



2012

SPORTSMAN
RULES

Lebanon I-44 Speedway

2012 Sportsman Rules

GENERAL DESCRIPTION

Anyone having questions may call Larry Magnussen (Chief Tech.) at 417-531-0775.

This class is open to racing cars and racing trucks, many of these have lost a series or track to race at. They can be purchased at a reasonable cost and are readily available. They are, but not limited to:

- 1) STOCK FRAME – Aluminum or steel body
- 2) STOCK STUB – Fiberglass body
- 3) RACING TRUCKS (old I-70 or USST Trucks) – Fiberglass body
- 4) PERIMETER CARS (i.e. old tour type late models) – Fiberglass body

WEIGHTS – all weights are after the race with driver sitting in normal upright position. Weights and percentages may be modified to make class competitive.

- | | |
|------------------------------------|---------------------------------------|
| 1) Factory steel or aluminum body | 2850 pounds with 58% left side weight |
| 2) Fabricated or Stock Camaro stub | 2850 pounds with 57% left side weight |
| 3) Trucks | 2850 pounds with 57% left side weight |
| 4) Perimeter | 2850 pounds with 57% left side weight |

Additional weights and penalties:

- | | |
|-------------------------------------|------------|
| 1) Unapproved intake | 50 pounds |
| 2) Unapproved cylinder heads | 100 pounds |
| 3) Excessive cubic inches (362-393) | 150 pounds |
| 4) Excessive cubic inches (394 +) | 200 pounds |

I. ENGINE

Crank height is set at 10 ½ inches for all engines.
Engine set back is 4" on stock frame, and 2" on fabricated frame.

ENGINE OPTION # 1 – CAST IRON HEAD ENGINES 11.0:1 COMPRESSION

- 1) Must use OEM cast iron, American make V-8 engines only.
- 2) External engine castings and thread holes cannot be altered.
- 3) No aluminum, titanium or carbon fiber components allowed.
- 4) No ANTI-FREEZE ALLOWED. WATER ONLY, NO ADDITIVES!! Violators subject to penalties.
- 5) Maximum compression is 11.0 to 1. NO TOLERANCE.
- 6) Engine must appear strictly stock.
- 7) Only standard OEM stock cast iron engine block permitted.
- 8) Engine block must retain all standard dimensions with exception of maximum allowable overbore and surfacing of block deck.
- 9) No angle cutting of engine deck permitted. No internal polishing of engine block permitted. Deburring is permitted.

- 10) ENGINE SIZES V-8 small block engine, 11.0:1 compression ratio;
 - a) Chevrolet / General Motors – 350 cubic inch displacement engine block plus a maximum of .045 inch overbore per cylinder.
 - b) Ford – 351 cubic inch displacement engine block plus a maximum of .040 inch overbore per cylinder.
 - c) Chrysler – 340 or 360 cubic inch displacement engine plus a maximum of .030 inch overbore per cylinder.
 - d) 355 cubic inch displacement Chrysler engine is not permitted.
 - e) All built motors will be check for Cubic Inches and Compression Ratio.

1-A VALVE TRAIN

1. Maximum 2.02-inch intake valves and 1.60-inch exhaust valves.
2. Only steel valve springs permitted. No titanium (or other expensive or exotic material) valve spring or retainers.
3. Guide plates and screw in studs allowed.
4. No angle milling permitted. Flat milling is allowed.
5. Flattop or dished pistons only.
6. Must use flat tappet cam and lifters.
7. No mushroom lifters.
8. Rev-kits are not permitted.
9. Cannot alter lifter bores. May have bronze inserts but diameter must remain O.E.M at .842-inch.
10. Must use OEM size lifters for block being used.
11. Any length push rods allowed.
12. Aluminum roller rocker arms and stud girdles are permitted.
13. No canted valves. Inline valves only.
14. Maximum valve spring diameter 1.44-inches.
15. No portion of piston above engine block surface permitted.
16. Only solid steel connecting rods permitted.
17. No air directional devices on any valve surface permitted.
18. Valve stem diameter is .34375-inch (11/32-inch) minimum.

1-B BLOCKS

1. Aftermarket blocks permitted.
 - a) General Motors – Stock cast iron blocks: 305, 327, or 350.
 - b) Ford – Stock cast iron blocks: 260, 289, 302, or 351.
 - c) Chrysler – Stock cast iron blocks: 273, 318, 340, or 360

1-C HEADS

1. No aftermarket head allowed except those listed.
 - a) General Motors: Any stock GM head except the Bowtie Vortec head.
 - 1) Dart – 10320010 or 10310010
 - 2) World Products – 011250 or 011150
 - 3) RHS – 12319 or 12320
 - 4) EQ – CC200BA
 - 5) Bowtie – 034

- b) Ford: Any stock Ford head.
 - 1) World Products – 053040 or E351 or Roush 200
 - 2) RHS – 35302
 - 3) SVO – N351 or N352
 - c) Chrysler: Any Stock OEM factory production Chrysler head allowed with inline valves (no canted valves). Must meet maximum intake and exhaust. No W-2 or aftermarket heads allowed. Chrysler may use OEM rocker arm bars.
2. Only unaltered stock cast iron production heads limited to 2 valves per cylinder permitted.
 3. No port matching or flow work of any kind permitted. Gasket matching will be permitted.
 4. No angle cutting of heads to block mating surface is permitted.
 5. No offset drilling head stud or bolts holes permitted.
 6. 3-angle valve job permitted.
 7. Combustion chamber may be polished.
 8. Intake manifold cannot be altered. Must remain as manufactured. No port matching or flow work of any kind permitted. Outside may be powder coated, but interior cannot be painted.
 9. Part numbers must remain visible.

1-D CRANKSHAFT / HARMONIC BALANCER

1. Only steel or cast iron production design crankshaft permitted with a minimum weight of 45- pounds.
2. After market crankshaft is permitted, but must be identical in appearance and construction as OEM crankshaft.
3. Stroke must be OEM dimension for engine block being used.
4. No Honda journal crankshaft permitted.
5. Leading edge of counterweights must not be knifed edge, have pendulum cut or holes across counterweights.
6. Only standard OEM steel elastomer-type harmonic balancer permitted. After market balancer may be used, but must be of conventional design. Balancer cannot contain fluid or unbonded inertia ring.

1-E CARBURETOR

1. A Carburetor track claim rule will be in effect:
 - a) Claim will be \$500 with NO EXCHANGE.
 - b) Claim to be made by track.
2. No use of any type of Epoxy or other coating of any type is permitted.
3. Fuel injection, superchargers or nitrous oxide are not permitted.
4. Alterations to allow additional air to be picked up below opening of venturi will not be permitted.
5. Double return spring required.
6. Base plate must not be altered in any way.
7. No modifications. Air horn must not be removed.
8. No polishing, grinding or drilling of holes permitted.
9. No tapered boosters. Boosters may not be changed or altered in any way.
10. Venturi area must not be altered in any way. Casting ring may not be removed.
11. Must use Edelbrock Performer 4 bbl. Intake manifold. No exceptions.
 - a. Chevrolet part # 2101 or 2701
 - b. Ford part # 2121 or # 2181
 - c. Chrysler part # 2176
12. No Performer RPM or air gap manifolds.

13. **Any straight bore adapter - Aluminum or Phenolic - 1.700 diameter hole and 1" tall.**
14. No spacers are allowed.
15. Carburetor must be securely fastened to intake manifold. Carburetor and adaptor gaskets maximum .05-inch thickness.

ENGINE OPTION # 2 – CRATE MOTOR 604

Factory stock new and sealed motor can run Holley 650 C.F.M. 4-Barrel carburetor with 6000 R.P.M. chip. Must have stock 1.5 rockers, no carburetor spacer, stock balancer and oil pan. Any 604 that does not have factory seals will run Holley 2-Barrel 500 C.F.M. carburetor. Any straight bore aluminum or phenolic adapter 1" tall and 1.700 straight holes may be used.

1. Engine must be used as STOCK as delivered from dealer. Lebanon I-44 Speedway's Exclusive Dealer is McGunegill Performance (765-282-1913).

2. CARBURETOR

- A) Stock Holley 650 CFM 4-barell carburetor, part # 4150 or # 80541-1, "box-stock" is required.
a-1) Any Crate motor without the proper documentation will be declared "altered" and must run the Holley 500 CFM. 2-Barrel carburetor.
- B) Carburetor must be securely fastened to the intake manifold with 1 (.0625-inch (1/16 inch or smaller flange) gasket.
- C) Drop-in spacers, alteration, physical changes, machining, re-shaping or tampering with any part of the original parts, internal or external, is prohibited.
- D) No use of any type of Epoxy or other coating of any type is permitted.
- E) Fuel injection, superchargers or nitrous oxide are not permitted.
- F) Alterations to allow additional air to be picked up below opening of venture will not be permitted.
- G) Following is a list of tuning and replacement parts permitted for use on the Holley 4150 HP Carburetor. Only genuine Holley replacement parts are permitted and must match exactly parts replaced.
 - a. Jets
 - b. Bleeds
 - c. Needle & seat
 - d. Emulsion bleeds
 - e. Power Valves
 - f. Accelerator pump nozzles
 - g. Accelerator pump can
 - h. Floats include all offered by Holley for the HP 4150 650 CFM Carburetor
 - i. Floats maybe modified/angle cut.

GENERAL RULES THAT APPLY TO ALL CARS

II. ROLL CAGE

1. Must consist of continuous hoops not less than 1 ¾ inch outside diameter and must have a wall thickness of at least .095-inch carbon steel round mechanical tubing.
2. Must be welded to frame in at least 6 places. Body mounted roll cages are not acceptable.
3. Must consist of configuration of front and rear hoops connected by tubing on sides or side hoops in a manner deemed acceptable by the inspector.
4. Driver's head must not protrude above cage with helmet on, while strapped in driver's seat. A minimum of 3 inches of clearance to nearest tubing.

5. Roll cage must have 3/16-inch inspection hole in non-critical area.
6. Minimum requirements for all roll cages are as follows:
 - a) 4 upright bars and 3 overhead bars
 - b) Must have at least 4 curved horizontal bars at driver's door welded to front and rear cage members and must have a .062 minimum thickness steel door plate from front to rear welded to outside of driver's door bars. And 3 in passenger door connected by vertical tubing.
 - c) 1 horizontal bar in dash area connecting front uprights.
 - d) Roof support bar (see diagram #2).
 - e) Rear hoop brace (see diagram #3).
 - f) Tubing to protect driver's feet (see diagram #4).
 - g) Vent window brace on driver side (see diagram # 4).
 - h) Complete engine compartment and truck compartment braces are required.
7. Bends must not have any kinks.

III. WEIGHT

1. All ballast must be in block form of 5 pounds minimum, painted white, must have car number on it, and securely fastened. Cannot be located in drivers compartment.
2. Weight penalties may be added to any car not meeting rule requirements.
3. No ballast weight is permitted to be welded or attached to leg or doorplates.
4. Lead shot, liquid or ballast adjustment devices are not permitted.
5. Tungsten, bb, or liquid weight is not permitted at anytime for ballast weight

IV. BODY / INTERIOR / FRAME

1. **Must have complete factory appearing steel, aluminum or fiberglass body in proper configuration for make and model.**
2. **No carbon fiber body parts allowed.**
3. **Interiors can be aluminum or steel and must be sealed.**
4. **No "coffin-style" interiors.**
5. **Must have a minimum of 1/8" Lexan windshield with proper bracing.** All glass is to be removed. Lexan windshield with 3 support bars required. Must be clear, not tinted. Side windows must remain open. Rear and quarter window can remain open, or have lexan.
6. Frame rails of unibody cars may be reinforced, but must not replace stock frame rails with tubing.
7. Rear frame rail from center of axel housing back can be fabricated with tubing.
8. Unibody cars must have 10-inch circumference square or rectangular frame rails added with .125-inch wall thickness connecting front and rear sub-frame.
9. **Ride height is 4 ½" without driver.**
10. Headlight and taillight covers are permitted.
11. Doors must be welded and/or bolted shut. Trunk lid and hood must be pinned down.
12. Must have all side glass, trim and upholstery removed, including soft dash components.
13. Driver must have easy access into and out of car on both sides.
14. Must have tow hook, chain or cable, front and rear, capable of supporting the car.
15. Car must have brightly painted, easily visible, at least 4 inches thick and 24 inches high number on roof (reading from passenger side) and at least 4 inch thick by 18 inches high number on both doors, and numbers at least 1 inch thick by 6 inches tall on front (driver side) and rear (passenger side) of car. See general rules.
16. Car must be kept in good condition all season long.

V. SUSPENSION / STEERING & REAREND COMPONENTS

1. NO "HIGH DOLLAR" SHOCKS PERMITTED. There will be claim rule on shocks.
 - a) Claim will be **\$125.00** with NO EXCHANGE.
 - b) Claim to be made by any competitor that finishes on the lead lap of the feature. Claim is to be made in cash and claim must be in writing, must be given to Tech. Official within 5 minutes of the end of feature.
2. ***If stock spindles, steering box and lower A's are used a weight break of 25 pounds is allowed.***
3. **Rear suspension must have solid lower trailing arms and solid top link or truck arm with 5" spring.**
4. **Either stock lower A's or strut type lowers are allowed.**
5. **Can alter spindle arms and center link for spherical type ends.**
6. **Only conventional setups are legal, no bump stop, coil bind, or snubbers on shocks.**
7. **Coil over shock and springs – no adjustable shocks.**
8. **Can run quick change rearend, but must have protective plate between quick change and fuel cell.**
9. **Either steering box or rack and pinion are allowed.**

VI. WHEELBASE / WHEELS / TIRES / TREADWIDTH

1. Wheel base dimension a minimum of 104 inches permitted.
2. 65 inch tread width from center of tire to center of tire.
3. Any steel wheels with a maximum width of 8 inches permitted. With a minimum weight of 19-pounds. No aluminum wheels permitted.
4. Wide 5 wheel permitted, but a weight penalty of 25 pounds added.
5. Track tire rule in effect. Tires will be bar coded and put into teams inventory and each team may purchase one new tire per week, **but new tire must be ran in that week's feature event.** You may start the season with six (6) tires in your tire bank.
6. **It is the Car owner or Driver's responsibility to make sure that tires that are sold or swapped between teams or cars:**
 - a) **Tire #'s are recorded in tire book and scanner.**
 - b) **If tire is swapped to another car it must be removed from original purchaser and placed on new car's tire list.**
 - c) **Any tire found on car that it is not registered to that car will be disqualified. NO EXCEPTIONS!**
7. Alteration of a tire(s) is not permitted and defined as changing the physical and/or chemical composition of the tire by cutting; grinding; buffing; warming; cooling or the use of chemicals whereby the tread area or the interior surfaces of the tire is changed from the manufacturer's specifications; alteration or defacing of tire identification numbers; labels; code numbers or serial numbers. Any violation of this nature causes the tire(s) to be deemed ineligible for competition.
8. All tires must be purchased from the I-44 Speedway tire dealer.
9. **No bleeders permitted.**

VII. BRAKES

1. **Any caliper is permitted.**
2. **Stock calipers will have a 15 pound weight break.**
3. Rotors must **be steel** and cannot be drilled or lightened.
4. Brakes must be operational on all 4 brakes at all times.

VIII. IGNITION / ELECTRICAL SYSTEM

1. Must have working starter and be capable of starting engine on demand.
2. **12-volt ignition system only.**
3. Crank triggered or multiple coil ignition systems are not permitted.
4. Master "ON/OFF" switch on battery cable must be located just inside driver side window, between ledge and roof, just behind driver for easy access. See diagram.
5. **Only one (1), 6 terminal ignition box permitted. Only one (1) ignition box allowed, and it must be out of driver's reach.**
6. **MSD boxes approved: MSD 6A, MSD 6T, MSD 6AL, MSD ALN, MSD 6TN.**
7. **MSD Connector: The 6 wire harness must be a maximum of 24-inches long, and have a female 6 pin, weather pack connector.**

SIX PIN WIRING DIAGRAM

- a) Ignition Switch 12v (Small red)
- b) Points Pick-up (Small white) brown gm boxes
- c) Coil Negative (Small black)
- d) Coil Positive (Small orange)
- e) Battery Positive (Large red)
- f) Battery Negative (Large black)

TWO PIN OPTION FOR THESE TWO

- Battery Positive (Large red)
Battery Negative (Large black)

8. Onboard electronics such as but not limited to lap timing devices, suspension monitors, computers, torque limiter ignitions, and other electronic devices are not permitted.
9. Battery must be securely fastened with cover and must not be mounted in driver compartment. A marine type battery box, or equivalent, is recommended.

IX. ENGINE COOLING SYSTEM

1. NO ANTI-FREEZE permitted. **WATER ONLY, NO ADDITIVES!! Violators subject to penalties.**
2. Fan shroud must cover a minimum of top 180 degrees of fan. Must extend at least to centerline of fan blades.

X. CLUTCH / FLYWHEEL / BELLHOUSING

1. **No aluminum flywheels or pressure plates allowed.**
2. **Minimum size of 7.25" clutch.**
3. Must have easily accessible 1 ½ inch diameter inspection hole in bellhousing.
4. **Only steel or aftermarket bellhousing allowed.**
5. Must be capable of being put into and taken out of gear with engine running.

XI. TRANSMISSION

1. 3 or 4 speed transmission must be OEM production manufactured that is cataloged through regular dealer channels.
2. Must have **minimum of 2** forward and a reverse gear, all in working order.
3. Bert, Brinn or Falcon type transmission allowed, **but will have a 25 pound weight penalty.**
4. Quick change transmission are not permitted.

XII. DRIVE SHAFT

1. Must be painted white, steel drive shaft.
2. **Must have two (2)** 360 degree drive shaft loop required and **one (1)** must be constructed of at least ¼ inch by 2 inch steel, or 1 inch tubing, mounted six inches back from front U-joint.

XIII. EXHAUST

1. Exhaust must exit behind driver.
2. Noise level is set at a maximum of 100 db measured at 100 feet from car.
3. If muffler is used, muffler choice will be left up to competitor.

XIV. FUEL SYSTEM / FUEL CELL

1. Must meet track specifications.
2. No fuel additives of any type permitted.
3. Fuel cell height is measured from ground to lowest point of bottom of fuel cell. 10 inches is minimum permitted.
4. Fuel cells are **mandatory**. Fuel cells with a bladder highly recommended. And must be encased in an approved metal container of no less than 20 gauge steel or 1/8 inch aluminum. Must have 3, 1/16 inch steel protection plates on rear and both sides of fuel cell that attach to square tubing, straps or frame of car. See diagram # 1.
5. Fuel cells must be mounted between frame rails behind rear axle and using minimum of 2, 2 inch by 1/8-inch metal straps, **attached to square tubing straps or frame**.
6. Fuel cell must not extend below the rear end housing. Must be equipped with a drag loop extending below bottom of the cell.
7. Fuel lines must be armored hose, or installed in metal conduit, or steel fuel lines and must not be routed through driver compartment.
8. Must have check valve on vent tube or cap.

XV. SEAT, SEATBELTS & SAFETY ITEMS

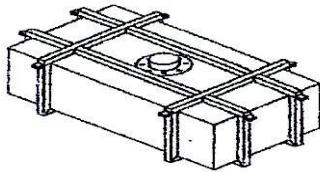
1. Full containment, high backed steel or aluminum racing seat is mandatory.
2. Seats must be attached with a minimum of 6, 5/16 inch or larger bolts (minimum of grade 5) with fender washers; 4 on bottom and 2 in back.
3. All cars must be equipped with an approved quick release type 5 point safety harness, securely fastened to frame and roll cage.
4. Seat belt and shoulder harness material should be at least 3 inches wide and CANNOT be older than 2 years. Minimum requirements consist of lap belt, shoulder harness and crotch strap. And should be routinely checked and maintained through out the season. No sewing or altering allowed on seatbelt material. Seat belts must be attached to main structure with a minimum of 7/16-inch grad 8 bolts with double or self-locking nuts.
5. Seat and steering wheel may be located to suit driver, but must be kept on the left side.
6. No center steer.
7. Drivers are required to wear a helmet (with the latest Snell Foundation label, rated for SA (Special Application) at all times while on the track. See general rules for additional information. Head & neck support/brace devices are highly recommended.
8. Drivers are required to wear fire retardant driving suit and fire resistant gloves at all times on track. Fire resistant socks and shoes are recommended.
9. An approved safety net with quick release is required.
10. Master "ON/OFF" switch on battery cable must be located just inside driver side window, between ledge and roof, just behind driver for easy access. Switch is to be clearly marked.

11. Must be equipped with a fully charged fire extinguisher with working gauge and must be mounted in a quick release holder to be accessible by the driver. Onboard fire-out system is recommended.
12. Radios are allowed.
13. Scanner tuned to track frequency is required. Driver or spotter must be able to monitor track frequency.

XVI. MISCELLANEOUS

1. Carbon fiber clutch or drive shaft, ceramic valves, or other new high technology, high expense items will not be permitted. Ask first, before buying any questionable equipment.
2. Pre-race inspection is mandatory for all cars each night before being permitted on track. Permission to compete does not mean that the car meets and passes all safety and division rules.
3. Post-race inspection is mandatory for any car directed by track officials, or for any car competing with a weight penalty.
4. All cars involved in a major accident must be re-inspected before returning to competition.
5. Equipment or parts failing inspection is subject to confiscation.
6. Any new parts or equipment not specifically covered in these rules must be approved before being used in competition.
7. Mirrors are allowed, but must not extend outside of body.
8. All wiring must be visible for inspection.
9. No electronic traction control allowed.
10. **Anyone under the age of 18 (Driver or crew member) must have a signed and notarized minor's parental waiver / release form(s). Both parents must sign. Questions, please call before showing up at track. Proof of age is required and no one under 10 will be permitted in pits at any time, (special rules and pit areas, apply for 10-13 years old).**
11. **At no time is anyone allowed to ride in or on the car with any part of their body outside the car. This includes in the pit or on the track. Disqualification from event can result.**

DIAGRAM #1



1 INCH STEEL SQUARE TUBING
OR
2 INCH BY 1/8 INCH STEEL STRAP

DIAGRAM #2

TOP VIEW
FRONT

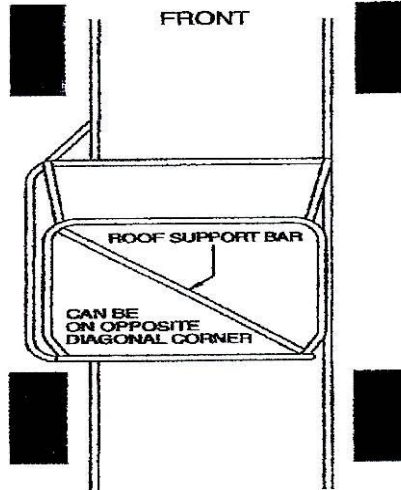
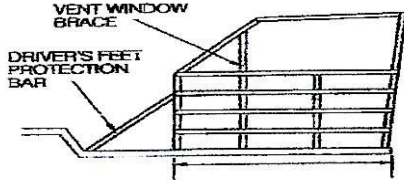
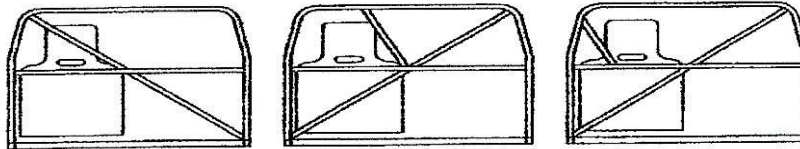


DIAGRAM #3



THIS AREA TO BE .095 INCH WALL THICKNESS BY
1.66 INCH O.D. TUBING MINIMUM.

DIAGRAM #4
BACK VIEW



ADDITIONAL BRACING BEHIND DRIVER'S HEAD IN MAIN HOOP REQUIRED.
THESE DIAGRAMS ARE MEANT TO BE SUGGESTIONS ONLY.

PROPER DRIVER SIDE DOOR PLATE INSTALLATION

Diagram # 5
Preferred Method

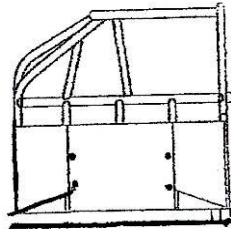
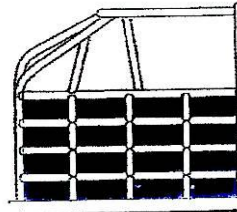


Diagram # 6



SEAT / SAFETY HARNESS

3-bar adjuster should be positioned as close possible to harness bar or snap-on/bolt-on bracket.
This applies to both lap and shoulder belt points. The final wrap as pictured in # 9 is mandatory. At
Least 4-inches of webbing material must extend out from the adjuster after this final wrap is completed.

Diagram # 7
Lap Belt Angle

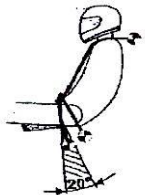


Diagram # 8
Sub Strap Angle

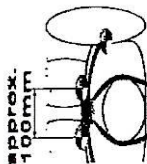


Diagram # 9
Proper Wrapping of
Shoulder Harness Belts

