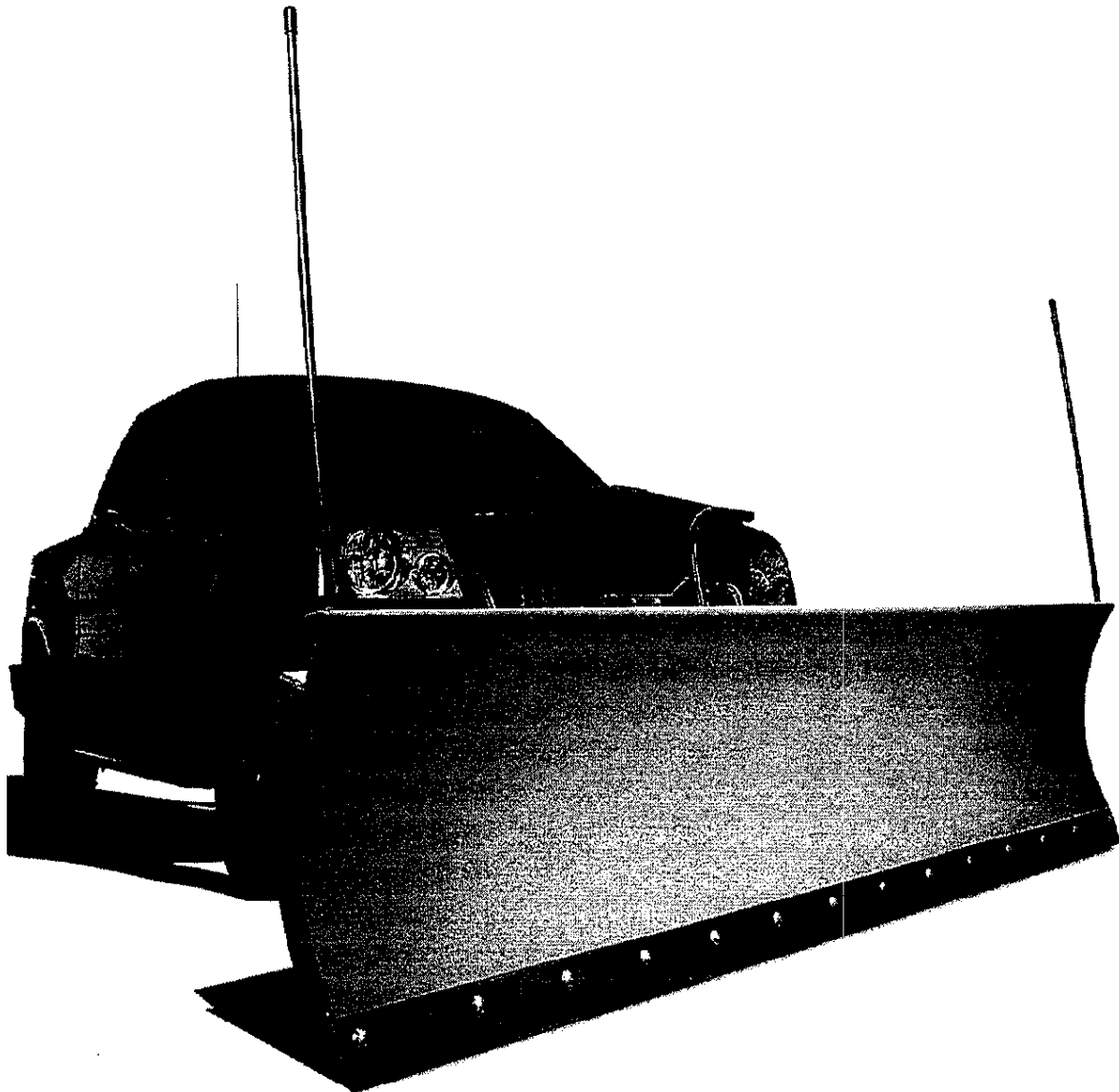




SNOWBEAR® PLOWS INC.

SnowBear Personal Snowplow Parts Listing



SNOWPLOW PART LIST

Before you begin, please verify that all of the parts below have been included with your plow. Your plow is packaged in two boxes.

Item	Quantity	Description	Part Number
1	1	Blade	**
2	1	82" Scraper for 82" Blade	5-B
		84" Scraper for 84" Blade	00227-B
		88" Scraper for 88" Blade	00230-B
3	1	Lower A-Frame	00420-B
4	1	Upper A-Frame	00430-B
5	1	5/8 -11 Lock Nut Center 2-Way	73095
6	1	5/8 -11 x 2" Hex Bolt	73015
7	1	5/8" Flat Washer	73080
8	1	Pivot Bolt Sleeve	79575
9	2	Frame Pin	41338-B
10	1	Winch frame - Driver side	00409-B
11	1	Winch frame - Passenger side	00408-B
12	1	Winch Mount Plate - Black	00496-B
13	2	12" Snowplow Spring	00470-B
14	2	Eyebolt - 4-1/2" (82" Blade)	79013
		Eyebolt - 9-1/2" (84" Blade)	79015
		Eyebolt - 12" (88" Blade)	78195
15	1	Release Handle	00475-B
16	1	Release Rod	00480-B
17	1	Complete Winch with Strap and Controls	00390 *
17a		Winch With Strap	00385
17b		Winch Controls	00395
17c		2,000 lb Winch Strap	79089
17d		Winch Switch and Control Box	00405
17e		2' Winch Connector	00403
18	1	35A Circuit Breaker	00435
19	1	Circuit Breaker Bracket	00436
20	2	14" Cable Ties	97362
21	1	U Bolt for Winch Strap	79040
22	2	Snowplow Marker	79099
23	1	Mount Assembly Stand	00499-B
24	1	Safety Hook	79075-B
25	3	5/16" x 2 1/2" Hitch Pin	79020
26	26	3/8 -16 Lock Nut Center 2-Way	71595
27	1	3/8 -16 x 1 1/4" Hex Bolt	71508
28	1	3/8 -16 x 1 1/2" Hex Bolt	71510
29	3	3/8 -16 x 2" Hex Bolt	71515
30	4	5/16 -18 x 1" Hex Bolt	71205
31	4	5/16 -18 Lock Nut Center 2-Way	71295
32	4	1/2 -13 Lock Nut Center 2-Way	72595
33	4	1/2" Flat Washer	72580
34	2	1/2 -13 x 2" Hex Bolt	72515
35	15	3/8 -16 x 1" Carriage Bolt.	75005
36	3	Clevis Pin 1/2" x 2"	79025
37	3	Cotter Pin 1/8" x 1"	79030
38	1	Cross Member	5XM5-B

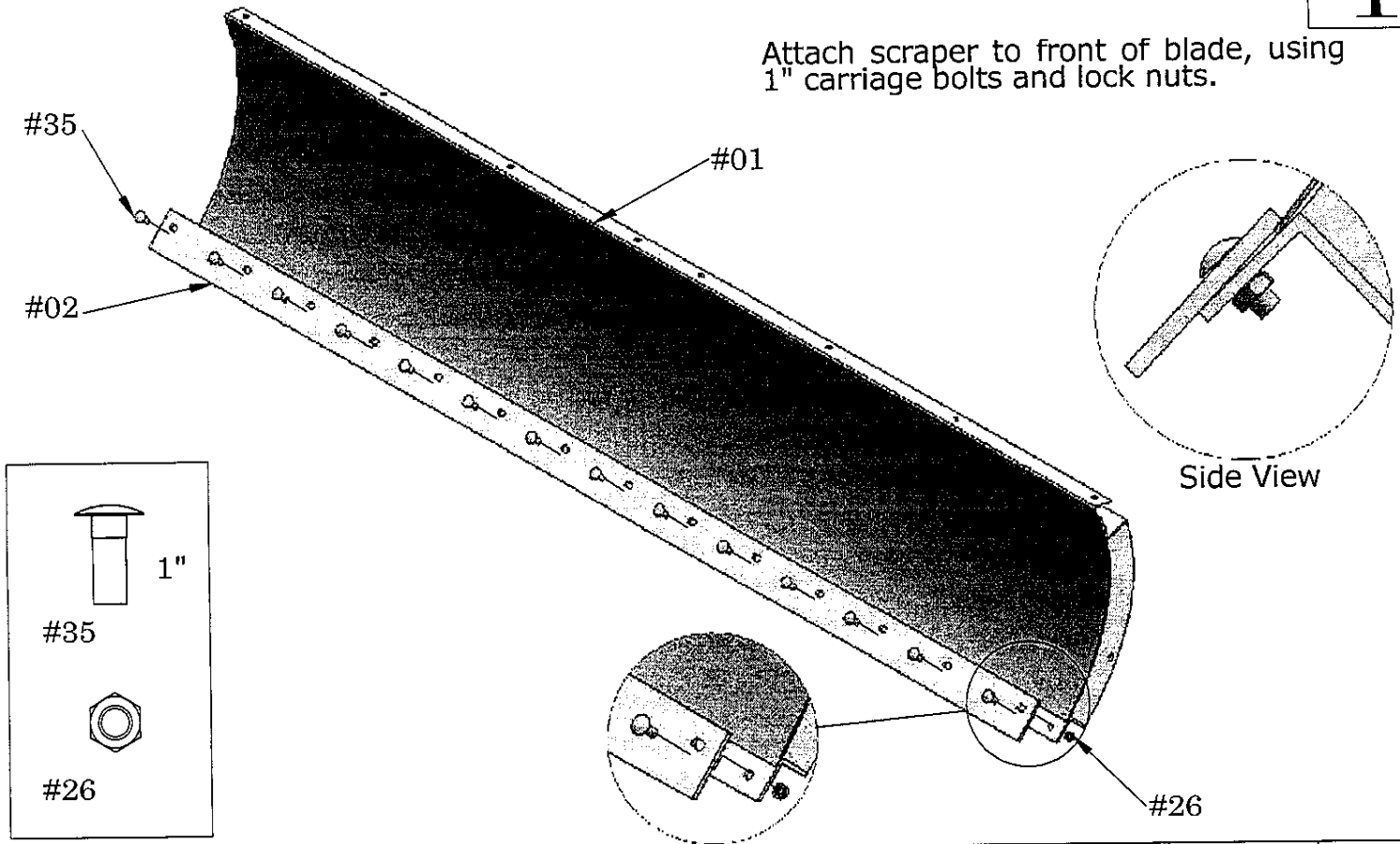
NOTE: 00390 Complete Winch with Strap and Control Kit will include items "a" through "e".
Individual components may not be available to order as separate items.
Contact customer service at 1.800.337.2327 to inquire about the availability of particular parts.

* SnowBear Limited reserves the right to change products or part numbers without prior notification,
and under no obligation to incorporate such changes into previously manufactured products *

SNOWPLOW ASSEMBLY

1

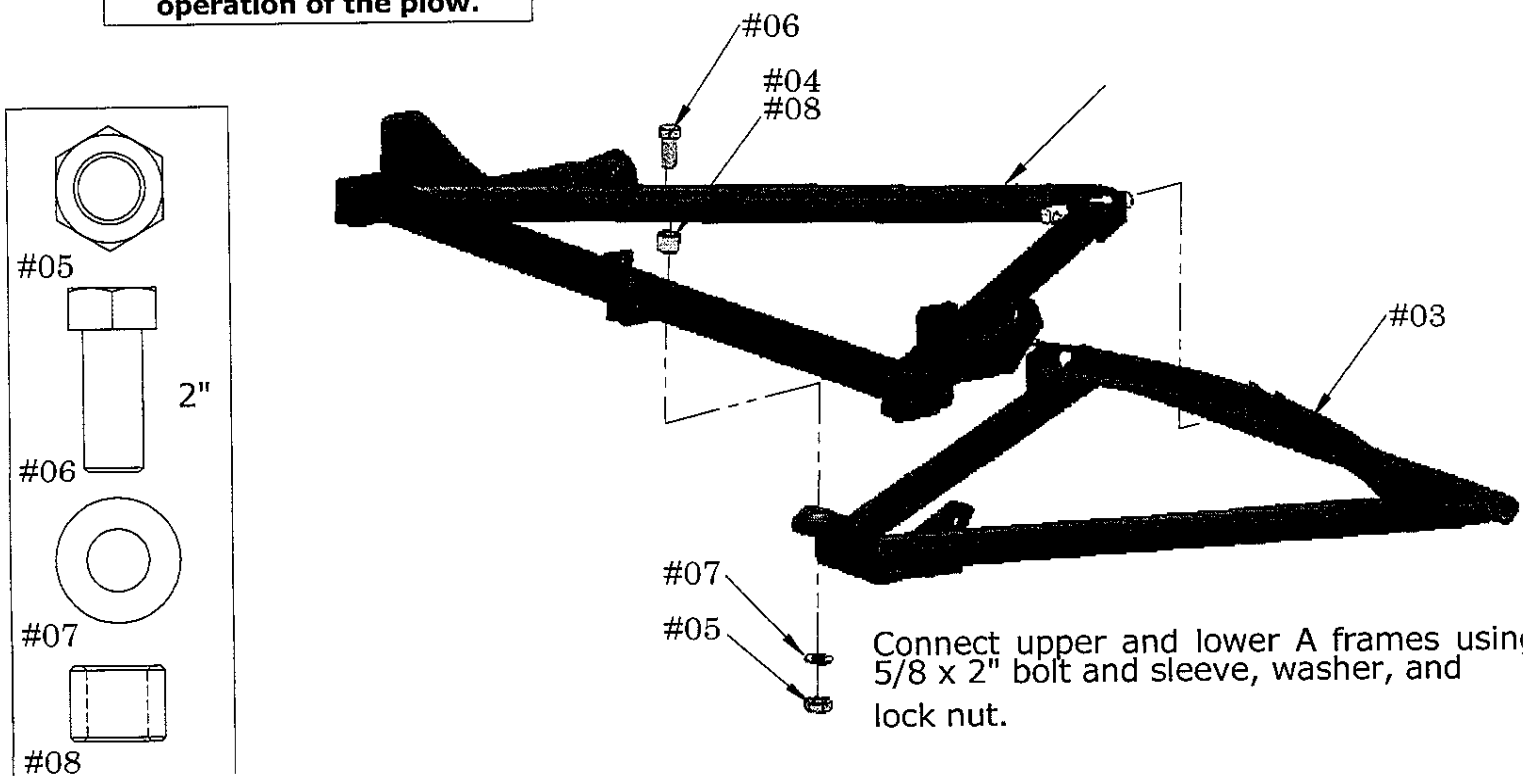
Attach scraper to front of blade, using 1" carriage bolts and lock nuts.



2

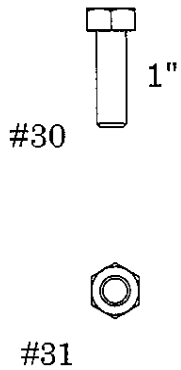
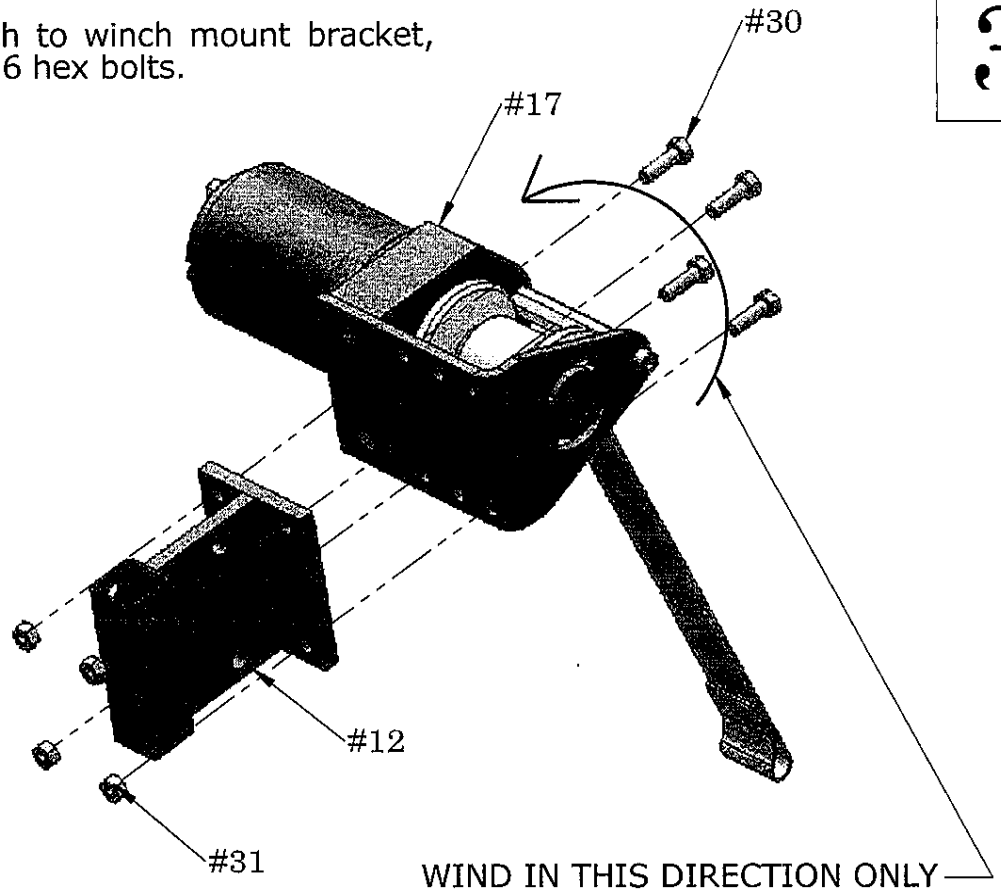
NOTE:
Ensure 1/4" of free movement in 5/8 hex bolt, to allow for proper operation of the plow.

Insert release pin on upper A frame into arched bracket on lower A frame.



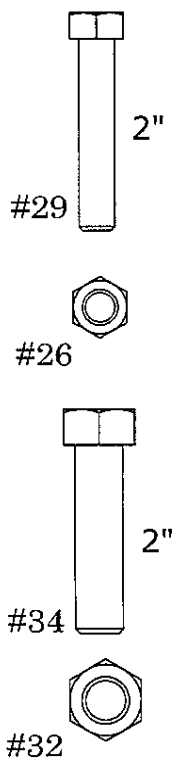
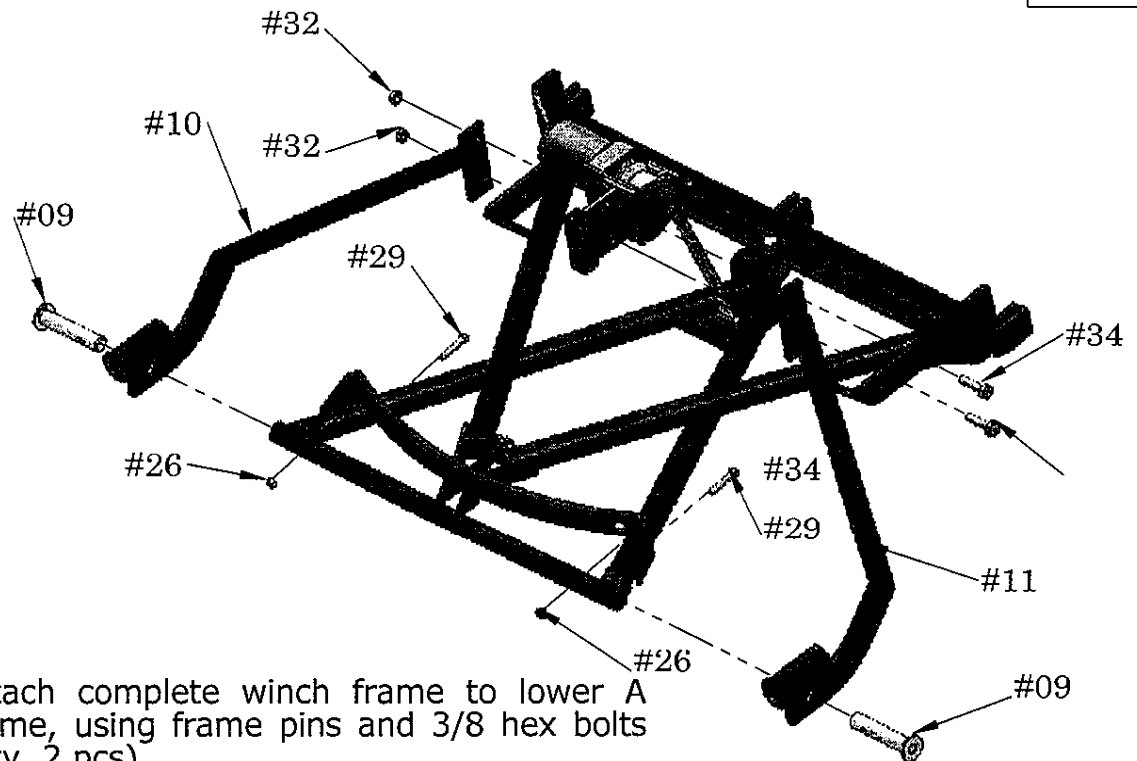
3

Bolt winch to winch mount bracket,
using 5/16 hex bolts.



Loosely assemble winch mounting bracket (#12)
between driver and passenger side winch frames.

4

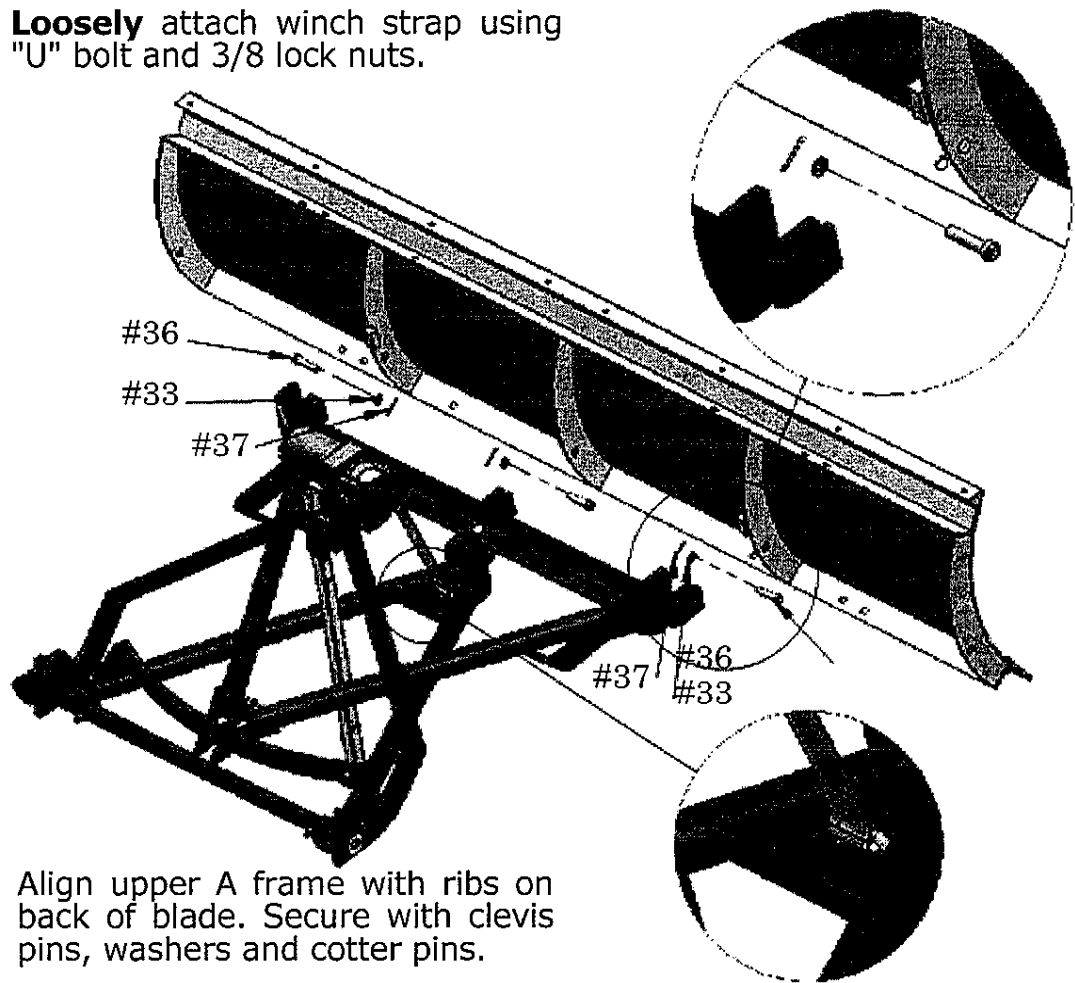
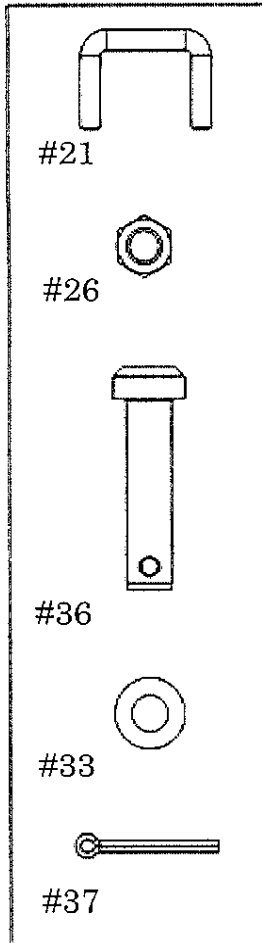


Attach complete winch frame to lower A
frame, using frame pins and 3/8 hex bolts
(qty. 2 pcs).

Winch hardware can now be tightened.

5

Loosely attach winch strap using "U" bolt and 3/8 lock nuts.

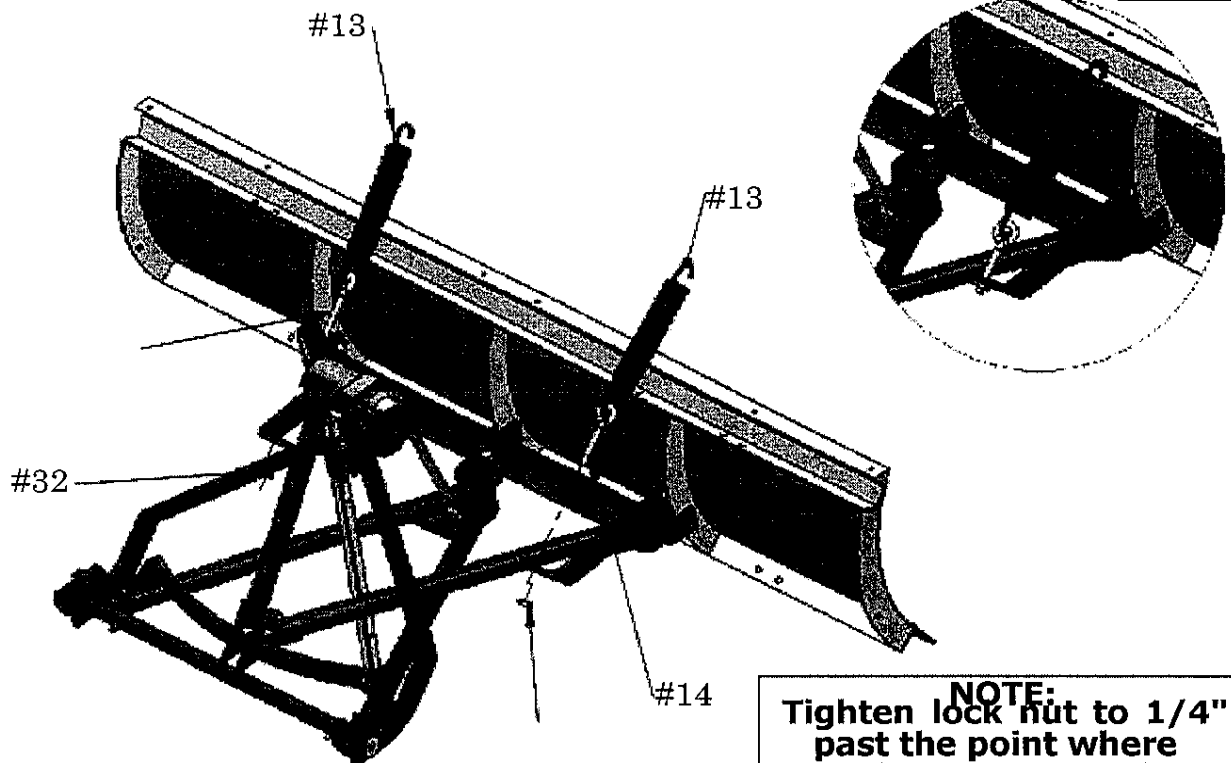
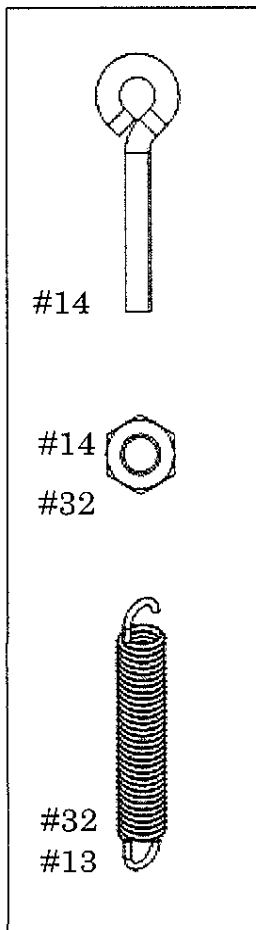


Align upper A frame with ribs on back of blade. Secure with clevis pins, washers and cotter pins.

6

Hook springs to rear of blade.

Secure springs to upper A frame, using eye bolts and 1/2" lock nuts.

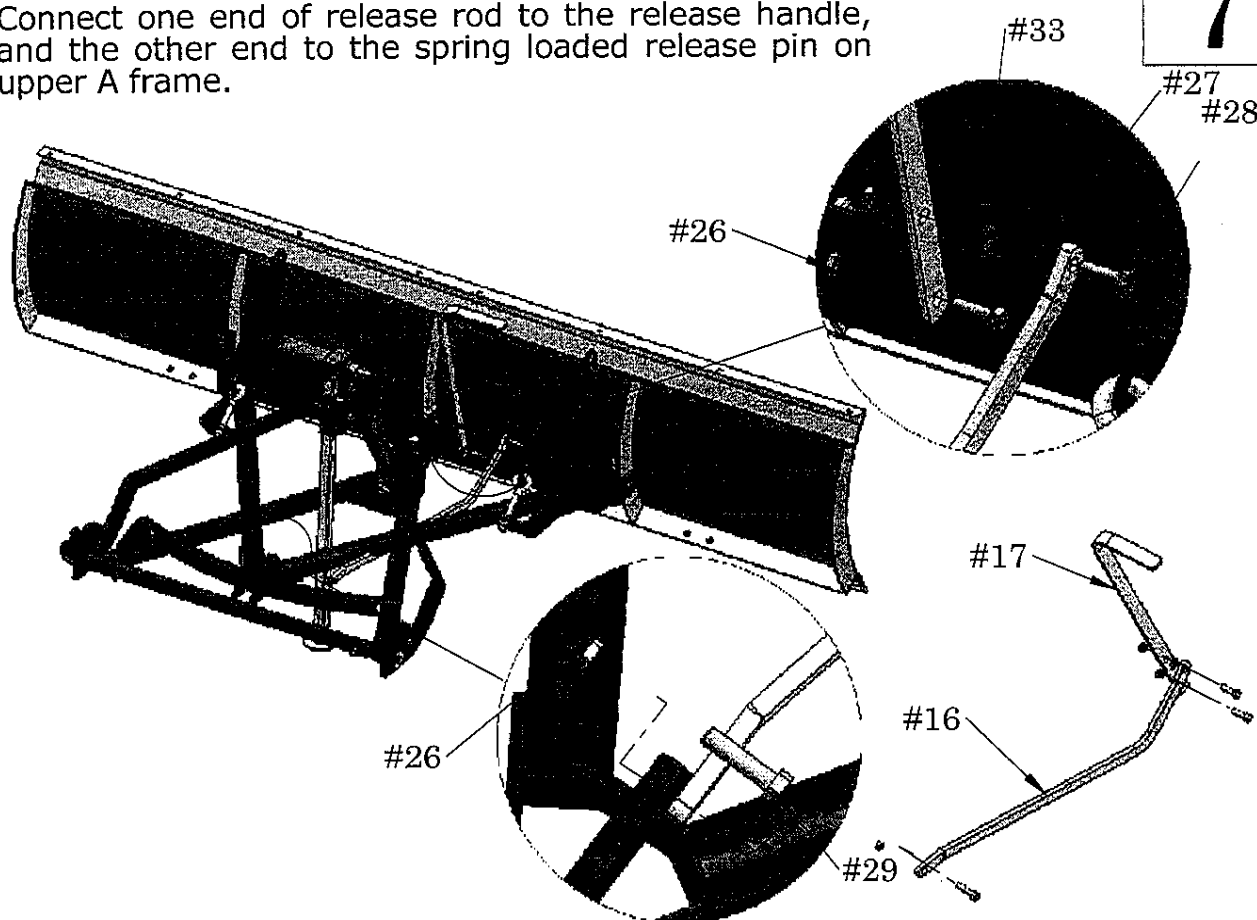
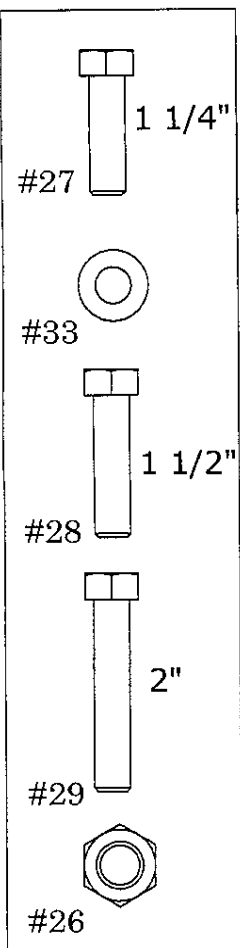


NOTE:
Tighten lock nut to 1/4" past the point where springs come under tension.

7

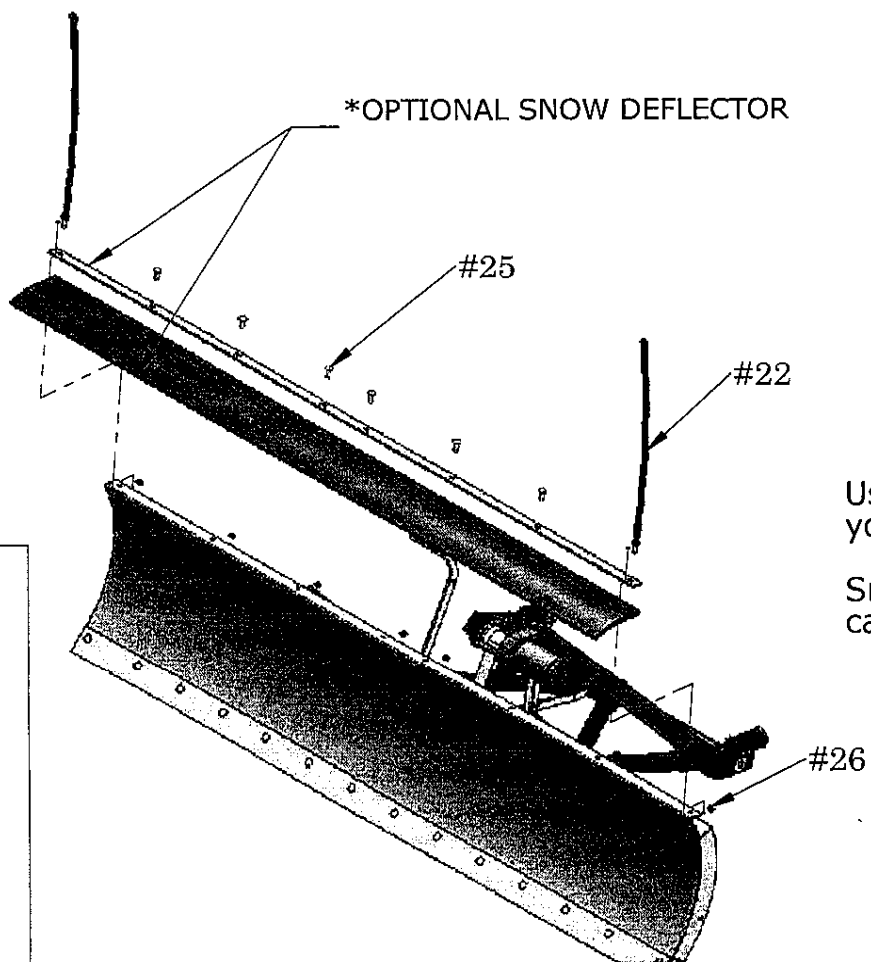
Attach release handle to bracket on upper A frame.

Connect one end of release rod to the release handle, and the other end to the spring loaded release pin on upper A frame.



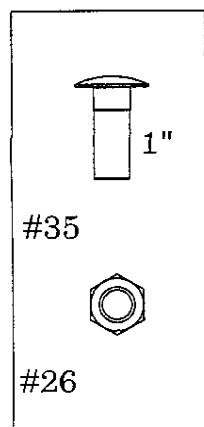
8.

*OPTIONAL SNOW DEFLECTOR



Use 1" carriage bolts to attach your optional snow deflector

Snowplow markers replace carriage bolts on both corners.



WIRING DIAGRAM

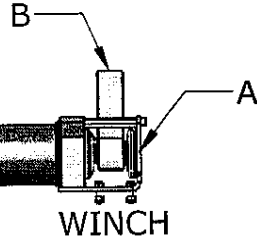
9

!CAUTION!

DISCONNECT ALL
POWER SOURCES,
PRIOR TO WORK ON
WINCH OR WIRING

35A circuit breaker
must be installed to
prevent damage to
the winch or your
vehicle

WINCH
CONNECTOR



C

D

DO NOT GROUND TO THE
VEHICLE FRAME

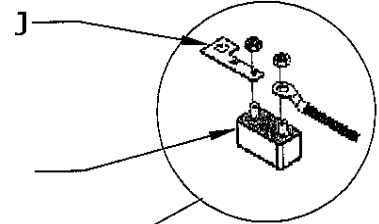
Control box must be
grounded to the
negative battery
terminal.

YOUR 12V
BATTERY

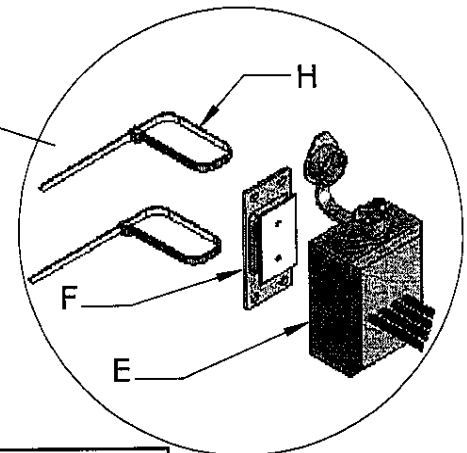
CONTROL BOX

CONTROL SWITCH

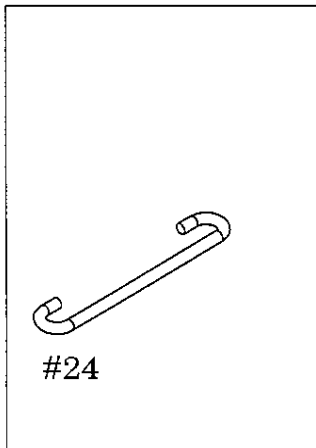
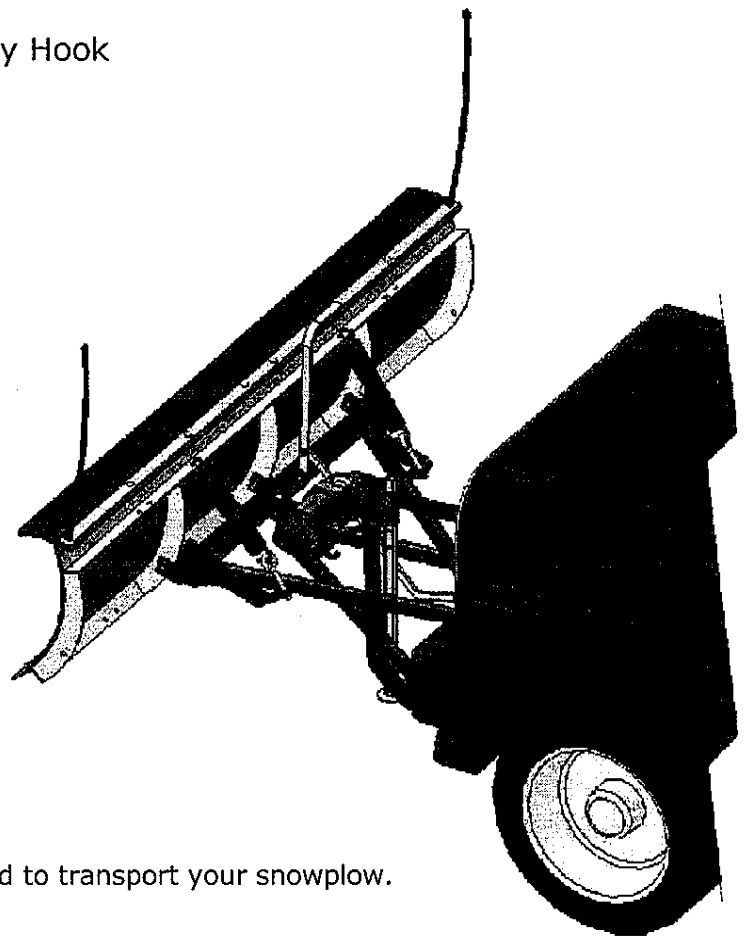
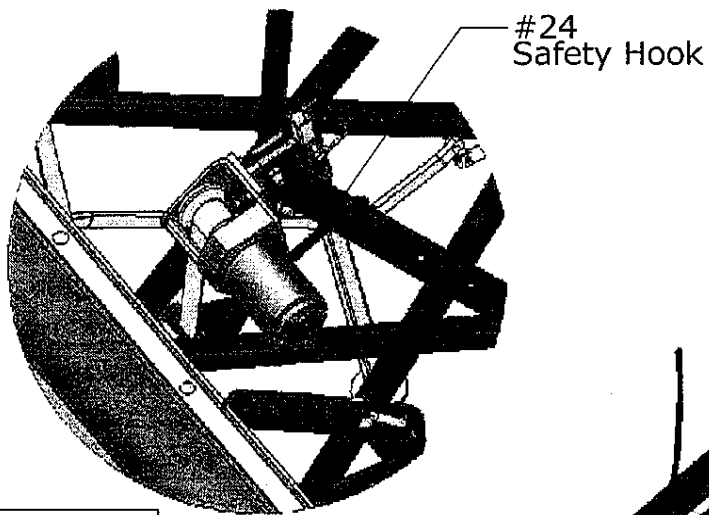
Switch Operation:
In=Up
Out=Down TO YOUR VEHICLE CABIN



Control box
mounting bracket
should be installed
away from any hot
or moving parts.
Attach using cable
ties or bolts
provided.



Item	Quantity	Description	Part Number
A	1	Winch	00385
B	1	Winch Strap	79089
C	1	Winch Connector	00403
D	2	Plastic Quick Connect	79240
E	1	Control Box	00405
F	1	Control Box Mounting Bracket	00405B
G	1	Control Switch	00405C
H	2	14" Cable Ties	97362
I	1	35A Circuit Breaker	00435
J	1	Circuit Breaker Bracket	00436

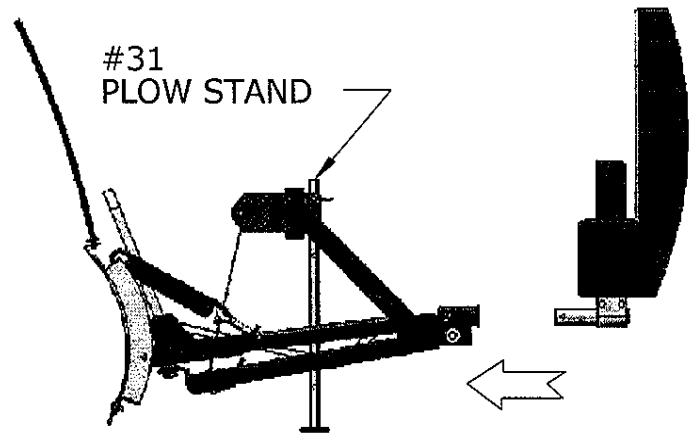


NOTE:
Use your Safety hook provided to transport your snowplow.

MountAssist PLOW JACK

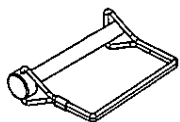
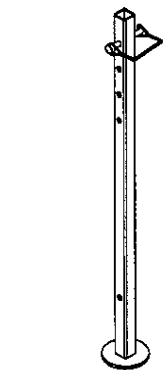
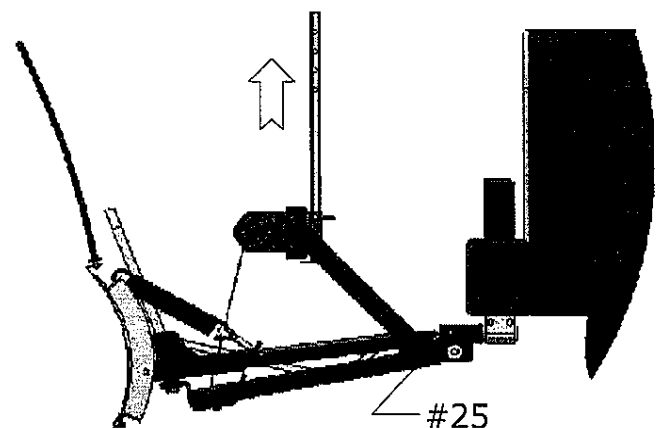
Attach your mount assist plow stand by sliding it through winch mount bracket sleeve and use D pin (#25) to adjust the height of the plow.

Line up your vehicle cross member with the plow frame mount pockets.
Move your vehicle forward.



Attach snowplow to your vehicle using 2 x D Pin (#25)

Slide up your snowplow mount assist stand and secure it in up position

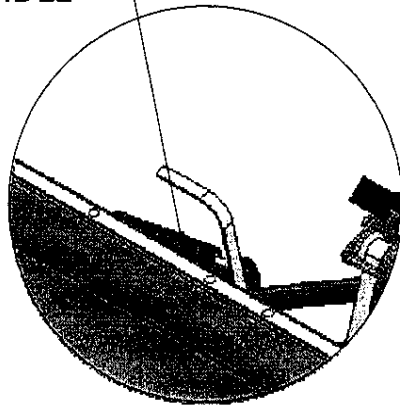


PLOW POSITION

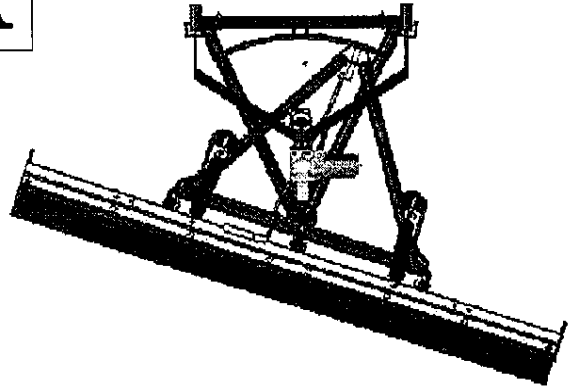
Pull plow release handle away from vehicle, to release spring loaded locking pin. With locking pin released, plow can now be adjusted into left or right angle position (see Figures A and B).

NOTE: When plow is in desired position, ensure the locking pin is engaged.

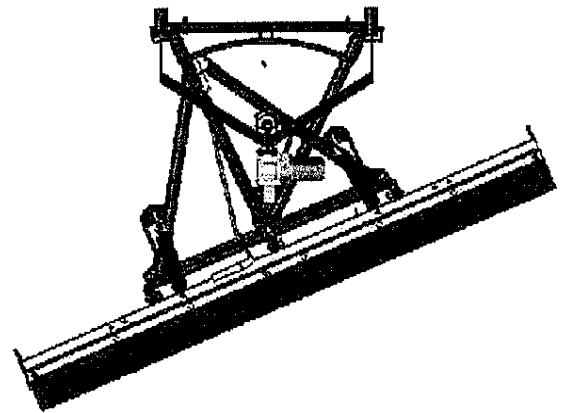
PLOW RELEASE HANDLE



A



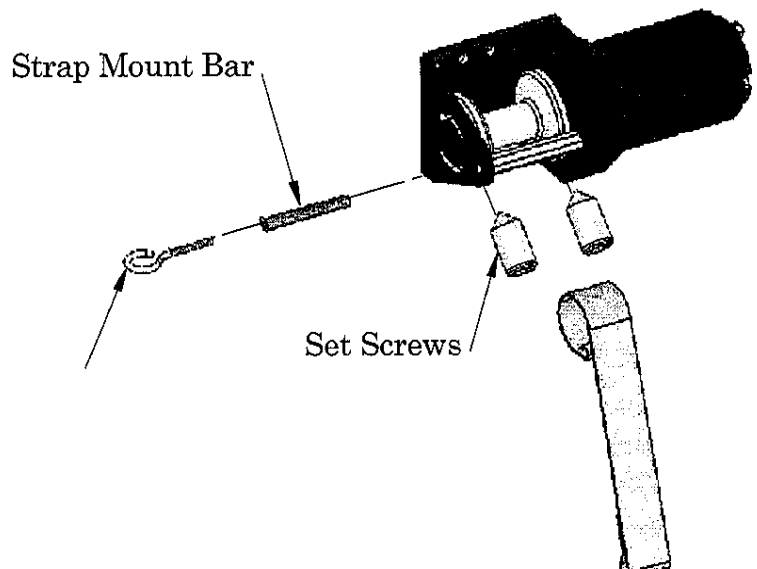
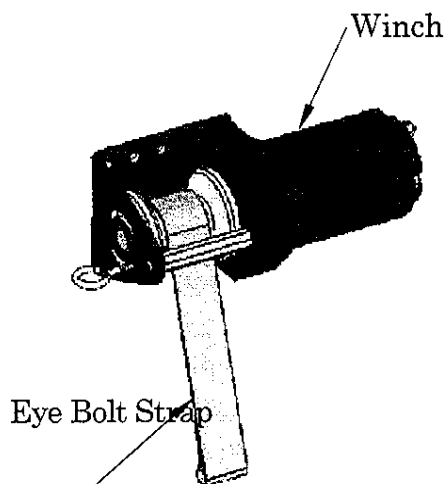
B



WINCH STRAP REPLACEMENT

To replace your winch strap, please follow instructions below.

Line up eye bolt provided with strap mount bar.
Screw the eye bolt about 1/2" into the strap mount bar.
Release set screws and pull the bar out. Your winch strap is now loose.
Remove it and replace it with the new strap, reversing steps above.



TROUBLESHOOTING

If you are experiencing difficulties with your plow, please consult the troubleshooting tips below. This is intended as a guide, to assist you in resolving common technical issues and performing simple adjustments. If you require further assistance, please contact the Snow Bear Customer Service department at 1.800.337.2327.

1. Plow rocks or tips from side to side.

- a) Your plow is intended to rock from side to side by 8 to 10 inches. This will help to compensate for differences in the terrain that you are plowing, and should not be reduced by adding shims or washers.
- b) If the plow is rocking excessively, check the 5/8" pivot bolt (#6) to ensure that there is no more than 1/4" of free play. The 5/8" lock nut can be tightened, if required.
- c) Check the springs and eye bolts to ensure that there is adequate tension. If the springs appear loose, tighten the lock nuts on the eye bolts to 1/4" past the point of tension.

2. Winch strap is breaking.

- a) The single most common cause of a broken strap is lack of free movement in the U Bolt, where the strap attaches to the A Frame. Ensure that the lock nuts on the U Bolt are sufficiently loose, and there is plenty of play in the U Bolt.

3. Winch does not engage, or winch hesitates.

CAUTION - Disconnect power from the plow, prior to working on the winch or wiring.

- a) Ensure that the battery cable is securely grounded to the negative terminal on your battery.
DO NOT GROUND TO VEHICLE FRAME.
- b) Ensure that the switch on the control box (under your hood) is in the "ON" position.
- c) Check your contacts and connectors to ensure that they are secure and free of any dirt or corrosion. Dielectric grease can be used to protect electrical connections against dirt and corrosion.

4. Plow operation is backwards (i.e. blade lifts when it should lower)

- a) Ensure that the red wire on the 2' winch connector is connected to the positive (top) terminal on the winch, and the black wire is connected to the negative (bottom) terminal.

5. Wiring, control switch or control box are getting hot.

- a) Circuit breaker must be installed between the red battery cable and the positive terminal on your battery. Ensure that the breaker bracket is connected between the battery and the brass terminal on the circuit breaker.

REMEMBER

This plow is intended for personal use **ONLY**. The plow is not rated for commercial use, and it is not designed to be transported at speeds greater than 10 mph (15 km/hr). Commercial use or travelling above the recommended speeds will void your warranty and can cause serious damage to the plow, your vehicle, or your person.

SnowBear Limited offers a 6-month limited warranty on the paint finish of each new Personal Snowplow.

All SnowBear Limited accessories carry a 1 Year Limited Warranty against manufacturing defects.

The obligation under these warranties is limited to the replacement of defective parts or paint finish at the sole discretion of SnowBear Limited.

The 1 Year Limited Warranty on your new Personal Snowplow becomes void if used in heavy-duty or commercial applications.

These Warranties do not obligate SnowBear Limited to bear the cost of labor or for shipping or transportation charges in connection with the replacement or repair of defective parts. These warranties shall not apply to a product to which alterations have been made, or to a product which has been abused, misused, neglected or improperly installed in any way, or not used for the intended purpose.

SnowBear Limited reserves the right to improve any of its products through changes in design or materials as deemed desirable without being obligated to incorporate such changes in products of previous manufacture.

Bills for service, labor, or other expenses which have been incurred by you without express approval or authorization by SnowBear Limited remain your obligation and **will not be borne by SnowBear Limited.**

Note: Always include a copy of your original receipt when sending in parts for warranty claims.

SnowBear mounts are an essential part of the SnowBear plow and are designed and manufactured to specifically fit SnowBear snowplows. These mounts are not designed to