Club Car DS Long Travel Lift Kit 1981-2004.5 DS Electric P#6235 1996.5-2004.5 DS Gas Part# 6235 1981-1996.5 DS Gas Part# 7470 2004.5 & Newer DS Gas/Electric Part# 6238 U.S.PAT. 7581740



Z P C OTY

<u>ITEM</u>	•	QTY
A. JAKES SUB-FRAME	1	
B. TOP FRAME SUPPORT	1	
C. CHROME FRONT BUMPER & MOUNTING BRACK	KET 1	
D. 3/8" X 1" BOLTS & NUTS FOR FRAME SUPPORT	6	
E. 17" CHROME COIL OVER SHOCKS	2	
F. PASSENGER SIDE TOP A-ARM	1	
G. DRIVER SIDE TOP A-ARM	1	
H. PASSENGER SIDE BOTTOM A-ARM	1	
I. DRIVER SIDE BOTTOM A-ARM	1	
J. 7/16"X 3 1/2" BOLTS NUTS & SPACERS	2 EA	
K. STEERING EXTENSION	1	
L. STEERING BOX	1	
M. ½" X 6" KINGPIN BOLT AND NUT	2 EA	
N. 7/16" X 1 1/4" BOLTS AND NUTS	8 EA	
O. 7/16" X 5 1/2" BOLTS AND NUTS FOR SHOCKS	2 EA	
P. WARNING LABEL	2 EA	
R. NUTS AND BOLTS FOR REAR LIFT	8 EA	
S. PASSENGER SIDE SPINDLE	1	
T. DRIVER SIDE SPINDLE	1	
U. 5/16" X 4" BOLTS, NUTS & WASHERS FOR STEER	RING BOX 3 EA (N	OT PICTURED)
V. ¼" X 1 1/2" BOLT & LOCKNUT FOR STEERING EX	XT. 1 EA (N	OT PICTURED)
W. 3/8" X 1 1/4 BOLT & LOCKNUT FOR STEERING EX	T. 1 EA (N	OT PICTURED)
X. REAR SHOCK MOUNTS	2	
Y. ½" U-BOLTS FOR REAR	2	
Z. 5/16" X 1" BOLTS & NUTS FOR JPLATE & BUMPE	CR 6 EA	
Z-1. SHOCK SUPPORTS & 7/16 X 1 1/4 BOLTS & LOCK	KNUTS 2 EA (N	OT PICTURED)

FRONT ASSEMBLY

Always wear appropriate ye protection!

- 1. Place the cart on jack stands.
- 2. Remove front wheel/tires.
- 3. Remove the front cowl.
- 4. Completely disassemble the front of the golf cart. Save the 2 stock 3/8" bolts, nuts, & hubs for reinstallation.
- 5. Mount Jakes sub-frame (ITEM A) to the stock sub-frame location using the supplied nuts and bolts (ITEM D) **NOTE: NUTS MUST FACE THE FRONT OF THE CART**. Using the stock nuts and bolts mount the subframe to the frame as shown in Figure 2. **NOTE: NUTS MUST GO ON** TOP OF THE FRAME FOR STEERING BOX CLEARENCE.
- Figure 1
- 6. Line the holes in Jakes top frame support (ITEM B) with the holes on the frame as shown in Figure 3. NOTE: Some models both the center holes will line-up. On other models only 1 center hole will line-up. You will need to drill the remaining 2 or 3 holes 5/16" to mount the top frame support to the cart.
- 7. Mount Jakes top frame support (ITEM B) to the frame and Jakes sub-frame (ITEM A) using the supplied nuts and bolts (ITEM D) as shown in Figure 4. NOTE: All bolts must inserted from the rear of the cart. The nuts must be on the front of the frame support (ITEM B) as shown in Figure 4.

Figure 2



Figure 3

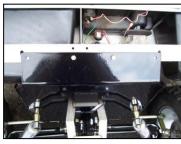
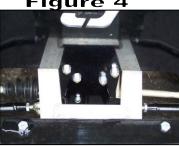


Figure 4



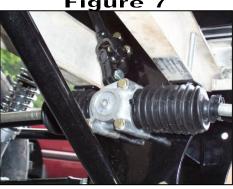
- Mount Jakes coil over shocks to the top frame support (ITEM B) with the appropriate hardware (ITEM J) and shock supports (ITEM Z-1) as shown in Figure 5. NOTE: The larger end of the shock spacer goes against the frame support. **NOTE:** There are several locations to mount your shocks. Outside holes are for a stiffer ride and inside holes are for a softer ride. The top hole on the outside is for a 6" lift. Each hole below lifts the cart an additional 1".
- 9. Mount Jake's bottom A-Arms (ITEMS H & I) to the sub-frame using the appropriate hardware (ITEM N) as shown in Figure 6. NOTE: A-Arms are marked P-Top, P-Bottom, D-Top, D-Bottom. P=passenger side, D=Driver side.
- 10. Mount the shocks to the bottom A-Arms using the appropriate hardware (ITEM O) as shown in Figure 6.
- 11. Mount Jake's top A-Arms (ITEMS F & G) to the sub-frame using the appropriate hardware (ITEM N) as shown in Figure 6.





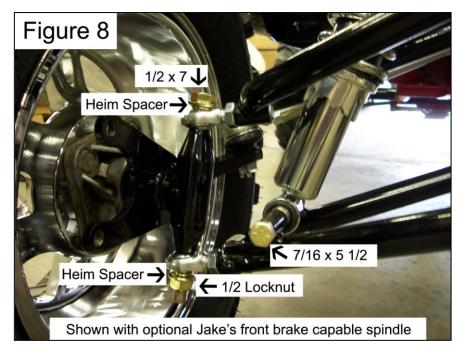


Figure 7



FRONT ASSEMBLY CONTINUED

- 12. Attach Jake's spindles (ITEMS S & T) to the A-Arms using the supplied nuts & bolts (ITEM M).
- 13. Mount Jake's steering extension (ITEM K) to Jake's steering box (ITEM L) using the supplied nut and bolt (ITEM W).
- 14. Loosely mount Jake's steering extension to the stock steering column using the supplied nut and bolt (ITEM V). Loosely mount Jake's steering box to subframe (ITEM B) using the supplied nuts, bolts & washers (ITEM U). NOTE: WASHERS MUST GO BETWEEN SUB-FRAME & STEERING BOX. SECURELY TIGHTEN ALL BOLTS AS SHOWN IN FIGURE 9.



- 15. Attach the tie rod ends to the spindles as shown in Figure 8.
- 16. Install the stock hubs to the spindles using the stock hardware. For 2004.5 & newer DS models with plastic dust covers on the front hubs use the supplied slotted nuts & cotter pins for mounting the hubs to the spindles.
- 17. Install recommended 23x10.5x12 or 22x11x10 wheels/tires (wheels must be offset). **NOTE:** Your stock wheels/tires will not work.
- 18. Adjust toe-in. Proper toe-in should be approximately 1/8" in.
- 19. Mount Jake's chrome front bumper (ITEM C) to the frame using the mounting bracket and supplied nuts and bolts as shown in Figure 10.
- 20. SECURELY TIGHTEN ALL NUTS AND BOLTS.





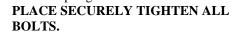
Figure 10



REAR INSTALLATION

- 1. Jack up the rear end of the cart and place jack stands on the frame in front of the springs. You will be installing larger wheels and tires so raise the cart high enough to accommodate the additional height. Place a car jack under the rear-end housing of the cart.
- Remove the wheels and tires.
- 3. Remove the U-bolts from the rear axle on both sides of the cart.
- 4. Remove the leaf spring shackle bolts and unhook the bottom of the rear shocks. Clean and lubricate all hardware and save for reinstallation.
- Remove the springs from under the axle on both sides of the cart. Using the car jack lower the rearend of the cart.
- 6. Place the provided allen cap bolt in the center hole of lower stock brake cable mount plate. (allen head up to center plate under rear axle)
- 7. Look at the picture of the rear lift provided. The bottom two holes that the u-bolts go through need drilled out to ½". The larger u-bolts provide maximum strength.
- 8. Place JAKES rear lift mounts (Item Y) over the axle, with the shortest end pointed towards the front of the cart. Line the axle with the supplied allen cap screw (Item R).
- 9. Place the springs on the top of the rear lift mounts with the center bolts of the springs in the hole of the rear lift mounts. Using the stock hardware loosely mount the front of the rear leaf springs to the stock leaf spring mount.
- 10. Place JAKES top rear shock mounting plates (Item X) over the springs with the shock mounts facing in and to the rear.
- 11. Put the U-bolts (Item Y), through JAKES shock mount plate and through the factory shock mount plate. Using the supplied nuts (Item R), tighten the U-bolts. **Securely Tighten**
- 12. Using the factory nuts and bolts attach the shocks to the new shock mounts. NOTE: IF YOUR REAR SHOCKS HAVE AN EYE-LIT ON USE THE SUPPLIED 7/16 X 1 BOLTS AND NUTS TO ATTACH THE SHOCKS TO THE NEW SHOCK MOUNT.

13. Using the stock hardware bolt the rear of the leaf springs to the rear leaf spring mount. **ONCE REAR IS ALIGNED AND IN**



- 14. Install JAKES recommended wheel and tire size 23x10.5x12 or 22x11x10 wheels and tires with a 3 x 5" offset for maximum performance. NOTE: Your stock wheels and tires will NOT work!
- 15. Included is a warning label (Item P) which is to be placed on the steering column or another visible area and is to be read by all operators.





Figure 11



Indemnification And Insurance Agreement

High Performance Enhancement Kit purchaser assumes sole and entire responsibility for, and shall indemnify and save harmless Nivel LLC, from any and all claim, liability, responsibility, and persons or property that may be sustained in connection with the use of any product before or after purchase, including but not limited to high performance enhancement lift kits. The High Performance Enhancement Kit purchaser also shall indemnify Nivel LLC harmless with respect to any and all liability that may be incurred.

Golf Cars are recommended for use only by those aged 16 and older. Golf Cars are recommended for use only by those aged 16 and older. Golf Cars can be especially hazardous to operate. Always remember that riding and alcohol/drugs don't mix. Never ride on public roads. Never carry more than two passengers (except shuttles and trams). Never engage in stunt driving. Avoid excessive speeds and be particularly careful on difficult terrain. Nivel LLC reserves the right, at any time, to discontinue or change specifications, prices, designs, features, models, or equipment without notice and without incurring any obligation.



