

A man wearing a blue baseball cap, sunglasses, and a red and black plaid shirt is working on securing cargo. He is wearing white work gloves and is pulling on a heavy metal chain. In the background, there are stacks of yellow wooden crates or pallets. The scene appears to be outdoors, possibly on a loading dock or at a construction site.

# MICHIGAN SAFETY CONFERENCE & EXPO

## Cargo Securement Rules



IS THIS LEGAL IN MICHIGAN





# COMMERCIAL TRUCKERS

# NORTH AMERICAN CARGO SECUREMENT

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DO ALL STATES HAVE THE SAME  
RULES?

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NO, NOT EVEN CLOSE

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WHAT IS THE COMMERCIAL  
REQUIREMENTS ON CARGO  
SECUREMENT?

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LOAD MUST STAY ON TRUCK  
SECURED RIGHT UP UNTIL AN  
ACCIDENT

# NORTH AMERICAN CARGO SECUREMENT

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DO YOU USE ADEQUATE CARGO  
SECUREMENT?

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Where do you find the rules,  
**49 CFR, PART 393 PARAGRAPH 102b**

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COMERCIAL SECUREMENT RULES, are  
called out in several ways and types.

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**TENSION OR FRICTION, ROPE, CHAIN,  
STRAPS BUNGEE CORD, TARP TIE DOWN,**

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DIRECT OR INDIRECT CONECTION

# NORTH AMERICAN CARGO SECUREMENT

## CARGO SIZE AND WEIGHT RULE #1 SIZE

**UNDER 5'-0 IN LENGTH & UNDER  
1100 LBS**

**ONE SECUREMENT DEVICE**

**OVER 5'-0 OR MORE THAN 1100 LBS**

**TWO SECUREMENT DEVICES WITH ONE  
ADDITIONAL FOR EVERY 10'-0**

# NORTH AMERICAN CARGO SECUREMENT

## CARGO SIZE AND WEIGHT RULE #2 WIEGHT

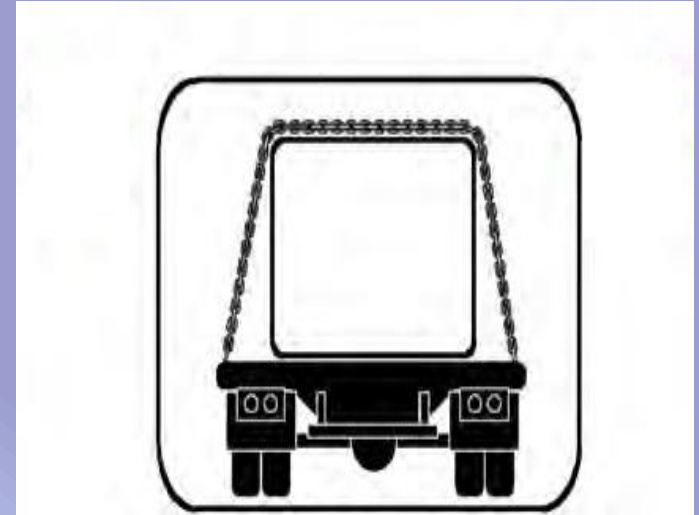
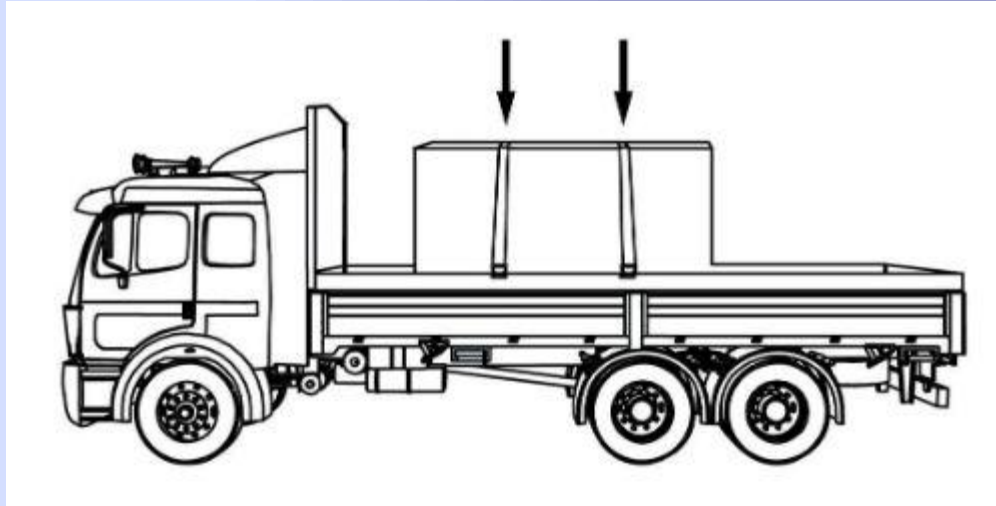
WEIGHT OF CARGO DETERMINES HOW  
MANY CARGO SECUREMENT ITEMS  
YOU USE

THE FORMULA IS 50% OF THE LOAD  
AGGREGATE

**EXAMPLE IF LOAD WEIGHT IS  
50,000 LBS**

*CARGO SECUREMENT NEED TO HAVE  
25,000 LBS OF VALUE*

# DEPTARTMENT OF TRANSPORTATON



Indirect  
Tiedown

Allowing  
100% Value  
of WLL

Causing  
Friction



# DEPARTMENT OF TRANSPORTATION



## LABELED CARGO POLYESTER STRAPS

- 1" = 500/800 LBS
- 2" = 3,335 LBS
- 4" = 5,400 LBS



## NORTH AMERICAN CARGO SECUREMENT

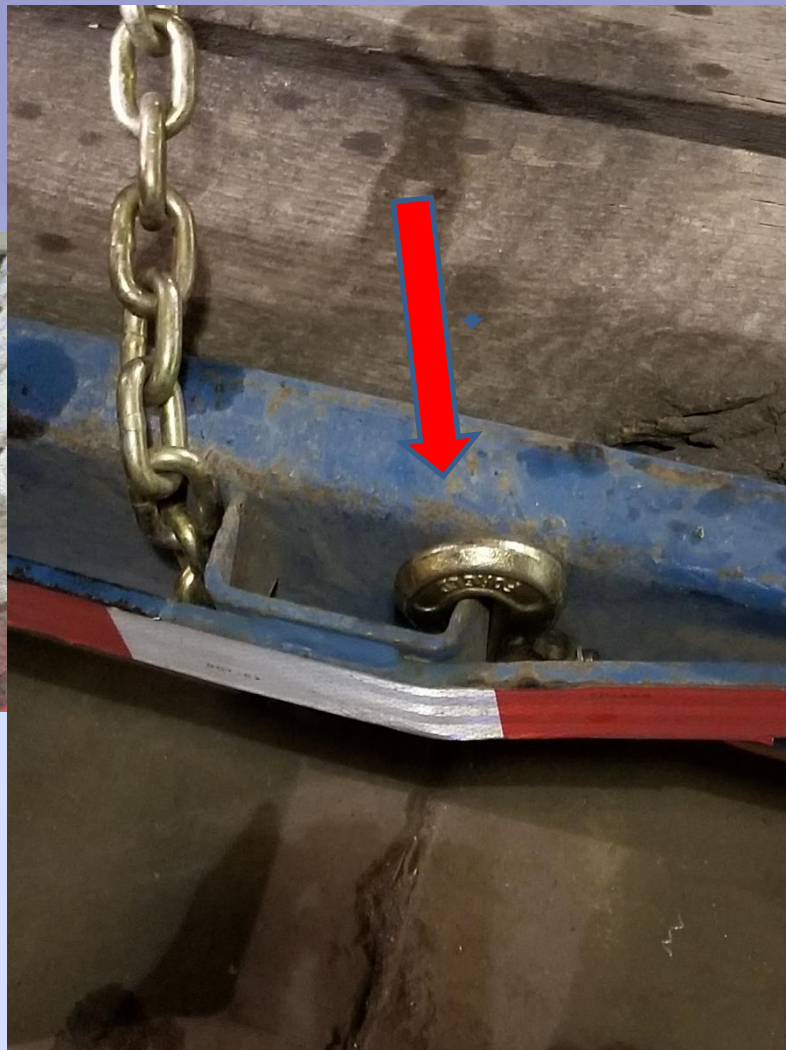
### GRADE 70 CHAIN

- $5/16'' = 4,700$  LBS
- $3/8'' = 6,600$  LBS
- $1/2'' = 11,300$  LBS

## DEPARTMENT OF STATE

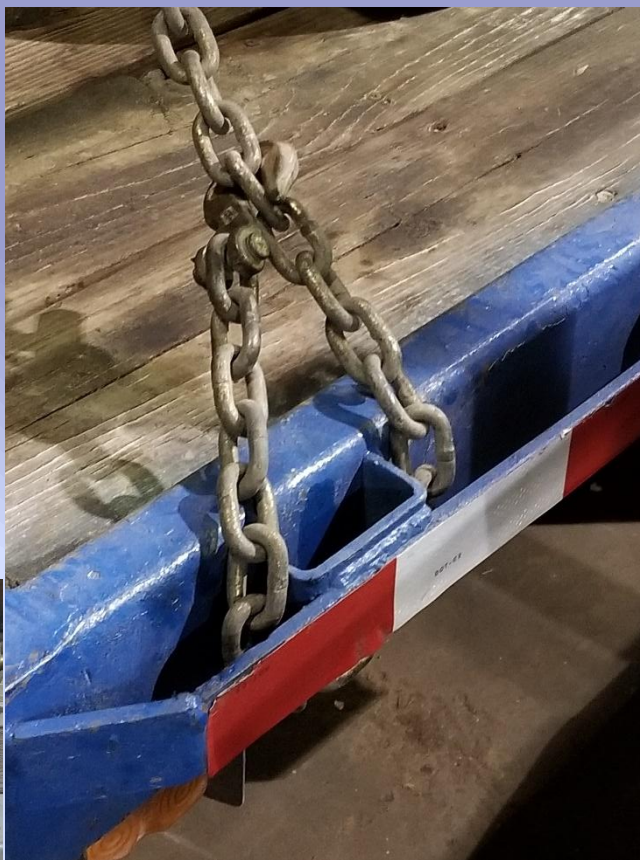
HOW TO ATTACH TO TRAILER  
MAKE SURE YOU STAY INSIDE  
RUBRAIL

BINDER = LEVER OR RACHET  
CHAINS ATTACH AROUND THE  
POCKET  
BUNGEE CORDS



## Incorrect Connection to side Rail





# Correct Connection to Rail Pocket

# DEPTARTMENT OF TRANSPORTATON



## Direct Tension Connection

5,000 CHAIN REQUIRMENT IF OVER 10,000 LB

TIE DOWN USED IN DIRECT TENSION REDUCES CAPICITY BY 50%

# DEPARTMENT OF STATE

Lever Binder has a 25 to 1 Advantage



Ratchet Binder has a 50 to 1 Advantage



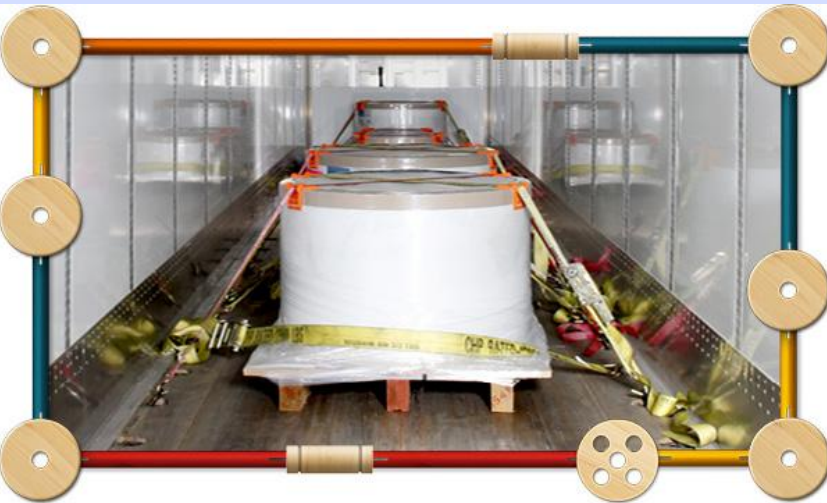
The Ratchet Binder was invented for smaller framed people to get the same tension on the load



Bungee cord the handle for secondary securement



# DEPTARTMENT OF TRANSPORTATON



**Covered Carriers Require Securement**  
INTERIOR 2" STRAPS YELLOW 12' GREY 16'  
BLUE 20' RACHET CAPICITY 1466 OR CAM 800



# NORTH AMERICAN CARGO SECUREMENT

- **WHAT DO I DO IF I BREAK DOWN ON THE ROAD?**
- PULL OFF TO SAFELY TO THE RIGHT
- EMERGENCY FLASHERS GO ON
- PLACE WARNING DEVICES **(10 MINUTES)**
- FIRST ONE 10' BACK ON DRIVERS SIDE
- SECOND ONE 100' BACK IN THE MIDDLE
- LAST ONE 100' BACK ON PASSENGERS SIDE
- UNLESS YOUR AT A CURVE
- HOLD IN FRONT OF YOU SO PASSING CARS CAN SEE YOU



THANK YOU FOR  
ATTENDING

- MORE  
INFORMATION IS  
AVAILABLE AT THE  
FEDERAL MOTOR  
CARRIER SAFETY  
ADMINISTRATION

# I THINK I WOULD NOTICE



# LOAD BLEW OFF NO ONE HURT





# This Was all Caused by a jet ski that was not secured properly



# COMMERCIAL TRUCKERS



# DRIVER DID NOT MAKE IT

FILM CLIP BA

