

Instructions and Parts List



TM-12W Mini Castle

MARTIN SAFETY SYSTEM with WINCH

NOTES: (1) The complete system is packed in two boxes — post box and house box. House box contains hardware for both post and house assembly. 2) It is necessary to install post before house is put up, but house can be assembled at any time.

Congratulations you have just purchased one of the finest martin houses manufactured in the U.S.A. today. With minimal care you have a house that will provide both you and your martins many years of enjoyment. Please read the following instructions carefully and check the contents of this box and the post box with the parts inventory. Everything possible has been done to assure the quality and quantity of the contents. If you have a discrepancy or a problem please do not return to the store where you purchased it. Notify us immediately by the toll free number or the e-mail address listed in this instruction sheet. We welcome both your questions and comments.



Recommended tools useful for house assembly besides kit wrench (Item 17) provided:

- 1 small, common screwdriver
- 1 medium, common screwdriver
- 1 each 1-1/4" ratchet set
or a 5/16", a 3/8" and a 7/16" wrench

HOUSE PARTS PACKED IN THIS BOX

<u>Code #</u>	<u>Item</u>	<u>Qty.</u>	<u>Description</u>
827439	1	1	Bottom floor with plate
827400	2	1	Top floor
827423	3	1	Ceiling with plate and C nuts
827406	4	6	Riveted divider
827407	5	6	Riveted modified divider
827410	6	6	Riveted roof with C nut
27415	7	1	Roof finial
26241	8	12	DN-2 floor tray
25040	9	12	MH door
827428	10	1	Riveted roof perch
25065	11	12	Winter door stop
25075	12	6	Divider plug
65648	13	12	Door rod
28425	14	6	6-32x13 tie rod

17



18



19



20



21

#900051 Parts Packed in House Hardware Bag

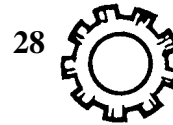
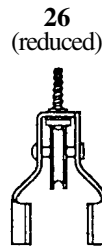
27300	17	2	Kit wrench
35288	18	12	6-32 acorn nut
35259	19	12	6x3/8 Stainless steel sheet metal screw (SSMS)
32022	20	6	#4 external tooth lock washer
35261	21	12	6-32x5/16 Stainless steel pan head machine screw (SSPHMS)
35265	22	12	6-32 Stainless steel keps nut



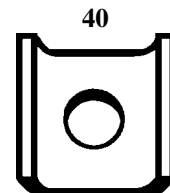
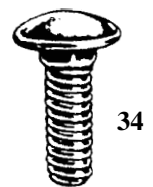
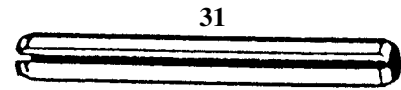
22

#975375 Parts Packed in Winch Box

<u>Code #</u>	<u>Item</u>	<u>Qty.</u>	<u>Description</u>
728206	23	1	Safety handle with clamps
728040	24	1	23' stainless steel cable
928000	25	1	Winch with cover and clamp
732001	26	1	Pulley assembly

**#900020** Winch and Post Hardware (packed inside winch box)

32020	28	1	5/16 external star lock washer
32019	29	1	1/4-20 insert nut
32009	30	1	1/4-20x1-3/4 hex head machine bolt (HHMB)
32004	31	1	1/4x2 slotted spring pin
43550	32	4	1/4 lock washer
42500	33	4	1/4-20 hex nut
30052	34	4	1/4-20x3/4 carriage bolt
35264	35	1	10-32x1/2 self-threading screw
20416	36	2	Link
28024	37	2	1-1/2 "B" clamp
20414	38	2	1-1/4 "A" clamp
40525	39	2	10-24 insert nut
28032	40	1	UHF clip

Parts Packed in Post Box

27856	41	1	1-1/4x60-1/2 post top section
27858	42	1	1-1/4x76 post center section
27850	43	1	1-1/2x74 post bottom section
28410	44	1	1-3/4x22 TGS ground socket
28024	45	2	1-1/2 "B" clamp
30053	46	2	1/4-20x1-1/4 carriage bolt
43550	47	2	1/4 lock washer
42500	48	2	1/4-20 hex nut

NOTE:
 post top section (41)
 is packed INSIDE
 post bottom section (43)

BEFORE STARTING ASSEMBLY: Wipe protective oily coating from all parts' surfaces prior to assembly. Read all instructions before starting assembly. This will acquaint you with each step. The exploded view of house on page 4 shows each major part numbered to correspond with item numbers on pages 1 and 2.

To order Nature House products, parts,
 or accessories call 877-833-2478
 or 800-255-2692

E-mail <natsoc@adams.net>

*Please use product code number
 when ordering parts*



Standard
12 compartments

NEW!

TM-12W with optional enlarged compartments

MARTIN SAFETY SYSTEM

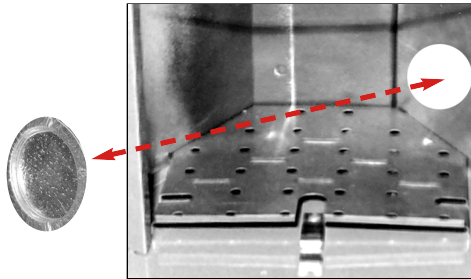


Converted to
6 compartments

A SUPERIOR QUALITY NATURE HOUSE PURPLE MARTIN HOUSE THAT NOW
OFFERS A CHOICE OF REGULAR 6"x6" COMPARTMENTS
OR ENLARGED 6"x12" COMPARTMENTS
BY SIMPLY INSTALLING OR REMOVING PLUGS FROM HOUSE DIVIDERS

CAUTION: It is important that regular nest checks be conducted during the nesting season when enlarged compartments are in use to make sure that martins are not trapped inside. It has been noted that sparrows may build a nest in front of the martin nest, trapping baby and/or adult birds.

NOTE: Dividers to be used in modifying the house now have a hole with plugs inserted. Leaving the plugs in place will keep the original 6"x6" compartments intact **OR** removing the plugs from those dividers will result in a modified house with enlarged compartments.



Not to scale — for illustration only

**Instructions to modify compartments on your newly constructed TM-12W*

1. Remove plug from one center divider and from two side dividers on each floor.
2. Install starling resistant entrance Crescent Door on compartment front.
3. Install a Winter Door Stop **OR** a Blank Door at back of compartment.

**Once house has been put together, follow the above instructions to modify your TM-12W martin house from a 12-compartment to a 6-compartment house.*

TO ENLARGE THE COMPARTMENTS, simply remove plugs and replace doors with crescent entrance doors. Enlarged compartments create a dark cavity which is inviting to starlings, thus starling resistant crescent entrance doors are suggested to prevent starling predation.

***Crescent Door**



**CD-12 (12 pak)
CD-6 (6 pak)**

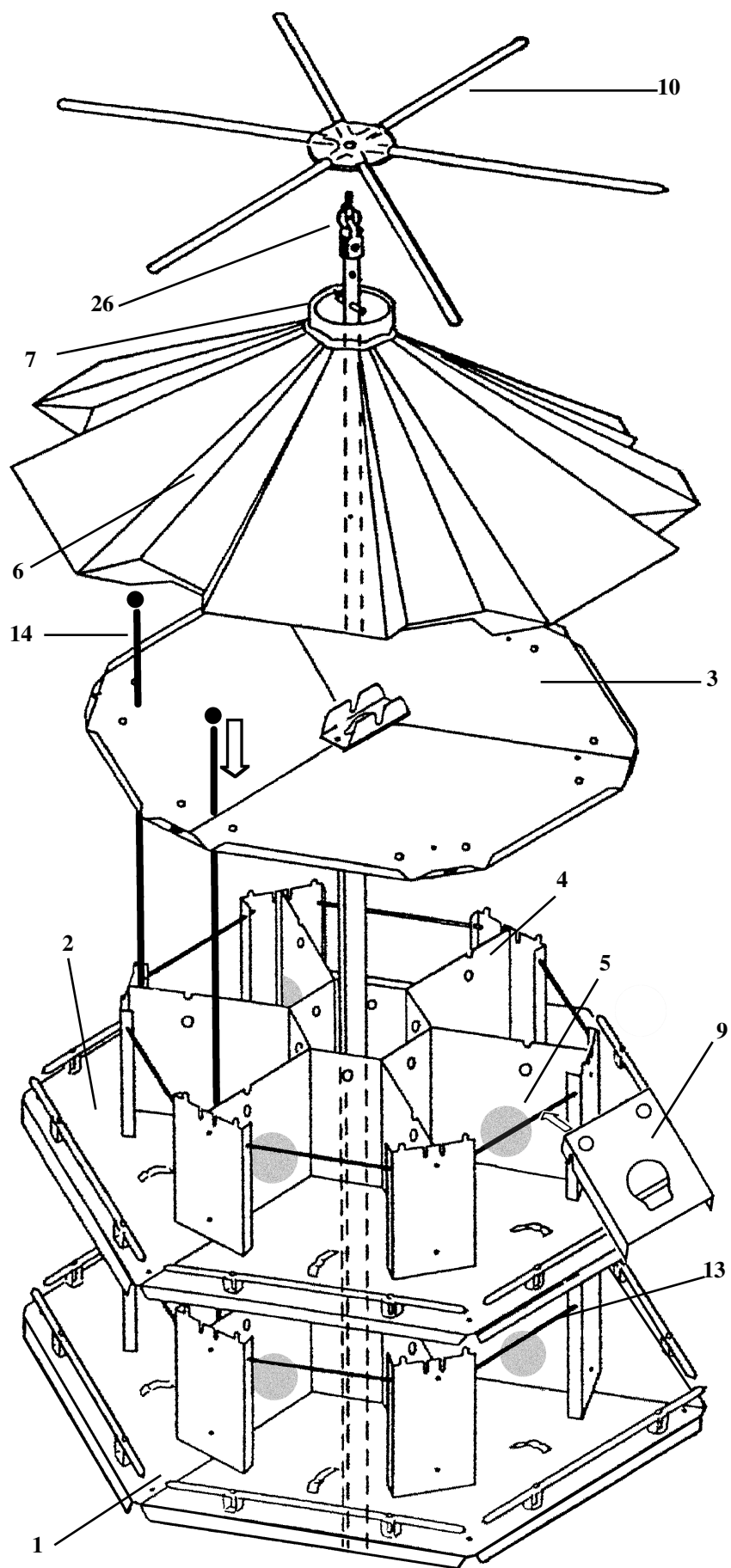
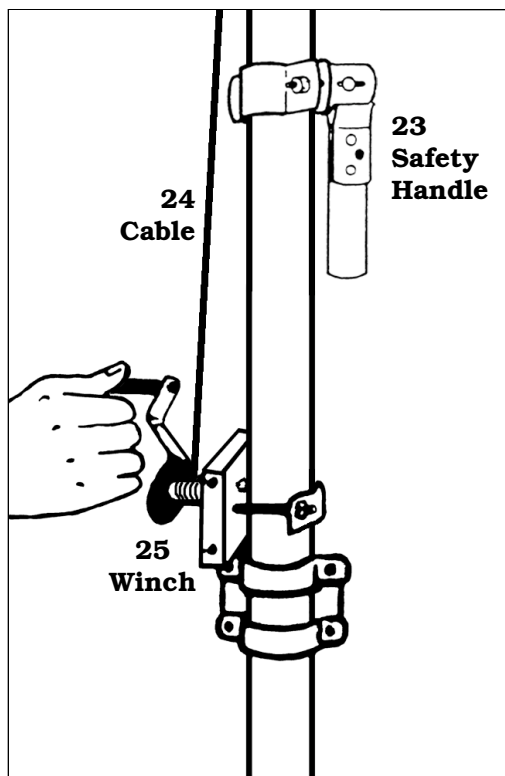
***Blank Door**



**BD-12 (12 pak)
BD-6 (6 pak)**

***NOT INCLUDED WITH HOUSE KIT - ORDER SEPARATELY**

Call 800-255-2692 to order Crescent Doors (12 pak or 6 pak); Blank Doors (12 pak or 6 pak)



TM-12W HOUSE ASSEMBLY INSTRUCTIONS

NOTE: Both the ceiling and bottom floor have center plate attached.

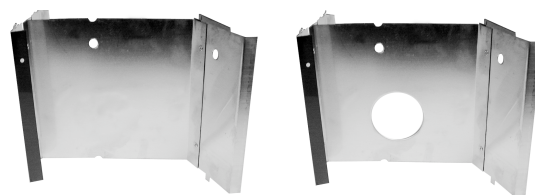
1. Place one compartment divider (4) on bottom floor assembly (1) as shown. Ventilation holes are up. Three square tabs go into "D" holes in floor. Bend tabs against straight side of "D" on underside of floor (1). Place a modified divider (5) adjacent to the first divider and slide flange near center into slot provided. Bend tabs on modified divider (5) as before. Continue around the floor alternating dividers and interlocking them as you proceed.

2. Repeat Step 1 on top floor (2). Be sure to start the procedure in the same place as on the bottom floor (1) except using a modified divider (5) first and alternating with a regular compartment divider (4). Use joins in floor as a guide. This will simplify the monitoring of the house. **DO NOT stack floors at this time.**

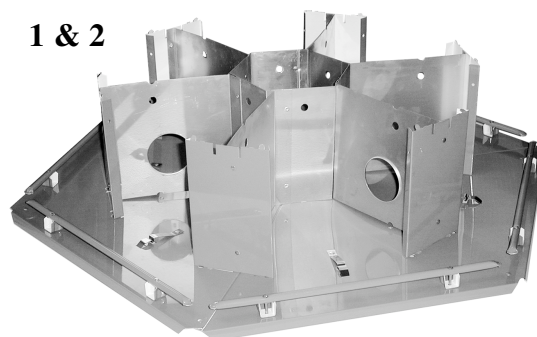
3. Place bottom floor assembly on an open cardboard box or trash can to keep floor level. Position so that approximately 6" of floor overhangs all the way around. Install door rod (13) at front of each compartment by placing in two holes at top of doorway. **DO NOT install doors at this time.**

4. Install top floor (2) on bottom floor (1) by first making sure seams in floors are aligned. Locate in proper position over dividers below by inserting the two round top tabs on each divider into round holes in top floor (2). BE SURE round tabs are to the inside of each divider front on the top floor (2). Door rods (13) can now be installed on top floor (2) as in Step 3.

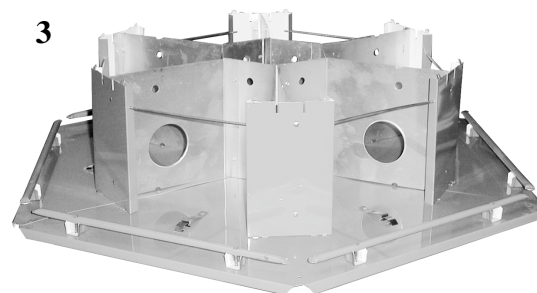
5. Install ceiling (3) on top floor (2) as in Step 4. Make sure formed bracket on ceiling lines up with bracket underneath bottom floor (1).



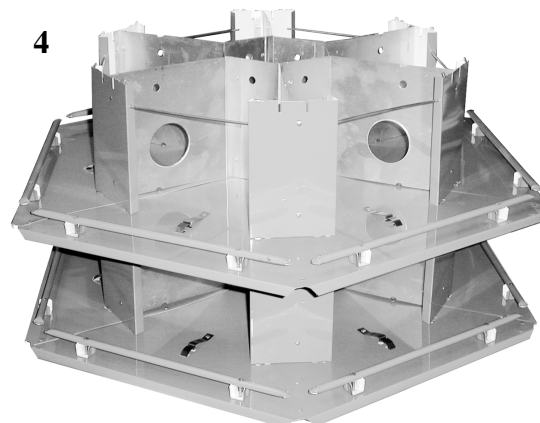
1 & 2



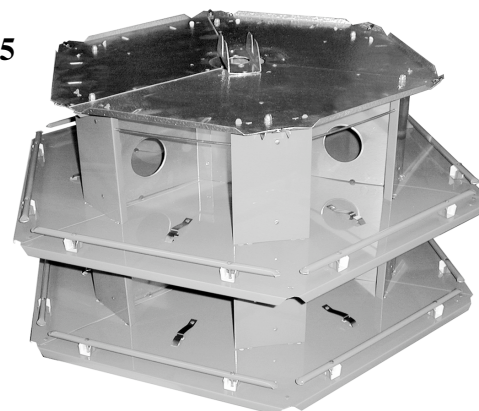
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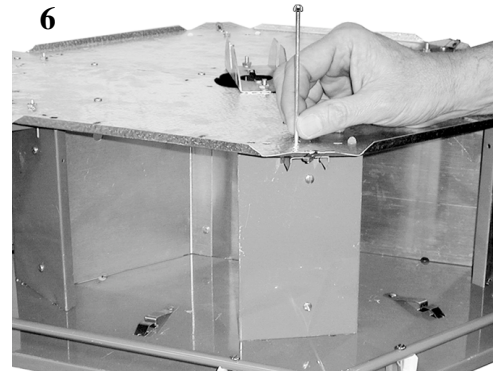
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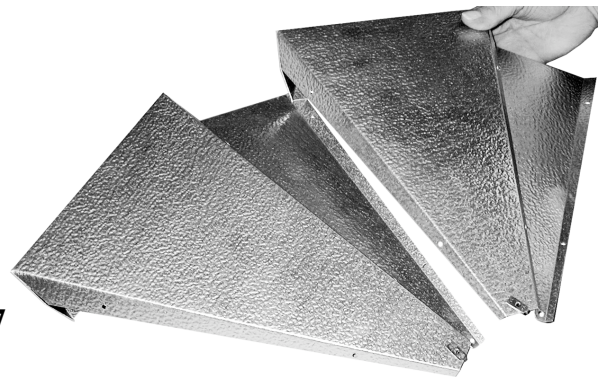
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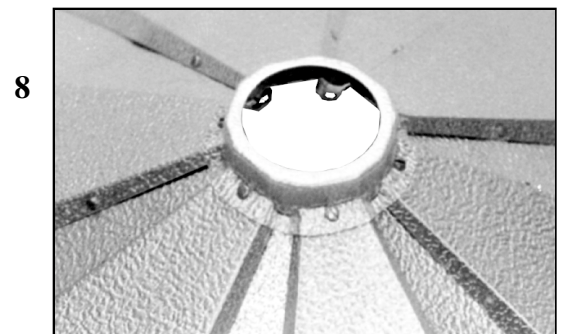
6. Install one 6-32 acorn nut (18) on one end of each tie rod (14). Use kit wrench (17) after starting. Insert tie rods (14) into round hole located between each set of "D" holes about 2" from edge on ceiling (3). Rotate tie rod (14) slowly and secure the end that protrudes from bottom floor (1) with a 6-32 acorn nut (18). Do not tighten completely at this time. Carefully handle assembly until all tie rods (14) have been tightened. Inspect house assembly to insure all door rods (13) are in place and all tabs from bottom floor (1) are to the inside of divider above them. Then using the two kit wrenches (17) provided to tighten acorn nuts (18) on tie rods (14) until snug.



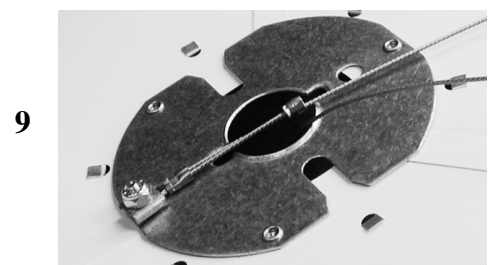
7. Use two each 6-32 stainless steel pan head machine screws (21) and 6-32 stainless steel keps nuts (22) to attach two riveted roof sections (6) as shown. Bend on larger section overlaps bend on smaller section. Do not tighten at this time. Repeat this step until all six riveted roof sections (2) have been joined together.



8. Place roof finial (7) over roof peak and attach with six 6x3/8 stainless steel sheet metal screws (19). Tighten all screws and nuts on the roof.

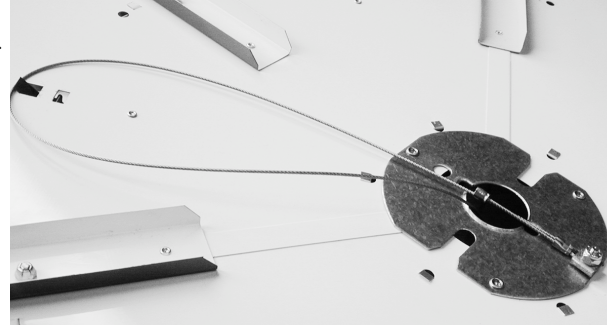


9. Turn house upside down and place over cardboard box or trash can. Uncoil the 23' cable (24) being careful not to kink or knot the cable. Feed cable through small, round hole in ceiling plate leaving about an inch of looped end of cable for flexibility. Place loop over threaded stud and secure with UHF clip (40) and 10-24 insert nut (39). Cable loop should pivot freely.



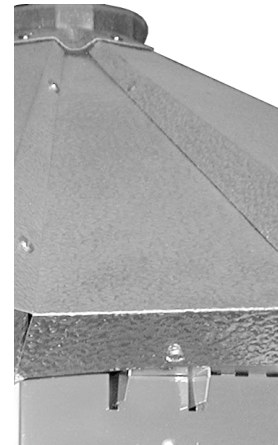
10. Turn house right side up. Feed loose end of cable down through other small round hole until it comes out bottom of house. Continue feeding cable down until you have approximately a 3' loop of cable above house.

10
bottom of
house shown



11. Feed loop of cable up through center of roof and set roof on house. Secure roof to house with six each 6x38 stainless steel sheet metal screws (19) and #4 external tooth lock washers (20).

11



12. Remove post top section (41) from post box. The post top section (41) is located **inside** post bottom section (43). The top section has three holes punched through the very top and three rings below them. Insert 1/4x2 slotted spring pin (31) in the lower of the three holes. To get pin through other side it may be necessary to gently tap pin to the side. Drive pin in until equal lengths are protruding out each side of post.

12



13. Lay completed house on its side on long table, cardboard, a rug, etc. with the two holes the cable runs through parallel with table surface. Insert bottom of post top section (41) through top of house, swaged end first. Push through until house and post will balance. Take pulley assembly (26) and swing one leg of it 90°. This will allow you to position cable onto pulley. After cable is in the pulley groove swing leg back and attach to post top section (41) with one each 1/4-20x1-3/4 hex head machine bolt (30) and 1/4-20 insert nut (29). Do not over-tighten.

TM-12W MINI-CASTLE POST ASSEMBLY INSTRUCTIONS

Top section of post (41) is packed inside bottom section (43) and **MUST** be removed before installation of post.

Recommended tools useful for post assembly and installation:

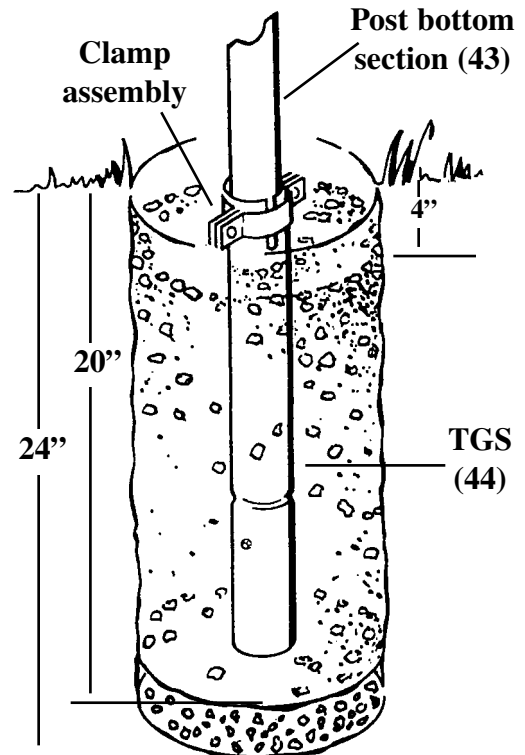
One shovel, spade or a post-hole digger; **one** tamping stick; **one** level; and **one** 7/16" wrench

14. Proceed to post assembly at this point. Install one 10-32x1/2 self-threading machine screw (35) into lower hole in post bottom section (43). This will act as a stop when post center section (42) is inserted.

NOTE: Before digging any hole, first check with your local utility company to make sure there are no utility lines buried at the site.

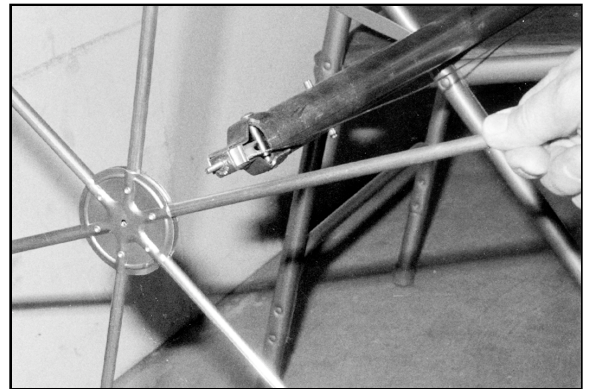
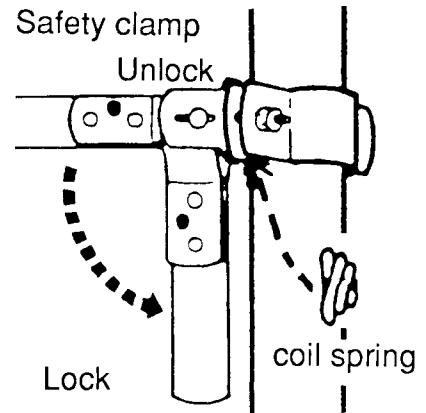
15. Find a location for your martin house that is near human activity but 25-40 feet from the nearest tree, building or obstacle that will interfere with the martins' flight path. They need an open flyway to and from their house. At point of installation dig a hole 8" in diameter and 24 inches deep. Place 3"-4" of coarse gravel in hole. Assemble the two 1-1/2 "B" clamps (45) using two each 1/4x1-1/4 carriage bolts (46), 1/4 lock washers (47) and 1/4-20 hex nuts (48). Do not tighten. Place clamp assembly over top of ground socket (44) and tighten finger-tight.

16. Slide lower end of post bottom section (43) into top of ground socket (44) 20 inches. At this time tighten the clamp assembly at top of ground socket (44). Place ground socket (44) and post assembly in the hole making sure top of ground socket (44) is at or just slightly below ground level. Fill hole to within 3"-4" of top with concrete insuring the post is plumb. Secure with cables, ropes or braces. Due to the shrinkage involved **DO NOT USE** quick-set or hydraulic concrete. Use standard premix. Allow to set undisturbed for 24 hours.

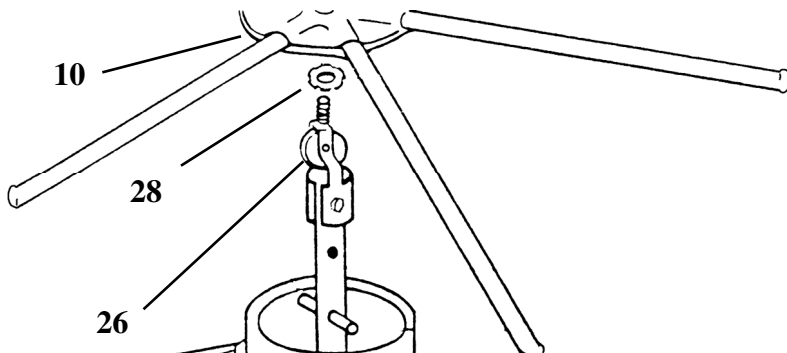


NOTE:
Top section of post (41)
is packed inside
bottom section (43)

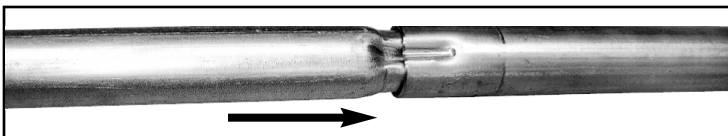
17. Slide safety handle assembly (23) onto bottom end of post center section (42). Handle should be to left side of post with our company logo to the inside or right. Slide this assembly one-half way up post center section (42) and lock in place by depressing the handle. With handle depressed, assembly should not move either up or down. If it does move, tighten the 1/4-20 insert nut (29) on back of assembly one-eighth turn at a time till assembly will not move. When safety clamp assembly is adjusted properly it will not move with the handle down but will slide freely when handle is raised. **TO PREVENT INJURY, AT NO TIME DURING INSTALLATION OR OPERATION OF HOUSE SHOULD YOU HAND EVER BE PLACED ON POST ABOVE THIS ASSEMBLY.**



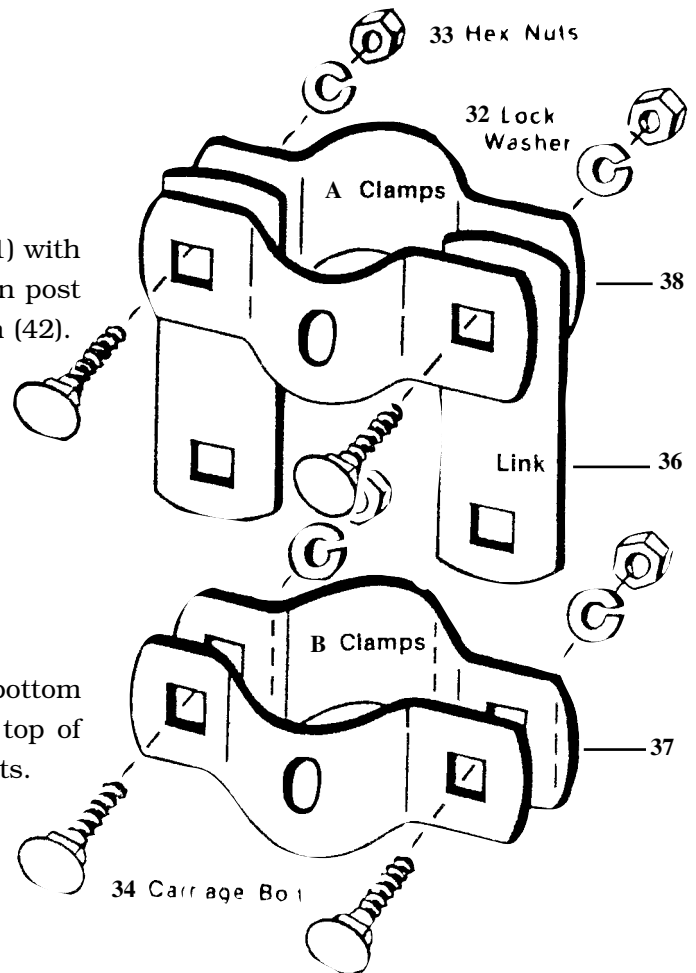
18. Install perch assembly (10) by first placing star washer (28) on stud protruding from pulley assembly (26). Install riveted roof perch (10) and 10-24 insert nut (39). Tighten until snug.



19. Attach post center section (42) to post top section (41) with house already installed. Note alignment of swaged end on post top section (41) to the grooved end on post center section (42).



20. Assemble tube clamps as shown. "B" clamps (37) on bottom and "A" clamps (38) on top. Slide "B" clamps (37) over top of post bottom section (43) already installed and tighten nuts.



21. At this point, two people are needed. One to handle the bottom of the section and one to handle the perch end. Carefully slide the post through the house until the house rests on the safety clamp assembly. Raise the pole and house to a vertical position and carefully insert the post center section (42) into the post bottom section (43) until it rests on the 10-32x1/2 self-threading screw (35) already installed. Now tighten the “A” clamps.

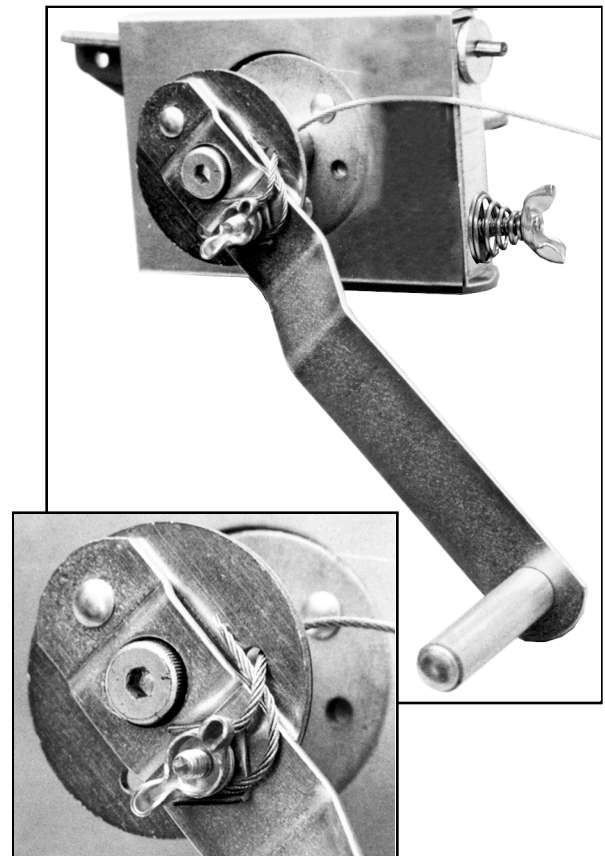
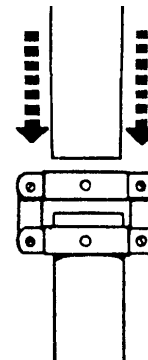
Keeping hands and body clear of winch handle, depress winch pawl. If house drops, increase brake tension with wing nut. Continue adjusting until house remains where it is when the pawl is depressed.

Do not forget to raise house off safety clamp assembly before each attempt. The added weight of nests might necessitate a slight increase in brake tension.

22. Attach winch to post center section (42) just above “A” clamps with the attached clamp. Align winch drum with pulley assembly (26). Loosen wing nut on winch drum. Thread loose end of cable (24) through either hole in the drum face from the inside of drum and wind around the cable stud between the UHF clip (40) and the washer. Make sure loose end of cable (24) extends a half-inch beyond the washer and tighten wing nut. Remove any slack from cable (24) by winding onto winch drum. **DO NOT RAISE HOUSE AT THIS TIME.**

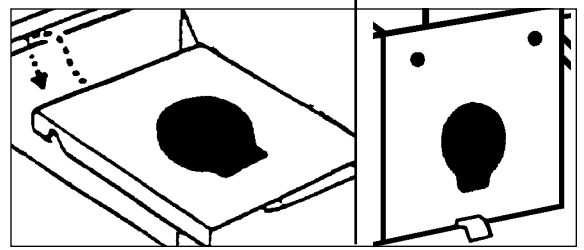
Two safety features are designed into this winch. First a brake mechanism to carry the weight of the house and second, a ratchet and pawl to hold the weight of house. The pawl lever is to the upper left of winch. To lower house the pawl must be depressed.

To properly adjust the brake turn wing nut clockwise to apply more brake. turn wing nut counterclockwise for less brake. Raise house a couple inches above safety clamp assembly.

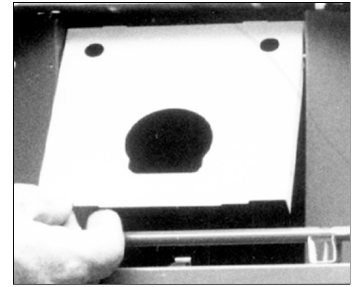


To reduce tampering with installation, pawl and winch case can be fastened together through holes provided. If this is desired, use a padlock.

23. Be sure house raises and lowers smoothly. When lowering house the safety clamp assembly should be positioned above head height. House should be lowered to clamp assembly, clamp should be lowered all the way and then house should follow. When raising house it should be raised to head height, safety clamp assembly should be raised to touch house and then house may be raised to top of post.

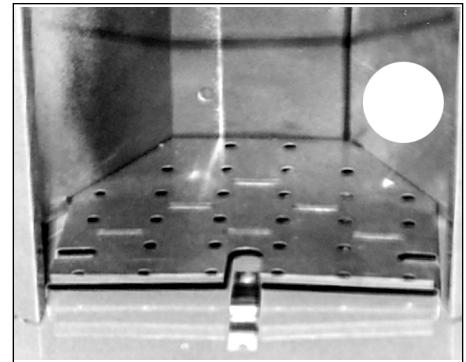


24. Our suggestion is to install doors (9) at this point. Hook doors (9) over door rods (13). Do not force.



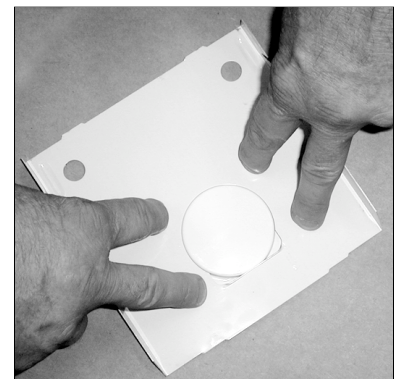
NOTE: Doors should hinge freely and snap into floor clips on floor. See sketches.

Install floor trays (8) in all compartments making sure flanges on sides of trays are down. If installed incorrectly the nesting material may become wet from contact with the floor during inclement weather.



25. If normal 6"x6" compartments are desired, install door plugs (12) in compartment dividers. For enlarged 6"x12" compartments install six winter door stops (11) in every other door, alternate on second floor so that a stopped door is above an open door. Enlarged compartments create a dark cavity that is inviting to European starlings. Therefore, starling-resistant, crescent-shape entrance doors are recommended if starlings are a problem in your area. These doors will not deter English "house" sparrows. The only deterrent for house sparrows is an active eradication program. Enlarged compartments should be closely monitored so that house sparrows do not build their nest in front, trapping purple martins in the back. See page 3 for details.

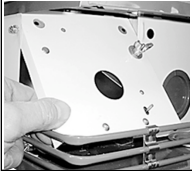
26. To install winter door stops (11) remove door, place door stop upside down on a flat surface and press door onto the door stop, then rehang door. Use winter door stops (11) to close entire house during winter months to keep unwanted species out.



ACCESSORIES AVAILABLE FOR NATURE HOUSE MARTIN HOUSES

TO SEE OUR FULL LINE OF ACCESSORIES OR TO ORDER,
PLEASE VISIT OUR ONLINE CATALOG AT www.naturehouseinc.com OR CALL 800-255-2692

SD-1 Spare-O-Door



Replace any door to turn that compartment into sparrow trap. Does not harm birds.

DHPA star perch



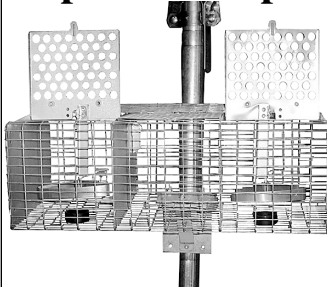
Fits PMC-24, TM-12, and DH-12N

CD-12 or CD-6 crescent doors



Starling resistant entrance. Use only on enlarged compartment. The PMC-24, TM-12, TM-12W, MSS-12, MSS-12W systems and the M-12K house now have optional enlarged compartments. Free plans to modify Nature House houses can be downloaded at www.naturesociety.org. Available in 12-pack or 6-pack

ST-1 sparrow trap



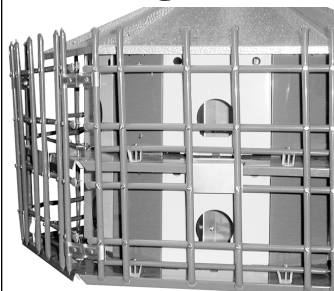
Assembled. Live trap, does not harm birds. Pole mount or place on ground; two trap compartments, one holding.

SB9 predator guard



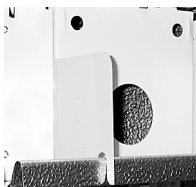
Protect martin houses from climbing predators. Fits all Nature House poles; also fits 1-3/4" poles.

OG-TM owl guard



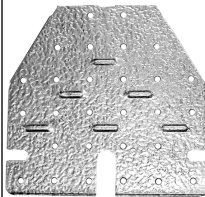
Fits TM-12. Protect birds from great horned owl, fish crow, hawk attacks. Swings open for easy access.

PD-1 porch dividers



8-pack fits one 12-unit house. Fits all Nature House houses.

DN-2 dri-nest subfloors



Fits PMC-24, TM-12, MSS-8 12-pack

Texture Strips



Place on floor of martin house in front of Crescent Entrance Door to help prevent martins from slipping during inclement weather while trying to enter their compartment.

BD-12 or BD-6 blank doors



Blank door for use on back side of enlarged compartment only. The PMC-24, TM-12, TM-12W, MSS-12, MSS-12W systems and the M-12K house now have optional enlarged compartments. Free plans to modify Nature House houses can be downloaded at www.naturesociety.org. Available in 12-pack or 6-pack

WDS-12 winter door stops

Fits all Nature House houses. Close entrances during off season to keep unwanted species out. 12-pack.



For replacement parts or accessories call toll-free 877-833-2478 or 800-255-2692



Bringing the benefits of nature to your house

Nature House products by
ERVA TOOL & MFG CO INC
3100 W GRAND AVE, CHICAGO IL 60622-4324



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