#4450

1:12 Stealth Diff Axle

Fits RC12:, RC12LW and RC12LS

STEP 1 STEP 2 STEP 3 STEP 4

(a) (b) (c) (f) (g) (h) (i)

• (k) (l) (m) (n)

fig. 1

Additional items needed to complete the assembly:

- Three 1/4" x 3/8" unflanged ball bearings, such as Associated's #7359 (one pair).
- Associated #6636 Diff lube. Do not use #6591 Stealth diff lube or #6588 black grease.
- One Kimbrough 48 or 64 pitch spur gear:

part #	64 pitch	part #
#143	104 tooth	#211
#144	108 tooth	NEW
#145	112 tooth	#212
#146	116 tooth	#216
#147	120 tooth	#213
	#143 #144 #145 #146	#143 104 tooth #144 108 tooth #145 112 tooth #146 116 tooth

Associated developed this kit for the serious 1:12 scale racer. With its lighter weight for reduced rotating mass, and Stealth-style differential for improved diff action and handling, your Associated 12L series car is going to be even more competitive than before. You will no longer have to worry about pinning diff drive rings because your new design locks the drive rings for you.

STEP 1 Install a diff drive ring (b) onto the axle (a), centering it on the axle hub, the shinier, rounded side of the ring against the diff hub. Slide one of your 1/4 x 3/8 unflanged ball bearings (c) onto the axle.

STEP 2 Install the six 1/8" diff balls (f) into the inner ring of the diff ball holes of your Kimbrough spur gear (d). Now fill the six holes used for the diff balls with diff lube (e) on both sides. Slide the gear onto the axle, fitting it over the ball bearing.

STEP 3 Center your other diff drive ring (g) over the diff balls (f), the shinier, rounded side facing away from the balls. Insert the 1/4 x 3/8 unflanged ball bearing (h) into the Stealth diff hub spacer (i). Push the diff hub spacer (i) onto the axle, bearing side first. Center it on the diff drive ring.

STEP 4 Install one of your Associated wheel/tire combos (j) onto the axle hub (i), then a 1/4 x 3/8 unflanged ball bearing (k) over the axle and into your wheel. Install the diff thrust cone (l) onto the axle with the small hole end first. Slide the three coned belleville washers (m) over the axle with the raised, center section pointing away from the wheel. Thread on the 8-32 nylon locknut (n) and just snug it down for now. (Note: this diff is designed for Associated rear wheels. We have not tested other brands for compatibility. If you want to use non-Associated wheels, it is your responsibility to test them to see if they will work.)

STEP 5 RACER'S SETUP: The right wheel is clamped into the diff, and not bolted onto the right diff hub as is done in most 1:10 scale cars. This is common to most 1:12 scale cars and was done to reduce weight. So the wheel doesn't slip separately from the diff, pin the wheel to the diff hub spacer with the 1/16" roll pin (o, fig. 2) as follows. With the diff completely assembled, drill a hole through one of the wheel screw mounting holes into the diff hub spacer (i) with a 1/16" drill bit and power drill. Now disassemble the diff and, using a pair of pliers, press the roll pin (o) into the hole you just drilled, enough so the pin sticks out the back of the hub spacer slightly. Reassemble the diff according to Steps 3-4.

STEP 5

fig. 2

Letter	Description	Part #	Qty
(a)	Stealth diff graphite rear axle	4451	1
(b, g)	Stealth diff drive rings	6579	2
(c, h, k)	1/4 x 3/8 unflanged ball bearings	7359	2
(f)	1/8" diff balls	3432	16
(i)	Stealth diff wheel hub	4452	1
(j, m)	Diff thrust cone assembly	8213	set
(n)	8-32 nylon locknut	4185	6

OTHER PARTS NOTED					
Letter	Description	Part #	Qty		
(e)	Associatd diff lube	6636	2 oz.		
(f)	1/8" carbide differential balls	6619	8		
(j)	Rear wheels, no tires	3610	pair		
(j)	Rear wheels/tires, green, trued	3635	pair		
(o)	1/16" roll pin	6572	6		

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