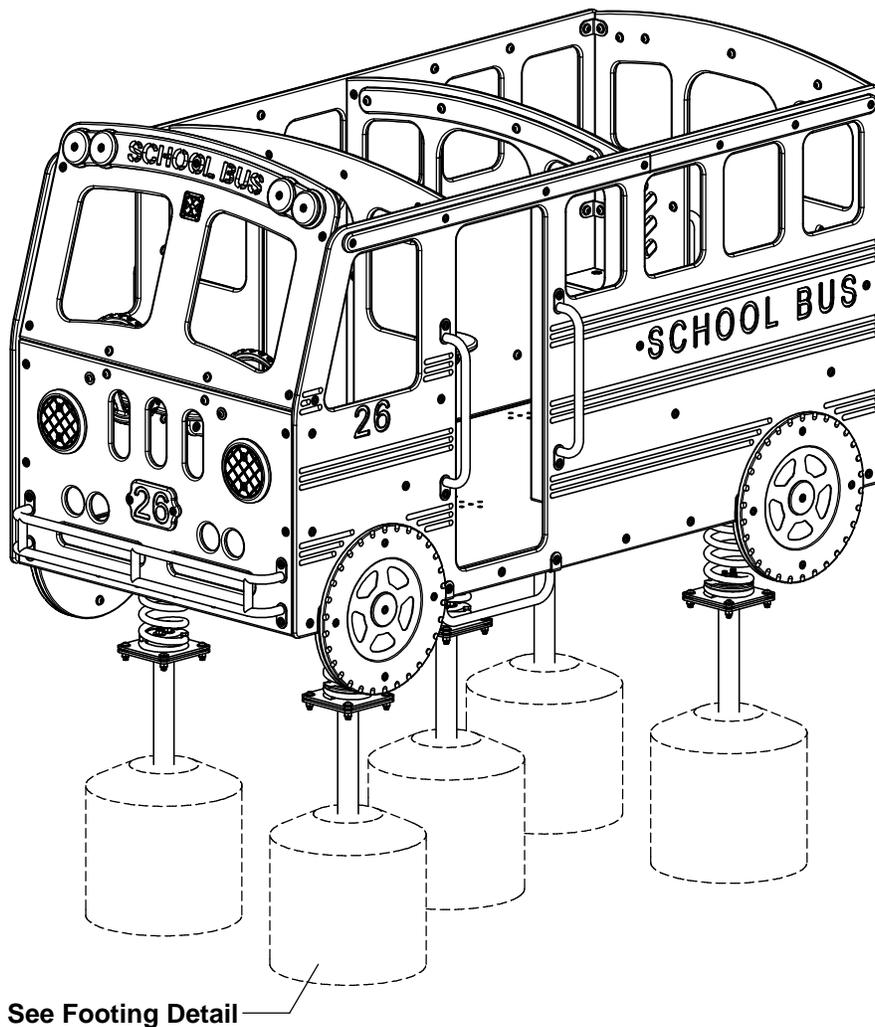


IMPORTANT NOTES: Read First

- (A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- (B) Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).
- (C) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

**FIGURE 1
School Bus**



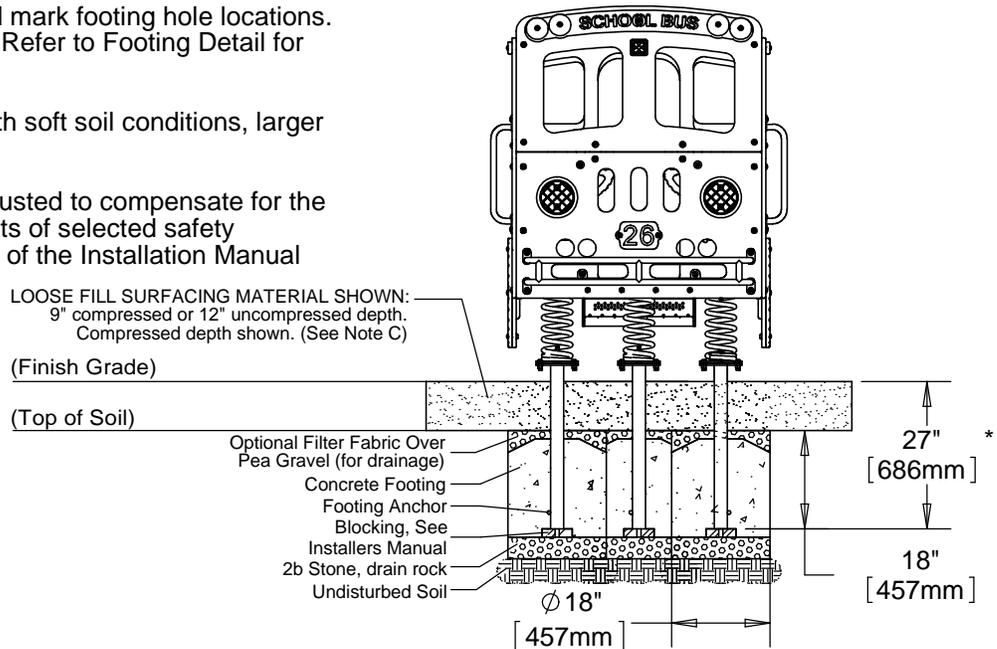
Step 1

Refer to Footing Layout and mark footing hole locations. Dig (5) Ø 18" footing holes. Refer to Footing Detail for depth and details.

IMPORTANT: For areas with soft soil conditions, larger footings may be required.

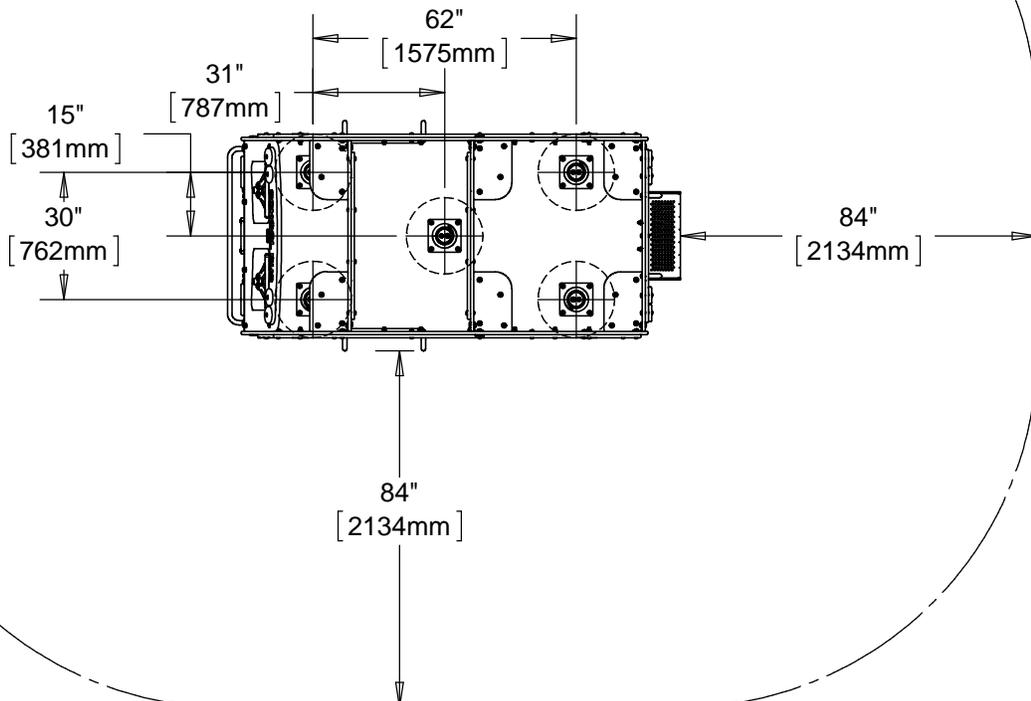
* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual

Footing Detail



Top View - Footing Layout 84" [2134mm] Use Zone Recommended

Refer to current ASTM 1487 standards:
The Use Zone for Rocking or Spring equipment upon which the user is intended to stand shall be no less than 84" [2134mm] in all directions from the at rest perimeter of the play structure.



Step 2 (Factory Assembled)

Attach Warning Lights and Banners to Windshield and Back Panel as shown in Figure 2. (See Note A)

NOTE: Windshield and Front Banner shown.

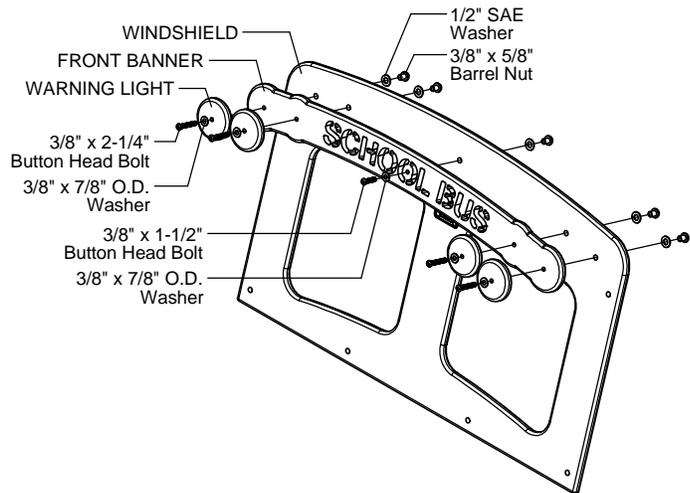


FIGURE 2

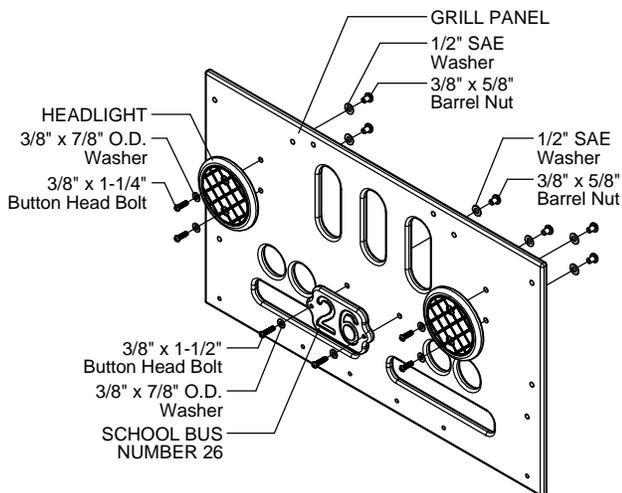


FIGURE 3

Step 3 (Factory Assembled)

Attach Number and Headlights to Grill Panel as shown in Figure 3. (See Note A)

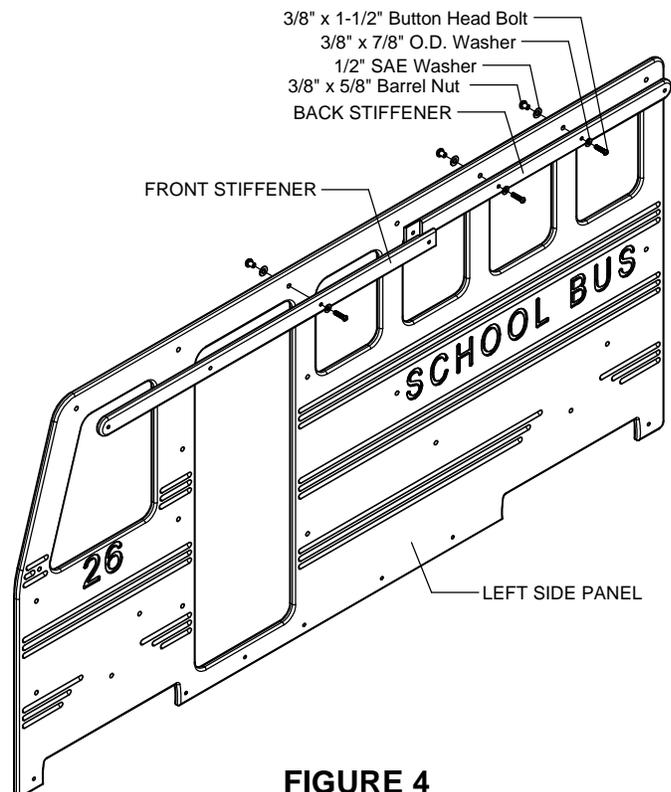


FIGURE 4

Step 4 (Factory Assembled)

Attach Stiffeners to Side Panels as shown in Figure 4. (See Note A)

NOTE: Left Side Panel shown.

Step 5 (Factory Assembled)

Attach Vehicle Bulkheads to Partitions as shown in Figure 5. (See Note A)

NOTE: Front Partition shown. Refer to Figure 1 for orientation.

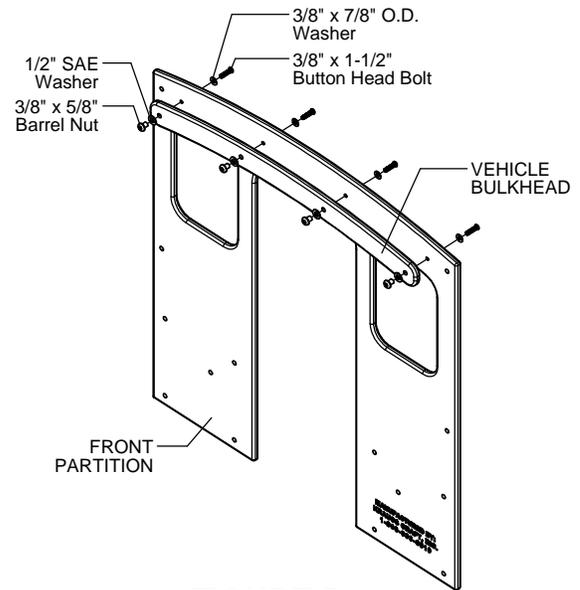


FIGURE 5

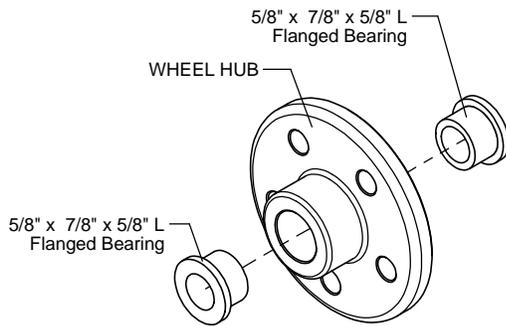


FIGURE 6

Step 6 (Factory Assembled)

Press Bearings into Wheel Hub as shown in Figure 6.

Step 7 (Factory Assembled)

Insert Spring Mount Pucks into Springs and attach to Spring Mount Plates and Multi-Spring Deck as shown in Figure 7. (See Note A)

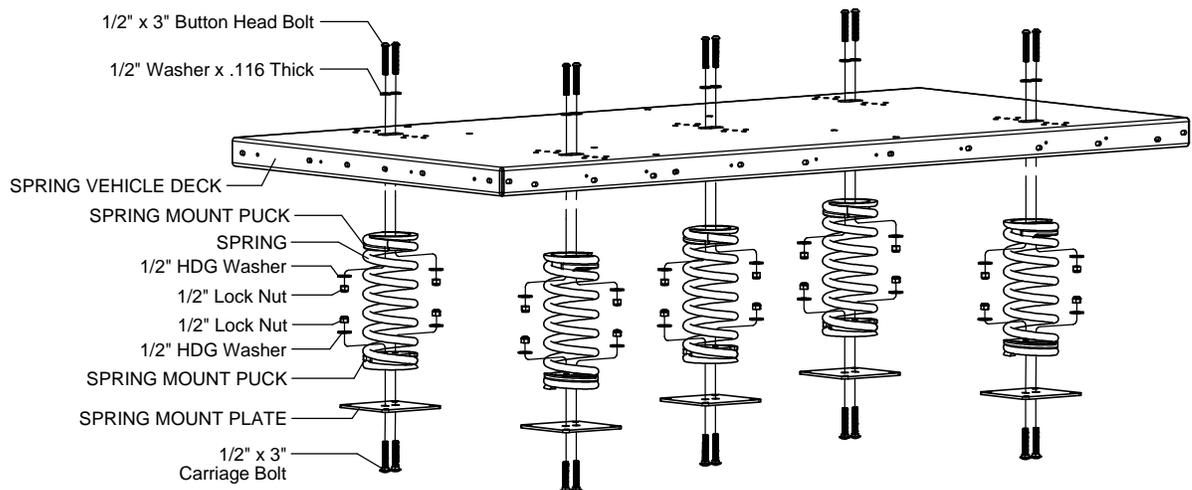


FIGURE 7

Step 8

Attach Spring Legs to Spring Mount Plates as shown in Figure 8. (See Note A)

Step 9

Place Spring Vehicle Deck Assembly into footing holes. Plumb and level entire component. Pour concrete into footing holes. Allow at least 72 hours to cure before proceeding to next step. (See Note B)

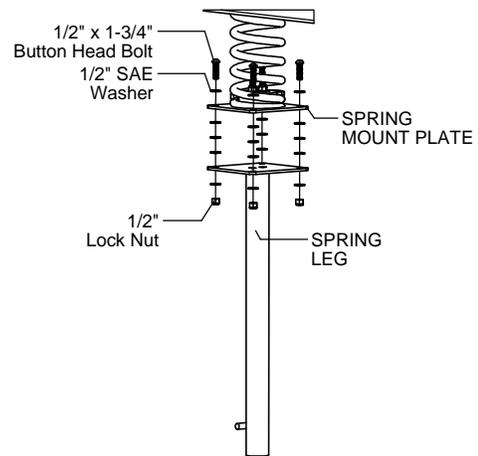


FIGURE 8

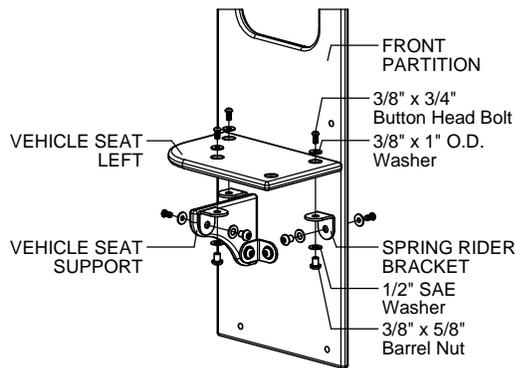


FIGURE 9

Step 10

Attach Spring Rider Brackets, Vehicle Seats and Supports to Back Panel and Partitions as shown in Figure 9. (See Note A)

NOTE: Front Partition shown. Refer to Top View for orientation.

Step 11

Attach Spring Rider Brackets to Partitions and Vehicle Seats as shown in Figure 10. (See Note A)

NOTE: Front Partition shown.

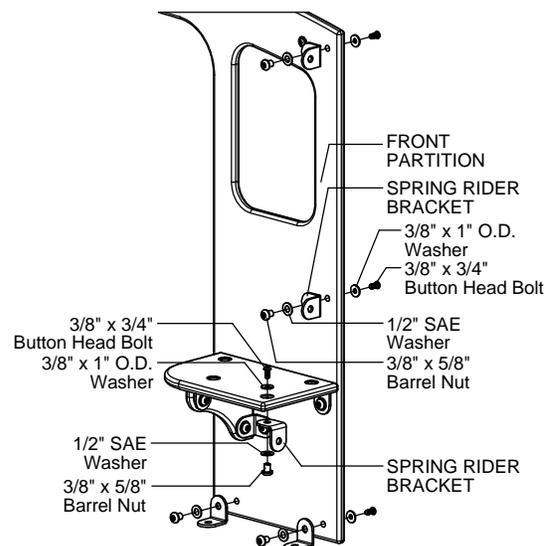


FIGURE 10

Step 12

Attach Partition Panels to Spring Vehicle Deck as shown in Figure 11. (See Note A)

NOTE: Front Partition Panel shown.

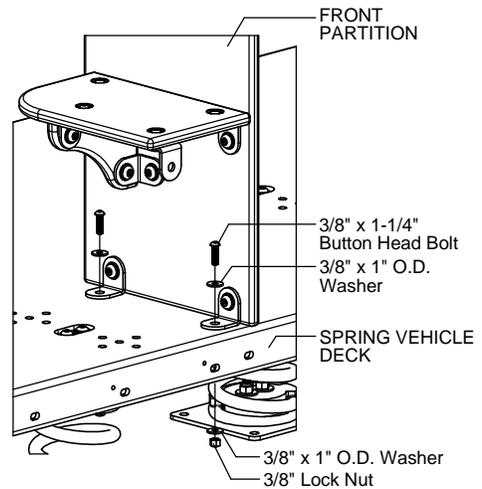


FIGURE 11

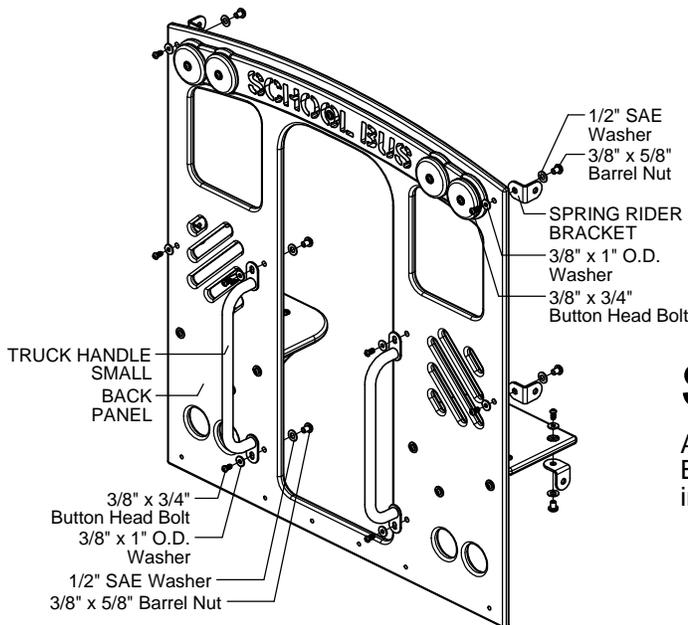


FIGURE 12

Step 13

Attach Small Truck Handles and Spring Rider Brackets to Back Panel and Vehicle Seats as shown in Figure 12. (See Note A)

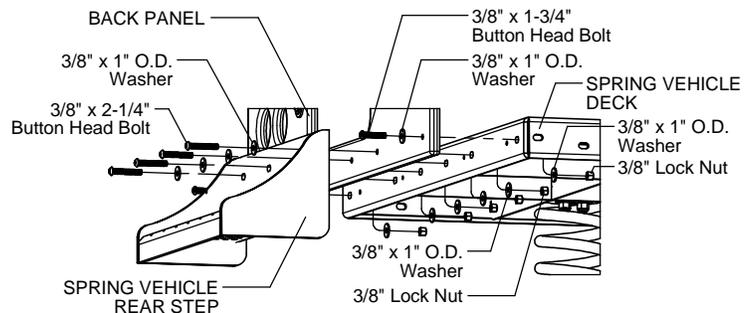


FIGURE 13

Step 14

Attach Back Panel and Spring Vehicle Rear Step to Spring Vehicle Deck as shown in Figure 13. (See Note A)

Step 15

Attach Brackets to Grill Panel as shown in Figure 14. (See Note A)

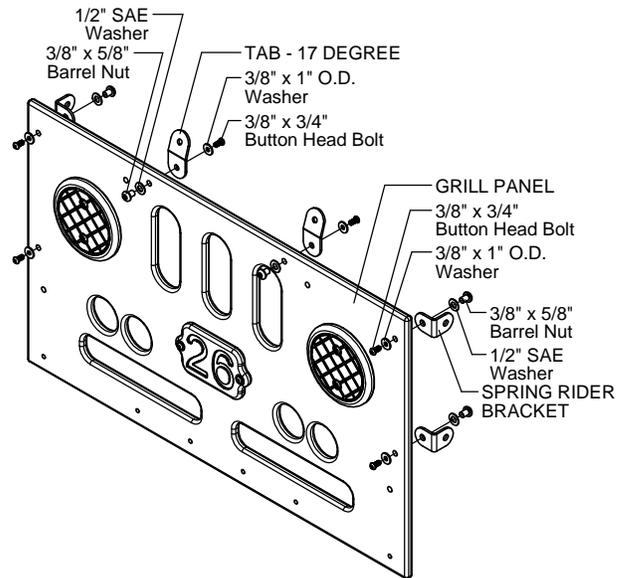


FIGURE 14

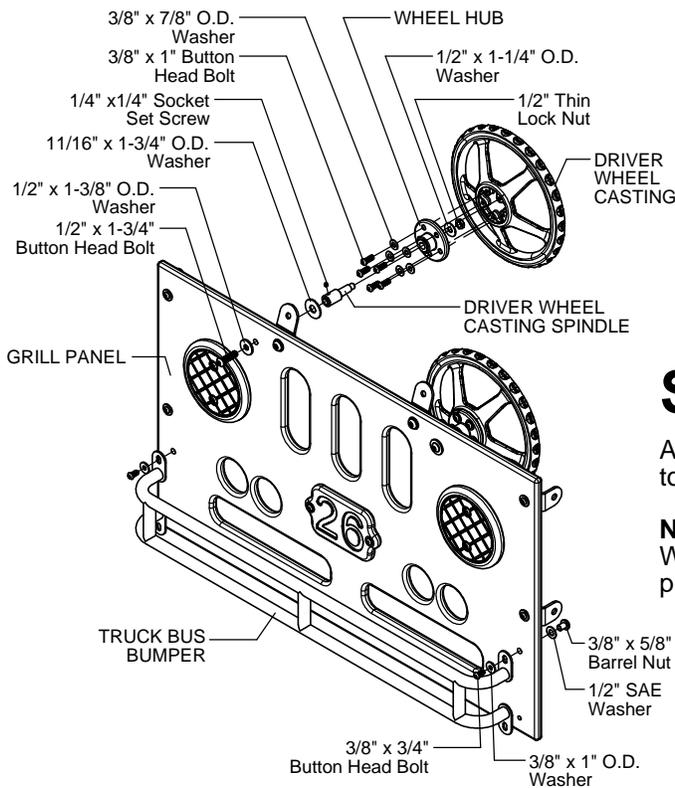


FIGURE 15

Step 16

Attach Driver Wheel Castings and Truck Bus Bumper to Grill Panel as shown in Figure 15. (See Note A)

NOTE: Secure 1/4" x 1/4" Socket Set Screw to Driver Wheel Casting Spindle using the Hex Key Wrench provided.

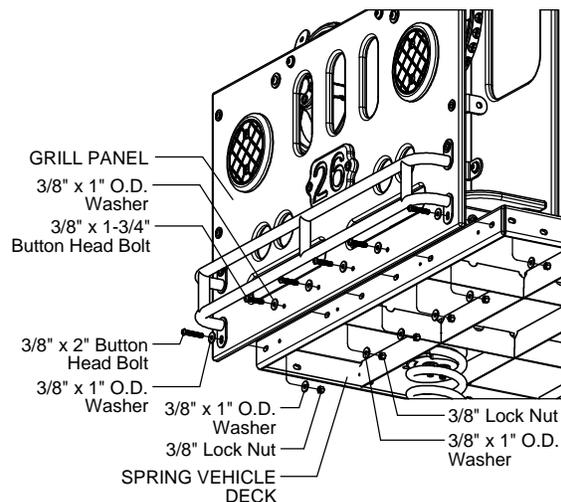


FIGURE 16

Step 17

Attach Grill Panel to Spring Vehicle Deck as shown in Figure 16. (See Note A)

Step 18

Attach Small Truck Handles to Side Panels as shown in Figure 17. (See Note A)

Step 19

Attach Side Panels and Steps to Spring Vehicle Deck as shown in Figure 18. (See Note A)

NOTE: Left Side Panel shown.

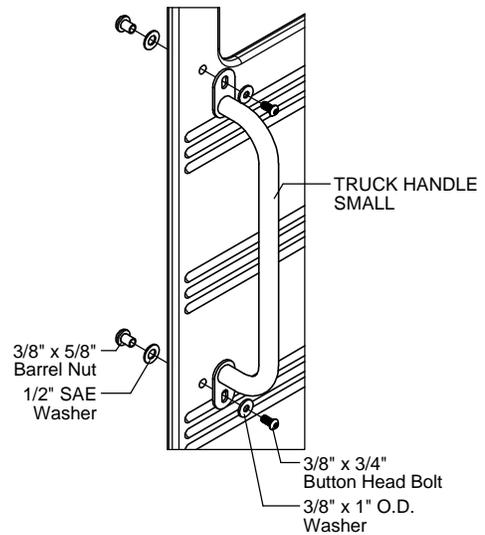


FIGURE 17

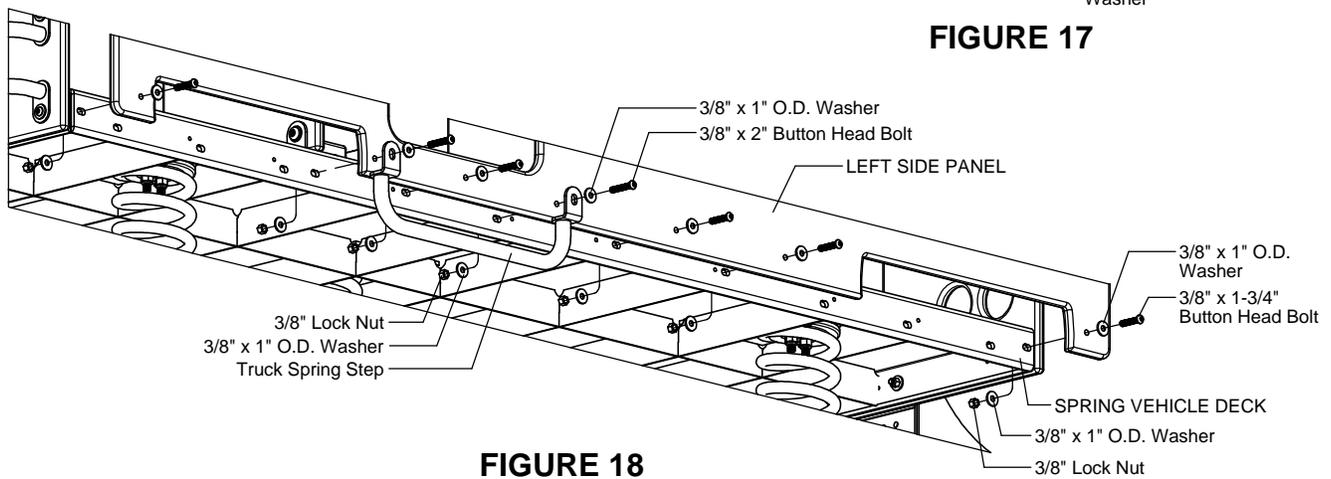


FIGURE 18

Step 20

Attach Side Panels to Grill Panel as shown in Figure 19. (See Note A)

NOTE: Left Side Panel shown.

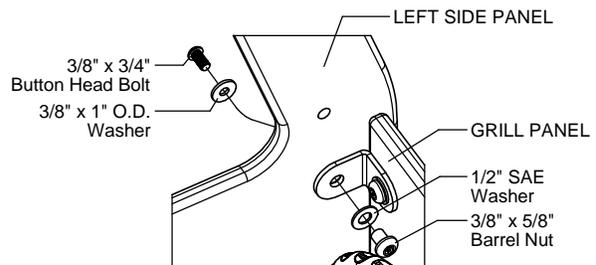


FIGURE 19

Step 21

Attach Side Panels to Front Partition as shown in Figure 20. (See Note A)

NOTE: Left Side Panel shown.

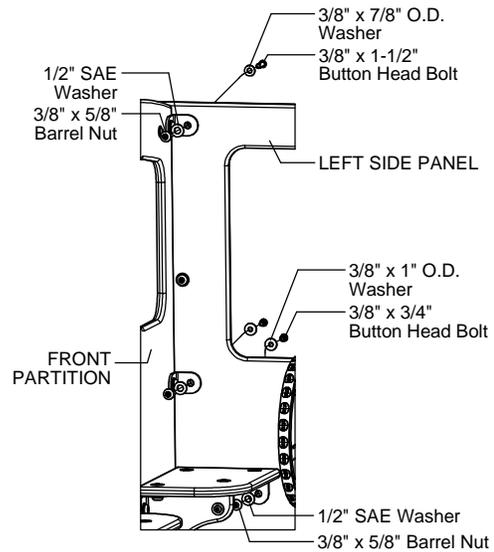


FIGURE 20

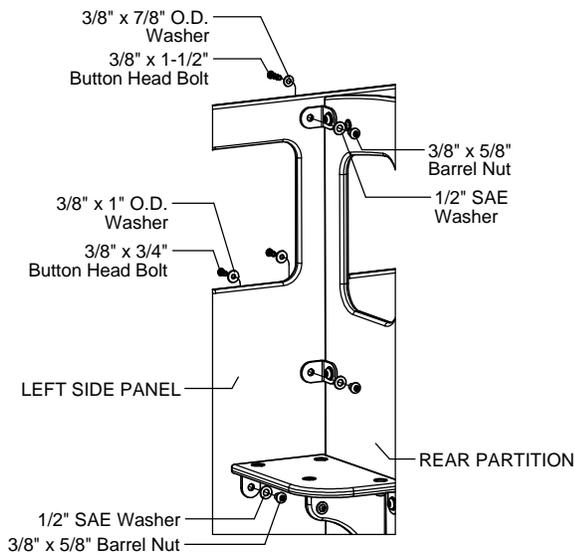


FIGURE 21

Step 22

Attach Side Panels to Rear Partition as shown in Figure 21. (See Note A)

NOTE: Left Side Panel shown.

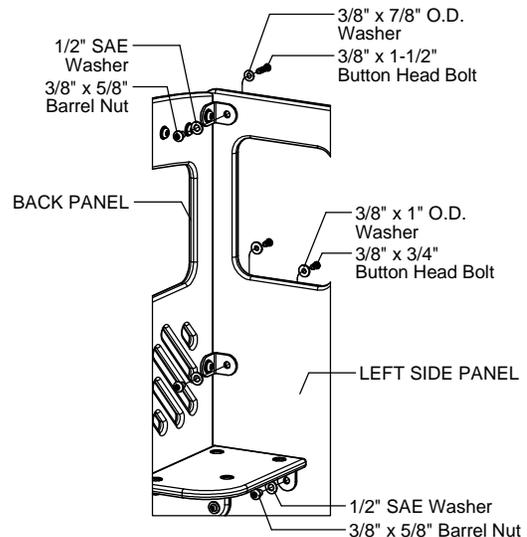


FIGURE 22

Step 23

Attach Side Panels to Back Panel as shown in Figure 22. (See Note A)

NOTE: Left Side Panel shown.

Step 24

Attach Spring Rider Brackets to Windshield as shown in Figure 23. (See Note A)

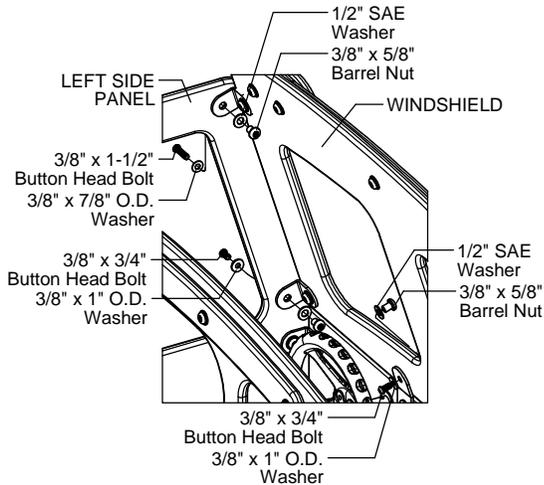


FIGURE 24

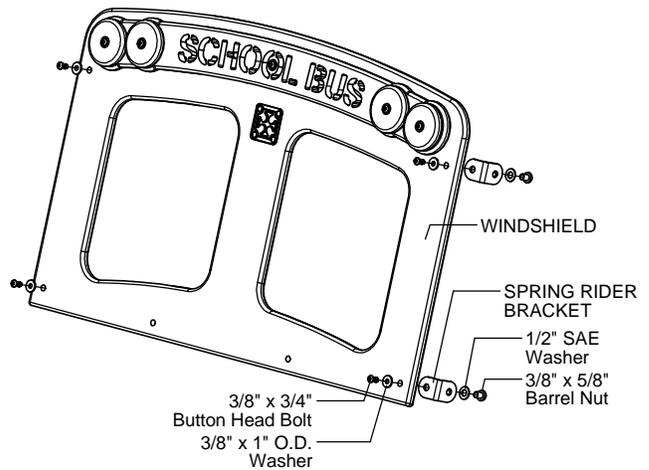


FIGURE 23

Step 25

Attach Windshield to Side Panels and Grill Panel as shown in Figure 24. (See Note A)

NOTE: Left Side Panel shown.

Step 26

Attach Tire Backs, Backers, Middles, Tires, and Wheel Inserts to Spring Vehicle Deck and Side Panels as shown in Figure 25. (See Note A)

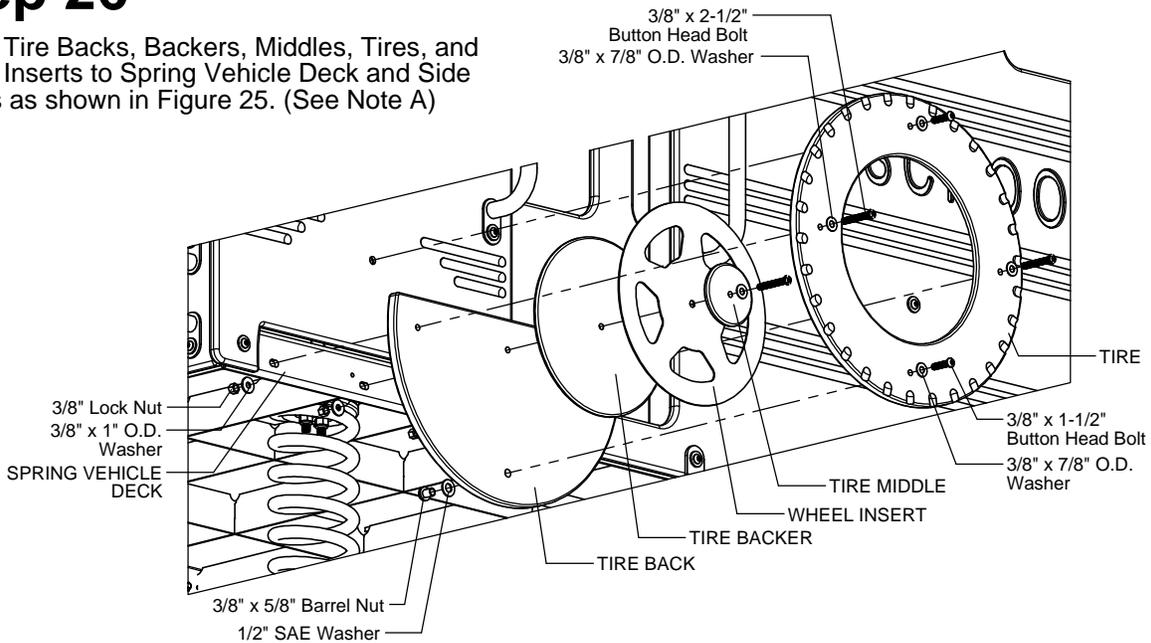


FIGURE 25

Step 27

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 28

Place required protective surfacing under and around School Bus. (See Note C)

MULTI-SPRING SCHOOL BUS INSTALLATION INSTRUCTIONS

PC-1397
Page 11 of 12

Parts List

Part #	DESCRIPTION	QTY.
AE-4718	Wheel Insert	4
BE-4466	Spring Rider Bracket	58
BE-7036-17	Castle Tab - 17 Degree	2
CE-4632	Spring Vehicle Rear Step	1
EE-0001-L	Spring Rider Vehicle Seat Left	3
EE-0001-R	Spring Rider Vehicle Seat Right	3
EE-0001-S	Spring Rider Vehicle Seat Support	6
EE-4771-1MF	Tire Backer	4
EE-4771-2MF	Tire Middle	4
EE-4771-IF	Tire Back	4
EE-4771-OF	Tire	4
FS-PC1397-BUMP	Truck Bus Bumper	1
FS-PC1398-HND	Truck Handle Small	6
FS-PC1399-A	Truck Stirrup Step	2
FS-PC1399-C	Spring Inground Leg	5
GE-4728	Driver Wheel Casting	2
IE-4761	Driver Wheel Casting Spindle	2
451172	Hex Key Wrench 1/8" SA	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	118
9103052-TR	Bolt Button Head 3/8" x 1"	10
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	8
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	16
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	16
9103092-TR	Bolt Button Head 3/8" x 2"	6
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	12
9105082	Bolt Button Head 1/2" x 1-3/4"	22
9261002	1/4" x 1/4" Socket Set Screw	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	198
9333042	Washer Flat 3/8" x 7/8" O.D.	38
9335062	Washer Flat 1/2" x 1-1/4" OD	2
9335062-5	Washer Flat 1/2" x 1-3/8" OD	2
9337072-5	Washer Flat 11/16" x 1-3/4" OD	2
9345002	Washer Flat SAE 1/2"	234
9413002	Nut Lock 3/8"	46
9415132	Nut Lock 1/2"	20
9425002	Nut Lock 1/2" Thin	2
9443022-TR	Nut Barrel 3/8" x 5/8" BH	134

Assembled Parts List

Part #	DESCRIPTION	QTY.
AE-4533	Single Spring Bottom Mount Plate	5
CE-4631	Double Bulkhead Spring Vehicle Deck	1
EE-0003	Spring Rider Vehicle Bulkhead	2
EE-0004	Vehicle Headlight	2
EE-4781-26	School Bus Number 26	1
EE-4781-BB	School Bus Back Banner	1
EE-4781-BP	School Bus Back Panel	1
EE-4781-BS	School Bus Back Stiffener	2
EE-4781-FB	School Bus Front Banner	1
EE-4781-FP	School Bus Front Partition	1
EE-4781-FS	School Bus Front Stiffener	2
EE-4781-GP	School Bus Grill Panel	1
EE-4781-LSP	School Bus Left Side Panel	1
EE-4781-RP	School Bus Rear Partition	1
EE-4781-RSP	School Bus Right Side Panel	1
EE-4781-WL	School Bus Warning Light	8
EE-4781-WP	School Bus Windshield	1
GE-4514	Spring Mount Puck	10
HE-4498	Playground Event Spring	5
IE-4662	Wheel Hub	2
481058-58	5/8" x 7/8" x 5/8" L Flanged Bearing	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	18
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	8
9105132	Bolt Button Head 1/2" x 3"	10
9115132	Bolt Carriage 1/2" x 3"	10
9315003	Washer Cut 1/2" HDG	20
9333042	Washer Flat 3/8" x 7/8" O.D.	30
9335002	Washer Flat 1/2" (.116" thick)	10
9345002	Washer Flat SAE 1/2"	30
9415132	Nut Lock 1/2"	20
9443022-TR	Nut Barrel 3/8" x 5/8" BH	30

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.



Manufactured by Krauss Craft, Inc.
www.playcraftsystems.com

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800.333.8519 (U.S.A.) or
541.955.9199 (International)

Rev C
9/24/2012

Specifications

DOUBLE BULKHEAD SPRING VEHICLE DECK:

Shall be fabricated using punched, formed and welded 12 gauge sheet steel, reinforcing cross members, gussets, and 1/4" thick steel mounting plates. The Double Bulkhead Spring Vehicle Deck shall be Play-Tuff™ coated after fabrication.

DRIVER WHEEL CASTING:

Shall be precision die-cast from a high-strength aluminum alloy. The Driver Wheel Casting shall have a multi-stage baked-on powder coat finish.

PLAYGROUND EVENT SPRING:

Shall be 5-3/4" O.D. with a free height of 14". The Playground Event Spring shall have a multi-stage baked-on powder coat finish.

SCHOOL BUS PANELS, SEATS & TIRE SETS:

Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV-Stability and color retention.

SPINDLE:

Shall be made from Ø 1" stainless steel.

SPRING INGROUND LEG:

Shall be fabricated using 2.375" O.D. 10 gauge steel tubing with welded 1/4" thick steel top mounting plate. The Spring Inground Leg shall have a multi-stage baked-on powder coat finish.

SPRING MOUNT PLATE:

Shall be made from 1/4" thick steel plate. The Spring Mount Plate shall have a multi-stage baked-on powder coat finish.

SPRING MOUNT PUCK:

Shall be cast from a high-strength aluminum alloy. The Spring Mount Puck shall have a multi-stage baked-on powder coat finish.

SPRING RIDER BRACKET & CASTLE TAB:

Shall be precision laser-cut and formed from 3/16" sheet steel. The Spring Rider Brackets and Castle Tabs shall have a multi-stage baked-on powder coat finish.

SPRING VEHICLE REAR STEP:

Shall be fabricated using punched, formed and welded 12 gauge sheet steel. The Spring Vehicle Rear Step shall be Play-Tuff™ coated after fabrication.

TRUCK BUS BUMPER:

Shall be fabricated using 1.029" O.D. 14 gauge steel tubing with welded 10 gauge steel mounting tabs. The Truck Bus Bumper shall have a multi-stage baked-on powder coat finish.

TRUCK HANDLE SMALL:

Shall be fabricated using 1.029" O.D. 14 gauge steel tubing with welded 10 gauge steel mounting tabs. The Truck Handle Small shall have a multi-stage baked-on powder coat finish.

TRUCK STIRRUP STEP:

Shall be fabricated using 1.029" O.D. 14 gauge steel tubing with welded 3/16" thick steel mounting brackets. The Truck Stirrup Step shall have a multi-stage baked-on powder coat finish.

WHEEL HUB:

Shall be machined from Ø 3-3/4" high strength aluminum alloy. The Wheel Hub shall have a multi-stage baked-on powder coat finish.

WHEEL INSERT:

Shall be precision laser-cut from 14 gauge sheet steel. The Wheel Inserts shall have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

