

# BATTERIES

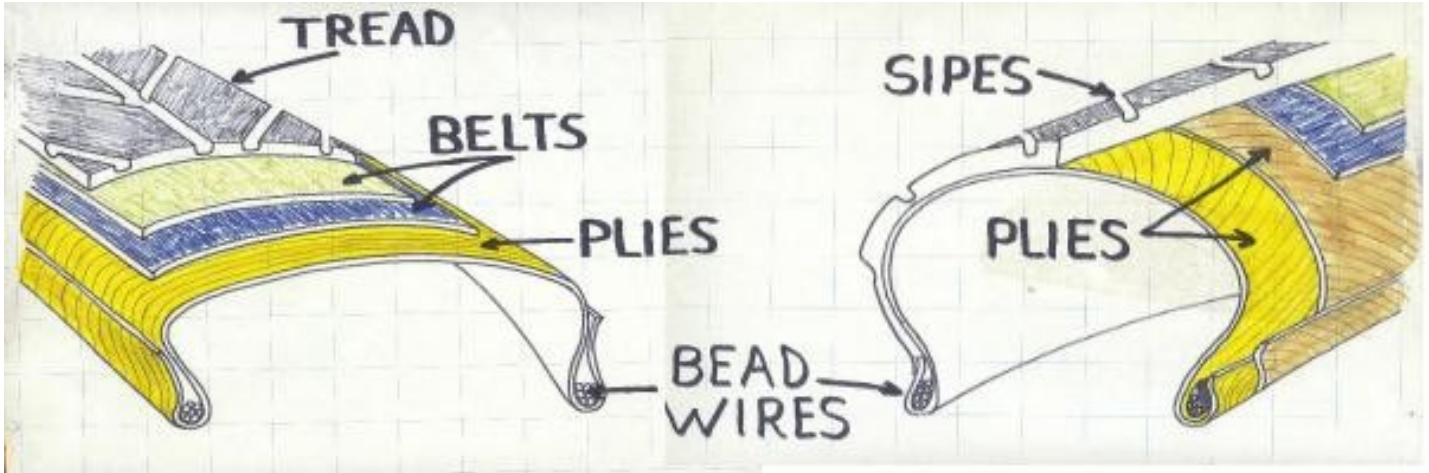
1. How do they work
2. How to test them
3. Why they lose water
4. Why they fail



Prolong battery life

1. Clean, tighten cables
2. Check water level
3. Do NOT overcharge
4. Check charging system

# TIRES



Radial	Bias-Ply
Soft carcass	Stiff carcass
Long life - squirm	Runs cooler
Smooth ride	Harsh ride
Large contact patch	Small contact patch
Expensive	Cheaper

## Maximum Tire Life

Proper Inflation

Properly Balanced

Ratings		
N = 93 mph	H = 130 mph	
S = 112 mph	V = 130+	Z = 150+

## **TIRE WEAR**

1. Major cause is under inflation
2. Improper addition of accessories
3. Blocking, left side wear is ok

## **HYDROPLANING**

1. Tread pattern determines dispersion
2. Worn tires plane easier
3. Rule: 2 x inflation = safe speed
4. Clear reflection is first clue

## **TIRE INFLATION**

1. Check once per month minimum
2. Always check when cold
3. Check against sidewall - NOT the owner's manual
4. Never less than 10%
5. High speeds and/or heavy loads - inflate to maximum pressure
6. Check tires for debris - nails, glass, old Harley parts
7. **TIRE DOESN'T SUPPORT THE LOAD  
- AIR PRESSURE DOES**

# HYPOTHERMIA

- I. What: A lowering of the bodies temperature -10°F spells **BIG** trouble
- II. Where: Three primary areas: Head & neck, arm pit, and groin
- III. When: Exposure to **MILD** temperatures

Wind speed	Temperature	Wind chill
40 mph	50°F	25°F
40 mph	40°F	10°F
40 mph	30°F	-6°F

# SYMPTOMS

Shivering - Euphoria, Impaired judgment, Lack of coordination, weakness (fatigue)

# FROSTBITE

Actual freezing of tissue

## **PREVENTION**

- I. Generate heat - snack often such as sugar & carbohydrates, 3 basic food groups
- II. Move heat around - exercise (**CAUTION: DO NOT OVEREXERT**)
  - a. Flex fingers & toes
  - b. Deep rapid breathing
  - c. Move at rest stops
- III. Proper dressing - layer clothing
  - a. Feet: heavy boots - 2 pair socks
  - b. Legs: long johns - Jeans - chaps
  - c. Torso: "T-shirt" - flannel shirts, sweat shirt, jackets
  - d. Hands: heavy gloves - mittens
  - e. Head: liner - ski mask - scarf

## **HEAT EXHAUSTION**

- I. Weakness, fatigue, dizziness
- II. Excessive sweating
- III. Cold pale skin
- IV. Normal body temperature

## **HEAT STROKE**

- I. Disorientation, unconscious
- II. Absence of sweating
- III. Skin is hot, flushed, & dry
- IV. High body temperature
- V. Can be fatal

# 1995 MICHIGAN DISTRICT RALLY

## CYCLE WEIGHT STATISTICS

	High	Low	Avg.
One-up (16)	1,285	770	1,097
Two-up (8)	1,680	1,015	1,368
Two-up + trailer (14)	2,070	1,420	1,762
Two-up + sidecar (4)	1,925	1,555	1,693
Two-up + trailer + sidecar (2)	2,560	1,960	

## **RAIN RIDING**

<b>TRACTION</b>	<b>SPEED</b>
80% when dry	Reduced traction
Grease, fuel, oil	Longer stopping
Pop, beer, French fries	Slower cornering
Let rain wash road	Less Swerving
Break for junk food	

<b>SLIPPERY SPOTS</b>	<b>BRAKING</b>
White plastic arrows	Keep vertical
Crosswalk markings	Best pavement
R.R. tracks	Less on front brake
Deep puddles	High side flip

## **MOTORCYCLE**

Tread depth, design

Hydroplaning (2x tire pressure)

Wet rotors

## **COOLANT**

Hotter engines = greater efficiency

Raise boiling point

Pressurize system

## **ETHYLENE GLYCOL - PETROLEUM/NAT. GAS**

Boiling point - 230°F

Freezing point - -40°F

Poor heat transfer

## **SOLUTION - MIX WITH DISTILLED WATER**

Tap water - high mineral content

Soft water - possible salt residue

## **INHIBITORS**

Coat and seal cylinder walls

Prevent electrolysis

Wears out - change 2 years

## **CAUTION - HIGHLY TOXIC**

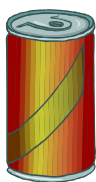
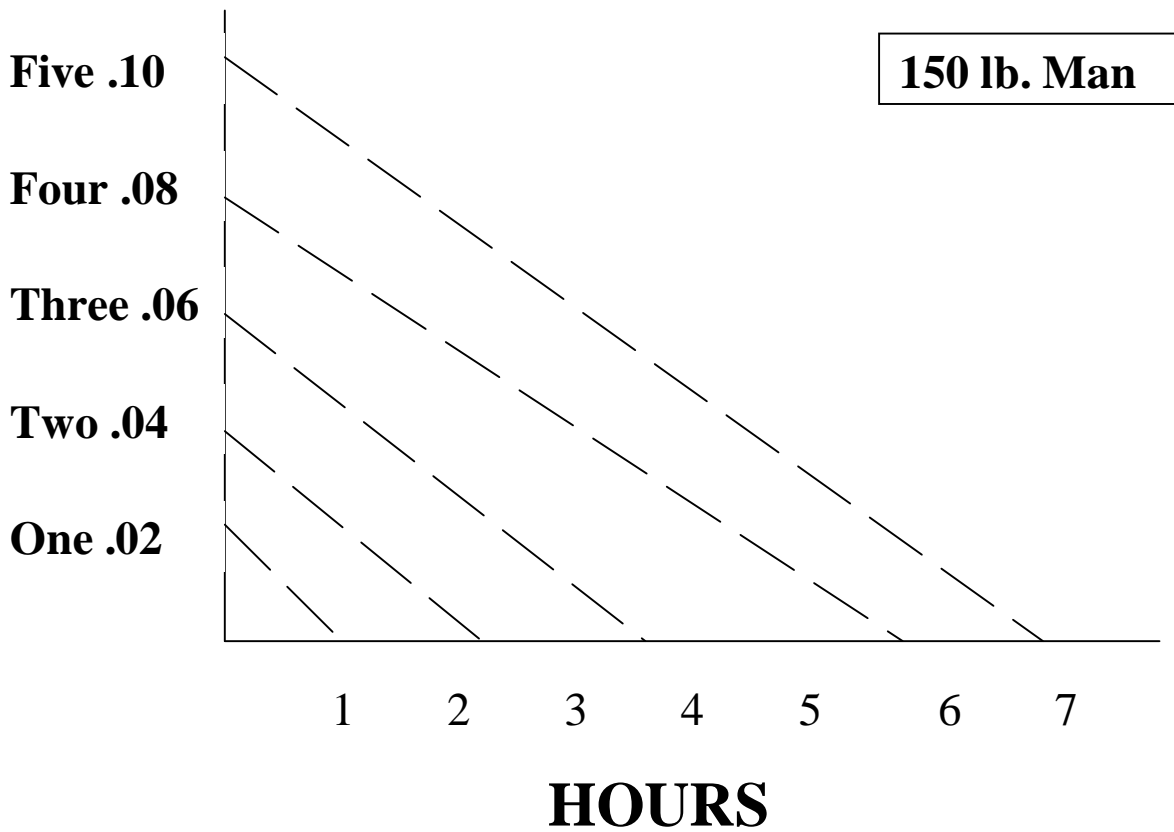
Non-biodegradable

Major cause of animal poisonings

Will damage paint

## **NEW DEVELOPMENTS**

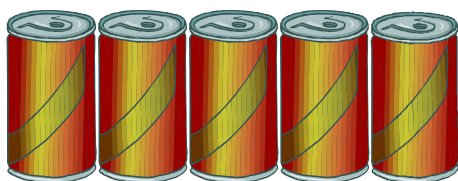
Check weep hole



Braking, lane positioning  
 Road surface awareness  
 Evasive maneuvering



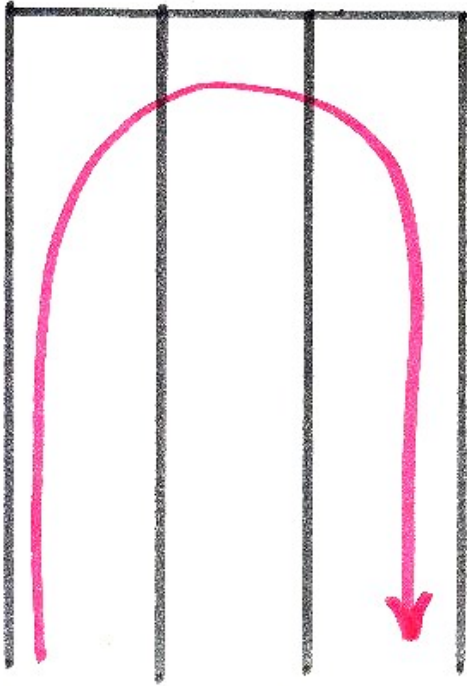
Scanning, shifting  
 Night vision  
 Throttle control



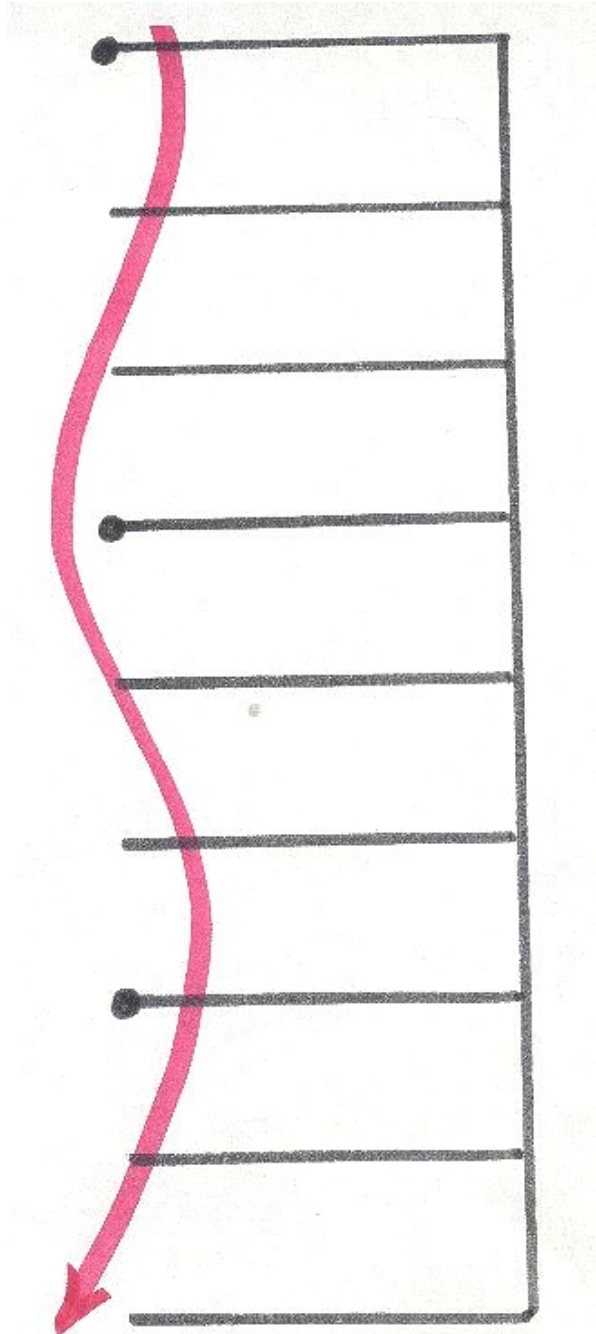
Critical judgment  
 Lean angle  
 Balance

# 20-Minute Tune-up

## U-turn



## Exercise weaves



# Sharp turns

# Quick stop

