



**Assembly
&
Installation Instructions**
CONTROL BOX STAND 99100169

FOR

18 SERIES SNOW PLOW

24 SERIES SNOW PLOW

25 SERIES SNOW PLOW

FOR PLOW SERIAL NUMBERS AFTER

18M 100000

18DX 100000

24D100000

24G100000

25D100000

25G100000

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INTRODUCTION

This manual was written for the assembly, installation and set up of the Stand for your Sno-Way Plow Control Box, or Sno-Way Joystick Plow Controller. Most importantly, this manual provides an operating plan for safe use. Refer to the Table of Contents for an outline of this manual.

Please keep this manual with your machine at all times as reference material and so it can be passed on to the next owner if the machine is sold.

We require that you read and understand the contents of this manual COMPLETELY, especially the chapter on SAFETY, before attempting any procedure contained in this manual.



The Society of Automotive Engineers has adopted this SAFETY ALERT SYMBOL to pinpoint characteristics that, if NOT carefully followed, can create a safety hazard. When you see this symbol in this manual or on the machine itself, BE ALERT!, your personal safety and the safety of others, is involved.

• Defined in the next column, are the SAFETY ALERT messages and how they will appear in this manual.



WARNING

Information, that if not carefully followed, can cause serious personal injury or death!



CAUTION

Information, that if not carefully followed, can cause minor injury or damage to equipment!

NOTE: Additional information concerning the equipment or the procedure that may or may not be contained elsewhere in this manual.

BE AWARE! It is illegal to remove, deface or otherwise alter the safety decals mounted on this equipment.

We reserve the right to make changes or improve the design or construction of any part(s) without incurring the obligation to install such parts or make any changes on any unit previously delivered.

TOOL LIST

Safety Goggles

Wrenches 3/8" - 15/16"

Utility knife

12 Volt Test Light

Screw Driver

Drill

Drill Bit 9/32"



SAFETY



BEFORE ATTEMPTING ANY PROCEDURE IN THIS BOOK, READ AND UNDERSTAND ALL THE SAFETY INFORMATION CONTAINED IN THIS SECTION. IN ADDITION, ENSURE ALL INDIVIDUALS WORKING WITH YOU ARE ALSO FAMILIAR WITH THESE SAFETY PRECAUTIONS.

For your safety Warning and Information Decals have been placed on this product to remind the operator to take safety precautions. It is important that these decals are in place and are legible before operation begins. New decals can be obtained from Sno-Way or your local dealer.

REMEMBER The careful operator is the best operator. Most accidents are caused by human error. Certain precautions must be observed to prevent the possibility of injury to operator or bystanders and/or damage to equipment.

NEVER operate Plow when under the influence of alcohol, drugs or other medications that could hamper your judgement and reactions. An accident may result in serious injury or death to other persons or yourself.

ALWAYS operate vehicle in a well-ventilated area. The carbon monoxide in exhaust gas is highly toxic and can cause serious injury or death.

NEVER allow hands, hair or clothing to get near any moving parts such as fan blades, belts and pulleys. Never wear neckties or loose clothing when working on the vehicle.

NEVER wear wrist watches, rings or other jewelry when working on the vehicle or individual equipment. These things can catch on moving parts or cause an electrical short circuit that could result in serious personal injury.

ALWAYS wear safety goggles when working the vehicle to protect your eyes from battery acid, gasoline, and dust or dirt from flying off of moving engine parts.

ALWAYS be aware of and avoid contact with hot surfaces such as engine, radiator, and hoses.

ALWAYS wear safety glasses with side shields when striking metal against metal! In addition, it is recommended that a softer (non-chipable) metal material be used to cushion the blow. Failure to heed could result in serious injury to the eye(s) or other parts of the body.

NEVER allow children or unauthorized person to operate this unit.

NEVER exceed 45 m.p.h. when snow plow is attached to vehicle. Braking distances may be reduced and handling characteristics may be impaired at speeds above 45 m.p.h.

ALWAYS lock the vehicle when unattended to prevent unauthorized operation of the plow.

ALWAYS check the job site for terrain hazards, obstructions and people.

NEVER operate this unit under water.

NEVER exceed 10 m.p.h. when plowing. Excessive speed may cause serious injury and damage of equipment and property if an unseen obstacle is encountered while plowing.

ALWAYS position blade so it does not block path of headlamps beam. Do not change blade positions while traveling. An incorrect plow position blocking Headlamp beam may result in an accident.

ALWAYS check surrounding area for hazardous obstacles before operating this unit.

ALWAYS inspect the unit periodically for defects. Parts that are broken, missing or plainly worn must be replaced immediately. The unit, or any part of it should not be altered without prior written approval of the manufacturer.

ALWAYS insert the cylinder lock when plow is not in use. If the cylinder lock is not installed, the plow blade could inadvertently drop and cause serious injury.

ALWAYS shut off the vehicle engine, place the transmission in Neutral or Park, turn the ignition switch to the "OFF" position and firmly apply the parking brake of the vehicle before attaching or detaching the blade from the vehicle or when making adjustments to the blade.

ALWAYS inspect lift system bolts and pins whenever attaching or detaching the plow, and before traveling. Worn or damaged components could result in the plow dropping to the pavement while driving, causing an accident.

ALWAYS keep hands and feet clear of blade and A-Frame when attaching or detaching plow.

NEVER place fingers in A-frame or mount lug holes to check alignment when attaching snow plow. Sudden motion of the plow could severely injure a finger.

NEVER stand between the vehicle and blade or directly in front of blade when it is being raised, lowered or angled. Clearance between vehicle and blade decreases as blade is operated and serious injury or death can result from blade striking a body or dropping on hands or feet.

NEVER work on the vehicle without having a fully serviced fire extinguisher available. A 5 lb or larger CO₂ or dry chemical unit specified for gasoline, chemical or electrical fires, is recommended.

NEVER smoke while working on the vehicle. Gasoline and battery acid vapors are extremely flammable and explosive.

ALWAYS be aware of and avoid contact with hot surfaces such as engine, radiator, and hoses.

NEVER use your hands to search for hydraulic fluid leaks; escaping fluid under pressure can be invisible and can penetrate the skin and cause a serious injury! If any fluid is injected into the skin, see a doctor at once! Injected fluid **MUST BE** surgically removed by a doctor familiar with this type of injury or gangrene may result.

REMEMBER it is the owner's responsibility for communicating information on the safe use and proper maintenance of this machine.

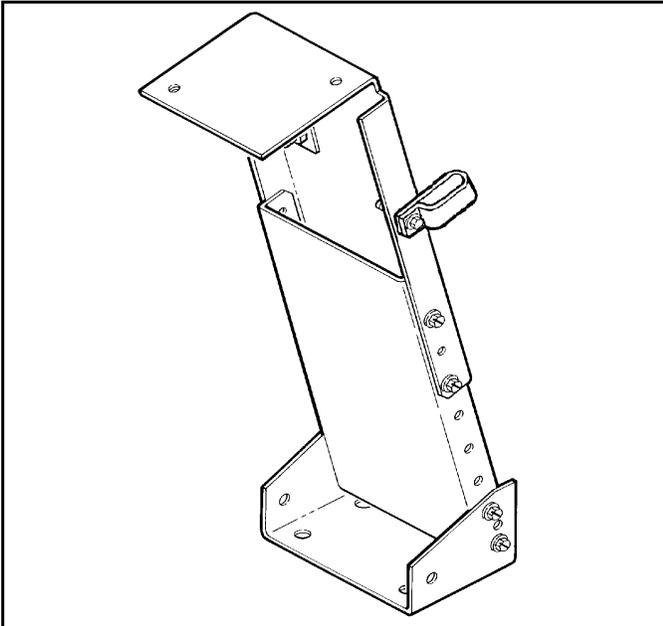
Installation Instructions

General

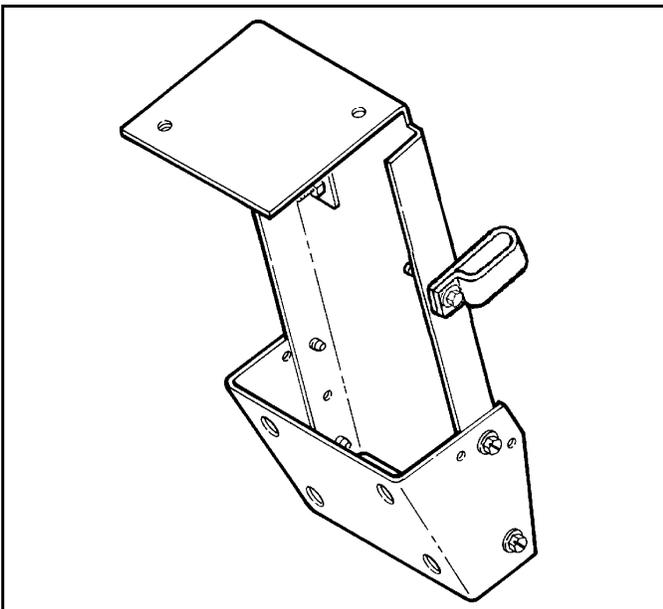
If vehicle is already equipped with a Control Box detach unit from mounting location.

Stand Assembly

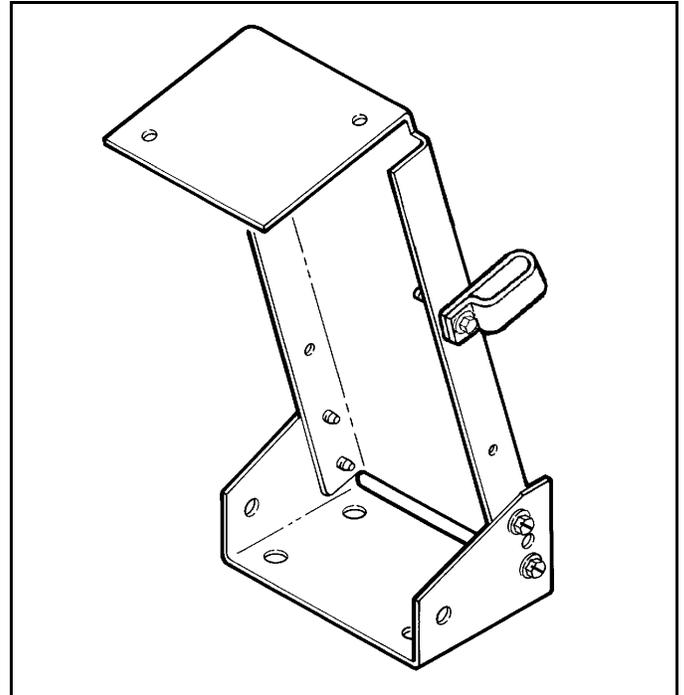
1. Determine whether stand will be mounted on the center tunnel or under the dash.
2. Select one of the following stand configurations depending on mount location.



Extended Stand



Angle or Dash Mount Stand



Short Stand

Stand Installation

IMPORTANT: Before installing Stand move seat forward and insure that Stand and controller will not interfere with operation of vehicle controls.

1. Loosely assemble the Stand Plate and Stand Mount Plate as illustrated. Then place the assembled stand in the desired position in the vehicle. If the position of the controller is lower than desired, remove the Stand Plate from the Stand Mount Plate and install the Stand Extension between the Stand Plate and Stand Mount Plate, adjusting the Plate to obtain the desired height.

NOTE: That the top of the Stand Plate can be either towards the front or the rear of the vehicle as desired.



CAUTION

Make sure there are no wires, cables or gas lines running under vehicle carpet or mats or under body in area where the Stand is to be installed.

2. When the position has been determined, fasten the Stand Mount Plate with the 1/4" Self-Drilling Screws provided.

NOTE: The top of the Stand Plate can be bent to accommodate operator preference. (See Figure 1-1)

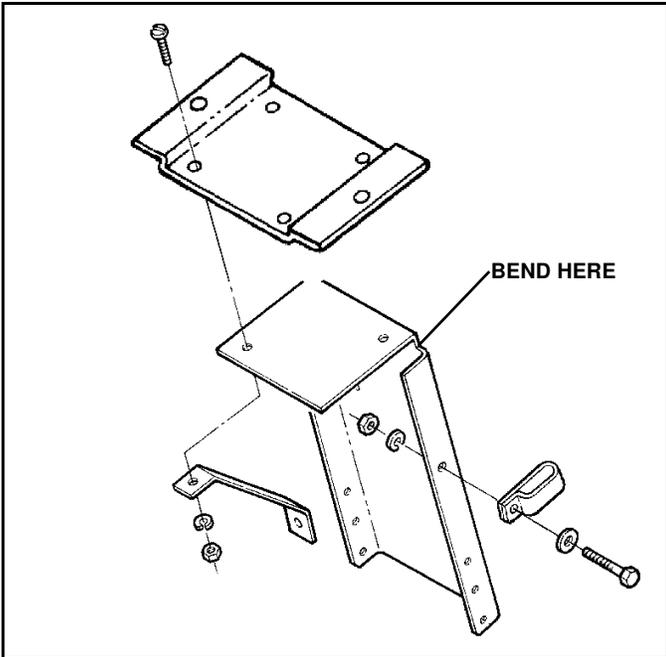


Figure 1-1

Mounting Control Box

1. Attach the Adapter Plate to the top of the Stand with (2) #10-24 x 1/2" Round Head Machine Screws. (See Figure 1-1)

NOTE: Be sure that the offset ends of the Adapter Plate are offset up as shown.

IMPORTANT: While installing the Adapter Plate attach the Brace Strap to the Stand Plate with #10-24 x 1/2" Round Head Machine Screws, Lock Washers and Nuts. (See Figure 1-1)

Make sure that the round heads of the screws are installed with the heads up as illustrated to prevent any interference with the Control Box.

NOTE: If the top of the stand has been bent to a different angle to suit operator preference, bend the Brace Strap ends to match the new angle. Locate and temporarily attach the Brace Strap to the top of the Stand Plate with #10-24 x 1/2" Round Head Machine Screw.

Drill a new 9/32" Dia hole in the Stand Plate using the second hole in the Brace Strap as a template.

2. Tighten all screws used to assemble plate and stand.
3. Position the Control Box on the top of the Adapter Plate and fasten it to the Adapter Plate with (2) 1/4" x 1-1/2" Cap Screws, Lock Washers and Nuts Provided. (See Figure 1-2)

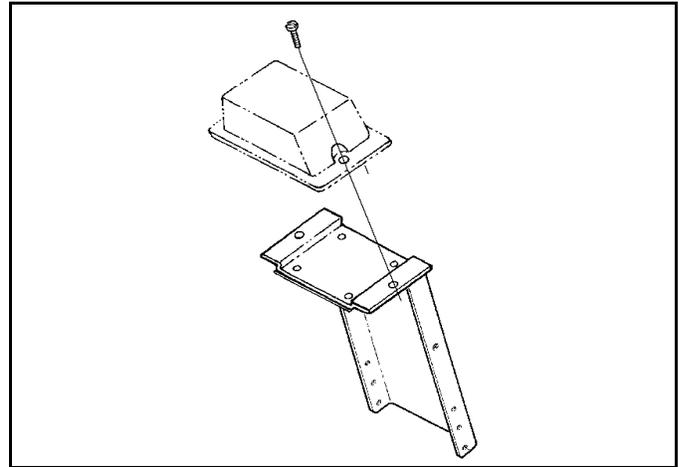


Figure 1-2

4. Secure wire harness to side of Stand Plate with Harness Clamp provided and secure with 1/4"-20 x 1" Cap Screw Lock Washer and Nut through the 9/32" Dia hole in the side of the Stand Plate. (See Figure 1-3)

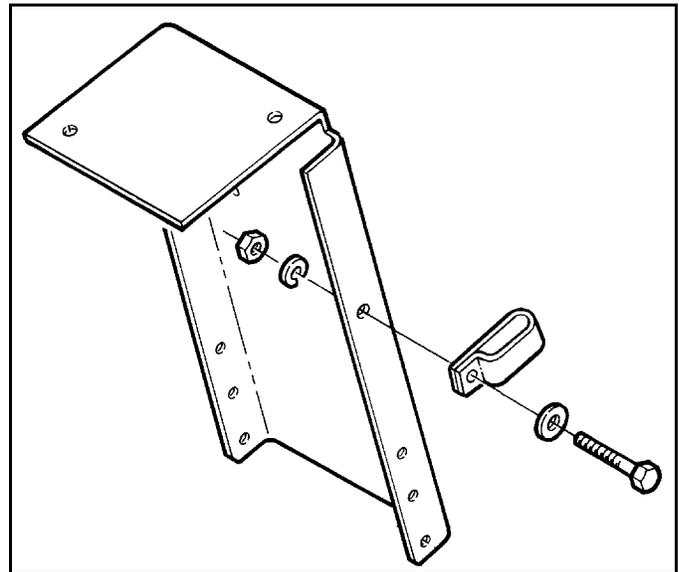


Figure 1-3

5. Plug in Connectors on wire harness to Connectors on Plow harness.

Mounting Joystick Controller

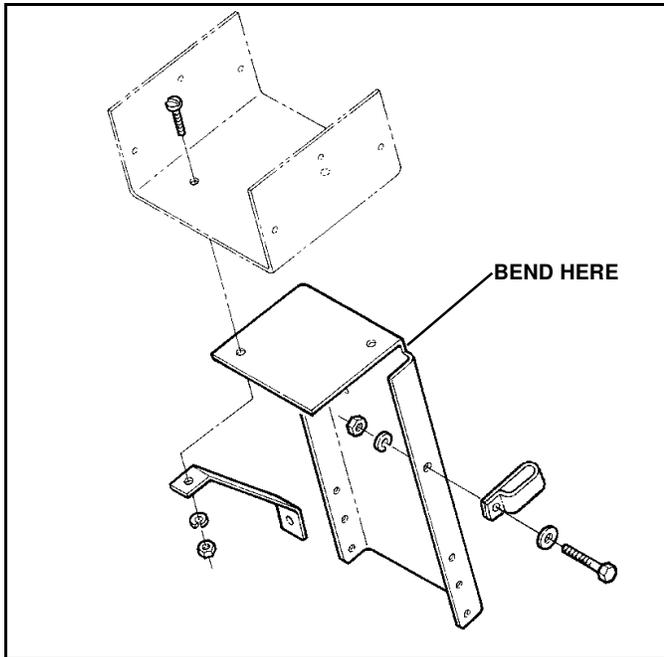


Figure 1-4

1. Attach the Brace Strap to the Stand Plate with one #10-24 x 1/2" Round Head Machine Screw, Lock Washer and Nut. (See Figure 1-4)

NOTE: If the top of the stand has been bent to a different angle to suit operator preference, bend the Brace Strap ends to match the new angle. Locate and temporarily attach the Brace Strap to the top of the Stand Plate with #10-24 x 1/2" Round Head Machine Screw. Drill a new 9/32" Diameter hole in the Stand Plate using the second hole in the Brace Strap as a template.

2. Tighten all screws used to assemble plate and stand.
3. Remove the three hex slotted head screws from each side of the Controller Housing and remove the controller Housing Bottom Plate. (See Figure 1-5)

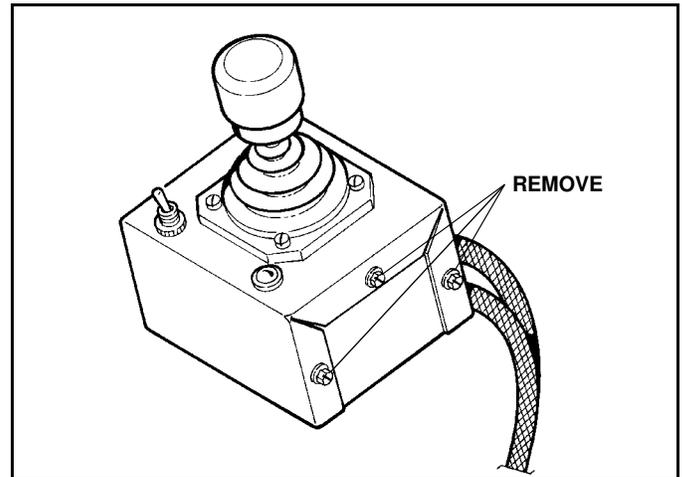


Figure 1-5

4. Position the Controller Housing Bottom Plate on top of the Stand Plate and fasten it with two #10-24 x 1/2" Round Head Machine Screws, Lock Washers and Nuts provided. (See Figure 1-6)

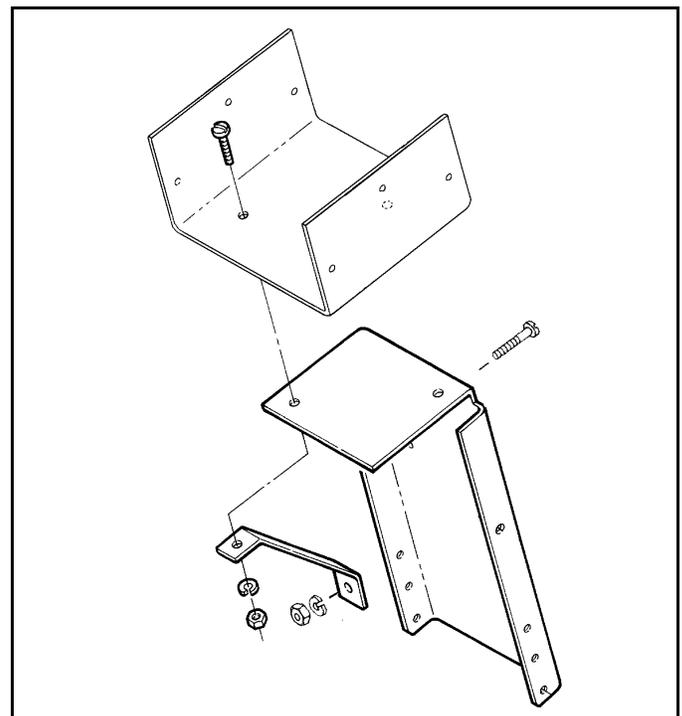


Figure 1-6

NOTE: One of the Screws also attaches the Brace Strap to the top of the stand.



CAUTION

Install the screws with the screw heads to the top so that the screw heads will be inside the control housing.

5. Re-assemble Controller using hardware removed in step 3.



CAUTION

•Make sure not to pinch wires when reassembling Controller.

•Make sure Strain Relief Bushing is in place.

6. Secure wire harness to side of Stand Plate with Harness Clamp provided and secure with 1/4"-20 x 1" Cap Screw Lock Washer and Nut through the 9/32" Dia hole in the side of the Stand Plate.
(See Figure 1-7)

7. Plug in Connectors on wire harness to Connectors on Plow harness.

NOTE: For Parts Listings, refer to the Snow Plow Service Parts Manual.

For Wiring Diagram, Refer to the Snow Plow Set Up & Installation Instructions.

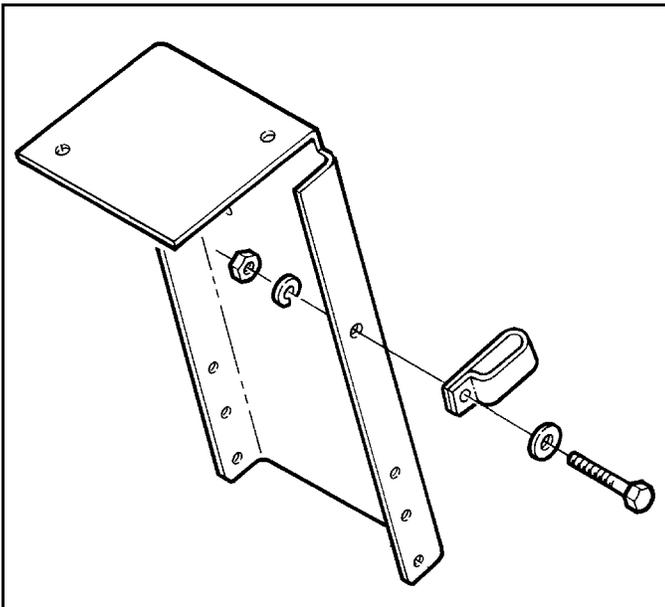


Figure 1-7

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