



Bow or hardtop strike plate enter lock opening here

## Rear Lock Opened

“Closed switch button released when lever is pulled away, Switch continuity open > 20k ohms

When rear lock is open the locked switch lever spring tension depresses the switch button. Switch continuity open > 20K ohms

Note pin position in full open and “not closed” position. Pin in contact with “closed” switch lever and lever has released the switch button.  
Even with the pin in full open position there’s also a locking pawl that needs to be engaged. See locking mechanism page for more info.

Lever position in open NOT closed position

A22s2 “locked switch”

A22s1 “closed switch”

Side cover over switches is removed

Later model years only have “closed” switch in left lock

## Position of rear lock switch pin and switches when rear lock is open

# Rear Lock Fully Closed

# Position of rear lock switch pin and switches when rear lock is fully closed and locked

Later model years only have "closed" switch in left lock

Side cover over switches is removed

Closed switch lever released

"Closed" switch

Switch Button depressed  
Switch continuity closed 0 ohms

Spring tension

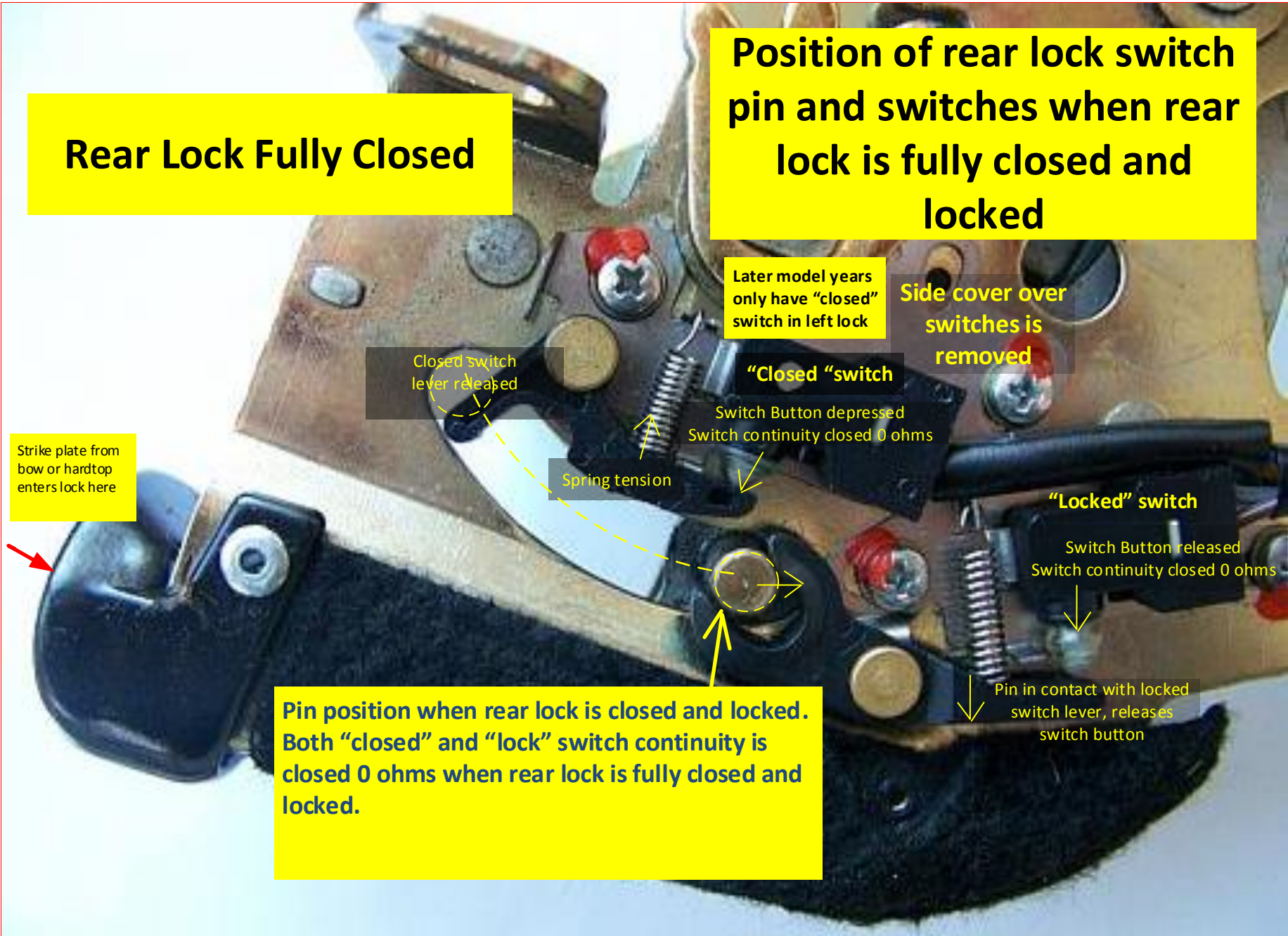
"Locked" switch

Switch Button released  
Switch continuity closed 0 ohms

Strike plate from bow or hardtop enters lock here

Pin in contact with locked switch lever, releases switch button

Pin position when rear lock is closed and locked. Both "closed" and "lock" switch continuity is closed 0 ohms when rear lock is fully closed and locked.

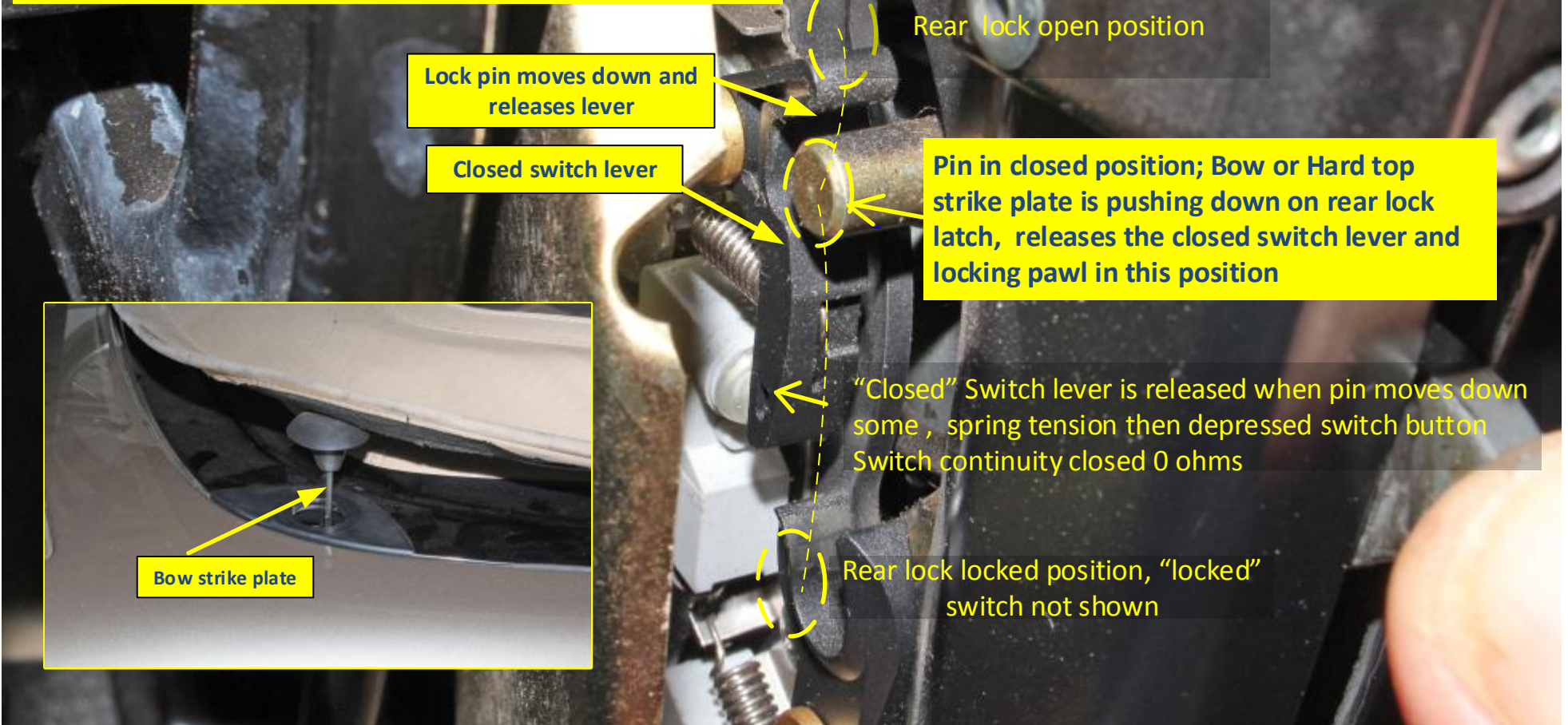


# Rear Lock Partially Closed Position

bow or hardtop strike plates putting pressure on rear locks latches and not yet pulled down to fully closed and locked position

“Closed” switch continuity closed 0 ohms

“Lock” switch continuity open > 20k ohms



Rear lock open position

Lock pin moves down and releases lever

Closed switch lever

Pin in closed position; Bow or Hard top strike plate is pushing down on rear lock latch, releases the closed switch lever and locking pawl in this position

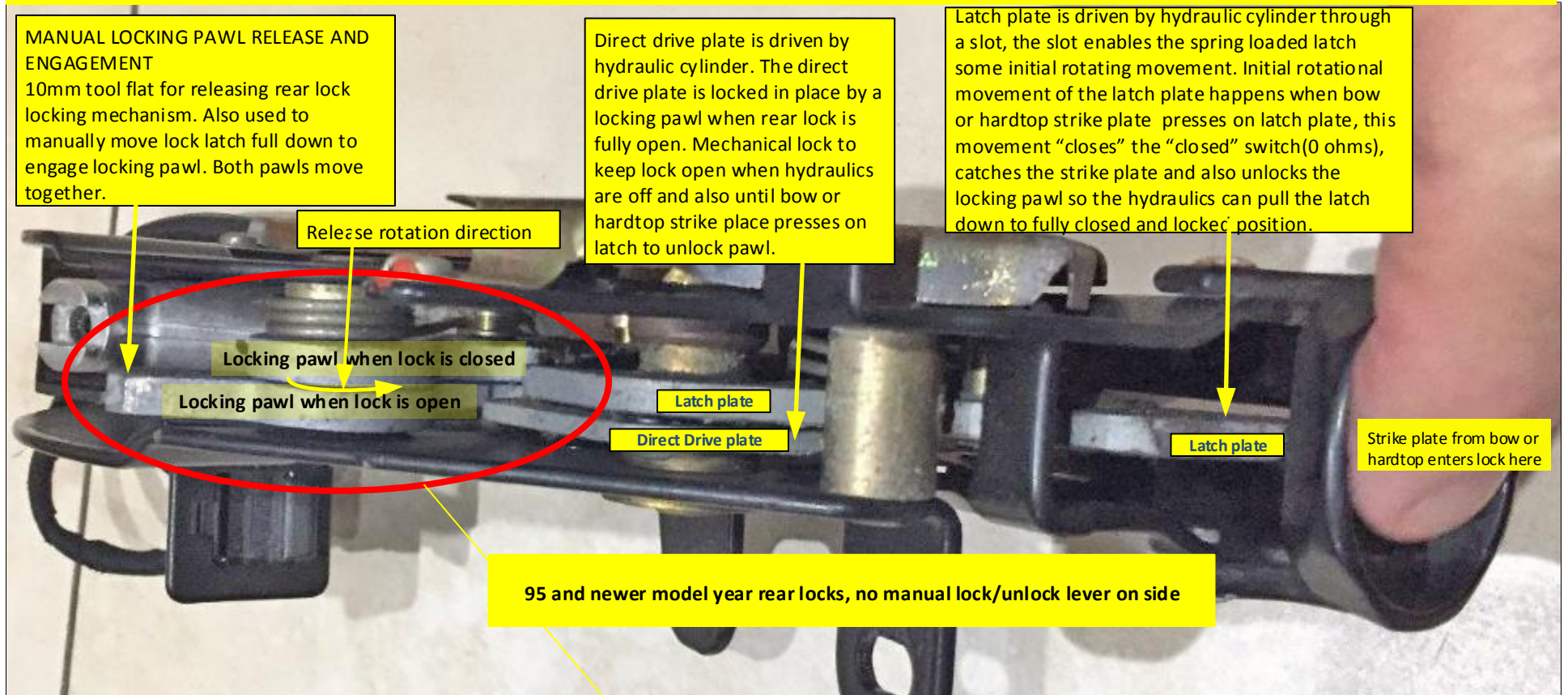


Bow strike plate

“Closed” Switch lever is released when pin moves down some, spring tension then depressed switch button Switch continuity closed 0 ohms

Rear lock locked position, “locked” switch not shown

## REAR LOCK FULLY OPEN AND FULLY CLOSED MECHANICAL LOCK



## REAR LOCK FULLY OPEN AND FULLY CLOSED MECHANICAL LOCK

1) When the rear lock is fully open one of the locking pawls is engaged in the direct drive plate to keep the lock open. This mechanical lock prevents the lock/latch from sinking down when the hydraulics are off and regulates when the lock can be closed. The lock's "open" locking pawl is released when the bow or hardtop strike plate presses down on the latch plate, which rotates the spring loaded latch plate, catches the strike plate, closes the "closed" switch, signals the controller and releases the mechanical locking pawl. The hydraulics can then pull the bow or hardtop strike plate to full down and "closed" locked position. If needed the locking pawl when the lock is open can be released manually using a 10mm open end wrench through the trunk. See following pages for more details.

2) When the rear lock is fully pulled down and the bow or hard top is closed and locked, a locking pawl is engaged in the latch plate and prevents the bow or hardtop strike plate from pulling up out of the lock even with the hydraulics off. The "closed" locking pawl is released when the hydraulics are activated to open the lock, the direct drive plate movement releases the latch plate locking pawl. The "closed" locking pawl can also be released manually with a 10mm open end wrench, there's wrench flats on the back of the locking pawl as shown above, pulling upward on the 10mm open wrench will release the locking pawl, both pawls.

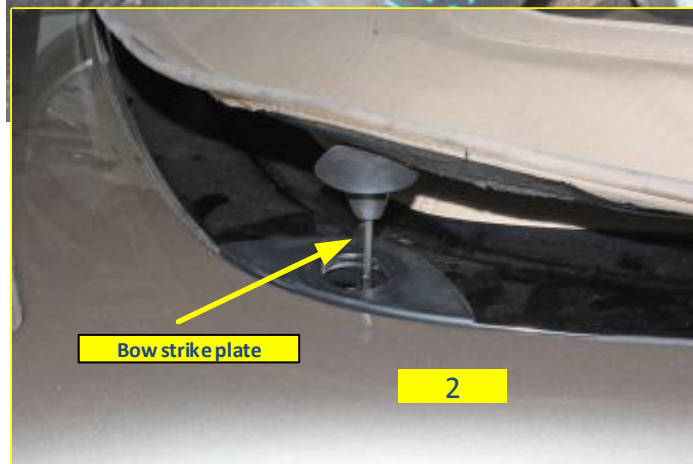
# Manually locking down rear locks for Bow or Hardtop

To manually unlock the rear locks use 10mm open end wrench, upward motion with wrench. Access through the trunk

To manually lock the rear locks, press strike plate into locks as far as possible, use 10mm open end wrench, downward motion with wrench.



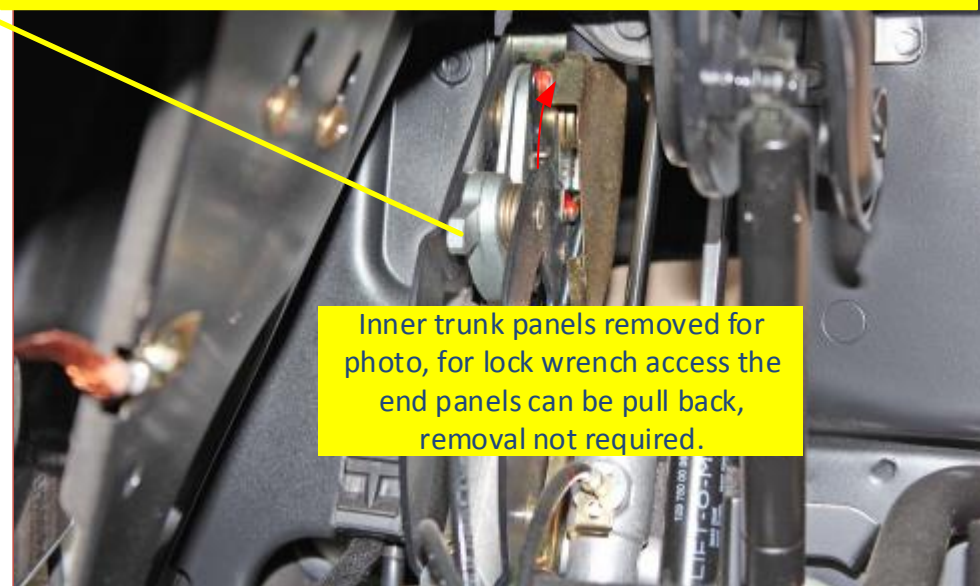
Top wrench from tool kit or 10mm open end wrench is used to rotate locking pawls for release and locking rear locks manually. Shorter offset 10mm open end works better on right side lock with gas fill hose in way.



Bow strike plate



## 95 and newer model year rear locks

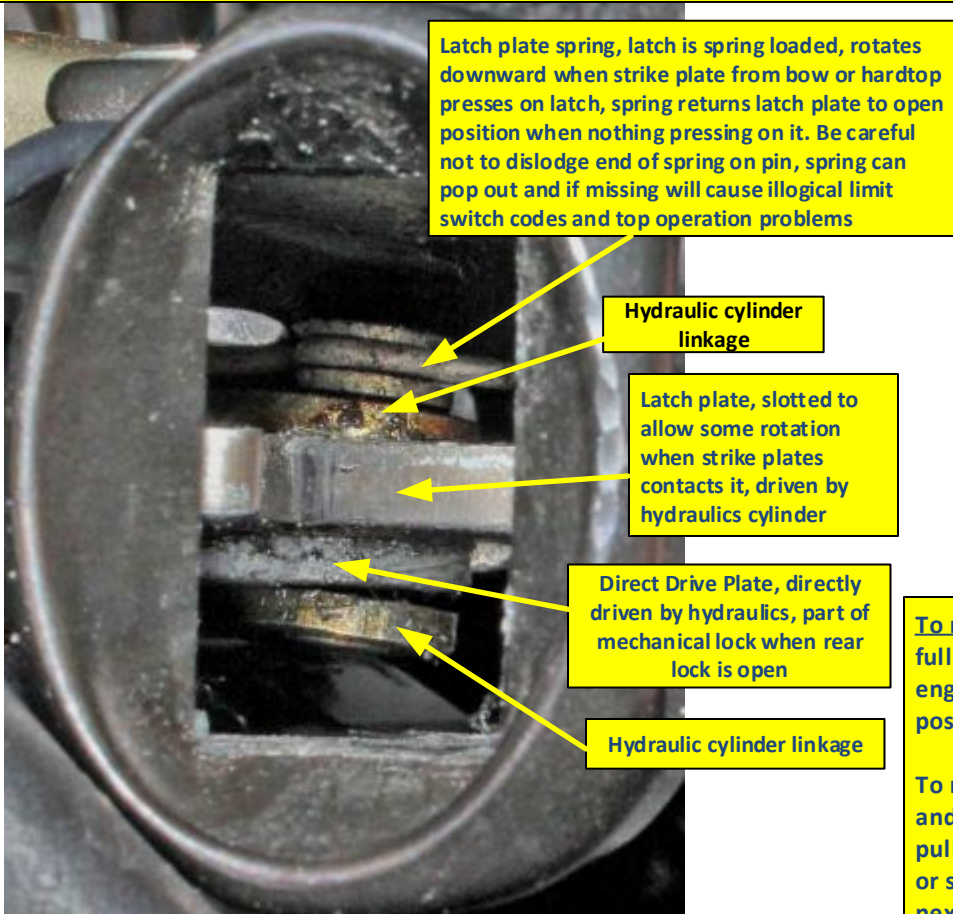


Inner trunk panels removed for photo, for lock wrench access the end panels can be pull back, removal not required.

If the bow or hardtop needs to be manually locked down;

- 1) first make sure the rear locks are in the open position
- 2) close bow or set hardtop so strike plates are in the rear locks
- 3) for each lock, release locked pawl from trunk using upward movement of 10mm wrench, press bow or hardtop down over rear lock area, strike plate should move deeper into lock, do for both sides and press into the lock as far as possible prior to final locking
- 4) Keep pushing down over lock area one side at a time and use downward motion on 10mm wrench to close and lock completely, resistance will be felt as the final movement of the lock is compressing/sealing bow or hardtop against the body of the car. If locked correctly the bow or hardtop will not pull up out of the locks.

# Manually Opening Rear Lock and Verifying Mechanical Lock Pawl is Engaged



To manually open the rear lock correctly; must check to see if it's locked open. The latch can be full up in the lock opening but the locking pawl may not be engaged. If the locking pawl is not engaged the lock/latch can sink downward when the hydraulics are off and the incorrect lock position may cause the top controller to incorrectly close the rear locks when powered up.

To manually open the lock fully and correctly means the "open" locking pawl must be engaged and to do this you can't just pull up on the latch in the middle of the lock opening, you have to pull up the direct drive plate until the locking pawl engages. To do this you use a thin plastic tool or small screwdriver through the slot in front of the lock to get under thinner direct drive plate next to the latch or the pin on the side, which is connected to the lock's cylinder. Pull up firmly until the locking pawl click engagement can be heard. A small flat head screwdriver or a bone tool as shown can be used to get under the thin drive plate or pin. If using a screwdriver care must be taken, the cylinder rod is exposed, it is lower than the pry location but you don't want to contact the rod with a screwdriver end.

To check if the rear lock "open" locking pawl is engaged do this; through the opening in the rear lock and with a thin tool press down firmly on direct drive plate or pin on the side of the latch plate. The latch and lock assembly should not move down. Don't press on latch plate itself for this check, the rotation of the latch plate is what unlocks the locking pawl. Be careful not to dislodge the latch spring end on the side pin is using this location to press down.

If the rear lock is all the way down and locked in the fully closed position the "closed" locking pawl will need to be released through the trunk using a 10mm wrench before. This must be done to be able to pull up and open the lock. Once the locking pawl is released you can pull up on the latch through the lock opening to get to the open position easier but the final step to engage the "open" locking pawl will need to be done as described above.

Rear lock has mechanical lock in open and closed positions. If lock is in open or closed position and needs to be unlocked, use 10mm wrench flat, which is accessed through the trunk. Upward movement of wrench will unlock either closed or open locking pawl.

Unlocking closed or open mechanical lock

Release direction for "open" or "closed" locking pawls.

From trunk, access to 10mm wrench flat to manually release rear lock's locking pawls and to fully lock down rear locks.



**Where to pull up on rear lock to manually open lock and engage locking pawl.**

Another pry point to manually open lock if you have a plastic tool, don't use a screwdriver near cylinder rod, use other pry points.

Lock appears open but check needed to see if locking pawl engaged. You can press down here to check if locked, should not move down. Don't press on latch plate for this check.

Latch plate

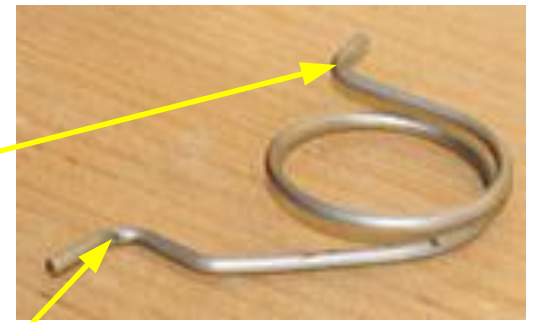
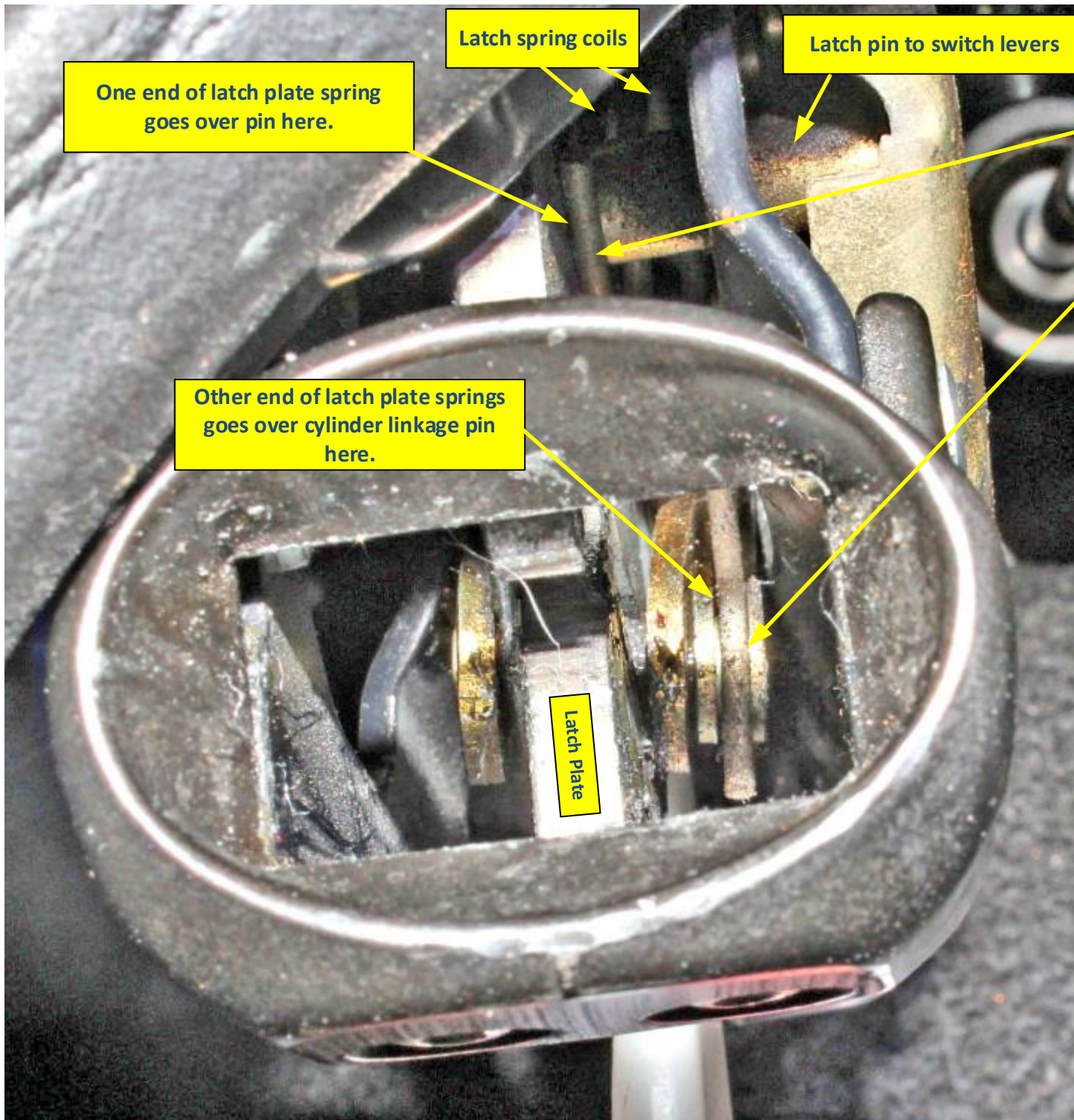
Pulling up on latch won't engage locking pawl due to slot in latch plate.

Pry point under pin but must be careful not to dislodge spring end. Least recommended pry point because of spring.

Small screwdriver, better to use plastic tool if available.

Another pry point to open lock and engage locking pawl.

Manually move up until "open" lock pawl engages. You can hear the click. Bone tool shown here for pulling lock up, can also use small screwdriver.



If manually opening the lock be careful not to dislodge the latch spring end. If the spring end is pulled up and dislodged from the pin the spring can fall out and if missing will cause limit-switch-signal-illogical code and interfere with top operation.

The spring is located on the side of the lock with the switch cover plate and internal so difficult to see. The spring hooks onto the latch plate pin on one end and over the pin of the hydraulic cylinder linkage pin on the other end (see photo).

This spring returns the latch plate to the open position when the bow or hardtop strike plate is not resting on the latch plate. When the bow or hardtop strike plate is resting on the latch plate it rotates down some, which moves the latch plate pin down and closes ( 0 ohm) the "closed" switch in the lock and signals the top controller.