**List One: Basic 20’ Diameter Carousel Operating Kit Inventory**

1. **Centerpole**: 12’ x 8.5” diameter wooden pole, painted steel crown with thrust bearing with zirk lube fitting and wired-in electrical commutator for rotating frame lights (lights not included). Total height of carousel when set-up on base also with electrical commutator on top is 12’-6 ½”, for clearance and installation the interior height of the pavilion center needs to be 14’.
2. **Base**: Wooden 6” x 6” x 6’ with 4” x 4” x 46” diagonals and hot dip galvanized pole base with tightening rods.
3. **Ring Bearing**: Hot dip galvanized; includes attached 76-cog 50-pitch chain main drive sprocket.
4. **Guy Rods**: Hot dip galvanized; 10 (10’-6” x ½” diameter) for Sweeps, 4 (5’-6” x ½” diameter) for Ring Bearing, with washers and hitch pins.
5. **Pinion Rack**: Hot dip galvanized (adjustable pillow block, pinion, chain and shaft not included).
6. **Sweeps**: 10 wooden Sweeps (2” x 3 ¼” x 9’-6”) with hot dip galvanized end-brackets, tabs and hooks.
7. **Rounding Boards**: 10 wooden Rounding Boards with galvanized brackets (approx. 70” x 7-1/4” ea.).
8. **Shields**: 10 wooden Shields with galvanized brackets (approx. 9-1/4” x 14” ea.).
9. **Poles**: 8 (1-3/8” o.d. x 5’-6”) painted steel poles with animal set pins.
10. **Swan Chariot**: double rider chariot with painted pole hanger.
11. **Kangaroo + Joey**: with stirrups and reins.
12. **Boar**: with stirrups and reins.
13. **Deer**: with stirrups and reins.
14. **Skunk**: with stirrups and reins.
15. **Cougar**: with stirrups and reins.
16. **Bunny**: with stirrups and reins
17. **Two Animals to be determined by you.**
18. **Animal Pole Sleeves**: Hot dip galvanized.
19. **Swing Seats and Struts**: 5, with hanging hardware.
20. **Ring Catcher**: with stand and complete set of rings and spares. Contact info for replenishment rings provided.
21. **Motor Mount**: attaches near Right Angle Bevel Gear Box
22. **Plexiglas Rounding Board Mirrors**

Carousel as listed above can carry 10 or 15 riders, adults or children and operate simply by pulling a rope-attached overhead to the chariot sweep. No motor or other power is actually needed. Lightweight scenic panels which can also be used as templates for heavy duty panels, are included and can be used right away then upgraded later.

**List Two: Possible Additional Options to Basic Carousel**

\* = item which is absolutely required for permanent operation.

1. **Power Train**: Adjustable Pillow Block (bolts on top of Pinion Rack), Pinion Gear (depending on desired ratio; 23-cog 50-pitch), 50-pitch Chain, Vertical Drive Shaft 1-3/16” diameter, 2:1 Right Angle Bevel Gear Box, Coupling Set.
2. **Hand Crank Wheel**: attaches directly to Right Angle Bevel Gear Box. (See McMinnville TN Carousel, MGR #7 or Port Townsend WA Carousel, MGR #8).
3. **110 Electric ¾ h.p. Motor**: attaches near Right Angle Bevel Gear Box, needs ½” V-belt pulleys and belts and off/on switch. This configuration works well in conjunction with the Hand Crank Wheel option, they are both easy to operate and maintain. To switch between the two merely lift motor with one hand and remove or place V-belt with the other (See Madison CT Carousel, MGR #9 or Port Townsend WA Carousel, MGR #8).
4. **Foot-Pedal Station**: needs additional right angle gear boxes and horizontal drive shaft that allows pedaling station to be located outside the perimeter of the ride. (See Olympia WA Carousel, MGR #4, or Davis CA Carousel, MGR # 5).
5. **Lights on rotating frame**: Attach to commutator power outlet at top of crown. Powered to lower section of Centerpole.
6. **Stencils and Mirrors**: on Rounding Boards and Shields (use Plexiglas mirror material), fancier more curved artistic rounding boards can easily be attached using existing hardware.
7. **Lower Scenic Panels**: 8 rectangular panels, approx. 2’-6” x 5’ ea., these fit right around the base and are stationary. One of the panels is fitted as an entry door to the middle of the carousel. (Note: sturdy full scale and useable templates are provided with the mechanism, heavier duty panels can be made later.)
8. **Upper Scenic Panels**: 10 trapezoidal panels, approx. 3’ x 1’-6” ea., these attach underneath the sweeps and rotate with the upper frame. (Note: sturdy full scale and useable templates are provided with the mechanism, heavier duty panels can be made later.)
9. **Clown Face Ring Target**: This can be a variety of designs, basically a place for riders to toss rings and operator to collect rings.
10. **Music**: A CD or other electronic sound system with 2 or 4 speakers mounted on the Lower Scenic Panels of the carousel. An external off/on switch needs to be in place to control music so it only plays while ride is in motion, average ride is 2.5 to 3 minutes. I can supply a CD of band organ style tunes made for carousel operation, all the tunes are 2.5 to 3 minutes long.
11. **\*Crowd Control Fence with Single Gate**: Needs approximately a 22’ diameter, a little more if possible this fence has only one control gate which clicks shut.
12. **\*Pavilion**: Typically an 8 posted structure with a stress ring top plate. Rafters converge in the middle with no center post. A cupola can be built on top (see Davis CA, MGR #5 or Madison CT, MGR #9 carousels for good pavilion examples). The carousel must be under a pavilion, otherwise the sun, wind, water, and dirt will slowly kill it. The steel sweep ends each have two eye tabs to attach a protective vertical skirt to the outer perimeter of the rotating carousel frame, rolled-up when in operation. Minimum diameter at shortest radius to top plate/compression ring is 24’, the eaves of the pavilion structure will be 2 to 4 or more feet than that.

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