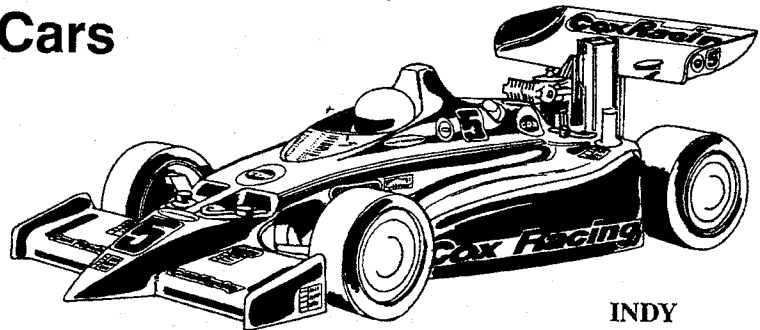
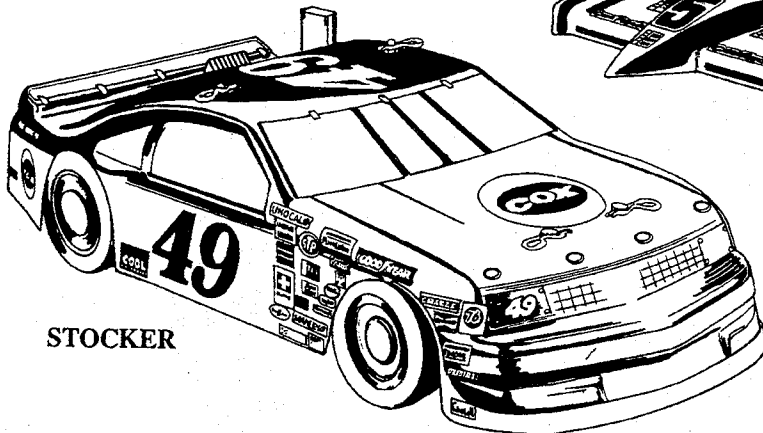




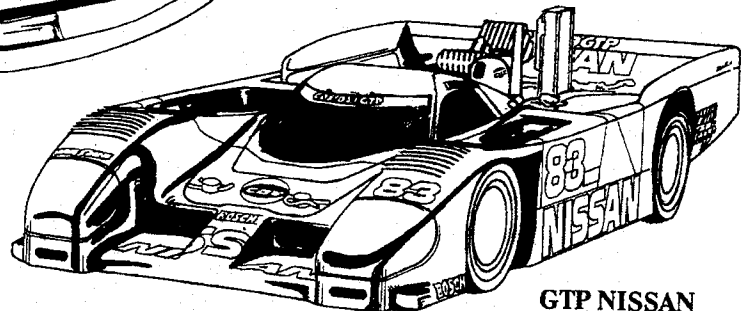
GAS POWERED Radio Controlled 1/12th Scale On-Road Race Cars



INDY



STOCKER



GTP NISSAN

BEFORE YOU BEGIN

Your car is equipped with the completely new "Maples EGR" (Exhaust Gas Recirculation) throttle system. With EGR, recirculated exhaust is mixed with fresh intake air to effect engine speed.

At full throttle, all exhaust gasses exit the car through the EGR throttle system. The engine receives 100% fresh air and therefore operates at maximum RPM.

At lower speeds the throttle valve recirculates exhaust through the engine's air intake. The engine receives a combined exhaust/fresh air mixture and therefore operates at lower RPM's.

The Maples EGR system is extremely efficient. You can completely control your .049 engine's RPM, from top speed to a standing idle. This total control of the fuel/air mixture provides immediate response to your throttle commands.

This instruction book has been prepared for all three of the Cox gas powered cars; the GTP Nissan, Stocker and Indy Car. Each car features the same basic chassis design, with only

minor component alterations to accommodate the different body styles. The resulting slight differences in the assembly process are simply and clearly identified in this instruction book.

From the ground up, each of these high performance Cox R/C cars are 100% race cars. The cars are powered by the Cox .049 cubic inch engine, the world's only mass produced .049 displacement engine. Each Cox car utilizes a ratchet pull starter and reaches a top speed of over 30 MPH! A 1.5 ounce fuel tank gives Cox cars a 15 minute engine run before refueling becomes necessary.

You've probably already noticed that all parts are in separate plastic bags. To prevent losing parts, don't open these bags until the instructions tell you. With each assembly step you'll be told to open a new bag of parts.

You'll have a great time building your Cox .049 powered car. So get started. We'll see you on the track.



GAS POWERED Radio Controlled 1/12th Scale On-Road Race Cars

WARNING

Improper use of this product may
result in personal injury or
damage to the product
**READ THE INSTRUCTIONS
CAREFULLY!**
You are responsible for the safe
operation of this product.



SAFETY PRECAUTIONS



FIRE AND FUEL SAFETY

DANGER POISON

VAPOR HARMFUL—FLAMMABLE—EYE IRRITANT—MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED

Contains Methanol and Nitro Methane. Cannot be made non-poisonous. Avoid contact with eyes. Use only in well ventilated area. Keep away from heat and open flame. Do not store in open or unlabeled container. Do not throw empty can in fire.

FIRST AID: In case of contact with eyes flush thoroughly with warm water. If swallowed, induce vomiting. Call a physician immediately.

KEEP FROM SMALL CHILDREN—USE WITH ADULT SUPERVISION

FIRE AND FUEL SAFETY

1. Use only Cox model fuel—NEVER USE GASOLINE! Gasoline can explode and burn, causing serious injury to YOU AND OTHERS.
 2. Cox model fuel works only because it is FLAMMABLE—it burns with an almost invisible flame. It can burn you if not used with common sense—be careful and follow these rules:
 - NEVER FUEL OR PRIME WITH BATTERY CONNECTED TO ENGINE.
 - WIPE EXCESS FUEL FROM MODEL WITH CLOTH AFTER EACH FUELING OR PRIMING.
 - KEEP FUEL AWAY FROM FIRES.
 - DO NOT OPERATE ENGINE INDOORS.
 - DO NOT SMOKE WHEN FUELING OR OPERATING MODEL.
 - NEVER USE COX FUEL CAN TO STORE OTHER CHEMICALS OR FUELS.
 - DON'T THROW EMPTY CAN IN FIRE.
- IF AN ACCIDENTAL FIRE DOES OCCUR—Flame can be smothered with a heavy clean dry cloth. Do not use a cloth with fuel on it. If fire continues, GET AWAY!
3. FUEL ONLY WITH SAFETY SPOUT IN CAN. Never use syringe or other device. Never remove safety spout from can.
 4. Fuel is an eye irritant. Fuel only in well ventilated outdoor area. Keep face away from model when fueling.
 5. FUEL IS POISON AND CAN CAUSE DEATH OR BLINDNESS. NEVER DRINK IT. If swallowed, induce vomiting and call a physician immediately.
 6. NEVER PLAY WITH FUEL. USE IT ONLY FOR YOUR MODEL'S ENGINE.

SPECIFICATIONS

Engine	Cox .049 cubic inch
Maximum RPM	23,000 RPM
Weight (without radio)	16.25 ounces
Wheel Base	7.82"
Ground Clearance	0.25"
Front Track	6.5"
Rear Track	6."
Tires (front)	1.9" x 1"
Tires (rear)	2.15" x 1.4"
Gear Ratio	4.37:1
Body (GTP Nissan)	
Overall Length	14"
Overall Width	6 1/2"
Height	2 7/8"
Body (Stocker)	
Overall Length	14 3/16"
Overall Width	6 1/2"
Height	3 1/8"
Body (Indy)	
Overall Length	14"
Overall Width	6 1/2"
Height	2 3/4"

Before you begin assembly, check inside the box to make sure all the car parts and bags listed below are included in your kit. If parts are missing, call Cox Customer Service toll free at 800/451-0339. We will send your parts immediately.

ASSEMBLY STEP PARTS BAGS

- (1) BRAKE GROUP
- (2) CHASSIS GROUP
- (3) RADIO INSTALLATION GROUP
(Standard servo group included in kits purchased without radio)
- (4) FRONT SUSPENSION GROUP
- (5) BODY GROUP
(Stocker & Indy cars only)
- (6) WING GROUP

BUBBLE CARD

TWO FRONT WHEEL/TIRE ASSEMBLIES
TWO FRONT SUSPENSION ASSEMBLIES
ENGINE DRIVE TRAIN ASSEMBLY

INSIDE BOX

ZIP STARTER
BODY
INSTRUCTIONS
STICKER SHEET
(Stocker & Indy cars only)
WING WIRE

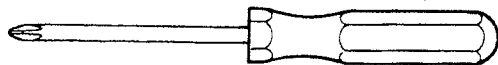
SIDEWINDER RADIO SYSTEM

(If kit purchased with radio)
TRANSMITTER
RECEIVER
TWO MICRO SERVOS
"AAA" BATTERY BOX WITH SWITCH
FREQUENCY FLAG

REQUIRED ITEMS FOR ASSEMBLY



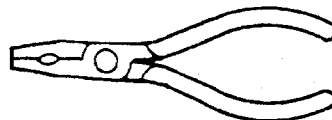
1/4" NUT DRIVER



SMALL PHILLIPS SCREWDRIVER



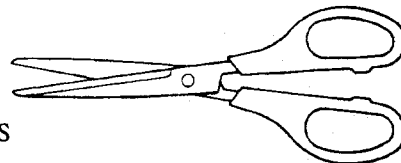
SMALL FLAT-BLADE SCREWDRIVER



PLIERS



MODELERS KNIFE



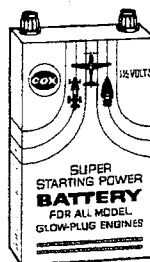
SCISSORS

REQUIRED ITEMS FOR PAINTING

LEXAN PAINT
(See photo of model you have purchased for colors)
MASKING TAPE
MODELERS KNIFE
SCISSORS
THIN PERMANENT MARKING PEN

REQUIRED ITEMS FOR STARTING

The Cox 400 starting kit contains everything you will need to start your engine.



1 1/2 Volt Battery

Cox Fuel



Cox Engine Wrenches



Cox Glow Head Clip



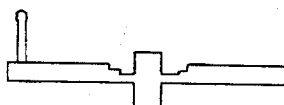
Cox Fuel Filler Hose

1 BRAKE GROUP

Before you begin each assembly step, check the parts bag to make sure all the pieces are there. If you are missing a part, give Cox Customer Service a call on our toll free line, 800/451-0339. We'll send your part immediately.

③ No. 4 × ¼" Screw
(actual size)

④ Washer

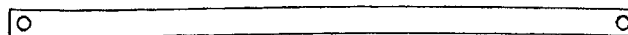


⑥ Two Clevises

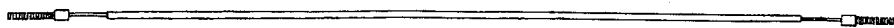
① Two No. 2-56 × ¼" Screws
(actual size)



② Bellcrank

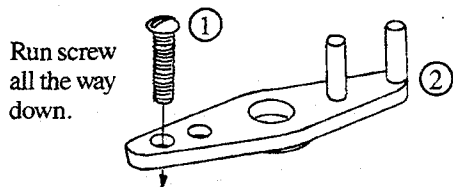


⑤ Brake Strap

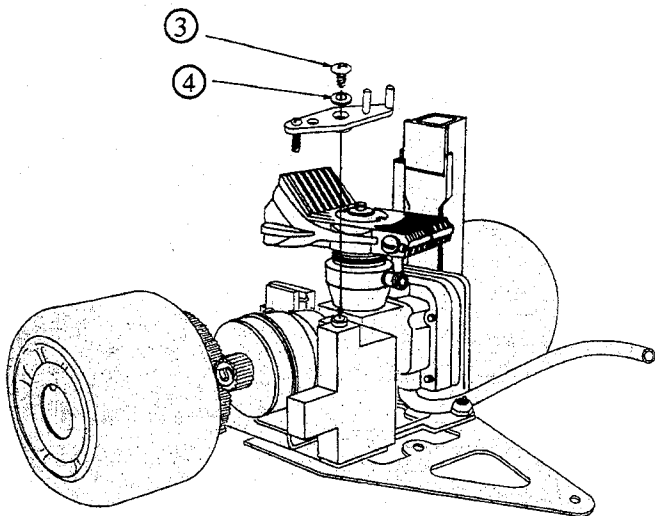


⑦ Brake Cable

1a. PREPARE BELLCRANK



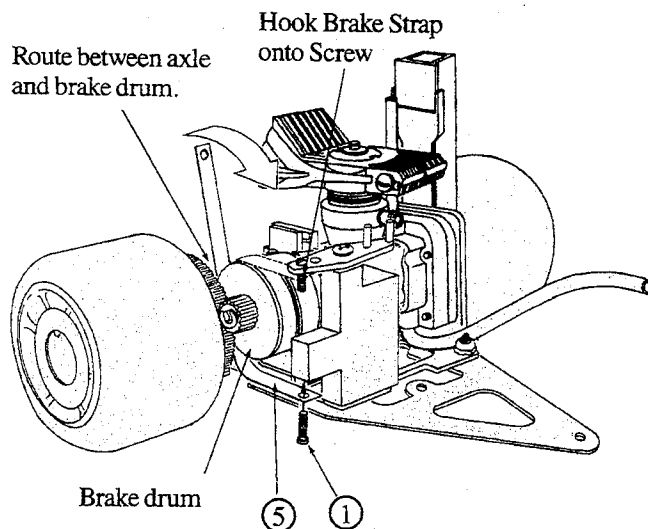
1b. INSTALL BELLCRANK



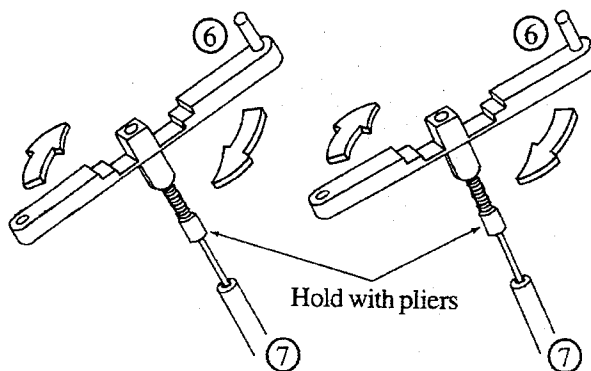
DO NOT OVERTIGHTEN!
Be sure Bellcrank rotates freely.

1c. INSTALL BRAKE STRAP

When you tighten screw ①, make sure brake strap is lined up with the brake drum. If it is not aligned, loosen screw, realign strap with drum and retighten.

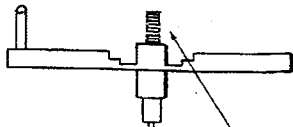


1d. INSTALL CLEVISES



1d. (CONTINUED)

Bellcrank end



Match length of exposed threads to this drawing.

(actual size)

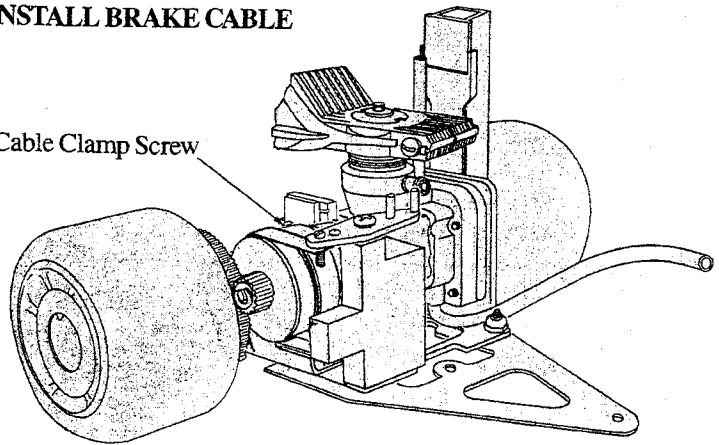


Servo End

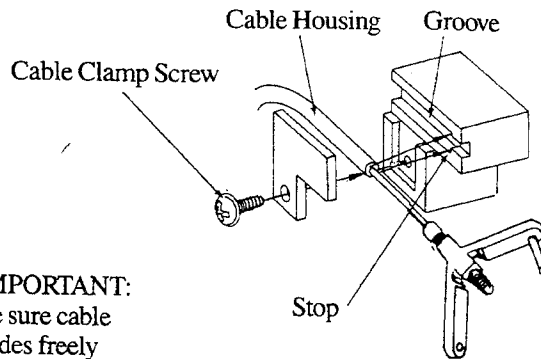
Match length of exposed threads to this drawing.

1e. INSTALL BRAKE CABLE

Cable Clamp Screw



Loosen cable clamp screw two turns. Install brake cable ⑦ (bellcrank end) in groove with cable housing up against stop. Now, tighten cable clamp screw. DO NOT OVERTIGHTEN.

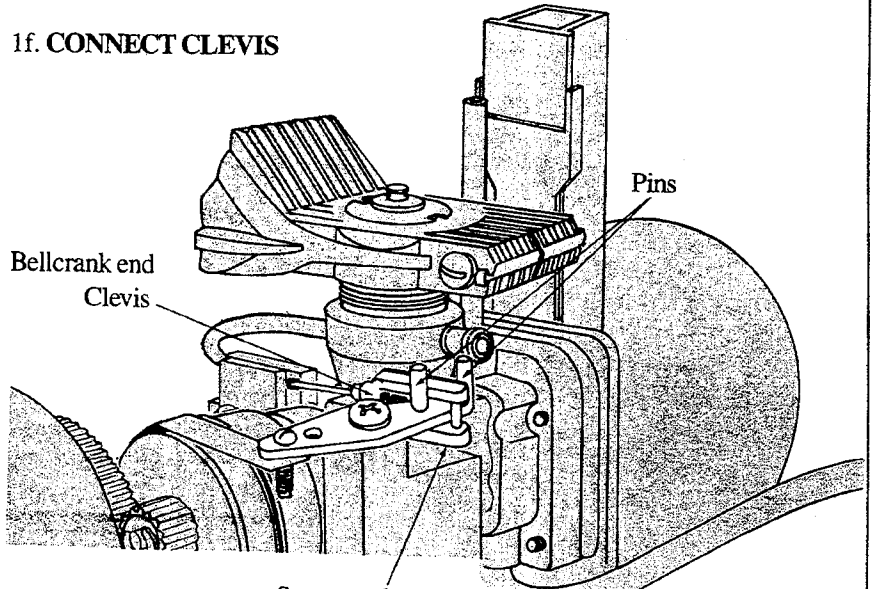


IMPORTANT:
Be sure cable slides freely and cable housing is secure.

1f. CONNECT CLEVIS

Bellcrank end Clevis

Pins



Snap together

2

CHASSIS GROUP

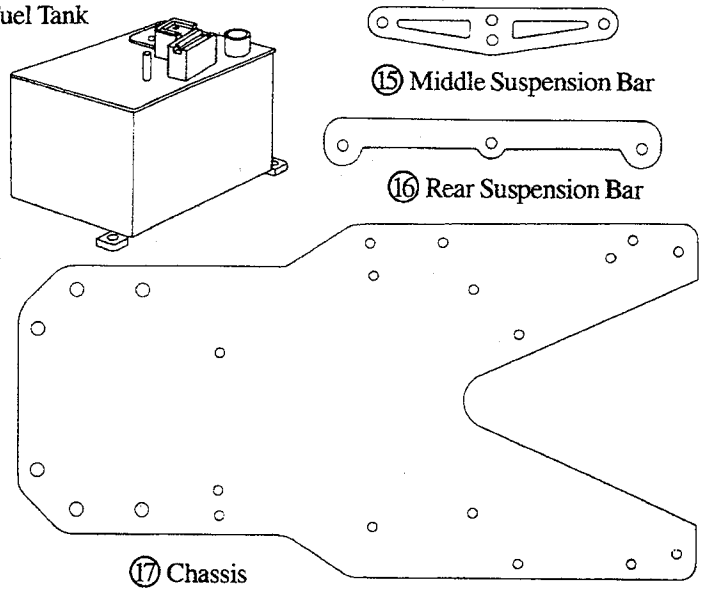
INDY AND GTP NISSAN CARS

STOCKER CAR

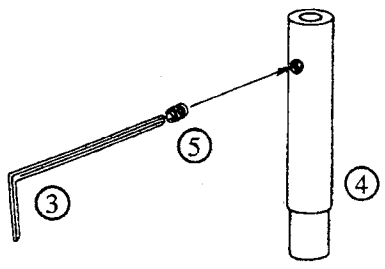
- ① Ten 4-40 × 3/8" Screws (actual size)
- ⑧ Two 4-40 × 1 3/8" Screws (actual size)
- ⑫ Two Brake Servo Mounting Posts

- ① Eight 4-40 x 3/8" Screws (actual size)
- ⑧ Four 4-40 x 1 3/8" Screws (actual size)
- ⑫ Four Mounting Posts (Two for Throttle/Brake Servo Two for Rear Body Posts)

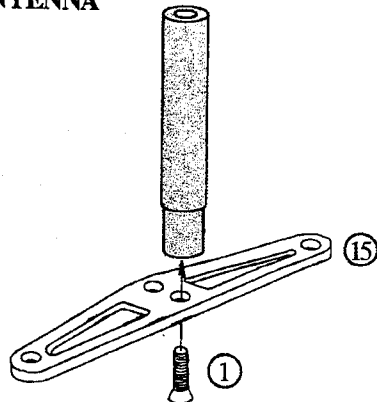
- ② Nine 4-40 Nylocks (actual size)
- ③ Allen Wrench
- ④ Antenna Pylon
- ⑤ Antenna Pylon Allen Set Screw
- ⑥ Two Silicone Spacers (white)
- ⑦ Eight Fiber Washers (black)
- ⑨ Two Washers
- ⑩ No. 4 × 1/4" Screw (actual size)
- ⑪ Cable Clamp
- ⑬ Two Rear Body Posts
- ⑭ Fuel Tank



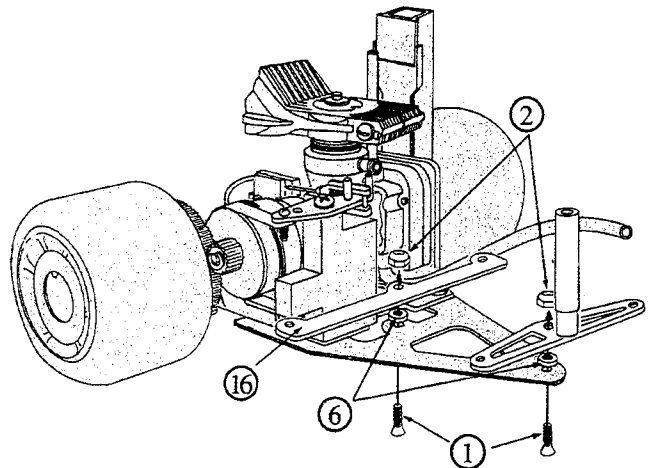
2a. INSTALL ALLEN SET SCREW



2b. INSTALL ANTENNA PYLON



2c. INSTALL SUSPENSION BARS

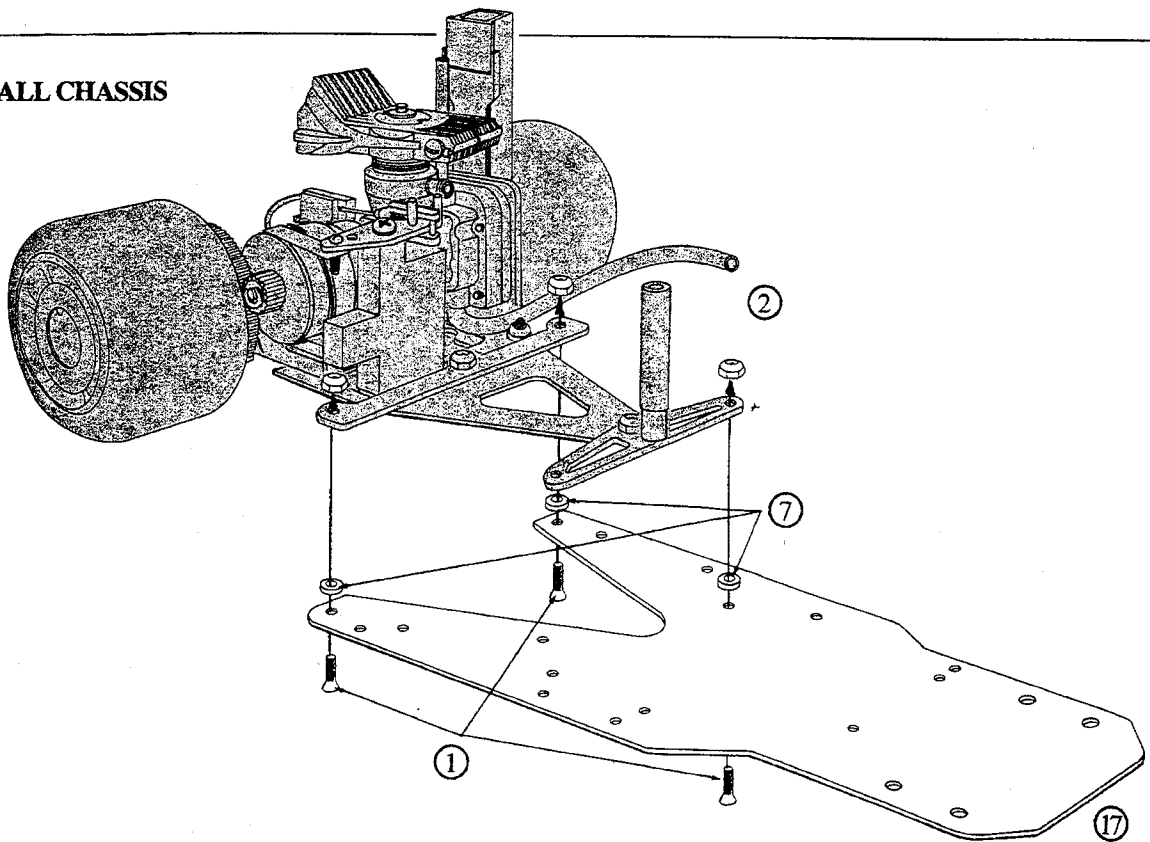


Do Not Overtighten

NOTE: Tighten Nylocks ② so top of Nylock is even with end of screws ①.

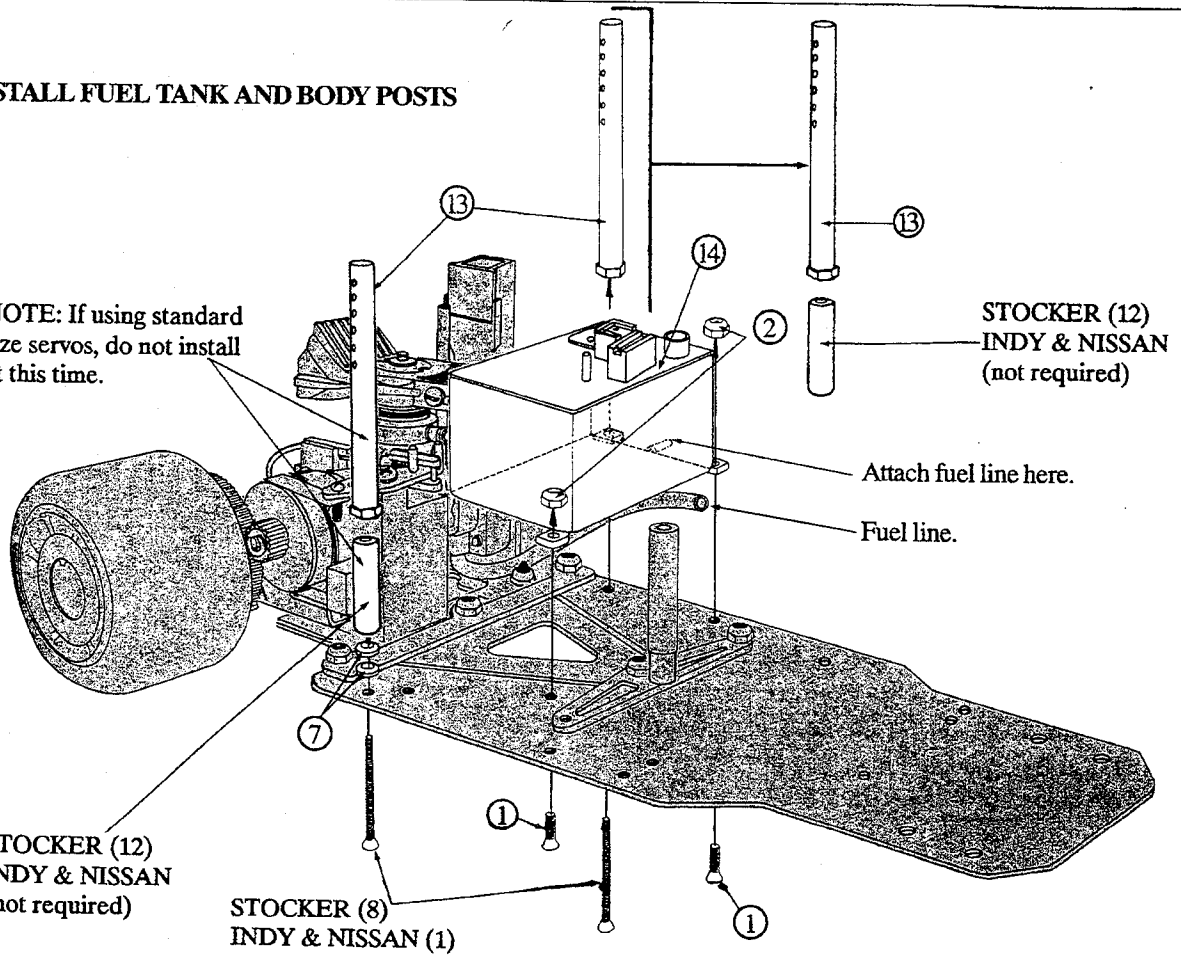
NOTE: The Silicone Spacers ⑥ provide flex to the cars' suspension. This part must be installed for proper suspension operation.

2d. INSTALL CHASSIS



2e. INSTALL FUEL TANK AND BODY POSTS

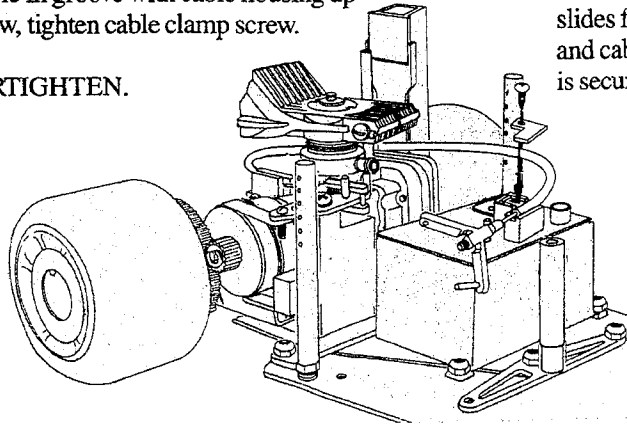
NOTE: If using standard size servos, do not install at this time.



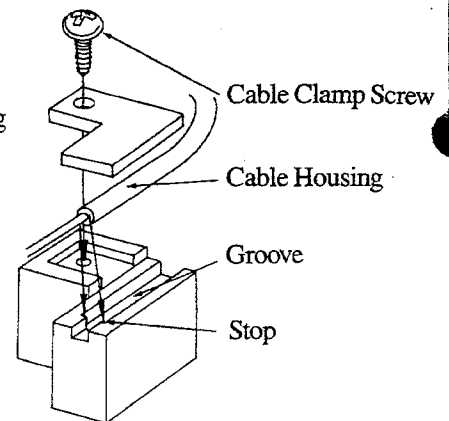
2f. INSTALL BRAKE CABLE

Install brake cable in groove with cable housing up against stop. Now, tighten cable clamp screw.

DO NOT OVERTIGHTEN.



IMPORTANT:
Be sure cable slides freely and cable housing is secure.



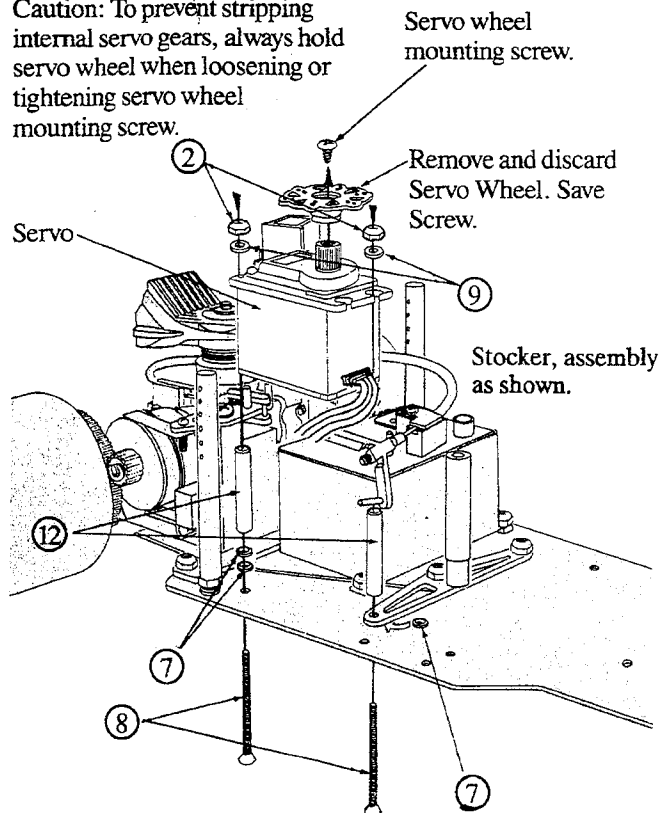
2g. INSTALL THROTTLE SERVO

If you purchased a kit with radio included, remove radio system from sidewinder box and proceed with Micro Servo Installation instructions. **NOTE:** It's not necessary to read Sidewinder instructions for assembly. If you purchased a kit without radio, examine your radio system to determine if your radio contains micro or standard servos.

MICRO SERVO INSTALLATION

Before installing servos, remove rubber grommets with brass eyelets from both servos.

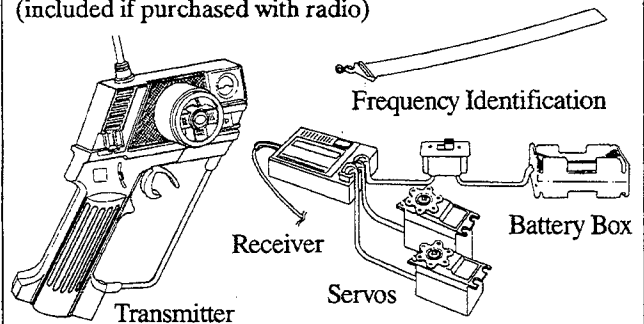
Caution: To prevent stripping internal servo gears, always hold servo wheel when loosening or tightening servo wheel mounting screw.



If you have any questions regarding servo installation call toll free Cox Customer Service. 1(800)451-0339

Insert fiber washer between suspension bar and chassis.

SIDEWINDER RADIO SYSTEM (included if purchased with radio)



STANDARD SERVO INSTALLATION

Standard servo accessory pack is only included in the kits without radio. The Indy car body does not have enough clearance for standard servos. If installing standard servos in the GTP Nissan, use the short body post supplied in the standard servo accessory pack in place of number (13). If you have any questions regarding servo installation call toll free Cox Customer Service. 1(800)451-0339

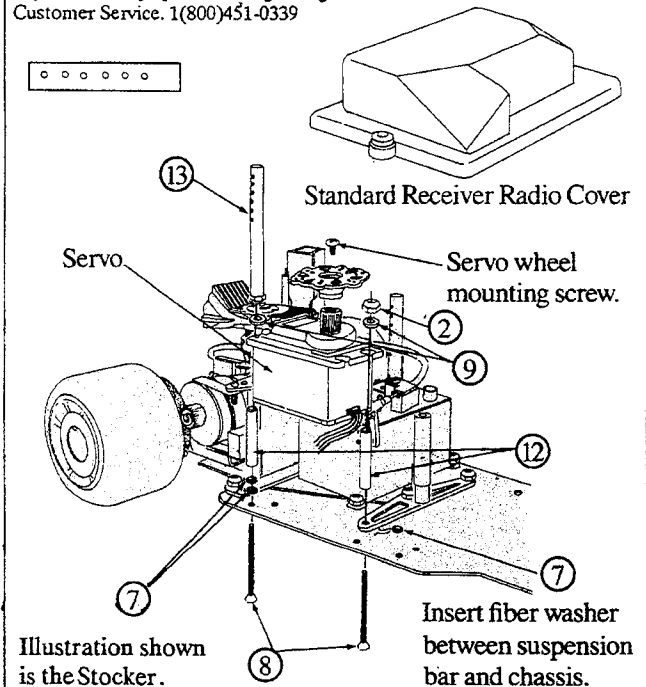

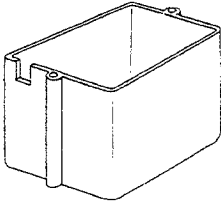
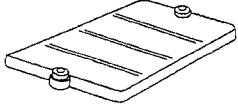









Illustration shown is the Stocker.

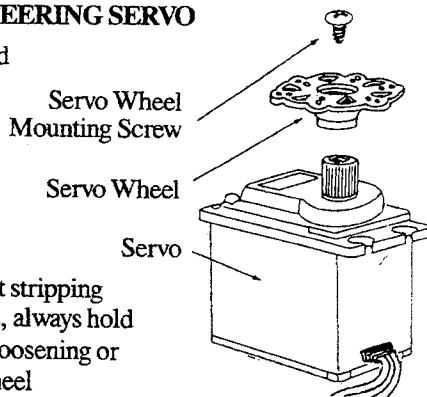
Insert fiber washer between suspension bar and chassis.

3 RADIO INSTALLATION GROUP

- 
 ① Two Steering Servo Bosses
- 
 ④ Battery/Receiver Housing
- 
 ⑦ Micro Receiver Housing Cover
- 
 ② On/Off Switch Boss
- 
 ⑤ Two No. 4 x 7/16 Screws
(actual size)
- 
 ⑧ Two Washers
- 
 ③ Four 4-40 x 3/8" Screws
(actual size)
- 
 ⑥ Two No. 2 x 1/4" Screws
(actual size)
- 
 ⑨ Two 4-40 x 3/8" Screws
(actual size)
- 
 ⑩ Two 4-40 x 1/4" Screws
(actual size)

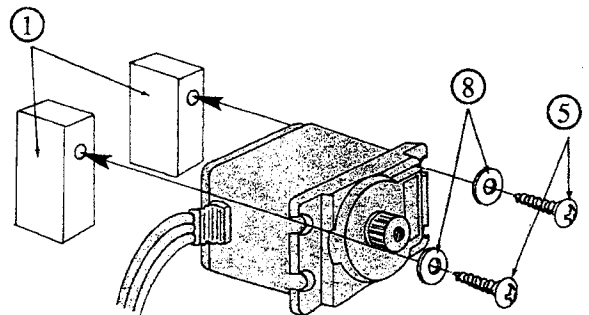
3a. PREPARE STEERING SERVO

Remove and discard Servo Wheel and Screw.

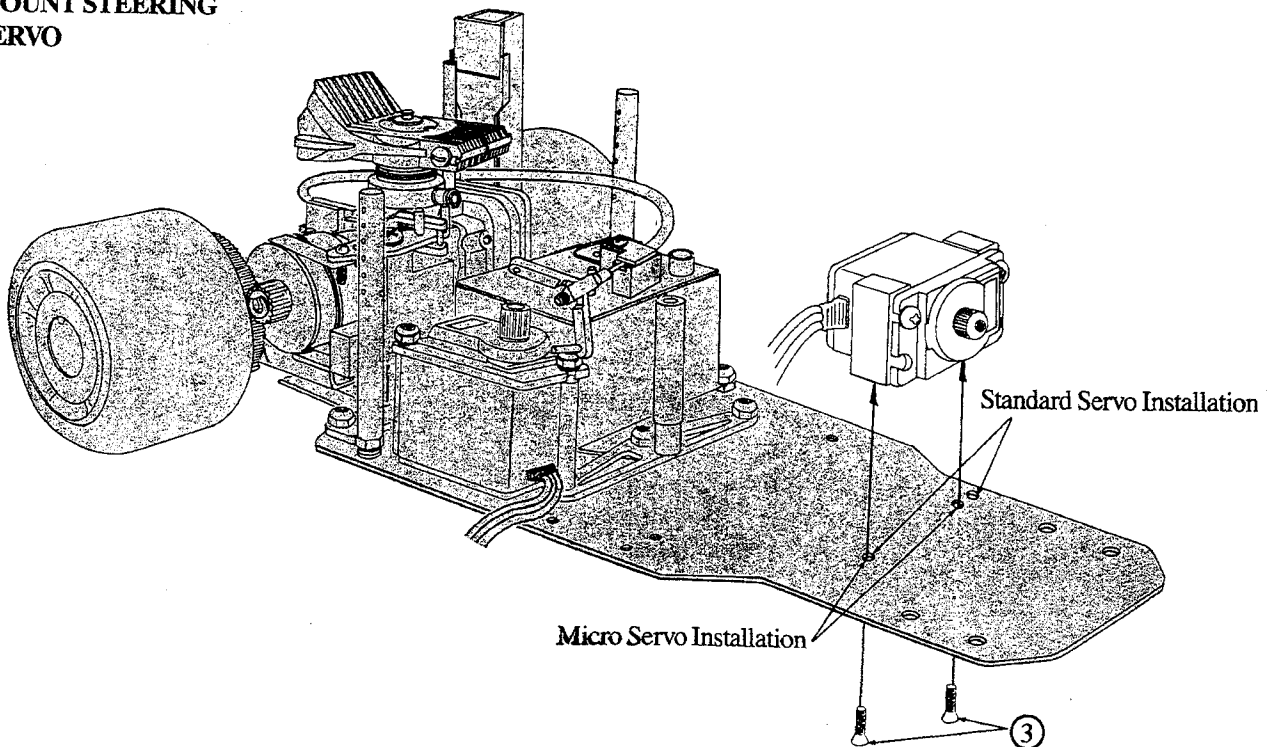


Caution: To prevent stripping internal servo gears, always hold servo wheel when loosening or tightening servo wheel mounting screw.

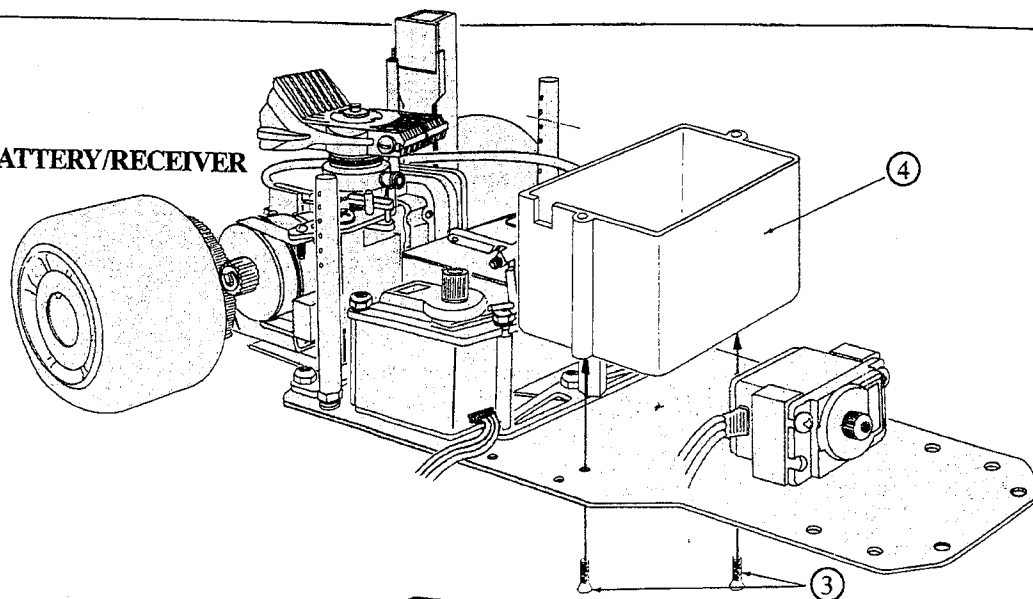
3b. INSTALL SERVO BOSSES



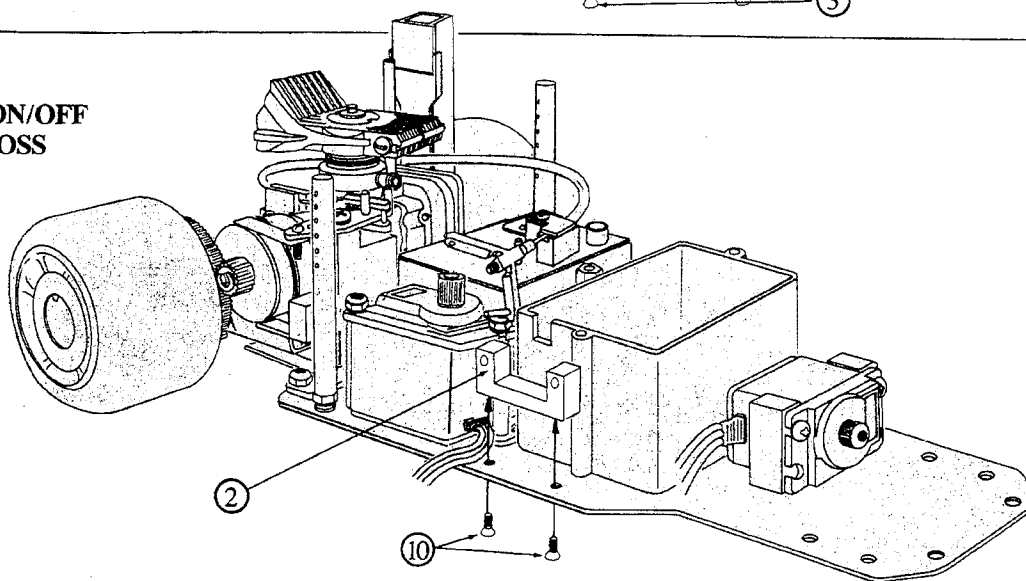
3c. MOUNT STEERING SERVO



3d. INSTALL BATTERY/RECEIVER HOUSING



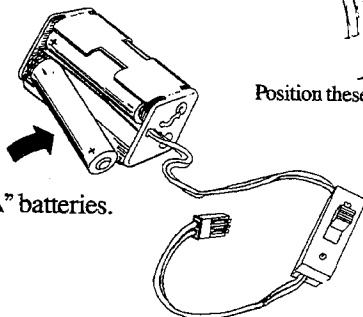
3e. INSTALL ON/OFF SWITCH BOSS



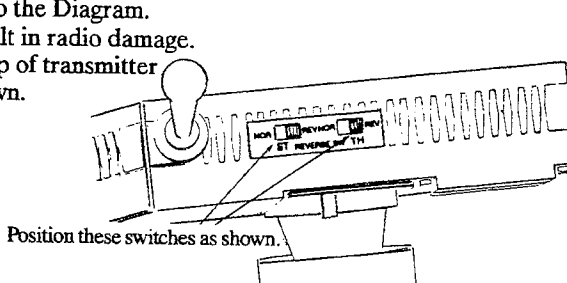
3f. INSTALL BATTERIES

Carefully install batteries according to the Diagram.
 Incorrect battery installation will result in radio damage.
 Set the servo reversing switches on top of transmitter to the "REV" (reverse) setting as shown.

Cox Sidewinder
 Battery Box
 (Included if
 kit purchased
 with radio)

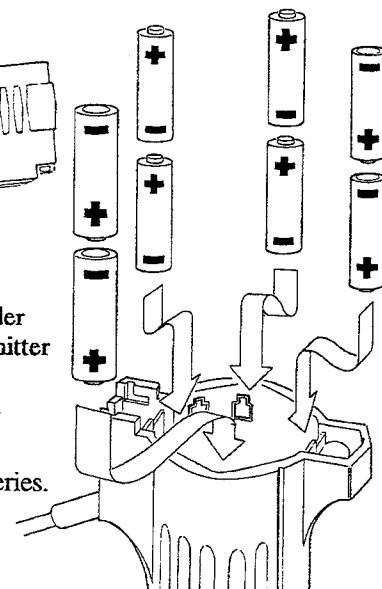


Install four "AAA" batteries.



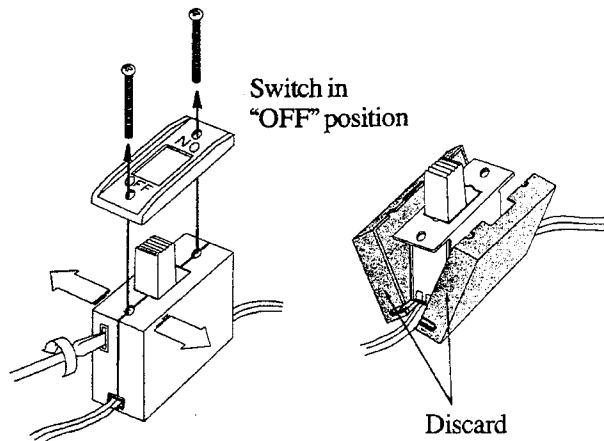
Cox Sidewinder
 Radio Transmitter
 (Included if
 kit purchased
 with radio)

Install eight "AA" batteries.

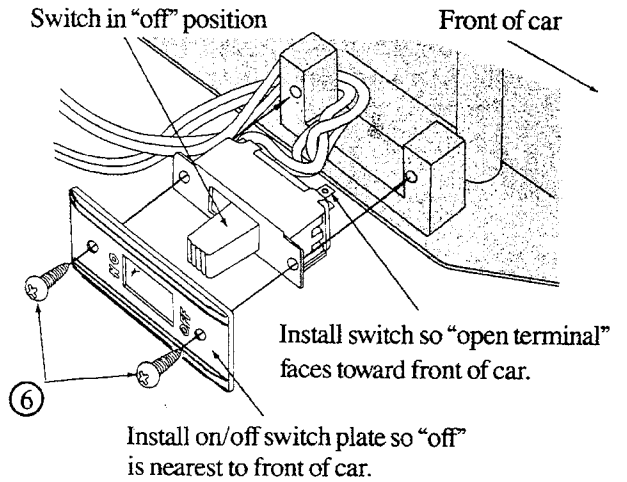


IMPORTANT: Be sure radio transmitter and battery box switches are turned off. Install antenna and attach frequency identification to transmitter antenna.

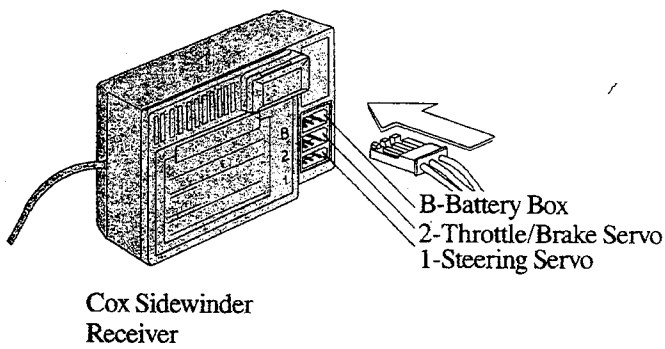
3g. REMOVE SWITCH CASE



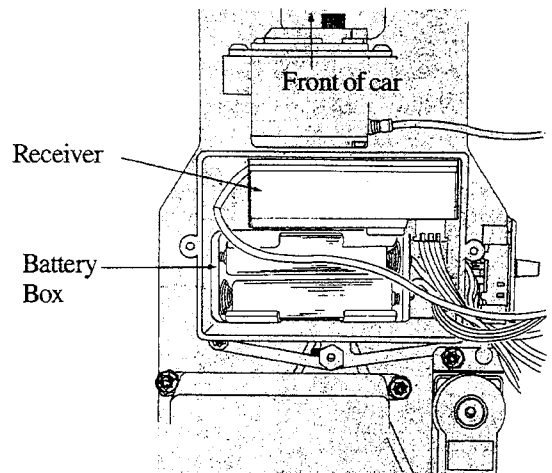
3h. INSTALL SWITCH



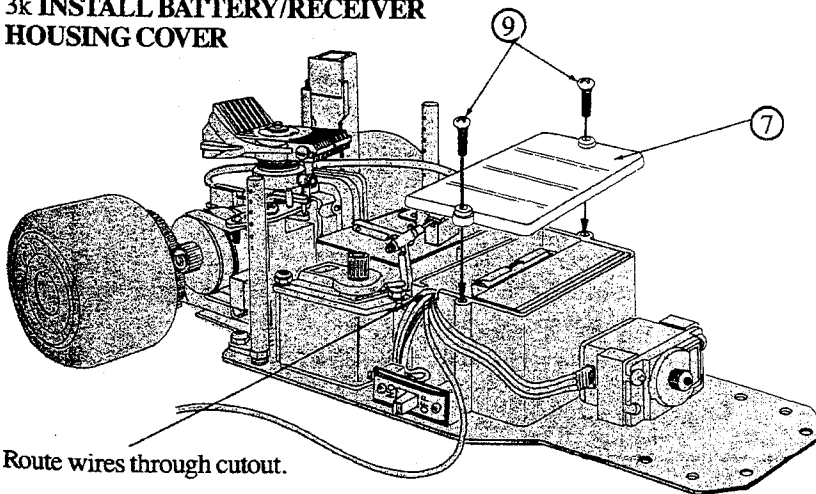
3i. PLUG IN RECEIVER



3j. INSTALL BATTERY BOX AND RECEIVER

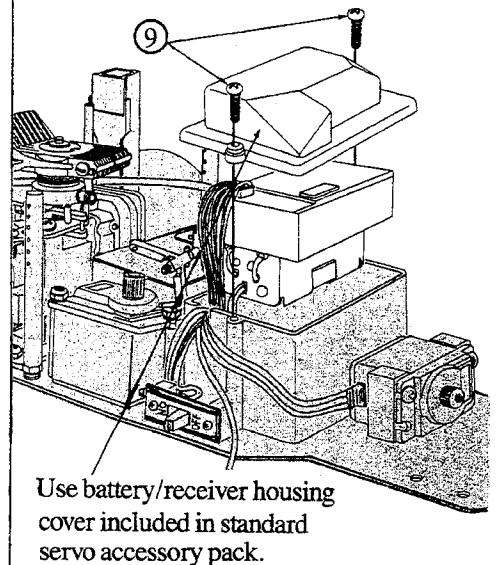


3k. INSTALL BATTERY/RECEIVER HOUSING COVER

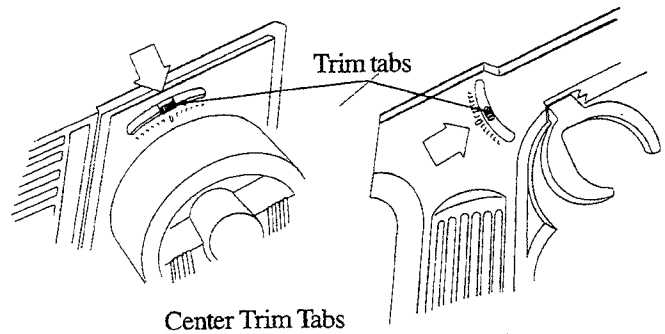


NOTE: Pack excess wire in battery/receiver housing. Leave approximately 12" of receiver antenna out of housing.

"AA" BATTERY BOX INSTALLATION

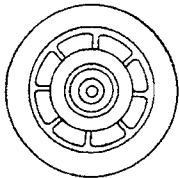


31. Center radio transmitter trim tabs.
 Turn on transmitter. Now turn on receiver on/off switch. The servos will move to their set position. Turn off receiver, then turn off transmitter.
CAUTION: Save your batteries. Turn off the radio system when not in use.

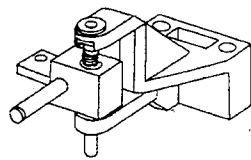


4 FRONT SUSPENSION GROUP

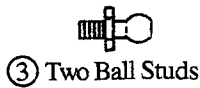
From Bubble Pack



① Two Wheel/Tire Assemblies



② Two Front Suspension Assemblies



③ Two Ball Studs



④ Two Tie Rod Ends



⑤ Two Tie Rods



⑥ Tie Bar



⑦ Four Washers



⑧ Two E-clips

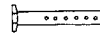


⑨ Two Hub Caps

INDY AND GTP NISSAN CARS



⑩ Front Bumper



⑪ Two Front Body Mounts



⑫ Two Suspension Shims



⑬ Two Nylocks



⑮ Two 8-32 × 5/8" Screws (actual size)

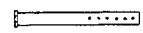


⑰ Servo Saver

STOCKER CAR



⑩ Front Bumper



⑪ Two Front Body Mounts



⑭ Two 4-40 × 3/8" Screws (actual size)

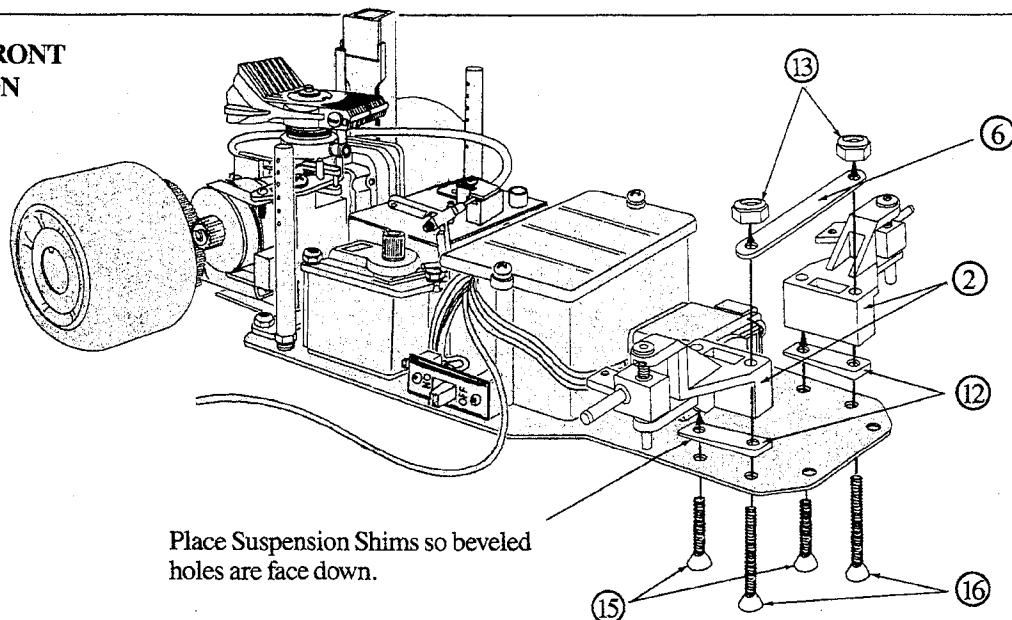


⑯ Two 8-32 × 1" Screws (actual size)



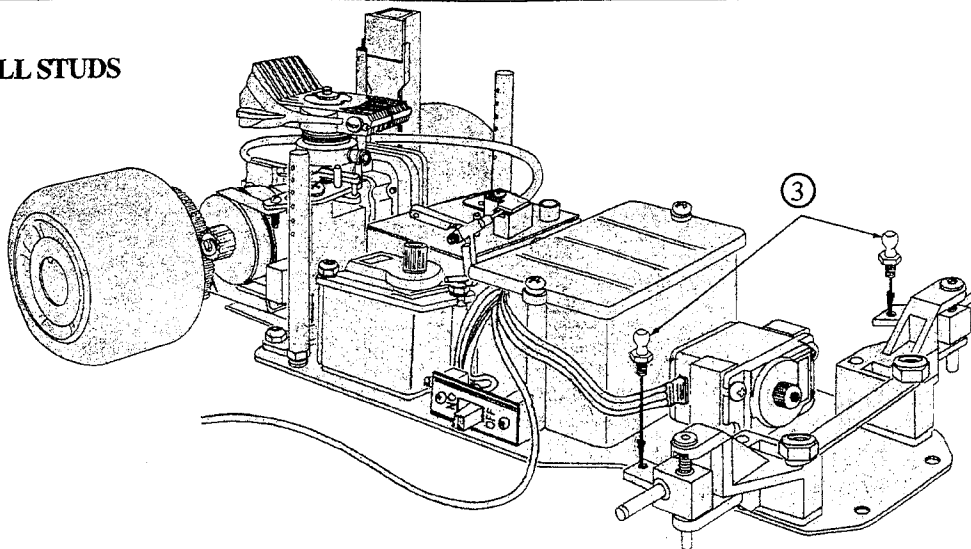
⑱ No. 4 × 1/16 (actual size)

4a. INSTALL FRONT SUSPENSION

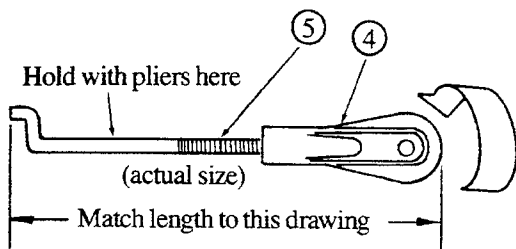


Place Suspension Shims so beveled holes are face down.

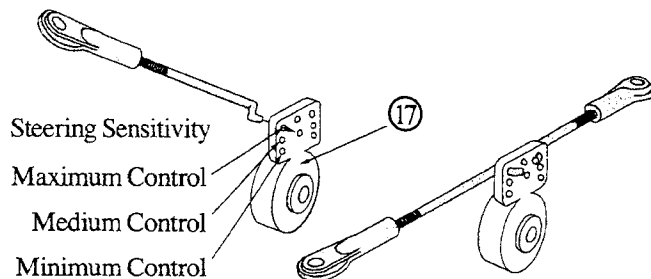
4b. INSTALL BALL STUDS



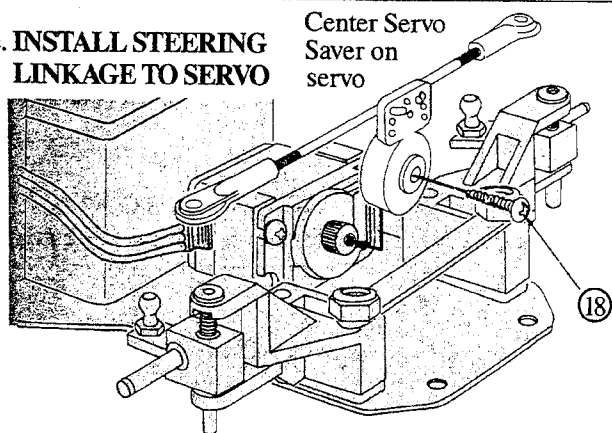
4c. PREPARE TIE RODS



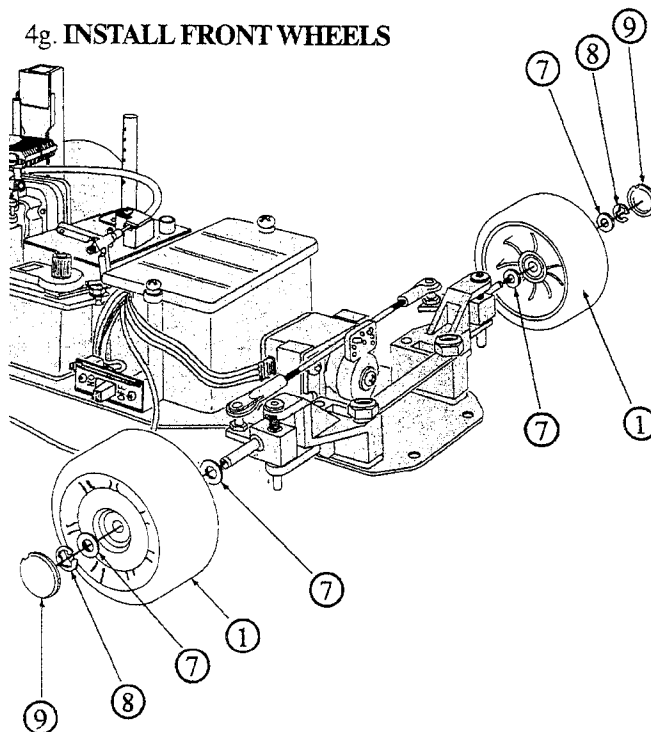
4d. INSTALL TIE RODS



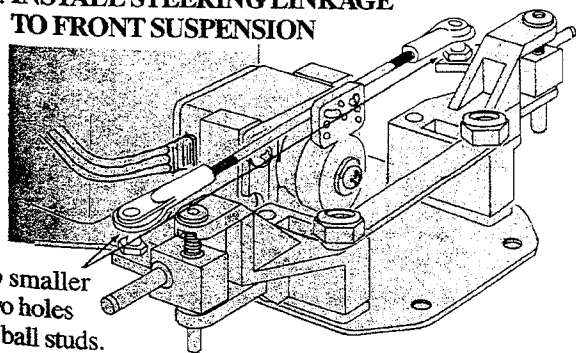
4e. INSTALL STEERING LINKAGE TO SERVO



4g. INSTALL FRONT WHEELS

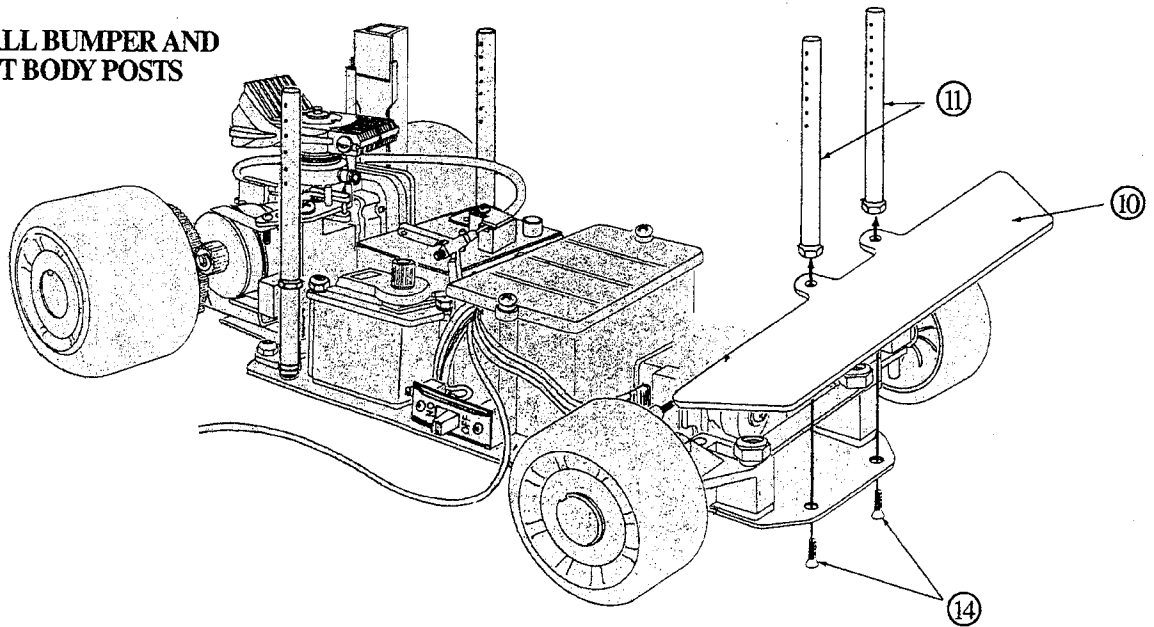


4f. INSTALL STEERING LINKAGE TO FRONT SUSPENSION

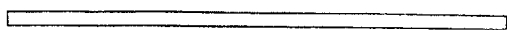


Snap smaller of two holes onto ball studs.

4h. INSTALL BUMPER AND FRONT BODY POSTS



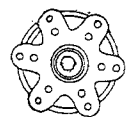
5 BODY GROUP



① Antenna Sleeve



② Eight Body Clips

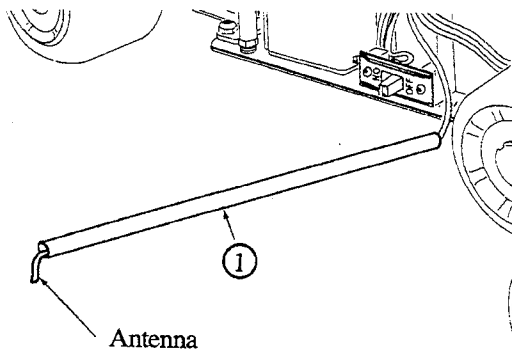


④ Throttle Servo Wheel

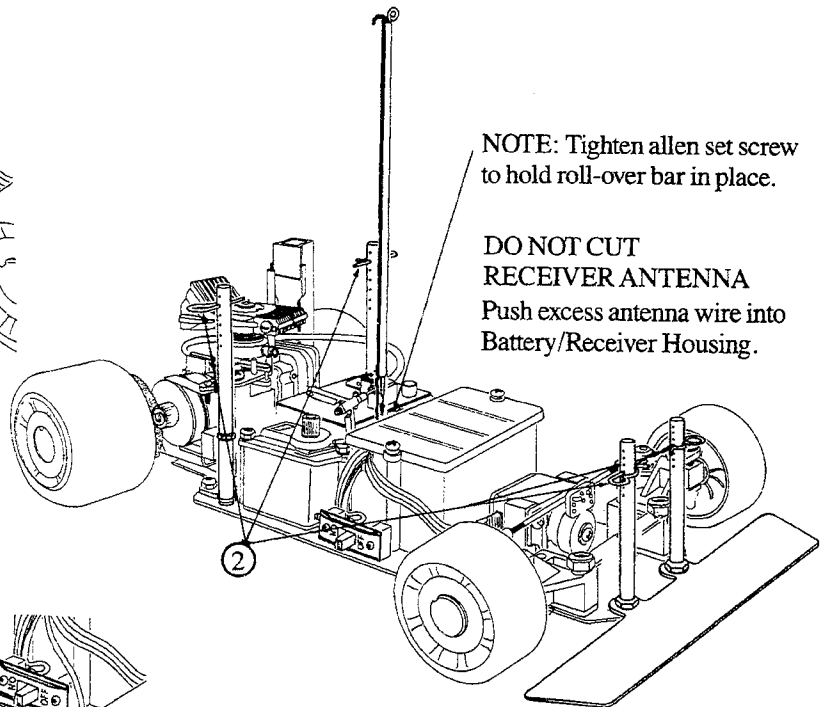


③ Roll-Over Bar

5a INSTALL ROLL OVER BAR



Antenna



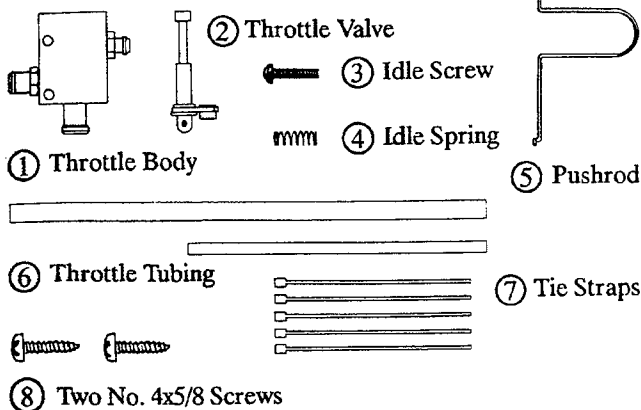
NOTE: Tighten allen set screw to hold roll-over bar in place.

DO NOT CUT RECEIVER ANTENNA
Push excess antenna wire into Battery/Receiver Housing.

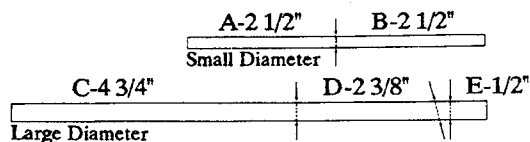
Position body clips as shown.

6 THROTTLE/BRAKE LINKAGE SERVO WHEEL INSTALLATION.

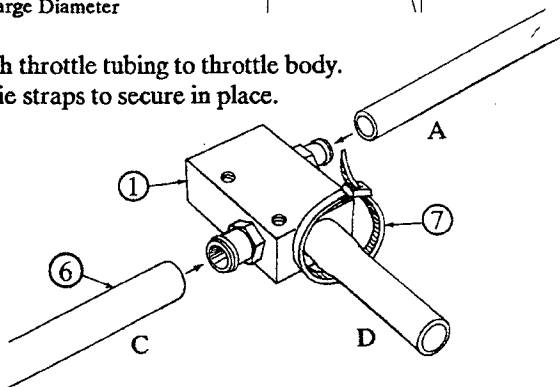
MAPLES EGR THROTTLE GROUP



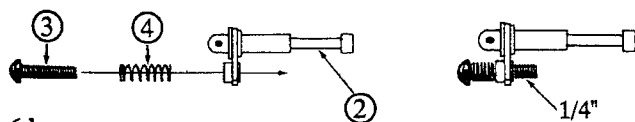
6a. Cut throttle tubing into lengths indicated.



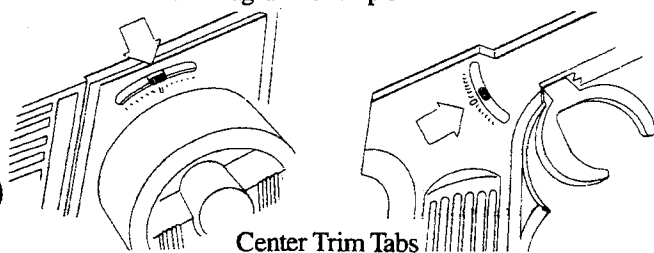
6b. Attach throttle tubing to throttle body. Use tie straps to secure in place.



6c. Install Idle Screw and Idle Spring. Screw in until 1/4" of threads is shown.



6d. Turn on transmitter, then receiver. Make sure trim tabs are centered as in the diagram for step 3l.



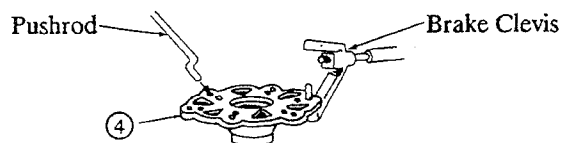
Now, turn off receiver. Then turn off transmitter. The servos are now in their centered positions.

6e. Now, before installing the throttle body onto fuel tank, install the ends of the throttle tubing to the nipples indicated on the diagram below. **IMPORTANT:** Hoses must be routed as shown below. Hose (C) connects to the front of the engine and is routed around brake cable. Hose (A) connects to the side of the air intake. Then secure with the tie wraps as in step 6b. Hose (D) is the exhaust outlet.

6f. Install the throttle body to the top of the fuel tank. Secure in place with two No. 4 x 5/8" screws.

6g. Install pushrod in the throttle valve and insert into throttle body as shown below.

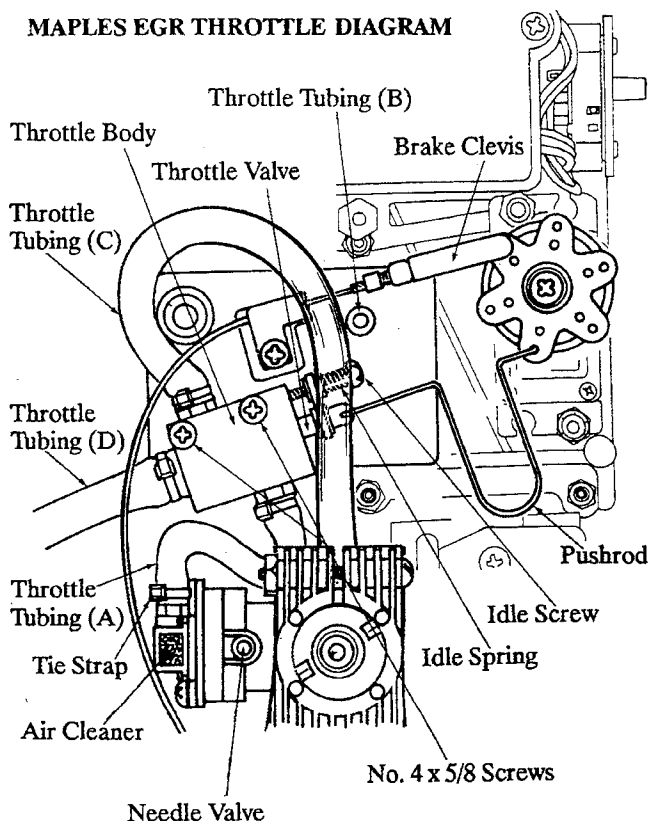
6h. Install throttle pushrod through hole in servo wheel. Attach brake cable clevis two holes away (see below).



6i. **IMPORTANT:** Place servo wheel (4) onto servo in the exact position shown. **CAUTION:** To prevent stripping internal servo gears, always hold servo wheel when loosening or tightening servo wheel mounting screw.

6j. Place hose (B) onto the fuel inlet to use as a filler tube.

MAPLES EGR THROTTLE DIAGRAM



7 FINAL ADJUSTMENTS

Checking Throttle Control

7a.

Idle adjustment screw should be used in conjunction with the needle valve adjustment to achieve a good idle.

As you turn the needle valve screw in clockwise for maximum performance (lean), turn the idle adjustment screw out (counter-clockwise) to lower idle.

If you turn the needle valve screw out counter-clockwise (rich), turn the idle adjustment screw in clockwise to raise idle.

Checking Brake Control

7b.

When the transmitter trigger is pushed forward the brake strap should tighten around brake drum.

7c.

If your brake does not meet the above specifications you will need to make an adjustment.

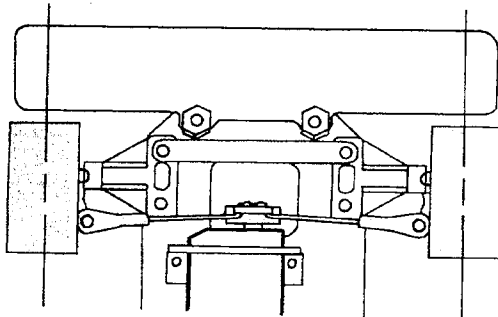
Adjusting Brake Control

To adjust brake, lengthen or shorten brake cable by rotating servo clevis on servo end of brake cable.

Checking Steering Control

7d.

The front wheels should be parallel as shown.



Adjusting Steering Control

7e.

If your car's front wheel alignment does not meet the above specifications you need to make an adjustment. The servo saver should be centered as in step 4e. Adjust the wheels to match the above illustration by adjusting the length of the tie rods. Test the car's front end alignment by rolling on a smooth surface. If the car turns to one side check the following:

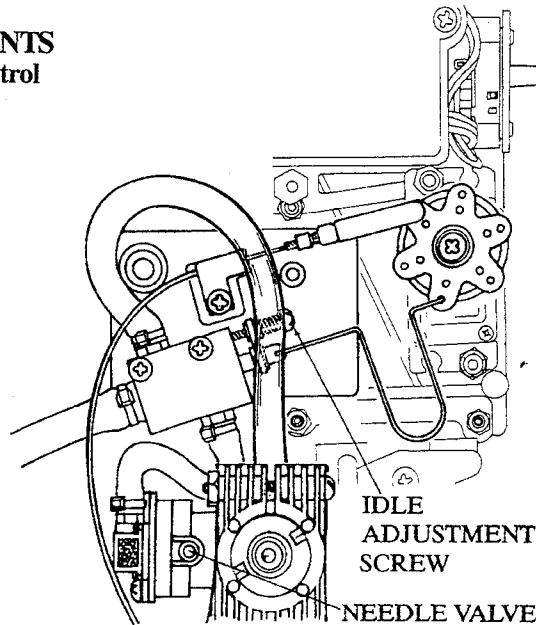
1st

Make sure the transmitter trim tabs and servo saver are centered.

2nd

One of the front wheels may be out of alignment. By trial and error, adjust the tie rods until your car rolls straight.

Transmitter trim tabs enable you to make minor adjustments. If your car does not roll straight try adjusting the trim tab above the transmitter wheel.



8 PAINTING AND WING INSTALLATION

Painting

Most R/C drivers prefer to individualize their car's paint scheme. You may also wish to paint your car with a customized design.

However, if you wish to duplicate the Cox factory paint scheme, then refer to the package photo as reference.

SUPPLIES NEEDED:

LEXAN SPRAY PAINT (Available at hobby shops.)

MODELERS KNIFE

SCISSORS

BLACK FINE LINE PERMANENT MARKER

3/4" MASKING TAPE

NOTE: Wait to trim wheel wells and excess plastic until painting is complete.

NOTE: You will have best results with an airbrush. If you do not have access to an airbrush you can paint with a spray can. However, a spray can will not provide the professional quality shown on the box.

8a.

Wash your hands and inside the car body with warm water and soap. Dry with a lint-free rag. Blow off any remaining dust.

8b.

Use 1/16" strips of masking tape to outline paint scheme on outside of body. Follow these lines when masking from the inside.

HOW TO CREATE MASK: Use a straight edge and modelers knife and cut masking tape into 1/8" strips. Use the center strips only, as they are clean and without fuzz and debris. Outline area to be masked with 1/8" masking tape, then fill in larger areas with 3/4" pieces.

8d.

Always mask to paint darker colors first. Apply mask to areas that are not to be painted. Be sure and burnish the edges of the masking tape down well or the paint will spread to unintended areas.

8e.

Avoid paint runs by laying down two or three light coats rather than one heavy coat. Let each coat dry until tacky before spraying the next coat. Remove the tape before the paint is fully dry. This will maintain a crisp line. Let paint dry completely between colors.

8f.

Add details such as door seams, window outlines, headlight areas, hood pins, gas

caps and door handles with a fine line black permanent marker.

8g.

With painting and marker highlighting dry and tape pulled, trim the wheel wells and lower perimeter of the body along the scribe. Trial fit on chassis. Secure body onto chassis with body clips. Position clips for height desired. Ground clearance required will vary depending on road surface. Fine tune fit with final trimming and sanding.

8h.

Cut decals from decal sheet. Trim decals as close as possible and apply to surface of car as shown in package photo. Burnish down edges.

8i.

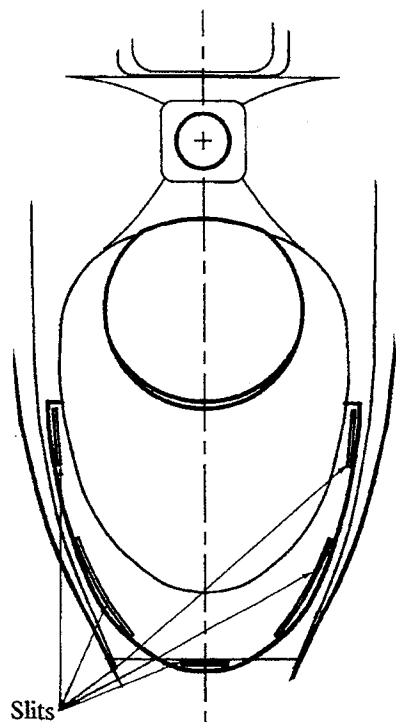
The exhaust tube must now be routed outside of the car body. With the body in place, from the under side mark the inside point where the exhaust tube will exit straight out the side. Remove body from chassis. With your modelers knife make a hole the diameter of the exhaust tube. Reinstall body with hose exiting outside.

8j.

Install Windshield

(included with Indy car only)

Use template below to make small slits in top of body. Remove protective film from windshield and insert tabs into body.



Top of Indy car body shown actual size.

The wing group is included with the Stocker and Indy cars only. The wing is an integral part of the aerodynamic integrity of these two cars. Required for proper tire adhesion.

Wing Group

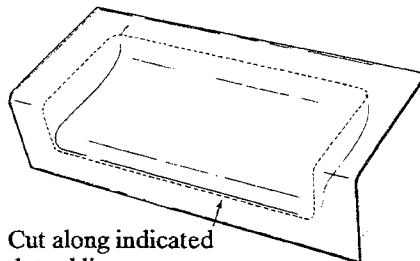
- ① Wing Wire
- ② Wing
- ③ Wing Button (2)
- ④ Wing Mount (2)
- ⑤ 4-40 x 1/4" Screw (2)
- ⑥ 4-40 x 3/16" Set Screw (4)

Paint Wing

Carefully paint wing from the backside and let dry.

Trim Wing

Carefully trim wing with your modelers knife.



Cut along indicated dotted line.

Install Wing

Fig. 1

Make 90° bends in wire as shown.

Fig. 2

With a felt tip pen mark the wire as shown.

Fig. 3

With your modelers knife punch 3/16" holes in the wing as shown and insert wing buttons.

Fig. 4

Insert wing wire as shown.

Fig. 5

Bend wing wire at felt tip mark.

Fig. 6

Center wing as shown, screw in allen set screws and tighten in place.

Fig. 7 Install wing mounts as shown in back of chassis with set screw hole facing the back of the car.

Fig. 8

Install wing wires down through engine cut-out and into wing mounts. Screw in allen set screws and tighten in place.

Fig. 1

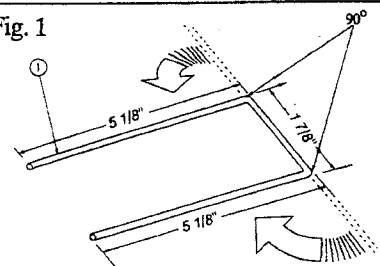


Fig. 2

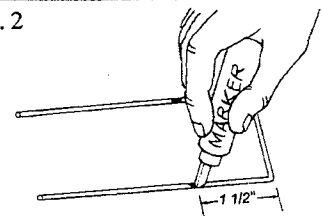


Fig. 3

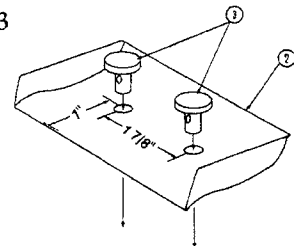


Fig. 4



Fig. 5

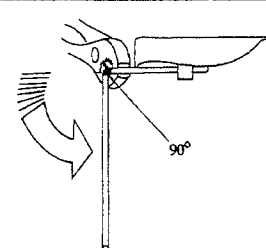


Fig. 6

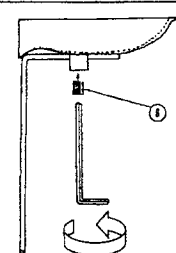


Fig. 7

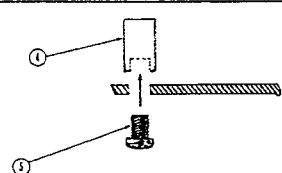
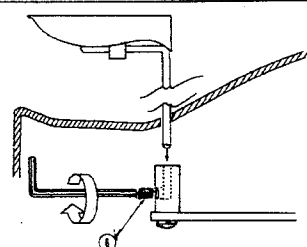


Fig. 8

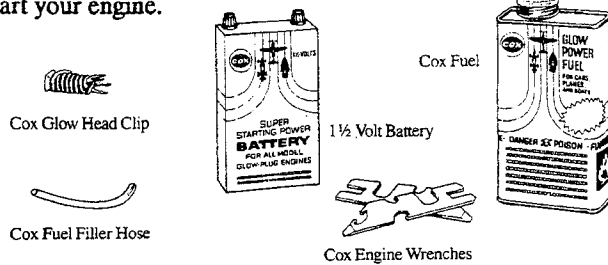


9 STARTING YOUR CAR

CAUTION: If you turn on your transmitter when another racer is driving on your radio frequency, you **WILL CAUSE THAT CAR TO CRASH**. If other drivers are in your area, **ALWAYS** join the group of racers and verify that your radio frequency is not being used. Each radio transmitter is required to have a color coded flag and/or number plaques to identify the frequency on which the transmitter operates.

It is recommended you have an assistant when first starting your Cox .049 engine powered car.

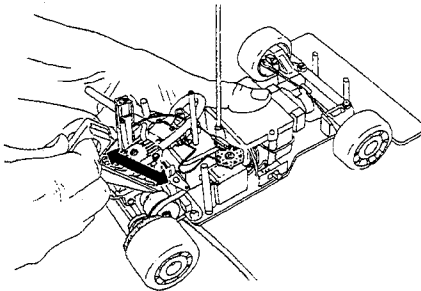
The Cox 400 starting kit contains everything you will need to start your engine.



Use only **COX SUPER POWER FUEL**. Using fuels with less than 20% Castor oil will damage the engine and void warranty. Your Cox .049 engine is air cooled. The car must be moving to cool engine. When running engine do not keep car stationary for more than 30 seconds at a time.

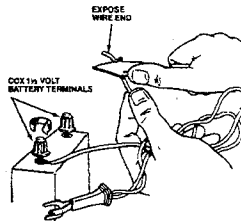
Clean air cleaner whenever air cleaner is dirty. Air cleaner is located in the snorkel off the back of the engine. First remove air cleaner, then wash with warm, soapy water, squeeze dry and reinstall. Never run car without air cleaner.

9a. Remove body from chassis.

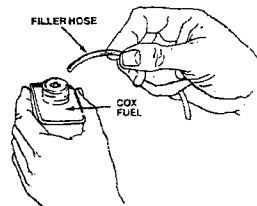


9b. With experience, the zip starter will enable you to start the Cox .049 engine quickly and easily. Practice using the zip starter now, before you continue.

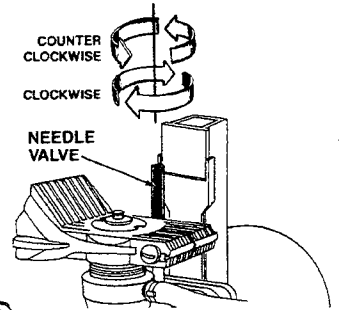
9c. Uncoil glow plug clip wires from clip, strip 1" of insulation off the ends of both wires. Attach wires to battery terminal posts.



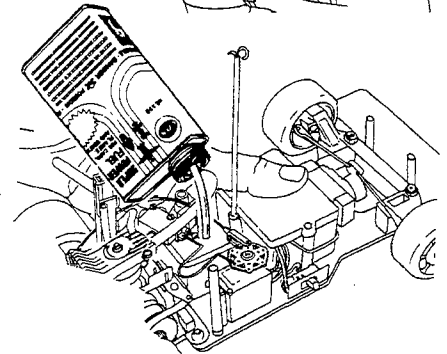
9d. Remove cap from fuel can and attach fuel hose to filler spout.



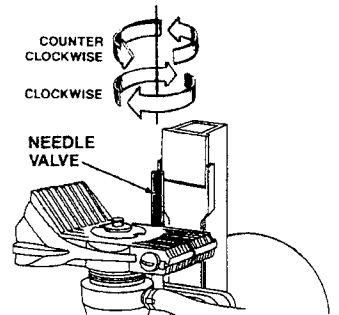
9e. Close the needle valve by turning it clockwise until it stops. **DO NOT OVERTIGHTEN.**



9f. Fill fuel tank.

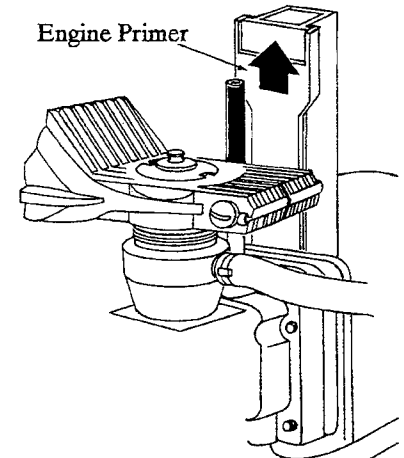


9g. Open needle valve 4 to 6 turns (counterclockwise) or until you see fuel move up the fuel line and into the engine. Now, close the needle valve (clockwise) until it stops. Then open needle valve (counterclockwise) 2 turns.

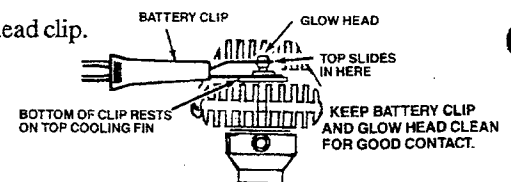


9h. Have assistant extend transmitter antenna and turn on power switch. Now turn on the receiver. Pull transmitter trigger and hold. You now have full throttle.

9i. Pull engine primer (even with top of the snorkel). Hold car securely off the ground and pull zip starter three times. push engine primer back down.



9j. Attach glow head clip.

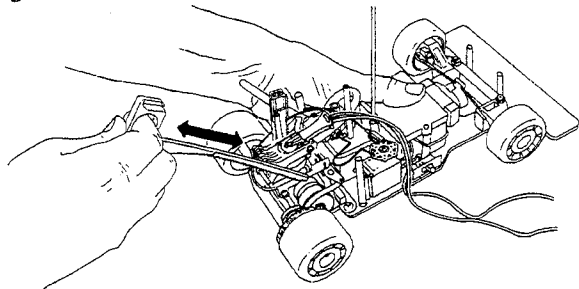


CAUTION: Be sure battery clip wires are away from wheels, gears and all other moving parts.

9k.

Hold car securely, off the ground. Start engine by pulling zip starter several times in rapid succession until engine starts. If after a minute, the engine does not start, then repeat steps 9i through 9k.

If engine still will not start, see Trouble Shooting section.



9i.

Remove glow head clip after engine starts. If engine immediately stops running, close needle valve 1/4 turn. Attach glow plug clip and restart.

TROUBLESHOOTING GUIDE

ENGINE WILL NOT START

CHECK LIST

- 1) Glow head clip is making contact with the glow plug.
- 2) Glow head clip wires are making contact with posts on battery.
- 3) Glow head is screwed on tight.
- 4) Battery is good. (To check the battery: Your battery should test 1 1/2 volts when attached to a glow head. If you do not have a volt meter then attach battery clip to a good glow head. Check the underside of the glow head. The battery is good if you see a bright orange color.)
- 5) Glow head is good. (To check glow head: Remove glow head from cylinder and attach to a good battery. The glow head is good if you see a bright orange color.)
- 6) Engine is primed with fuel.
- 7) Engine is overprimed. Cylinder is flooded with fuel. (Clear cylinder of fuel by closing needle valve 1 turn and try to start again. You may need to try 4 or 5 times before the engine will turn over.)
- 8) Needle valve properly adjusted to approx. 2 turns.
- 9) Zip starter engages engine. If engine will not turn over when you pull the zip starter then put a few drops of fuel in the ratchet.

ENGINE RUNS FOR SHORT BURSTS

CHECK LIST

- 1) Fuel tank is full.
- 2) Fuel line from fuel tank to engine is attached.
- 3) Engine is getting enough fuel. (Open needle valve 1/2 turn, prime and start again. You may need to do this 3 or 4 times before engine will start.)

CAR RUNS BACKWARDS

- 1) Engine is running backwards. (Pinch exhaust tubing to stop engine and restart.)

10 TUNING FOR ENGINE BREAK IN

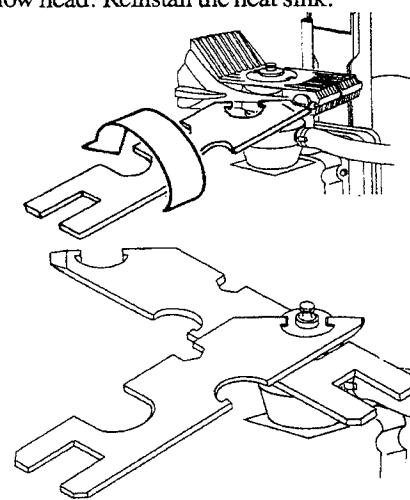
- 10a. After starting, engine will be running rich, making a "crackling", "bubbling", sound.
- 10b. Have helper slowly return throttle to idle position. Hold the car on the ground, and take transmitter from helper. Release car and slowly bring throttle to full power. During engine break in, the car will have a sluggish response to your throttle commands.

Break in engine by running rich for 15 minutes. During this break in period, maintain a slow speed. **CAUTION:** High RPM's during the engine break in period may cause engine damage. To prevent engine damage reduce RPM's by applying less throttle.

- 10c. After completing engine break in, you will need to check to make sure the glow head is tight.

First allow the heatsink to cool. Remove the heatsink and tighten the glow head. Reinstall the heat sink.

- 10d. Tighten or remove glow head with cox wrenches. If cylinder turns with glow head, insert one wrench on top cylinder fin and hold in position while turning top wrench in opposite direction.



Periodically check the glow head for tightness.

11 TUNING FOR RACING

- 11a. To tune car for peak performance, after starting engine, slowly begin to close needle valve in 1/4 turn increments. Test throttle response between each adjustment by accelerating from a standing start to top RPM. Continue closing needle valve and testing throttle response until car reaches peak performance. Refer to Step 7a. for needle valve, idle screw adjustment.

NOTES:

Symptoms Of Too Lean

- Engine hesitates when given throttle.
- At top RPM engine sounds very crisp and clear, producing a high-pitched whine sound.

CAUTION: Running the engine too lean will result in *overheating* and short engine life.

Symptoms Of Too Rich

- Engine will not develop high RPM.
- Engine sounds like it is running unevenly and may stall.

12 ENGINE CARE

Make sure you run the engine until the tank is dry. Never put the car away with fuel in the tank. The lubricant in the fuel will thicken after exposure to air and will eventually clog the fuel intake.

Clean air cleaner with warm, soapy water whenever dirty. Make sure air cleaner is dry before reinstalling. Never run car without air cleaner.

Never run engine without the Heat Sink.

Never attempt to remove hot glow head. The top fin of the cylinder has two flats. Insert one wrench over these flats and hold in place while using other wrench to remove the glow head.

When installing glow head be sure copper gasket is in place, make sure glow head is tight!

WARRANTY

Your Cox engine is fully warranted against factory defects for 90 days from the date of purchase. **GLOW HEADS ARE NOT WARRANTED** since they normally require periodic replacement. Should your engine require warranty service contact Cox Customer Service. Modified car engines are not covered by warranty.

COX CUSTOMER SERVICE

For warranty, performance tips, problems and parts call Cox Customer Service toll free at 800/451-0339, from 8:00 AM until 4:30 PM Pacific Time, Monday through Friday.

REPLACEMENT PARTS

We have listed those items which are most likely to require replacement during the life of this product. We have also included exploded assembly drawings which identify all replacement items available.

Ordering Instructions: You may order parts from Cox by telephone or mail. Orders may be charged to your Visa or MasterCard. For a credit card order please give the following information. Name, card number and expiration date. For other orders please send a check or money order made payable to Cox Hobbies for the full amount including the following postage and handling charges:

	TOTAL PARTS COST	POSTAGE & HANDLING
Orders from	\$.01 to \$ 5.00 -	\$1.00
	5.01 to 10.00 -	2.00
	10.01 to 20.00 -	3.00
	20.01 to 30.00 -	4.00
	31.00 up -	5.00

All international orders \$5.00 additional.
California residents add state sales tax.

No C.O.D. orders accepted. Telephone orders by Visa and MasterCard only.

TELEPHONE ORDERS

Call Cox Customer Service toll free at 800/451-0339, from 8:00 AM until 4:30 PM Pacific Time, Monday through Friday.

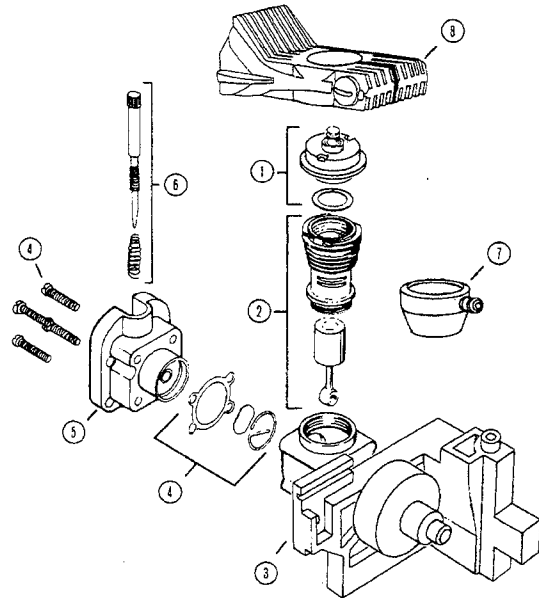
MAIL ORDERS

Send check, money order, Visa or MasterCard number to Cox Customer Service
350 West Rincon Street
Corona, CA 91720-2004



Prices subject to change without notice.

ENGINE REPLACEMENT PARTS



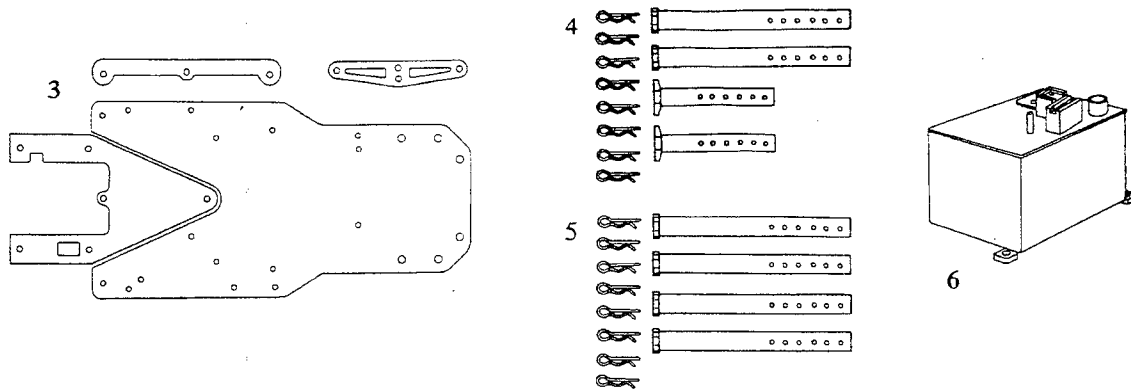
Item Number	Part Number	Description	Price
1	331	Glow Head and Gasket	3.00
2	1477	Cylinder, Piston and Rod	5.00
3	385	Crankcase, Crankshaft, Flywheel & Mount	6.48
4	1996	Overhaul Kit (Reed Valve, Retaining Ring, Gasket and Screws)	1.45
5	1259	Carburetor Backplate	2.25
6	1968	Needle Valve and Spring	1.35
7	9600600	Exhaust Collector	3.90
8	1972	Heat Sink Assembly	5.20
	1530	Glow Head/Cylinder Wrench	1.10
	400	Basic Starting Kit	10.90
	24909	.049 Engine w/Flywheel	36.95

BRAKE GROUP REPLACEMENT PARTS



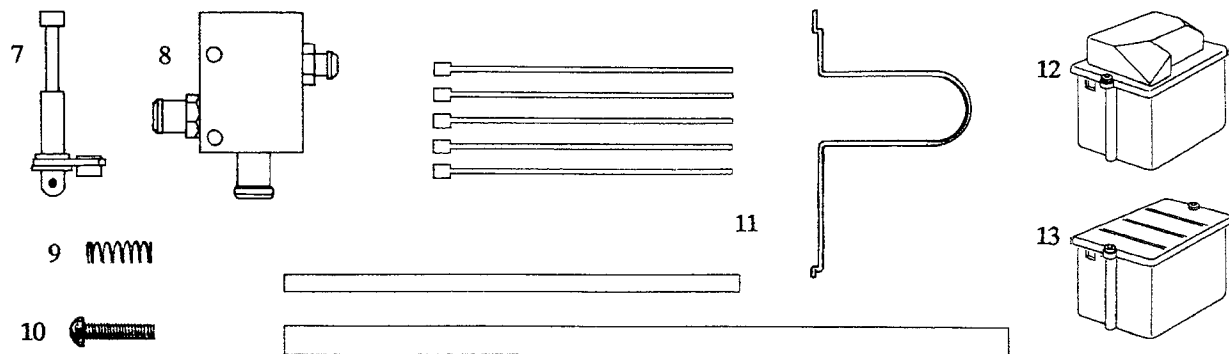
Item Number	Part Number	Description	Quantity	Price
1	GTP 40	Brake Cable Assembly	1	5.20
2	GTP 41	Brake Strap	1	1.15

CHASSIS GROUP REPLACEMENT PARTS



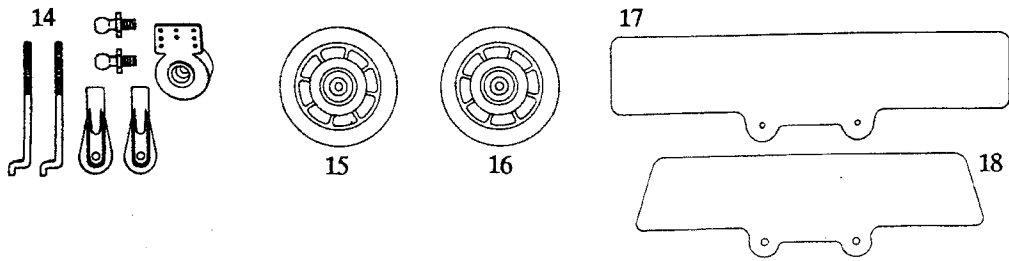
Item Number	Part Number	Description	Quantity	Price
3	GTP 34	Chassis Components	1 Set	34.50
4	GTP 30	Front & Rear Body Posts & Clips (GTP Nissan/Indy)	1 Set	2.60
5	CSC 30	Front & Rear Body Posts & Clips (Indy)	1 Set	2.60
6	GTP 31	Fuel Tank	1	2.60

RADIO INSTALLATION GROUP REPLACEMENT PARTS



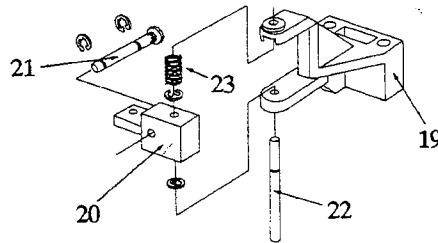
Item Number	Part Number	Description	Quantity	Price
7	9160461	Throttle Valve	1	3.50
8	9160451	Throttle Body	1	4.00
9	23092	Idle Spring	1	.25
10	9600454	Idle Screw	1	.25
11	IND 10	Throttle Tubing, Tie Straps & Pushrod	1 Set	3.90
12	GTP 32	Battery/Receiver Housing (For Standard Servos)	1	2.30
13	GTP 33	Battery/ Receiver Housing (For Micro Servos)	1	2.30

SUSPENSION GROUP REPLACEMENT PARTS



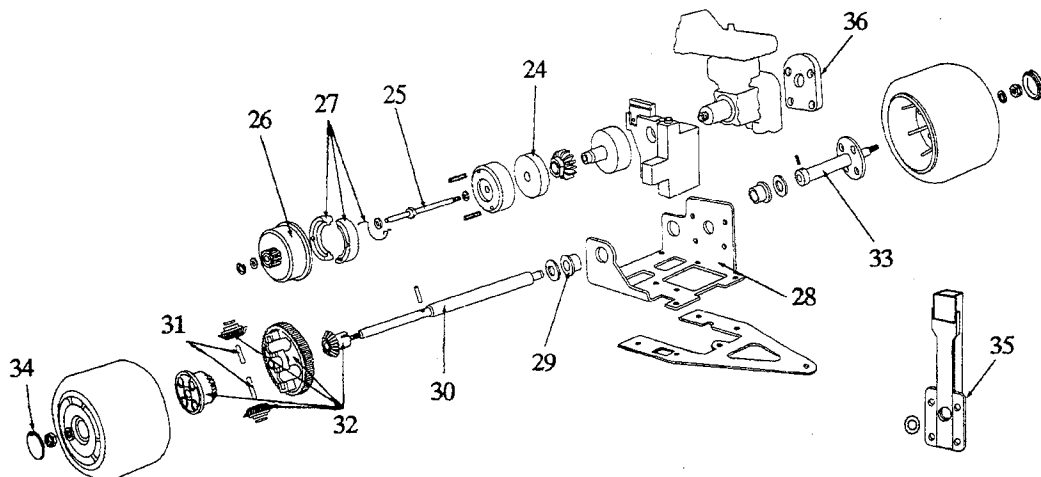
Item Number	Part Number	Description	Quantity	Price
14	GTP 25	Steering Linkage	1 Set	6.60
15		Front Tire (Listed Under Performance Parts)		
16		Rear Tire (Listed Under Performance Parts)		
17	GTP 60	Front Bumper (GTP Nissan & Indy)	1	1.75
18	CSC 08	Front Bumper (Stocker)	1	1.75

FRONT SUSPENSION ASSEMBLY REPLACEMENT PARTS



Item Number	Part Number	Description	Quantity	Price
19	GTP 20	Suspension Blocks	2	2.60
20	GTP 21	Steering Arms	2	1.40
21	GTP 22	Front Axles	2	2.60
22	GTP 23	King Pins	2	2.30
23	GTP 24	Springs	2	1.40

ENGINE CARRIER ASSEMBLY REPLACEMENT PARTS



Item Number	Part Number	Description	Quantity	Price
24	GTP 01	Zip Starter Ratchet	1	3.45
25	GTP 02	Power Train Shaft	1	2.30
26	GTP 03	Clutch Drum & Pinion	1	7.20
27	GTP 04	Clutch Shoes & Spring	2	2.30
28	GTP 10	Axle Carrier	1	2.60
29	GTP 11	Front/Rear Wheel Bushing Set	4	4.60
30	GTP 13	Rear Axle and Roll Pin	1	6.90
31	GTP 14	Differential Axle	2	2.00
32	GTP 15	Gear Set	1 Set	2.60
33	GTP 16	Wheel Hub	1	5.75
34	GTP 17	Hub Cap	4	1.50
35	CSC 04	Air Snorkel/Engine Primer & O-Ring	1 Set	2.50
36	CSC 07	Engine Spacer	1	1.10

FASTENER SETS AND MISCELLANEOUS REPLACEMENT PARTS

Item Number	Part Number	Description	Quantity	Price
-	GTP 70	Screw Set for Entire Car	1 Set	4.90
-	GTP 71	Nut Set for Entire Car	1 Set	2.20
-	GTP 72	Washer Set for Entire Car	1 Set	2.90
-	GTP 73	E-Clips for Entire Car	1 Set	2.40
-	GTP 61	Body (GTP Nissan)	1	17.25
-	CSC 01	Body (Stocker)	1	17.25
-	IND 01	Body (Indy)	1	17.25
-	GTP 62	Sticker Sheet (GTP Nissan)	1	5.75
-	CSC 62	Sticker Sheet (Stocker)	1	5.75
-	IND 62	Sticker Sheet (Indy)	1	5.75
-	GTP 74	Zip Starter	1	1.75
-	GTP 75	Air Filter	5	2.30
-	GTP 63	Body Clips	8	2.50
-	GTP 64	Antenna Pylon, Allen Wrench & Set Screw	1 ea.	3.50

OPTIONAL PERFORMANCE PARTS

Item Number	Part Number	Description	Quantity	Price
-	GTP 50	Front Tire and White Rim (Standard)	2	13.80
-	GTP 51	Rear Tire and White Rim (Standard)	2	14.95
-	GTP 52	Front Tire and White Rim (Soft)	2	13.80
-	GTP 53	Rear Tire and White Rim (Soft)	2	14.95
-	GTP 54	Front Tire and Black Rim (Standard)	2	13.80
-	GTP 55	Rear Tire and Black Rim (Standard)	2	14.95
-	GTP 56	Front Tire and Black Rim (Soft)	2	13.80
-	GTP 57	Rear Tire and Black Rim (Soft)	2	14.95
-	CSC 05	Wing Assembly and Wire	1	6.30
-	IND 99	Maples Throttle Complete	1 Set	17.95

COX HOBBIES, INC.
FULL 90-DAY WARRANTY

COX HOBBIES WILL REPAIR OR REPLACE FACTORY DEFECTS FOR 90 DAYS FROM DATE OF PURCHASE. GLOW HEADS ON FUEL-POWERED MODELS ARE NOT WARRANTED, SINCE THEY NORMALLY REQUIRE PERIODIC REPLACEMENT. THIS WARRANTY SPECIFICALLY DOES NOT COVER CRASH DAMAGE OR ABUSE!

IF YOU HAVE A WARRANTY CLAIM OR NEED REPLACEMENT PARTS, PLEASE CONTACT COX HOBBIES, INC. CUSTOMER SERVICE DEPARTMENT AT 350 WEST RINCON STREET, CORONA, CA 91720-2004 (800)451-0339

THIS WARRANTY APPLIES ONLY IF THE PRODUCT IS OPERATED WITH ADULT SUPERVISION AND IN COMPLIANCE WITH ASSEMBLY AND OPERATING INSTRUCTIONS PROVIDED WITH EACH MODEL. COX ASSUMES NO LIABILITY EXCEPT FOR THE EXCLUSIVE REMEDY OF REPAIR OR REPLACEMENT PARTS AS SPECIFIED ABOVE. COX SHALL NOT BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES. Some states do not allow the exclusion of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.



COX HOBBIES, INC.
Customer Service
350 W. Rincon Street
Corona, CA 91720-1004
Open 8:00 AM to 4:30 PM Pacific Time
Monday through Friday
Call Toll Free 800/451-0339

© Cox Hobbies, Inc. 1991
Litho in U.S.A. R-3/1-91
Instruction Sheet No. 09600283-200

8. PAINTING

RED, WHITE, BLUE AND BLACK LEXAN SPRAY PAINT (Available at hobby shops).

THREE 8" x 10" ACETATE SHEETS (Available at stationary stores).

MODELERS KNIFE

SCISSORS

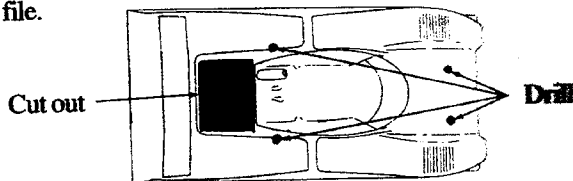
FINE LINE PERMANENT MARKER

1/8" DRILL BIT AND DRILL

NOTE: The GTP Nissan paint scheme is one of the most impressive on the racing circuit. It is also one of the most complicated to paint. To help simplify your efforts and make your painting most accurate we have included instructions from which you can make painting masks from the illustration on page 17.

8a. Body mounting and antenna holes must be drilled before painting.

Use a modelers knife to cut out engine compartment. Score the body by lightly running your knife along the lines in the body. Repeatedly cut along score, cutting deeper with each pass until engine compartment can be pushed out. Clean the edges with sandpaper or a smooth file.



Position body over chassis and mark where holes need to be drilled.

NOTE: Wait to trim wheel wells and excess plastic until painting is complete.

8b. Carefully drill 1/8" holes. Now take modelers knife and enlarge holes so body mounting posts fit. (Do not use 1/4" drill to make holes. This will destroy the lexan body.)

8c. Wash inside the body with warm water and soap. Dry with a lint-free rag. Blow off any dust.

8d. Using acetate and masking tape you will now make painting masks.

Place a piece of acetate over the illustration on page 17. Carefully trace the outline for the windows onto the acetate.

Repeat the tracing process for both the red and white areas.

8e. Cover each piece of acetate with masking tape so the outlined area is covered. Overlap the masking tape so there are no gaps between pieces of masking tape.

8f. Cut along the lines you drew on the acetate.

8g. Carefully remove masking tape from the acetate. These are your painting masks. Now apply the sticky side of the masks to the inside of the car body in the following order.

First, remove the masking tape from the window acetate outline. Place window mask in location shown. (Firmly rub the edge of the mask. A tight seal between the mask and the car body will prevent paint from creeping or streaking.)

Second, remove the white area mask from acetate and place mask over the windows as shown.

Third, remove red mask from acetate and place over the white mask as shown.

8h. Now you can paint the car.

First, paint the entire inside of the car body blue. Check paint coverage by looking at the outside of the body. Remove red mask when paint is dry. (Removing mask before paint is dry will cause paint to have rough edge.)

Second, paint the newly exposed area of the car body red. To insure complete coverage overspray into the blue painted area. Check paint coverage by looking at the outside of the body. Remove white mask when paint is dry.

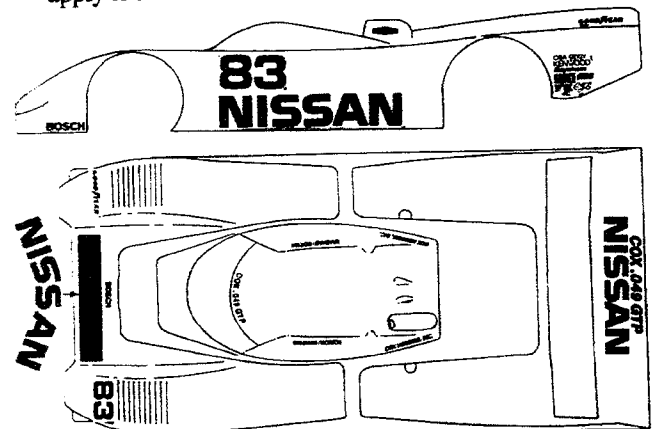
Third, paint the newly exposed area of the car body white. Overspray to insure complete coverage and look at the outside of the body to check coverage. Remove window mask when paint is dry.

Fourth, tint windows by spraying a light mist of black over window areas.

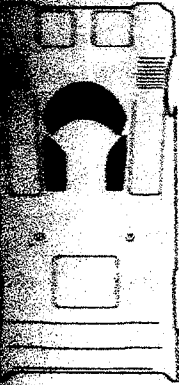
8i. Using the box top as reference, mask and paint the upper portion of the rear fins white, on the outside of the body.

8j. After the paint is completely dry, trim the body along the lines that are etched into the body.

8k. Cut decals from the decal sheet. Trim decals close and apply to surface of car as shown.



8l. Secure body onto chassis with body clips. If the clips are positioned incorrectly the body will not set or look proper.



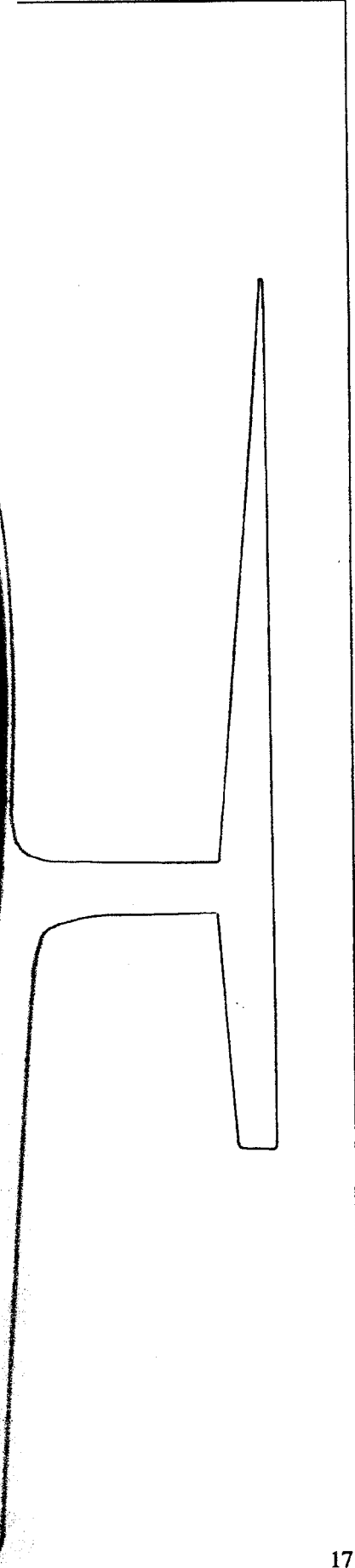
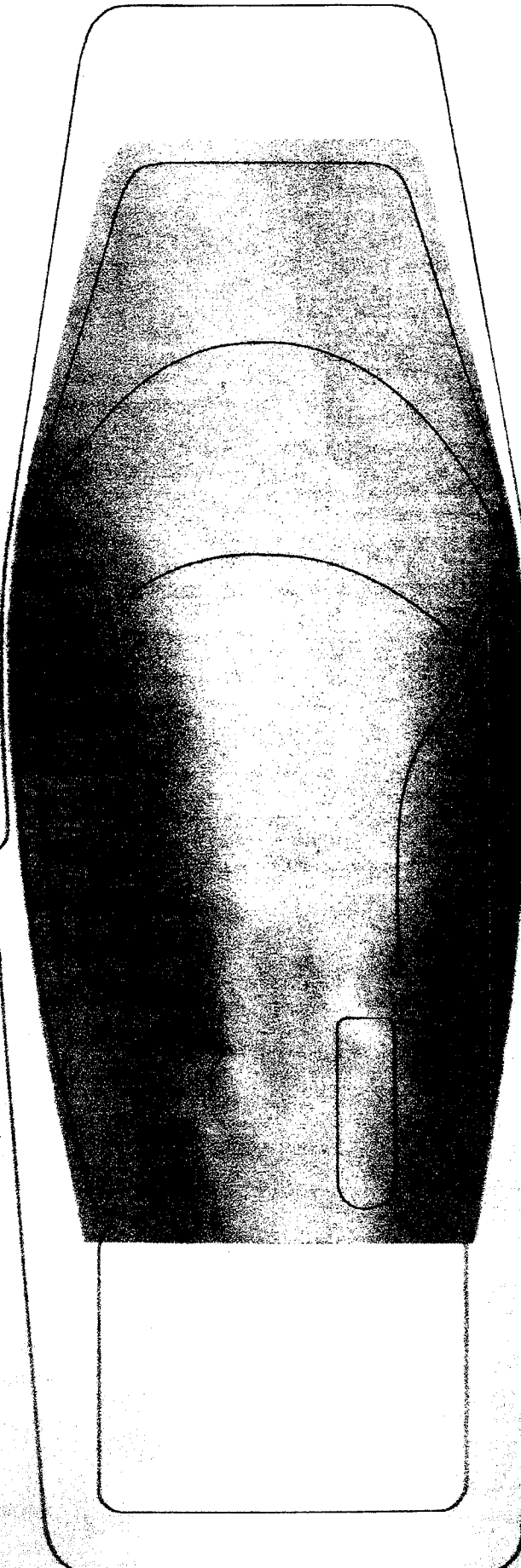
Window Mask



White Mask



Red Mask



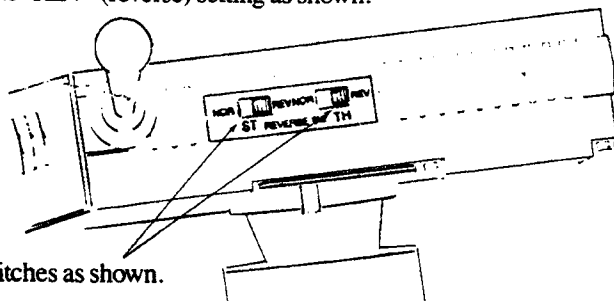
IMPORTANT SUPPLEMENT TO YOUR COX .049 GTP NISSAN INSTRUCTIONS

1c. INSTALL BRAKE STRAP

When you tighten screw ①, make sure brake strap is lined up with the brake drum. If it is not aligned, loosen screw, realign strap with drum and retighten. When strap is properly aligned it is not necessary to back off screw ¼ turn as noted in assembly step 1c of the Nissan Assembly Instruction Book.

2g. Before installing servos, remove rubber grommets with brass eyelets from both servos.

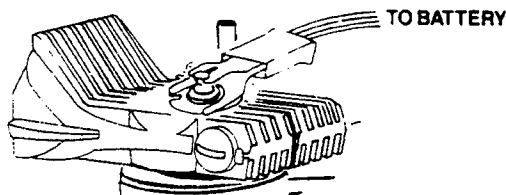
3f. Carefully install batteries according to the Diagram in 3f of your Nissan Assembly Instruction Book. Incorrect battery installation will result in radio damage. Set servo reversing switches on top of transmitter to the "REV" (reverse) setting as shown.



Position these switches as shown.

7f. Transmitter trim tabs enable you to make minor adjustments. If your car does not roll straight try adjusting the trim tab above the transmitter wheel.

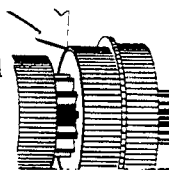
9h. Attach glow plug clip as shown.



9j. If engine immediately stops running, close needle valve ¼ turn. Attach glow plug clip and restart.

IMPORTANT PERFORMANCE TIPS FOR YOUR COX .049 GTP NISSAN

- Your Cox .049 engine is air cooled. The car must be moving to cool engine. When running engine do not keep car stationary for more than 30 seconds at a time.
- Clean air cleaner with Cox fuel whenever air cleaner is dirty. Air cleaner is located in the back of the engine, below the needle valve. First remove air cleaner, then wash with Cox fuel, squeeze dry and reinstall. Never run car without air cleaner. The best procedure is to wash air cleaner each time you refuel.
- When storing car, place a few drops of lightweight oil or sewing machine oil into ratchet where shown.



If you do not do this the castor oil in the Cox fuel will congeal so that when you use the zip starter the ratchet will not engage. If this happens, place a few drops of Cox fuel into the ratchet. The Cox fuel will dissolve the congealed oil and allow the ratchet to engage. Wipe excess fuel with clean cloth.