



Assembly & Installation Instructions

FOR

DOWN PRESSURE SYSTEM JACKSTAND PACKAGE 99100213

GRAVITY DOWN SYSTEM JACKSTAND PACKAGE 99100214

TO FIT

24 & 25 SERIES SNOWPLOWS

AFTER SERIAL NUMBERS

24D100000

24G100000

25D100000

25G100000

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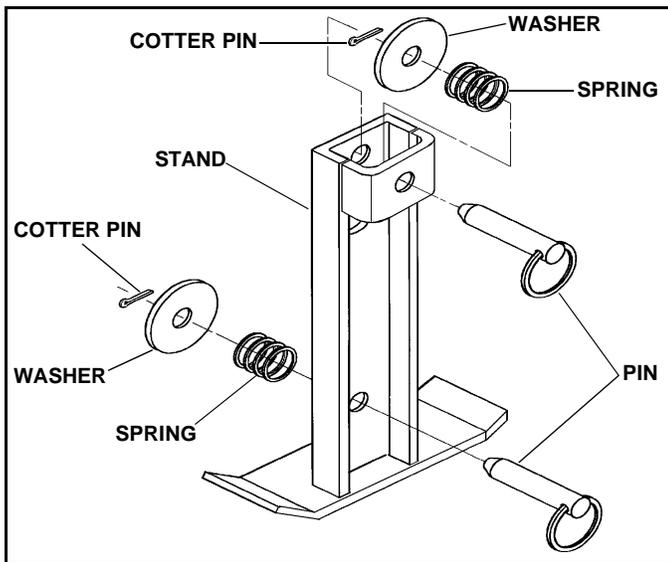
1. THINK SAFETY, ALWAYS WEAR SAFETY GLASSES WHEN PERFORMING THE OPERATIONS PRESCRIBED IN THESE INSTRUCTIONS
2. READ ALL INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING INSTALLATION
3. BEFORE BEGINNING WORK MAKE SURE TO SET PARKING BRAKE AND CHOCK WHEELS

IMPORTANT: If the Jack Stand is used on a Sno-Way Snow Plow with Remote Control, the switch and wiring in this package is not required and no wiring modifications are needed. The Jack Stand can be operated by using the Remote Control

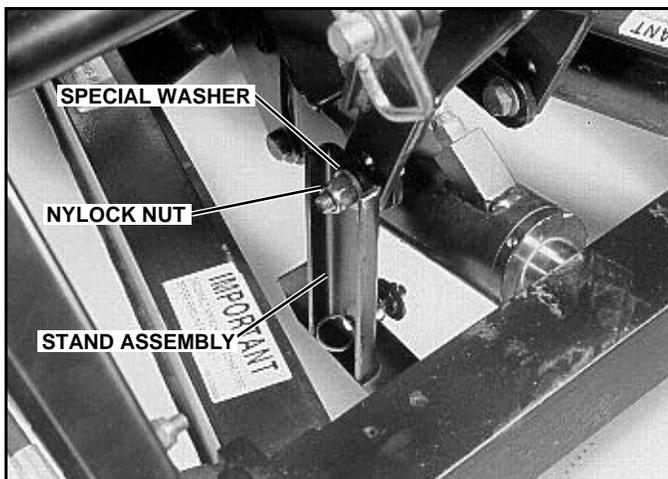
ASSEMBLY TOOLS NEEDED

Sockets	7/16" – 1-1/8"
Wrenches	7/16" – 1-1/8"
Torque Wrench	
Drill Bit	15/32"

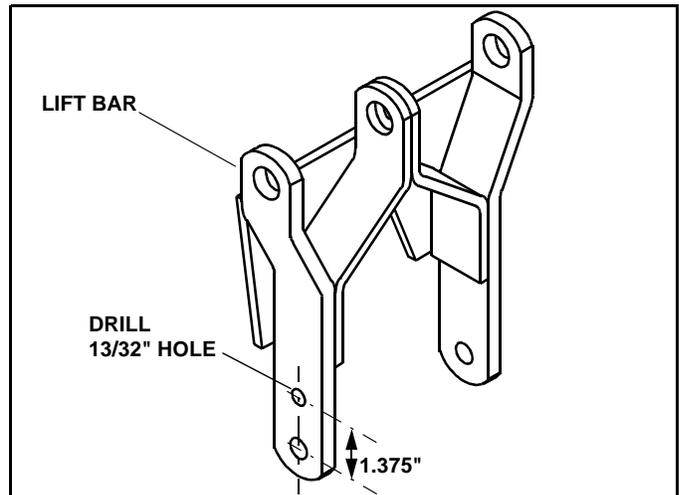
INSTALLATION (MECHANICAL)



1. Insert Pin (#7) into hole in Stand (#5). Assemble Spring (#4), and Washer (#3), on Pin and secure with Cotter Pin (#2).



2. Remove the 1/2" Nylock nut from the cap screw which connects the left side of the Bellcrank to the lift arm. Install the Spacer (#6) on the cap screw and install the Stand Assembly (#5) with the open legs of the stand toward the outside of the A-Frame. Install the special washer (#1) and then reinstall the 1/2" Nylock nut previously removed.



3. The stand has a spring loaded locking pin to hold the jackstand in the operating position by pinning it to a hole in the lift bar of the snow plow. On older plows, this hole will have to be drilled. Drill a 13/32" diameter hole in the lift bar 1-3/8" above the lower hole in the lift bar (which attaches it to the bellcrank). Refer to illustration for locating and drilling this hole.
4. Torque all the fasteners to 80 lb.ft.
5. Check the operation of the stand to ensure that it will swing freely and will latch into the latch support tube welded to the side of the bellcrank.

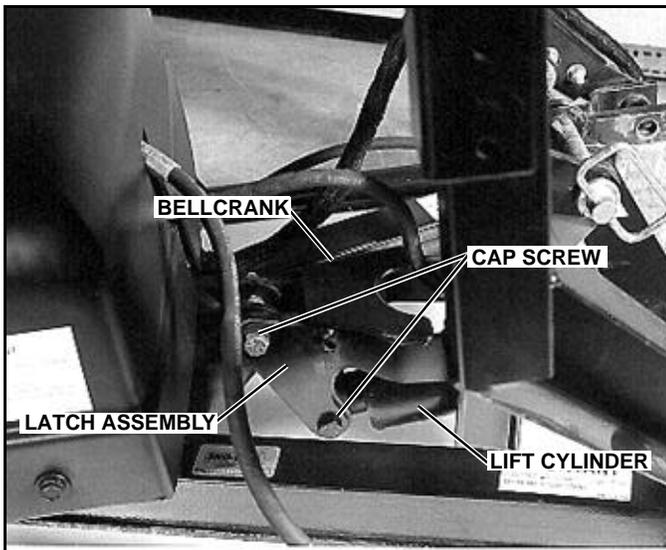
NOTE: For older snowplows which do not have the latch support tube welded to the side of the bellcrank, a latch assembly (#20) is available as a service part. If required, install following instructions 6 and 7.

ELECTRICAL INSTALLATION

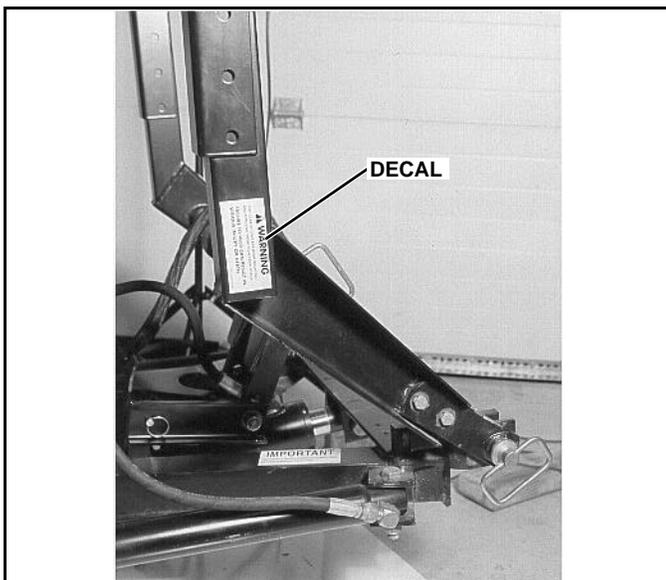
IMPORTANT: If the Jack Stand is used on a SNO-WAY snow plow with a Remote Control, the switch and wiring in this package are not required and no wiring modifications are needed. The Jack Stand can be operated by using the Remote Control.

DOWN PRESSURE SYSTEM PLOWS

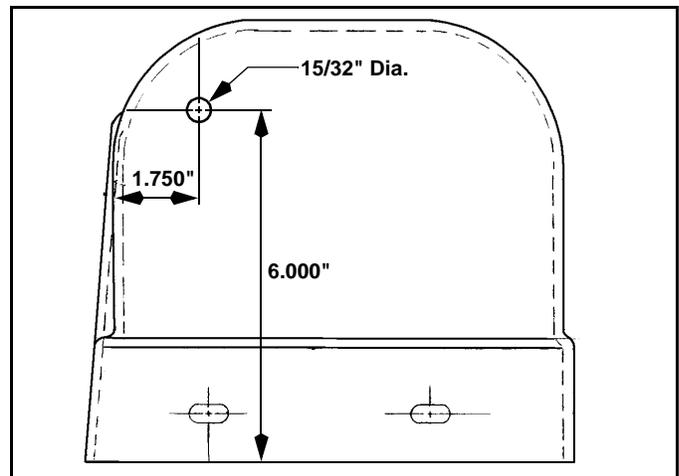
1. Remove four (4) cap screws securing cover to frame. Remove pump cover.



6. Remove the 1/2" x 3-1/2" cap screw securing the Bellcrank to the A-Frame and the 1/2" x 3-1/2" cap screw which attaches the Lift Cylinder to the Bellcrank.
7. Install the Latch Support Assembly (#20) on left side of the Bellcrank. Secure with two (2) 1/2" x 3-1/2" hex head cap screws previously removed. Install both cap screws with the heads on the left side (against the latch support assembly). Do not reinstall the special washers on the left side (against the latch support assembly), but do reinstall these washers on the right side of the Bellcrank assembly.



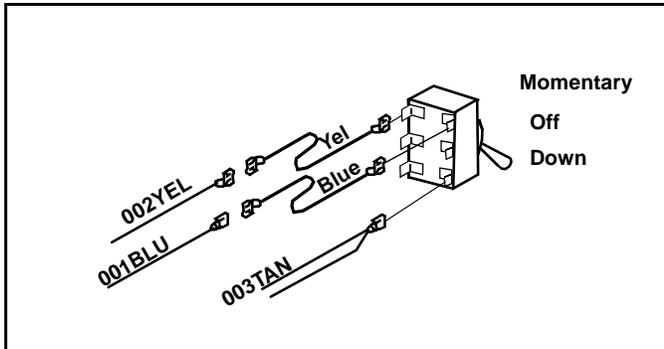
8. Install one Warning Decal (#8) on each side of the light bar assembly.



2. Drill a 15/32" diameter hole in the pump cover in the location shown for installing the toggle switch. Install the switch decal (#9) on the pump cover with the hole in the center of the decal over the hole drilled in the cover and the word "RAISE" at the top of the decal.
3. Install the Toggle Switch (#14) through the hole drilled in the pump cover with the "momentary on" position of the switch toward the top of the cover. Secure Switch with Knurled Collar and lock in place with Toggle Switch Boot (#15).

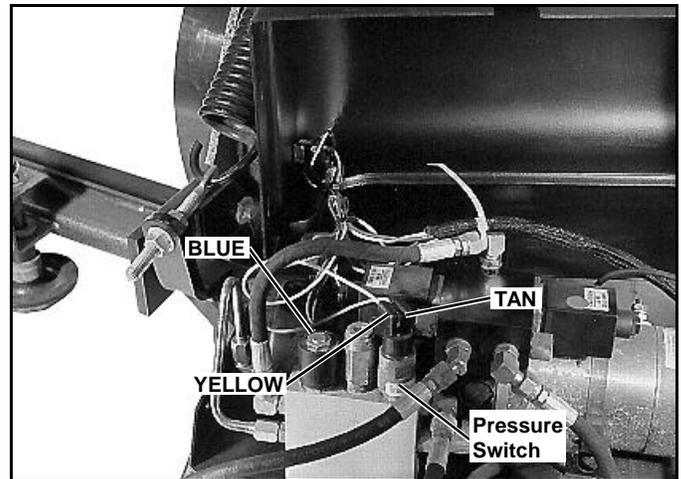
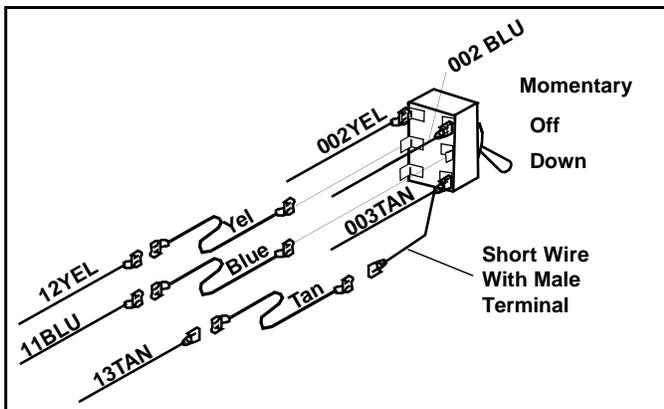
NOTE: Terminals on back of switch are "reversed" from toggle position. Center terminals are common, top terminals are "DOWN" and bottom terminals are "MOMENTARY".

4. Install the shorter end of the provided wire harness onto the toggle switch terminals as follows:



- 003 TAN wire - on one lower terminal (momentary on circuit)
- 1 BLU wire - to one end of a Blue Wire Extension - on upper terminal - same side of switch as 003 TAN wire.
- 002 YEL wire - to one end of a Yellow Wire Extension - on upper terminal - opposite of 001 BLU wire.

5. Relocate wires of the plow harness as follows:



•13 TAN wire- from DP system pressure switch - to one end of a Tan Wire Extension - to male terminal of pig-tail on 003TAN wire.

•12 YEL wire - Remove from DP system pressure switch - to one end of a Yellow Wire Extension - and connect to center terminal of toggle switch (on same side of switch as 002 YEL wire.).

•11 BLU wire - Remove from DP system solenoid - to one end of a Blue Wire Extension - and connect to center terminal of toggle switch (on same side of switch as 002 BLU wire).

6. Install the longer ends of the provided wire harness as follows:

•003 TAN wire - to one end of a Tan Wire Extension - to DP system pressure switch (where 13 TAN wire was previously removed).

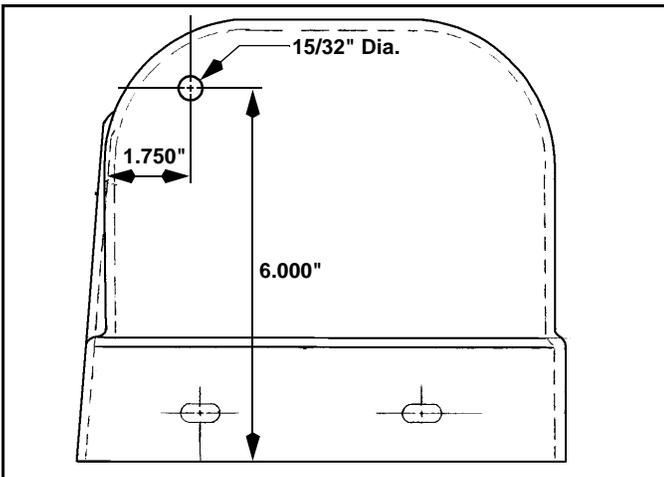
•003 YEL wire- to one end of a Yellow Wire Extension - to DP system pressure switch (where 12 YEL wire was previously removed).

•001 BLU wire - to one end of a Blue Wire Extension - to DP system solenoid (where 11BLU wire was previously removed).

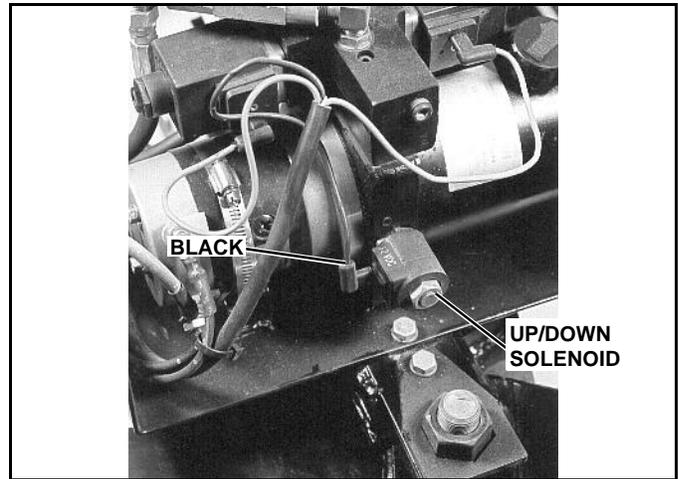
7. Install cover on hydraulic unit. Secure with four cap screws and washers removed in step #1.

GRAVITY DOWN SYSTEM PLOWS

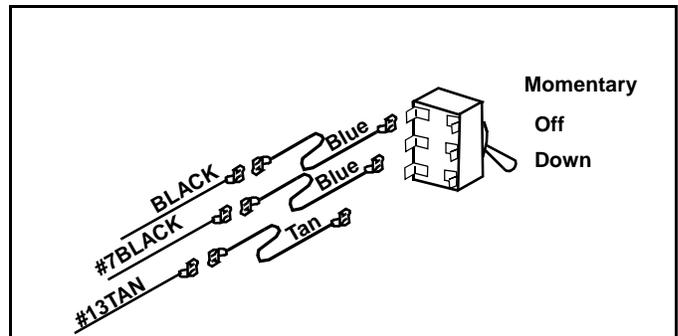
1. Remove four (4) cap screws securing cover to frame.
Remove pump cover.



2. Drill a 15/32" diameter hole in the pump cover in the location shown for installing the toggle switch. Install the switch decal on the pump cover with the hole in the center of the decal over the hole drilled in the cover and the word "RAISE" at the top of the decal.
3. Install the Toggle Switch (#14) through the hole drilled in the pump cover with the "momentary on" position of the switch toward the top of the cover. Secure Switch with Knurled Collar and lock in place with Toggle Switch Boot (#15).



NOTE: Terminals on back of switch are "reversed" from toggle position. Center terminals are common, top terminals are "DOWN" and bottom terminals are "MOMENTARY".



4. Remove the 7 BLACK wire from the Up/Down Solenoid Valve of the power unit. Connect one end of a Blue Wire Extension to the 7 BLACK wire and install other end on one of the center terminals of the Toggle Switch. Install the Black Wire provided on one of the upper terminals of the Toggle Switch (on the same side of the switch as the 7 BLACK wire). Add a Blue Wire Extension to the Black Wire and connect other end of Blue Wire Extension to the up/down solenoid of the power unit (where the 7 BLACK wire was previously removed).
5. Remove the sealing plug from the back side of termination (Z) on both parts of the harness connectors between the plow harness and the vehicle harness. Install the pin connector of the provided 013 TAN wire in termination (Z) of the plow harness connector. Add a Tan Wire Extension and route the tan wire, and wire extension, along the plow harness up to the power unit area and to one of the lower terminals of the toggle switch and install this wire on the same side of the switch as the two black wires.

6. Install the sleeve connector of the provided brown wire (#13) in termination (Z) of the vehicle harness connector. Route the brown wire along the vehicle harness to the motor solenoid and install the ring terminal on the same post of the solenoid as the existing brown wire (#10).
7. Tape the brown wire and the tan wire to the main harnesses in several places and inspect the wire routing to be sure that the added wires are not contacting any sharp edges or hot surfaces.
8. Install cover on hydraulic unit. Secure with four cap screws and washers removed in step #1.

STAND OPERATION-PLOW REMOVAL

1. Choose a location for plow storage which will allow the plow to be removed from the vehicle and not moved after removal. Also, choose a location which will not allow the stand to sink into the ground during storage.
2. With the snow plow attached to the vehicle and lowered to the ground, place the raise/lower toggle switch on the pump cover in the lower position. Place the up/down switch on the plow control in the cab of the vehicle in the down position, and, if the plow is a down pressure system plow, activate the down pressure switch on the plow control.
3. Next, move the toggle switch on the pump cover to the off position (center position of toggle).
4. Pull the spring-loaded pin on the stand to release the stand from the transport position and allow the stand to rotate down to a vertical position.

IMPORTANT: IF THE SNOWPLOW IS EQUIPPED WITH LIGHTS, DISCONNECT THE LIGHT WIRING HARNESS AT THIS TIME.

5. Pull the upper (center) hitch pin to disconnect the lift arm and light bar from the upper (center) hitch point of the subframe.

6. Using the raise/lower switch on the pump cover, place the stand firmly on the ground by using the raise function of the switch.
7. Remove the two lower hitch pins. Using the raise/lower switch will allow the rear of the A-frame to be raised or lowered to take pressure off the two hitch pins to allow easier removal of the pins.
8. After the lower hitch pins are removed, raise the rear of the A-frame (using the raise function of the switch) to allow the A-frame to clear the lower mounting points of the subframe.
9. After the plow is positioned satisfactorily for storage, disconnect the electrical connections between the Snow Plow and vehicle and then back the vehicle away from the snowplow.



WARNING

When Using The Raise/lower Switch On The Pump Cover To Raise Or Lower The Plow A-frame Be Especially Careful Of Movement Of The Light Bar Which Occurs During Raising And Lowering Of The A-frame On The Stand.

FAILURE TO HEED CAN RESULT IN SERIOUS INJURY OR DEATH.

PLOW STORAGE

1. If the plow will not be on a firm surface, place a board or piece of plywood, etc. under the stand to prevent the stand from sinking into the ground. Additionally, place a support under the rear of the A-frame during storage to prevent any inadvertent movement of the plow from tipping the stand allowing the rear of the A-frame to fall.

PLOW ATTACHMENT

1. Move the vehicle to the snowplow and position it so that the mounting points at the rear of the A-frame are within 3-4 inches of the lower mounting points of the subframe on the vehicle (it's much easier to move the vehicle instead of the plow).



WARNING

Be Sure All Plow Functions Are Off On All Plow Controls In The Vehicle Cab And The Raise/lower Toggle Switch On The Pump Cover Is In The "Off" Position Before Making Any Electrical Connections.

FAILURE TO HEED CAN RESULT IN SERIOUS INJURY OR DEATH.

2. Connect all electrical connections between the snowplow and the vehicle-except for light harness if the snowplow is equipped with lights. Place the up/down switch on the plow control in the cab of the vehicle in the down position and, if the plow is a down pressure system plow, also activate the down pressure switch on the plow control.



WARNING

When Using The Raise/lower Switch On The Pump Cover To Raise Or Lower The Plow A-frame Be Especially Careful Of Movement Of The Light Bar Which Occurs During Raising And Lowering Of The A-frame On The Stand.

FAILURE TO HEED CAN RESULT IN SERIOUS INJURY OR DEATH.

3. Raise the rear of the A-frame (using the raise switch on the pump cover) to ensure that the A-frame is higher than the subframe mounting points. The plow can then be manually moved into position for connecting the lower hitch pins. Move the plow manually by grasping one end of the blade and moving one side and then the other side. Again, if the plow is more than 3-4 inches from proper alignment, move the vehicle - it's easier. But remember to disconnect the electrical connections BEFORE backing away from the plow to avoid stretching and damaging the electrical wiring harness.



CAUTION

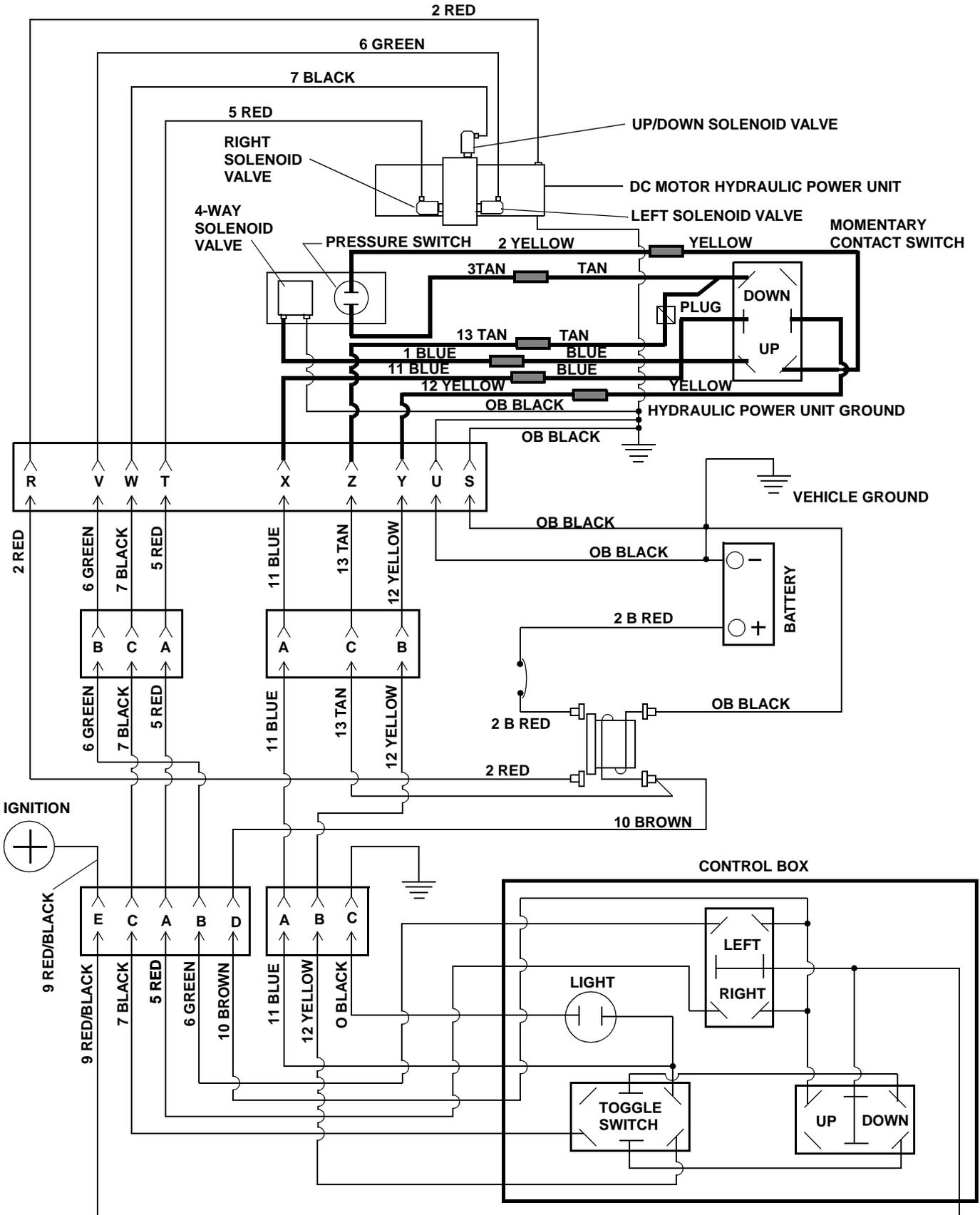
Never Move Vehicle While Plow Is Connected Electrically.

4. Lower the A-frame into alignment with the lower hitch pin mounting holes of the vehicle subframe and install the two lower hitch pins.

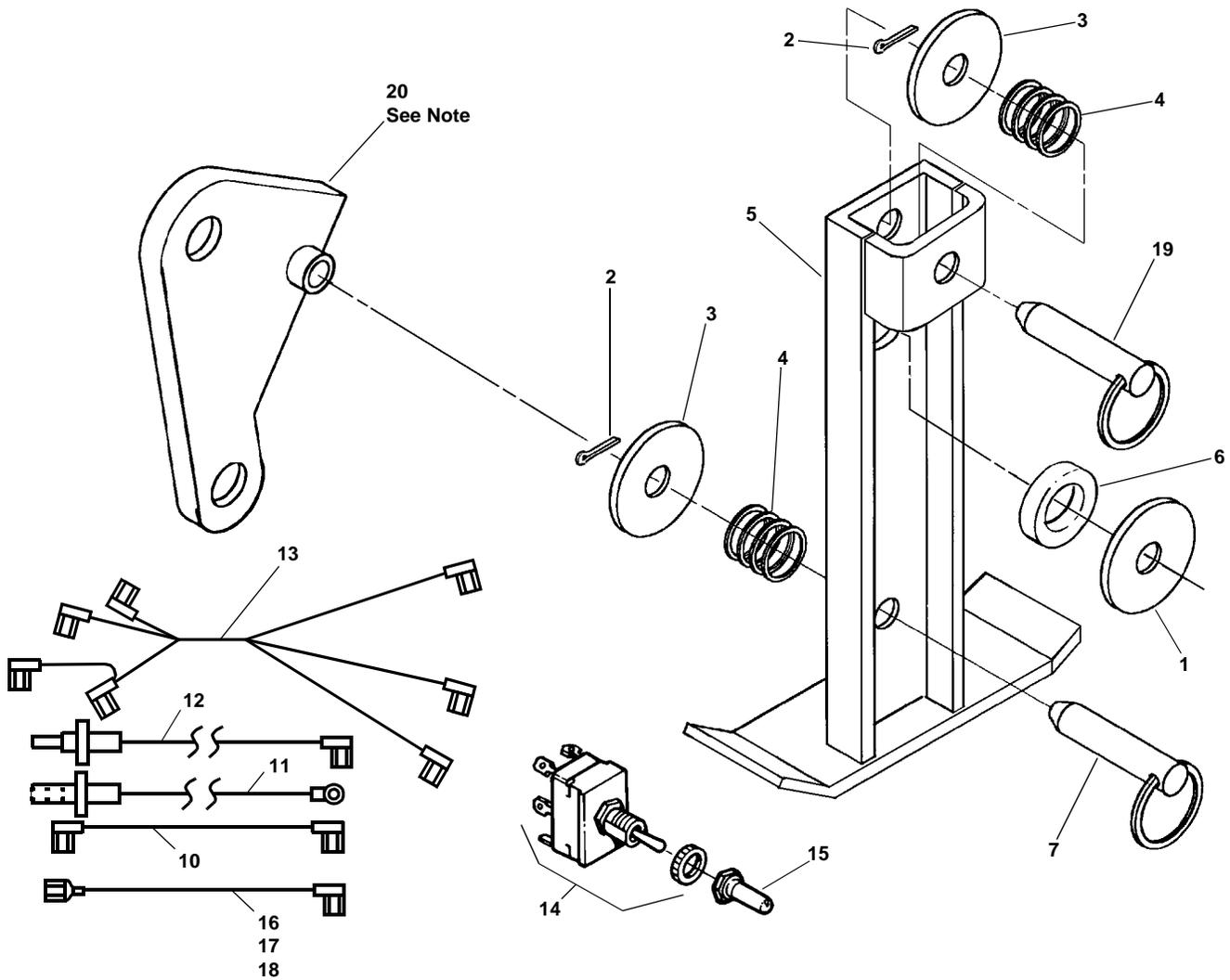
NOTE: If the plow and vehicle are not level with each other, install one lower pin and then, using the raise/lower switch on the pump cover, adjust the A-frame height to allow installation of the second lower hitch pin.

5. After the lower hitch pins have been installed and lynch pins installed to retain the hitch pins, place the stand switch in the lower position to allow the stand to be raised off the ground. Then rotate the stand forward and upward and latch it in the transport storage position.
6. The lift link and light bar can now be raised manually to align the upper hitch mounting and install the upper hitch pin. Install the upper pin and the lynch pin to retain it. Then connect the snowplow light harness. The last step is to move the raise/lower switch on the pump cover to the "lower" position to allow normal snowplow operation.

WIRING SCHEMATIC ROCKER SWITCH STYLE DOWN PRESSURE SYSTEM



PARTS LIST



ITEM	PART NO.	DESCRIPTION	QTY.
1	98100176	Washer, Special	1
2	98100105	Pin, Cotter	2
3	98100104	Washer, Wide, 3/8"	2
4	96102130	Spring, Latch	2
5	96103524	Stand Assembly	1
6	96102168	Spacer, Stand.....	1
7	96102131	Pin, Latch	1
8	97100400	Decal, Warning (not shown)	1
9	97100401	Decal, Switch (not shown).....	1
10	96102190	Wire, Switch To Solenoid.....	1
11	96102189	Wire, Vehicle End	1
12	96102188	Wire, Pump End	1
13	96102187	Harness, Down Pressure	1
14	96102211	Switch, Toggle DPDT	1
15	96102291	Boot, Toggle Switch.....	1
16	96103238	Wire, Extension - Blue.....	2
17	96103239	Wire, Extension - Yellow	2
18	96103240	Wire, Extension - Tan	2
19	96103519	Pin, Latch	1
20	96102124	Latch Support Assembly- (Note: Not Included in JackStand Package. Available as a service part for older snowplows)	



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