Form 1205-07

Instructions and Parts List

MSS-12 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.

Check parts against this list (pgs. 1 and 2) HOUSE PARTS PACKED IN HOUSE BOX before starting assembly. Refer to illustra-Code # **Item** Qty tions on pages 6 and 7 to view house parts. If 25022 1 4 Floor section any shortages are found, refer to Packing Slip 924776 2 1 Roof for claim instructions. 3 24771 1 Ceiling End panel 25036 4 25040 5 12 Door 26228 6 Center divider 2 Modified Center divider 926228 2 6A Short divider 7 4 26235 926235 7A Modified Short divider 4 25075 **7B** 6 Mill finish door stops (installed in 6 modified dividers) 26204 8 Roof cap 25056 Perch rod 8A 1 9 6-32x18-5/8 tie rods 35278 825047 10 4 Rail assembly 26240 11 8 Floor tray (see page 8) 21 26242 12 4 Center floor tray (see page 8) 925065 13 12 Winter door stop (see page 12) 26211 14 1 Center bracket (packed in bundle, see page 7) Lannamanana PARTS IN SMALL PLASTIC BAG (HARDWARE) 24 10 #6x3/8 Sheet metal screw (SMS) 35250 15 16 6 Flat C nut 35286 10-24x1/2 Round head machine screw (RHMS) 40050 17 40550 18 10-24 Keps nut 20 *9 6-32 Acorn nut 35288 35263 21 *32 6-32x5/16 Pan head machine screw (PHMS) 27300 22 1 Kit wrench (fits items 20, 23, 28) 35252 23 *34 6-32 Keps nut 24 35270 2 6-32x1-1/4 Pan head machine screw (PHMS) 25 25060 2 Rail support 26 900041 12 Floor clips w/hardware: 27 (sm. bag) 12 6-32x1/4 Pan head machine screw (PHMS) 12 6-32 Keps nuts 28

*Extra parts included

24400

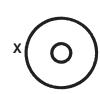
X

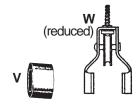
POST PA	RTS PAC	KED IN THIS BOX (LARGE PLASTIC BAG)
20414	A	2 'A' Tube clamps
28024	В	2 'B' Tube clamps
20416	C	2 Links
30052	D	4 1/4-20x3/4 Carriage bolts
42500	E	4 1/4-20 Hex nuts
43550	\mathbf{F}	4 1/4 Lock washers
32019	G	1 1/4-20 Lock nuts
35264	Н	2 10-32x1/2 Self threading screws
32048	I	1 1/4x9/16 Flat washer
40525	J	1 10-24 Lock nut
24380	K	1 3/4 O.D.x5/16 I.D. washer
35248	T	4 Tape strips (see page 11)
32003	U	1 1/4-20x2-1/4 Bolt
26213	V	2 Brass bushings
926208	W	1 Pulley end assembly (see page 11)











1 3/4 O.D.x3/16 I.D. washer

30053

33

PARTS PACKED IN BUNDLE

Code #	<u>Item</u>	Qty	Description
33000	N	1	22-foot rope
26212	P	1	Rope cleat

PARTS PACKED IN SS POST BOX

27856	Q	1 1-1/4" x 60-1/2" Post (top section)
27858	R	1 1-1/4" x 76" Post (center section)
27850	S	1 1-1/2" x 74" Post (bottom section)
75352	29	1 1-3/4" x 24" Ground Socket
28024	30	2 'B' Tube clamp
42500	31	2 1/4-20 Hex nut
43550	32	2 1/4" Lock washer

PARTS IN PLASTIC BAG (LANYARD LOCK)

726276	34	1 Lanyard lock assembly (see pages 2 & 7)
26272	35	1 Lanyard lock case cover (see pages 2 & 7)

2 1/4-20x1-1/4" Carriage bolt

NOTE:

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

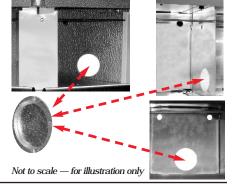
To order parts, accessories or Nature House products call 877-833-2478 or 800-255-2692 E-mail <natsoc@adams.net>
Please use product code number when ordering parts

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.

Crescent Door



CD-12 (12 pak) **Item #75450 CD-6** (6 pak) **Item #75452**

Blank Door

BD-12 (12 pak) **Item #75440 BD-6** (6 pak) **Item #75442**

MSS-12





Regular 12 compartments

Converted to 6 compartments

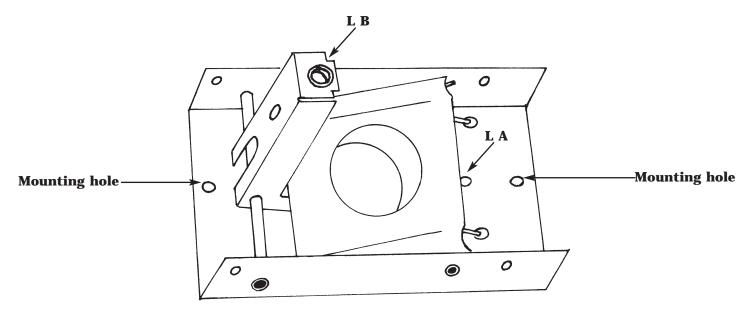
*Instructions to modify compartments on your newly constructed MSS-12

- 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-12 martin house from a 12-compartment to a 6-compartment house. Included in this system is a Lanyard Lock with instruction for installing to house.

Lanyard Lock Instructions

1. This device provides a positive means of locking your house into any position on the post. Pulling out on the rope releases this lock and allows house to be raised and lowered. Releasing rope allows lanyard lock to tighten against post securing it in position. When lowering house, stand out far enough from base of mounting post to allow for pulling rope out for release of lock (see drawing on page 7). Slowly allow lanyard to feed up through lock, standing in this same position and lowering house. To stop lowering at any point, simply loosen pull on rope and allow to drop in position. When raising house, stand close to base of mounting post and pull rope straight down.



With house at top of post, lock will engage ring in post for correct location.

2. Remove the Lanyard Lock cover (35) from lock assembly (34). See illustration above and on page 7. At step 2 of martin house assembly (see page 3), install Lanyard Lock assembly (34) in center of underside of bottom floor through the two mounting holes as shown. Leave lock cover (35) off until later in assembly, step 22.

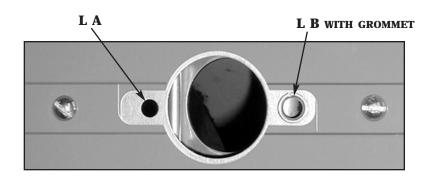
Wipe protective oily coating from all martin house parts surfaces prior to assembly.

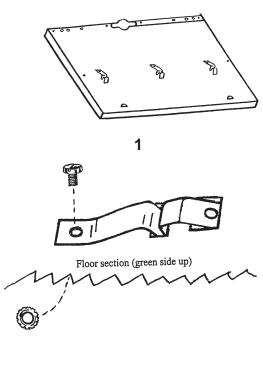
READ ALL INSTRUCTIONS BEFORE STARTING ASSEMBLY. This will acquaint you with each step required.

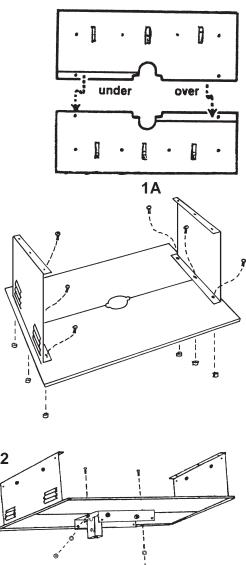
LOOK AT EXPLODED VIEW OF HOUSE on page 6. This shows each major part which is numbered or lettered to correspond with the parts list on page 1.

Note: S.S. refers to Stainless Steel items. <u>ONLY</u> use screws in specified location.

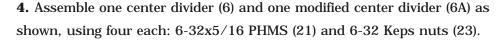
- 1. Attach three floor clips (26) to each floor section (1), using one 6-32x1/4 PHMS S.S. (27) and one 6-32 Keps nut S.S. (28) per clip. Screw heads are to be on top (green side) of floor section. Keps nuts will be on underside of floor. See sketch of floor clip assembly. Front end of floor clip slips under the edge of the 3/8x3/8 square cut-out, while the hole in the opposite end of the clip lines up with the screw hole in floor section. This assembly should be tight for proper spring action.
- **1A.** For bottom floor, assemble two floor sections (1) by interlocking over and under as shown green side up. Attach two end panels (4) using three each: 6-32x5/16 PHMS (21) and 6-32 Keps nuts (23) per end. Flanges on end panels point in and rail brackets will be in lower corners as shown.
- **2.** Install lanyard lock without cover (see page 2) on underside of floor/end panel assembly. Use two each: 10-24x1/2 RHMS (17) and 10-24 keps nuts (18). Mounting holes in Lanyard Lock will align with holes in seam of floor section. Screw heads MUST be on top (green side) of floor. Be sure rope holes in Lanyard Lock case line up with slots in center of floor assembly. See photo below.





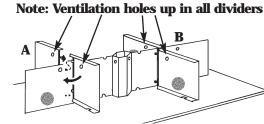


3. Uncoil rope (N). Working from top (green side) of floor/Lanyard Lock assembly (T), feed one end of rope through hole "L A" in Lanyard Lock case. Holes are identified in photo at step 2. Place the 1/4x9/16 flat washer (I) over end of rope and tie a knot near end of rope. Feed other end of rope through hole "L B" in Lanyard Lock case and hole "L B" in lever bracket. Tie a knot near this end of rope. (See photos at right.) At this point, we suggest placing bottom floor assembly on a wastebasket and centering so that floor will be level and prevent scratching your work surface.



5. Place center divider (6) assembly between end panels (4), 1/2" dia. ventilation holes are up. (Pull doubled rope up through center of divider assembly.) Tabs on bottom edge of divider assembly will drop into holes in floor seam. Place two short dividers (7) in position with tabs entering floor and modified center divider (6A). (See illustration A below.) Place two modified short dividers (7A) in position with tabs entering floor and center divider (6). (See illustration B below.) Flanges on short dividers (7) and modified short dividers (7A) <u>must</u> face as shown. All 1/2" ventilation holes are up. When

you're sure that short dividers (7) and modified short dividers (7A) are in correct locations, bend tabs against straight side of "D" holes to lock in place on floor and on center divider.

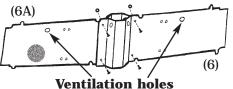


- **6.** Interlock two remaining floor sections (1) and place on top of bottom story assembly. (Pull double rope up through center hole.) Attach two end panels (4) as shown, using only two each: 6-32x5/16 PHMS (21) and 6-32 Keps nuts (23) per end. Screws go down through flange in upper end panels (4), floor sections (1) and flange in lower end panels (4).
- **7.** Repeat steps 4 and 5 for second story, pulling doubled rope up through center of assembly. Again, make sure short dividers (7) are correctly located before bending tabs.
- **8.** Slip flat C nuts (16) over holes on ceiling (3) edge. Flat side is out. Bolt center bracket (14) to ceiling center using two each: 10-24x1/2" RHMS (17) and 10-24 keps nuts (18). Screw heads <u>MUST</u> be on underside of ceiling.

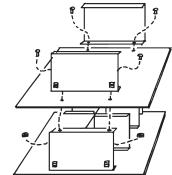
Attach ceiling (3) to flanges of second story end panels (4) using four each: 6-32x5/16 PHMS (21) and 6-32 Keps nuts (23). Pull doubled rope up through center hole in ceiling/center bracket.

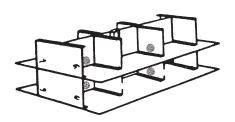


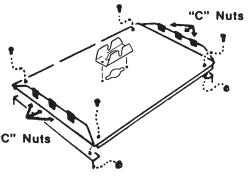


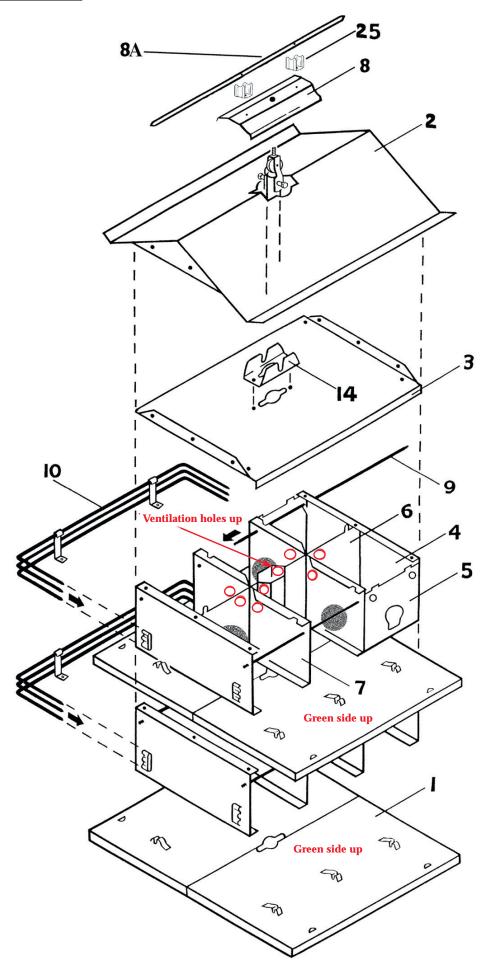


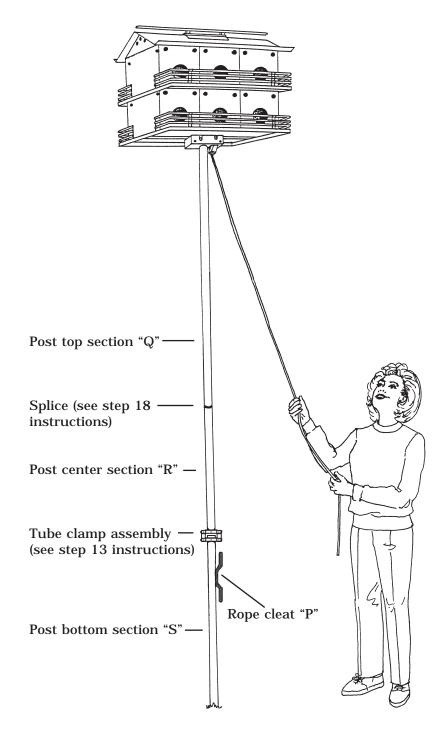




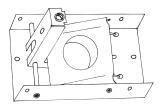




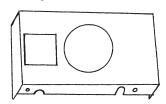


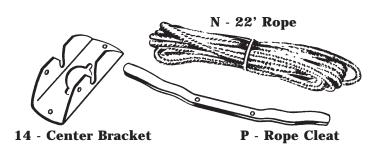


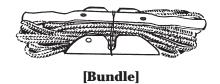
34 - Lanyard Lock assembly



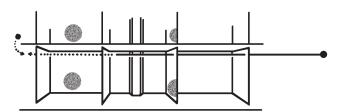
35 - Lanyard Lock case cover

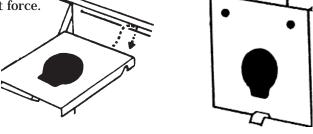






9. Install **four** tie rods (9) as shown by placing 6-32 acorn nut (20) on one end of rod; pushing rod through holes in end panels (4) and holes in short dividers (7) and modified short dividers (7A) then placing 6-32 acorn nut (20) on other end of rod. Hang doors over rod. Do not force. Doors should hinge freely and snap into floor clips on floor.



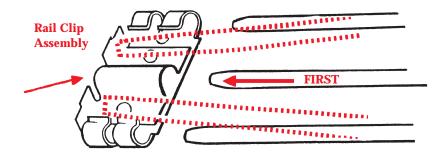


- **10.** Attach roof to ceiling as shown with six #6x3/8 SMS (15). Flat C nuts can be positioned with a small nail if required. Roof is on outside of ceiling at both ends. (Pull rope up through hole in center of roof.)
- **11.** Place rail assembly around front of house making sure rivets of rail spacer are to the outside.

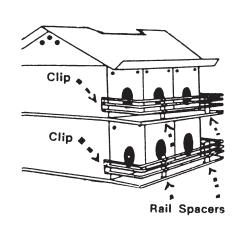
On one end, slip center rail section inside rail clip until flush with end.

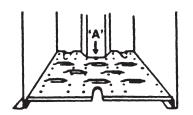
Using back of kit wrench, push top rail section and lower rail section into clips as shown. Repeat on other end of rail.

Align rail spacer to "D" holes in floor and using two each: 6-32x5/16 PHMS (21) and 6-32 Keps nuts (23), fasten to floor through "D" holes and hole in rail spacer.



12. Floor trays (11) and (12) can be placed in house after house is mounted on post (step 21). Flanges on sides of floor trays go down. Floor trays with cutout "A" go in center compartments.



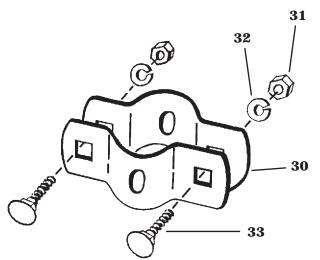


TGS Ground Socket Installation

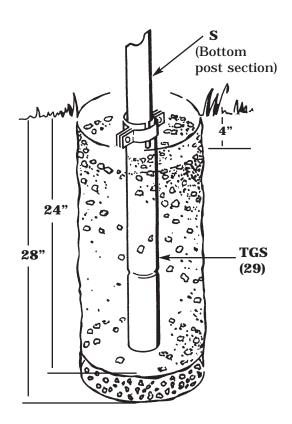
Ground socket and hardware is packed inside post box.

NOTE: TGS Ground Socket allows the pole and house to be moved to another location without losing the post bottom section. Refer to Post Box Parts list (page 1) to identify parts in drawings at right.

14. Assemble "B" tube clamps (30) as shown. Place assembly over slotted end of TGS ground socket (29) and tighten just enough to hold in position.



- 15. Slide post bottom section (S) into socket 18" and tighten assembly securely.
- 16. Dig hole 8" diameter and 28" 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.

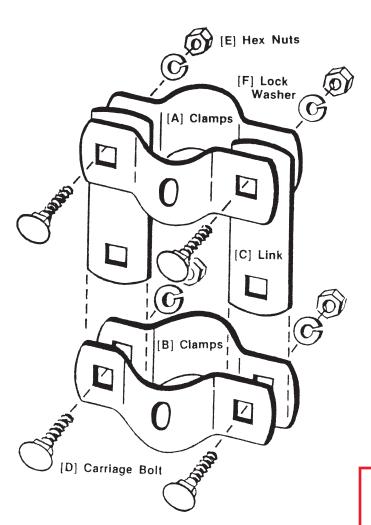


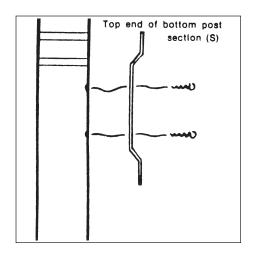
Post Installation

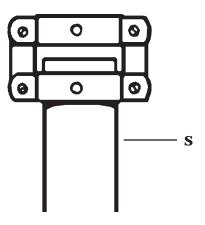
Post top section (Q) is packed inside bottom section (S) and MUST BE removed before installation of post.

19. Attach rope cleat (P) to post bottom section (S) with two 10-32x1/2" self threading screws (H) in holes provided. This end of pole is up.

Assemble tube clamps as shown. Place "B" clamps over top end of post (S) and tighten nuts. Leave "A" clamp loose for now. "A" clamps will be tightened later at step 21.





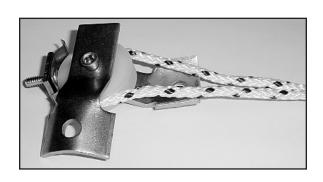


NOTE:
Post top section (Q)
is packed inside
post bottom section (S)

20. Pull end of rope that extends through hole "L B" in Lanyard Lock until there is approximately six feet of doubled rope above roof of martin house.

Work rope into pulley bracket over pulley (as shown below) using pulley end assembly (W) and far end of the doubled rope. Rotate one leg of pulley assembly 90° to aid in rope placement. Check to determine that ropes aren't crossed. Place this unit over post top end (Q) and bolt in place using bolt (U), two brass bushings (V) and nut (G). Tighten firmly. See photos.



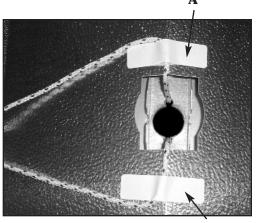




21. Using tape strips (T), tape one side of doubled rope to roof peak at Point A, and other side of rope to roof at Point B. See photo.

By looking through hole in roof, make sure rope is in notches in ceiling center bracket, and rope is not twisted inside house.

22. Slide crimped end of top post section through roof hole; slide through house and Lanyard Lock about two feet. Check to see that ropes are still in place and not crossed. Remove tape strips from rope at roof peak.



At this point, install Lanyard Lock cover (35) on Lanyard Lock case, using four #6x3/8" SMS (15).



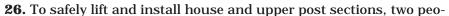
23. Attach center post section (R) to top post section (Q) as shown. Note alignment of crimped end of top section "Q" and grooved end of center section "R".

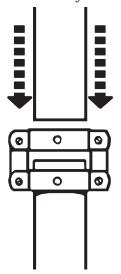
); top section Q

center section R

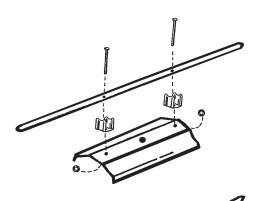
24. Assemble roof cap (8), perch rod (8A) and rail supports (25). Use two each: 6-32x1-1/4 PHMS (24) and 6-32 Keps nuts (23) as shown.

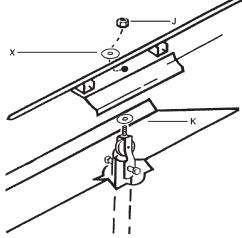
25. Place 3/4 O.D.x5/16 I.D. washer (K) over stud at top end of post. Add roof cap with perch (8) to assembly. Using 3/4 O.D.x3/16 I.D. washer (X) add to roof cap beneath perch rod as shown. Tighten assembly firmly in place using 10-24 lock nut (J).





ple are required. House should be positioned about two feet above the bottom end of center post section. This will provide a low center of gravity when lifting. Lift house and upper post sections to vertical position. Then slip bottom end of center post section through clamp assembly and down into bottom section (about 8"). Make sure center post section slides down until it rests on top rope cleat screw. Rotate upper post sections and house until groove in pulley wheel is in line with rope cleat on bottom section. Tighten nuts on clamp assembly.

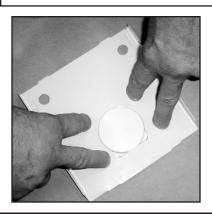




Refer to page 2 for proper Lanyard Lock operation and raising and lowering of house. Secure house in position by wrapping rope around cleat.



27. Use winter door stops (13) to close house during winter months. We suggest to install door stops: remove door, place door stop upside down on a flat surface and press door onto the door stop, then rehang door.



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



Nature House products by ERVA TOOL & MFG CO INC

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