

Axle and Sprocket Options, Assembly Instructions

SPECIFICATIONS

HOUSING:	High strength die cast aluminum alloy
BEVEL & PINION GEARS:	High quality, steel cut gears
AXLES:	Stress-proof steel
BEARINGS:	Self-lubricating
MAXIMUM TORQUE:	Static tested to 500 ft. lbs
WEIGHT:	7 pounds
LUBRICANT:	Bison Grease #1650
OPTIONS:	Splined output shafts available in different lengths and final drive sprockets

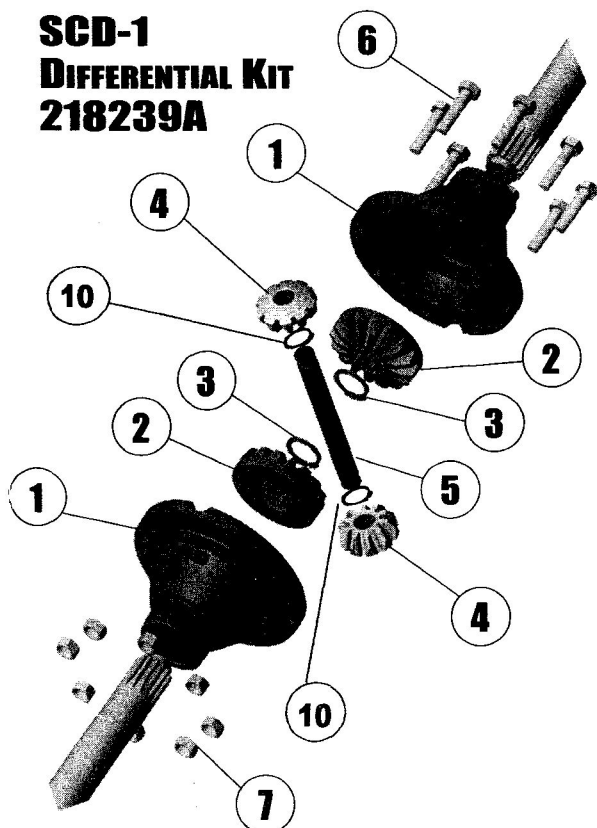
NOTE: Differential installation requires 1 bearing mount inboard and 1 mount outboard per axle (side).

FEATURES

The Comet SCD-1 has been constructed with a heavy duty die cast aluminum housing, tapered in design to give added strength to the unit. The pinion gears and straight beveled gears are high quality steel cut gears. Coupled with bearings that are self-lubricating, the unit requires a minimum of maintenance and will give maximum performance at a reasonable cost. The SCD-1 is designed for applications where conventional differential action is required.

APPLICATIONS: Utility Vehicles, Go-Karts, Line Marking Equip., Floor Care Equip., Turf Equip., Industrial Equip.

SCD-1 DIFFERENTIAL KIT 218239A



Item No.	Part No.	Description	Qty.
1	208167A	Diff Hsg w/Brg	2
2	See Kit*	16T Bevel Gear	2
3	-----	Retaining Ring	2
4	See Kit^	10T Pinion Gear	2
5	-----	Pinion Shaft	1
6	See Kit‡	5/16-18x1-1/2 Hx Hd Bolt	8
7	-----	5/16-18UNC Nut	8
8	218240A	Grease Pk	1
9	218241A	Sealant	1
10	-----	O Rings	2

*16T Bevel Gear Kit 217841A includes Item Nos.: 2,3,8 & 9

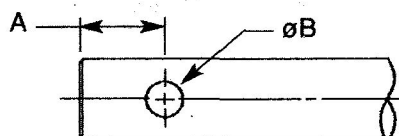
^10T Pinion Gear Kit 217840A includes Item Nos.: 4,5,8,9 & 10

‡Nut & Bolt Kit 218237A includes Item Nos.: 6 & 7

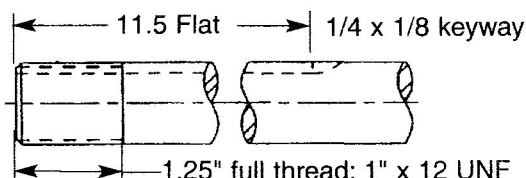
Listed to the right are
manufactures that
we have supplied
differential systems to
and their axle shafts
replacement part numbers.

Company	Axle Shafts
Power Tec	215934A & 215935A
T & D	216482A & 216480A
Carter	215777A & 215776A
Ken Bar	214126A & 214134A
Kartco	217317A & 217318A
Jacobson	215773A & 215775A

AXLE OPTIONS: ALL AXLES ARE 1" IN DIAMETER AND ARE SPLINED TO FIT THE BEVEL GEARS



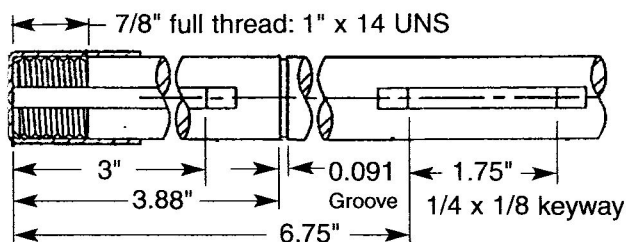
Part No.	A	øB	* Actual Lg.
215934A	1"	0.437	27.73"
215935A	1"	0.437	21.98"
217407A	0.75	0.375	4.67



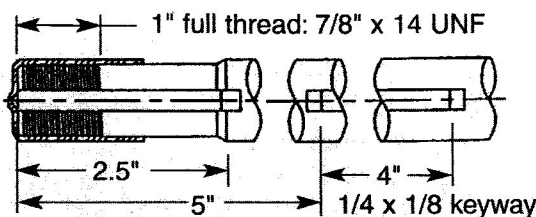
Part No.	* Actual Lg.
216482A	15.37"

SPROCKET OPTIONS:

Available with
an eight hole
pattern
to fit
Differential



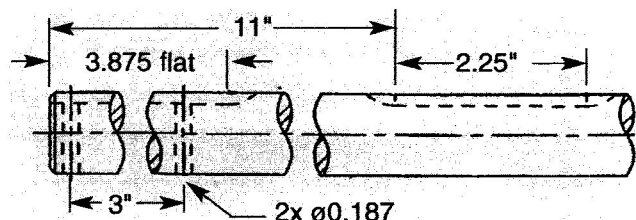
Part No.	* Actual Lg.
217317A	12.70"
217318A	24.78"



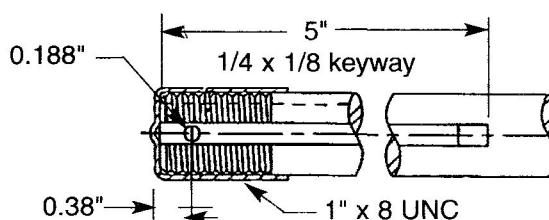
Part No.	* Actual Lg.
214126A	15.32"
214134A	24.57"

216525A
72 Tooth 41 Pitch

217220A
54 Tooth 41 Pitch



Part No.	* Actual Lg.
215773A	15.73"
215775A	17.23"



Part No.	* Actual Lg.
215777A	27.73"
215776A	16.23"

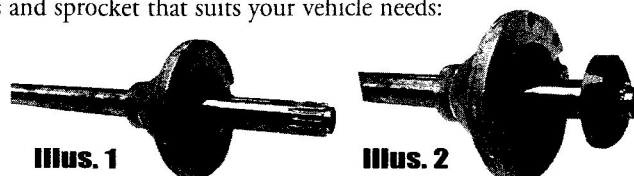
*
For overall
length,
add the two
axle lengths
and
add 0.54"

ASSEMBLY INSTRUCTIONS After you have selected the set of axle shafts and sprocket that suits your vehicle needs:

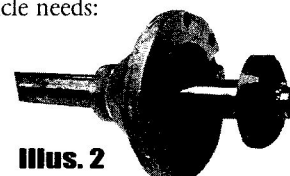
Insert one of the axle shafts through the large end of the differential housing (us. 1). ② Install the bevel gear onto the shaft with the flat side of the gear to : inside of the housing (Illus. 2). ③ Install the retaining ring onto the end of : shaft in the retaining ring groove (Illus. 3). Pull on the shaft to set the : aining ring. Do these operations to both axle and differential halves.

Apply a bead of sealant 360 degrees around the flange of one of the hous- : gs. The bead must be consistent, without breaks and in the groove where : pinion shaft will be located (Illus. 4). ⑤ Insert the pinion shaft with the : o pinion gears into the center of the housing making sure that the shaft is : sitioned in the grooves of the flange. The pinion gears must be positioned on : shaft with the flat side of the gears to the inside of the shaft and mesh with : bevel gears. Apply sealant over the pinion shaft that is in the flange area : us. 5). ⑥ Place the provided grease into the center of the housing that has : pinion shaft and gears (Illus. 6). CAUTION: Do not allow the grease to : ich the flange of the housing, as this may inhibit the sealant's ability to seal : differential. ⑦ Place the housing with the gears and grease in an upright : sition and place the other half of the differential directly over the top, align- : the pinion shaft grooves in the flange. (Illus.7). ⑧ Slide the sprocket over : axle shaft and line up the bolt holes in the differential housing Push one : lt through housing and sprocket then snug down the nut. (Nut must be next : sprocket Illus.8.) Do the same with the remaining seven nuts and bolts. : eck the axle shafts, rotate by hand to assure that the gears are in the correct : sition and no tight spots. Torque all nuts 13-15 ft/lbs.

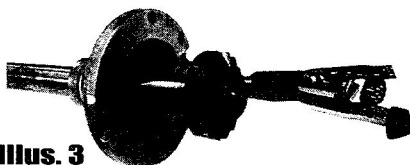
OTE: When installing differential make sure you have one bearing mount : board on each axle and one bearing mount outboard on each axle.



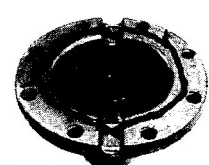
Illus. 1



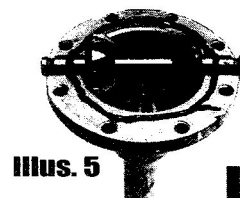
Illus. 2



Illus. 3



Illus. 4



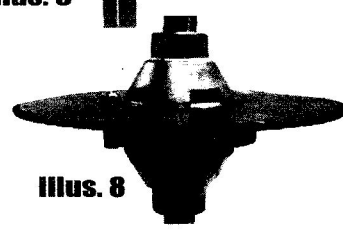
Illus. 5



Illus. 6



Illus. 7



Illus. 8