# SUPPLEMENT H

MARTIN CONTROLLED DESCENT DEVICE<sup>TM</sup> WORLD PATENTS PENDING

## FOR LOW CLEARANCE TRACK WITH TORSION SPRINGS AT THE BACK

-SEE SUPPLEMENT "C" INSTRUCTION-

#### STEP 1 to 27

Follow the regular instruction manual to complete the garage door installation. Be sure to tighten the 3 set screws on the Red and Black Cable Drums about one turn each after feeling resistance on the Torsion Tube. See FIGURE H4.

Martin garage door hardware required for correct installation of the controlled descent device. See FIGURE H1

#### STEP 27a

Place the **low clearance** trigger plate over the bearing of the left lock-on side bearing bracket. Bolt the trigger finger to the side bearing bracket with the hex head bolt, sleeve and flange nut. Make sure the lock pin fits into the lock pin slot. See FIGURE H2

#### STEP 27b

Slide the clutch on the torsion tube firmly against the bearing, which holds the **low clearance** trigger plate in place. Tighten the 3 set screws on the clutch about one turn each after feeling resistance on the torsion tube. See FIGURES H2, H3, H4

### STEP 27c

Pull the end of the trigger spring using needle nose pliers and place it over the hook on the **low clearance** trigger plate. See FIGURES H2, H3, H4

#### STEP 27d

Test the device as explained in the theory on other side. Centrifugal force will cause the trigger pins to actuate the **low clearance** trigger plate, which actuates the trigger finger to stop the clutch and the door. Raising the door a few inches (cm) will unlock and reset the device.

ATTENTION! The 3 set screws in the Clutch and the 3 set screws in the Red and Black Cable Drums must be firmly tightened or they will slip when the device instantly stops the closing door.



The World's finest, safest doors "







-SEE SUPPLEMENT "C" INSTRUCTION-

# THEORY:

This device is designed to stop and lock-up a closing door if the speed exceeds about 12" (300) per second when installed with standard 4"(102) cable drums. This increased speed may be caused by weakened or aged springs, a broken spring, a broken lift cable, etc.

It is normal for all springs to weaken over time. If a door is manually released from the door opener for the first time in years, the door will probably close faster than normal. The Martin Controlled Descent Device is designed to stop the fast closing door.

NOTE: Extra strong electric door openers, set to maximum strength, may be able to open a two spring door with one broken spring. If the

opener is manually disconnected, while the door is open, the door will fall, actuating the Martin Controlled Descent Device.

This device will reset the lock-up by simply manually raising the door a few inches (cm). NOTE: The reset device will not work on a broken one spring door. Torsion springs normally break when fatigued while the door is in the closed position, with springs under "full" stress / tension.

If a lift cable breaks, a Martin torsion spring door is designed not to fall. The other lift cable is engineered to support six times (minimum) the door's rated load. A trained Martin service technician can manually open and then close the door from the side with the broken lift cable.





attention

UNTRAINED OR NEGLIGENT INSTALLING, ADJUSTING, AND SERVICING CAN BE DANGEROUS. THE SPRINGS AND RELATED PARTS CAN CAUSE SERIOUS INJURY OR DEATH! <u>CALL A TRAINED MARTIN DOOR DEALER</u>, WHO KNOWS HOW TO SAFELY OPEN THE DOOR, REMOVE A TRAPPED AUTOMOBILE, SAFELY CLOSE THE DOOR TO MAINTAIN SECURITY UNTIL THE TECHNICIAN IS SCHEDULED TO RETURN TO REPLACE THE SPRINGS, CABLES, ETC. The controlled descent device should not be oiled, etc.