

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 before starting assembly. Refer to illustrations on pages 6 and 7 to view house parts. If any shortages are found, refer to Packing Slip for claim instructions.

nouse p	arts. If any shortages are found, refer to racking Stip for claim instructions.
IOUSE P	ARTS PACKED IN HOUSE BOX
Qty. <u>Req.</u>	<u>Description</u> 15 16 17
4	Floor sections
1	Roof (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
1	Ceiling 24
4	End panels 20 21 23 24
12	Doors 25 A
4	Center dividers
8	Short dividers 22
1	Roof cap
1	Perch rod
4	6-32x18-5/8 tie rods
4	Rail assemblies
8	Floor trays (see page 5)
4	Center floor trays (see page 5)
12	Winter door stops (see page 11)
1	Center bracket (packed in bundle, see page 7)
PARTS	IN PLASTIC BAG (HARDWARE)
10	#6x3/8 Sheet metal screws (SMS)
6	Flat C nuts
4	10-24x1/2 Round head machine screws (RHMS)
4	10-24 Keps nuts
*9	6-32 Acorn nuts
*32	6-32x5/16 Pan head machine screws (PHMS)
1	Kit wrench (fits items 20, 23, 28)
*34	6-32 Keps nuts
2	6-32x1-1/4 Pan head machine screws (PHMS)
2	Rail supports
*Extra parts	s included W
RTS IN SI	MALL PLASTIC BAG (FLOOR CLIPS)
	Floor clips X O
	6-32x1/4 Pan head machine screw (PHMS) S.S.
12	6-32 Keps nuts S.S. PARTS PACKED IN BUNDLE
	Parts 10 4 11 14 12 4 8 11 14 4 12 1 1 PARTS 10 6 4 4 12 1 1 *34 2 2 *Extra parts *Extra parts *Extra parts *In the second of

Covered by U.S. Pat. Nos: RE25,878; 3,367,632; 3,410,248; 3,426,732; 3,496,913; 3,563,205; D-221,090; 3,643,631; 3,986,480.

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OST	PARTS P	ACKED IN THIS BOX (LARGE PLASTIC BAG)			Qty.	
Α	2	'A' Tube clamps		<u>Item</u>	Req.	<u>Description</u>
В	2	'B' Tube clamps		N	1	22 ft. rope
\mathbf{C}	2	Links		P	1	Rope cleat
D	4	1/4-20x3/4 Carriage bolts			DADTO	DACKED IN DOCT BOX
E	4	1/4-20 Hex nuts			PARIS	PACKED IN POST BOX
F	4	1/4 Lock washers	NOTE:	Q	1	1-1/4" x 60-1/2" Post (top section)
G	1	1/4-20 Lock nuts	Top section	R	1	1-1/4" x 76" Post (center section)
Η	2	10-32x1/2 Self threading screws	1 - 1	S	1	1-1/2" x 74" Post (bottom section)
I	1	1/4x9/16 Flat washer	post (Q)	29	1	1-3/4" x 24" Ground Socket
J	1	10-24 Lock nut	is packed inside	30	2	'B' Tube clamps
K	1	3/4 O.D.x5/16 I.D. washer	bottom	31	2	1/4-20 Hex nuts
T	4	Tape strips (see page 9)		32	2	1/4" Lock washers
U	1	1/4-20x2-1/4 Bolt	section (S).	33	2	1/4-20x1-1/4" Carriage bolts
V	2	Brass bushings				
W	1	Pulley end assembly (see page 9)			<u>PARTS</u>	IN PLASTIC BAG (LANYARD LOCK)
X	1	3/4 O.D.x3/16 I.D. washer		34	1	Lanyard Lock assembly (see page 7)

Form 413-04

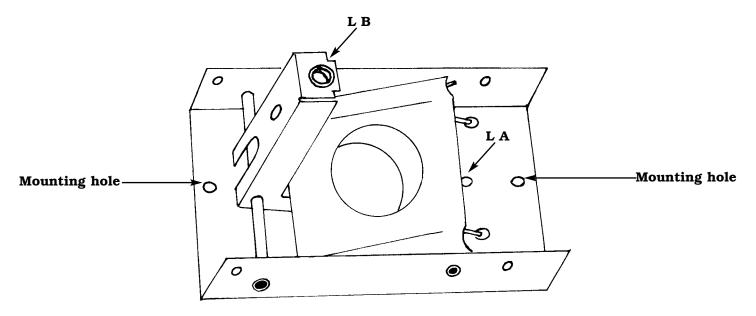
35

Lanyard Lock case cover (see page 7)

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.

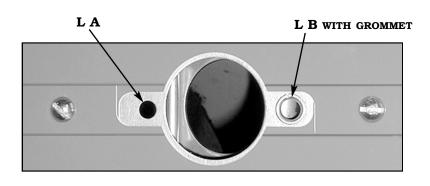
READ ALL INSTRUCTIONS BEFORE STARTING ASSEMBLY.

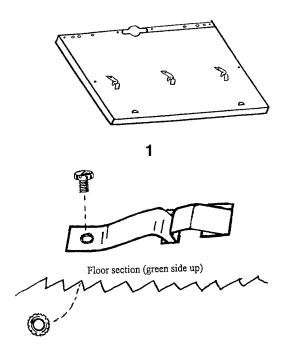
This will acquaint you with each step required.

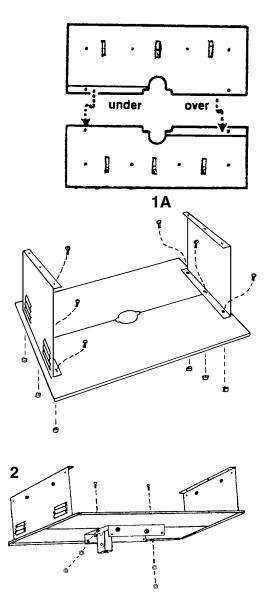
LOOK AT EXPLODED VIEW OF HOUSE on page 6. This shows each major part which is numbered or lettered to correspond with the parts list on page 1.

Note: S.S. refers to Stainless Steel items. Only 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.







Page 4 — MSS-12 Instructions

- **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.
- **4.** Assemble two center divider (6) pieces as shown, using four each: 6-32x5/16 PHMS (21) and 6-32 Keps nuts (23).
- **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 short dividers (7) in position with tabs entering floor and center divider. Flanges on short dividers (7) <u>must</u> face as shown. All 1/2" ventilation holes are up. When you're sure that short dividers (7) are in correct locations, bend tabs

Note: Ventilation holes up in all dividers

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.)

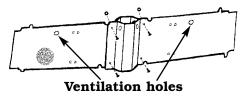
Attach two end panels (4) as shown, using only two each: 6-32x5/16 PHMS (21) and 6-32 Keps nuts (23) per end. Screws go down through flange in upper end panels (4), floor sections (1) and flange in lower end panels (4).

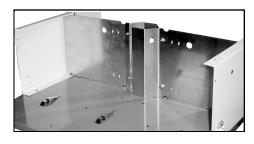
- **7.** Repeat steps 4 and 5 for second story, pulling doubled rope up through center of assembly. Again, make sure short dividers (7) are correctly located before bending tabs.
- **8.** Slip flat C nuts (16) over holes on ceiling (3) edge. Flat side is out. Bolt center bracket (14) to ceiling center using two each: 10-24x1/2" RHMS (17) and 10-24 keps nuts (18). Screw heads MUST be on underside of ceiling.

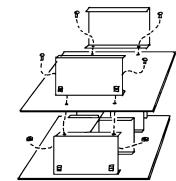
Attach ceiling (3) to flanges of second story end panels (4) using four each: 6-32x5/16 PHMS (21) and 6-32 Keps nuts (23). Pull doubled rope up through center hole in ceiling/center bracket.

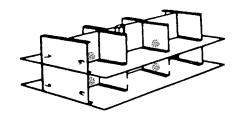


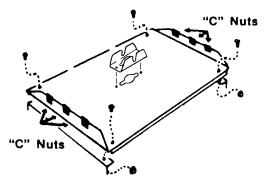




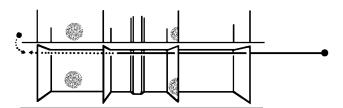


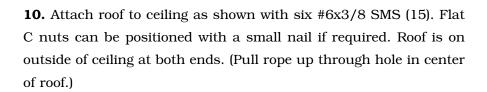


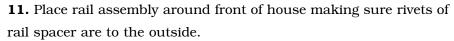




9. Install **four** tie rods (9) as shown by placing 6-32 acorn nut (20) on one end of rod; pushing rod through holes in end panels (4) and holes in short dividers (7) and placing 6-32 acorn nut (20) on other end of rod. Hang doors over rod. Do not force. Doors should hinge freely and snap into floor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



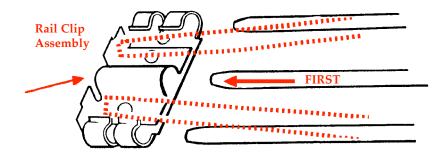




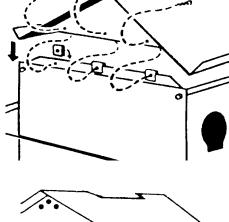
On one end, slip center rail section inside rail clip until flush with end.

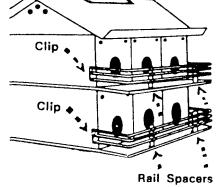
Using back of kit wrench, push top rail section and lower rail section into clips as shown. Repeat on other end of rail.

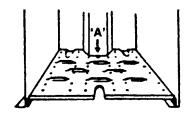
Align rail spacer to "D" holes in floor and using two each: 6-32x5/16 PHMS (21) and 6-32 Keps nuts (23), fasten to floor through "D" holes and hole in rail spacer.

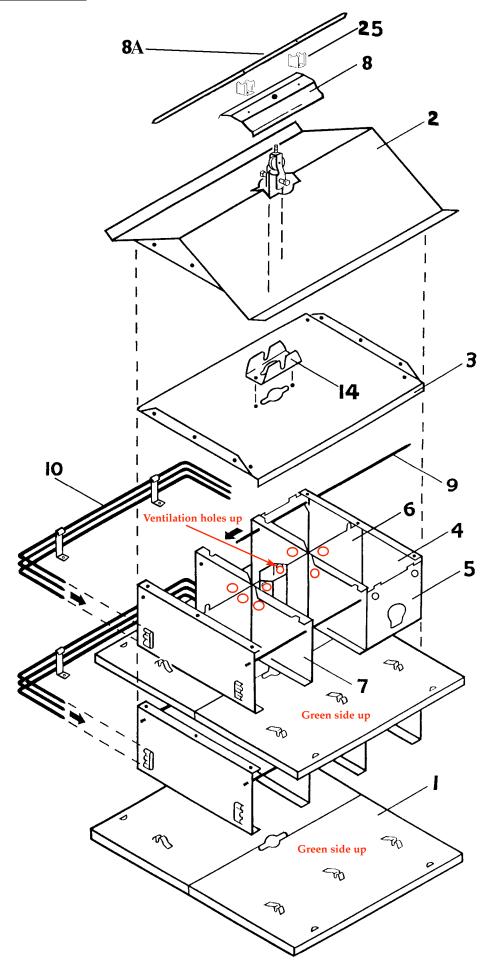


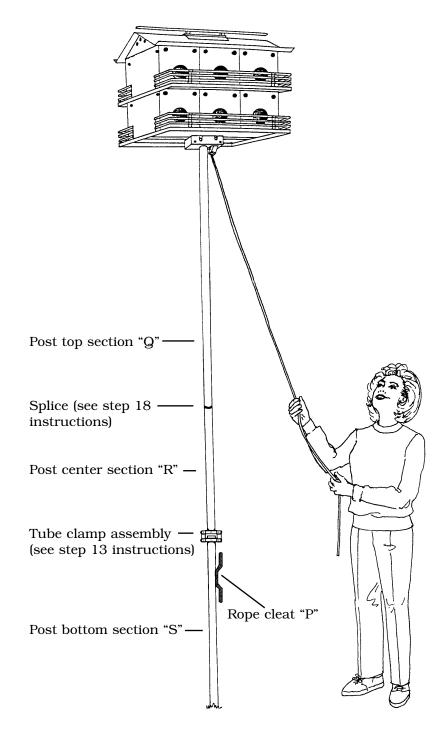
12. Floor trays (11) and (12) can be placed in house after house is mounted on post (step 21). Flanges on sides of floor trays go down. Floor trays with cutout "A" go in center compartments.



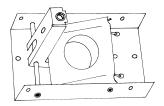




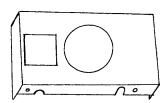


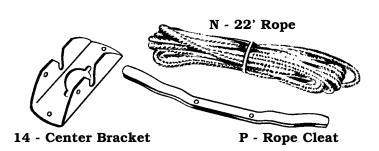


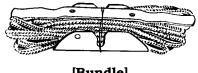
34 - Lanyard Lock assembly



35 - Lanyard Lock case cover







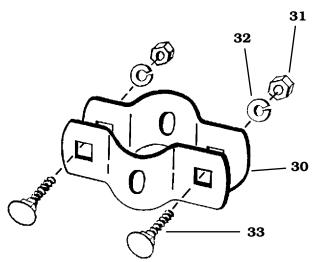
[Bundle]

TGS Ground Socket Installation

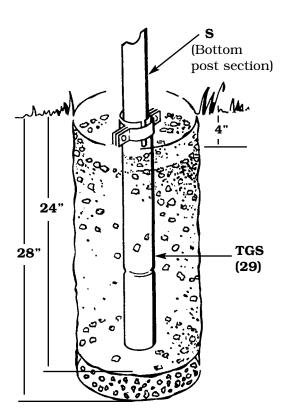
Ground socket and hardware is packed inside post box.

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.

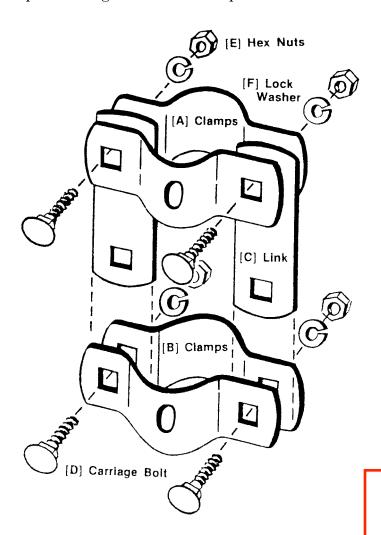


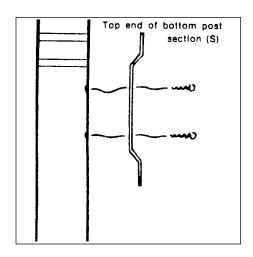
Post Installation

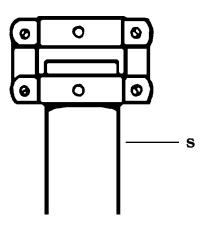
Post top section (Q) is packed inside bottom section (S) and MUST BE removed before installation of post.

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.





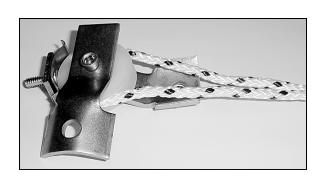


NOTE:
Post top section (Q)
is packed inside
post bottom section (S)

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.



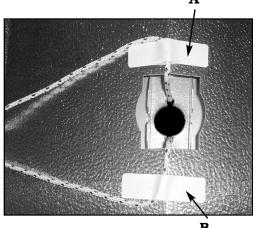




21. Using tape strips (T), tape one side of doubled rope to roof peak at Point A, and other side of rope to roof at Point B. See photo.

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).

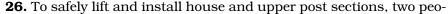


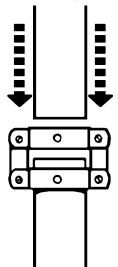
23. Attach center post section (R) to top post section (Q) as shown. Note alignment of crimped end of top section "Q" and grooved end of center section "R".

center section R) (5) top section Q

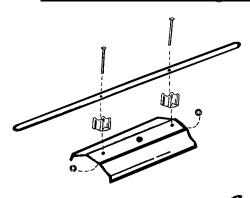
24. Assemble roof cap (8), perch rod (8A) and rail supports (25). Use two each: 6-32x1-1/4 PHMS (24) and 6-32 Keps nuts (23) as shown.

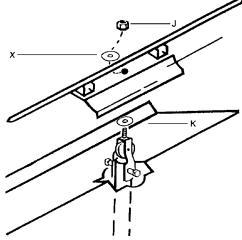
25. Place 3/4 O.D.x5/16 I.D. washer (K) over stud at top end of post. Add roof cap with perch (8) to assembly. Using 3/4 O.D.x3/16 I.D. washer (X) add to roof cap beneath perch rod as shown. Tighten assembly firmly in place using 10-24 lock nut (J).





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.

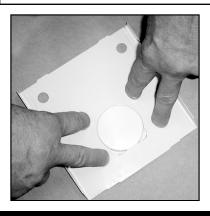




Refer to page 2 for proper Lanyard Lock operation and raising and lowering of house. Secure house in position by wrapping rope around cleat.



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.



Rope should be checked yearly and replaced if worn. With house lowered, attach new rope to end of old rope with tape or wire and pull new rope through with old rope.

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

Phone 800-342-3782

E-mail <ervatool@sbcglobal.net>

Fax 800-342-3781

Please use product code number when ordering parts MSS-12 Martin Safety System

Call 800-255-2692

E-mail <nathouse@adams.net>

HOUSE PARTS PACKED IN HOUSE BOX

	Qty.	
<u>Item</u>	Req.	Description
1	4	Floor sections
2	1	Roof
3	1	Ceiling
4	4	End panels
5	12	Doors
6	4	Center dividers
7	8	Short dividers
8	1	Roof cap
8A	1	Perch rod
9	4	6-32x18-5/8 tie rods
10	4	Rail assemblies
11	8	Floor trays
12	4	Center floor trays
13	12	Winter door stops
14	1	Center bracket
	1 2 3 4 5 6 7 8 8A 9 10 11 12 13	Item Req. 1 4 2 1 3 1 4 4 5 12 6 4 7 8 8 1 8A 1 9 4 10 4 11 8 12 4 13 12

PARTS IN PLASTIC BAG (HARDWARE)

35250	15	10	#6x3/8 SMS
35286	16	6	Flat C nuts
40050	17	4	10-24x1/2 RHMS
40550	18	4	10-24 Keps nuts
35288	20	9	6-32 Acorn nuts
35263	21	32	6-32x5/16 PHMS
27300	22	1	Kit wrench
35252	23	34	6-32 Keps nuts
35270	24	2	6-32x1-1/4 PHMS
25060	25	2	Rail supports

PARTS IN SMALL PLASTIC BAG (FLOOR CLIPS)

25042	26	12	Floor clips
35260	27	12	6-32x1/4 PHMS S.S.
35265	28	12	6-32 Keps nuts S.S.

POST PARTS IN LARGE PLASTIC BAG

			<u> </u>
20414	Α	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	F	4	1/4 Lock washers
32019	G	1	1/4-20 Lock nuts
35264	H	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
32009	U	1	1/4-20x2-1/4 Bolt
26213	V	2	Brass bushings
726208	W	1	Pulley end assembly
24400	X	1	3/4 O.D.x3/16 I.D. washer

PARTS PACKED IN BUNDLE

Product Code #		Qty. <u>Req.</u>	<u>Description</u>
33000	N	1	22 ft. rope
26212	P	1	Rope cleat

PARTS PACKED IN 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)
28410	29	1	1-3/4" x 24" Ground Socket
28024	30	2	'B' Tube clamps
42500	31	2	1/4-20 Hex nuts
43550	32	2	1/4" Lock washers
30053	33	2	1/4-20x1-1/4" Carriage bolts

PARTS IN PLASTIC BAG (LANYARD LOCK)

726276	34	1	Lanyard Lock assembly
26272	35	1	Lanyard Lock case cover