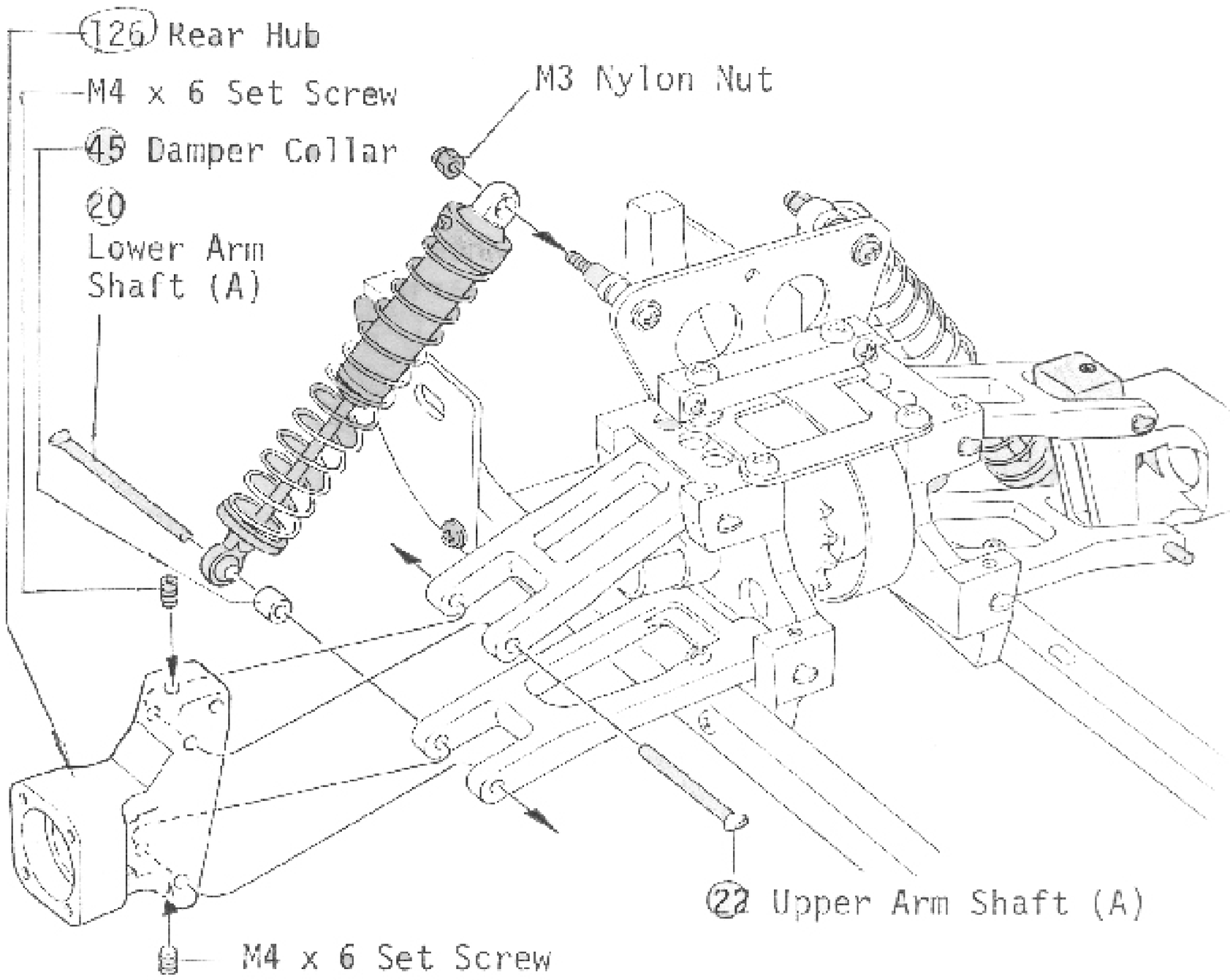
20 Lower Arm Shaft (A).....2

22 Upper Arm Shaft (A).....2

45 Damper Collar...2



13 INSTALLATION OF REAR DAMPER



14 FIXING OF SWING SHAFT

[Small Parts Used]

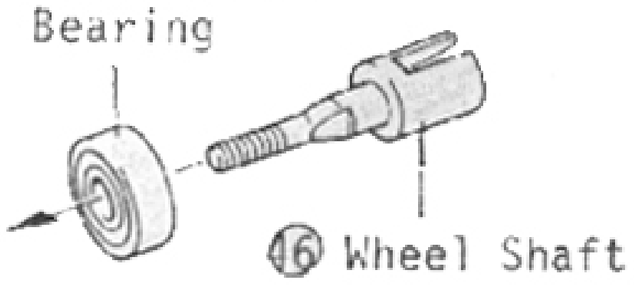
M3 x 8 Self Tapping Screw (Bind).....8

M3 x 5 Bind Screw...8

3ø Washer.....8

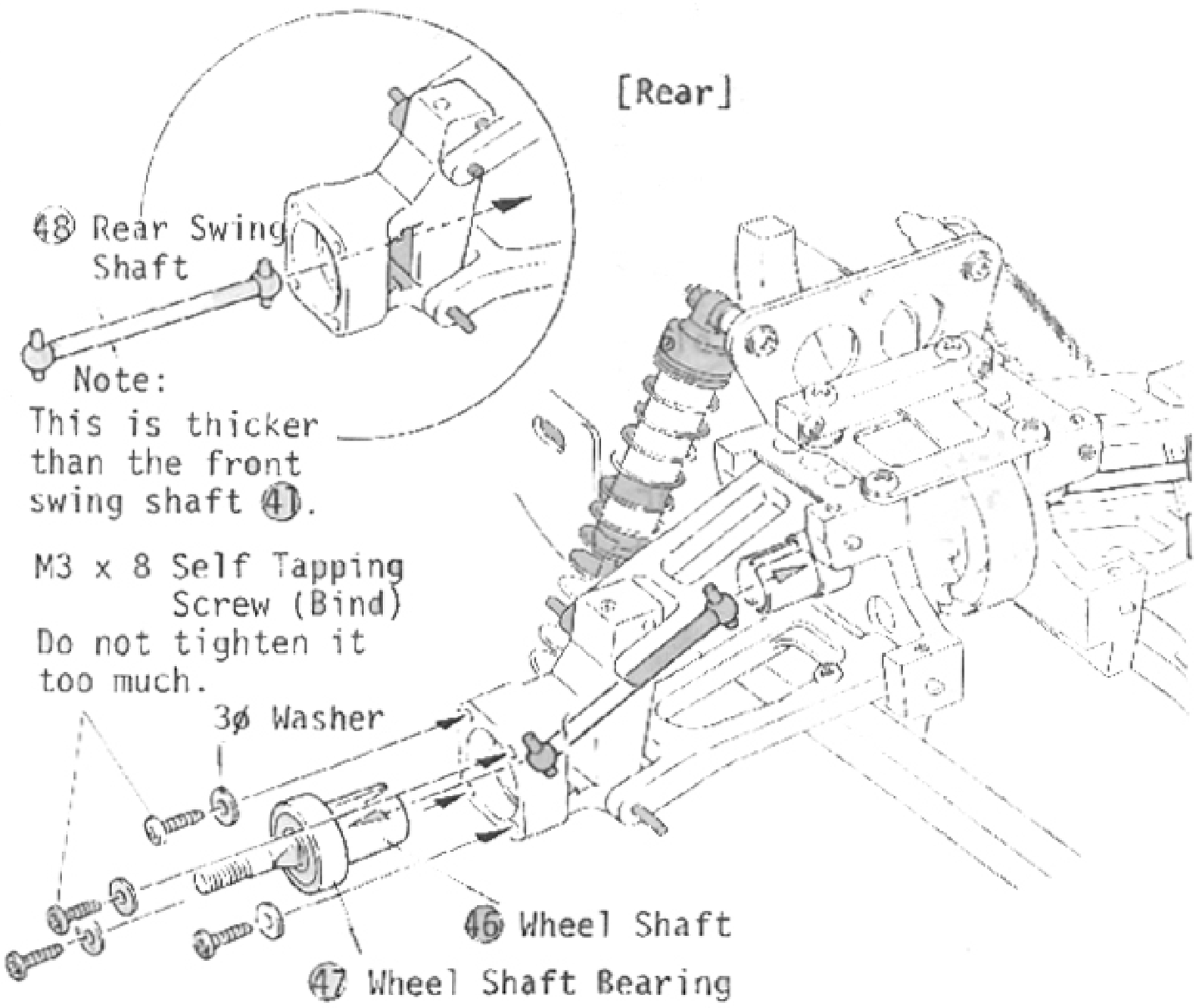
⑤ Collar.....2

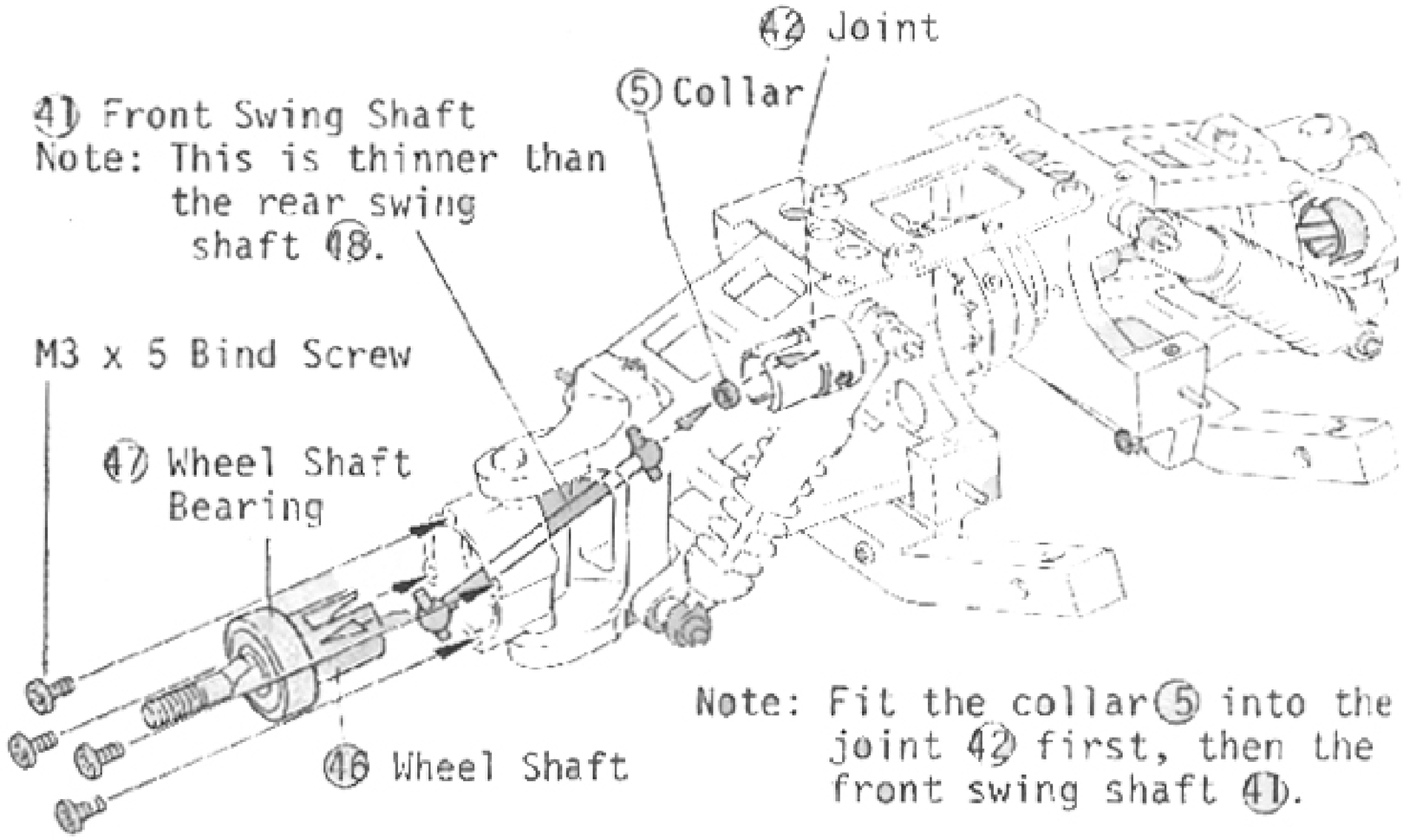
Put the wheel shaft bearing ㊼ onto the wheel shaft ㊻.



14 FIXING OF SWING SHAFT

Note: The front swing shaft is different in size from the rear one. Do not misplace them.





15 ASSEMBLY OF SPUR GEAR MOUNT

[Small Parts Used]

M3 x 12 Cap Bolt..2

M3 x 30 Screw.1

M5 Nut ...2

5ø Washer ...3

M5 Flanged Nut 1

6ø Wahser 3

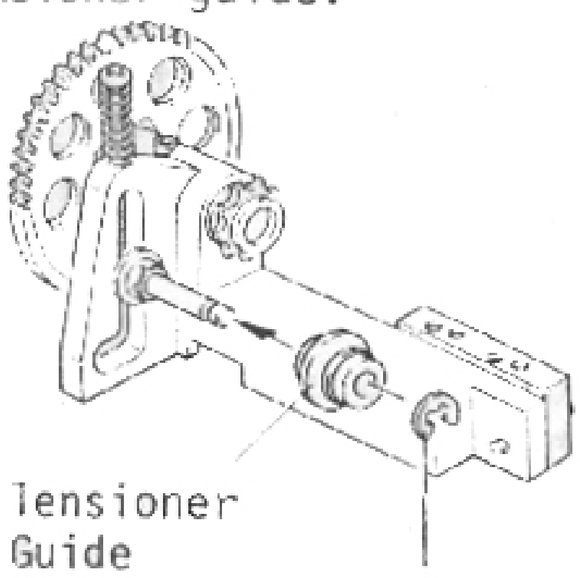
63 Adjust Spring..1

66 Tensioner Shaft.....1

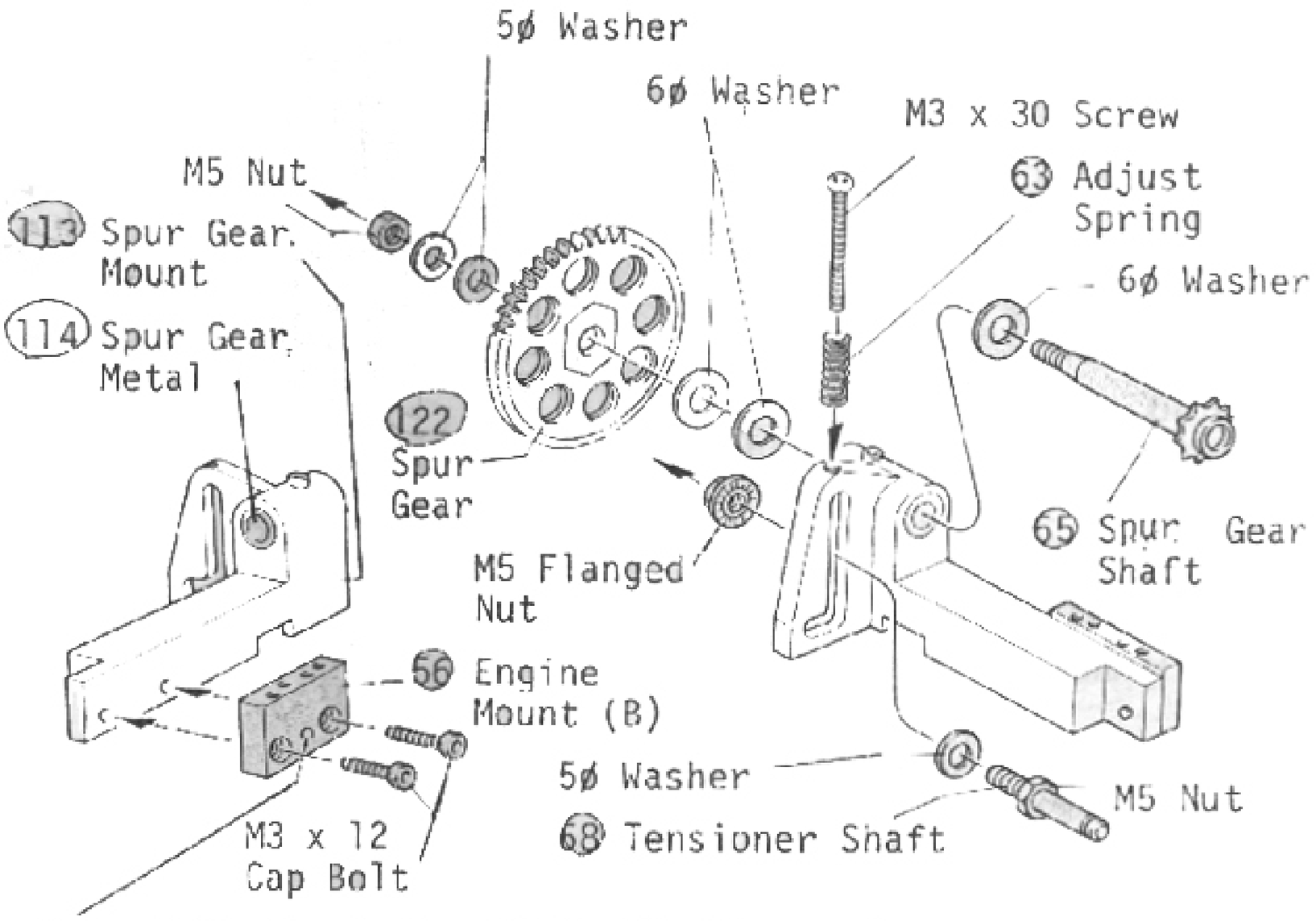
67 Tensioner Guide..1

68 R Ring..1

After having assembled as shown in the right side picture, install the tensioner guide.



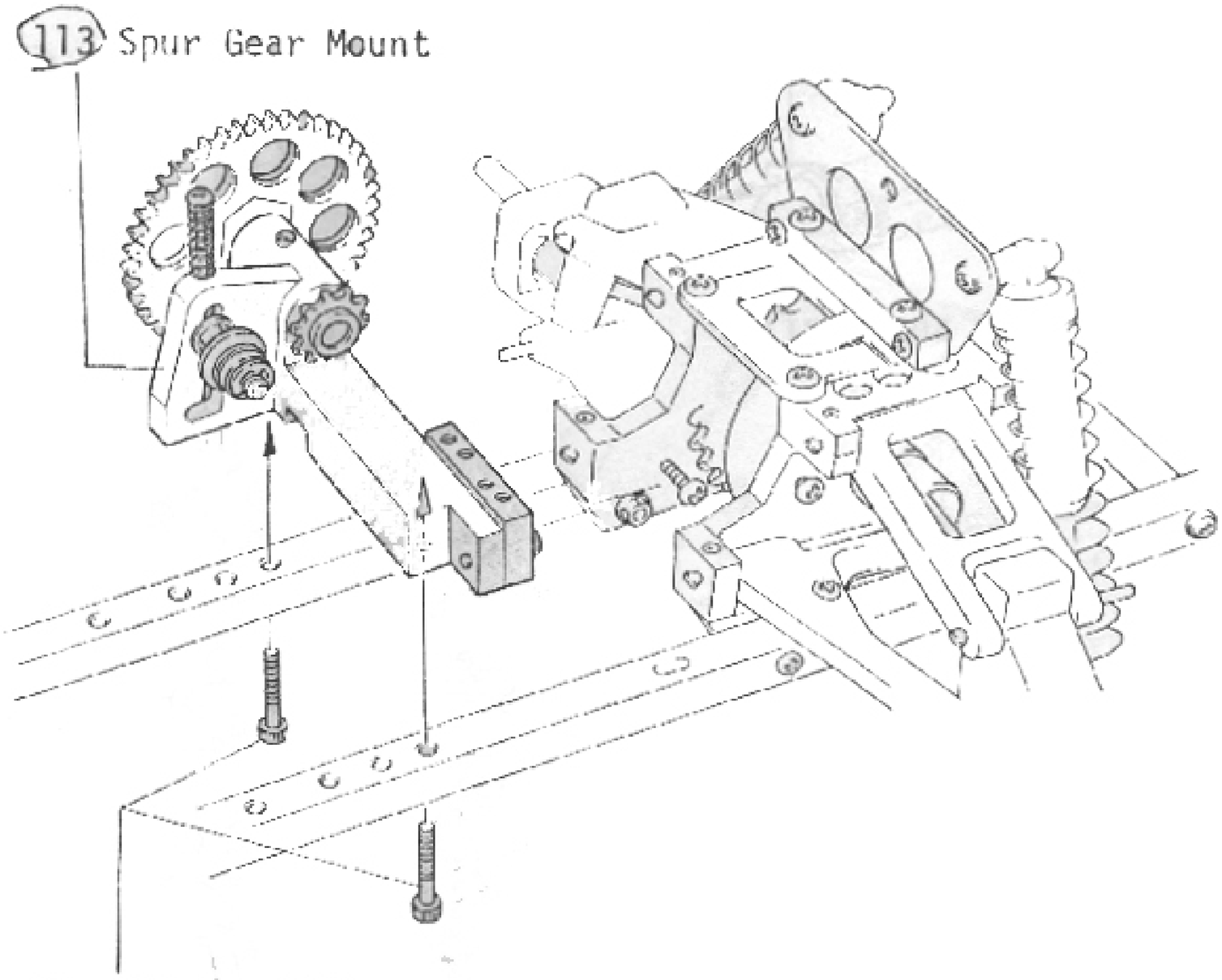
15 ASSEMBLY OF SPUR GEAR MOUNT



Note: With the engine OS21, fix the engine mount with the circle mark facing outside; and with the Irvine, Enya 21CX or HP .25VT, put it the other way around.

*Only the LD-71 spur gear ball bearing, which is an optional part, can be used to replace the spur gear plain bearing (114).

16 ASSEMBLY OF SPUR GEAR MOUNT



16 ASSEMBLY OF SPUR GEAR MOUNT

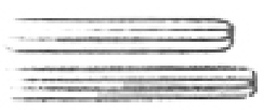
[Small Parts Used]

M3 x 16 Cap Bolt 2

17 FIXING OF FLYWHEEL

[Small Parts Used]

M3 x 10 Cap Bolt....2

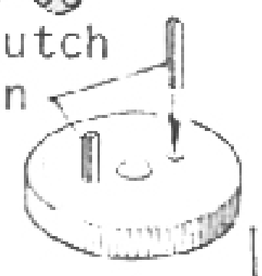


49 Clutch Pin(short)2

50 Clutch Pin(long).2

[Assembly of Flywheel]

Drive in the clutch pin into the flywheel 51.

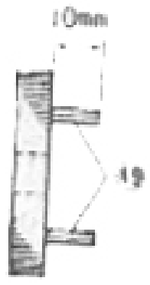


49 60 Clutch Pin

51 Flywheel

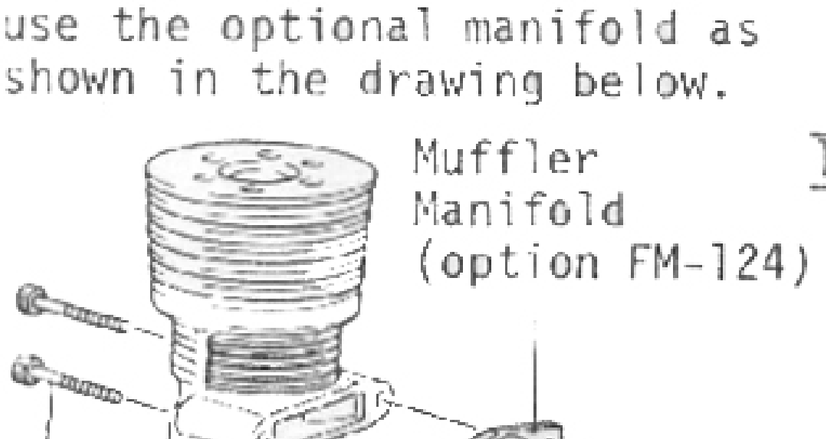
Note:
Use the long clutch pins for Irvine, Enya & HP.25VT engines. Use the short pin for the OS MAZ.

[Short pins for OS 21]



[Long Pins for irvine and Enya]

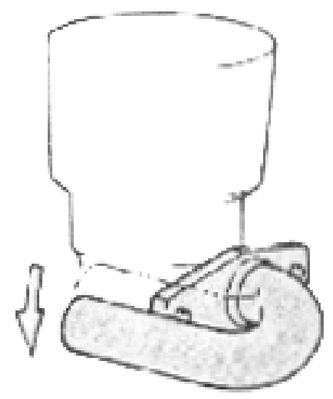
[Installation of Muffler Manifold]
In the case your engine has a rear exhaust port, like on the Enya 21CS or OS-21FSR, use the optional manifold as shown in the drawing below.



Muffler Manifold (option FM-124)

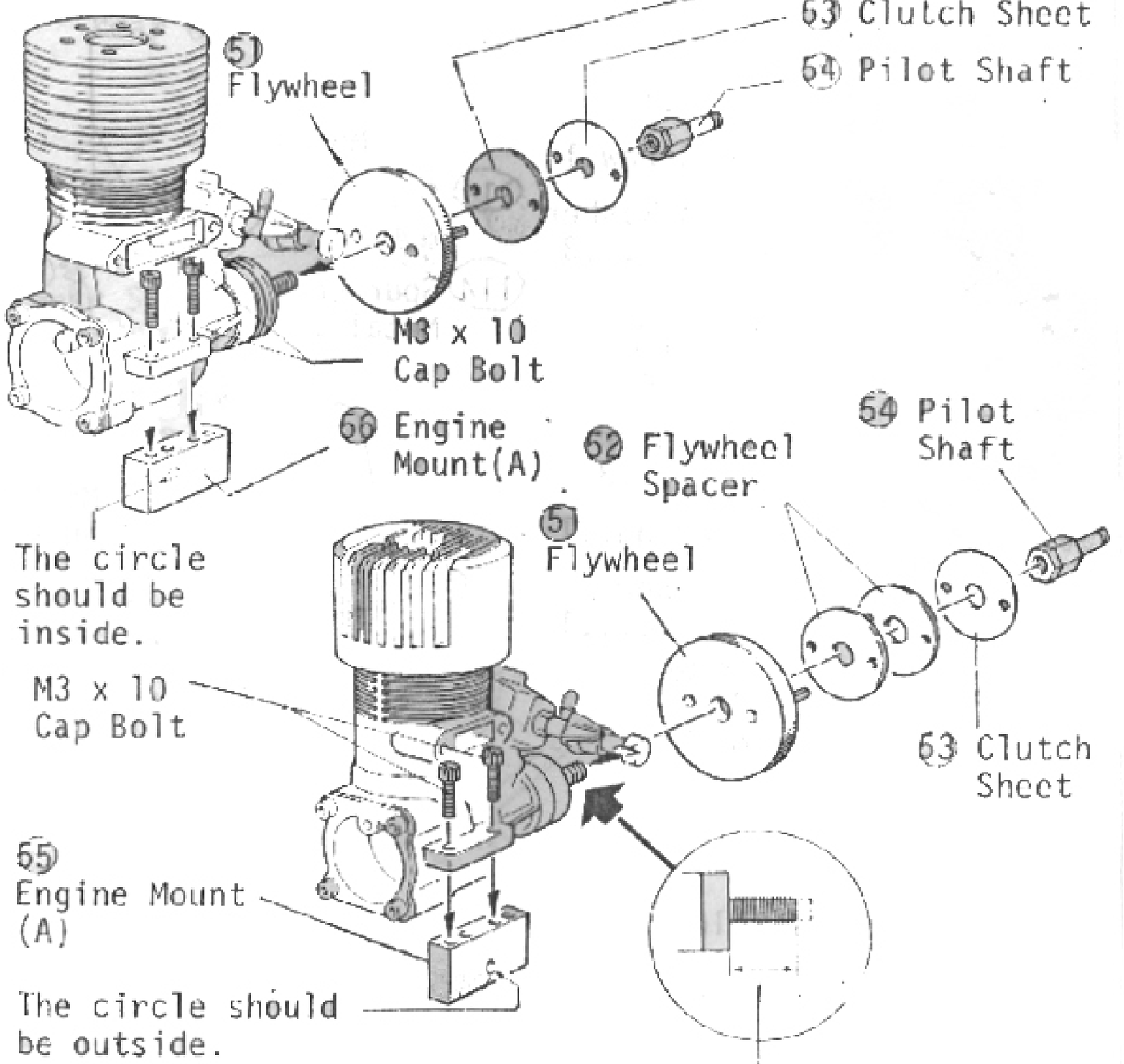
M3x25 Cap Bolt

Twist it as shown after installing it.

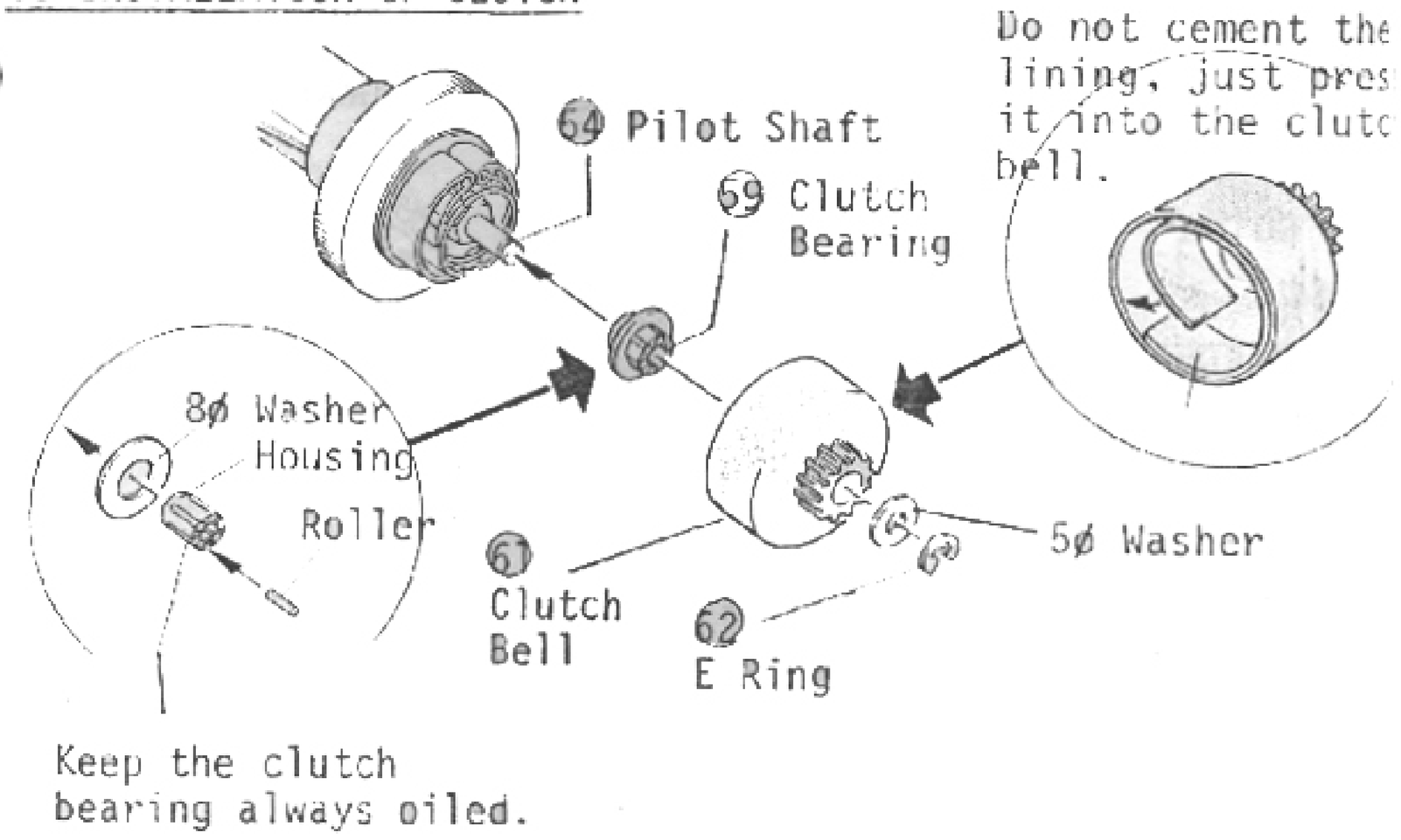


17 FIXING OF FLYWHEEL

[For the OS21 Side Exhaust]



18 INSTALLATION OF CLUTCH



18 INSTALLATION OF CLUTCH

[Small Parts Used]

69 Clutch Bearing 1

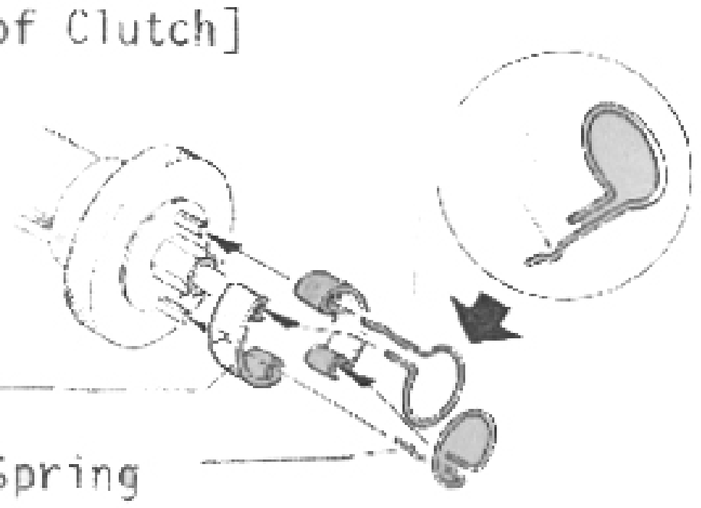
8ø Washer..1

5ø Washer 1

Roller....6

62 E Ring....1

[Assembly of Clutch]



57 Clutch Shoe

68 Clutch Spring

Make a small "U" ber in the longer of th two clutch spring legs to help secure them into the pins of the flywheel.

19 MOUNTING OF ENGINE

[Small Parts Used]

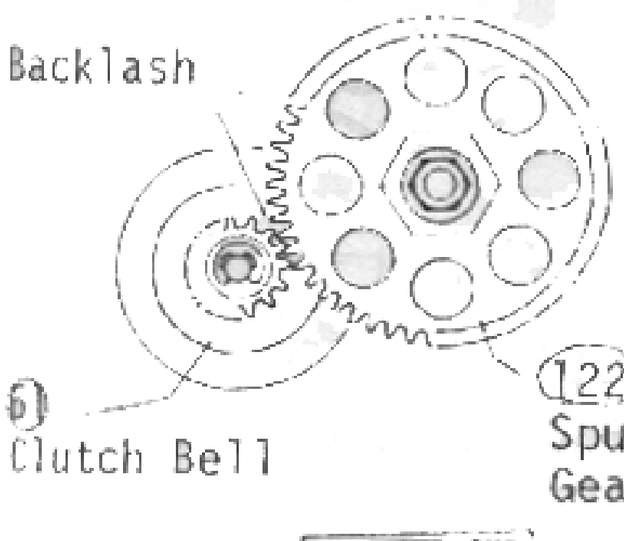
M3 x 10 Cap Bolt..2

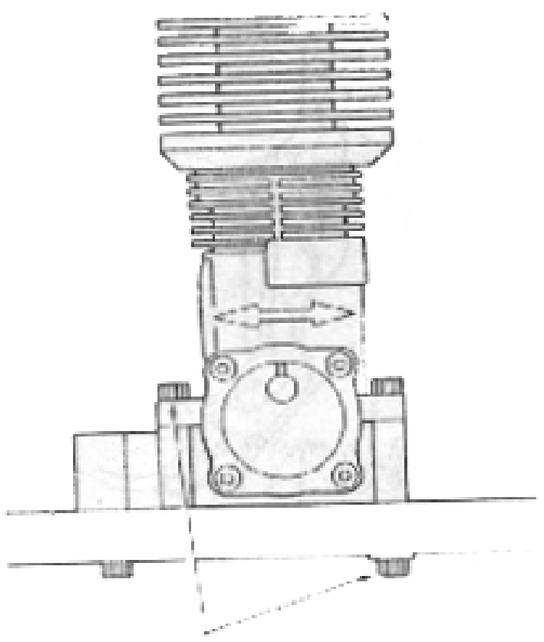
M3 x 16 Cap Bolt..1

3ø Washer.....1

[Backlash]

Adjust the backlash between the clutch bell (6) and the spur gear (122) by loosening the engine mounting bolts.





Loosen three cap bolts for the adjustment. After adjusting, retighten the bolts.

20 FIXING OF CHAIN

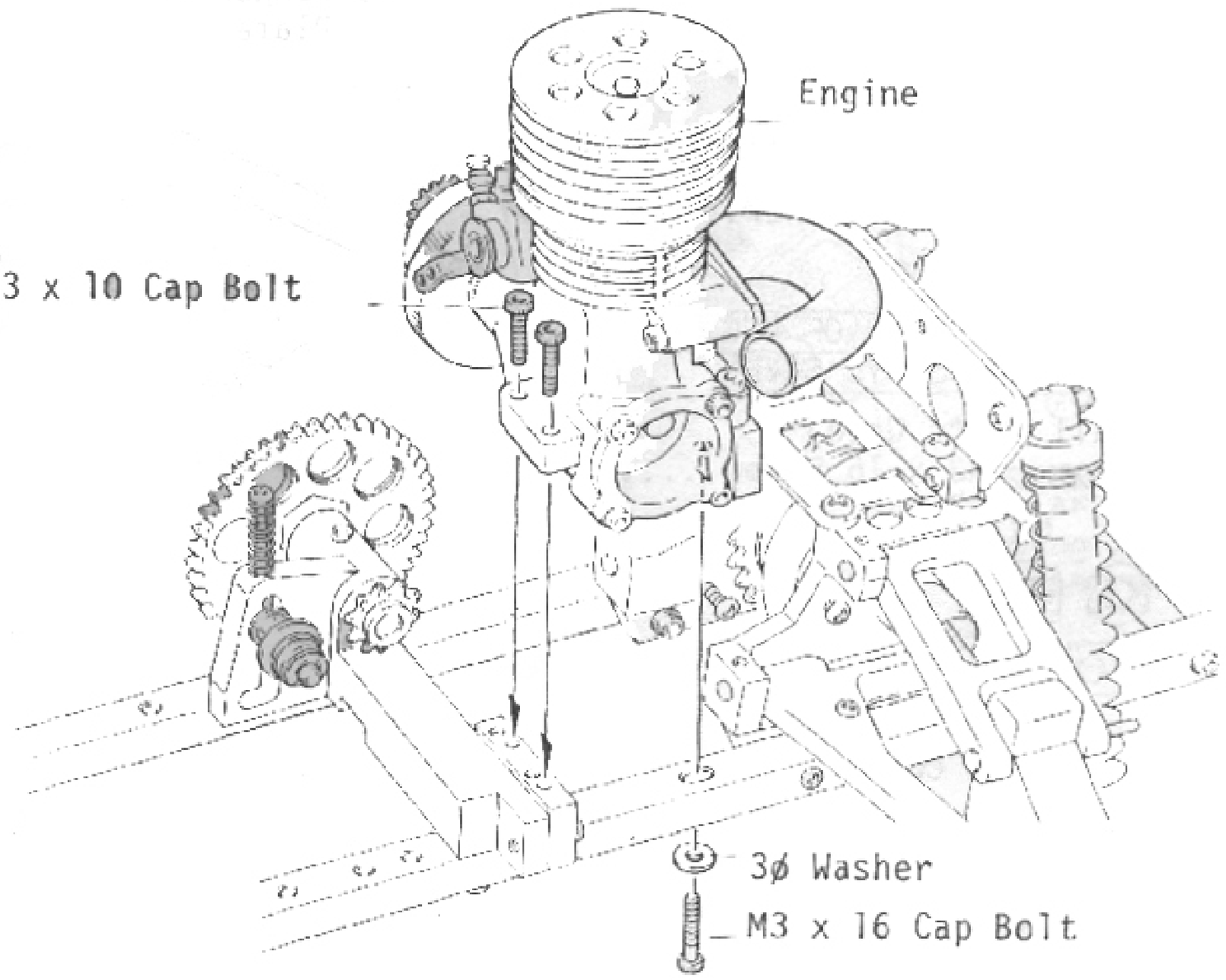
[Small Parts Used]

120 Chain Joint....1

121 Chain Washer...1

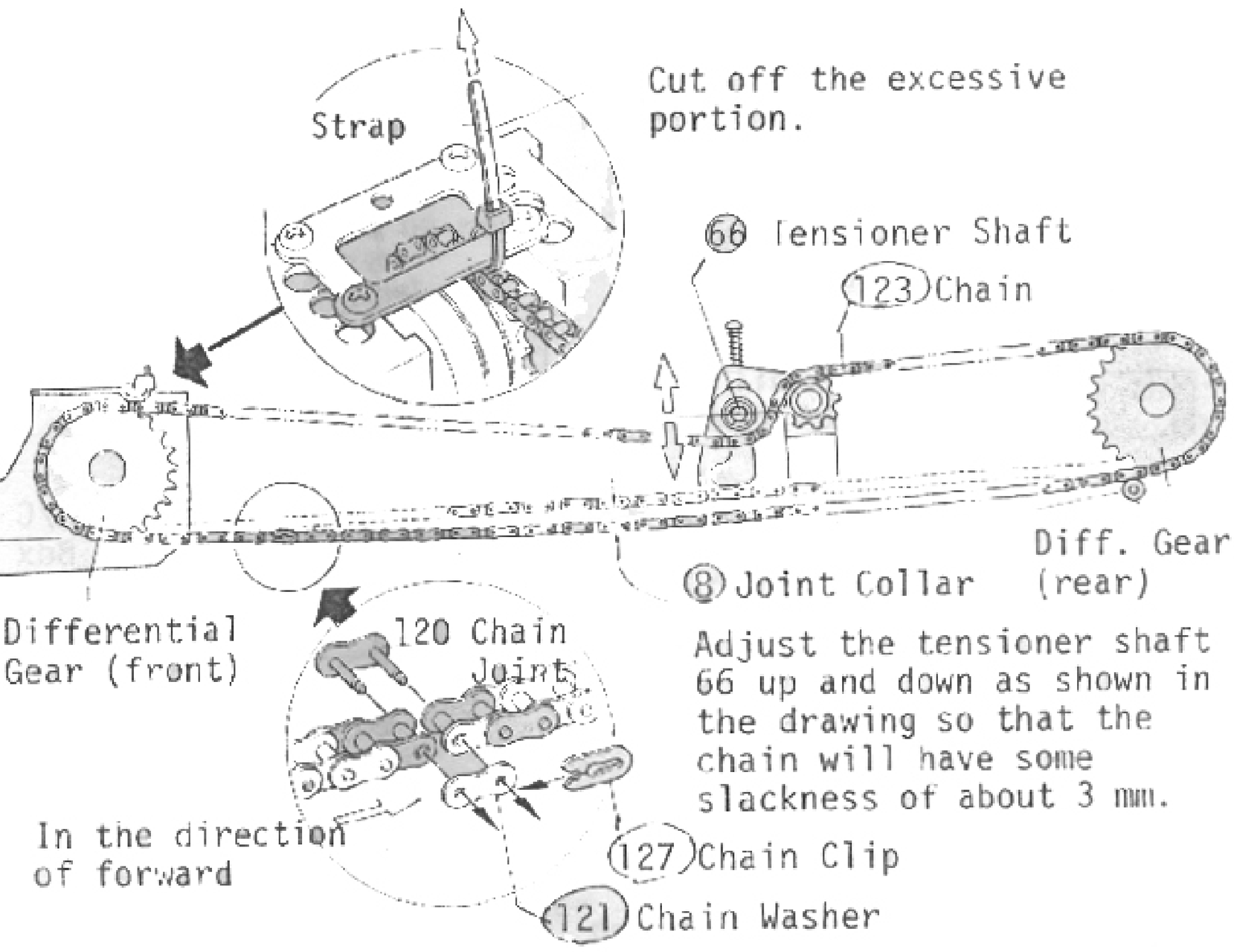
127 Chain Clip.....1

19 MOUNTING OF ENGINE



20 FIXING OF CHAIN

Fix the strap, which is for preventing a derail, to the bulk head plate with care so that it comes along the center of the chain.



21 ATTACHING THE BUMPER

[Small Parts Used]

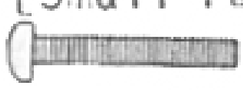
M4 x 20 Bolt...2

M4 Nut.....2

4ø Washer.....2

22 INSIALLATION OF ENGINE CONTROL SERVO SAVER

[Small Parts Used]



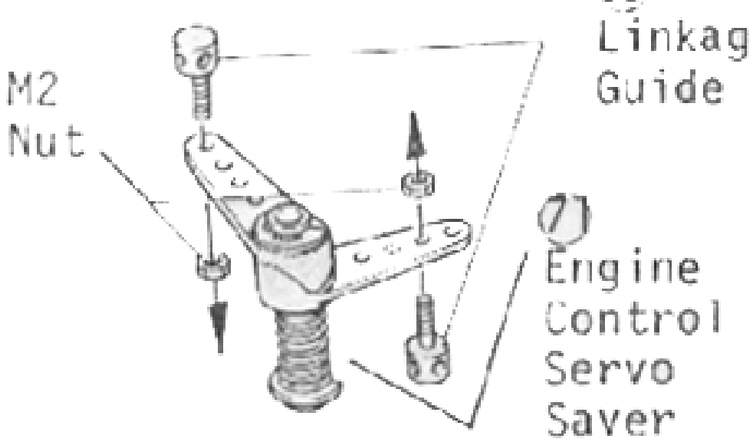
M3 x 16 Screw.....1

M2 Nut.....2

M4 Nylon Nut.....1

69 Linkage Guide..2

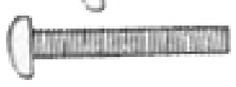
Fix the linkage guide 69 to the engine control servo saver 71.



23 MOUNTING OF SERVOS

[Small Parts Used]

M3 x 10 Screw.....2



M3 x 16 Screw.....4

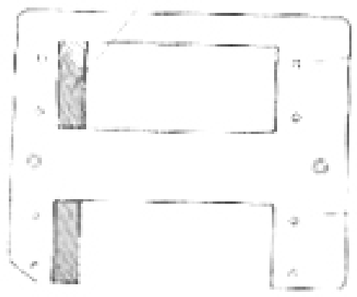
M4 x 40 Screw...1

M3 x 12 Self Tapping Screw 8

M3 Flanged Nut.....2

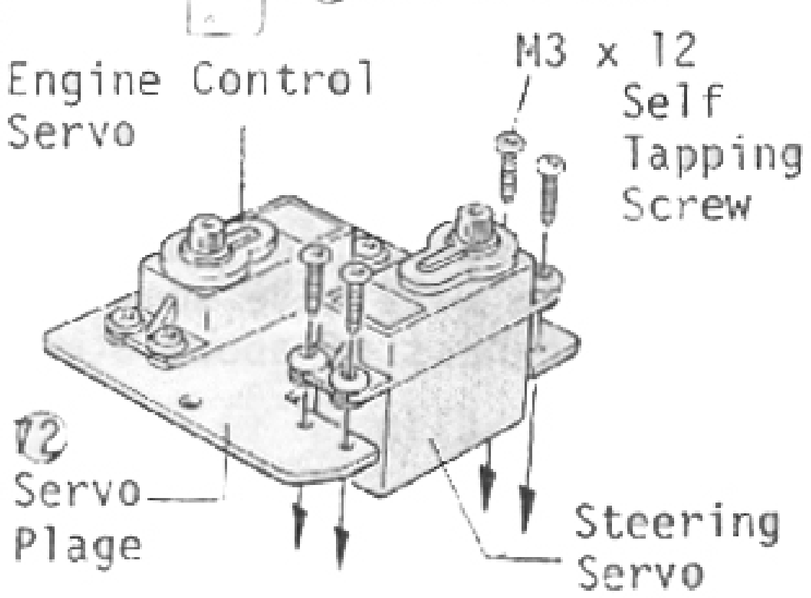
M4 Nut 1

Cut off part of the shaded portion according to the servo, and drill the holes for the mounting bolts.

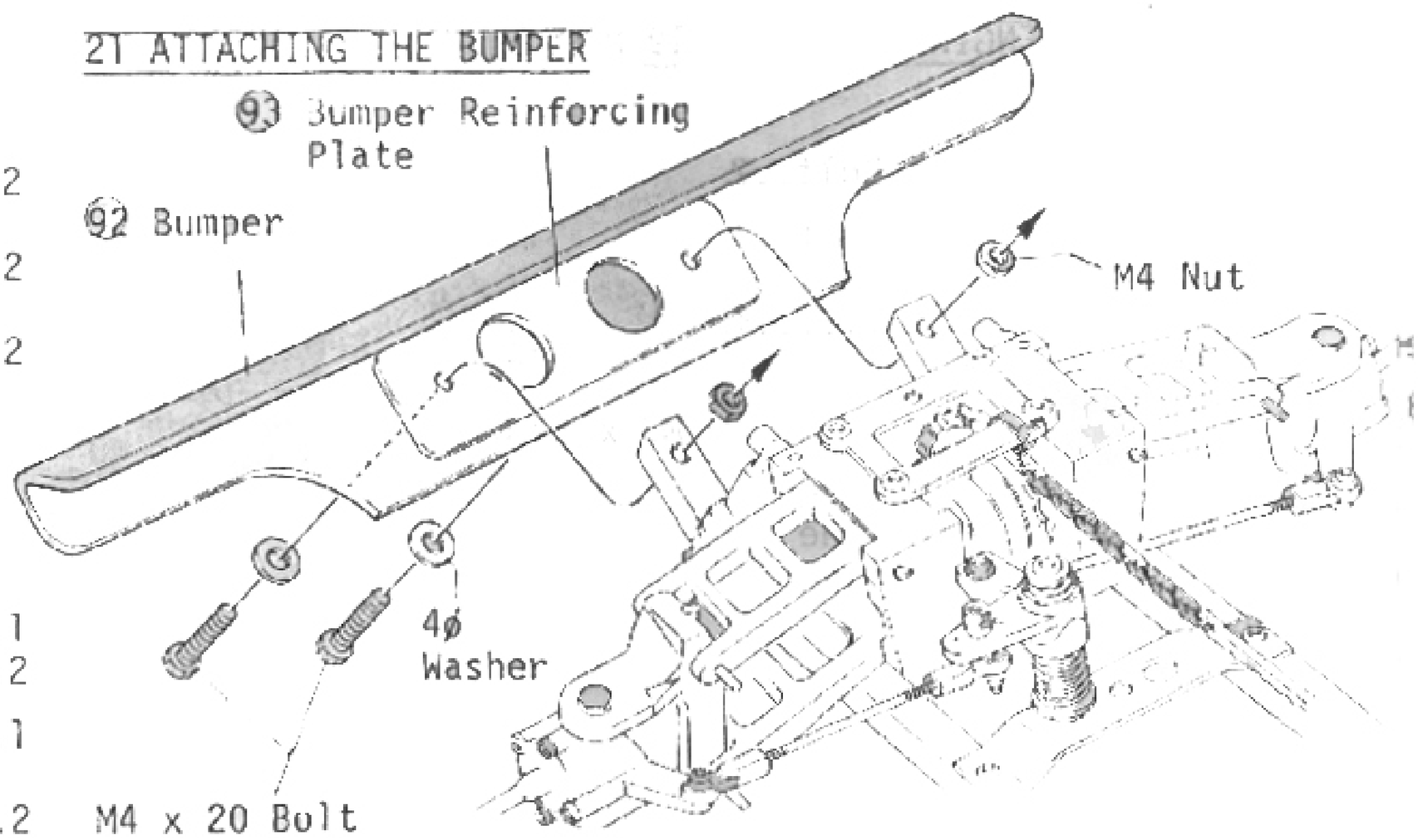


Drill samll holes of about 2mm diameter

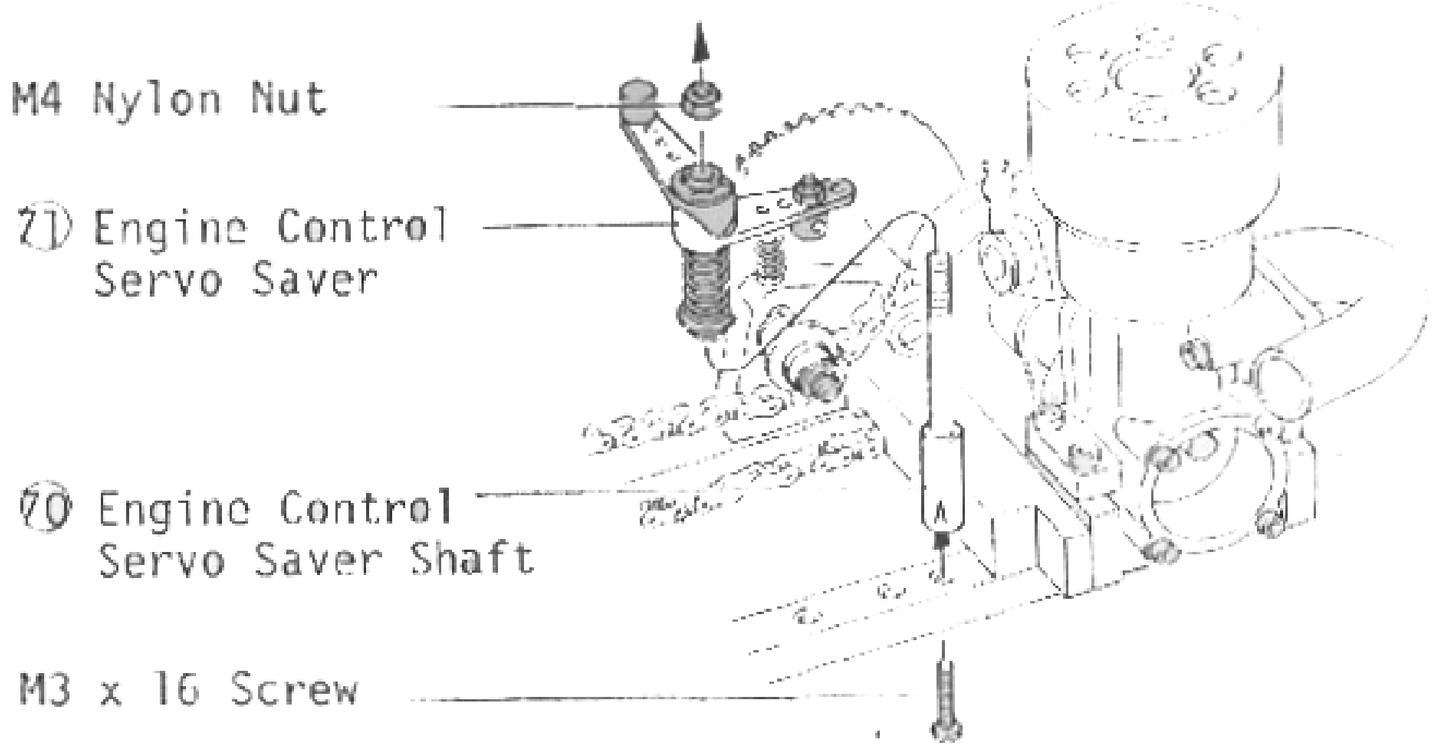
72 Servo Plate



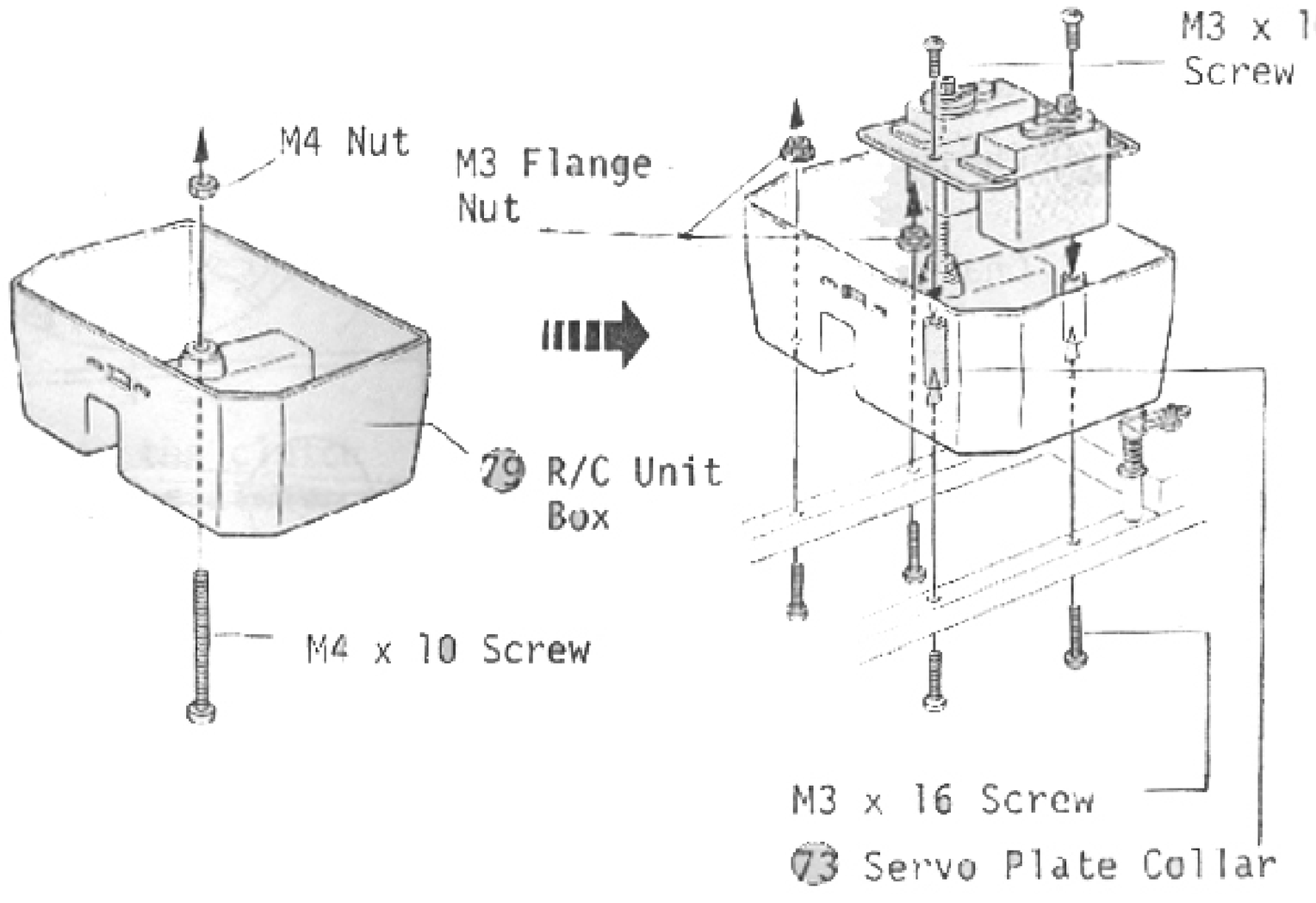
21 ATTACHING THE BUMPER



22 INSTALLATION OF ENGINE CONTROL SERVO SAVER



23 MOUNTING OF SERVOS



24 LINKAGE FOR STEERING CONTROL

[Small Parts Used]

■ M3 x 3 Set Screw....1

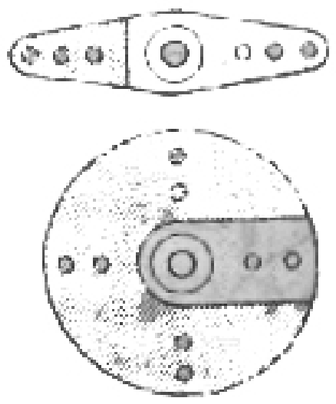
Note: Arrange the linkage of the control rods while keeping the servo and front wheels in the neutral position.

Put together the rubber boot for the control rod by cementing the parts.

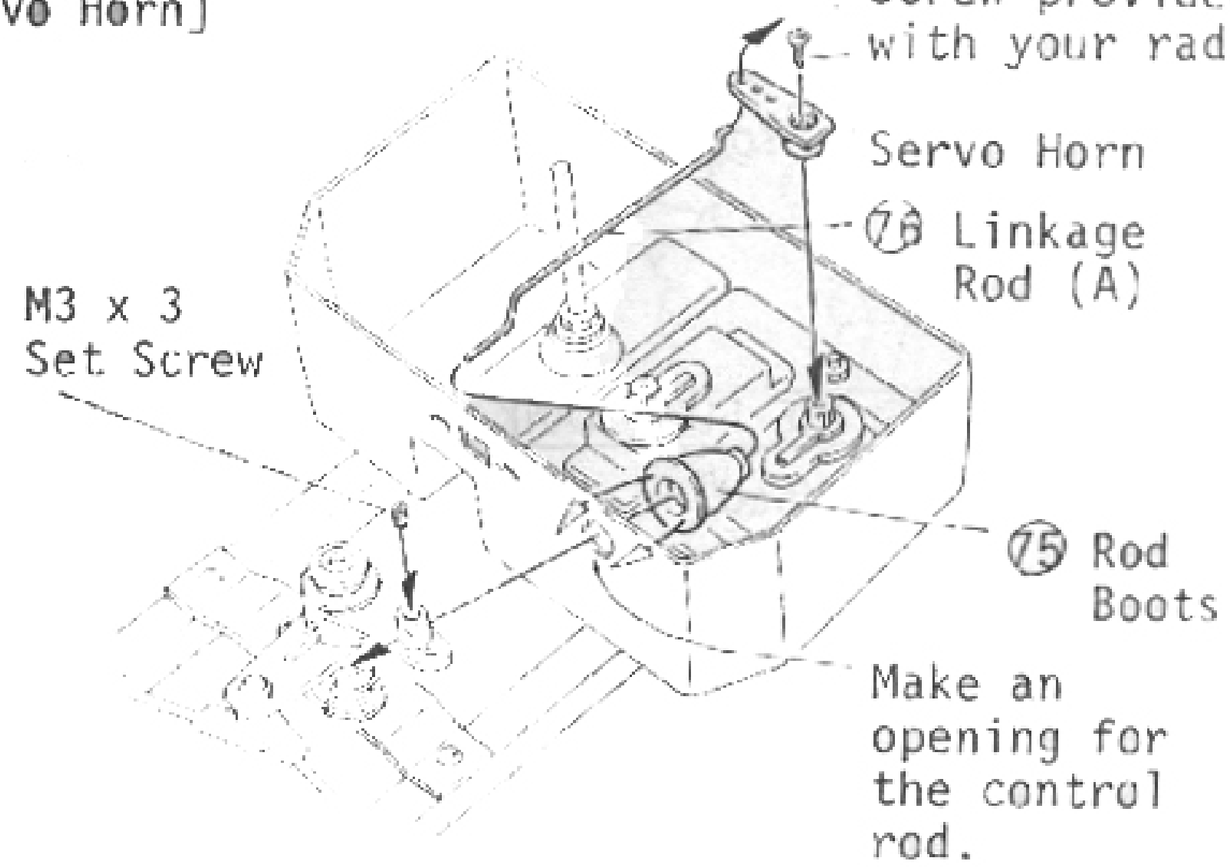
*Assemble two sets of them.

24 LINKAGE FOR STEERING CONTROL

[Cutting of Servo Horn]



Cut off the shaded portion.

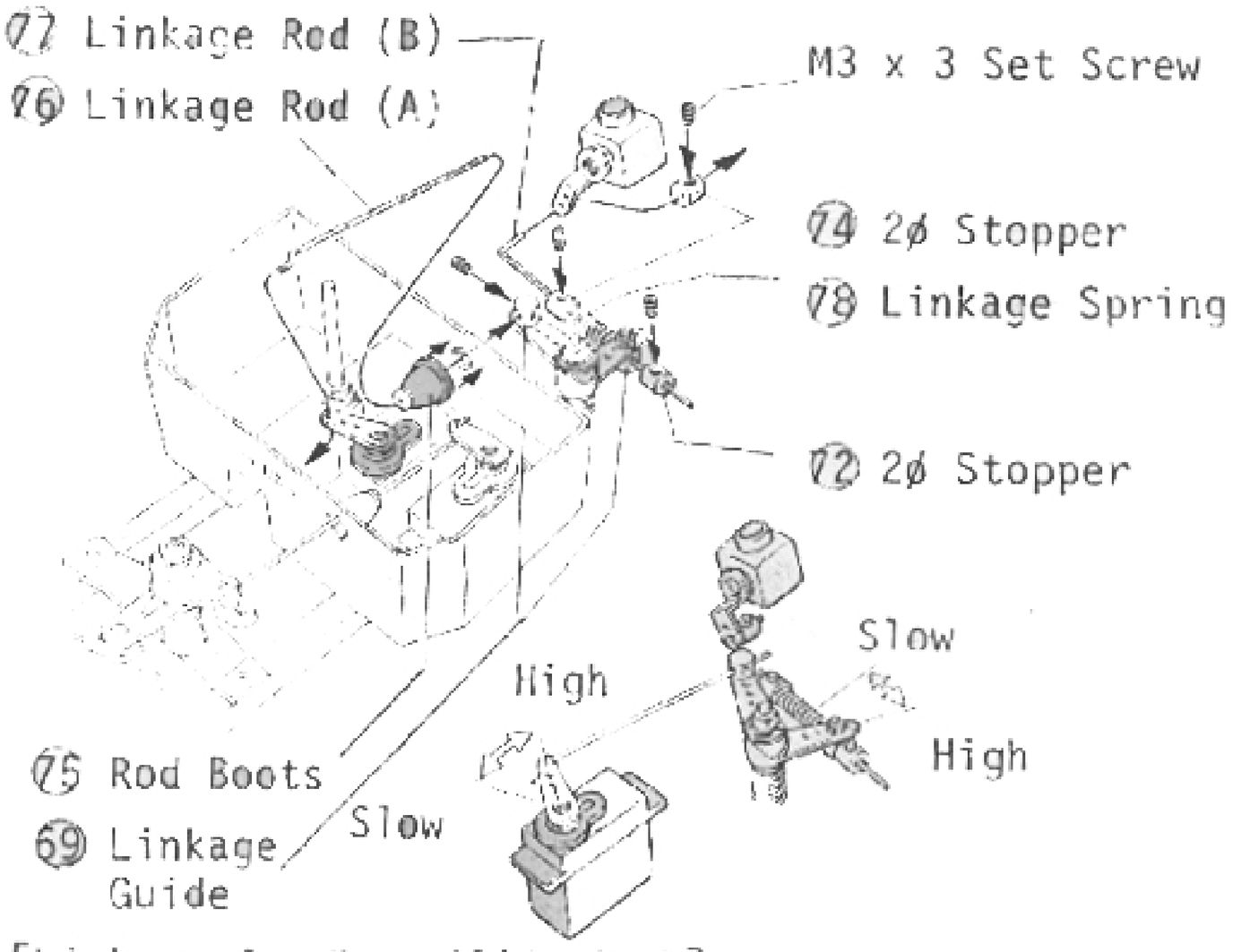


25 LINKAGE OF ENGINE CONTROL

[Small Parts Used]

M3 x 3 Set Screw...4
74 2ø Stopper.....3
78 Linkage Spring..1

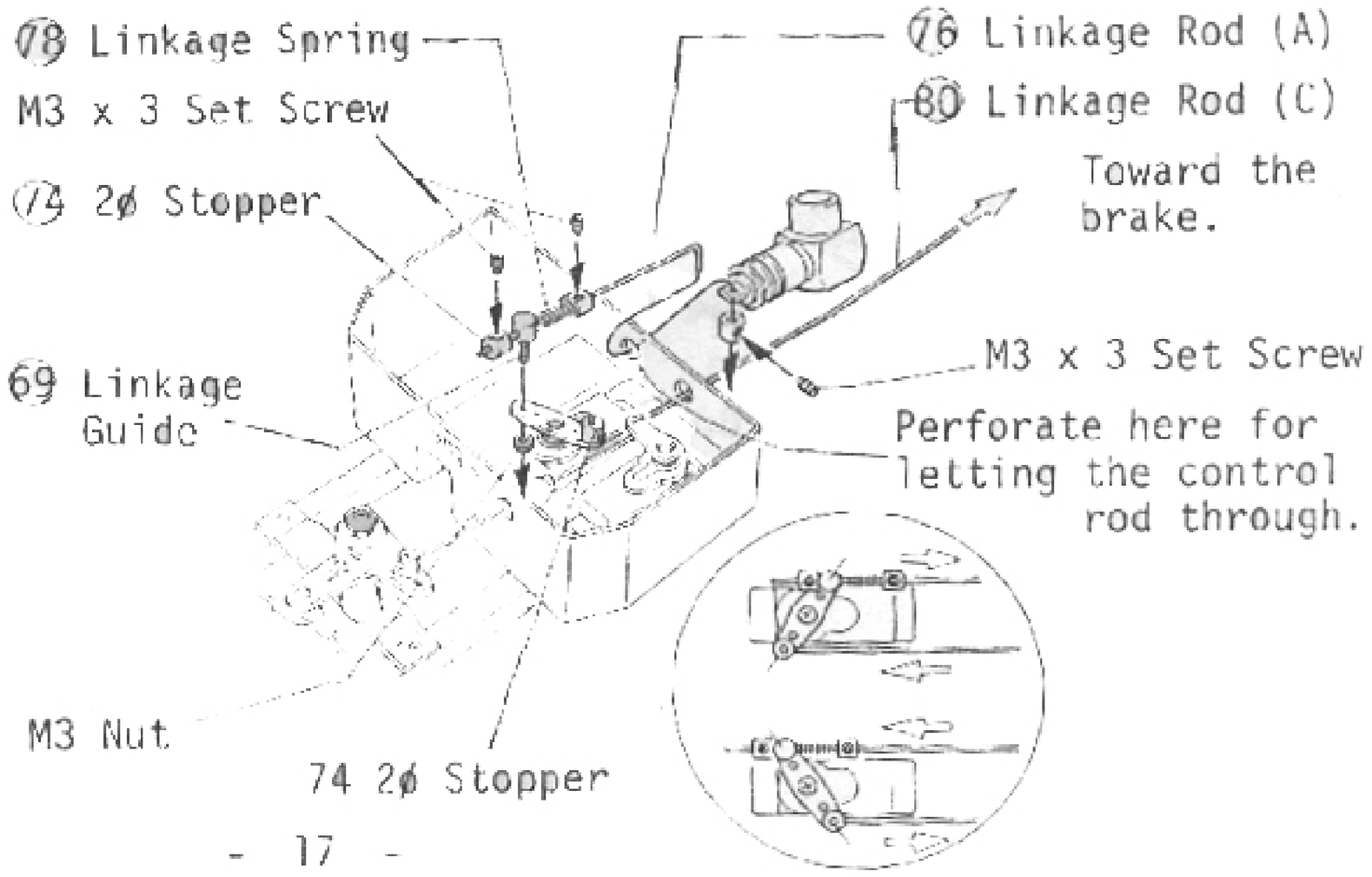
25 LINKAGE OF ENGINE CONTROL



[Linkage for Enya Slide Carb]

If you have an HP .25 VT/car engine you must use a ball link similar to the dubro #191 for the carbo linkage. It would then hook up similar to the Enya installation shown at right.

Note: When slide carburator is employed, arrange the linkage as shown in the drawing below; the servo, in this case, should be reverse rotation.



26 LINKAGE OF BRAKE SYSTEM

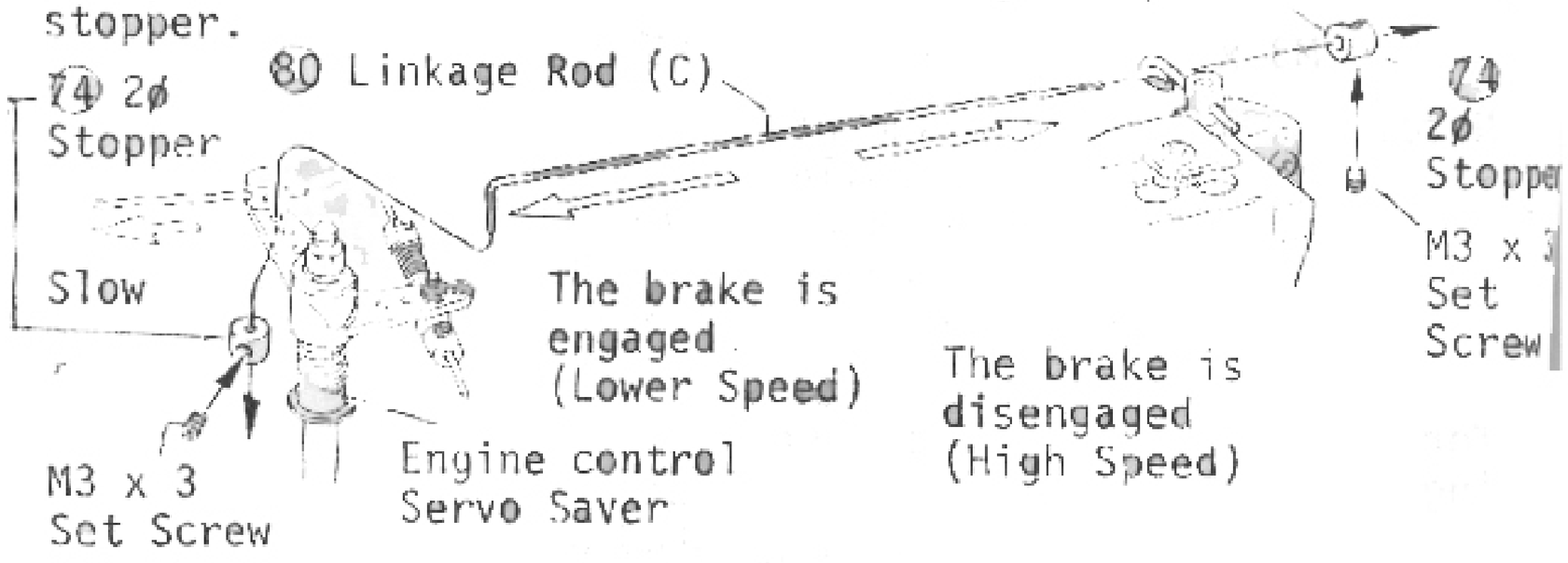
[Small Parts Used]

M3 x 3 Set Screw....2

74 2ø Stopper.....2

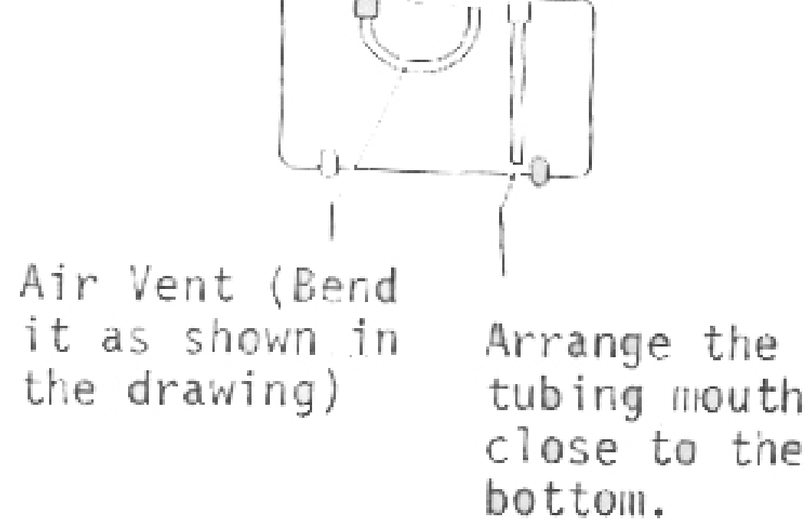
26 LINKAGE OF BRAKE SYSTEM

The braking effect can be adjusted by loosening the stopper setscrew under the chassis and shifting the position of the stopper.



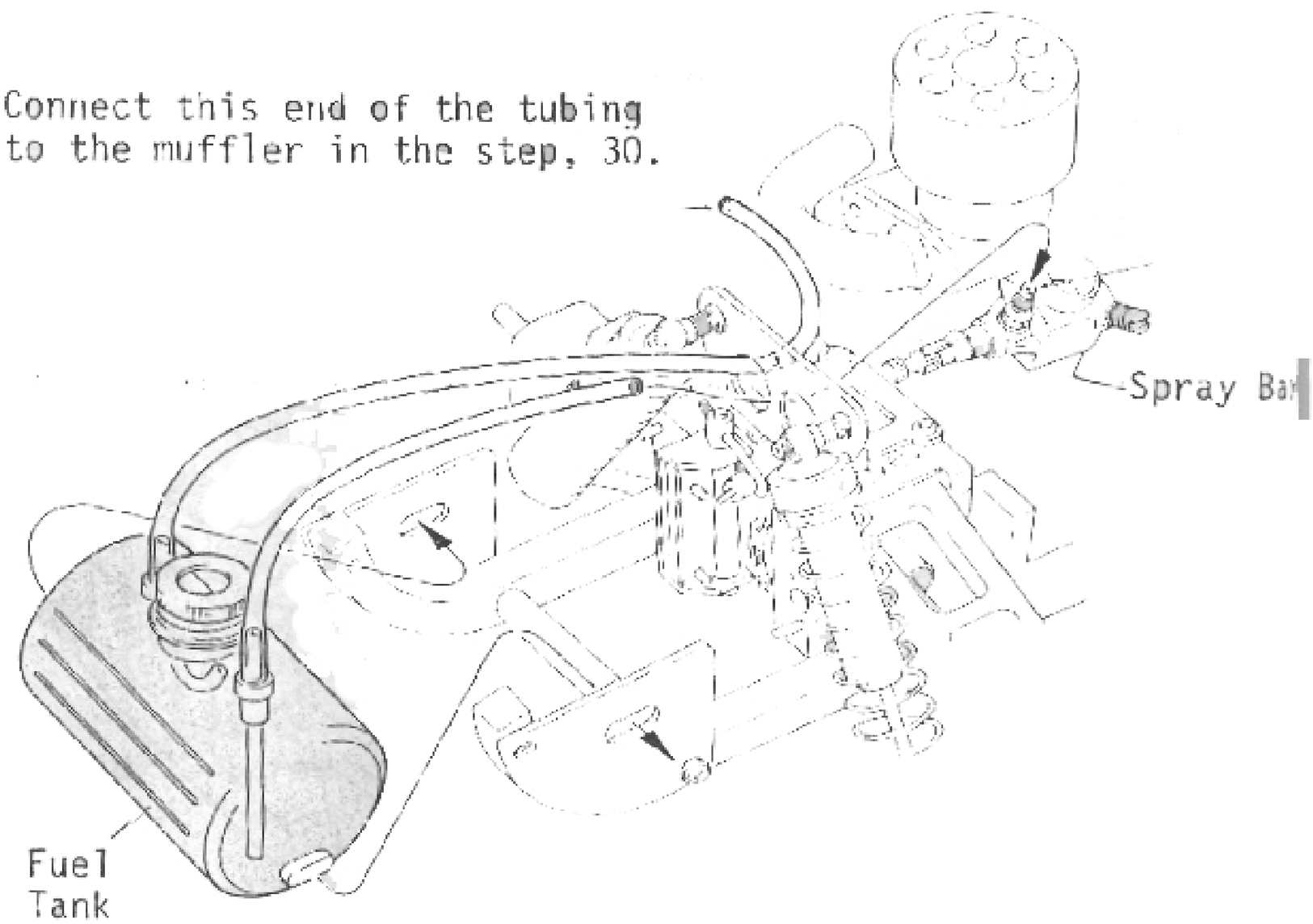
27 MOUNTING THE FUEL TANK

[Small Parts Used]



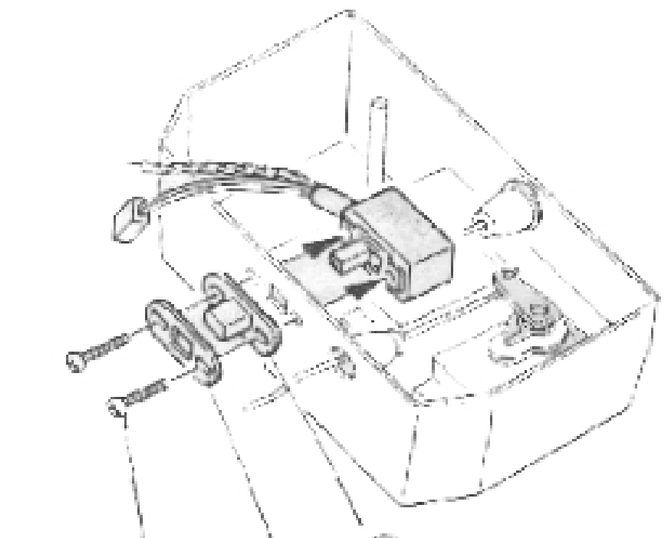
27 MOUNTING THE FUEL TANK

Connect this end of the tubing to the muffler in the step, 30.

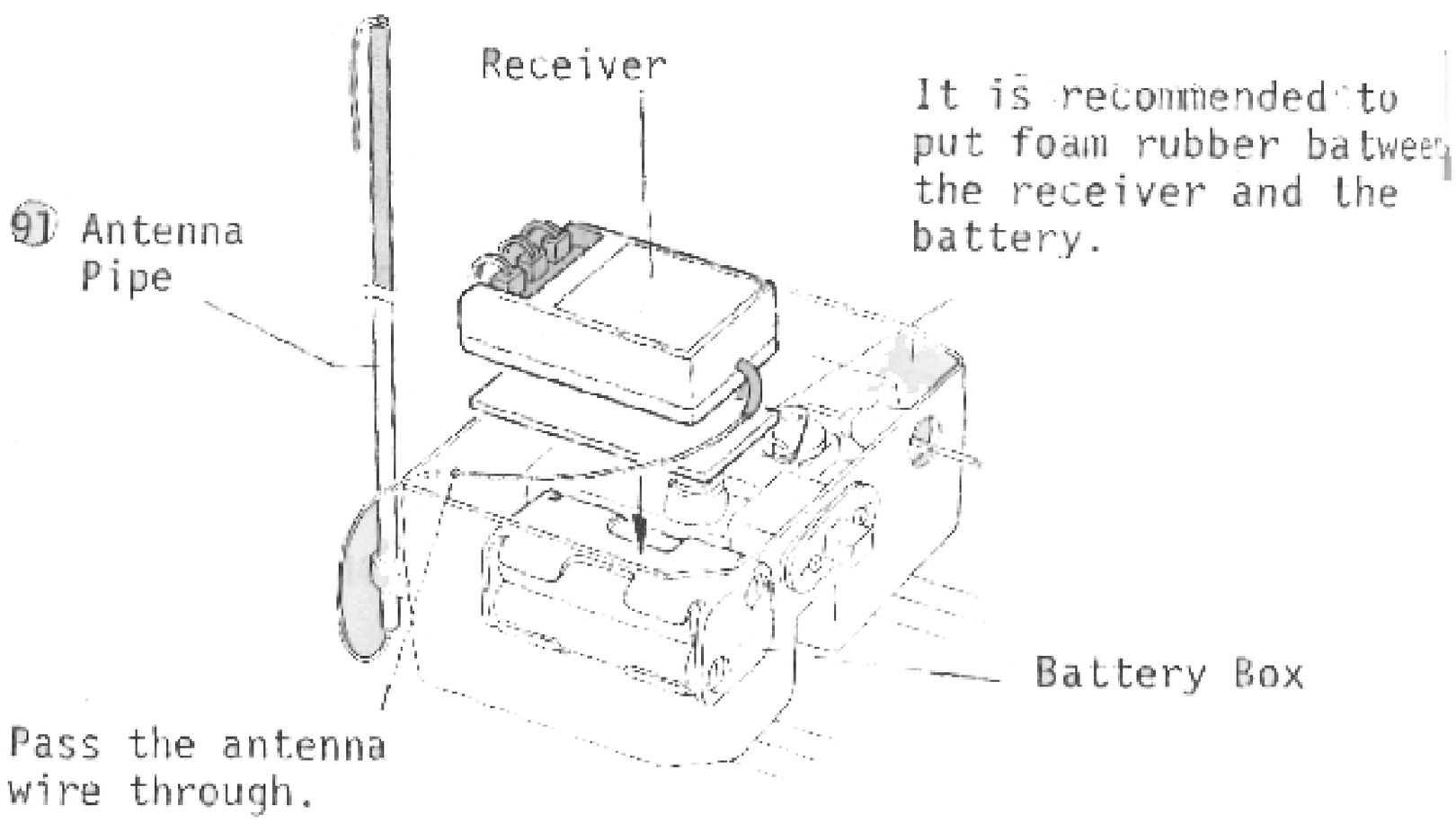


28 MOUNTING THE RADIO CONTROL UNIT

[Fixing of R/C Unit Switch]



28 MOUNTING THE RADIO CONTROL UNITS



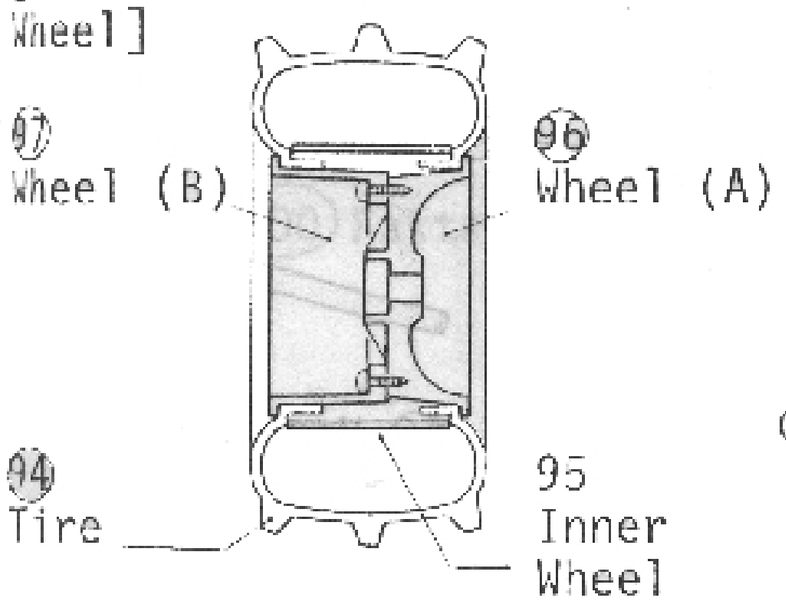
It is recommended to put foam rubber batween the receiver and the battery.

29 ASSEMBLY OF TIRE

[Small Parts Used]

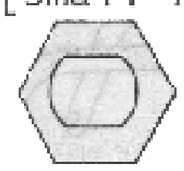
M2.6 x 12
Self Tapping Screw.16

[Cross Sectional View of Wheel]

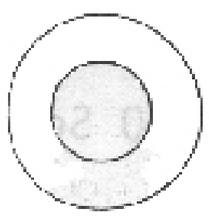


30 INSTALLATION OF WHEELS

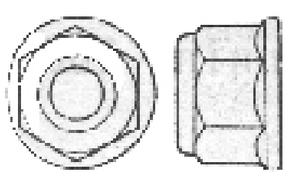
[Small Parts Used]



98 Drive Washer...4



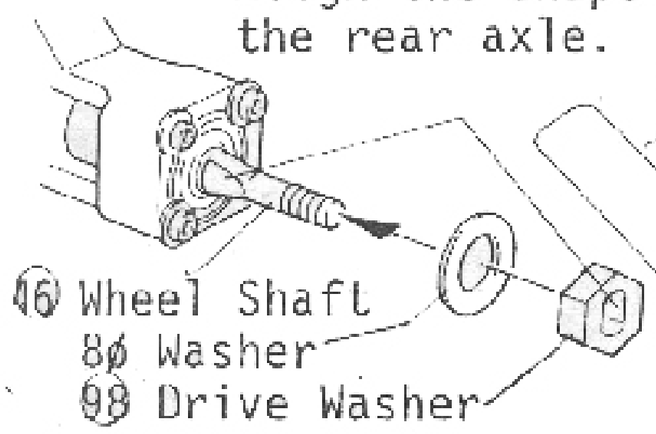
8ø Washer.....4



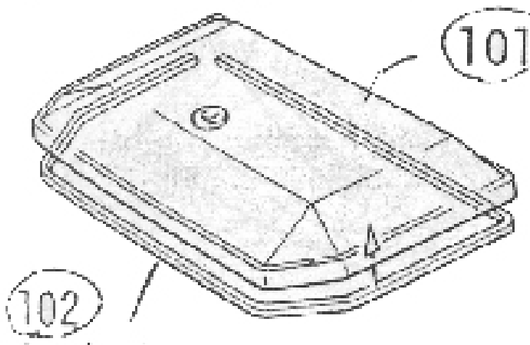
M6 Flanged
Nylon Nut.....4

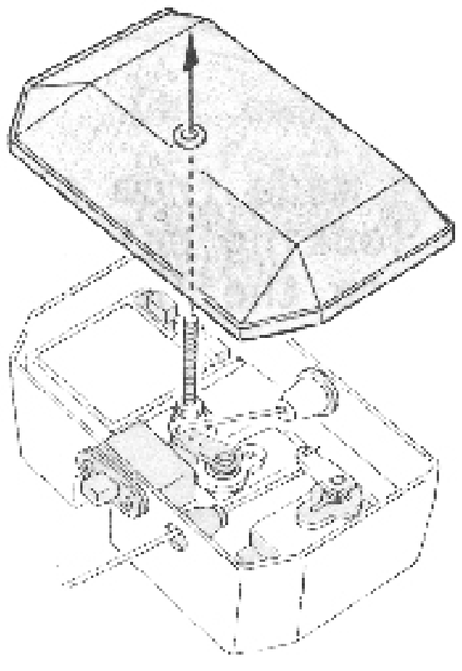
[Attaching the Drive Washer]

Align the shape to the rear axle.



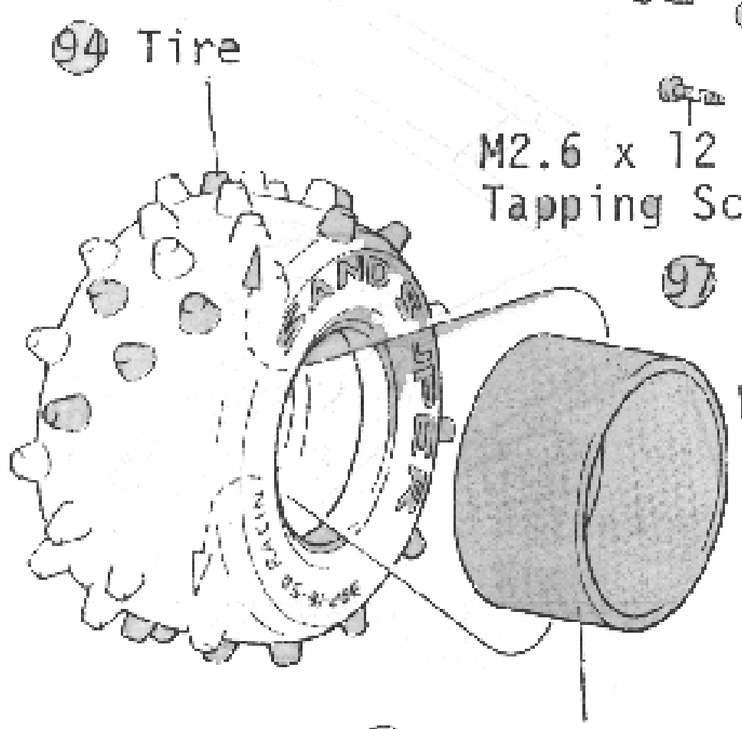
[Attaching Radio Box Cover]



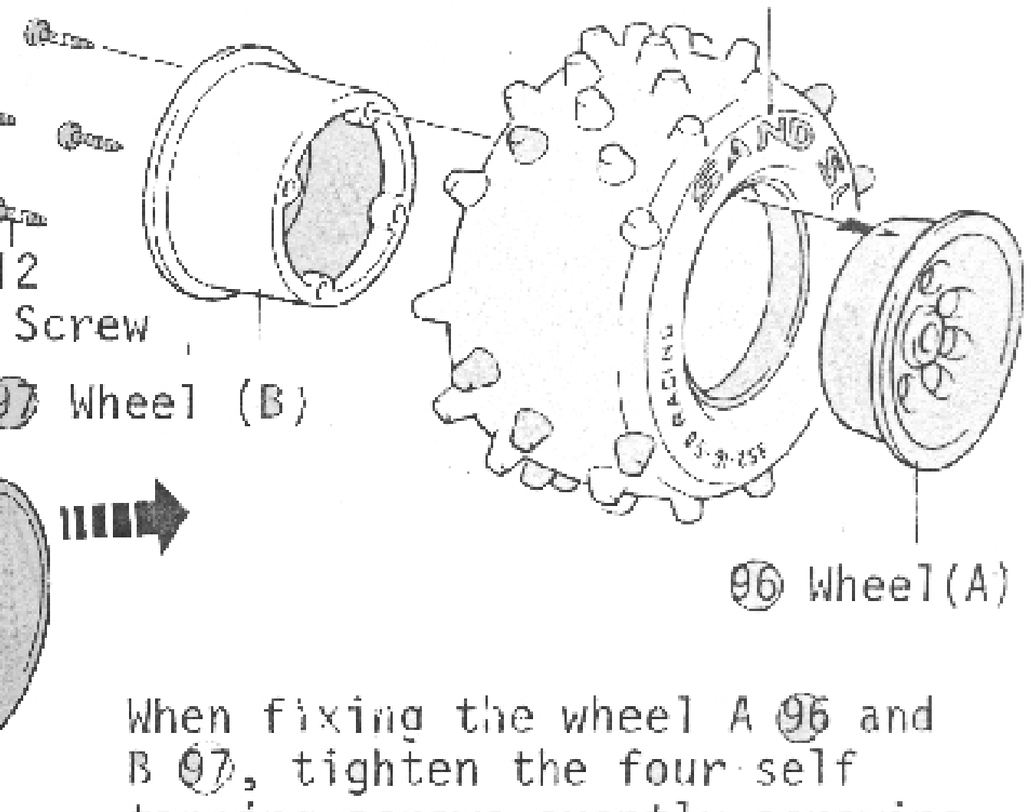


29 ASSEMBLY OF TIRE

Assembly four of these.

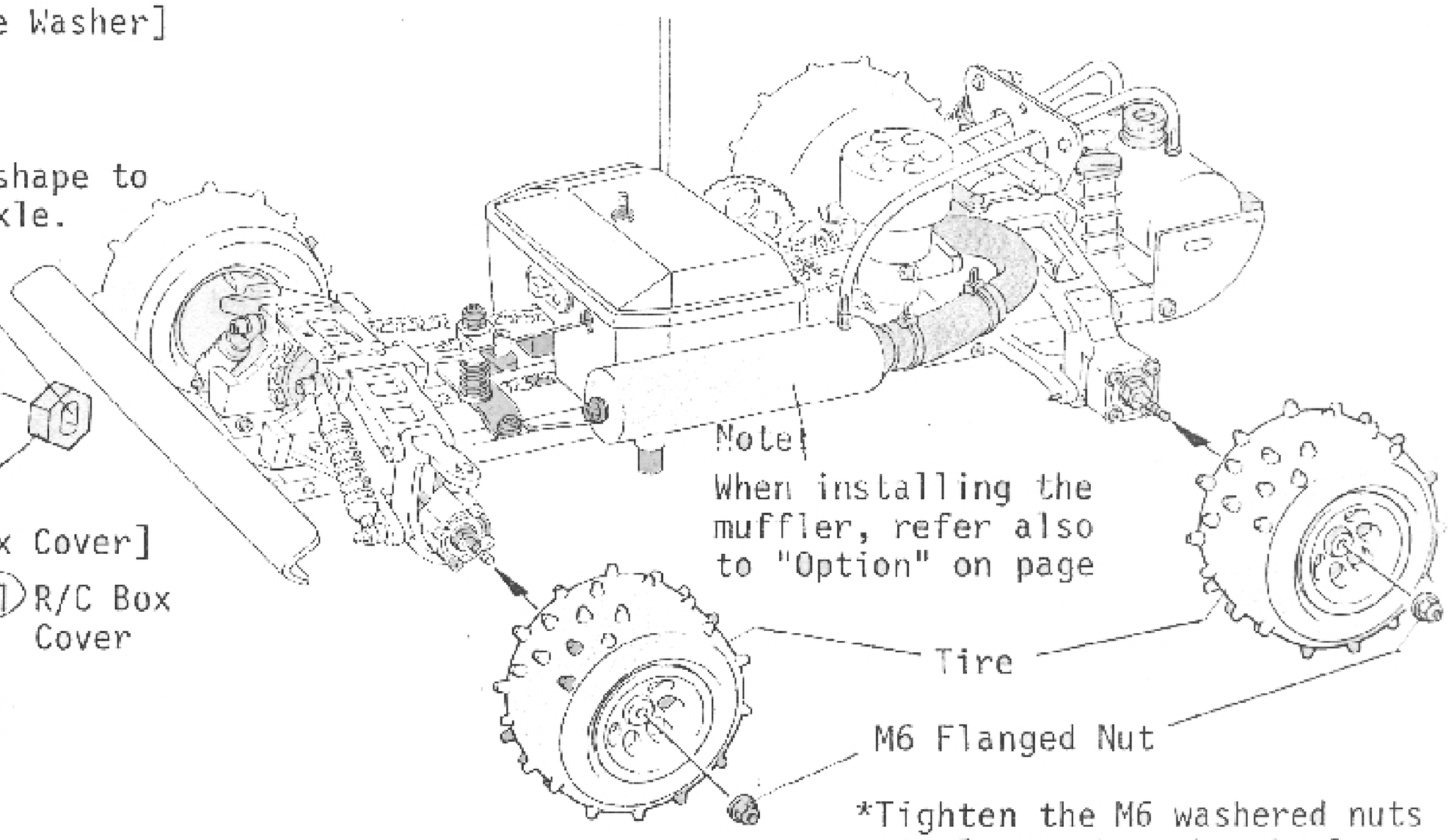


The side of the tire with description "Sand Super" should face this side.



When fixing the wheel A 96 and B 97, tighten the four self tapping screws evently screwing in them little by little at a time.

30 INSTALLATION OF WHEEL

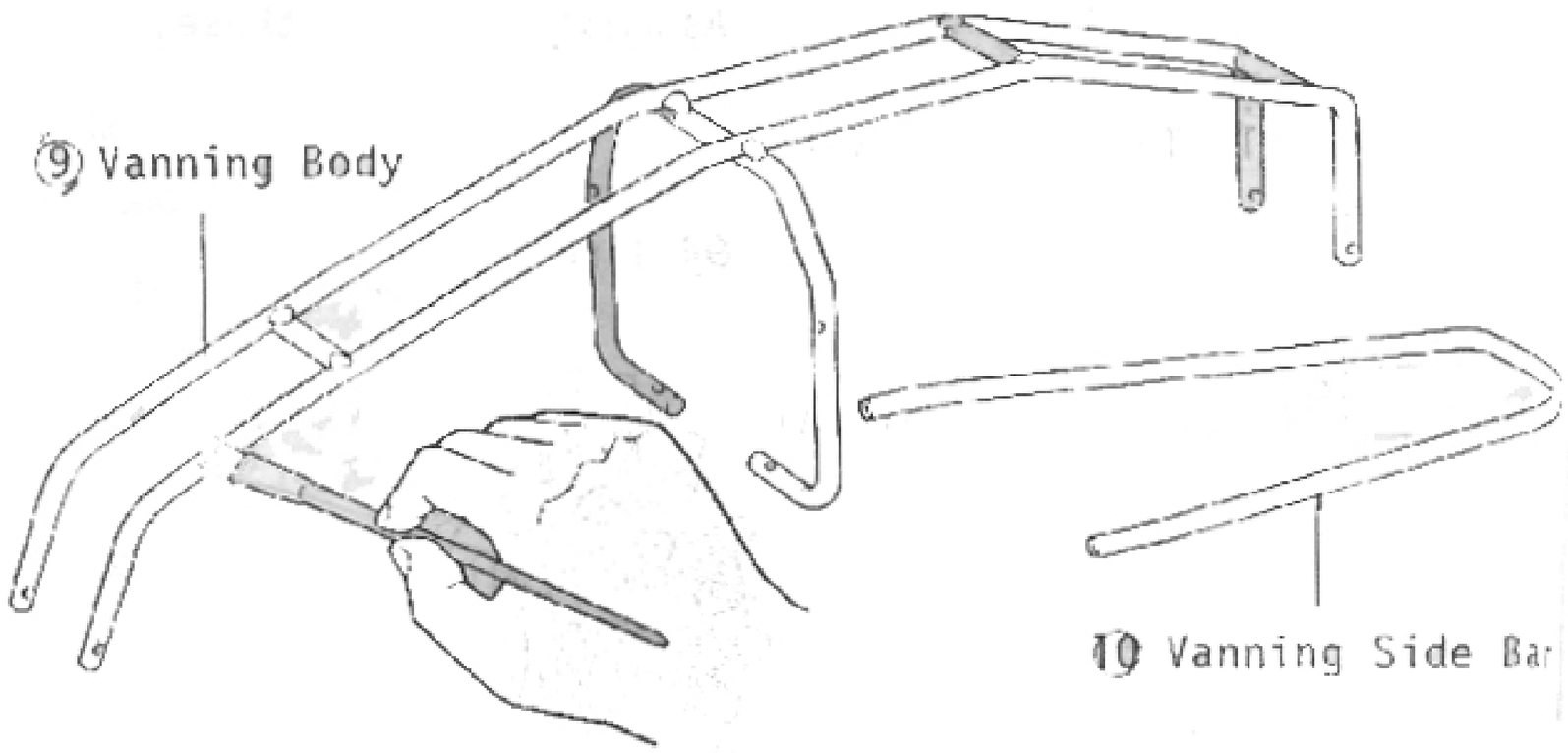


*Tighten the M6 washered nuts firmly so that the wheels will not run idle.

31 PAINGING BODY (VANNING)

Use a high quality, fuel proof paint (such as pactra's Formula-U). Regular model enamels will dissolve and flake off.

31 PAINGING BODY (VANNING)

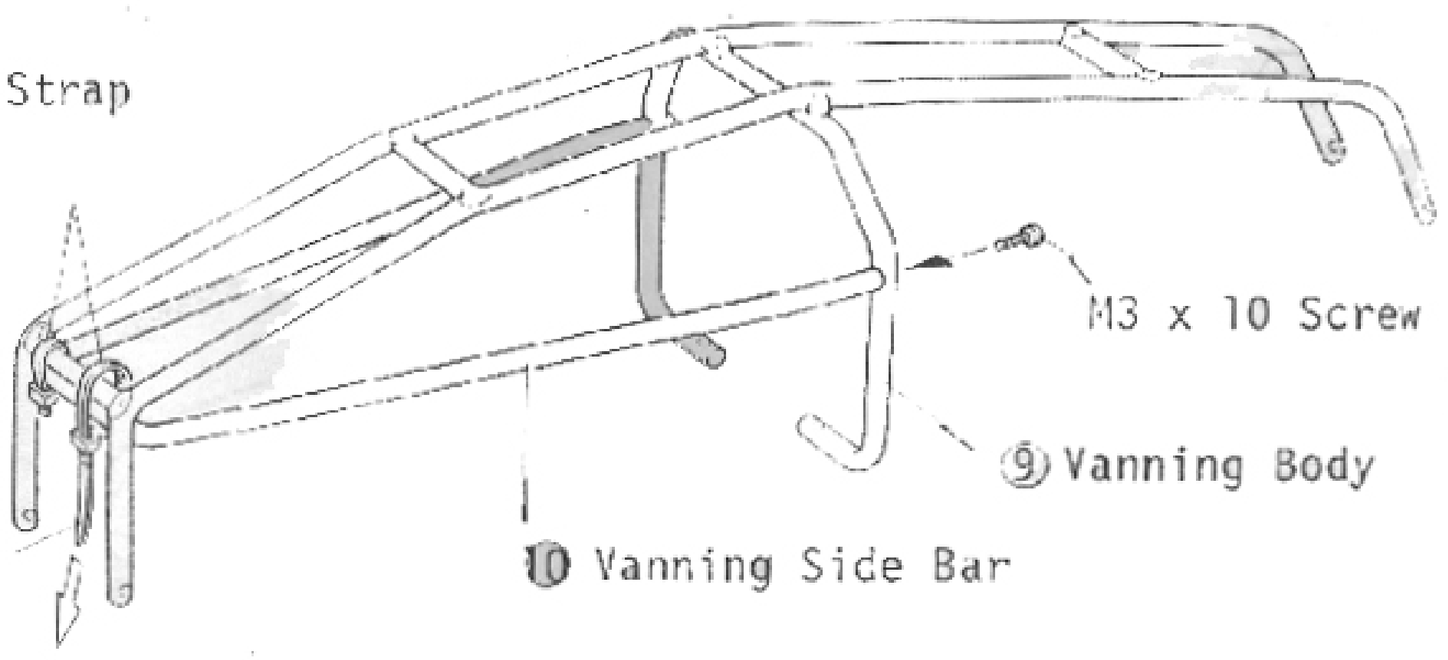


32 INSTALLATION OF BODY(VANNING)

[Small Parts Used]

M3 x 10 Screw

32 INSTALLATION OF BODY (VANNING)



Cut off the unnecessary portions.

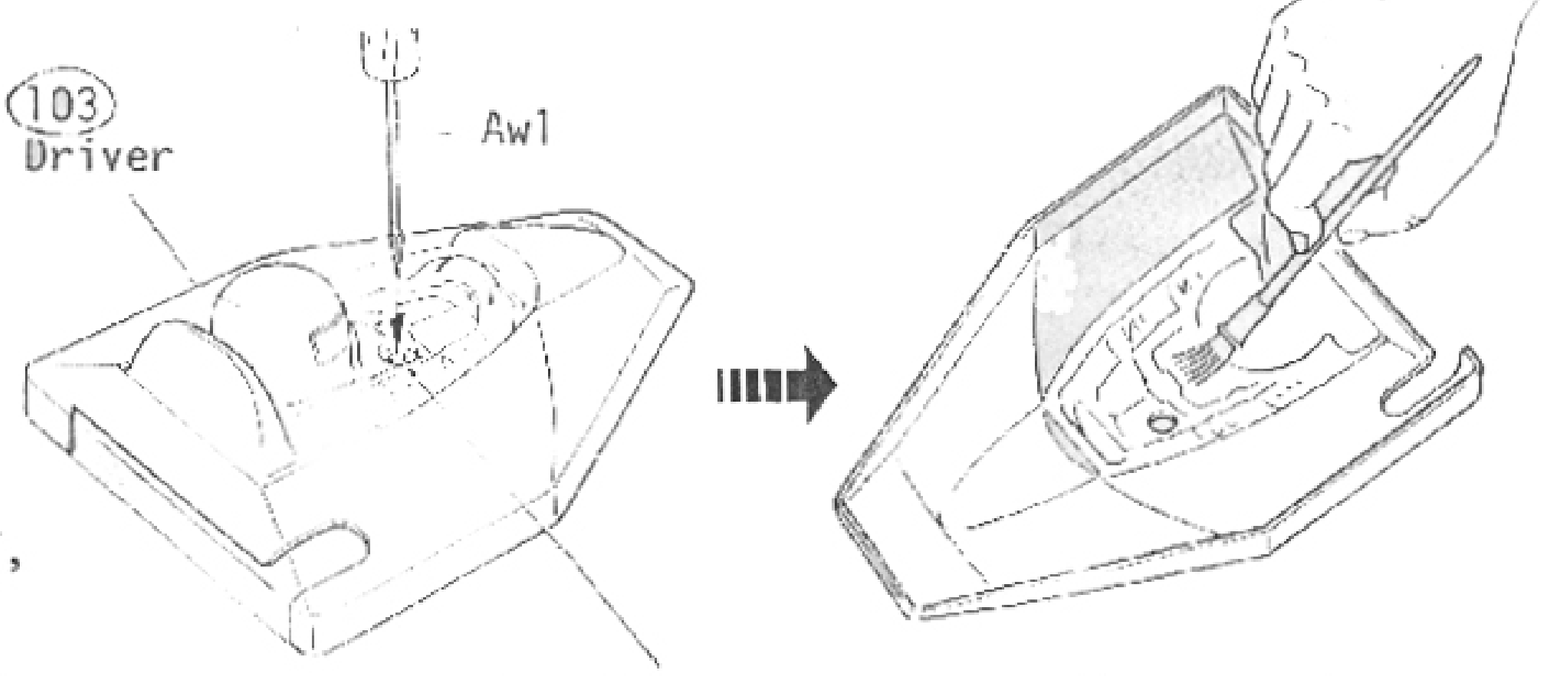
33 TRIMMING & PAINTING THE DRIVER

The body of the Vanning is made from clear plastic, The best looking paint job can be had by painting the INSIDE of the body. Before painting, wash the body with a mild detergent (like dishsoap) and warm water to remove any residual manufacturing oils. Make sure the body is completely dry before painting.

Use a high quality, fuel proof, plastic-type paint (such as pactra's Formula-U). Regular model enamels will dissolve and flake off.

33 TRIMMING & PAINTING THE DRIVER

Cut off the portion indicated with [illegible] with a knife or scissors.



The driver figure is made from clear plastic. The best looking paint job can be had by painting the INSIDE of it.

34 MOUNTING THE BODY (VANNING)

34 MOUNTING THE BODY (VANNING)

[Small Parts Used]

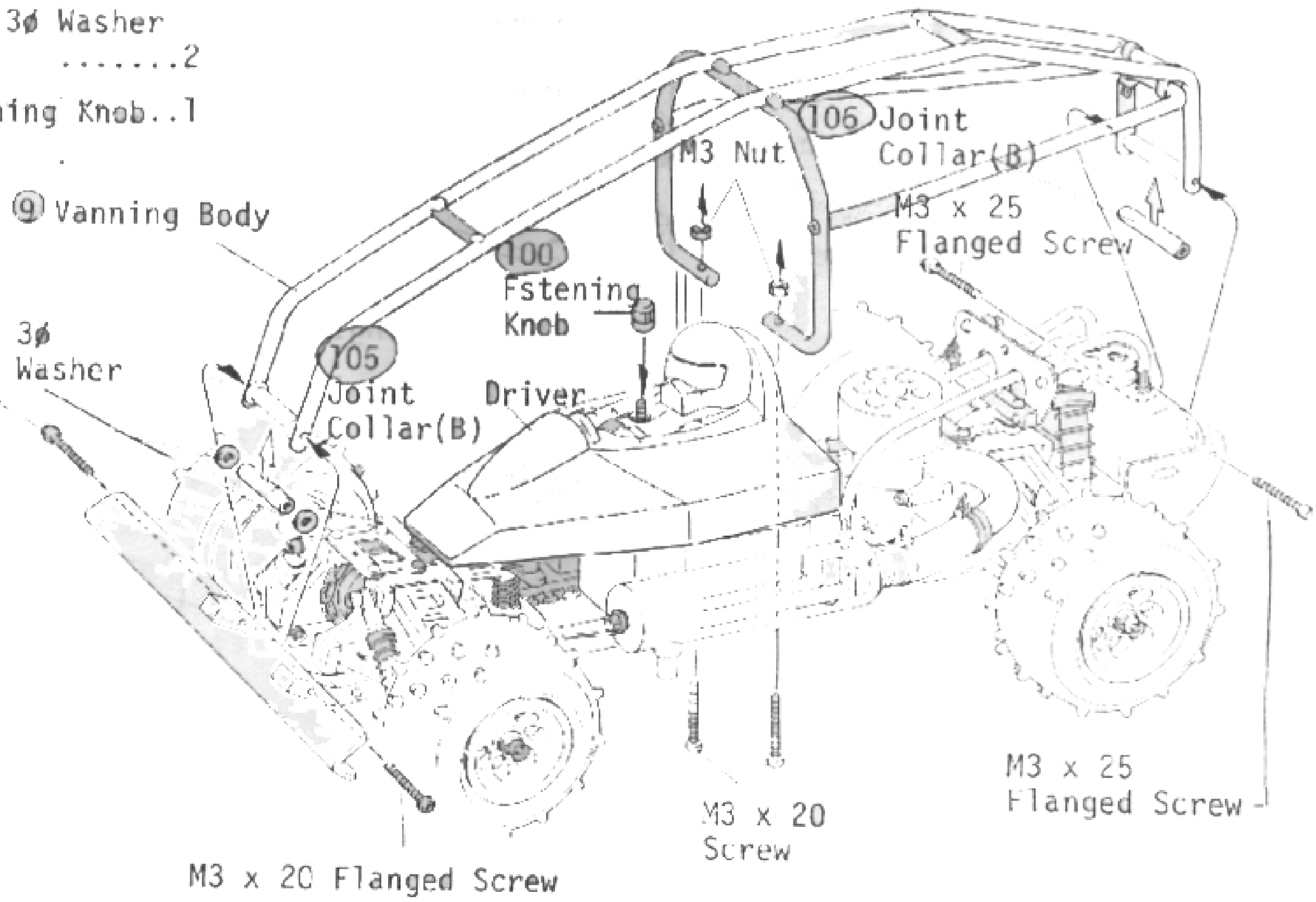
M3 x 20 Screw 2

M3 x 25 Flanged Screw.2

M3 Nut ..?

3ø Washer 2

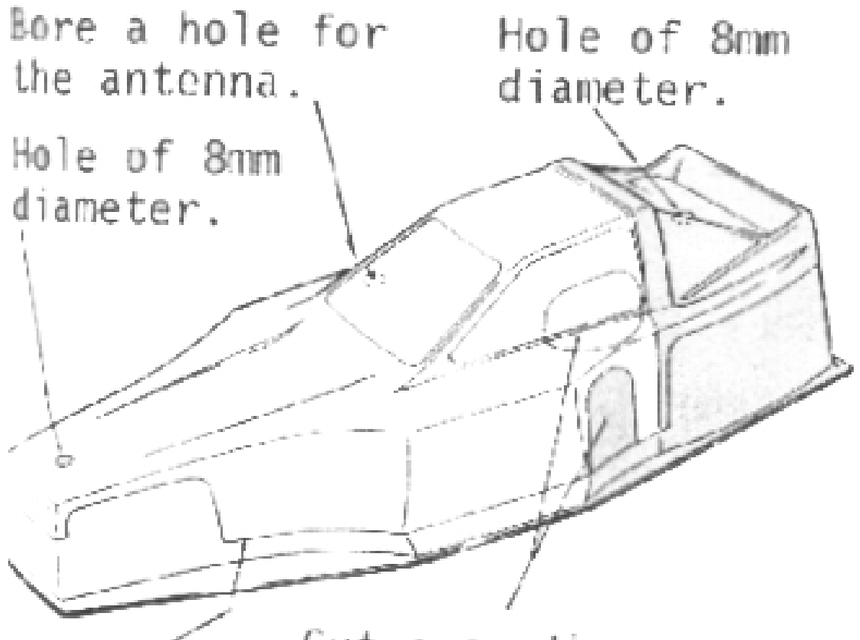
100 Fastening Knob..1

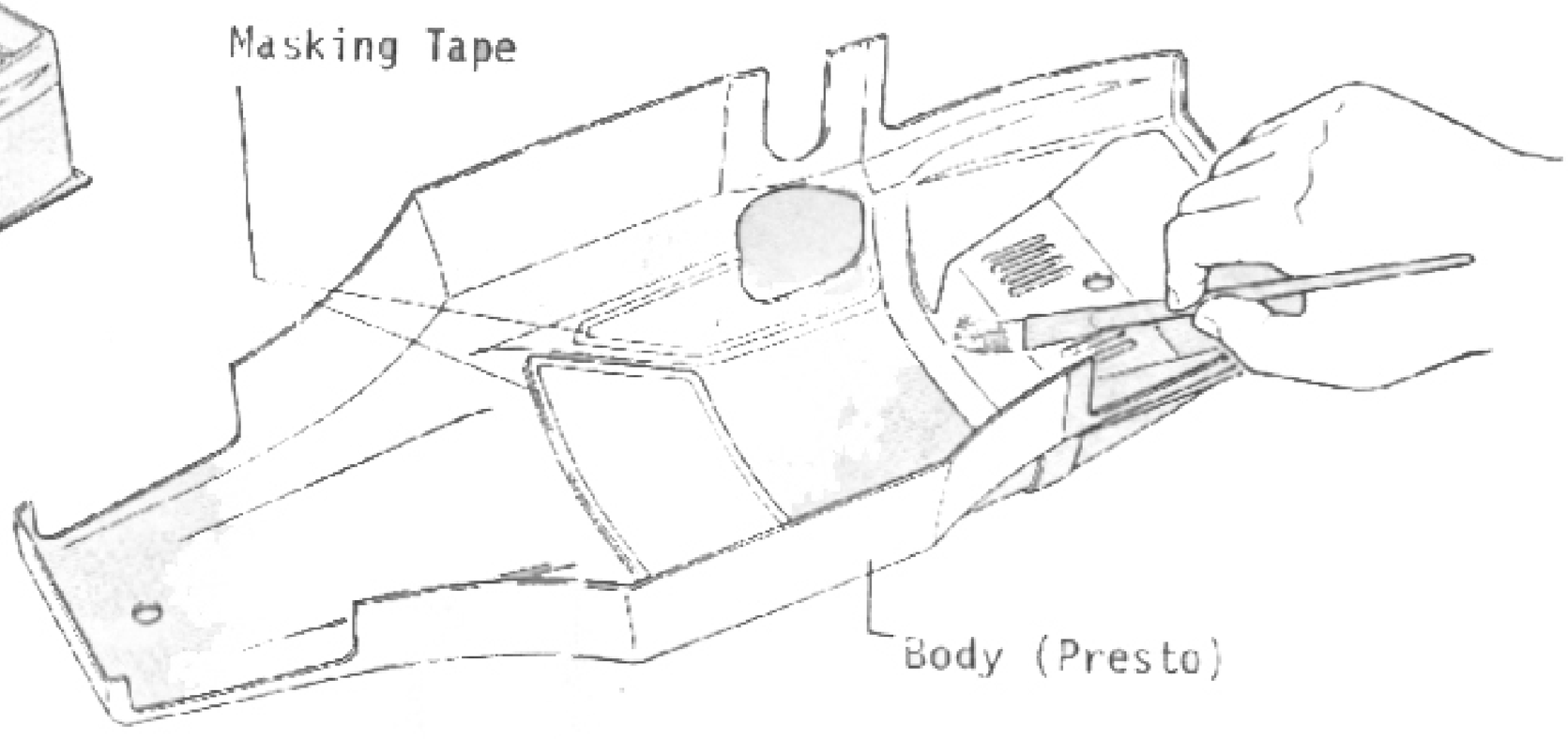


35 PAINTING THE BODY (PRESTO)

35 PAINTING THE BODY (PRESTO)

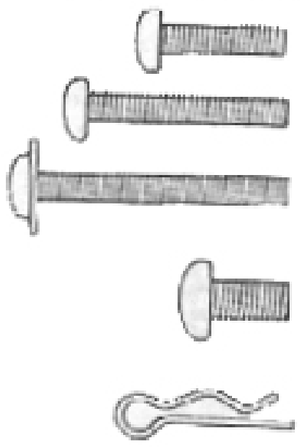
Cut off the shaded portions in the drawing below with a knife or scissors. Also drill holes for the installation as shown.



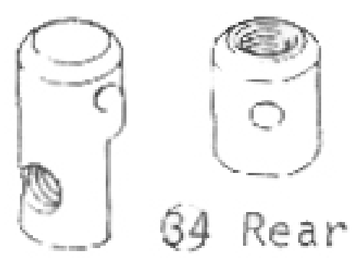


36 MOUNTING THE BODY (PRESTO)

[Small Parts Used]



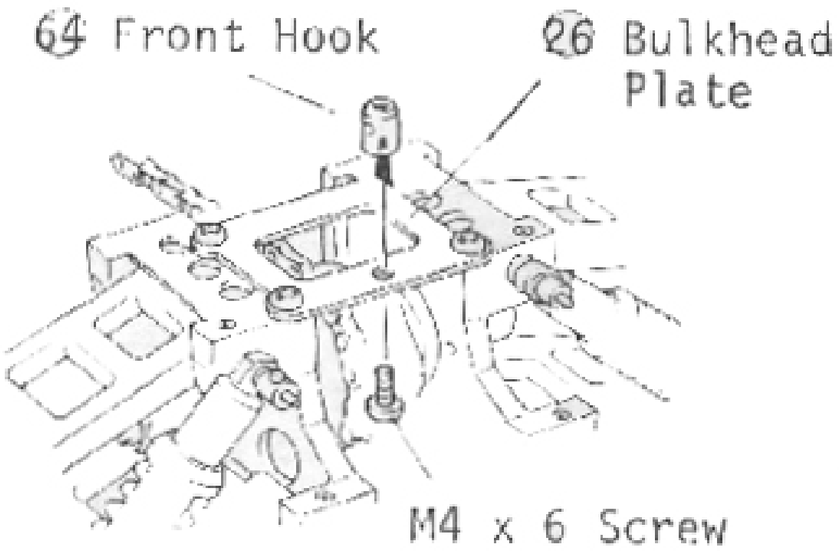
M3 x 10 Screw...1
M3 x 16 Screw...2
M3 x 20 Flange Screw....2
M4 x 16 Screw...1
90 Hook Pin.....2



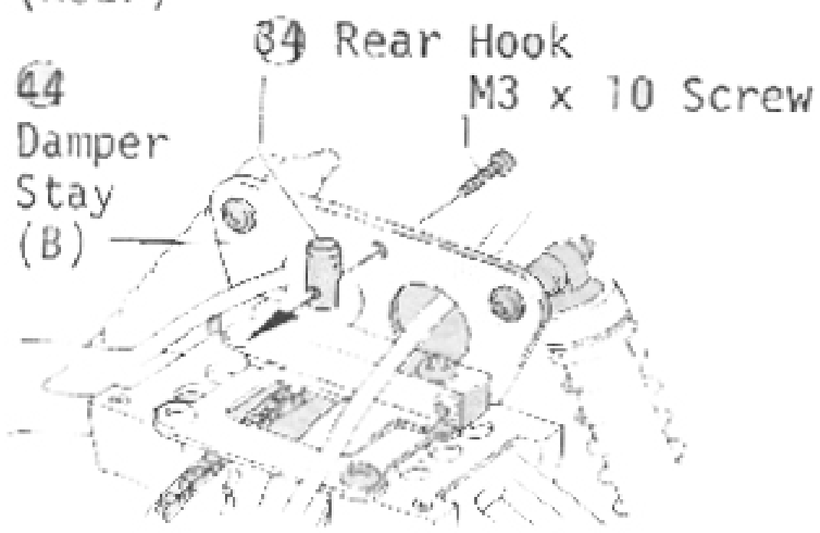
64 Front Hook 1
64 Rear Hook.....1
100 Fastening Knob....1

[Installation of Body Hook]

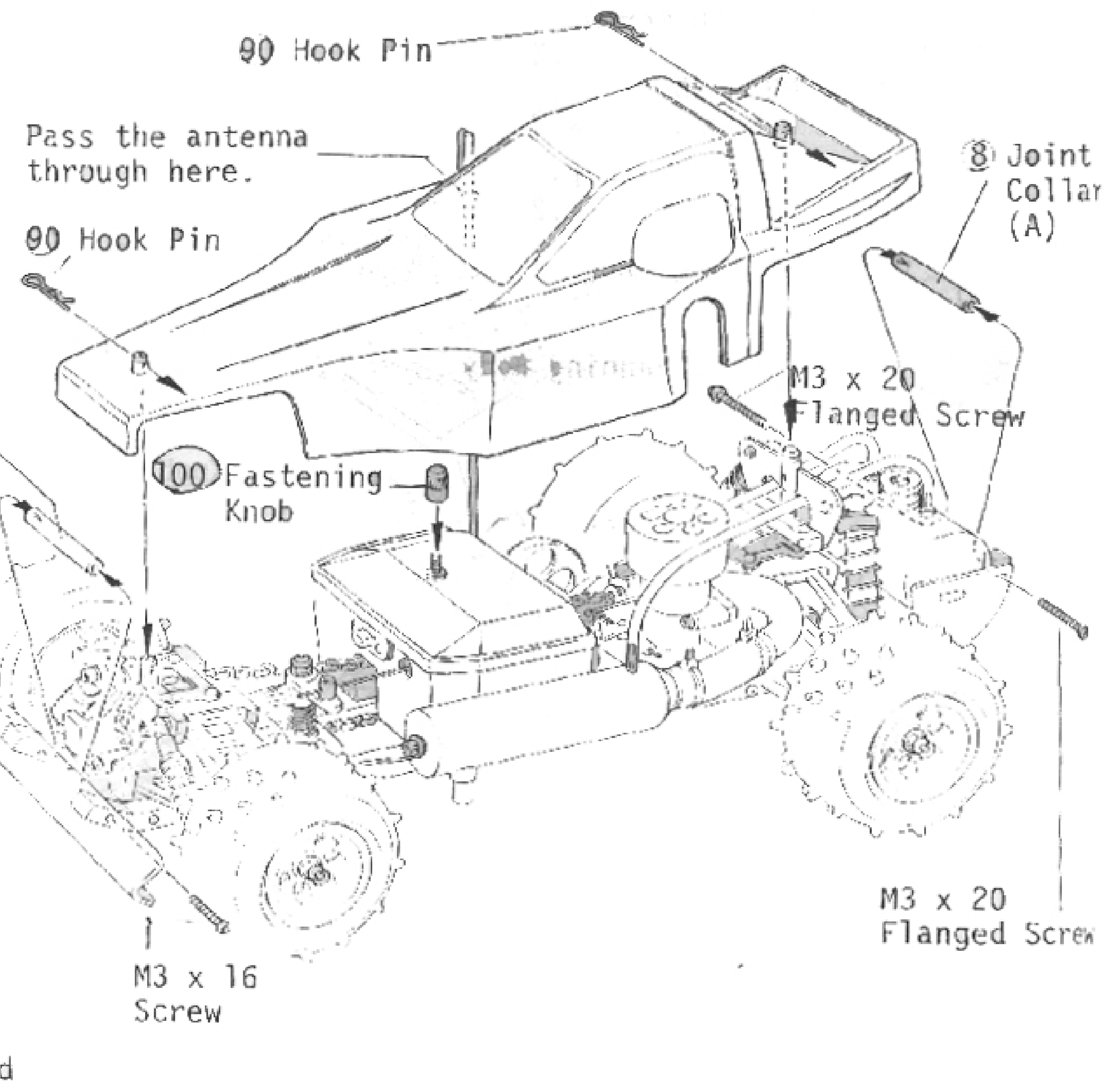
(Front)



(Rear)

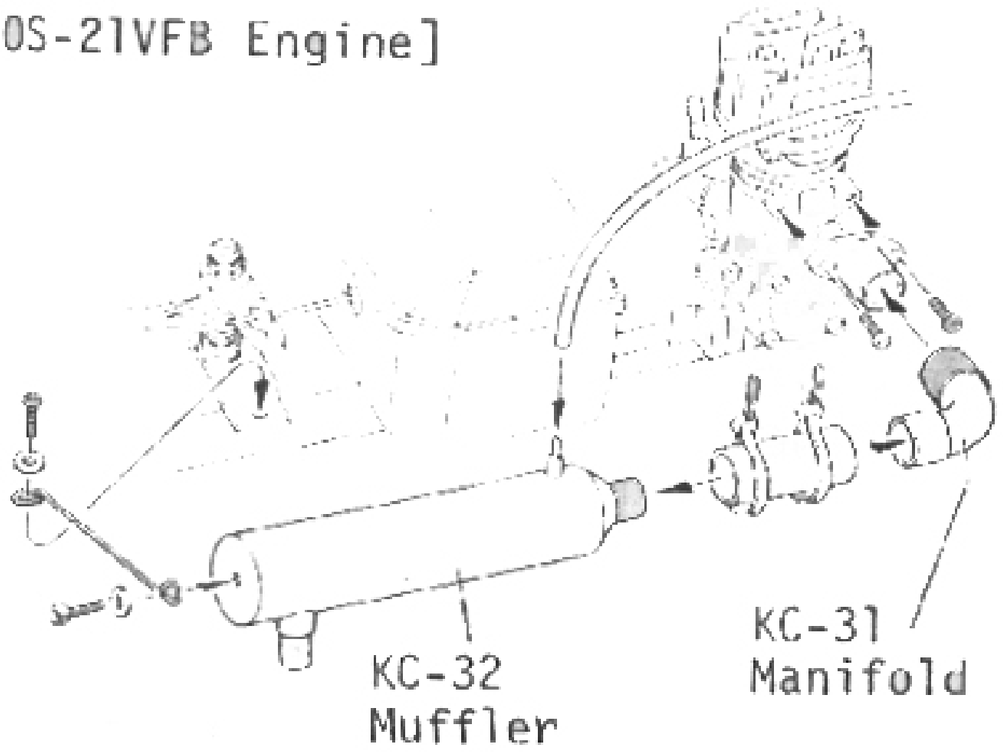


36 MOUNTING THE BODY (PRESTO)



OPTIONAL PARTS

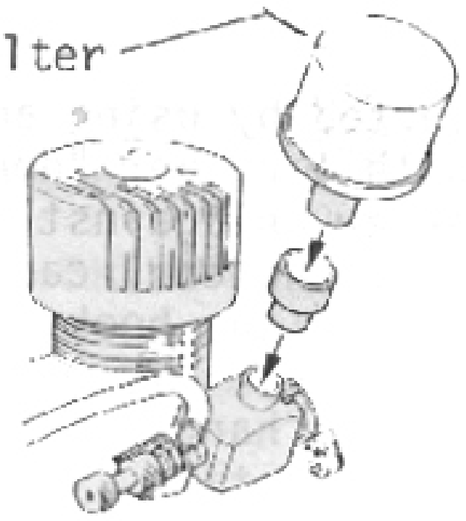
[OS-21VFB Engine]



With the OS-21VFB rear exhaust engine, use the manifold and muffler combination shown, above.

[Air Filter]

CB-110 Air Filter

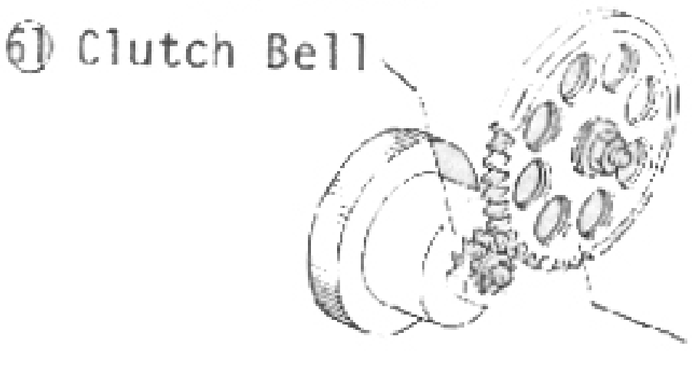


To keep the engine free from dust, use an air filter to the carburetor without fail. It is available as an optional part.

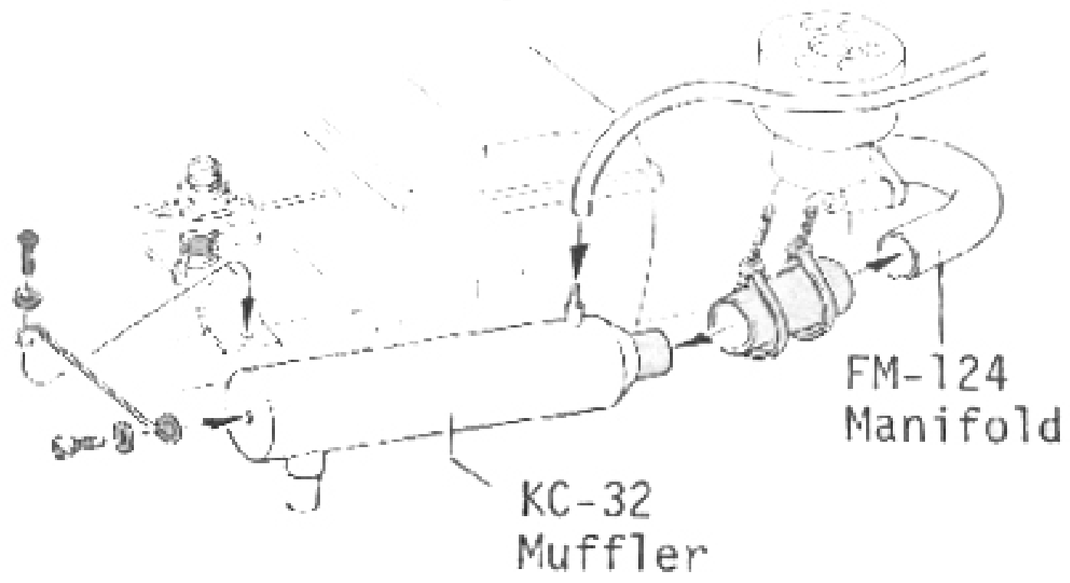
[Changing Gear Ratios]

Clutch Bell	Spur Gear	Gear Ratio
12T (SD-53	53T (LD-27)	10.6 : 1
13T (SD-54)	52T (LD-26)	9.6 : 1
14T (SD-55)	51T (LD-25)	8.7 : 1

The above combination is the only way possible to mesh the spur gear with the clutch bell.



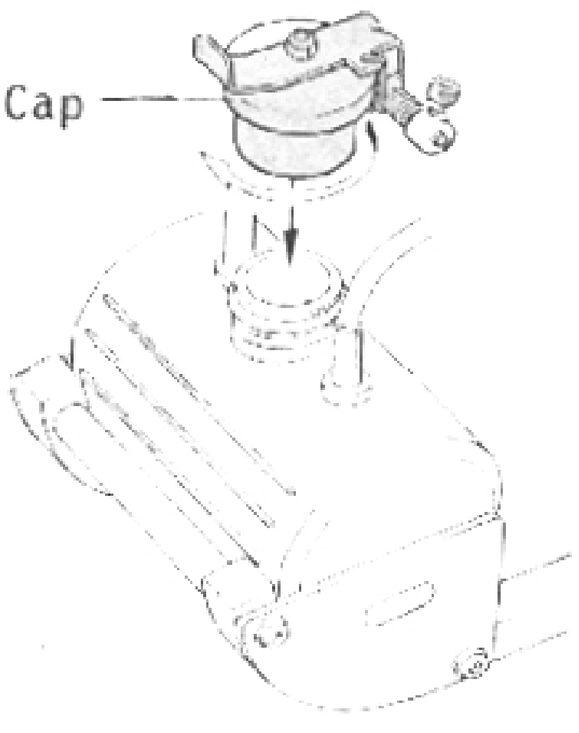
[Enya 21CX, OS-21FSR Engine]



With teh Enya 21CX, OS-21FSR rear exhaust engine, use the manifold and muffler combination shown, above.

[One Touch Cap]

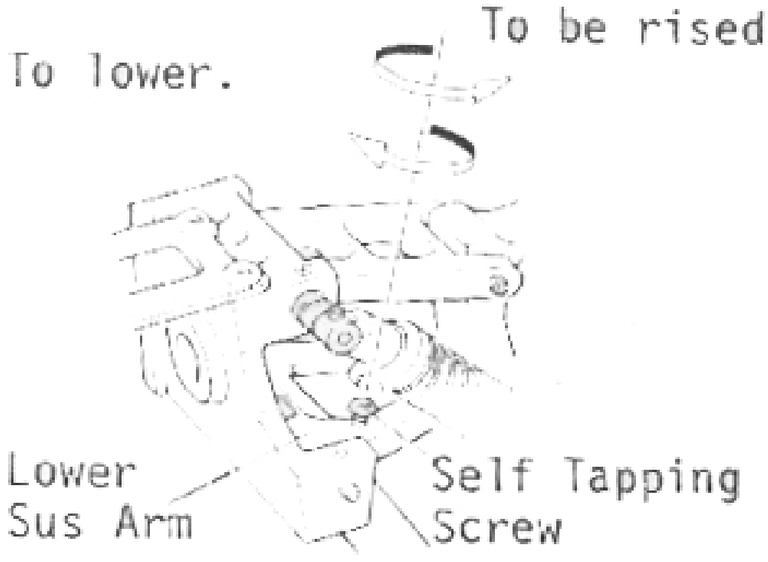
CB-161 One Touch Cap



The 12 tooth clutch bell (61) and 53 tooth spur gear (122) are included with the kit and produce a gear ratio of 10.6 : 1 optional gears will provide either 8.7 : 1 or 9.6 : 1 ratios.
The 8.7 : 1 ratio will provide higher speed. The 9.6 : 1 ratio will improve handling and climbing.

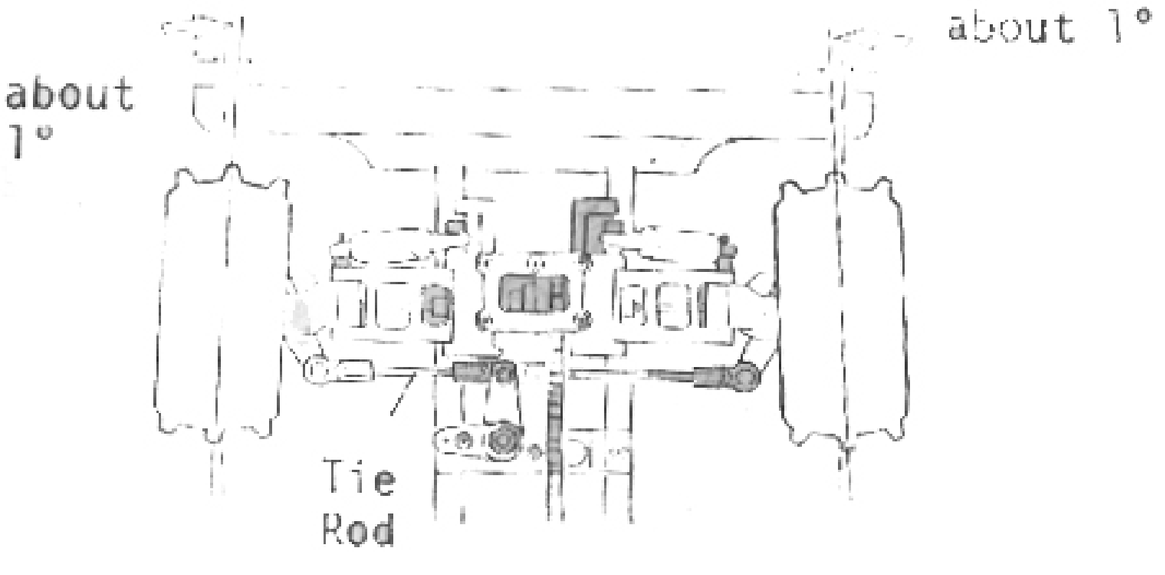
SETTING

[Adjustment of Suspension Arm]



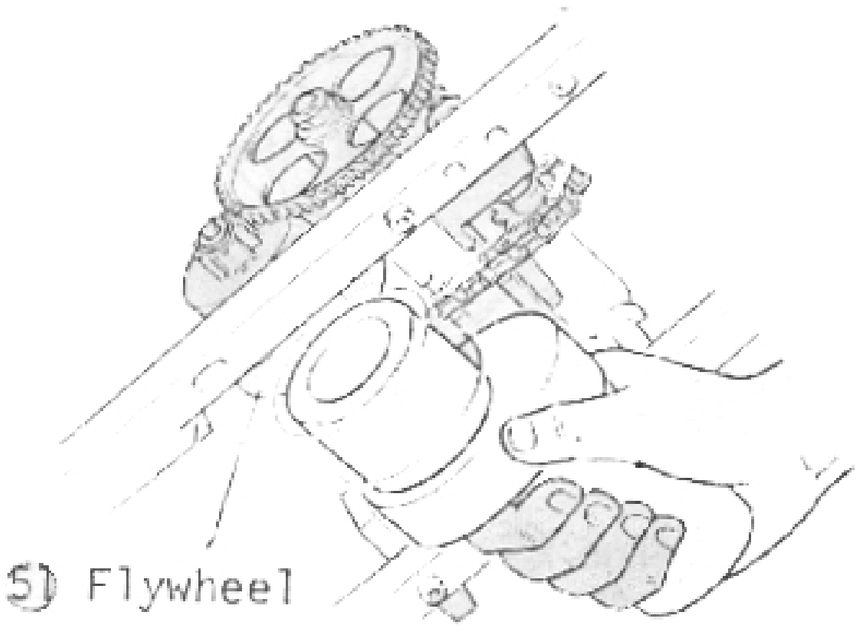
You can adjust the clearance with the suspension arm by turning the self tapping screw right or left.

[Adjustment of Toe-in]



Toe-in is an adjustment of the front wheels that makes them converge slightly toward the front. This helps the model run in a straight line. Toe-in can be adjusted by changing the threaded tie rods. This model seems to run best with about 1 degree of toe-in on each side.

[How to Start Engine]

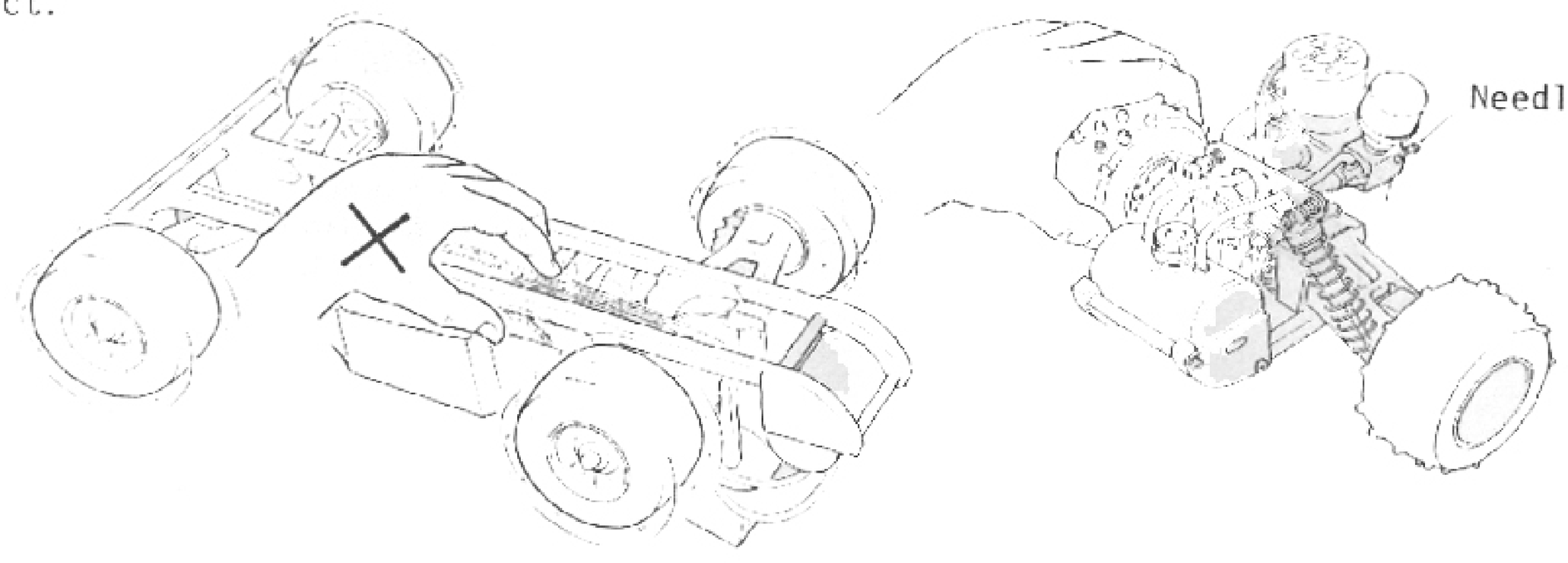


The engine is started by using an electric starter fitted with a rubber "donut". Pressing the starter up against the flywheel (from the bottom of the car) causes the motor to spin (don't forget the hook up the glow plug to a power source). It may take you a few times to get the "hang" of this, but keep trying. After a short time, you'll be able start the car on the first try almost every time. The easiest way to stop the engine is to pinch teh fuel tubing with your fingers until the engine runs out of gas.

CAUTION

This car uses a chain and gearing for the drive system that moves at a very high speed and can be dangerous if not handled properly. NEVER touch the chain or gears while the engine is running (even if the drive parts are not turning).

Always make adjustments to the engine (needle valve, etc.) while the engine is at idle. Hold the rear wheels firmly (or have a friend of it for you) so that if they start to move, the car won't get away from you or get tangled in your cords or clothing. After making the adjustments, put the car down and DRIVE it to see if the adjustment is correct.



Never allow children to be in the immediate area that you are running your car. kids love to chase RC cars (which is usually not too dangerous with the small electric types), BUT the Integra 4WD is a high performance vehicle capable of much damage and pain if it runs into someone.

**If the car overturns, do not touch the chain or gears. Try to pick it up by the front bumper.

PARTS LIST

Key No.	Parts Name	Q'ty
1	Main Chassis (R) (L)	1 set
2	Servo Saver Mount	1
3	Servo Saver	1
4	Servo Saver Shaft	1
5	Collar	2
6	Steering Linkage Guide	1
7	Stay for Tank Installation	2
8	Joint Collar (A) for Presto	4
	for Vanning	2
9	Body, Vanning	1
10	Side Bar, Vanning	1
11	Hub Carrier	2
12	Hub Carrier Mount (R)	1
13	" (L)	1
14	King Pin	4
15	Ball (for Damper)	4
16	Bulk Head (R)	2
17	" (L)	2
18	Front Lower Arm	2
19	Front Upper Arm	2
20	Lower Arm Shaft (A)	6
21	" (B)	4
22	Upper Arm Shaft (A)	4
23	" (B)	2
24	Bushing for Damper Installation	4
25	3ø Stopper	2
26	Bulk Head Plate	2
27	Damper Oil	1
28	Ball End	4
29	Tie Rod (Large)	1
30	Tie Rod (Small)	1
31	Axle Bearing	4 sets
32	Damper Stay (A)	1
33	Brake Cover	1
34	Rear Hook (for Presto)	1
35	Disk	1
36	Brake Arm	1
37	Brake Pat (A)	1
38	" (B)	1
39	Brake Caliper	1
40	Brake Shaft	1
41	Front Swing Shaft	2
42	Joint	4
43	Strap for Vanning	3
	for Presto	1
44	Damper Stay (B)	1
45	Damper Collar	7
46	Wheel Shaft	4
47	Wheel Shaft Bearing	4
48	Rear Swing Shaft	2
49	Clutch Pin (Small) for O.S.	2
60	" (Large) for Enya	2
51	Flywheel	1
52	Flywheel Spacer	2
53	Clutch Sheet	1
54	Pilot Shaft	1
55	Engine Mount (A)	1
66	" (B)	1

Key No.	Parts Name	Q'ty
67	Clutch Shoe	2
58	Clutch Spring	2
59	Clutch Bearing	1 set
60	Lining	1
61	Clutch Bell (12T)	1
62	E Ring (E-3)	1
63	Adjust Spring	1
64	Front Hook (for Presto)	1
65	Spur Gear Shaft	1
66	Tensioner Shaft	1
67	Tensioner Guide	1
68	E Ring (E-4)	1
69	Linkage Guide	2
70	Engine Control Servo Saver Shaft	1
71	Engine Control Servo Saver	1 set
72	Servo Plate	1
73	Servo Plate Collar	2
74	2ø Stopper	5
75	Rod Boots	2 sets
76	Linkage Rod (A)	2
77	(B)	1
78	Linkage Spring	1
79	R/C Unit Box	1
80	Linkage Rod (C)	1
81	Switch Boots	1
82	Switch Plate	1
83	Sprocket	2
84	Diff. Bearing	4
85	Bevel Gear (Large)	4
86	Center Shaft	2
87	Bevel Shaft	2
88	Bevel Gear (Small)	4
89	Differential Gear Case	2
90	Hook Pin (for Presto)	2
91	Antenna Pipe	1
92	Bumper	1
93	Reinforcement Plate for Bumper	1
94	Tire	4
95	Inner Wheel	4
96	Wheel (A)	4
97	" (B)	4
98	Drive WAsher	4
99	Damper Wrench	1
100	Installation Knob	1
101	R/C Unit Box Cover	1
102	R/C Unit Box Seal	1
103	Doll, Vanning	1
104	Body, Presto	1
105	Joint Collar (B) for Vanning	2
106	Rear Damper	2
107	Rear Suspension Spring Stay	2
108	Rear Spring	2
109	Rear Spring Holder	2
110	Front Damper	2
111	Front Suspension Spring Stopper	2
112	Front Suspension Spring Holder	2
113	Spur Gear Mount	1
114	Spur Gear Bearing	2
115	Fuel Tank	1

Key No.	Parts Name	Q'ty
116	Fuel Pipe	2
117	Fuel Tank Bush	2
118	Fuel Tube	1
119	Fuel Tank Cap	1
120	Chain Joint (1pc. Spare)	2
121	Chain Washer(")	2
122	Spur Gear	1
123	Chain	1
124	Rear Upper Arm	2

Key No.	Parts Name	Q'ty
125	Rear Lower Arm	2
126	Rear Hub	2
127	Chain Clip (1 pc. Spare)	2
128	Decal	1
129	Front Spring	2
130	Tie Rod End	4
131	Ball (for Tie Rod)	4
132	Differential Oil	1
133	Differential Spring	2

SPARE PARRTS LIST

No.	Description	Key No. & Consisting of
LD- 1	Bumper	92 93 x 1
LD- 5	Front Hub Carrier	11 x 2
LD- 7	Tie Rod Set	29 30 x 1 130 131 x 4
LD-11	Fornt Swing Shaft	41 x 2
LD-17	Chain Set	120 121 123 127 x 1
LD-18	Joint Ring	120 121 127 x 1
LD-20	Engine Mount	55 56 x 1
LD-22	Chain Tensioner	63 66 67 68 x 1
LD-24	Spur Gear Shaft	65 x 1
KC-40	Main Gear (53T)	122 x 1
LD-35	Engine Control Servo Saver	70 71 x 1
LD-36	Tank	115 118 119 x 1 116 117 x 2
LD-38	R/C Unit Box Set	72 79 81 82 100 101 102 103 x 1 73 75 x 2
LD-43	Spike Tire	94 x 2
LD-45	Linkage Set	6 74 78 80 77 x 1 69 76 x 2
LD-47	Servo Saver	3 4 x 1
LD-70	Clutch Bearing	59 x 1
LD-74	Drive Washer	98 x 4
LD-76	Damper Rubber Bush	24 x 10
LD-79	Rear Diff.	35 83 86 87 89 133 x 1 84 85 88 x 2
CB-11	Swing Shaft	48 x 2
CB-13	Rear Wheel Shaft	46 x 2
CB-15	Ball Bearing	47 x 2
CB-28	Clutch Parts	60 x 1 49 57 58 x 2
CB-52	Joint	42 x 2
CB-67	Clutch Spring	58 x 4
CB-72	E-ring (E-3)	62 x 4
KC-41	Ball Bearing	31 x 2
CB-89	Rear Oil Damper	15 28 106 x 2
SD-53	Clutch Bell (12T)	61 x 1
SD-56	Lining	60 x 5
SD-76	Flywheel	51 x 1
SD-79	Antenna Set	91 x 5
FM-20	Clutch sheet	53 x 5
FM-28A	Flywheel Spacer	52 x 1
FM-29	Body Pin	90 x 10
FM-73	Pilot Shaft	54 x 1
SC-85	Front Damper	15 28 110 111 112 129 x 2 99 x 1
EP-38	Strap	43 x 6
KC- 1	Main Chassis	1 x 1 set
KC- 2	Plate Set	2 x 1 7 26 x 2
KC- 6	Hub Carrier Mount	12 13 x 1
KC- 7	King Pin	14 x 4
KC- 8	Bulk Head	16 17 x 1
KC- 9	Front Arm Set	18 19 x 1
KC-10	Rear Arm Set	124 125 126 x 1

No.	Description	Key No. Consisting of
KC-11	Arm Shaft Set	20 x 6 21 22 x 4 23 x 2
KC-16	Spur Gear Mount	113 x 1 114 x 2
KC-17	Collar Set	5 x 2 45 x 7
KC-18	3ø Stopper	25 x 10
KC-19	Rear Spring Set	107 108 109 x 2
KC-20	E Ring (E-4)	68 x 4
KC-21	Joint Collar (Plesto)	8 x 3
KC-22	Joint Collar (Vanning)	8 x 1 105 x 2
KC-27	Brake Caliper Set	33 36 39 40 x 1
KC-30	Stainless Disk Set	35 37 38 x 1
KC-33	Body (Vanning)	9 10 x 1
KC-34	Body (Presto)	104 x 1
KC-35	Rear Spring Stay	32 44 x 1
KC-36	Body Hook (for Plesto)	34 64 x 1
KC-37	Wheel Set	95 96 97 x 2
KC-38	Screw, Nut Wrench	1 set
KC-39	Decal	128 x 1

Optional Parts

LD-25	Main Gear (51T)	Use with SD-55 (8.7 : 1)
LD-26	Main Gear (52T)	Use with SD-54 (9.6 : 1)
LD-71	Spur Gear Bearing	Exchange with Key No.114
LD-82	Engine Parts for OPS & Pico	Mount & Flywheel for OPS & Pico
CB-110	Air Clener	
CB-161	One Touch Cap	
SD-54	Clutch Bell (13Z)	Use with LD-26
SD-55	Clutch Bell (14Z)	Use with LD-25
KC-31	Manifold for OS-21VFB	
KC-32	Muffler	
FM-124	Muffler Manifold	
1880	Damper Oil	
1881	Hard Oil for Diff.	
CB-84	Ball Bearing	(Sealed Type) Exchange with Key No.31
LD-27	Main Gear (53T)	(Steet Type) Exchange with Key No.122