














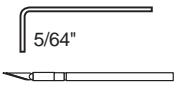
BAG D

REMOVE THESE PARTS FOR:

Steps 1-5

 1:1 6573, qty 2 diff thrust washer	 1:1 6574, qty 6 diff thrust ball	 1:1 6575, qty 1 T-nut	 1:1 6575, qty 1 diff thrust bolt cover, nylon	 1:1 6575, qty 1 2-56 diff bolt	 1:1 6581, qty 12 diff balls carbide	 1:1 6582, qty 1 diff spring
 6588, qty 1 black grease	 6591, qty 1 diff lube	 9365, qty 1 diff gear	 9367, qty 2 diff drive ring	 9370, qty 1 left diff outdrive hub	 9375, qty 1 right diff outdrive hub	

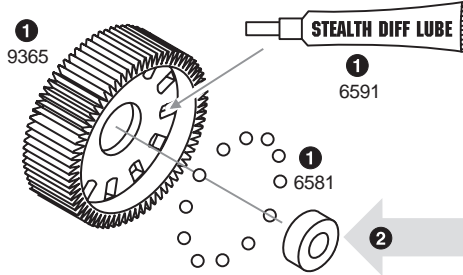
TOOLS USED





step 1

SET UP DIFF GEAR

- 1 Add a generous amount of #6591 diff lube to the #9365 diff gear ball holes and push in the twelve #6581 diff balls. Then push in the lube that was pushed out.
- 2 Insert one #6597 bushing or #6589 bearing into the gear.

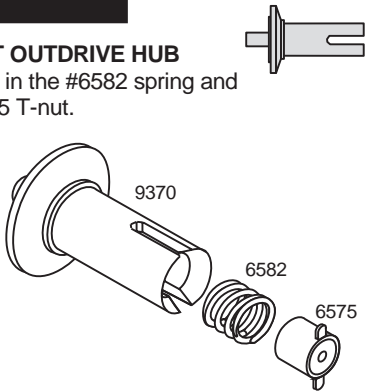


TEAM & F.T.	BASIC & SPORT
 1:1 6589, qty 1 5/32 x 5/16 ball bearing	 1:1 6597, qty 1 5/32 x 5/16 bushing

step 2

LEFT OUTDRIVE HUB

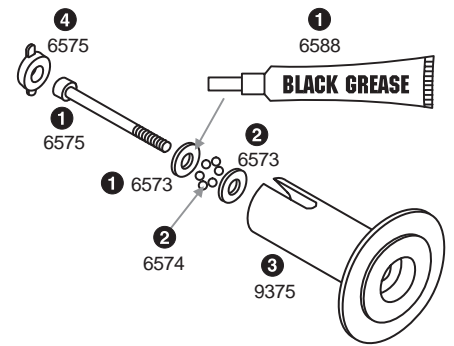
Push in the #6582 spring and #6575 T-nut.



step 3

RIGHT OUTDRIVE HUB

- 1 Slide one #6573 washer onto the #6575 bolt. Apply a generous amount of #6588 black grease to the washer on the side facing away from the bolt head.
- 2 Stick six #6574 balls into the grease against the bolt and washer. Add the other #6573 washer. The grease will hold the balls in place during assembly.
- 3 Slide all this into the #9375 right outdrive hub, being careful not to lose any of the balls.
- 4 Insert the #6575 bolt cover.



step 4

RIGHT OUTDRIVE HUB

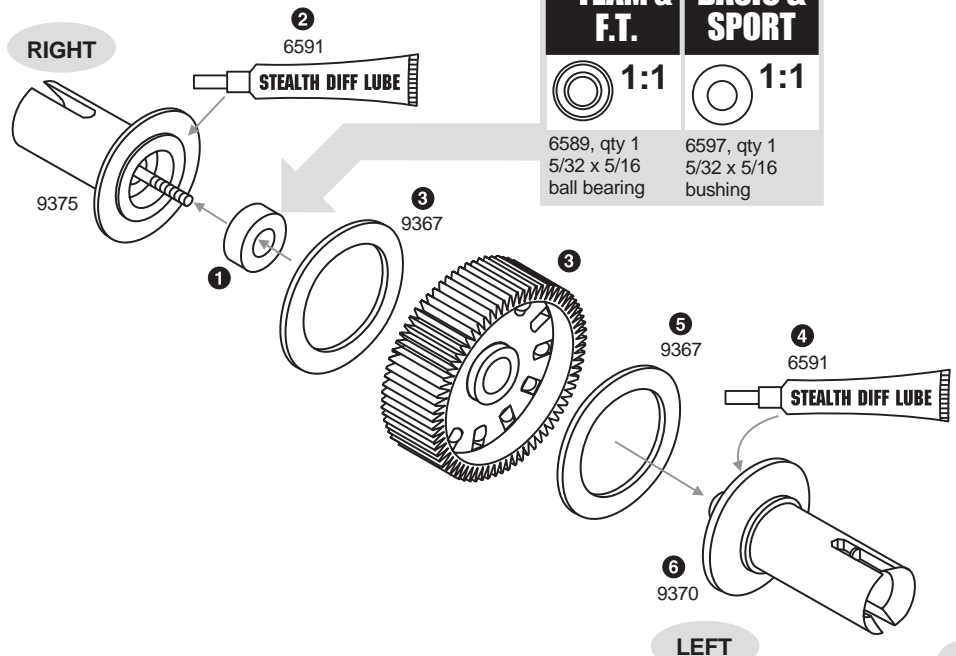
- 1 Insert one #6597 bushing or #6589 bearing into the #9375 right hub.
- 2 Add a **light** coat of #6591 diff lube to right hub where shown.
- 3 Place a #9367 diff drive ring and then the gear assembly on the hub.

ASSEMBLE THE HUBS

- 4 Add a **light** coat of #6591 diff lube to left hub where shown.
- 5 Place a #9367 diff drive ring on the hub.
- 6 Push the #9370 hub over the diff bolt and center the hub.

CHECK ALIGNMENT OF HUBS

- 7 Tighten the diff with your 5/64" Allen wrench, but not completely.
- 8 Rotate the diff hubs several times as you are tightening the bolt to check for proper alignment of the parts.
- 9 We'll adjust the diff on the next page.

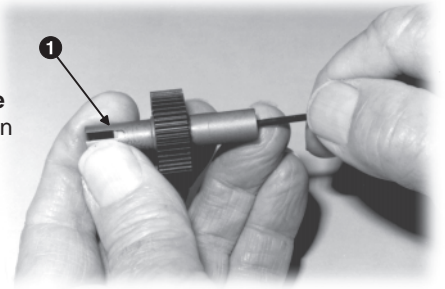


step 5

ADJUST THE DIFFERENTIAL

1 As you tighten the diff bolt, you will notice the T-nut ears moving closer to the bottom of the diff hub slot. This compresses the spring behind the T-nut. The spring should be fully compressed at the same time the T-nut reaches the end of the slot. **Caution:** Pay close attention to feeling when

the spring is fully compressed. **Do not overtighten the bolt.** When you feel the spring fully compressed, loosen the diff bolt 1/8 of a turn. No more, no less. Your diff should now operate very smoothly when turning the hubs in opposite directions. After you have driven the car once, recheck the diff adjustment. Never adjust the diff any other way.



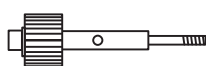
BAG D

REMOVE THESE PARTS FOR:

Steps 6-7



6292, 6934*, qty 1
4-40 x 3/8



6571, qty 1
drive shaft/gear



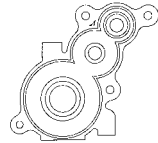
6572, qty 1
drive shaft
roll pin



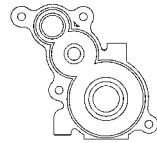
6928, 6935*, qty 3
4-40 x 1



7669, qty 2
drive shaft
spacer



9352, qty 1
right tranny case



9352, qty 1
left tranny case



9360, qty 1
idler gear

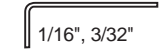
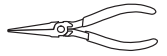


9361, qty 1
idler gear shaft



7337, qty 3
washer, gold

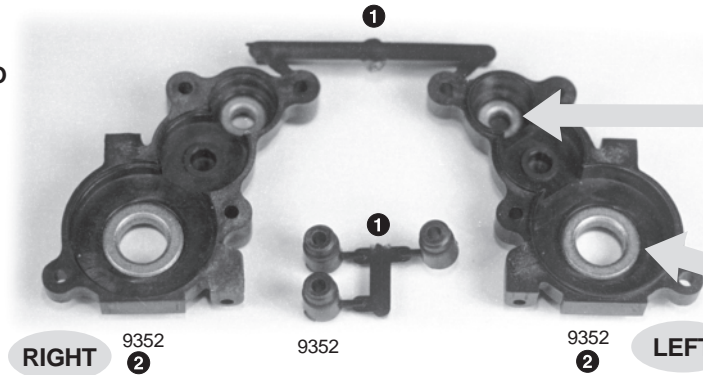
TOOLS USED



step 6

ADD BUSHINGS OR BEARINGS TO THE CASE HALVES

- 1 Cut the two #9352 transmission case halves and the three #9352 spacers from the runner.
- 2 Add bushings or bearings to each case half.



TEAM & F.T.



3977, qty 2
3/16 x 3/8
unflanged bearing



3976, qty 2
3/8 x 5/8
unflanged bearing

BASIC & SPORT



6599, qty 2
3/16 x 3/8
bushing



6598, qty 2
3/8 x 5/8
bushing

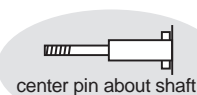
step 7

INSIDE THE TRANNNY

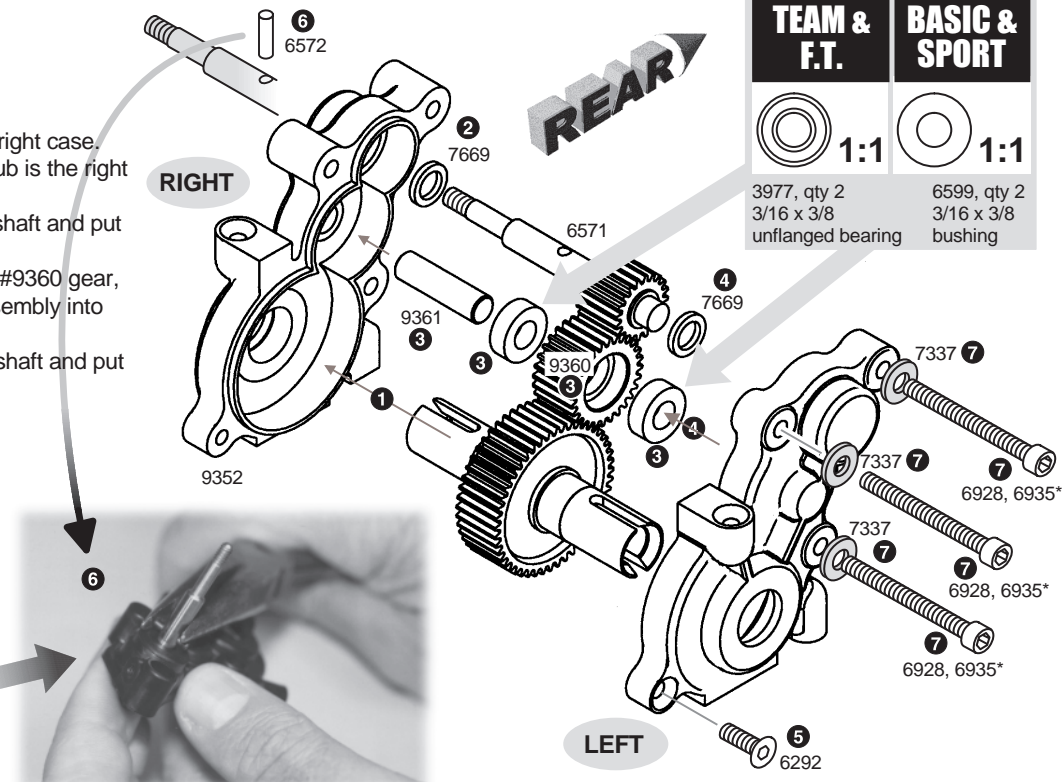
- 1 Install the right side diff assembly into the right case. (Page 9, Step 3 will show you which diff hub is the right side.)
- 2 Add the #7669 spacer to the #6571 drive shaft and put both into the case.
- 3 Install the two bushings or bearings in the #9360 gear, followed by the #9361 shaft. Insert the assembly into the case.
- 4 Add the other #7669 spacer to the #6571 shaft and put the case halves together.

OUTSIDE THE TRANNNY

- 5 Screw the halves together with one #6292 (6934*) bolt.
- 6 Insert the #6572 roll pin into the shaft hole with your needlenose pliers.
- 7 Push the three #6928 (6935*) bolts through, each with its own #7337 washer.



center pin about shaft



TEAM & F.T.



3977, qty 2
3/16 x 3/8
unflanged bearing

BASIC & SPORT

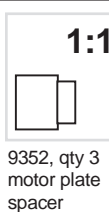
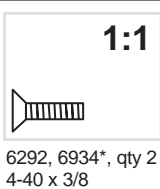


6599, qty 2
3/16 x 3/8
bushing

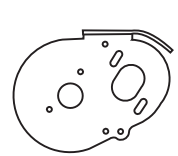
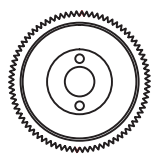
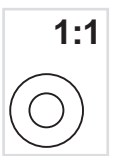
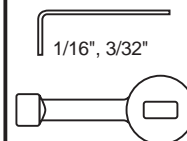
BAG D

REMOVE THESE PARTS FOR:

Steps 8-11



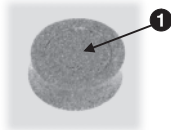
TOOLS USED



step 8

REMOVE THE BACKING

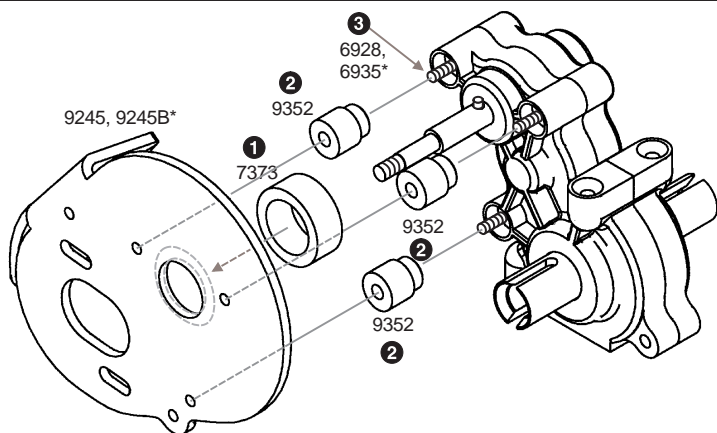
- 1 Remove the backing and center from the #7373 gasket.



step 9

INSTALL THE MOTOR PLATE

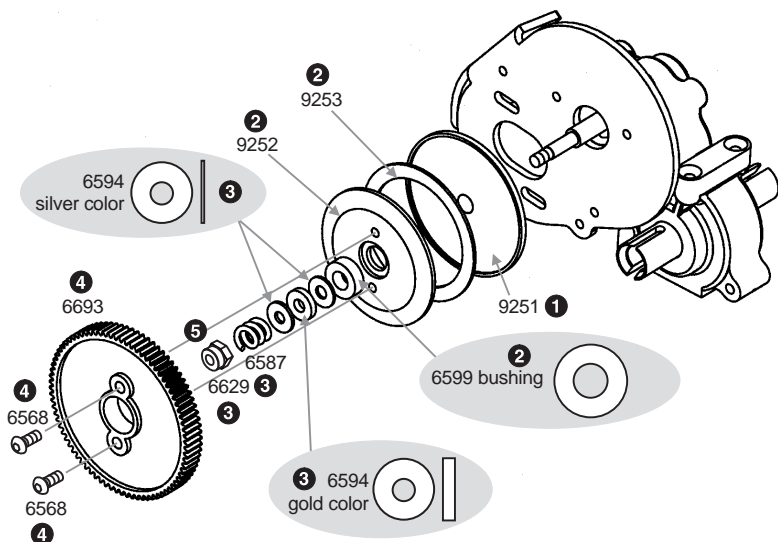
- 1 Center the #7373 gasket around the large round hole of the 9245 (9245B*) plate.
- 2 Install the three #9352 spacers.
- 3 Line up the #9245 (9245B*) plate and fasten with the three #6928 (6935*) screws.



step 10

INSTALL THE ASSOCIATED TORQUE CLUTCH (ATC)

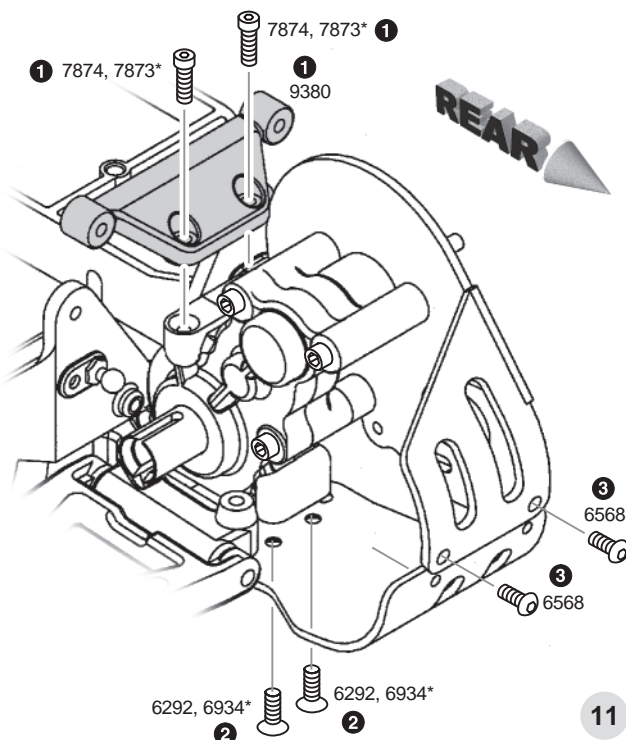
- 1 Add the #9251 inner hub to the shaft, lining up the notch with the roll pin.
- 2 Install the #9253 clutch disc into the inner hub, then add the #9252 outer hub and #6599 bushing.
- 3 Install parts in the following order: #6594 (thin), 6594 (thick), 6594 (thin), 6587 black spring, 6629 locknut.
- 4 Orient the #6693 spur gear side facing out as shown and mount to #9252 with two #6568 screws.
- 5 Tighten the #6629 locknut so the end of the shaft is flush with the end of the nut. This is a good initial adjustment. For further info on the torque clutch, see the tuning section on page 27.



step 11 LEFT SIDE

MOUNT THE TRANSMISSION

- 1 Mount the #9380 brace with two #7874 (7873*) screws.
- 2 Mount the tranny with the two #6292 (6934*) screws from below, lining up the motor plate holes as shown.
- 3 Bolt the motor plate to the rear chassis with two #6568 screws.



BASIC & SPORT KITS ONLY

BAG E

REMOVE THESE PARTS FOR:

Basic: step 1

Sport: step 1



6272, qty 2
dust cover



6273, qty 2
ball end



6299, qty 4
E-clip



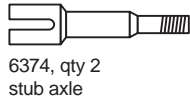
6370, qty 2
dogbone



6372, qty 2
dogbone spring



7366, qty 2
hub carrier



6374, qty 2
stub axle



6375, qty 2
roll pin



6388, qty 2
cone washer



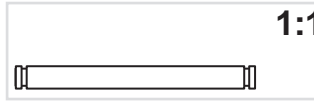
6466, qty 4
spacer, 1/16"



7260, qty 2
small nut



7360, qty 4
bushing

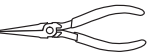


9263, qty 2
rear outer hinge pin



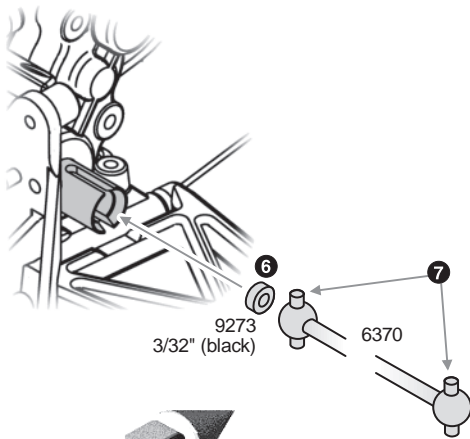
9273, qty 2
dogbone spacer
3/32" (black)

TOOLS USED



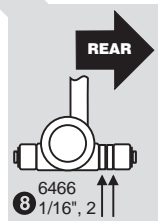
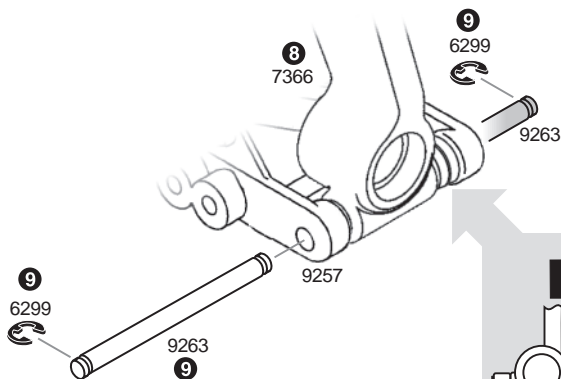
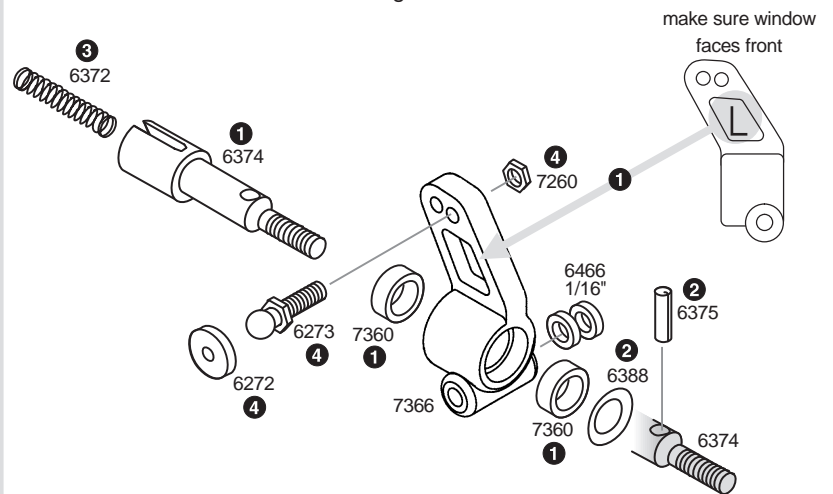
step 1 LEFT SIDE

BASIC & SPORT KITS ONLY



ASSEMBLE REAR HUB CARRIERS

- Note that the #7366 hub carriers are marked for left and right. Insert #7360 bushings into each side of the left hub carrier. Install the #6374 stub axle as shown.
- Insert #6388 cone washer, raised outer edges facing out. Add #6375 roll pin.
- Insert the #6372 spring into the stub axle.
- Thread on the #6273 ball end and add the #7260 nut to the other side. (When you do the other hub carrier, thread the ball end into the other side so both will point to the front when assembled.) Add a #6272 dust cover to the ball end.
- Follow the above for the right hub carrier.



HUB CARRIERS TO REAR ARMS

- (Upper left drawing:) Push the #9273 spacer into the outdrive of the transmission.
- (Upper left drawing:) Insert the dogbone pins into the stub axle and outdrive hub as shown.
- Place the hub carrier between the arm holes as shown and add two #6466 spacers where shown.
- Add one #6299 E-clip to the end of the #9263 hinge pin, insert it as shown, then add the other #6299 E-clip.
- Now install the axle assembly for the right side.

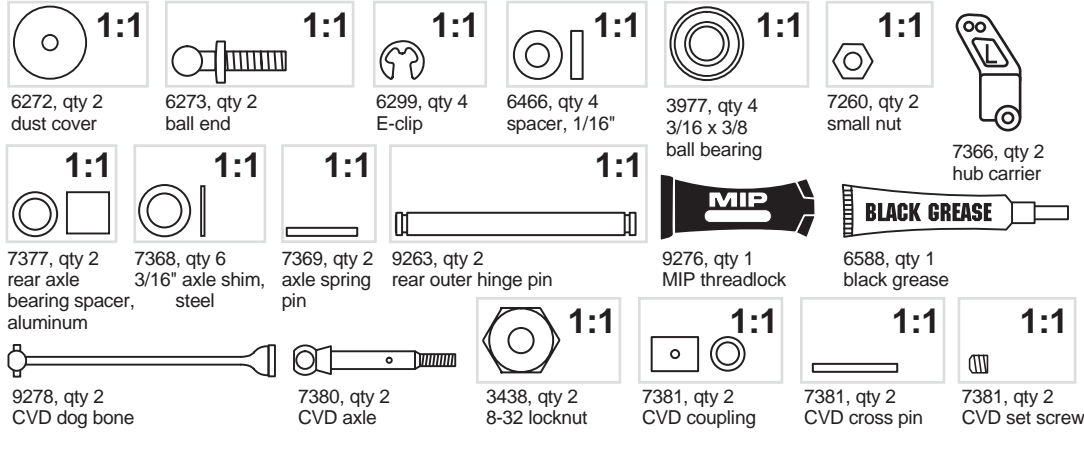
TEAM & FACTORY TEAM KITS ONLY

BAG E

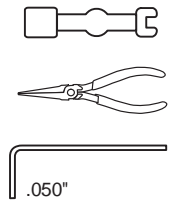
REMOVE THESE PARTS FOR:

Team: step 1

Factory Team: step 1



TOOLS USED

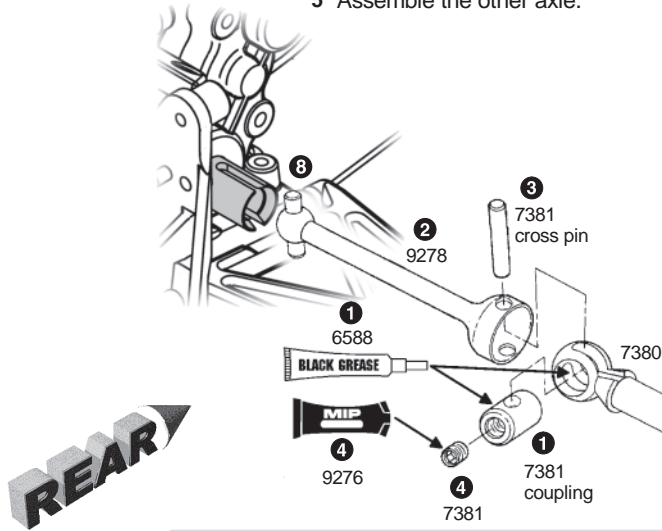


step 1 LEFT SIDE

TEAM & FACTORY TEAM KITS ONLY

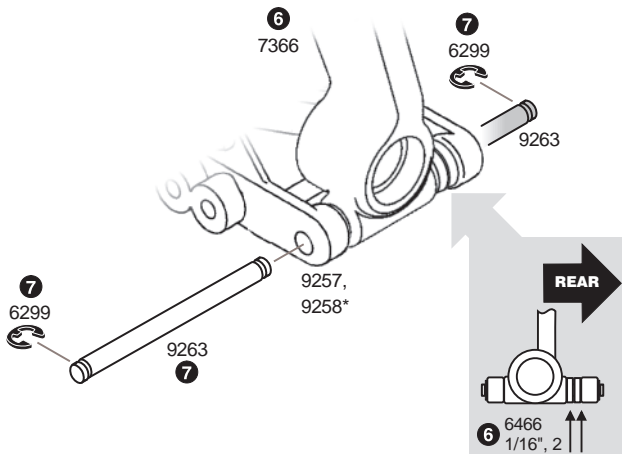
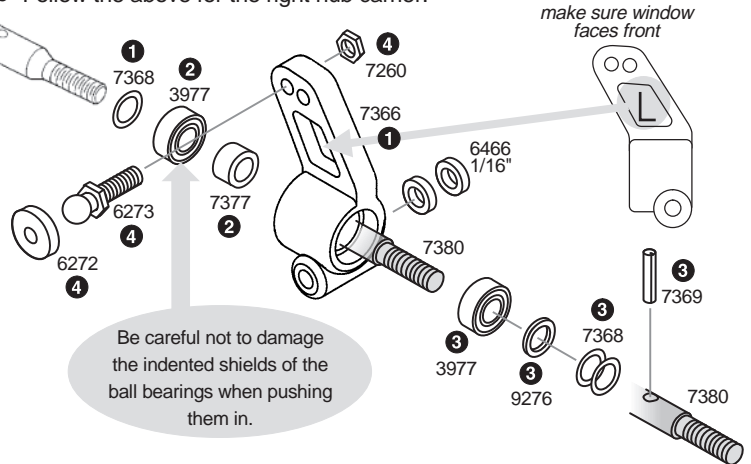
ASSEMBLE THE #9276 MIP CVD™ (Constant Velocity Drive™)

- 1 Spread some Associated #6588 black grease inside the #7380 axle hole where shown, then on the #7381 coupling, and insert the coupling into the axle.
- 2 Slide the axle into the #9278 dogbone, aligning the cross holes.
- 3 Insert the #7381 cross pin, making sure it is evenly spaced on both sides of the #9278 bone.
- 4 Add the #9276 MIP thread lock to the #7381 set screw. Angle and turn the MIP CVD™ so the set screw can be screwed in with the Allen wrench.
- 5 Assemble the other axle.



REAR HUB CARRIERS

- 1 Note that the #7366 hub carriers are marked left and right. Slide one of the thin #7368 3/16" axle shims onto the axle.
- 2 Install one #3977 bearing, then the #7377 bearing spacer. **NOTE: You MUST use the bearing spacer.** Slide the axle assembly into the hub carrier from the rear.
- 3 Install the second #3977 bearing into hub carrier and onto the axle, followed by the #9276 thick spacer and two #7368 thin spacers. Insert the #7369 roll pin into axle.
- 4 Thread on the #6273 ball end into the hole shown and add the #7260 nut to the other side. (When you do the other hub carrier, thread the ball end into the other side so both ball ends will point to the front when assembled.) Add a #6272 dust cover to the ball end.
- 5 Follow the above for the right hub carrier.



HUB CARRIERS TO REAR ARMS

- 6 Place the left hub carrier between the arm holes as shown and add two #6466 spacers where shown.
- 7 Add a #6299 E-clip to the #9263 hinge pin insert it as shown, then add an E-clip at the other end of the hinge pin.
- 8 Insert the universal dog bone into the slots of the outdrive hub.
- 9 Now install the axle assembly for the right side.

ALL KITS

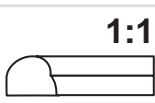
BAG E

REMOVE THESE PARTS FOR:

Steps 2-3



6262, 1403*, qty 2
1.65" turnbuckle



7230, qty 4
large ball cup



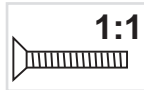
7260, qty 2
4-40 nut



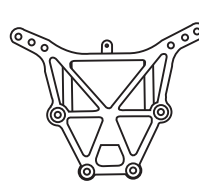
7413, qty 2
4-40 x 3/4



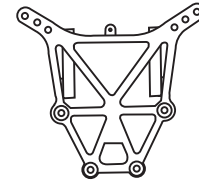
6292, 6934*, qty 2
4-40 x 3/8



6915, qty 2
4-40 x 5/8

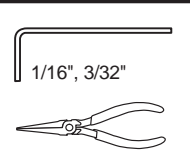


TEAM & F.T. ONLY
9279, 9280*, qty 1
rear shock tower



BASIC & SPORT ONLY
9270, qty 1
rear shock tower

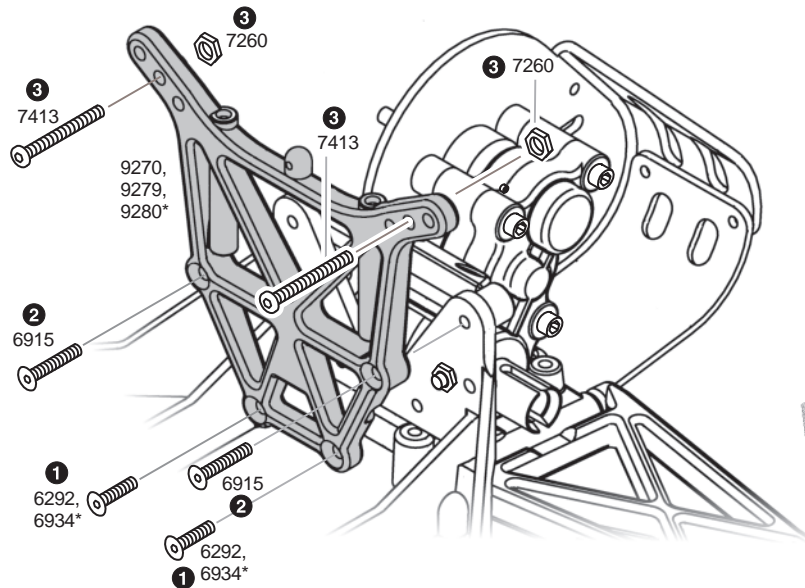
TOOLS USED



step 2 LEFT SIDE

MOUNT THE REAR SHOCK TOWER

- 1 Orient the tower outward as shown and mount to bulkhead with #6292 (6934*) screws.
- 2 Fasten the tower to the transmission brace with the #6915 screws.
- 3 Add two #7413 screws in the middle holes at top, then thread on #7260 nuts.



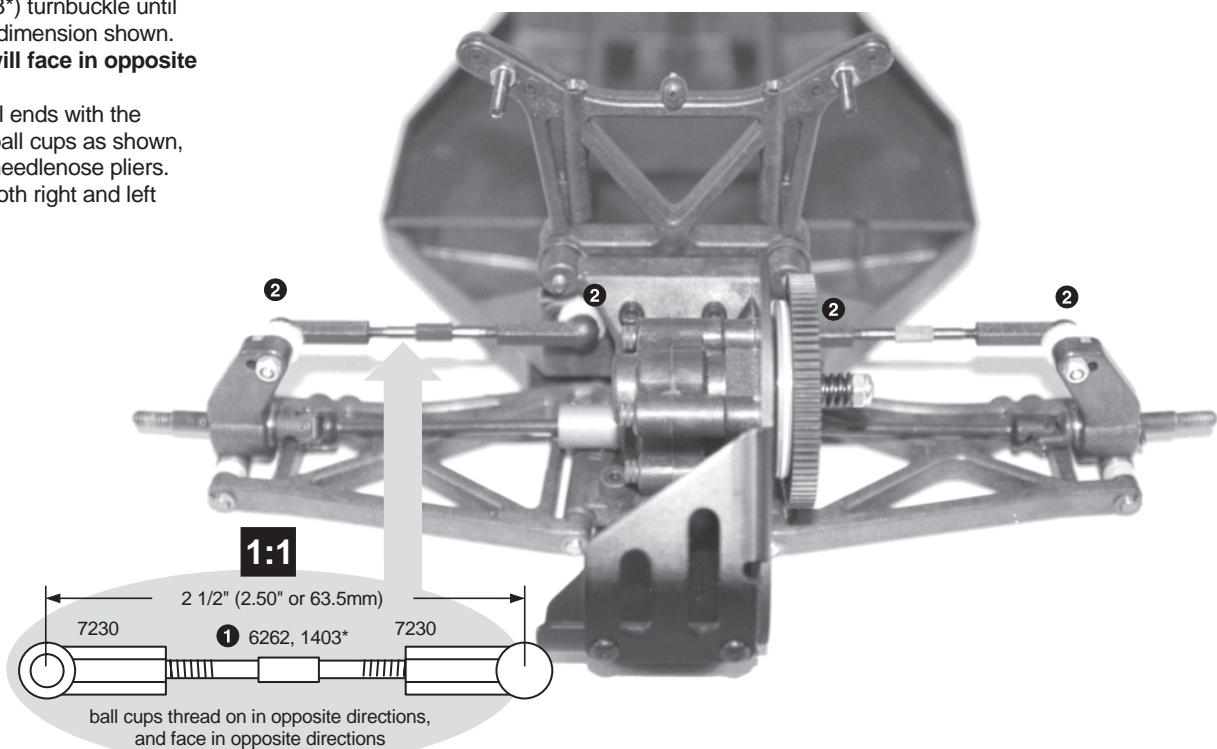
REAR

step 3 REAR VIEW

COMPLETED REAR ASSEMBLY

ADD TURNBUCKLES



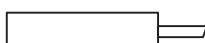



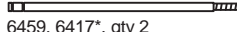
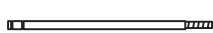




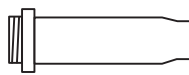
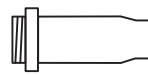
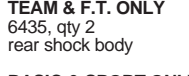
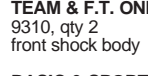



- 1 Twist #7230 ball cups onto the #6262 (1403*) turnbuckle until you get the dimension shown. **Ball cups will face in opposite directions.**
- 2 Connect ball ends with the turnbuckle ball cups as shown, using your needlenose pliers. Assemble both right and left sides.



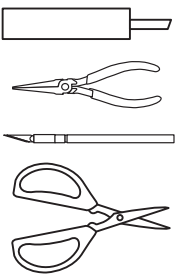
BAG F

REMOVE THESE PARTS FOR:

Steps 1-4

 5407, qty 8 red O-ring	 6299, qty 8 E-clip	 6429, qty 1 shock assembly tool	 6440, qty 4 split locking washer	 6440, qty 8 small washer	 6440, qty 4 large spacer	 6459, 6417*, qty 2 rear shock shaft	 6460, 6418*, qty 2 front shock shaft
 6465, qty 2 shock piston #1	 6465, qty 2 shock piston #2	 6428, qty 4 shock cap	 6469, qty 4 large O-ring	 TEAM & F.T. ONLY 6435, qty 2 rear shock body	 TEAM & F.T. ONLY 9310, qty 2 front shock body	 BASIC & SPORT ONLY 6424, qty 2 rear shock body	 BASIC & SPORT ONLY 9311, qty 2 front shock body
 7217, qty 4 pivot ball plastic	 7217, qty 4 eyelet nylon	 5428, qty 1 25 wt silicone oil					

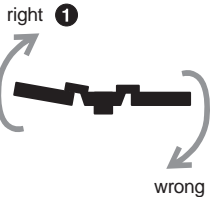
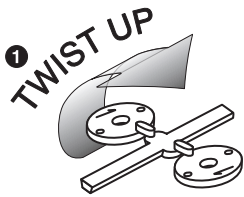
TOOLS USED



step 1

TRIM SHOCK PISTONS

- 1 Burrs interfere with smooth shock action within the shock body. To remove from tree without creating burrs, twist up, not down. Remove two each of #1 and #2.
- 2 Remove remaining burrs carefully with hobby knife.



TRIM SHOCK WASHERS & SPACERS

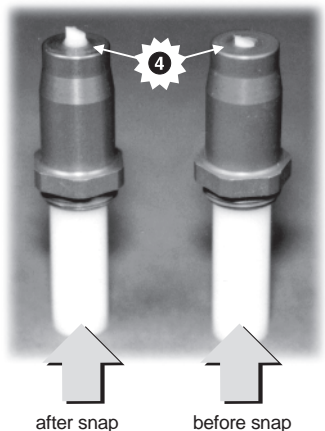
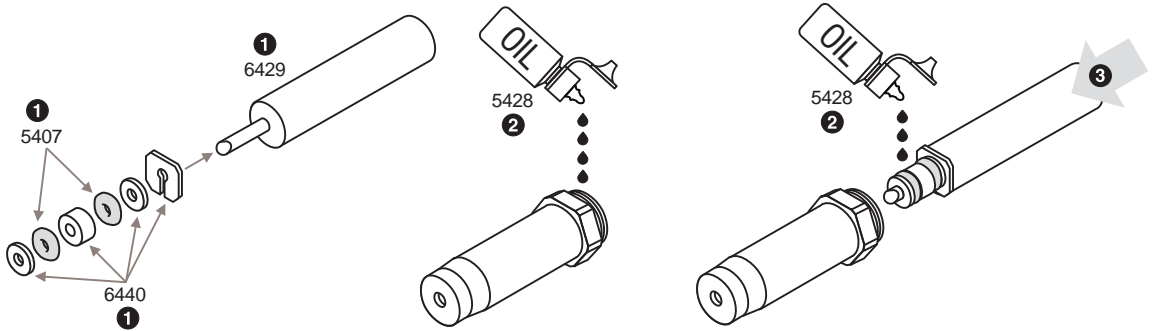
- 3 For best shock performance, trim each part from the parts tree so no part of the two molding runners remain. It is safer to remove a tiny amount of the part than to risk the chance of a burr remaining. Short blade scissors or a hobby knife will work fine, as shown at right. Run your finger over the edges to feel for burrs you cannot see. Remove the ones you find. Burrs can keep the parts from snapping in correctly, and can cause the shock to leak or the shaft to jam.



step 2

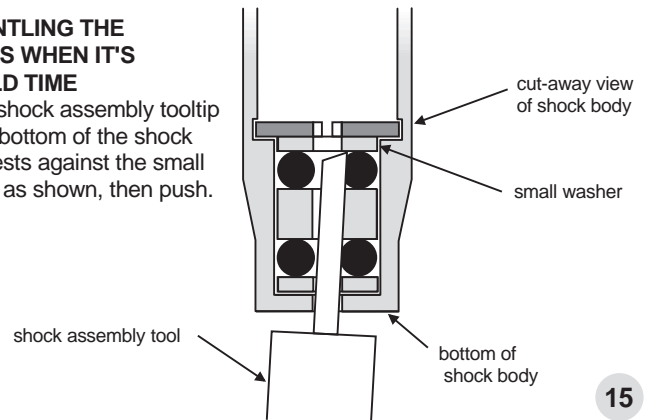
SHOCK SEAL PARTS

- 1 Install the #5407 and #6440 parts shown onto the #6429 tool tip.
- 2 Add 3-4 drops of #5428 oil to the inside of the shock body, and to the shock seal parts.
- 3 Insert the tool tip into the shock body all the way. Push **easily** until the parts snap into place.
- 4 Check the tool height in photo. The right shock shows just before snapping parts in place, the left shows after.
- 5 If your shocks do not snap together easily, check the parts for burrs again.
- 6 Assemble the other shock bodies the same.



DISMANTLING THE SHOCKS WHEN IT'S REBUILD TIME

Put the shock assembly tooltip into the bottom of the shock until it rests against the small washer, as shown, then push.



step 3

FINAL INTERNAL SHOCK ASSEMBLY

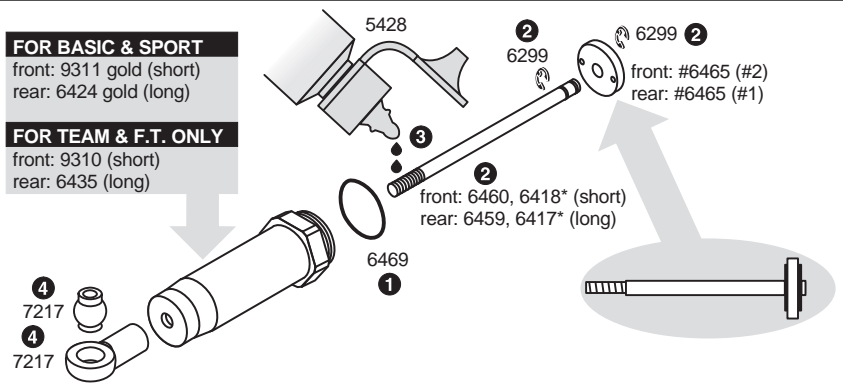
- 1 Add #6469 O-ring over threads of shock body.
- 2 For the #6460 (6418*) front shock shafts, install a #6299 E-clip on either side of a #6465 (#2) piston. For the #6459 (6417*) rear shock shafts, install a #6299 E-clip on either side of a #6465 (#1) piston.
- 3 Place a couple drops of #5428 oil on threaded part of shaft and insert into shock body.
- 4 Push the #7217 pivot ball and eyelet together, then screw the eyelets onto the end of the shock shaft. Hold shaft with rag and needlenose pliers next to threads.

FOR BASIC & SPORT

front: 9311 gold (short)
rear: 6424 gold (long)

FOR TEAM & F.T. ONLY

front: 9310 (short)
rear: 6435 (long)



step 4

FILLING THE SHOCKS

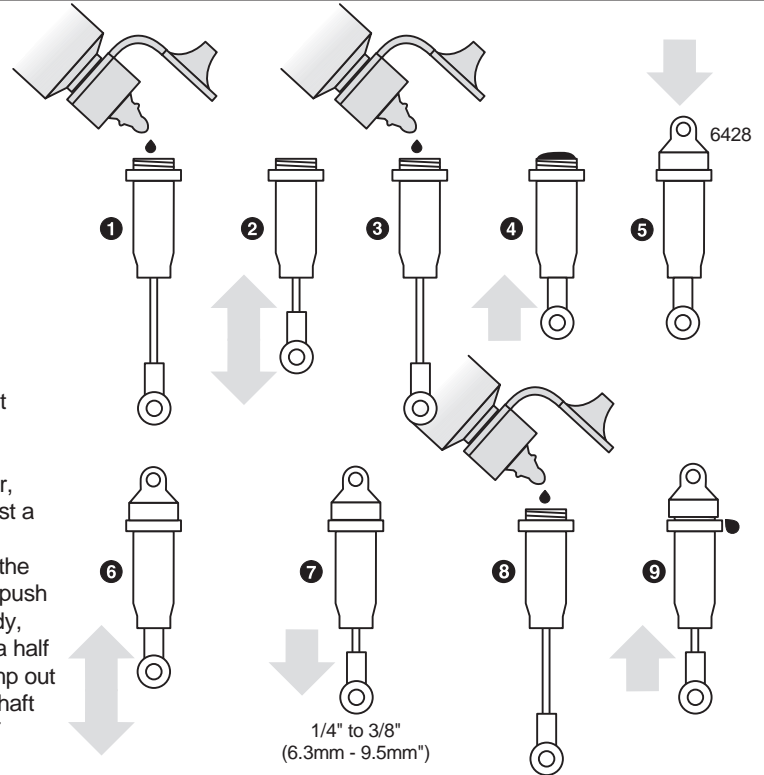
- 1 Holding the shocks upright, fill with oil to the top of the shock body.
- 2 Slowly move the shaft up and down several times to allow air bubbles to escape to the top.
- 3 Refill with oil to the top of the shock body.
- 4 Push the shaft in until the piston is level with top of shock body. The oil will slightly bulge up above the shock body.
- 5 Install the #6428 shock cap and tighten. There should be no gap between the cap and the hex portion of the shock body when tight.



5
HOW TO
TIGHTEN
THE CAP
ON YOUR
SHOCK

SETTING THE REBOUND

- 6 Move the shock shaft in and out a few times and then push it all the way in. It should be easy to push the shaft in until the eyelet hits the body.
- 7 Then the shaft should push itself out approximately 1/4" to 3/8" (6.3mm - 9.5mm").
- 8 If the shocks do not push out this far, there is not enough oil in them. Add just a little oil and try steps 6-7 again.
- 9 If the shocks push out farther than the distance in step seven, or you cannot push the shaft in until the eyelet hits the body, there is too much oil. Loosen the cap a half turn (with the shaft extended) and pump out a small amount of oil by pushing the shaft in. Retighten the cap and try steps 6-7 again.



BAG F

REMOVE THESE PARTS FOR:

Step 5



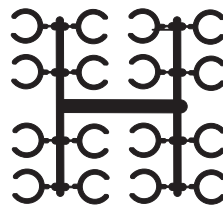
6474, qty 4
spring collar



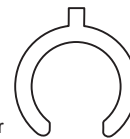
6478, qty 2
rear spring
silver



6494, qty 2
front spring
green



8846, qty 6
preload spacer



step 5

FINAL SHOCK ASSEMBLY

- 1 Install one #6474 spring collar onto the shock body.
- 2 Install the correct spring for front and back shocks.
- 3 Pull the shock shaft out as far as it will go, compress the spring, then insert the #6474 spring cup over the #7217 eyelet.
- 4 Twist two 1/4" thick #8846 preload spacers from the tree. For the front shocks, slide a preload spacer between the spring collar and shock body hex.
- 5 Twist two 1/16" and 1/8" thick preload spacers off the tree. Slide them onto the rear shocks between the spring collar and shock body hex.

