Form 0610-08

Instructions and Parts List

MSS-12W MARTIN SAFETY SYSTEM

NOTES: (1) A 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.

BEFORE STARTING ASSEMBLY: Check parts against this list (pgs. 1 & 2). Refer to illustration on page 6 to view house parts. If any shortages are found, refer to Packing Slip for claim instructions.

HOUSE PARTS PACKED IN HOUSE BOX NOTE: Top section post (Q) is packed inside Code # Item Qty **Description** 925022 1 4 Floor section 924776 2 Roof w/gable ends 24771 3 Ceiling 825036 4 4 End clipped 25040 5 12 Door 826228 6 Center divider riveted bottom section post (S) 26235 7 Short divider 926235 7A 4 Modified short divider 25075 8 12 Mill finish plug 826204 9 1 Roof cap w/perch 4 6-32x18-5/8 tie rod 35278 10 825047 4 Rail assembly 11 26240 12 8 Floor tray 4 Center floor tray 26242 13 925065 14 12 Winter door stop 15 26211 1 Formed center bracket 17 928000 16 1 Assembled winch w/cover & clamp 728040 16A Cable assembly 728206 16B Safety handle assembly

PARTS IN SMALL PLASTIC BAG (#980006) (PACKED IN LARGE PLASTIC BAG) 27300 17 1 Kit wrench 18 35263 24 6-32x5/16 Binder head machine screw (BHMS) 40050 19 10-24x1/2 Round head machine screw (RHMS) 20 35286 6 Flat C nut. 35250 21 6 #6x3/8 Sheet metal screw (SMS) 35252 22 24 6-32 Keps nut

35288 23 9 6-32 Acorn nut 40550 24 5 10-24 Keps nut 28032 25 1 UHF steel clip 35264 26

32003

26213

42500

42550

39

40

41

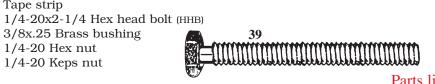
10-24 Self-threading screw (STS)

00204	20	1	10-24 Sen-unreading screw (Si	5)
PARTS II	N LARGI	E P	LASTIC BAG (#980008)	
26203	27	1	Flat center plate	
726208	28	1	Pulley assembly	
24400	29	1	3/4 O.D.x3/16 I.D. aluminum	washer
20414	30	2	1-1/4 A clamp	
28024	31	2	1-1/2 B clamp	
20416	32	2	Link	
30052	33	4	1/4-20x3/4 Carriage bolt	34
43550	34	4	1/4 Lock washer	
32019	35	1	1/4-20 Insert nut	
40525	36	1	10-24 Insert nut	
24380	37	1	3/4 O.D.x5/16 I.D. aluminum washer	
35248	38	4	Tape strip	

2 3/8x.25 Brass bushing

4 1/4-20 Hex nut

2 1/4-20 Keps nut



(reduced)



26

11111111111

18





PARTS PACKED IN SS POST BOX

27856	Q	1 1-1/4x60-1/2 Top section post
27858	R	1 1-1/4x76 Center section post
27850	S	1 1-1/2x74 Bottom section post
28410	T	1 1-3/4x22 Ground socket
28024	U	2 B clamp
42500	V	2 1/4-20 Hex nut
43550	W	2 1/4 Lock washer
30053	X	2 1/4-20x1-1/4 Carriage bolt

NOTE:

Top section post (Q) is packed <u>INSIDE</u> bottom section post (S)

To order parts, accessories or Nature House products call 877-833-2478 or 800-255-2692 E-mail <natsoc@adams.net>

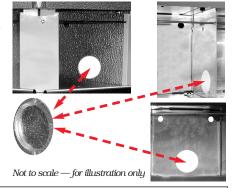
Please use product code number when ordering parts

OUR SUPERIOR QUALITY NATURE HOUSE PURPLE MARTIN HOUSES NOW OFFER A CHOICE OF REGULAR 6"X6" COMPARTMENTS OR ENLARGED 6"X12" COMPARTMENTS

BY SIMPLY INSTALLING OR REMOVING PLUGS FROM HOUSE DIVIDERS

CAUTION: Because of decreased entry size, 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.



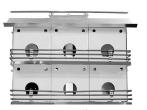
TO ENLARGE THE COMPARTMENTS, simply remove plugs and replace doors with crescent entrance doors. Enlarged compartments create a dark cavity which is inviting to starlings, thus starling resistant crescent entrance doors are suggested to prevent starling predation.

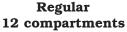


*Blank Door BD-12 (12 pak) BD-6 (6 pak)

*NOT INCLUDED WITH HOUSE KIT - ORDER SEPARATELY

MSS-12W







Converted to 6 compartments

*Instructions to modify compartments on your newly constructed MSS-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.

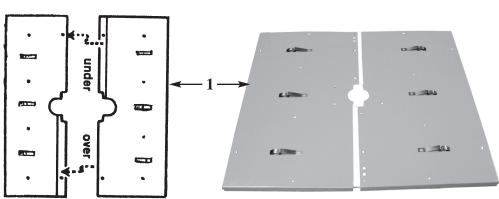
*Once house has been put together, follow the above instructions to modify your MSS-12W martin house from a 12-compartment to a 6-compartment house. To acquaint you with each step required to assemble and install this martin house it is to your benefit to read all instructions BEFORE starting assembly

Special Notes of Interest

- ♦ Wipe protective oily coating from all martin house parts surfaces prior to assembly.
- ◆ LOOK AT EXPLODED VIEW OF HOUSE on page 6. This shows each major part which is numbered or lettered to correspond with the parts list on page 1.
- ◆ Mill finish aluminum plugs are provided to convert your MSS-12W martin house back into a 12-compartment house with 6"x6" compartments by inserting them in dividers [see page 2]. Leaving the door plugs out of the dividers [see instructions for details] will allow you to have a 6-compartment house with 6"x12" compartments. If the European starling is a problem in your area, we recommend the use of Crescent Doors (starling resistant entrance doors) if using 6"x12" compartments. Because of the varying degree of starling problems encountered Crescent Doors are sold only as an accessory, available in either a 6-pack or 12-pack [see page 2].
- ◆ The use of PD-1 (porch dividers) is strongly recommended to lessen the effect of porch domination by more mature purple martins. PD-1 (8-pack) is sold separately as an accessory.
- ◆ A Kit Wrench, item #17 on page 1, is provided for your convenience to use on items #22 (6-32 keps nut) and #23 (6-32 acorn nut).

Page 4 — MSS-12W Instructions

1. For bottom floor, assemble two floor sections (1) by interlocking over and under — green side up. White tape in photo at right indicates where overlapping should occur.

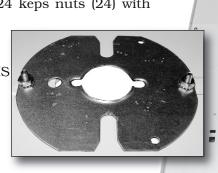


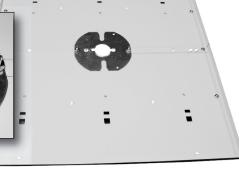
1A. Attach two end panels (4) using three each: 6-32x5/16 BHMS (18) and 6-32 keps nuts (22) per end. Flanges on end panels point in and rail brackets will be in lower corners.



2. Install flat center plate (27) on bottom of floor assembly using two each: 10-24x1/2 RHMS (19) and 10-24 keps nuts (24) with screw heads on green side of floor. Be sure

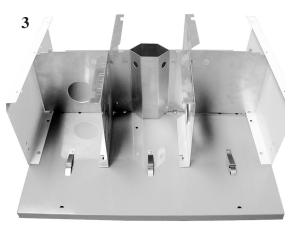
screw heads on green side of floor. Be sure that the flange on the large center hole points down. Do not tighten the 10-24 RHMS at this time.



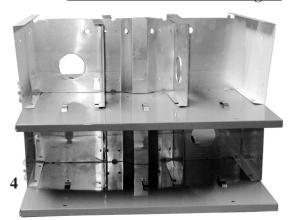


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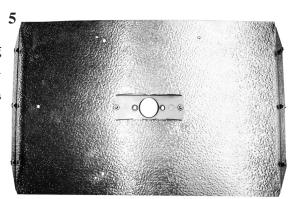
3. Place one center divider assembly (6) between end panels (4) making sure that half-inch ventilation holes are up. The tabs on the bottom of the divider assembly will drop into the holes in the floor seam. Place two short dividers (7) in position with tabs entering floor and center divider assembly (6). Place two modified short dividers (7A) in position entering floor and center divider assembly (6). Make sure the two short dividers closest to the hole in the center divider assembly have no center hole. Flanges on all dividers must face as shown. All half-inch ventilation holes are up. When you are sure that short dividers are in their proper place bend tabs against the straight side of the "D" holes to lock in place on floor and center divider assembly.

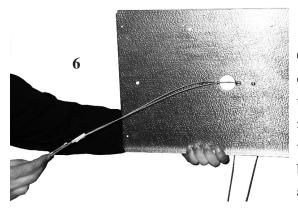


4. Interlock two remaining floor sections (1) and place on top of bottom floor assembly. Attach two end panels (4) as shown, using only two each: 6-32x5/16 BHMS (18) and 6-32 keps nuts (22) per end. Screws go down through flange in upper end panels (4), floor sections (1) and flange in lower end panels (4). Repeat step 3 for second story, making sure short dividers are in proper position before bending tabs and placing center divider assembly (6) with hole to opposite end of the floor as on bottom floor.



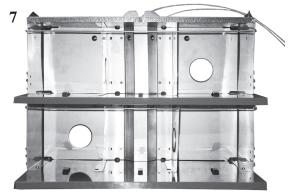
5. Slip the flat C nuts (20) over holes on ceiling (3) edge making sure flat side of the C nut is out. Bolt formed center bracket to ceiling center using two each: 10-24x1/2 RHMS (19) and 10-24 keps nuts (24) making sure screw heads are on underside of ceiling. Tighten both screws.





6. At this time uncoil cable assembly (16A). Insert small end of cable assembly (16A) through the formed center bracket (15) from the bottom and pull through until approximately thee feet of cable remains. Thread cable back through the formed center bracket until you have about three feet of cable protruding below the bracket also. Tape the two 3-foot ends of cable together to aid in assembly.

7. Feed the taped-together cable through the center of the house while lowering the ceiling (3) into place. When ceiling is properly lined up with the tabs on the divider assemblies attach with four each: 6-32x5/16 BHMS (18) and 6-32 keps nuts (22).

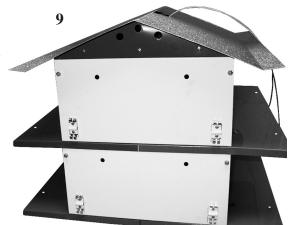


8. Install four 6-32x18-5/8 tie rods (10) by placing one 6-32 acorn nut (23) on one end of a rod and pushing through holes in the end panel (4), through the two short dividers (7, 7A) and out the other end panel (4) securing with 6-32 acorn nut (23).

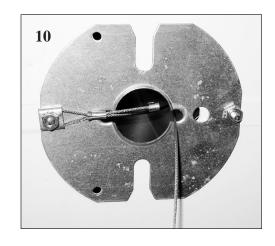
Green side up

SOD

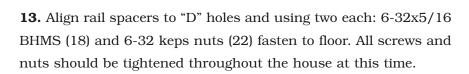
9. Thread doubled cable (16A) through hole in roof (2) and fasten roof to ceiling (3) with six #6x3//8 SMS (21). Flat C nuts can be aligned using a small nail. Gable ends go on outside of ceiling (3).

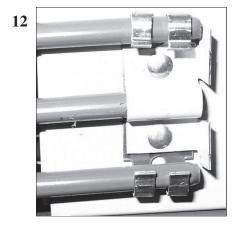


10. Turn house on its side and remove tape from cable ends. Each strand of cable must run straight down through the center of the house. Attach looped cable end to one of the 10-24x1/2 RHMS (19) already installed in the flat center plate (27) by removing the 10-24 keps nut (24) which was previously installed loosely. Place the looped cable end over the screw threads. Place the UHF clip (25) over the loop with the "ears" down, reinstall the 10-24 keps nut (24) and tighten. Be sure **not** to pinch or cut the cable loop with the "ears" on the UHF clip (25).



- 11. Turn house back to an upright position. Hang doors (5) on 6-32x18-5/8 tie rods (10), being careful not to force. Doors should hinge freely and snap into floor clips.
- **12.** Place rail assembly (11) around front of the house making sure rivets of the rail spacer are to the outside. Slip one end of the center rail section inside rail clip until flush. Using the back of the kit wrench (17) push the top and the bottom rail section into clips as shown.



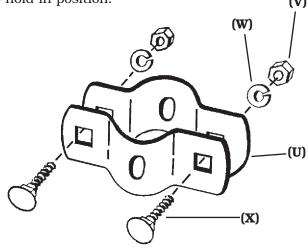


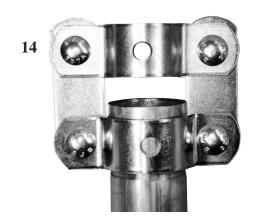
TGS Ground Socket Installation

Ground socket and hardware is packed inside post box.

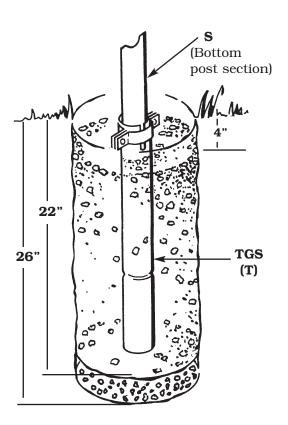
NOTE: TGS Ground Socket allows the pole and house to be moved to another location without losing the bottom section post. Refer to Post Box Parts list (page 2) to identify parts in drawing/photo below.

14. Assemble "B" tube clamps (U) as shown. Place assembly over slotted end of TGS ground socket (T) and tighten just enough to hold in position. (V)





- **15.** Slide post bottom section (S) into socket 18" and tighten assembly securely.
- **16.** Dig hole 8" diameter and 26" deep. Put 4" of coarse gravel in bottom of hole. Place a ball of crumpled newspaper inside lower end of socket to prevent concrete from sealing end. This will allow any water to drain from inside post.
- **17.** Place ground socket/post section assembly in center of hole. Fill with concrete mix to just below slots in upper end of the socket. This will require approximately 80 to 90 pounds of mix. Use guy wires or rope to hold assembly in vertical position while concrete sets.
- **18.** After concrete has hardened, loosen clamps and slide post section to bottom of socket. Re-tighten clamps securely.



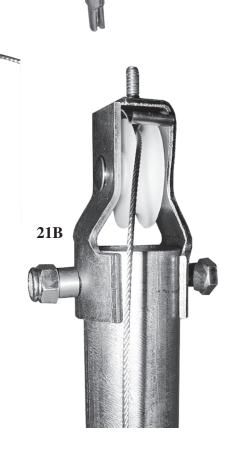
Post Installation

Post top section (Q) is packed inside bottom section (S) and MUST BE removed before installation of post.

- 19. Install one 10-24 STS (26) in the upper hole provided in the post bottom section (S). This hole is located 8-15/16" down from the top of the bottom section post (S). This will aid in final assembly of the post at a later time.
- **20.** Slip safety clamp assembly (16B) onto top section post (Q) by moving handle to a horizontal position and sliding onto post section. The handle should be to the left side of the clamp assembly (16B) and the printing should be on the right side of the handle. Slide the safety clamp assembly (16B) approximately 18" up the post and lock into place. Keeping the cables straight, slide the house from the top down to rest on the safety clamp assembly (16B).

21A. Work the cable loop into the pulley assembly (28) by rotating one leg of the pulley assembly 90 degrees. Check to make sure the cables are not crossed.

21B. Place this assembly over the post end and bolt in place using 1/4-20x2-1/4 HHB (39), two brass bushings (40) and 1/4-20 insert nut (35). At this time pull any extra slack out of the cable that exists between the house and pulley by pulling on the end of the cable protruding through the bottom of the floor. At all times be sure the cable is centered in the pulley groove.



Page 10 — MSS-12W Instructions

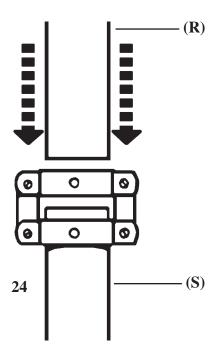
22. Attach center section post (R) to top section post (Q) as shown. Note alignment of crimped end of top section post (Q) and grooved end of center section post (R).



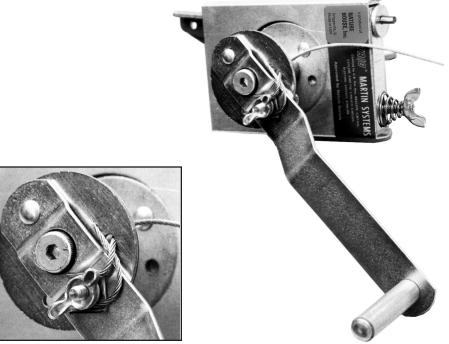
23. Place 3/4 O.D.x5/16 I.D. aluminum washer (37) over stud at top end of pulley assembly (28). Add roof cap and perch assembly (9) followed by 3/4 O.D.x3/16 O.D. aluminum washer (29). Secure in place by installing 10-24 keps nut (24).



24. To safely lift and install house, two people are recommended. Lower house to within two feet of the bottom end of the center section post (R). This will provide the lowest center of gravity. Lift house and upper post sections to vertical position. Slide bottom end of center section post (R) into top end of bottom section post (S) until it rests on the screw. Rotate upper post sections and house until pulley groove is in line with clamp assembly that secures center section post (R) to bottom section post (S). Tighten nuts on clamp assembly.



25. Remove two 1/4-20 keps nuts (42) and clamp from winch assembly (16). Install winch assembly (16) 1/2" above clamp assembly that secures bottom section post (S) to center section post (R) and at right angle on the right side of the post. Reinstall clamp and 1/4-20 keps nuts (42). Loose end of winch cable should be directly over winch. If it is not, rotate house until it is.

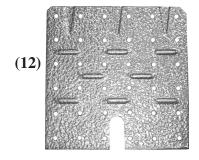


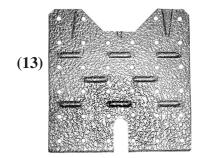
26. Insert cable through hole in winch and secure in place using #10 flat washer, #10 lock washer and wing nut from winch assembly. Turn winch handle clockwise until all slack is out of cable. Adjust wing nut on winch brake cable until house will not fall unless the winch handle is turned counterclockwise.

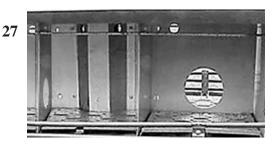
To reduce tampering with installation, pawl and winch case can be fastened together through holes provided. If this is desired, use bolt and nut, wire or padlock for this purpose.

Page 12 — MSS-12W Instructions

27. Install eight floor trays (12) in outside compartments and four center floor trays (13) in center compartments.



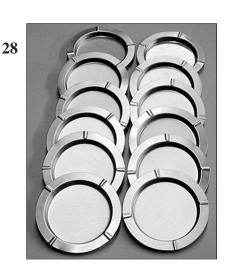




28. Use winter door stops (14) to close house during winter months. Leave door stops in place until time for purple martins to arrive to prevent earlier arrival of other species such as tree swallows and bluebirds from claiming the house in their territory.

To install door stops: remove door, place door stop upside down on a flat surface and press door onto the door stop, as shown below. Then rehang door on rod in martin house.





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



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



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