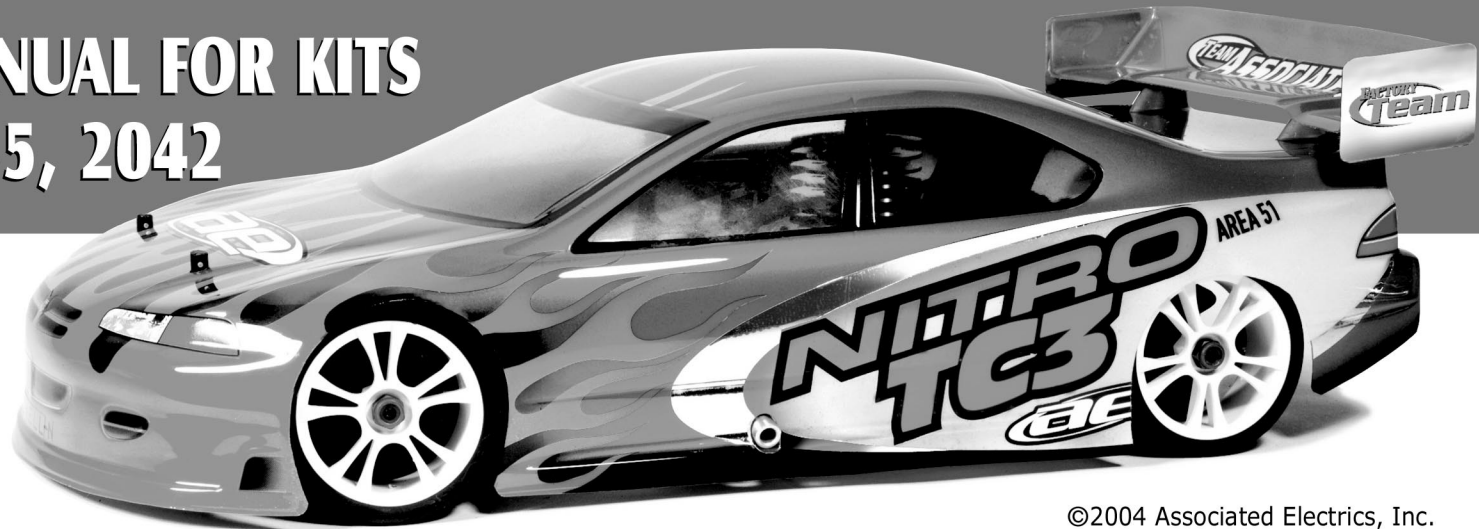


# ASSOCIATED 1:10 SCALE NITRO 4WD ON ROAD MANUAL

# NITRO TC3



## INSTRUCTION MANUAL FOR KITS #2033, 2034, 2035, 2042



# NITRO TC3

ALREADY ASSEMBLED!

## RTR PLUS #2042

**Includes:**  
 Oil-filled shocks  
 Precision rubber-sealed bearings.  
 Tuned pipe and manifold  
 Universal driveshafts  
 6061 T-6 aluminum chassis  
 Fuel bottle  
 Glow igniter

## TEAM KIT #2034/#2035

**Includes:**  
 Blue aluminum shocks  
 Precision rubber-sealed bearings  
 Tuned pipe and manifold  
 Aluminum MIP CVD's  
 Pro-Line wheels & tires  
 6061 T6 aluminum chassis

## FACTORY TEAM KIT #2033

**Includes:**  
 Factory Team Blue aluminum threaded shock bodies, VCS Macro shocks  
 Factory Team front one-way  
 Factory Team Precision PTFE-sealed bearings  
 Factory Team Blue anodized pipe and manifold  
 Aluminum MIP CVD's  
 Factory Blue Titanium turnbuckles  
 Factory Team Graphite components set  
 Factory Team blue aluminum screws

## REQUIRED EQUIPMENT TO RUN YOUR NITRO TC3

for the RTR Nitro TC3 Plus #2042:

Model car fuel.  
 12 AA batteries.

for the pull start version of Team Kit #2034:

Glow plug starter.  
 Model car fuel.  
 Fuel bottle.  
 Receiver battery pack.  
 Glow plugs (AE #MC-59).  
 R/C two channel surface frequency radio system with two servos.  
 .12 or .15 c.i. glow fuel R/C engine.  
 200mm touring car body.

for the non pull start version of Team Kit #2035:

Glow plug starter.  
 Model car fuel.  
 Fuel bottle.  
 Receiver battery pack.  
 Glow plus AE #MC-59).  
 Starter box or electric hand starter with car starter donut.  
 12 volt battery for starter system.  
 R/C two channel surface frequency radio system with two servos.  
 .12 or .15 c.i. flow fuel R/C engine.  
 200mm touring car body.

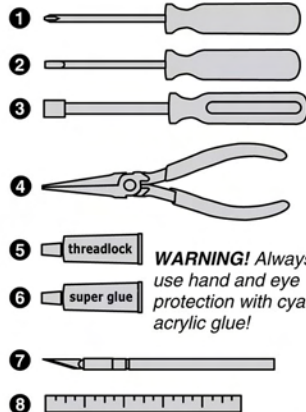
for the Factory Team Kit #2033:

Glow plug starter.  
 Model car fuel.  
 Fuel bottle.  
 Receiver battery pack.  
 Glow plus AE #MC-59).  
 Starter box or electric hand starter with car starter donut.  
 12 volt battery for starter system.  
 R/C two channel surface frequency radio system with two servos.  
 .12 or .15 c.i. flow fuel R/C engine.  
 200mm touring car body.

### YOU WILL NEED THESE TOOLS TO ASSEMBLE YOUR KIT

- 1 Phillips screwdriver #2.
- 2 1/8" flat head screwdriver.
- 3 5/16" driver or glow plug wrench.
- 4 Needlenose pliers.
- 5 Thread locking compound (#1596 Locking Adhesive or equivalent)
- 6 Super glue or tire adhesive (#1597).
- 7 Hobby knife **WARNING!** This knife cuts plastic and fingers with equal ease, so be careful.
- 8 Precision ruler.

**YOUR ENGINE MAY REQUIRE TOOLS NOT LISTED HERE.**



**WARNING!** Always use hand and eye protection with cyano-acrylic glue!

### TOOLS SUPPLIED

Allen wrenches (#6950)

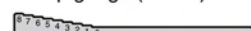
.050", 1/16", 3/32", 5/64"

Clutch nut wrench (#1721)

Molded tools (#6956):



Droop gauge (#3987)



Camber/toe-in gauge (#1719)



### WARNING!

Do not use a power screwdriver to install screws into nylon, plastic, or composite materials. The fast rotation speed can heat up the screws being installed. They can break the molded parts or strip the threads during installation.



Track width/ride height tool (#1719)



## BEFORE BUILDING

### OPEN THE BAGS IN ORDER

The assembly is arranged so that you will open and finish that bag before you go on to the next bag. Sometimes you will have parts remaining at the end of a bag. These will become part of the next bag.

### LEFT AND RIGHT

When we refer to left and right sides of the car, we are referring to the driver's point of view while sitting in the car.

### SUPPLEMENTAL SHEETS

Improvements to our kits, if any, will be noted in supplementary sheets located in a parts bag or inside the kit box. Check the kit box before you start and each bag as it is opened. When a supplement is found, attach it to the appropriate section of the manual.

◀1:1▶ = Actual part size.      x2 = Quantity per step.  
**REAR x2** = Do entire step twice.    ! = Pay attention to this detail.  
**RTR: 9181** = Part numbers for RTR vehicles.

**Bag A**

**1:1**

3857, qty 3  
short special  
ball end, black

2228, qty 1  
swing rack

2228, qty 1  
swing rack arm

**1**

**1:1**

2228, qty 1  
.125 x .250 rack  
shim

**1:1**

6918, qty 1  
4-40 x 1/2 bhcs

**1:1**

4449, qty 1  
4-40 locknut

3929, qty 1  
FT only, 6587, qty 1  
spring

**2**

**1:1**

2229, qty 2  
4-40 x 7/16 bhcs

**1:1**

2229, qty 2  
pivot post

**1:1**

7337, qty 2  
washer

2228, qty 2  
swing rack  
bellcrank arm

**3**

**1:1**

6291, qty 2  
4-40 x 1/4 fhcs

2229, qty 2  
swing rack  
mounting post

2224, qty 1  
FT only, 1752, qty 1  
NTC3 chassis

Threadlock  
#1596  
RECOMMENDED

**4**

**1:1**

2234, qty 2  
FT only, 1714, qty 2  
3/16 x 5/16  
bushing

**1:1**

2234, qty 2  
FT only, 1714, qty 2  
1/8 x 1/4 bushing

6472, qty 2  
nylon locknut

**5**

**Bag B**

**1:1**

2240, qty 2  
5-40 x 7/16 fhcs

2275, qty 1  
front arm rear  
mount

**1**

**Steps 3-5, Factory Team Only**

**1:1**

2240, qty 2  
5-40 x 7/16 fhcs

2223, qty 1  
front bumper/  
arm mount

2233, qty 2  
FT only, 2236, qty 2  
front a-arms,  
right & left

2242, qty 2  
hinge pin

**2**

**1:1**

3862, qty 2  
5-40 x 1/8 set screw

1715, qty 2  
blade roll bars

1717, qty 2  
aluminum blade roll  
bar mounts

**3**

**1:1**

4334, qty 4  
2-56 x 5/16 bhcs

**4**

adjust the blades until ball and cup are centered down the center of the chassis.

**ROLL BAR TUNING**

Vertical less steering      Horizontal more steering

**5**

**1:1**  
3865, qty 2 set screw

Adjust Droop

↑ Screw out, smaller number, more Droop  
↓ Screw in, larger number, less Droop

Droop Screw

0 1 2 3 4 5 6 7 8

Front arms rest on step 4.

**6**

**1:1**  
2275, qty 1 rear arm front mount

**1:1**  
2240, qty 2 5-40 x 7/16 fhcs

Rear

**7**

**1:1**  
2240, qty 2 5-40 x 7/16 fhcs

2242, qty 2 hinge pin

2238, qty 2 FT only, 2339, qty 2 rear a-arms, right & left

2275, qty 1 rear arm rear mount

Rear

**8**

**1:1**  
3865, qty 2 set screw

Adjust Droop

↑ Screw out, smaller number, more Droop  
↓ Screw in, larger number, less Droop

Droop Screw

0 1 2 3 4 5 6 7 8

Rear arms rest on step 3.

Rear

**9**

**Bag C**

2329, qty 2 FT only, qty 1 ring gear

**1:1**  
6581, qty 24 FT only, qty 12 3/32 diff balls

Stealth #6591

**1**

**1:1**  
2331, qty 4 FT only, qty 2 drive ring

2328, qty 2 FT only, qty 1 short outdrive

Stealth #6591

NOTE: Remove any oil residue thoroughly before applying Stealth lube!

**2**

2331, qty 4  
FT only, qty 2  
drive ring

2328, qty 2  
FT only, qty 1  
long outdrive

Stealth  
#6591

NOTE: Remove any oil residue thoroughly before applying Stealth lube!

**3**

6575, qty 2  
FT only, qty 1  
diff bolt

6574, qty 12  
FT only, qty 6  
thrust balls

6573, qty 4  
FT only, qty 2  
thrust washer

Black Grease  
#6586

**4**

**5**

2332, qty 2  
FT only, qty 1  
friction disc

6909, qty 4  
FT only, qty 2  
3/16 x 5/16  
bearing

**6**

2330, qty 2  
FT only, qty 1  
T-nut

6582, qty 2  
FT only, qty 1  
diff spring

0 Fully tightened position

5/64" Allen wrench installed in diff bolt

-1/8

-1/4 Standard setting for FRONT DIFF

-3/8

-1/2 Standard setting for REAR DIFF

-5/8

-3/4

	-1/8	-1/4	-3/8	-1/2	-5/8	-3/4
<b>Result</b>	Diff Tighter			Diff Looser		
<b>FRONT DIFF</b>	Less Steering			More Steering		
<b>REAR DIFF</b>	More Steering			Less Steering		

CAUTION: Do not turn the diff bolt out more than 3/4 of a turn.

**7**

3976, qty 4  
FT only, 1711, qty 2  
3/8 x 5/8 bearing

2293, qty 4  
FT only, qty 2  
outdrive shim

**8**

1732, qty 1  
HD oneway ring gear

9146, qty 4  
2-56 x 3/16 bhcs

1728, qty 1  
HD oneway hub w/bearings

**Factory Team Only**

**9**

1728, qty 2  
3/8 x 5/8 bearing

1728, qty 2  
outdrive shim

1730, qty 2  
outdrive cup

5407, qty 2  
red o-ring

**Factory Team Only**

**10**

3920, qty 1 front input shaft

2291, qty 1 dowel pin

6299, qty 1 small e-clip

2293, qty 2 input shaft shim

3977, qty 1 FT only, 6906, qty 1 3/16 x 3/8 bearing

3903, qty 1 drive pinion

Trim any burrs from this edge of the drive pinion with a hobby knife.

**11**

3977, qty 1 FT only, 6906, qty 1 3/16 x 3/8 bearing

2293, qty 1 input shaft shim

2291, qty 1 dowel pin

2270, qty 1 drive cup

6920, qty 1 4-40 x 3/16 bhcs

front input shaft assembled  
PLEASE COMPARE YOUR ASSEMBLY CAREFULLY

**12**

2290, qty 2 two speed shoe

2290, qty 2 M4 x 4mm set screw (silver)

2290, qty 2 5/32" ball

Stealth #6591

Trim any burrs from this edge of the holes with a hobby knife.

**13**

2290, qty 2 2-56 x 9/16 adjustment screw

2290, qty 2 adjustment spring

2286, qty 1 input shaft

set screw (silver)

Insert the screw and spring into the shoes and tighten the screws gently until they are fully compressed. Now, turn each screw 3 1/2 turn **counter clockwise**. Adjust both screws equally.

To adjust the pressure of the set screw: Adjust the set screws equally so that the ball is just touching the flats on the input shaft as shown.

**NOTE:** If the shoe assembly rocks on the shaft, tighten the set screws (equally) so the balls are touching the flats, but not enough to spread the shoes apart. If the shoes start to spread apart, loosen the set screws (equally) to take pressure off the ball.

**14**

6920, qty 3 4-40 x 3/16 bhcs

2287, qty 1 two speed housing

2264, qty 1 50T spur gear FT only, 2263, qty 1 48T spur gear

Threadlock #1596

**Racer's Tip:** After running your car for a tank of fuel, remove your two-speed housing and clean any oil or residue from inside the housing and outside the shoes to ensure consistent shifting.

**15**

2661, qty 1 3/16 large e-clip

6920, qty 3 4-40 x 3/16 bhcs

2288, qty 1 one-way hub

2266, qty 1 54T spur gear

gear mounts to shoulder side

**16**

**1:1**  
3977, qty 1  
FT only, 6906, qty 1  
3/16 x 3/8 bearing

**1:1**  
6299, qty 1  
small e-clip

**1:1**  
2293, qty 2  
input shaft  
shim

3903, qty 1  
drive pinion

**1:1**  
2291, qty 1  
dowel pin

Trim any burrs from this edge of the drive pinion with a hobby knife.

**17**

**1:1**  
5407, qty 1  
red o-ring

**1:1**  
6920, qty 1  
4-40 x 3/16 bhcs

2270, qty 1  
drive cup

2281, qty 1  
brake disc

**1:1**  
2291, qty 1  
dowel pin

**1:1**  
3977, qty 1  
FT only, 6906, qty 1  
3/16 x 3/8 bearing

**1:1**  
2293, qty 1  
input shaft  
shim

**18**

2276, qty 1  
brake cam

2274, qty 1  
brake bracket

**1:1**  
6863, qty 1  
FT only, 1709, qty 1  
flanged bushing  
3/16 x 5/16

**19**

**1:1**  
2277, qty 1  
FT only, 1709, qty 1  
flanged bushing  
1/8 x 1/4

**20**

**1:1**  
2661, qty 1  
3/16 large e-clip

**21**

2280, qty 1  
brake cam  
lever wire

**1:1**  
6920, qty 1  
4-40 x 3/16 bhcs

Note the angle

Threadlock #1596 RECOMMENDED

**22**

**1:1**  
6292, qty 4  
4-40 x 3/8 fhcs

2368, qty 1  
lower transmission  
case

Front

**23**

2368, qty 1  
upper transmission case

7874, qty 6  
4-40 x 7/16 shcs

Install differential for RTR and Team kits.

Stealth #6951

Install one-way for Factory Team kits.

Stealth #6951

Front

24

6922, qty 2  
4-40 x 1/2 fhcs

6291, qty 2  
4-40 x 1/4 fhcs

2278, qty 2  
brake pad

2269, qty 1  
FT only, 1706, qty 1  
center bulkhead

Threadlock #1596

steel side facing bulkhead

bulkhead

brake cam assembly

steel side away from bulkhead

Front

25

6292, qty 4  
4-40 x 3/8 fhcs

2368, qty 1  
lower transmission case

Rear

26

7874, qty 6  
4-40 x 7/16 shcs

2368, qty 1  
upper transmission case

1712, qty 1  
main drive shaft

NOTE:  
Make sure the brake disc is placed between the brake pads.

brake disc

brake pads

Stealth #6951

Front

27

6924, qty 2  
4-40 x 3/8 shcs

2269, qty 1  
bearing cap

NOTE:  
Threadlock on Factory Team kits only

Front

28

**Bag D**

6917, qty 2  
4-40 x 3/8 fhcs

6917, qty 4  
4-40 x 3/8 bhcs  
FT only, 6860, qty 4  
4-40 x 3/8 shcs  
blue aluminum

2254, qty pr  
FT only, 2255, qty pr  
front chassis braces,  
left & right

Rear

1



**1:1**  
6292, qty 2  
4-40 x 3/8 fhcs

**1:1**  
6917, qty 4  
4-40 x 3/8 bhcs  
FT only, 6860, qty 4  
4-40 x 3/8 shcs  
blue aluminum

2254, qty pr  
FT only, 2255, qty pr  
rear chassis braces  
left & right

**Rear**

**2**

**1:1**  
6292, qty 2  
4-40 x 3/8 fhcs

**1:1**  
5407, qty 2  
red o-ring

2260, qty 1  
FT only, 2261, qty 1  
handle

**Front**

**3**

**1:1**  
7738, qty 4  
4-40 x 7/8 shcs

**1:1**  
7260, qty 4  
4-40 nut

2250, qty 1  
FT only, 2248, qty 1  
front tower

2237, qty 1  
FT only, 2327, qty 1  
rear tower

**FRONT!**

**REAR!**

**4**

**1:1**  
6924, qty 3  
4-40 x 3/8 shcs

**Front**

**5**

**1:1**  
6924, qty 3  
4-40 x 3/8 shcs

**Front**

**6**

**Bag E**

3886, qty 4  
CVD axle

3888, qty 4  
CVD dogbone

2402, qty 4  
Uni drive dogbone

2402, qty 4  
Uni drive axle

**1:1**  
7381, qty 4  
CVD cross pin

**1:1**  
7381, qty 4  
CVD coupling

**1:1**  
7381, qty 4  
CVD set screw








Threadlock #1596

Black Grease #6588

**Team & Factory Team**

**RTR**

**1**




 2247, qty 1 pr FT only, 2241, qty 1 pr steering blocks left & right	 2268, qty 2 FT only, 2336, qty 2 rear hub carrier	 1:1 3965, qty 4 bearing spacer	 1:1 7368, qty 4 thin spacer	 1:1 7369, qty 4 FT only, 1654, qty 4 roll pin	 1:1 6273, qty 2 ball end (silver)	 1:1 7260, qty 2 4-40 plain nut
---	---	---	--	---	--	---

**NOTE!** L R

**FRONT!**

**REAR!**

**2**

 1:1 6924, qty 16 4-40 x 3/8 shcs FT only, 6860, qty 16 4-40 x 3/8 shcs blue aluminum	 2246, qty 8 pivot ball	 2249, qty 8 socket cap
---	--	--

**NOTE:** Tighten pivot ball cap screws so that the pivot ball moves freely without any binding or excess play.

**FRONT!**

**REAR!**

Repeat for opposite side.

**3**

**FRONT!**

2233, qty pr  
FT only, 2236, qty pr  
suspension arm,  
left & right

Black Grease #6588

**4**

Use your 5/64" Allen wrench to tighten the pivot ball until the track width gauge is wedged between the arm and the steering block. Turn the pivot ball counter clockwise until the gauge can be removed. Repeat for other side.

track width gauge

Black Grease #6588

**Front**

**5**

**1:1**

9146, qty 2  
2/56 x 3/16 bhcs

2235, qty 2  
front hinge pin

2239, qty 4  
caster clip

**6**

**7**

**1:1**

6274, qty 4  
ball cup, black

6264, qty 2  
FT only, 1414, qty 2  
steering link  
turnbuckle

1.80"  
45.9mm

**8**

**1:1**

2283, qty 2  
FT only, 1418, qty 2  
turnbuckle .825"

**1:1**

2311, qty 4  
rear turnbuckle  
eyelet ball

2271, qty 4  
rear turnbuckle  
eyelet

1.39"  
35.3mm

**9**

**1:1**

2308, qty 4  
3mm x 18mm bhcs

**1:1**

2309, qty 2  
3mm nyloc nut

**10**

**Bag F**

**1:1**

6465, qty 2  
shock piston #2  
rear

**1:1**

6465, qty 2  
shock piston #3  
front

YES! NO!

remove

**1**

**1:1**

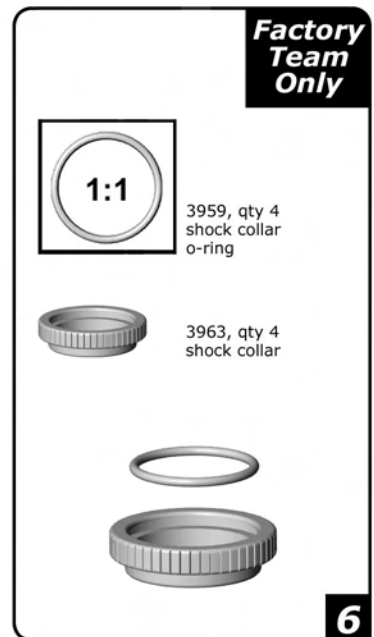
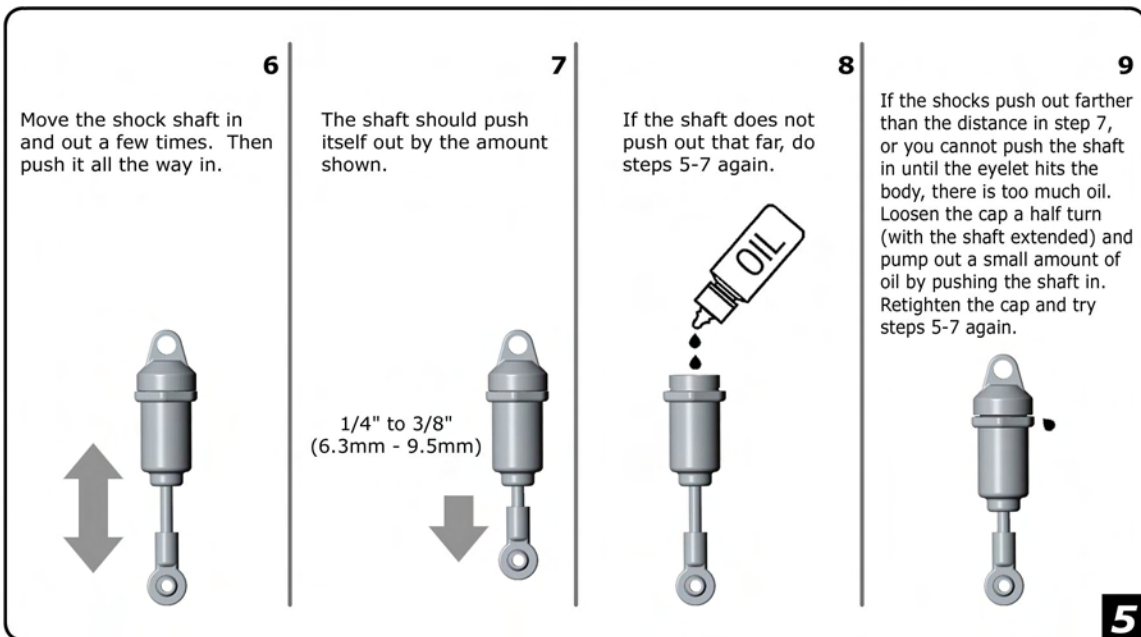
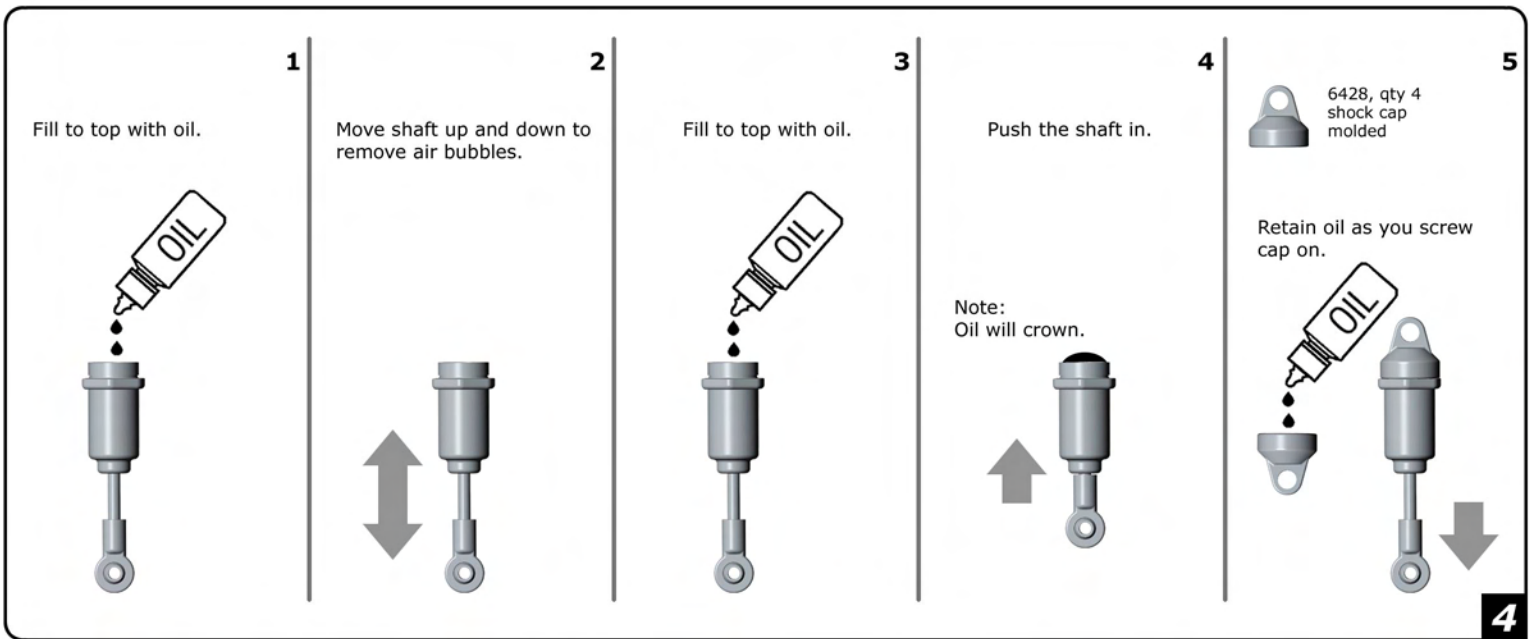
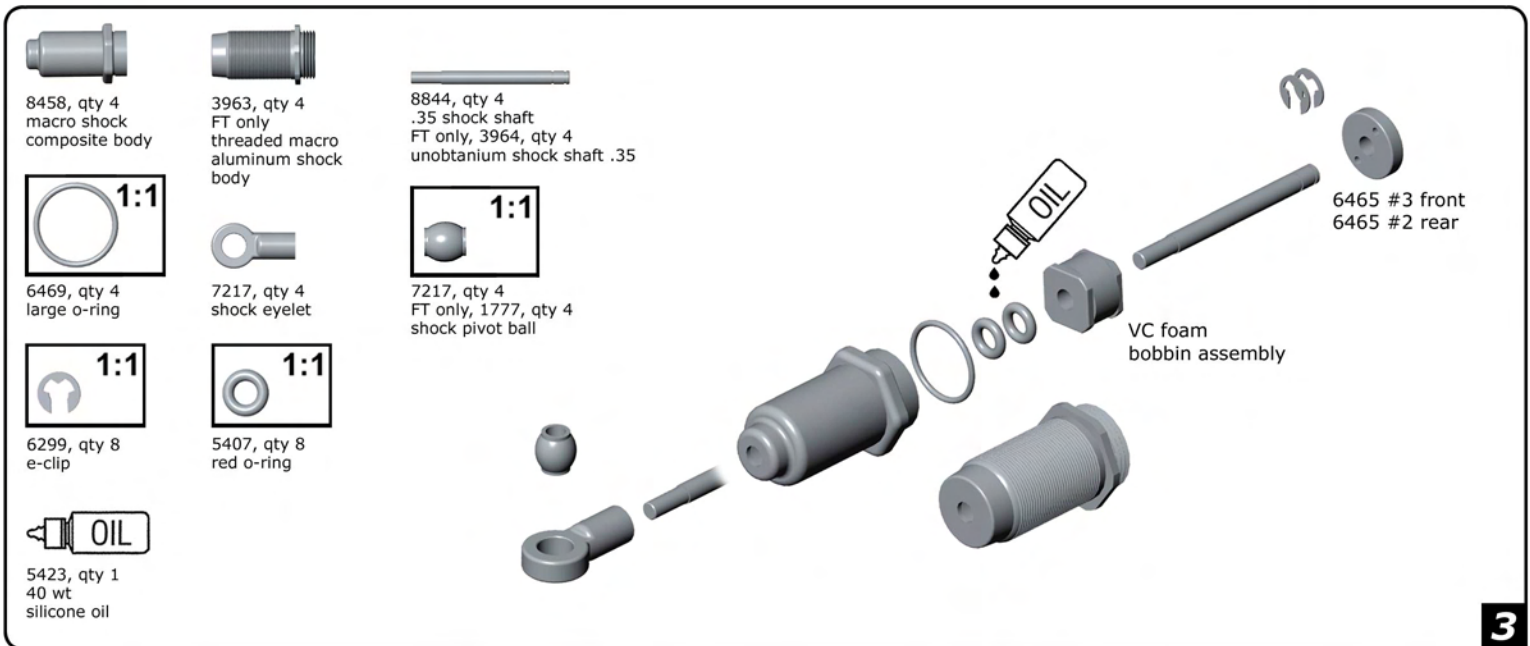
8456, qty 4  
VC foam

8456, qty 4  
VC bobbin

OIL

assembled

**2**



**Factory Team Only**

Apply one drop to collar o-ring.



**7**

**Factory Team Only**



**8**

3946, qty 2  
spring, copper  
front

3944, qty 2  
spring, gold  
rear

6475, qty 4  
spring collar

8846, qty 4  
preload spacer  
.25"

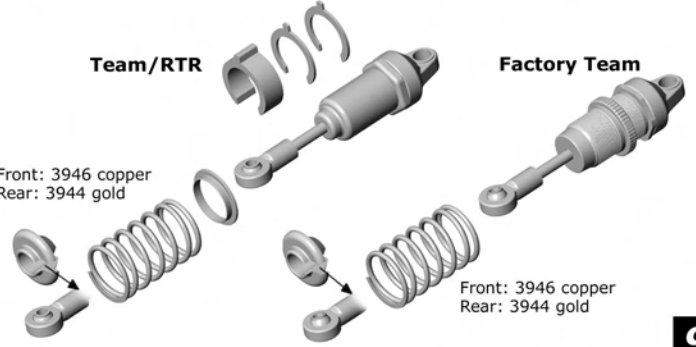
8846, qty 8  
preload spacer  
.03"

6475, qty 4  
spring cup

**Team/RTR**

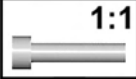
**Factory Team**

Front: 3946 copper  
Rear: 3944 gold



Front: 3946 copper  
Rear: 3944 gold

**9**



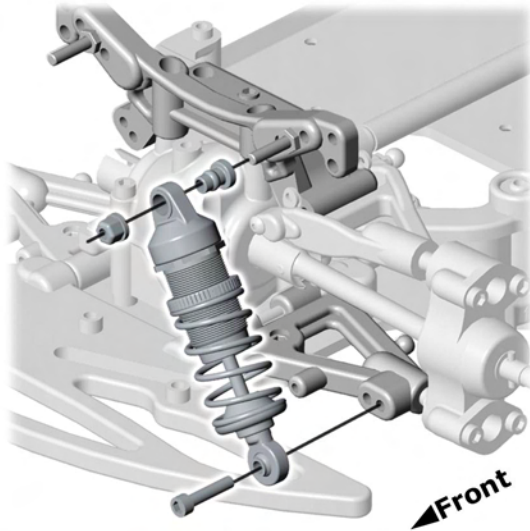
6925, qty 2  
4-40 x 1/2 shcs



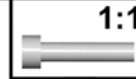
6472, qty 2  
shock nut  
small



6473, qty 2  
shock bushing  
small



**10**



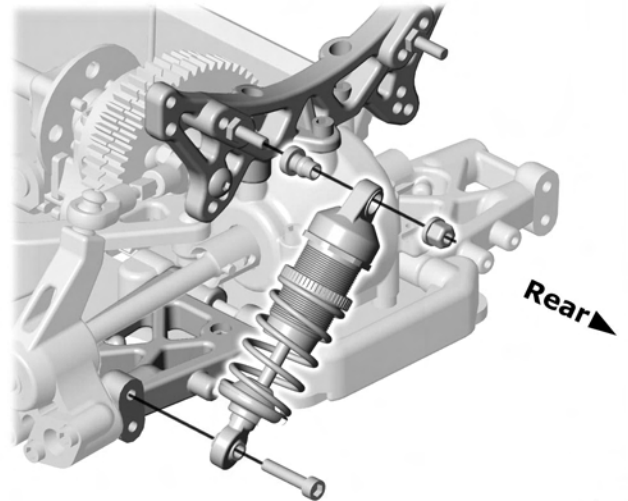
6925, qty 2  
4-40 x 1/2 shcs



6472, qty 2  
shock nut  
small



6473, qty 2  
shock bushing  
small

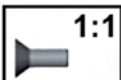


**11**

**Bag G**



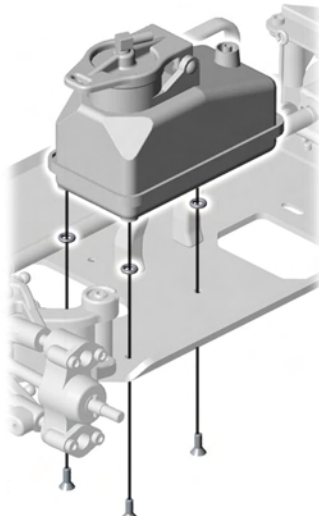
5407, qty 3  
red o-ring



6292, qty 3  
4-40 x 3/8 fhcs



7719, qty 1  
fuel tank



**1**

**Bag H**



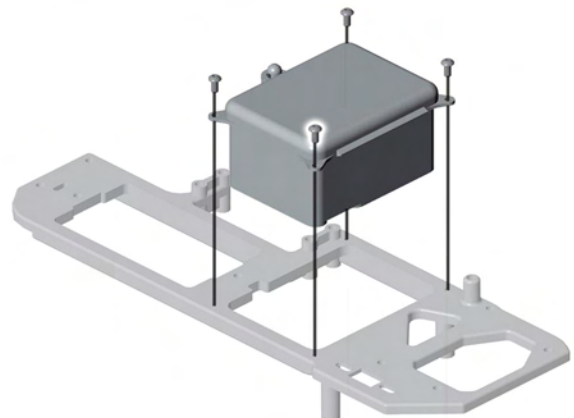
9146, qty 4  
2/56 x 3/16 bhcs



2256, qty 1  
FT only, 2259, qty 1  
radio tray



2258, qty 1  
receiver box



**1**



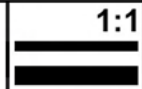
7336, qty 2  
servo mount



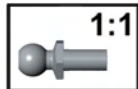
6917, qty 4  
steel washer



7336, qty 2  
offset spacer



qty 2 thin (.050")  
qty 2 thick (.100")



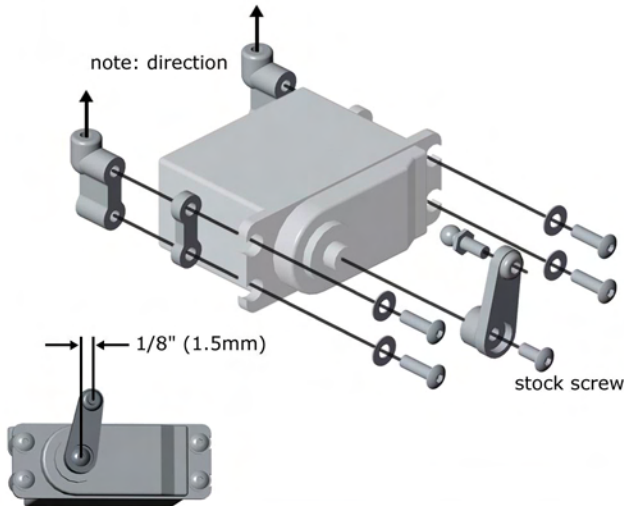
3857, qty 1  
short special  
ball end, black



6917, qty 4  
4-40 x 3/8 bhcs  
FT only, 6860, qty 4  
4-40 x 3/8 blue  
aluminum shcs



9180, qty 1  
servo horn



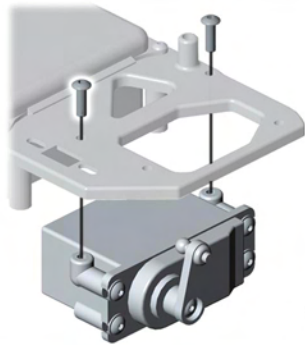
STEERING SERVO TYPE	#7336 SPACER	#9180 SERVO ARM
<b>Airtronics</b> 94102	no spacer	A
<b>Airtronics</b> 94738, 94157, 94158, 94257, 94258, 94357, 94358, 94452, 94453, 94751, 94755	thick spacer	A
<b>Hitec</b> HS-5625MG, HS-5645MG, HS625MG HS645MG	no spacer	H
<b>Hitec</b> HS-303, HS-300BB, HS-945MG, HS-925MG, HS-5945MG, HS-5925MG, HS-525MG, HS-525BB, HS-425BB, HS-422	thin spacer	H
<b>JR</b> Z4725, Z4750, Z2750, Z8450, Z8550, NES-4750	no spacer	J
<b>JR</b> Z250, Z550	thin spacer	J
<b>Futaba</b> S9204, S9250, S9450, S148	no spacer	F
<b>Futaba</b> S3003, S9202, S9101	thin spacer	F
<b>Futaba</b> S9404	thick spacer	F
<b>KO</b> PS-401, PS-2001, PS-2004, PS-2015, PS-2173, PS-2174, PS-2123, PS-2143, PS-2144	thin spacer	J

\*Not all servo's are listed.

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6917, qty 2  
4-40 x 3/8 bhcs  
FT only, 6860, qty 2  
4-40 x 3/8 blue  
aluminum shcs



3



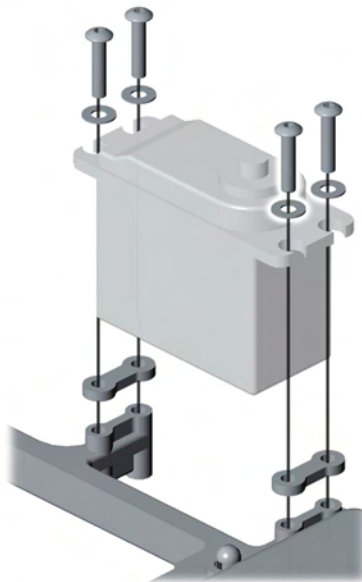
6918, qty 4  
4-40 x 1/2 bhcs  
FT only, 7801, qty 4  
4-40 x 5/8 blue  
aluminum shcs



7337, qty 4  
steel washer



2326, qty 2  
.080" throttle servo  
spacer



STEERING SERVO TYPE	#7336 SPACER	#9180 SERVO ARM
<b>Airtronics</b> 94102	no spacer	A
<b>Airtronics</b> 94738, 94157, 94158, 94257, 94258, 94357, 94358, 94452, 94453, 94751, 94755	spacer	A
<b>Hitec</b> HS-5625MG, HS-5645MG, HS625MG HS645MG HS-303, HS-300BB, HS-945MG, HS-925MG, HS-5945MG, HS-5925MG, HS-525MG, HS-525BB, HS-425BB, HS-422	no spacer	H
<b>JR</b> Z4725, Z4750, Z2750, Z8450, Z8550, NES-4750	no spacer	A
<b>JR</b> Z250, Z550	spacer	A
<b>Futaba</b> S9204, S9250, S9450, S148, S3003, S9202, S9101	no spacer	F
<b>Futaba</b> S9404	spacer	F
<b>KO</b> PS-401	spacer	A
<b>KO</b> PS-2001, PS-2004, PS-2015, PS-2173, PS-2174, PS-2123, PS-2143, PS-2144	no spacer	A

\*Not all servo's are listed.

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