CORVETTE

UNIT DISASSEMBLY for REPAIR

Major component service instructions

FLIPPERSPILL.COM
RACE TRACK

A. To Remove Track From Game
1. Unplug cables, two from behind back panel, one from underneath play field.
2. Remove two screws from back side of back panel
3. Remove three screws securing X-mass tree. (two on top, one in wood rail.)
4. Remove cable.
5. Remove two screws in bracket under X-mass tree bracket.
6. Lift race track out of game.

B. To Service Track
1. Turn unit over so it is up side down.
2. Remove four screws from bottom of track.
3. Remove two screws securing side rail (wireform) on race track.
4. Remove stainless steel bracket from bottom of track.

SIDE VIEW
C. Track limit Board  1. Remove two screws from board. Lift and rotate board and remove from unit. Repair or replace board. Reassemble in same manner.

D. Track Opto Board  1. Remove cords, (see changing cord and springs). remove two screws and lift board up and out. Repair or replace board. Insert board and two screws. Reattach cords and springs.

E. Cord and Springs  1. Slide car to center of track.  
2. Unhook spring from wire loop attached to car chassis.  
3. Remove spring from cord loop.  
4. Spread track slot and car will fall out of plastic frame.  
5. Unthread cord from opto pulleys and gear train.  
6. Remove cord from car chassis.  
7. Reverse steps to reassemble.

F. Gear Train  1. Remove cords and springs.  
2. Remove cable harness from screw bosses at wire ties.  
3. Remove connectors from both circuit boards.  
4. Turn track right side up  
5. Remove three 4-40 flat head screws from top side of track.  
6. Holding gear box from falling out of track and turn track over.  
7. Lift gear box out of track.

CAUTION: THE AXLES IN THE GEAR BOX ARE LOOSE THEY WILL FALL OUT, LIFT THE GEAR BOX OUT CAREFULLY

G. To remove motors  1. Slide the axles out of the gears and metal bracket.  
2. Work from the pulley gears in toward the motors.  
3. Remove the gears before removing the motors  
4. Remove screws on back side of gear box frame.  
5. Two screws secure the motor and the motor bracket.  
6. To reassemble reverse the procedure.

NOTE: When building the gear box insert the gears from the motor out to the pulley gears.  
As you insert one axle and two gears you can put a piece of tape over the ends of the axles to keep the axles from falling out while working on the other gears.

When reassembling the gear train be sure to reapply grease to all gears. After assembling the gear train back into the race track check for proper backlash in the gear train. There should be a slight amount of movement between all the gears.

If there is no clearance between the pinion gear and the first gear on the right side of the assembly you made need to SLIGHTLY bend the motor bracket up. This will remove some pressure from the gear train and allow for the proper amount of backlash in the system. Insufficient backlash will cause excessive wear in the gear train, and shorten the life of the mechanism.
REMOVE COMPLETE ENGINE MECH FROM PLAY FIELD

1. Remove plastic LT-5 cover from engine mech. (2 screws)
2. Remove play field plastics on both sides of engine. (6 screws)
3. Remove garage proper wire. (2 screws, 1 nut)
4. Remove two screws holding race ramp brackets in back panel.
5. Remove Left wire. (1 screw, 1 nut)
6. Unplug all connectors:
   a. Four from front of ramp.
   b. Two from behind coils.
   c. One from gate at back of ramp coming from inside engine.
   d. One from coils.
7. Remove screws in ramp. (2 in front, 1 in side rail in back, 1 in ramp guard)
8. Lift up play field remove 2 screws holding engine from under side of play field.
9. Put play field down, remove engine assembly. Lift back of engine first and push back toward back panel. Lift up and look to see if coils are clear of cut out as you remove the assembly.
10. Reassemble in reverse order.

NOTE: when assembling plastic LT-5 cover be sure sides of engine are clipped into the spring clips on both sides of the slotted engine head plates.
REMOVE RAMP ONLY FROM ENGINE ASSEMBLY

1. Remove plastic LT-5 cover from engine motor. (2 screws)
2. Remove play field plastics on both sides of engine. (6 screws)
3. Remove garage popper wire. (2 screws, 1 nut)
4. Remove two screws holding race track ramp brackets in back panel.
5. Remove Left wire. (1 screw, 1 nut)
6. Remove right side plastics mounting bracket. (2 screws)
7. Remove screws on each side of engine, by slotted plate. (4 screws) Pull sides of engine up and off of mechanism.
   Use a right angle screwdriver
8. Remove screws in engine ramp. (3 screws)
9. Remove screws in ramp assembly. (2 in front, 1 in side rail in back, 1 in ramp guard)
10. Unplug all connectors.
    a. Four from front of ramp.
    b. One from gate at back of ramp.
11. Remove ramp from game.
12. Reassemble in reverse order

FRONT GATE COIL
FRONT OPTOS
ENGINE LIMIT SWITCHES
HALL EFFECT SENSOR
ENGINE COILS (4)
BACK GATE SWITCH
ENGINE RUBBERS
ENGINE BEARINGS

REMOVE RAMP ONLY
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REMOVE ENGINE ASSEMBLY
LIFT PLAYFIELD VERTICALLY AND ACCESS
REMOVE RAMP PROCEDURE STOP AT THE RAMP REMOVAL
STEP, FIX SWITCH
REMOVE PLASTIC LT-5 COVER, REPLACE RUBBERS
REMOVE RAMP
REMOVE AXLE PIN SCREWS (4-2 FRONT, 2 REAR)
REMOVE HAIRPIN, WASHERS, AND LINK BRACKETS FROM PINS
REMOVE ROCKER BRACKET
REPLACE BEARINGS