Original Series Pickup Lift Mounting Instructions

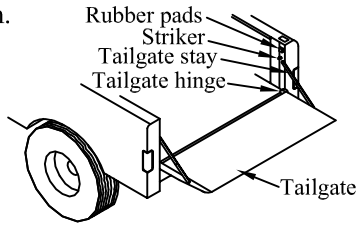
Dodge Dakota from 1987 - present ——— **T-31**
Isuzu trucks from 1987 - 1997——————— **T-11**

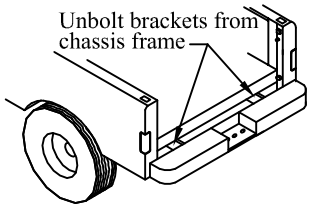
T-31
T-11

Step 1. Refer to the drawing and part list to be certain you have the correct mounting brackets and parts

Step 2. Remove the tailgate and unbolt all the tailgate hardware as shown.

On 2005 to present Dakotas, the tailgate hardware does not need to be removed.





Step 3. Remove the rear bumper and bumper mounting brackets. These cannot be remounted after the liftgate is installed.

On 2005 to present Dakotas, the The factory tube and/or receiver hitch does not need to be removed. The liftgate is designed to fit over the factory receiver hitch.

Step 4. Modify the mounting of the tail light lenses.

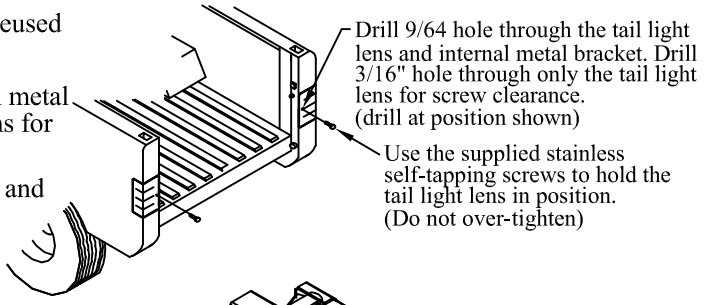
NOTE: THE TAIL LIGHT MODIFICATION MUST BE PERFORMED BEFORE THE LIFTGATE IS INSTALLED SO THE TAIL LIGHT BULBS CAN BE CHANGED WITHOUT HAVING TO REMOVE THE LIFTGATE.

Remove the (4) factory tail light screws. The screws will not be reused after the modification.

Carefully drill a 9/64" hole through the tail light lens and internal metal bracket. Carefully drill a 3/16" hole through only the tail light lens for screw clearance.

Apply clear silicone sealant to the 3/16" hole in the tail light lens and supplied stainless self-tapping screw.

Use the supplied stainless self-tapping screws to fasten the tail lights back in place. (Do not over-tighten)



Step 5. **Filler Strip Installation**

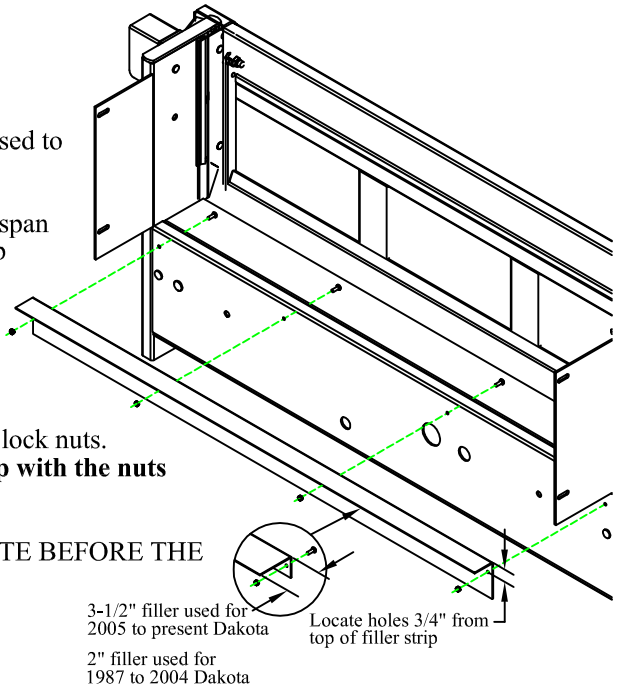
There is a filler strip that was shipped with the liftgate. The filler strip is used to to fill any gap between the rear of the truck and the liftgate mainframe.

The filler strip is bent with a 2" leg and a 3-1/2" leg. The 2" leg is used to span the gap on 1987 to 2004 Dakotas and the 3-1/2" leg is used to span the gap on 2005 to present Dakotas.

Drill four evenly spaced 1/4" holes in the filler strip and then the rear of the liftgate mainframe. Remove the box cover and check for obstructions. Cover and protect all cables before cutting or drilling.

Bolt the filler strip to the liftgate using the supplied 1/4-20x3/4" bolts and lock nuts. **The bolts must be inserted through the liftgate and then the filler strip with the nuts facing the outside of the liftgate.**

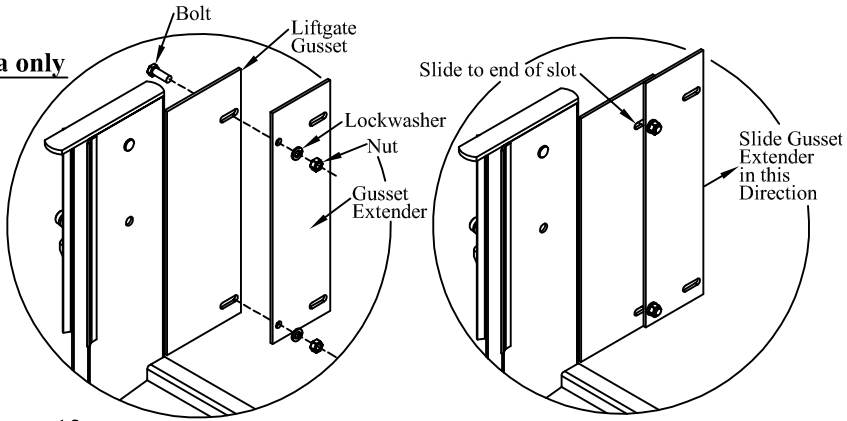
NOTE: THE FILLER STRIP MUST BE MOUNTED ON THE LIFTGATE BEFORE THE LIFTGATE IS MOUNTED ON THE TRUCK.



Step 6. **Gusset Extender Installation- 2005-present Dakota only**

Attach the gusset extenders to the inside of the liftgate gussets using the supplied 3/8"x1" bolts, 3/8" lockwashers, and 3/8" nuts.

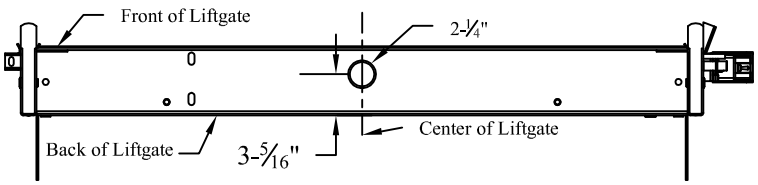
Slide the gusset extenders to the end of the slots in the liftgate gusset and then tighten to 30 ft-lbs.



Original Series Pickup Lift Mounting Instructions continued

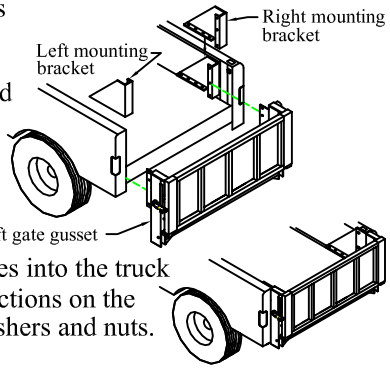
Step 7. The liftgate comes with a 2-1/4" knockout hole in the bottom of the mainframe. This knockout must be removed before the liftgate is installed so the liftgate will fit over the Dodge receiver hitch. Use a screwdriver and hammer to remove the knock outs.

If the liftgate you are mounting does not have the holes in the bottom of the mainframe, they must be added before the liftgate is installed. Look at the drawing below for the location and size of the holes. Remove the box cover and check for obstructions. Cover and protect all cables before cutting or drilling.



BOTTOM OF LIFTGATE FRAME VIEW

Step 8. Set the two mounting brackets into the truck bed behind the stake pockets. Do not drill the holes or bolt the brackets into the truck bed. This will be done at a later time.



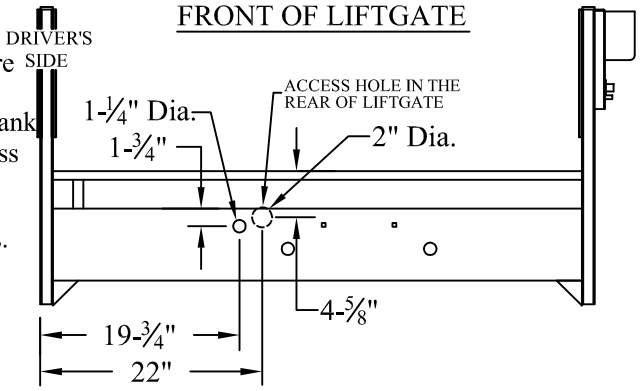
Place the Tommy Lift into the bed opening. The liftgate should be in a vertical position centered in the opening and set flush against the rear of the truck bed. Attach the mounting brackets to the liftgate gussets with 3/8" x 1" hex head bolts, lock washers, and hex nuts. Hand tighten the bolts and make sure the brackets fit tight behind the corner posts of the truck bed. Let the liftgate now hang supported by the stake pockets.

Step 9. Push the brackets flush against the stake bed pocket. Holding the bracket in place, drill two holes into the truck bed using a 3/8" bit. (Choose two of the four holes provided in the brackets that have no obstructions on the underside of the truck bed.) Attach brackets with 3/8"x1" hex head bolts, flat washers, lock washers and nuts.

Step 10. Adjust the liftgate so the platform is level from front to back, then tighten the bolts securing the liftgate gusset to the mounting brackets. NOTE: Check the clearance between the truck tail light lenses and the liftgate.

Step 11. **Spare Tire Access- Dodge Dakota only**

There are holes located in the main frame that provide access to the spare tire crank mechanism. Remove the box cover. Remove the black plastic plugs from main frame in the locations as shown. Insert the spare tire crank rod through the holes in the main frame to verify that the spare tire access is working properly. Reinstall the box cover.

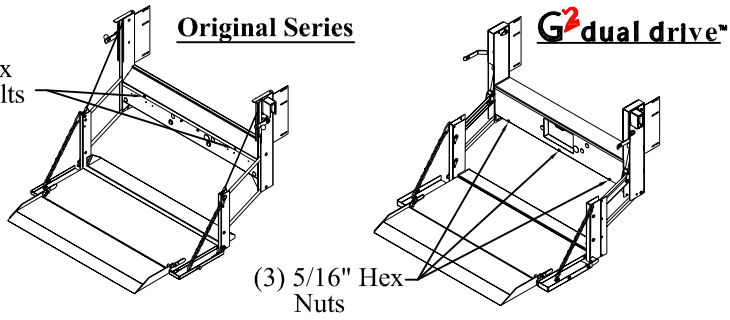


Step 12. See end of section A for final wiring, assembly, and painting instructions.

G2 dual drive™ and Original Series Wiring and Final Assembly for Fullsize Pickups

Step 1. The liftgate should be lowered to the ground so the box cover can be removed to finish the installation of the liftgate. To lower the liftgate, attach 12 volts to red positive(+) cable from a battery (no battery chargers). To activate the control, push the hidden "POWER ON" switch(located half way between the Tommy Gate logo and the up decal) once and the amber "POWER ON" LED will illuminate. Now press the hidden button on the control(located under the Tommy Gate logo) twice within one second and the red "LIFTGATE ACTIVATED" LED will illuminate. Once both lights are illuminated you will have power to lower the liftgate. Lower the liftgate to the ground. Remove the mainframe box cover by taking out 5/16" hex head bolts or nuts. Packaged inside the mainframe are the following:

- Operator's manual
- License plate lights
- Vent plug
- Two latch balls with studs-Original Series only
- Warranty sheets
- 150 Amp Manual Reset Circuit Breaker
- Copper lugs
- Two lower brace irons -500# & 1000# Original Series only
- 1300# lower bracket kit- 1300# Original Series only



Step 2. Remove the circuit breaker and copper end lugs from the mainframe. Install the circuit breaker on the firewall or fender of the truck or other place in the engine compartment out of the way of moving parts. Make sure there is easy access for installation of the power cables and so the circuit breaker can be reset.

The liftgate electrical cables are coiled up in the bottom of the mainframe. Loosen the strain relief on the back of the liftgate mainframe. Carefully pull the cables through the strain relief, leaving approximately two inches of slack inside the liftgate mainframe. Tighten the strain relief.

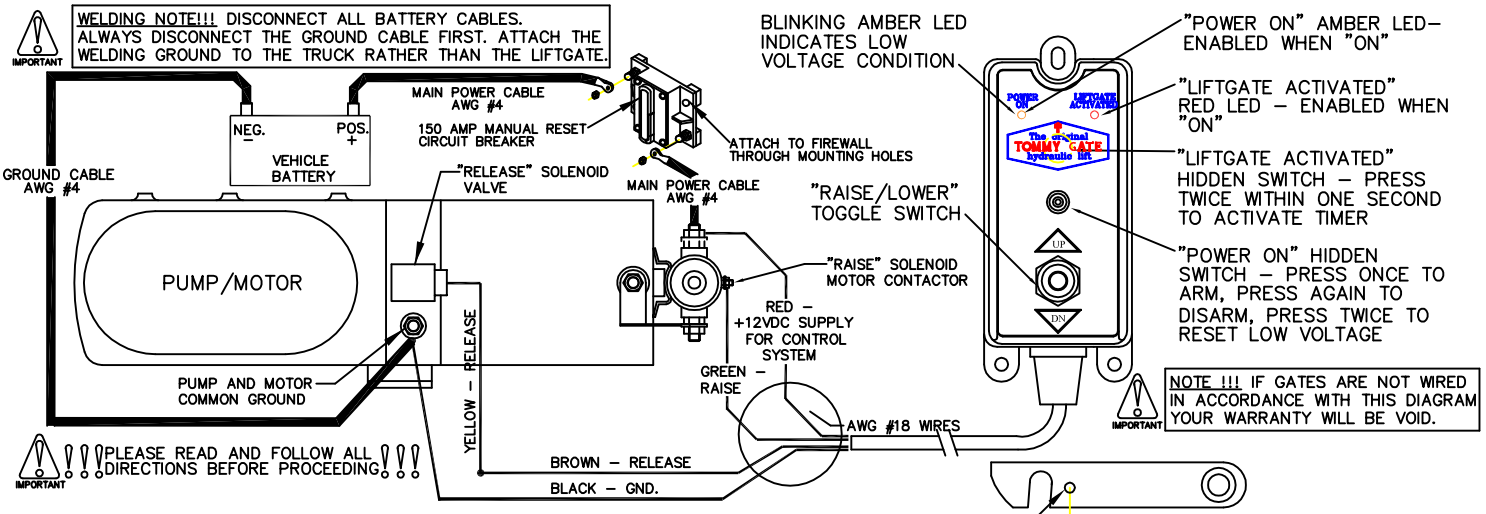
Carefully route the cables according to the Tommy Gate Electrical Guidelines along the frame to the battery. Pull the excess cables beyond the battery, and separate the positive (+) and negative (-) leads. Cut the positive (+) lead to the length required to reach the auxiliary (AUX) terminal of the circuit breaker. The remaining positive (+) lead needs to be cut at the length required to span the distance from the circuit breaker battery (BAT) terminal to the positive battery terminal.

Cut the negative (-) lead to the length required to reach the negative battery terminal. Install copper lugs on all required ends and attach to the circuit breaker and battery as outlined in the Tommy Gate Electrical Guidelines and wiring diagram.

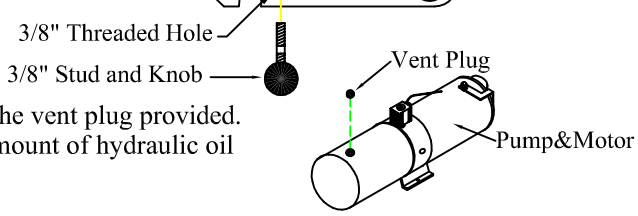
To activate the control, push the hidden "POWER ON" switch(located half way between the Tommy Gate logo and the up decal) once and the amber "POWER ON" LED will illuminate. Now press the hidden button on the control(located under the Tommy Gate logo) twice within one second and the red "LIFTGATE ACTIVATED" LED will illuminate. Once both lights are illuminated you will have power to raise and lower the liftgate.

NOTE: The safety control will automatically shut off if not used for 90 seconds.

IMPORTANT: The pump and motor unit for this lift can require up to 205 Amps of electrical power at 12 volts D.C. Be sure you connect the negative(-) cable to the negative(-) terminal of the vehicle battery.

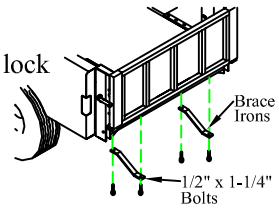


Step 3. **Original Series Only-**
Install the two knobs on the platform latches.



Step 4. Remove the solid plastic plug from the reservoir and screw in the vent plug provided. The hydraulic system has already been filled with the proper amount of hydraulic oil so do not add any oil at this time.

500# & 1000# Capacity Lower Brace Instructions- Original Series Only



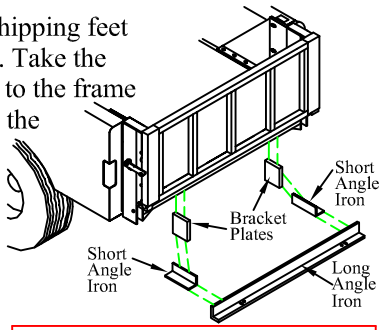
Step 5a. Bolt the two brace irons onto the bottom of the mainframe using 1/2" x 1-1/4" bolts, washers and lock washers. Nuts have been welded inside the mainframe for these bolts. On some makes of trucks, it may be necessary to drill two 1/2" holes in the frame to secure the brace irons to the truck.

NOTE: This is very important as the brace irons provide added support for the Tommy Gate.

Lower Bracket Instructions- dual drive™ and 1300# Original Series

Step 5b. IMPORTANT: Do not install a 1300# or 1500# capacity liftgate on a pickup or service body without performing this step.

Supplied with the Tommy Lift are two frame bracket plates, two small angle irons or shipping feet (2"x2-1/2"x9-1/4") and bolted to the bottom of the Tommy Gate is one long angle iron. Take the bracket plates and bolt them to the frame of the truck. Clamp the two short angle irons to the frame brackets so they will extend out to the long angle iron. Mark the long angle iron where the short angle butts up to it.



Remove all the frame bracket plates, the short angle irons and the long angle iron from under the truck and place a heavy weld on all seams where the bracket plates and the short angle irons are clamped together, and where the short angle irons and long angle iron are butted against each other.

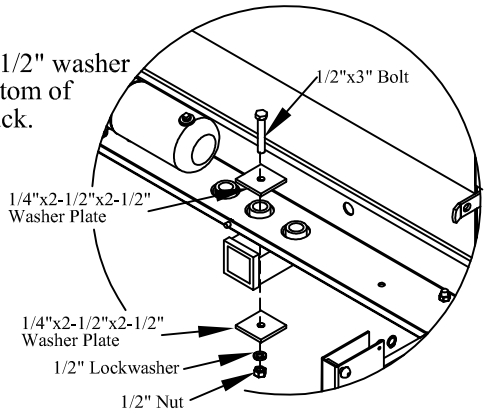
Once welded together, the complete bracket can be bolted back to the truck frame and the underside of the liftgate. This bracket is of great importance because it adds additional support to the liftgate.

IMPORTANT

WELDING NOTE!!! DISCONNECT ALL BATTERY CABLES. ALWAYS DISCONNECT THE GROUND CABLE FIRST. ATTACH THE WELDING GROUND TO THE TRUCK RATHER THAN THE LIFTGATE.

Lower Brace Instructions- T-320 only

Step 5c. For lower bracket support, use the supplied 1/2"x3" bolt, two 1/4"x2-1/2"x2-1/2" washer plates, 1/2" lock washer, and 1/2" nut. Bolt through the center hole in the bottom of the liftgate mainframe and the center hole in the factory hitch plate on the truck.



Step 6. Install the license plate lights in the holes provided. Wire the license plate lights by running the wire through the strain relief in the back of the mainframe and then connect it to the truck's existing wiring. In some instances you may need to splice additional wire to the license plate lights in order to reach the connection point. NOTE: All electrical splices should be heat shrinked for corrosion protection.

Step 7. Reinstall the box cover on the mainframe.

Step 8. Test the operation of the liftgate:

a) Check operation of the safety control for proper lift operation. Be sure the control shuts off automatically after 90 seconds of not being used.

b) Raise and lower an unloaded platform on a flat surface looking for proper operating speed and alignment with the ground.

c) Load the platform with the rated capacity and measure the time necessary to raise the platform. The platform should raise at roughly 2-3 inches per second.

d) Examine the platform for any downward creep.

e) With the platform still loaded, time the lowering operation. The load should descend at roughly 7-9 inches per second.

f) Remove the load from the platform and examine the liftgate and truck for any problems such as hydraulic oil leaks, loose wiring, etc.

Step 9. Your Tommy Gate has been primed with a white polyurethane and painted with a black semi-gloss polyurethane topcoat to protect it from the enviroment. No additional paint is required unless shipping or installation damage or outdoor storage exposure has deteriorated the Tommy Gate paint. **Tommy Gate will not be responsible for shipping or installation damage or outdoor storage exposure that has marred or otherwise deteriorated the Tommy Gate paint.**

If you need to refinish the liftgate you should do the following:

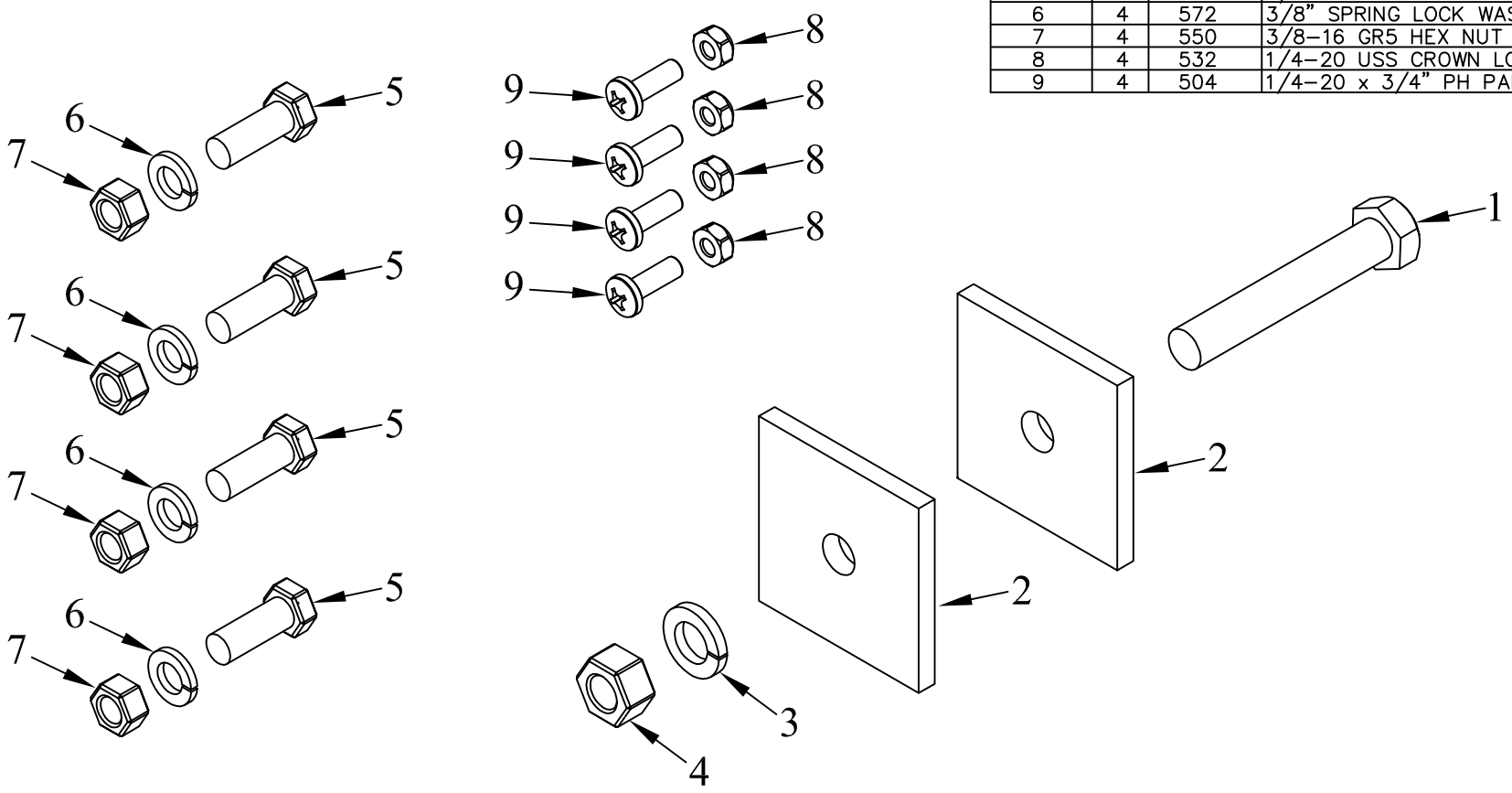
Remove any dirt, oil, grease, salt, or other contamination by washing with a mild detergent solution. Rinse thoroughly with fresh water and allow to dry. Lightly scuff sand the Tommy Gate topcoat.

If prolonged exposure, shipping, or other installation damage has deteriorated the Tommy Gate paint, it will be necessary to sand and spot prime the area(s) prior to finish coating. Mask off all safety decals, cylinder shafts and vents before painting. After proper cleaning and surface preparation apply desired finish coat per paint manufacturer's recommendations.

Remove the masking from the safety decals and cylinders. **Make sure all decals are clean and legible.** Additional decals are available from the factory, if needed. **Paint overspray on the cylinder shaft(s) or vent(s) will damage the cylinder seals and void warranty.**

Step 10. Place Maintenance and Operator's manual in the truck.

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	523	1/2-13x2-1/2" HHCS GR5
2	2	6959	.25"x2.5"x2.5" P-200-92/300 WASHER
3	1	573	1/2" SPRING LOCK WASHER
4	1	551	1/2-13 GR5 HEX NUT
5	4	509	3/8-16x1" HHCS GR5
6	4	572	3/8" SPRING LOCK WASHER
7	4	550	3/8-16 GR5 HEX NUT
8	4	532	1/4-20 USS CROWN LOCK NUT
9	4	504	1/4-20 x 3/4" PH PAN HD MS



REV.	DATE	CHANGE RECORD	BY	APPVD	ECN

THIRD ANGLE PROJECTION

DECIMAL	2PLC	3PLC
MACHINE SAW,DRILL	.030	.015
SHEAR, PUNCH FORM	.060	.030
TORCH, WELDING ROUGH CAST	.090	.060

DRAFT 2°

ANGULAR ±1°

FILENAME:

SYMBOLOGY PER ANSI Y14.5

DRAWN BY. DJR

DRAWN/DATE 03/14/05

APPVD/DATE

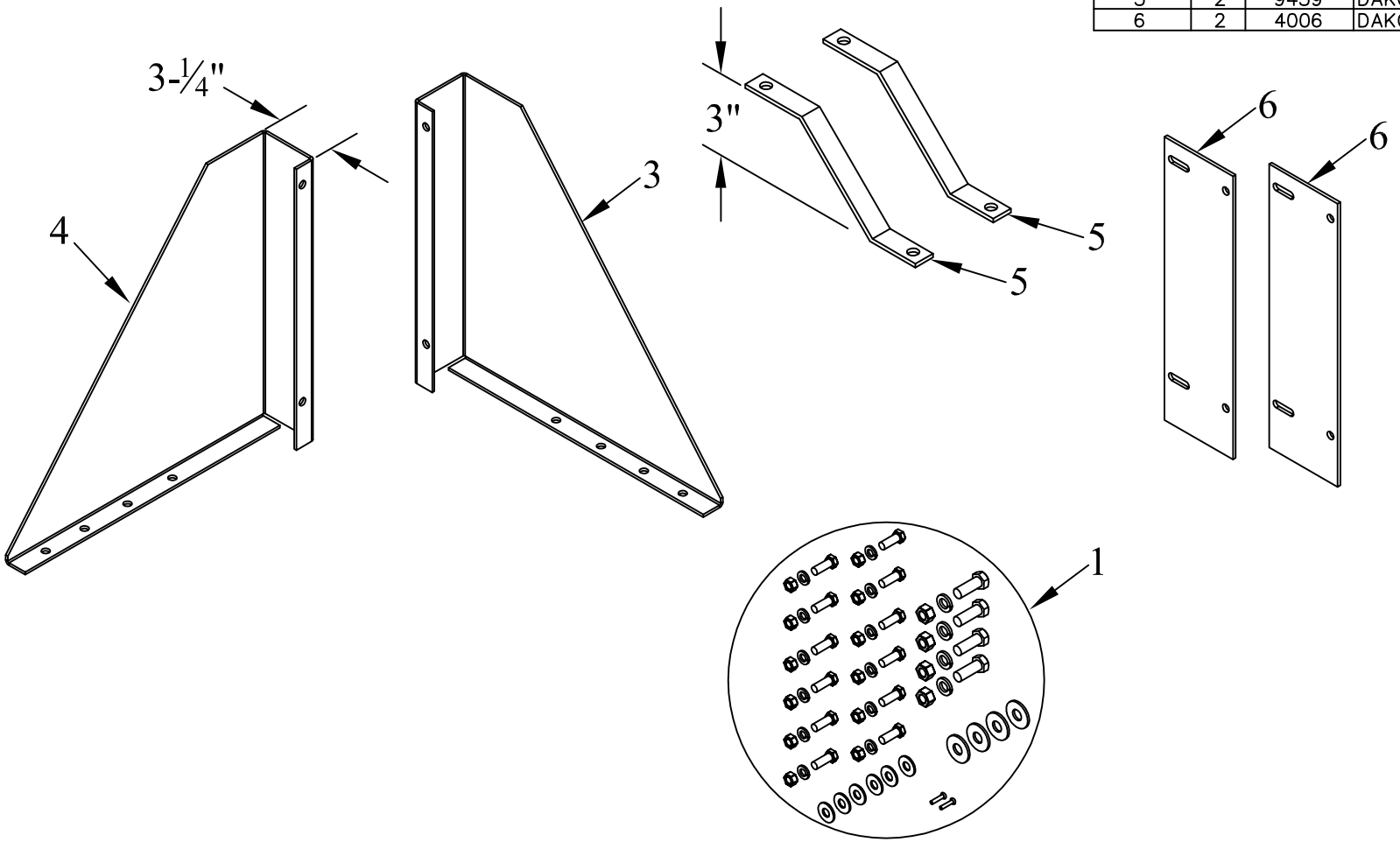
NOTES:

WOODBINE MFG. CO.
BUS BROWN DRIVE
WOODBINE, IOWA 51579
712-647-2050
The original TOMMY GATE hydraulic lift

TITLE T-31 BOLT BAG KIT

SALES CATEGORY	PRODUCT LINE	SCALE	FIN. WT.	PART NO.
45	8600	N		999

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	9094	STANDARD PICKUP BRACKET BOLT BAG KIT
2	1	999	T-31 BOLT BAG KIT
3	1	5003	T-31 LEFT CORNER BRACKET(DAKOTA)
4	1	5108	T-31 RIGHT CORNER BRACKET(DAKOTA)
5	2	9439	DAKOTA STRAP (15-3/4")
6	2	4006	DAKOTA GUSSET EXTENDER



REV.	DATE	CHANGE RECORD	BY	APPVD	ECN

THIRD ANGLE PROJECTION

DECIMAL	2PLC	3PLC
MACHINE SAW,DRILL	.030	.015
SHEAR, PUNCH FORM	.060	.030
TORCH, WELDING ROUGH CAST	.090	.060

DRAFT 2°

ANGULAR ±1°

FILENAME:

SYMBOLOGY PER ANSI Y14.5

DRAWN BY. DJR

DRAWN/DATE 3/14/05

APPVD/DATE

NOTES:

WOODBINE MFG. CO.
BUS BROWN DRIVE
WOODBINE, IOWA 51579
712-647-2050
The original TOMMY GATE hydraulic lift

TITLE: T-31 MOUNTING KIT

SALES CATEGORY	PRODUCT LINE	SCALE	FIN. WT.	PART NO.
45	8600	N		5125