

# 2101 NITRO PRO STOCK DRAG KIT 2104 NITRO PRO MOD DRAG KIT

THANKS FOR BUYING RJ SPEED'S NITRO DRAG KIT . IT IS A LITEWEIGHT CAR MADE FOR STRAIGHT LINE DRAG RACING AND CAN BE BROKEN IF RUN INTO SOLID OBJECTS AT HIGH SPEED. YOU WILL NEEDTO PURCHASE A .12 TO.18 SIZE SMALL BLOCK ENGINE, CLUTCH SETUP, AND EXHAUST SYSTEM. SEE OUR SEPARATE SHEET FOR INFORMATION AND SUGGESTIONS. IT REQIURES A 2 CHANNEL RADIO WITH 2 SERVOS . (STANDARD OR MINI SERVOS WILL WORK FOR THE THROTTLE AND STEERING). YOU WILL NEED A SMALL PAIR OF PLIERS, AND A 1/4" WRENCH OR NUTDRIVER. HEX WRENCHES TO FIT THE SOCKET HEAD SCREWS ARE INCLUDED . YOU WILL ALSO NEED PAINT FOR THE LEXAN BODY AND WING, AS WELL AS NITRO FUEL FOR THE ENGINE. TAKE YOUR TIME WITH THE ASSEMBLY TO MAKE SURE IT IS DONE RIGHT. REFER TO THE WRITTEN INSTRUCTIONS, PICTURES, AND EXPLODED VIEW DRAWINGS



STEP 1 OPEN BAG 1 AND BAG 2 PLACE FOUR SPACERS THRU THE HOLES NEAR THE FRONT OF THE CHASSIS AND ADD A NYLON SPACER ON EACH. TO DETERMINE WHICH SIDE IS THE TOP OF THE CHASSIS, NOTE THE OFFSET POSITION OF THE SERVO MOUNT HOLES TO THE LEFT SIDE OF THE CHASSIS. ADD A THIN SPACER ON EACH OF THE TWO FRONT SCREWS.

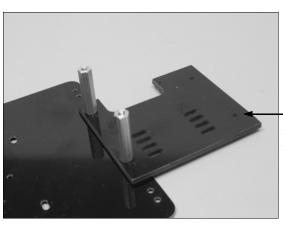
STEP 2 ADD THE FRONT AXLE PLATE ON THE FOUR SCREWS AND RETAIN WITH FOUR LOCKNUTS.



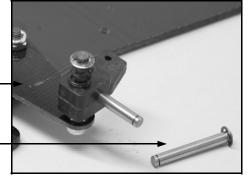


**STEP 3** OPEN THE KINGPIN BAG (INSIDE BAG 2) INSTALL A THIN NUT ON EACH KINGPIN, INSERT IT INTO THE END OF THE FRONT AXLE PLATE, ADD A LOCKNUT AND TIGHTEN, REPEAT FOR THE OTHER SIDE.

**STEP 4** PUT A DROP OF LIGHT OIL OR SILICONE LUBE ON EACH KINGPIN AND INSTALL A STEERING BLOCK ON EACH ONE WITH THE ANGLED PORTION POINTING IN. ADD A SPRING AND 1/8 METAL WASHER, THEN RETAIN EACH ONE WITH AN E-CLIP.



SNAP AN E-CLIP ON EACH \_\_ STUB AXLE AND PUSH THEM INTO THE STEERING BLOCKS FROM THE INSIDE.



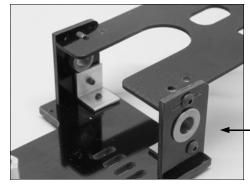
STEP 5 OPEN BAG 3. ATTACH THE NITRO BOTTOM PLATE ON THE REAR OF THE CHASSIS WITH TWO LONG SCREWS(3/8). THREAD THE ALUMINUM THROTTLE PLATE SUPPORTS ONTO THE SCREWS AND TIGHTEN THEM. NOTE THAT THERE ARE TWO SETS OF HOLES IN THE PLATE SO THAT YOU CAN CHANGE THE REAR OFFSET AS NEEDED ONCE YOU INSTALL YOUR ENGINE.



STEP 6 PRESS AN OILITE BUSHING INTO EACH OF THE REAR AXLE MOUNTS AS SHOWN. NOTE THAT BOTH MOUNTS ARE ALIKE AND THE ROUNDED TOP SIDE OF EACH ONE WILL GO TO THE REAR OF THE CAR. THE LARGE PART OF THE BUSHING SHOULD BE TO THE OUTSIDE WHEN YOU MOUNT THEM.

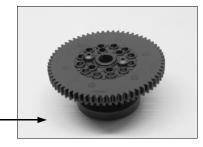
STEP 7 ATTACH ONE AXLE MOUNT TO THE BOTTOM PLATE WITH AN ALUMINUM ANGLE BRACKET AND TWO 1/4" SCREWS. DO NOT TIGHTEN.





STEP 8 SLIDE THE FRONT OF THE REAR TANK PLATE INTO THE SLOT AT THE TOP OF THE AXLE PLATE YOU HAVE MOUNTED, THEN ADD THE OTHER AXLE PLATE AND ALUMINUM BRACKET AND TIGHTEN ALL. NOTE THAT THE PLATE IS ANGLED SLIGHTLY HIGHER AT THE REAR. ADD TWO SCREWS THRU THE AXLE PLATE AND INTO THE TANK PLATE.

STEP 9 OPEN BAG 4 ATTACH THE GEAR TO THE WIDER HUB WITH TWO 3/8" LONG SCREWS. IT CAN BE MOUNTED WITH THE FLAT SIDE IN OR OUT AS NEEDED TO GET IT TO LINE UP WITH THE CLUTCH BELL. SLIDE THE AXLE THRU THE HUB UNTIL THE END IS EVEN WITH THE TIRE SIDE OF THE HUB. INSTALL TWO SETSCREWS AND TIGHTEN VERY LIGHTLY.



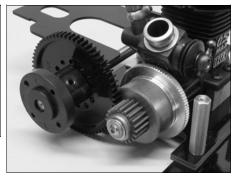


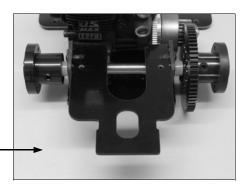
STEP 10 OPEN BAG 12 INSTALL YOUR CLUTCH ONTO YOUR ENGINE AND ATTACH THE ALUMINUM ENGINE MOUNTS TO THE ENGINE WITH FOUR 1/4" CAP SCREWS AND THIN STEEL WASHERS. IT MIGHT BE A GOOD IDEA TO USE A SMALL AMOUNT OF REMOVABLE LIQUID THREAD LOCK TO PARTS THAT WILL-CONNECT TO THE ENGINE . IF YOU ARE USING A PULLSTART ENGINE , YOU MAY NEED OUR #5145 SPACER AND SCREW KIT TO RAISE THE ENGINE TO CLEAR THE PULLSTART.

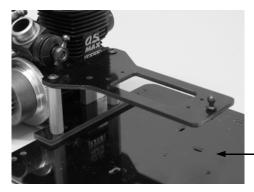


STEP 11 INSTALL THE ENGINE ON THE BOTTOM PLATE WITH FOUR 3/8" SCREWS AND THICK WASHERS.SLIDE THE AXLE ASSEMBLY THRU THE BUSHINGS AND MESH THE GEARS SO THAT THERE IS A SMALL AMOUNT OF PLAY BETWEEN THE GEARS, THEN TIGHTEN THE MOTOR SCREWS. MAKE SURE YOU HAVE THE ENGINE STRAIGHT OR THE REAR SLIGHTLY FORWARD.

STEP 12 REMOVE THE AXLE AND ADD ENOUGH THIN SHIMS TO KEEP THE GEAR FROM RUBBING THE FACE OF THE CLUTCH BELL. ADD THICK AND THIN SHIMS ON THE OPPOSITE SIDE TO SPACE THE HUB OUT AS FAR AS YOU WANT. YOU MAY HAVE TO ADJUST THE ENGINE POSITION, AXLE SPACING, OR BOTTOM PLATE OFFSET AS NECESSARY.





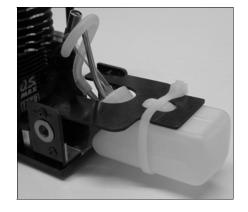


STEP 13 ATTACH THE THROT-TLE PLATE TO THE TOP OF THE ALUM. SUPPORTS WITH TWO 1/4" SCREWS. OPEN BAG 6. THREAD THE BALL JOINT INTO THE HOLE AT THE FRONT OF THE THROTTLE PLATE.

STEP 14 ATTACH THE PULL ROD POST TO THE CHASSIS WITH ONE 1/4 OR 3/8 SCREW. THREAD THE PULL ROD FROM BAG 1 INTO THE BALL CUP FROM BAG 6. SLIDE THE COLLAR AND SILICONE TUBE ON THE PULL ROD, SLIDE THE END THRU THE POST, AND SNAP THE CUP ONTO THE BALL JOINT. SLIDE THE COLLAR AGAINST THE TUBE AND POST AND TIGHTEN THE SET SCREW.

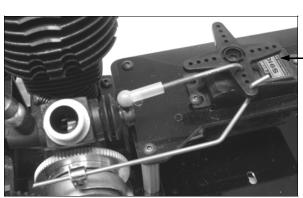




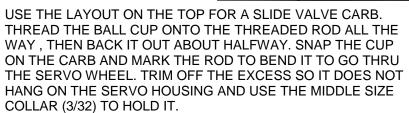


STEP 15 5147 FUEL TANK. WE HAVE PROVIDED EXTRA PICTURES INCLUDING A CUTAWAY VIEW IN ADDITION TO THE MANUFACTURER'S IN-STRUCTIONS. SLIDE ALL TUBES THRU THE CAP. RUBBER SEAL AND INNER RETAINER BEFORE BENDING THEM. INSTALL THE SCREW, BUT DO NOT TIGHTEN. THE BRASS TUBE BENT ONLY INSIDE IS THE FUEL PICKUP. THE CLEAR PLAS-TIC ONE IS THE FILL LINE. THE BRASS LINE BENT INSIDE AND OUTSIDE IS THE VENT. YOU CAN ROTATE IT AROUND CLOSE TO THE PICKUP TO GET IT IN, THEN ROTATE IT BACK TO GET IT NEAR THE TOP OF THE TANK ,THEN TIGHTEN THE SCREW. YOU CAN BUILD THE TANK WITH ONLY TWO LINES BY LEAVING OUT THE PLASTIC LINE AND FILLING THE TANK BY PULLING THE FUEL LINE OFF THE CARB. ON THE ENGINE TO FILL THE TANK. INSTALL THE TANK IN THE REAR PLATE WITH AN 8" TIE STRAP PROVIDED. IF YOU PREFER, YOU CAN MOUNT THE TANK ON THE CHASSIS BY CUTTING A SLOT IN THE CHASSIS AND USING THE TIE STRAP.

STEP 16 ATTACH THE BRAKE STRAP UNDER THE BOTTOM PLATE WITH THE SMALL SCREW. YOU MAY HAVE TO ADJUST THE BEND TO LINE IT UP AS SHOWN. IT SHOULD NOT DRAG ON THE CLUTCH BELL.

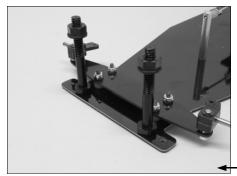


STEP 17 INSTALL YOUR THROTTLE SERVO IN THE THROTTLE PLATE.



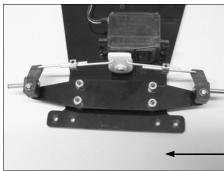
BEND THE LONG 1/16 WIRE LINK TO GO THRU THE SERVO ARM AND THRU THE HOLE IN THE BRAKE STRAP AS SHOWN. INSTALL THE SMALL COLLAR (1/16) ON THE LINK SO IT WILL PRESS ON THE BRAKE STRAP AT LOW THROTTLE.

USE THE BOTTOM LAYOUT FOR A ROTARY CARB. USE THE THIN WIRE LINK AND THE PREBENT SHORT LINK TO MAKE THIS LINK AND JOIN THEM WITH THE LARGE COLLAR . INSERT THE SHORT LINK IN THE SERVO ARM AND THE BENT END OF THE THIN WIRE IN THE ARM ON THE OPPOSITE SIDE. SLIDE THE COLLAR OVER THEM AND TIGHTEN. THIS ALLOWS THE SMALL WIRE TO BEND AT THE END OF THE CARB'S TRAVEL. YOU WILL NEED TO ADJUST YOU RADIO CAREFULLY WITH EITHER SETUP. YOU MAY ALSO HAVE TO VARY THE SETUP IF YOUR CARB OR SERVO OUTPUT VARIES IN SIZE OR LOCATION. SHORTEN LINKS AS NECESSARY.



STEP 18 OPEN BAG 5 INSTALL THE SHORT BODY POSTS AT THE FRONT OF THE CHASSIS AND THE LONGER ONES AT THE REAR OF THE CHASSIS. INSTALL THEM IN THE INNER HOLES FOR THE PRO STOCK AND IN THE OUTER HOLES FOR THE PRO MOD VERSION. ADD THE NUTS AND ADJUST THEM LATER TO SET THE BODY HEIGHT.





STEP 19 INSTALL YOUR STEERING SERVO ON THE CHASSIS BEHIND THE FRONT AXLE PLATE WITH SUPPLIED SERVO TAPE. LAY IT ON THE CHASSIS WITHOUT THE BACKING PEELED AND TEST FIT THE LINKAGE BEFORE STICKING IT DOWN. MAKE SURE THE OUTPUT OF THE SERVO IS IN THE CENTER OF THE CHASSIS AND USE TWO SHORT AND TWO LONG LINKS ATTACHED TOGETHER WITH COLLARS TO ATTACH THE STEERING BLOCKS TO THE SERVO SAVER ON YOUR SERVO.MAKE SURE THE SERVO SAVER IS STRAIGHT UP AND THE AXLES ARE STRAIGHT, THEN TIGHTEN THE SETSCREWS IN THE COLLARS.

STEP 20 INSTALL YOUR RADIO RECEIVER, SWITCH, AND BATTERY PACK ON THE CHASSIS WITH SERVO TAPE IN A CONVENIENT LOCATION. YOU SHOULD TEST YOUR RADIO SETUP AND MAKE SURE YOU HAVE ADJUSTED EVERYTHING CORRECTLY ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS. INSTALL YOUR EXHAUST SYSTEM. YOU SHOULD ALSO INSTALL A THROTTLE RETURN SPRING ON YOUR CARB THAT IS STRONG ENOUGH TO CLOSE THE CARB TO IDLE IF YOU TURN THE RADIO OFF.THIS AN IMPORTANT SAFETY FEATURE. INSTALL THE FRONT BUSHINGS IN EACH SIDE OF EACH FRONT WHEEL. LUBE EACH AXLE AND REAR BUSHINGS WITH A SMALL AMOUNT OF LIGHT OIL. INSTALL THE FRONT WHEELS AND RETAIN WITH E-CLIPS. INSTALL THE REAR TIRES ON THE HUBS WITH TWO 3/8 CAP SCREWS EACH FROM THE REAR AXLE BAG.

SET YOUR BODY DOWN OVER THE CHASSIS AND MARK THE OUTSIDE FOR BODY POST LOCATIONS, TIRE CUTOUTS AND ANY CLEARANCE REQIURED FOR ENGINE OR EXHAUST. PAINT THE BODY AS DESIRED WITH PAINT FOR FUEL POWERED CARS, TRIM IT OUT AND TEST FIT IT ON YOUR CAR, AND MAKE CHANGES AS NECESSARY, THEN YOU CAN PEEL THE PROTECTIVE FILM. INSTALL ANY WINGS OR SIDE DAMS THAT ARE INCLUDED. YOU CAN PUT A SMALL HOLE IN THE ROOF AND RUN YOUR ANTENNA WIRE OUT IT AS YOU INSTALL YOUR BODY TO RUN THE CAR. THIS WILL IMPROVE YOUR RADIO RANGE. IF YOU ARE GOING TO RUN YOUR CAR ON A SURFACE OTHER THAN A TRACK WHERE COMPOUNDS HAVE BEEN PUT ON THE SURFACE TO IMPROVE TRACTION, BE VERY CAREFUL TO PICK A SPOT THAT IS CLEAN AND FREE OF DEBRIS. USE WD-40 TO CLEAN YOUR TIRES AND IMPROVE TRACTION.

IF YOUR ENGINE IS NEW YOU SHOULD BREAK IT IN ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS, THEN GO OUT AND HAVE FUN WITH YOUR **RJ SPEED NITRO DRAG CAR.** 

REPLACEMENT PARTS AND ACCESSORIES ARE AVAILABLE THRU YOUR LOCAL HOBBY SHOP.IF THEY DO NOT CARRY THEM , THEY CAN ORDER THEM FOR YOU. SEE OUR COMPLETE LINE AT www.rjspeed.com

### **CURRENTLY AVAILABLE ACCESSORY PARTS:**

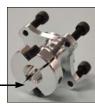


5136 .40 NARROWER FRONT AXLE PLATE TO FIT NARROWER BODIES.



5321 CLAMP HUB FOR GEAR/ WHEEL SIDE INCLUDES SCREWS.

5322CLAMP HUB FOR LEFT SIDE .50 WIDE INCLUDES SCREWS





# 2101 NITRO PRO STOCK KIT 2104 NITRO PRO MOD KIT

1/8 E-CLIP

1002 PRO STOCK BODY WITH WING 2502

1020 PRO MOD BODY

2.0" O-RING FRONTS (BLACK) 1.5 WIDE REAR TIRES, STD. 2510

NITRO PRO STOCK CHASSIS NITRO DRAG BOTTOM PLATE 5139 5140

NITRO AXLE MOUNT PLATE(2) 5141

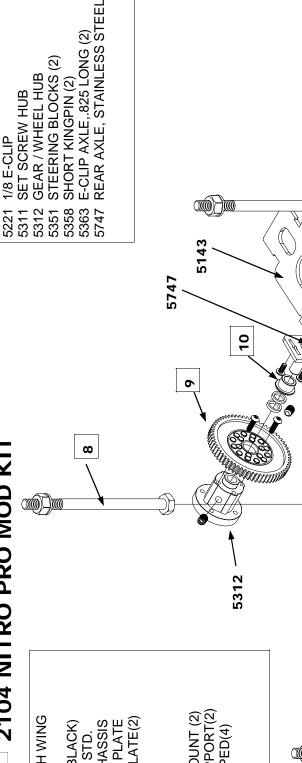
**RONT AXLE PLATE THROTTLE PLATE** 5142 5134

**NITRO TANK PLATE** 5143

ALUMINUM ENGINE MOUNT (2) 5144

THROTTLE PLATE SUPPORT(2) 5146

ANGLE BRACKET, TAPPED(4)



5377

5363

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5142

5351

5221

2- 4-40 X 3/8 BUTTON HEAD SCREW 1- 4-40 X 1/4 BUTTON HEAD SCREW

3- 4-40 X 5/8 BUTTON HEAD SCREW 5- 4-40 LOCK NUT 6- 10-32 SOCKET SET SCREW 2" BODY POST 4- 4-40 HEX NUT

5139

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5134

64 TOOTH 32P GEAR 4" BODY POST

11-5-40 X 3/8 BUTTON HEAD SCREW 10- 1/4 X 3/8 BUSHING

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## IMPORTANT ENGINE, CLUTCH, AND EXHAUST INFORMATION

BELOW ARE RECOMMENDED CLUTCH AND EXHAUST SYSTEMS TO USE DEPENDING ON THE ENGINE YOU HAVE CHOSEN. WE ARE SURE THAT THERE ARE MORE, BUT THESE SHOULD BE EASILY OBTAINABLE. THE BEST WAY IS TO GO WITH A SHORT SHAFT SETUP. THIS STYLE CLUTCH IS THE SHORTEST, LEAVING THE MOST ROOM FOR CONNECTING YOUR HEADER TO A REAR EXHAUST ENGINE. IF YOU ARE GOING TO USE A PULL START ENGINE, YOU WILL NEED RJ SPEED #5145 ENGINE MOUNT SPACERS W/SCREWS TO RAISE THE ENGINE SO THAT THE PULL START WILL CLEAR THE BOTTOM PLATE. WE ALSO PROVIDE PARTS AND INSTRUCTIONS FOR THE LINKAGE TO USE ROTARY OR SLIDE VALVE CARBS. YOU MAY HAVE TO ADAPT SOME OF THE LINKAGE IF YOUR CARB IS VERY DIFFERENT.

### FOR SHORT SHAFT THREADED CRANK

### **DURATRAX**:

DTXC7701 FLYWHEEL DTXC7157 CLUTCH SHOES AND SPRING DTXC7651 CLUTCH NUT (SHAFT) DTXC7137 17T 32P CLUTCH BELL DTXC1527 5X8MM BEARINGS

### ASSOCIATED: (SHORTEST)

7618 FLYWHEEL COLLET W/SHIMS
7612 FLYWHEEL
7601 CLUTCH SHOES
7603 CLUTCH SHAFT
2661 E-CLIPS
6902 CLUTCH BELL BEARINGS 3/16X 5/16 (2)
7607 17T 32P CLUTCH BELL
7608 18T 32P CLUTCH BELL

2312 CLUTCH NUT ALLOWS THE USE OF ASSOC. "SG" CLUTCH PARTS TO BE USED ON SHORT SHAFT ENGINES,

FOR ENGINES WITH A SIDE EXHAUST, YOU CAN USE THE HPI A870 MUFFLER FOR SIMPLICITY. ALSO, THE DURATRAX DTXG0612 CAN BE USED. O.S. ALSO HAS SOME MUFFLERS. THERE ARE LOTS OF MANIFOLDS AVAILABLE TO ADAPT SIDE EXHAUST ENGINES TO A PIPE.

### FOR "SG" OR "PILOT" CRANKSHAFT

### **ASSOCIATED PARTS**

7618 FLYWHEEL COLLET W/SHIMS
7993 FLYWHEEL
2313 SG CRANK NUT
2310 CLUTCH SHOES
7971 SPRINGS
2320 CLUTCH BELL BEARINGS
2321 RETAINER SCREWS AND SHIMS
7969 19T 32P CLUTCH BELL
7968 20T 32P CLUTCH BELL
7967 21T 32P CLUTCH BELL
2312 CLUTCH NUT INSTEAD OF 2313 TO USE
THESE PARTS ON A SHORT SHAFT ENGINE

### FOR "LONG SHAFT" (THREADED) CRANKS

### **LOSI PARTS**

LOSA9376 FLYWHEEL AND COLLET LOSA9372 FLYWHEEL LOSA9362 CLUTCH SHOE/SPRING LOSA9369 CLUTCH NUT LOSA6913 1/4X 3/8 BEARINGS (4) LOSA9370 CLUTCH NUT CLIPS LOSA9380 17T 32P CLUTCH BELL LOSA9381 18T 32P CLUTCH BELL LOSA9383 20T 32P CLUTCH BELL LOSA9383 20T 32P CLUTCH BELL

FOR ENGINES WITH A REAR EXHAUST, THERE ARE MANY ADAPTORS AND PIPES TO CHOOSE FROM. YOU NEED TO CHOOSE AN ADAPTOR THAT GIVE YOU THE MOST CLEARANCE BETWEEN THE ENGINE AND LEFT TIRE. THE ASSOCIATED #7737 GT MANIFOLD WOULD TURN THE EXHAUST TO THE REAR, ALLOWING A STRAIGHT SHOT TO A PIPE. O.S. #72103210 HEADER SHOULD DO ABOUT THE SAME. YOU WILL HAVE TO CHOOSE WHAT YOU NEED DEPENDING ON YOUR ENGINE CHOICE.

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