

Henchercraft CHASSIS



ASSEMBLY MANUAL



FOUR BRANDS, ONE GOAL.

Writing the future with a welding torch. EMI builds chassis and components for four segments of the open wheel industry with four unique brands. Thirty years in the making brought Eagle Motorsports, Schnee Chassis, Stallard Chassis, and Henschcraft Chassis together to collaborate and create the most responsive and safest micro sprints, midgets, lightning sprints, and sprint cars available.



ONE TEAM. ONE COMMITMENT.

Safety and service are our focus. With over 100 years of combined racing and fabrication experience on staff, our team is available for technical assistance in both racing and fabrication arenas. Our technical support combined with our ongoing commitment to safety advancements set us apart. Advanced materials testing and welding processes and procedures position EMI at the forefront of open wheel racing technology.

OUR COMMUNITY.

Dirt track racing is a way of life for our customers and for us. From the hobbyist to the professional, our customers live to race. The competition and comradery draws us together. Our dealer network includes fellow industry professionals specializing in one or more of our brands. Throughout the U.S., Canada, Australia, and New Zealand, they ensure product and support availability at a moment's notice.

OUR PRODUCTS.

A chassis is what we are most known for while the components and custom fabrication complete the package. Specializing in TIG welding and component design EMI offers proprietary welding tools, billet CNC machined race car parts, and custom shapes made from composite materials. Titanium, magnesium, or carbon fiber – we've got you covered.



www.EagleMotorsports.com
855.525.1941

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CHAIN GUARD/FLOOR AND FRONT AIR BOX INSTALLATION:

CHAIN GUARD /FLOOR



AIR SCOOP



PARTS:

1	CHAIN GUARD/FLOOR	976-14006
2	CHAIN GUARD BOLT KIT	970-8326
3	FLOOR PAN BOLT KIT	970-8332
4	SCOOP AIR BOX	976-14008



1



2



3



4

PARTS:

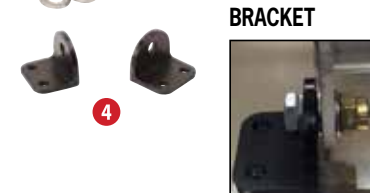
1	BRAKE PEDAL	970-7201
2	BRAKE PEDAL BOLT KIT	970-72011
3	THROTTLE PEDAL	970-7101
4	PEDAL ANGLE BRACKETS	970-7102
5	THROTTLE PEDAL BOLT KIT	970-8333
6	THROTTLE LINKAGE ASSEMBLY	970-7103
7	THROTTLE CABLE	970-7100



BRAKE PEDAL



THROTTLE PEDAL



BRACKET



THROTTLE CABLE



PEDAL INSTALLATION:

- 1) BOLT BRAKE PEDAL TO CHASSIS TABS WITH $\frac{3}{8}$ " SHOULDER BOLT. THE $\frac{3}{8}$ " AN WASHERS GO ON THE OUTSIDE OF EACH TAB. USE STEEL LOCK NUT. DO NOT OVER TIGHTEN AS PEDAL NEEDS TO PIVOT FREELY.
- 2) ASSEMBLE THROTTLE PEDAL AS SHOWN. DO NOT OVER TIGHTEN BRACKETS AS THE PEDAL NEEDS TO PIVOT FREELY ON THE BRACKETS.
- 3) POSITION PEDAL ON FLOOR FOR DRIVER COMFORT.
- 4) DRILL AND BOLT PEDAL TO FLOOR PAN.
- 5) DRILL THROTTLE PEDAL FOR LINKAGE.
- 6) INSTALL THROTTLE CABLE BETWEEN BELL CRANK AND COVER PLATE AS SHOWN. INSTALL ALUMINUM SPACER TO CHASSIS MOUNT BOLT, THEN INSTALL BELL CRANK. INSTALL AN WASHERS THEN LOCK NUT. MAKE SURE THE BELL CRANK PIVOTS FREELY ON MOUNT. INSTALL LINKAGE ROD BETWEEN BELL CRANK AND PEDAL. THE $\frac{5}{8}$ " LONG SPACER GOES ON THE BELL CRANK END OF THE ROD, AND THE $\frac{1}{4}$ " LONG SPACER GOES ON THE PEDAL SIDE.

THROTTLE CABLE





MASTER CYLINDER INSTALLATION

- 1) INSTALL BRAKE RETURN SPRING, RETAINER, AND ROD END AS SHOWN.



- 2) INSTALL BRAKE LINE FITTING.



STRAIGHT



TEE

- 3) BOLT SHIFTER HANDLE BRACKET AND MASTER CYLINDER TO CHASSIS AS SHOWN.
- 4) BOLT BRAKE PEDAL TO MASTER CYLINDER ROD END.



PARTS:

1	MASTER CYLINDER	106-662-0875
2	BRAKE RETURN SPRING	970-7203
3	BRAKE SPRING RETAINER	970-7204
4	5/16" ROD END	117-0720
5	MASTER CYLINDER BOLT KIT	970-8327
6	SHIFTER HANDLE BRACKET	970-7004
BRAKE LINE FITTING:		
7	STRAIGHT (FOR REAR BRAKE ONLY)	106-6680003
8	TEE (FOR FRONT AND REAR BRAKE)	617-61101



PARTS:

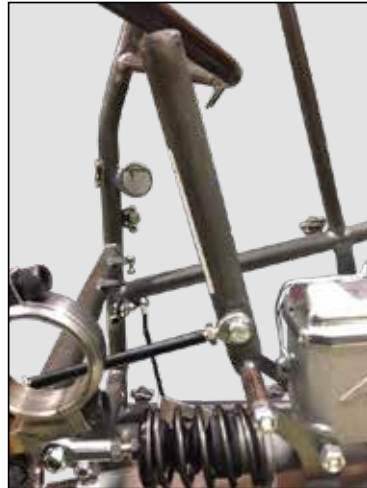
1	SHIFTER ASSEMBLY	970-7000
ENGINE SHIFT ROD:		
R1 2"		
GSXR 09 AND UP 4½"		
GSXR 05 - 08 AND ZX10 9½"		
2	CLUTCH HANDLE	970-7008
3	CLUTCH CABLE (GSXR ONLY)	970-7009

SHIFTER AND CLUTCH HANDLE INSTALLATION

- 1) INSTALL SHIFTER BELL CRANK TO CHASSIS MOUNT BOLT WITH WASHERS ON EACH SIDE OF BELL CRANK. MAKE SURE BELL CRANK PIVOTS FREELY AFTER TIGHTENING.
- 2) INSTALL SHIFTER HANDLE TO BRACKETS AS SHOWN.
- 3) INSTALL LINKAGE ROD TO HANDLE AND BELL CRANK.
- 4) INSTALL CLUTCH HANDLE TO SHIFTER OR STEERING CROSS AS PREFERRED.



HANDLE AND BRACKET



VIEW FROM COCKPIT



VIEW FROM FRONT



VIEW FROM EXTERIOR



09-UP GSXR CASE SAVER

970-10034	2009 - Up GSXR
970-10081	09-Up Case Saver Hardware Kit
970-10078	Case Saver Cable Mount
970-16034	GSXR Engine Bolt Tube
970-16035	GSXR Tube Spacer
970-16037	GSXR Gear Actuator Tube
970-16039	GSXR Activator Tube Spacer
970-7012	GSXR Gear Actuator

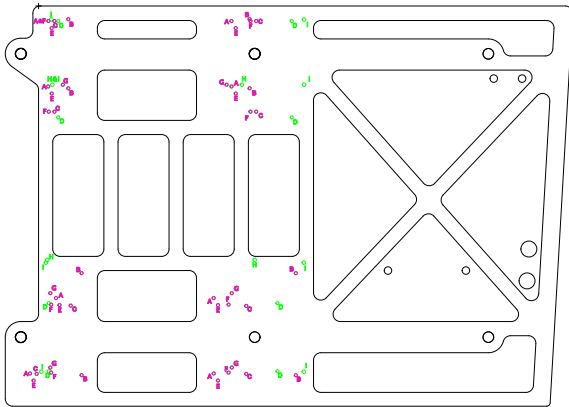
05-08 GSXR CASE SAVER

970-10035	05-08 GSXR
970-10080	05-08 Case Saver Hardware Kit
970-16036	Gear Actuator Mount
970-10078	Case Saver Cable Mount
970-16034	GSXR Engine Bolt Tube
970-16037	GSXR Gear Actuator Tube
970-7012	GSXR Gear Actuator



MOTORPLATE AND MOUNTS

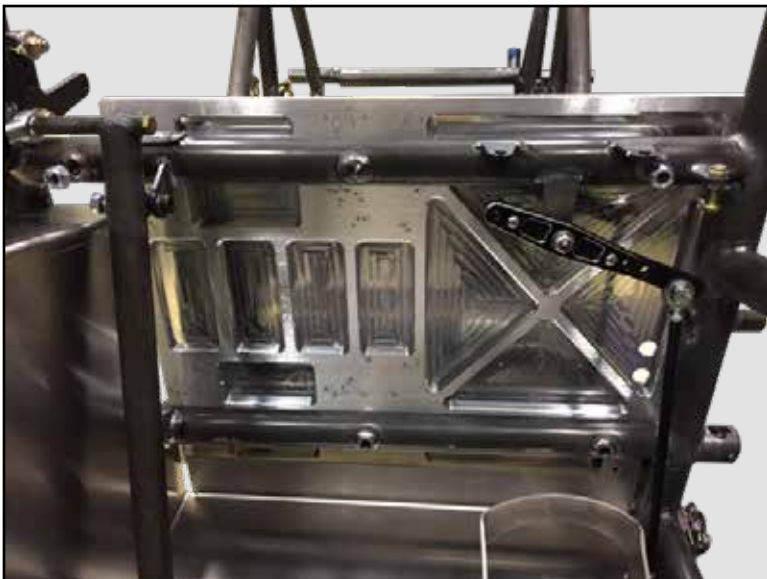
- 1) DRILL MOTORPLATE FOR DESIRED ENGINE MOUNTS. SEE ENGINE DRILL LEGEND.
- 2) BOLT MOTORPLATE TO CHASSIS.



DRILL HOLE LEDGEND:

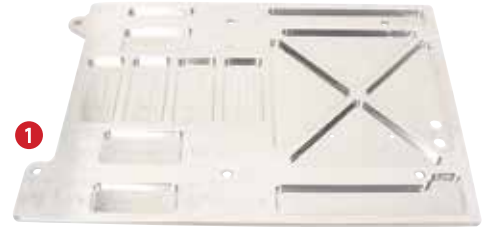
A 05-06 GSXR	D 00-05 ZX12R	G 09 GSXR
B 06-09 ZX10R	E 07-08GSXR	H 08-12 1000RR
C 04-08 R1	F 09-10 R1	I 11-12ZX10R

MOTORPLATE



PARTS:

1	MOTORPLATE	970-10032
2	MOTORPLATE BOLT KIT	970-10033



ENGINE MOUNTS

SUZUKI

970-10093	09-Up GSXR Assembly (Shown)
970-10050	09-Up GSXR (Mounts Only)
970-100500	09-Up GSXR Bolt Kit
970-10089	05-08 GSXR (Mounts Only)

YAMAHA

970-10096	09-Up R1 Assembly
970-10057	09-Up R1 (Mounts Only)
970-10059	R1 Bolt Kit
970-10088	04-08 R1 (Mounts Only)
970-10092	R1 Engine Bolt

KAWASAKI

970-10094	06-10 ZX10 Assembly
970-10056	06-10 ZX10 (Mounts Only)
970-10095	06-10 ZX10 Bolt Kit
970-10058	06-10 ZX10 Bolt
970-10046	ZX10 Motor Bolt Nut
970-10090	11-14 ZX10R (Mounts Only)

HONDA

970-10091	08-12 Honda 1000 (Mounts Only)
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PARTS:

1	SWITCH PANEL	976-14015
2	WING ACTUATOR SWITCH	913-64382
3	TERMINAL BUSS BAR	970-9290
4	WATER TEMP GAUGE	182-4332
5	OIL PRESSURE GAUGE	182-4321
6	OIL PRESSURE TEE FITTING	617-6171
7	OIL PRESSURE LINE FITTING	617-60791
8	OIL PRESSURE LINE	910-31894-3
9	OIL PRESSURE SENDER	106-85281
	GREEN INDICATOR LIGHT	910-5567
	RED INDICATOR LIGHT	910-5564
BATTERY BOX:		
10	YUASA	970-52085
11	ANTIGRAVITY	970-52084
BATTERY:		
12	YUASA	636-581325
13	ANTIGRAVITY	960-1201
14	BATTERY HOLD DOWN	970-52083
	BATTERY TERMINAL HARNESS	976-17813
	SWITCH PANEL HARNESS	976-17810
	WING SWITCH HARNESS	976-17811
	INDICATOR LIGHT HARNESS	976-17812
	FUEL PUMP HARNESS	976-17814
	RADIATOR FAN HARNESS	976-17815
ECU PANEL:		
15	09 - UP GSXR	970-65017
	07 - 08 GSXR	970-65019
	11 - UP R1	970-65018
16	DASH	970-65012

DASH INSTALLATION & ASSEMBLY



DASH



DASH BACKSIDE



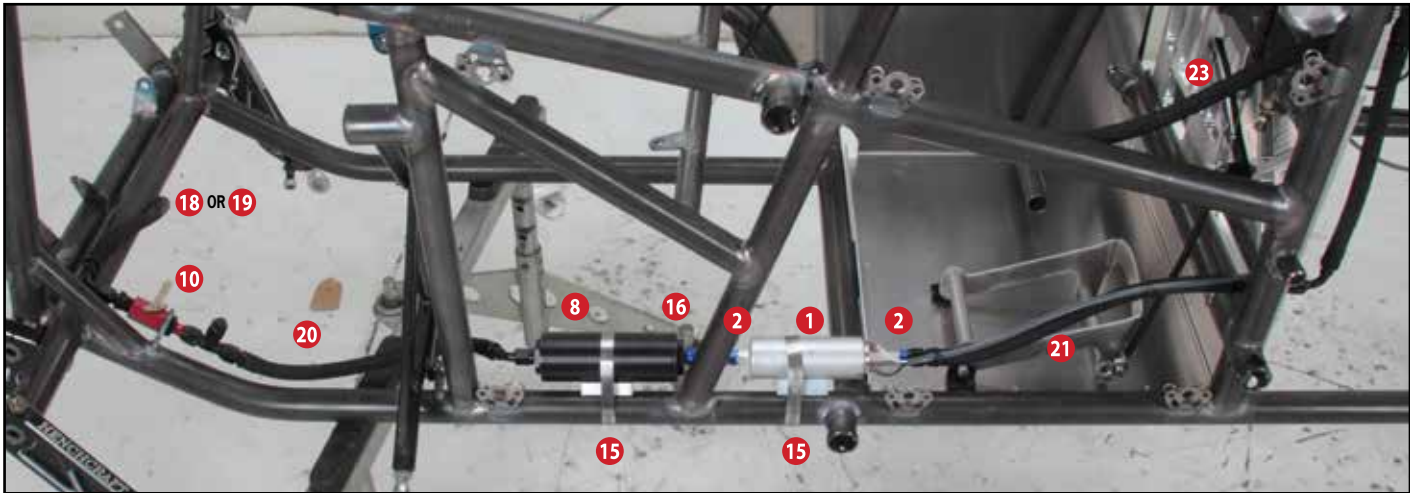


FUEL DELIVERY SYSTEM

PARTS:



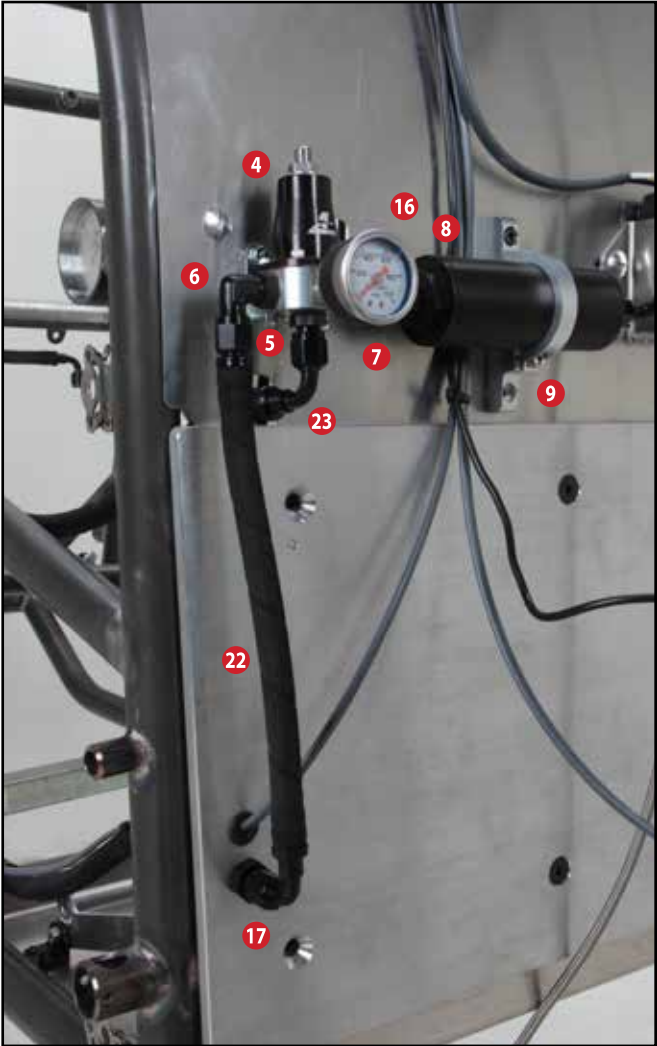
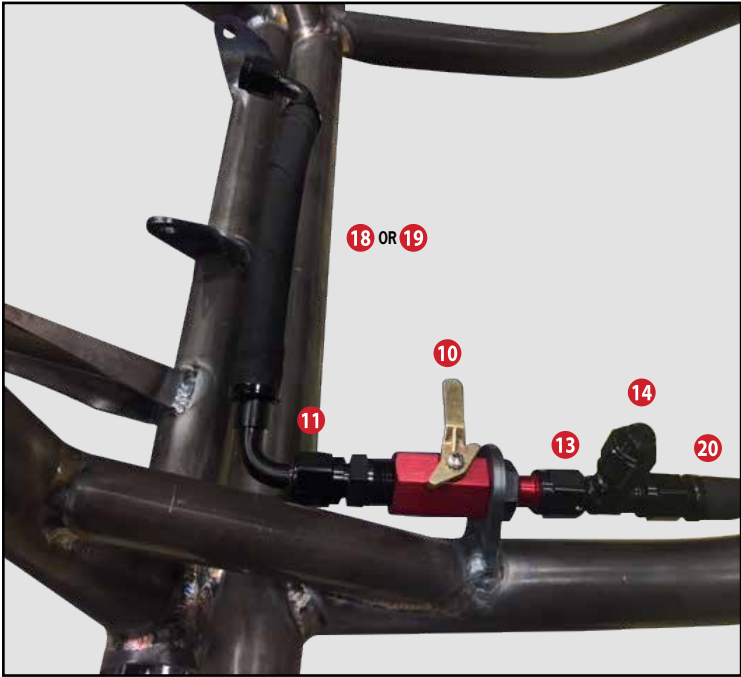
1	WALBRO FUEL PUMP	960-392
2	FUEL PUMP FITTINGS (2)	960-3039
3	WALBRO TERMINAL KIT	960-929
4	FUEL PRESSURE REGULATOR	910-13129
5	REGULATOR FITTINGS (2)	617-70101
6	90° REGULATOR FITTING	617-70241
7	FUEL PRESSURE GAUGE	182-2177
8	FUEL FILTER (2)	910-11733
9	FUEL FILTER DASH MOUNT	425-162573
10	FUEL SHUT OFF VALVE	916-11504
11	SHUT OFF VALVE FITTING	617-60461
12	BULKHEAD NUT	617-61891
13	TEE FITTING	425-AT926106ERL
14	AN6 CAP	617-61961
15	FILTER & PUMP MOUNTING KIT	970-10067
16	SWIVEL UNION (2)	425-AT915106ERL
17	BULKHEAD FITTING	617-61181
TANK OUTLET LINE:		
18	BLADDER TANK	976-17801
19	5 GAL. JAZZ CELL	976-17802
20	PRE FILTER INLET LINE	976-17803
21	FUEL PUMP OUTLET LINE	976-17804
22	REGULATOR INLET LINE	976-17805
23	REGULATOR BYPASS LINE	976-17806
FUEL LINE KIT BLADDER CELL		976-17807
FUEL LINE KIT JAZZ CELL		976-17808



REAR OF CHASSIS

FRONT OF CHASSIS

FRONT OF MOTORPLATE





STEERING INSTALLATION

- 1) CUT STEERING AS SHOWN.
- 2) INSTALL RH END CAP
- 3) INSTALL STEERING INTO CHASSIS LEAVING LEFT SIDE STEERING MOUNT LOOSE.
- 4) INSTALL BOLTS IN COLUMN SHAFT BEARING SUPPORT AND TIGHTEN TO CHASSIS.
- 5) TIGHTEN LEFT SIDE STEERING CLAMP BOLTS.
- 6) MAKE SURE STEERING TURNS FREELY.
- 7) INSTALL QUICK RELEASE HUB TO STEERING WHEEL AND COLUMN SHAFT. DO NOT OVER TIGHTEN NUT ON STEERING COLUMN SHAFT.
- 8) INSTALL PITMAN ARM ON END OF STEERING SHAFT
- 9) BOLT DRAG LINK TO PITMAN ARM.

PARTS:

1	STEERING GEAR	622-2000
2	QUICK RELEASE HUB	622-2560
3	STEERING WHEEL	910-32727
4	PITMAN ARM	970-8025
5	STEERING BOLT KIT	970-8329

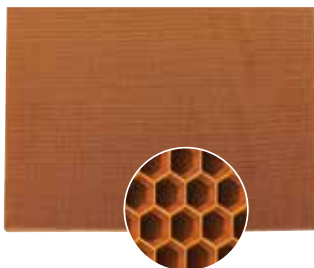


PARTS:

SINGLE ROW SINGLE PASS (METHANOL)	106-10073
DUAL ROW TRIPLE PASS (GAS)	106-20160
HONEYCOMB PROTECTOR (18X22)	917-34214
HONEYCOMB MOUNTING KIT	910-23108

RADIATOR INSTALLATION

- 1) INSTALL RADIATOR AS SHOWN. THE RADIATOR CAP SHOULD BE INLINE WITH THE BOTTOM OF THE TOP FRAME RAIL TO HAVE HOOD CLEARANCE. DRILL RADIATOR FLANGES AND FASTEN WITH 4 DZUS BUTTONS.



CAP INLINE WITH RAIL



ATTACHED WITH DZUS





OIL COOLER OR AIR DEFLECTOR INSTALLATION

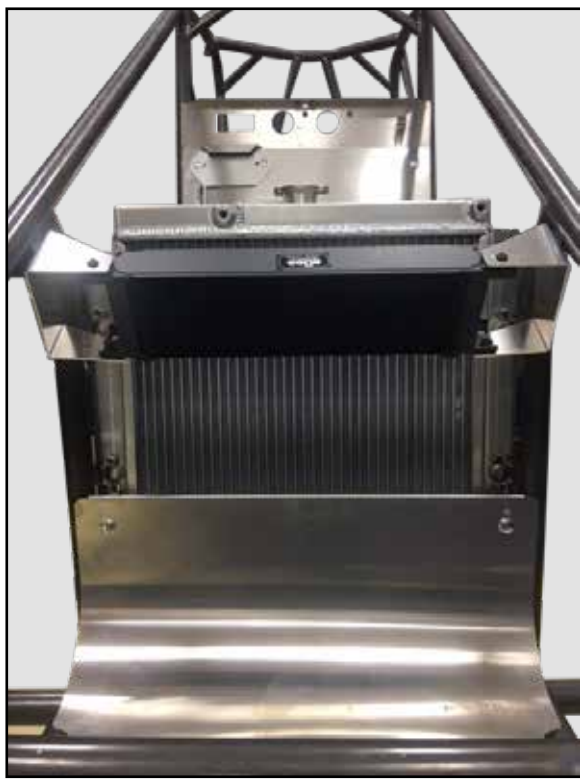
- 1) FOR ENGINES REQUIRING AN OIL COOLER, MOUNT OIL COOLER AS SHOWN.
- 2) FOR ENGINES NOT REQUIRING AN OIL COOLER, MOUNT THE AIR DEFLECTOR AS SHOWN.

PARTS:

1	13 ROW OIL COOLER	970-10000
2	8AN OIL COOLER FITTING (2)	617-464151
3	OIL COOLER MOUNTS	970-10085
	OIL COOLER MOUNT BOLT KIT	970-10086
4	AIR DEFLECTOR	976-14012
5	PREMIUM BLACK SYNETHIC HOSE	620-508-LENGTH
6	STRAIGHT AN8 HOSE END	617-10031
7	45° AN8	617-10101
8	90° AN8	617-10171



OIL COOLER MOUNT



PARTS:

1	LF RADIUS ROD	910-357-14
2	RF RADIUS ROD (2)	910-357-14.5
3	PANHARD ROD	910-357-17
4	7/16" ROD ENDS RH (4)	175-0114
5	7/16" ROD ENDS LH (4)	175-0314
6	7/16" JAM NUTS RH	175-6044-RH
	7/16" JAM NUTS LH	175-6044-LH
7	TIE ROD	910-358-39.5
8	DRAG LINK	910-358-36
9	1/2" X 7/16" ROD ENDS RH (2)	175-0131
10	1/2" X 7/16" ROD ENDS LH (2)	175-0331
11	1/2" JAM NUTS RH	175-6045-RH
	1/2" JAM NUTS LH	175-6045-LH
12	RADIUS ROD BOLT KIT	970-8324

RADIUS ROD AND STEERING ROD ASSEMBLY

- 1) ASSEMBLE ROD ENDS IN RADIUS RODS AND STEERING RODS.
- 2) PRE SET ROD LENGTHS TO:
 PANHARD 19⁵/₈"
 LF 16"
 RF TOP 16⁷/₈"
 RF BOTTOM 17"
- 3) BOLT FRONT RADIUS RODS AND PANHARD TO CHASSIS.



**WIRING HARNESS
MODIFICATION SERVICE**

**SEND YOUR STOCK HARNESS
IN FOR WIRE REDUCTION**



FRONT AXLE ASSEMBLY AND INSTALLATION

- 1) INSTALL FRONT AXLE AS SHOWN. USE 4½" ASSEMBLY BLOCKS BETWEEN AXLE AND BOTTOM FRAME RAIL.
- 2) ADJUST PANHARD ROD LENGTH SO LF BOTTOM SHOCK MOUNT IS 1¾" FROM BOTTOM FRAME RAIL.
- 3) SET FRONT AXLE LEAD. MEASURE FROM FRONT CHASSIS UPRIGHT TO AXLE: LF 5⅝" AND RF 5⅜".
- 4) INSTALL GREASE FITTINGS AND BOTTOM BUSHING RETAINING SCREWS IN SPINDLES.
- 5) INSTALL SPINDLES ON AXLE WITH GREASE FITTINGS TO REAR.
- 6) INSTALL STEERING ARMS AND LF CALIPER MOUNT TO SPINDLES.
- 7) INSTALL TIE ROD.
- 8) SET CASTER IN RF TO 7 DEGREES.
- 9) INSTALL FRONT BRAKE ROTOR TO LF HUB.
- 10) PACK INNER HUB BEARINGS WITH GREASE AND INSTALL IN HUBS.
- 11) INSTALL HUB GREASE SEALS
- 12) PACK OUTER HUB BEARINGS WITH GREASE AND INSTALL IN HUBS.
- 13) INSTALL HUBS TO SPINDLES WITH SLOTTED NUTS. TIGHTEN HUB NUTS UNTIL END PLAY IS REMOVED AND HUB SPINS FREELY. DO NOT OVER TIGHTEN NUTS.
- 14) INSTALL AND SECURE COTTER PINS.
- 15) INSTALL HUB DUST COVERS WITH A RUBBER MALLETT.

PARTS:

1	FRONT AXLE (42" STANDARD)	970-8022
	FRONT AXLE (45" NON WING)	970-8029
2	SPINDLE RH	970-8014-RH
3	SPINDLE LH	970-8014-LH
4	KING PINS (2)	970-8016
STEERING ARMS:		
5	LF (STANDARD)	970-8018
6	RF (STANDARD)	970-8019
	LF (NON WING)	970-8020
	RF (NON WING)	970-8021
7	STEERING ARM BOLT KIT	970-8328
8	FRONT HUB RH	970-8008
9	FRONT HUB LH	970-8007
10	INNER BEARING (2)	970-8010
11	OUTER BEARING (2)	970-8011
12	HUB GREASE SEAL (2)	970-8012
13	FRONT HUB DUST COVER (2)	970-8013
14	TIE ROD BOLT KIT	970-8325
15	DRAG LINK BOLT KIT	970-8334
16	ONE NUT SHOCK MOUNT KIT	970-8338



FRONT AXLE



1 1/4" FROM RAIL



SHOCK MOUNT



LEFT SIDE 5 1/8" FRAME TO AXLE



FRONT AXLE DETAIL FROM LEFT SIDE



RIGHT SIDE 5 5/8" FRAME TO AXLE



LEFT SIDE



RIGHT SIDE



SHOCK INSTALL LEFT FRONT



7° CASTER RIGHT SIDE





FRONT BRAKE INSTALLATION

- 1) INSTALL THE FRONT ROTOR TO THE LF HUB WITH THE ROTOR BOLT KIT AND SPACERS.
- 2) INSTALL THE CALIPER MOUNT KIT TO THE TOP OF THE LF STEERING ARM.
- 3) INSTALL THE 1/8" NPT X -3 STR FITTING IN THE FRONT CALIPER.
- 4) INSTALL THE BRAKE PADS IN THE LF CALIPER.
- 5) INSTALL THE LF CALIPER TO THE CALIPER MOUNT.
- 6) CONNECT THE BRAKE LINE FROM THE MASTER CYLINDER TO THE CALIPER.

PARTS:

1	FRONT CALIPER AFCD	106-6630410
2	CALIPER MOUNT KIT	970-7205
3	BRAKE PAD	835-6823
4	CALIPER FITTING	106-6680003
	BRAKE LINE (-3 X 88")	970-67037
5	FRONT ROTOR	970-7206
	ROTOR BOLT KIT	970-7202



BRAKE DETAIL



PARTS:

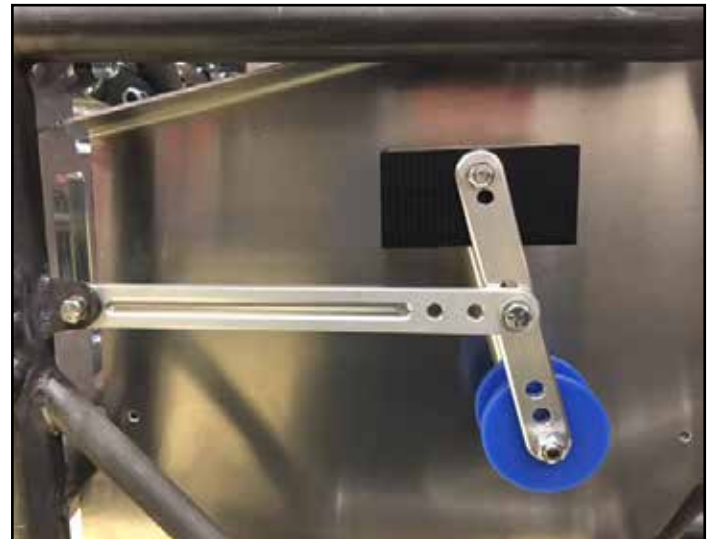
1	CHAIN TENSIONER KIT	970-8316
CHAIN AND LINKS		
2	530 CHAIN - 166 LINKS	960-659
3	530 CHAIN MASTER LINK	960-958
	530 CHAIN RIVET LINK	960-662
530 SPROCKETS		
4	REAR ALUMINUM SPROCKETS	
	5.25" BOLT PATTERN	970-261-TEETH
5	FRONT SPROCKETS	
	SUZUKI GSXR1000	960-777-TEETH
	01-08 KAWASAKI ZX10R	960-777-TEETH
	YAMAHA R1	960-776-TEETH
	SUZUKI 09 AND UP	960-677-TEETH

CHAIN TENSIONER

- 1) ASSEMBLE CHAIN TENSIONER AS SHOWN.
- 2) INSTALL CHAIN TENSIONER ASSEMBLY TO TAB ON CHASSIS AS SHOWN.



CHAIN TENSIONER





WISHBONE ASSEMBLY AND INSTALLATION

- 1) ASSEMBLE WISHBONE ASSEMBLY AS SHOWN.
- 2) INSTALL WISHBONE ASSEMBLY TO CHASSIS WITH BOLT KIT. WISHBONE WITH LONG HEX ADJUSTER IS THE RIGHT SIDE.

PARTS:

1	WISHBONE ASSEMBLY RH	970-8200-RH
2	WISHBONE ASSEMBLY LH	970-8200-LH
3	WISHBONE BOLT KIT	970-8323
4	RH HEX ADJUSTER	970-8204
5	LH HEX ADJUSTER	970-8205
6	1/2" LH ROD END	175-0315
7	7/16" RH ROD END	175-0114
8	3/8" JAM NUT 3/4" HEX	175-6046-RH



BIRDCAGE TIMING



WISHBONE INSTALLATION



PARTS:

1	W-LINK ASSEMBLY	970-8317
2	W-LINK PIN KIT	970-8321

W-LINK ASSEMBLY AND INSTALLATION

- 1) ASSEMBLE W-LINK AS SHOWN
- 2) INSTALL W-LINK TO CHASSIS WITH PIN KIT.



W-LINK INSTALLATION



W-LINK END VIEW



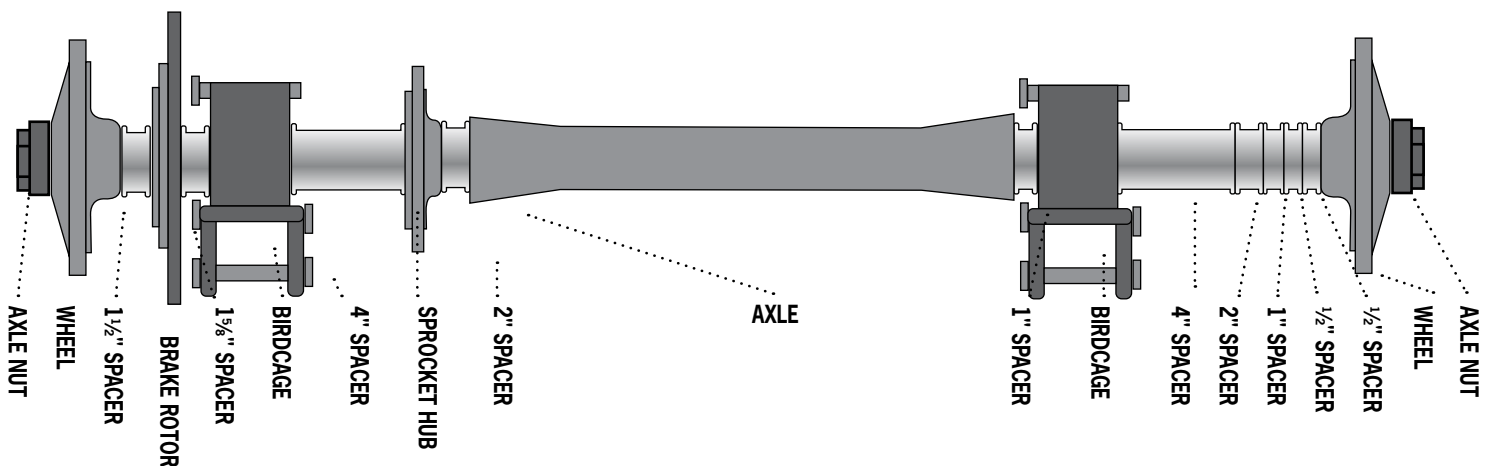


REAR AXLE ASSEMBLY AND INSTALLATION

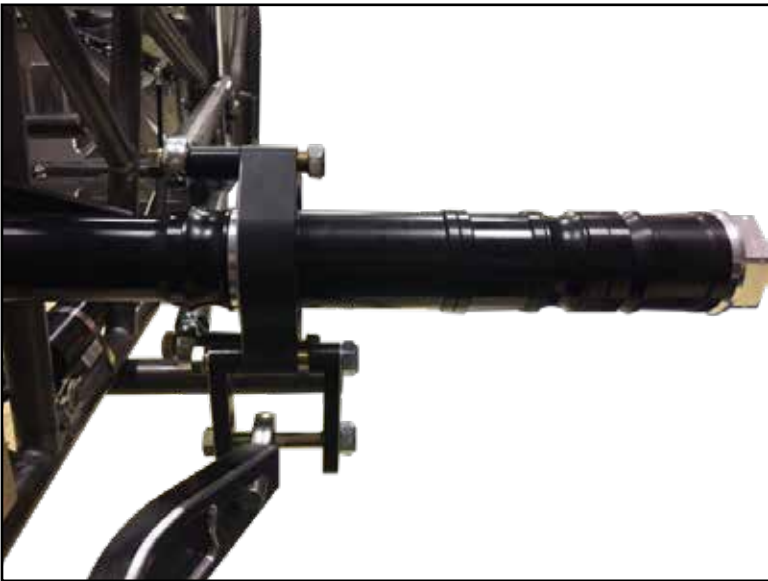
- 1) ASSEMBLE BIRDCAGES AS SHOWN. NOTE THAT THE SHOULDER ON THE SPLINED BEARING SLEEVE IS INSTALLED TO THE INSIDE OF THE BIRDCAGE.
- 2) ASSEMBLE THE REAR AXLE AS SHOWN.
- 3) ORDER OF ASSEMBLY:
- 4) RR / 1" SPACER / BIRDCAGE / 4" SPACER / 2" SPACER / 1" SPACER / 1/2" SPACER / 1/2" SPACER / WHEEL / AXLE NUT
- 5) LR / 2" SPACER / SPROCKET HUB / 4" SPACER / BIRDCAGE / 1 5/8" SPACER / BRAKE ROTOR HUB / 1 1/2" SPACER / WHEEL / AXLE NUT
- 6) INSTALL REAR AXLE USING 6" ASSEMBLY BLOCKS UNDER AXLE.
- 7) BOLT WISHBONES TO BIRDCAGES.
- 8) USE A SQUARE OR A LEVEL TO SET BIRDCAGE TIMING AS SHOWN.
- 9) ADJUST AXLE L TO R FOR SPROCKET ALIGNMENT AND CONNECT W-LINK TO BIRDCAGE.
- 10) SQUARE REAR AXLE TO REAR TORSION TUBES USING REAR AXLE SQUARING TOOL.

PARTS:

1	REAR AXLE ASSEMBLY	976-27302
2	REAR AXLE SQUARING TOOL	976-17400



REAR AXLE BIRDCAGE



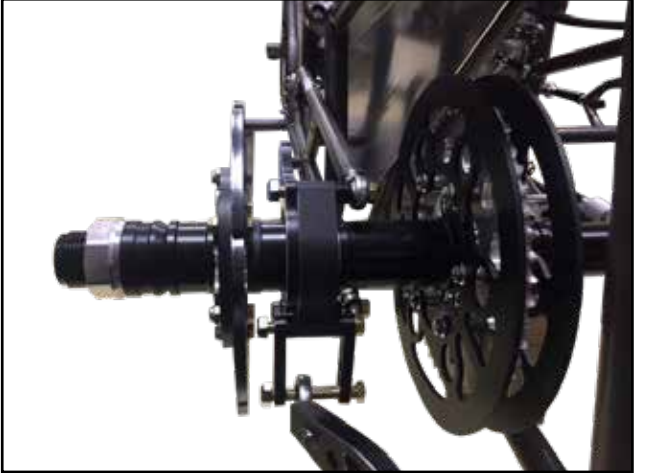
SPROCKET HUB



BRAKE ROTOR HUB



BIRDCAGE TO WISHBONE



SQUARE AND LEVEL



SQUARING TOOL



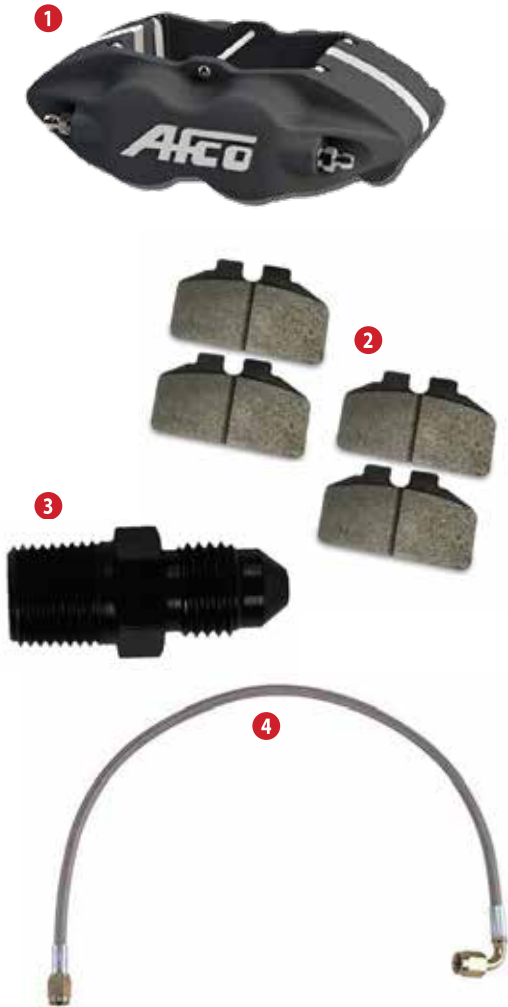


PARTS:

1	REAR CALIPER	106-6630100
2	REAR PADS	106-6655011
3	BRAKE CALIPER FITTING	106-6680003
4	BRAKE LINE	910-31891

REAR BRAKE INSTALLATION

- 1) INSTALL FITTING INTO BRAKE CALIPER
- 2) INSTALL BRAKE PADS INTO BRAKE CALIPER
- 3) INSTALL BRAKE CALIPER TO BRAKE PLATE ON BIRDCAGE
- 4) CONNECT BRAKE LINE TO BRAKE CALIPER AND MASTER CYLINDER.

**INSTALLED REAR BRAKE**



SUSPENSION INSTALLATION

- 1) INSTALL THE TORSION BUSHINGS IN THE CHASSIS.
- 2) MAKE SURE TORSION BARS TURN FREELY IN THE BUSHINGS. IF NOT, REAMING THE BUSHINGS WILL BE REQUIRED.
- 3) INSTALL THE DESIRED TORSION BARS INTO THE BUSHINGS.
- 4) SET REAR TORSION ARM LENGTHS CENTER OF SPLINE TO CENTER OF ROD END. RR 10½" AND LR 12¼"
- 5) INSTALL ALL TORSION ARMS TO TORSION BARS.
- 6) BOLT REAR TORSION ARMS TO BIRDCAGE HANGERS. LR MIDDLE OR BOTTOM HOLE AND RR TOP OR MIDDLE HOLE TO START.
- 7) INSTALL SHOCK BOLT STUDS TO REAR TORSION ARMS AND FRONT AXLE.
- 8) INSTALL SHOCKS TO CHASSIS WITH ½" CAP SCREWS FROM SHOCK BOLT KIT.
- 9) PUT SETUP BLOCKS UNDER AXLES TO INSTALL TORSION STOPS. 3½" FRONT AND 4" REAR.
- 10) TIGHTEN TORSION STOP PINCH BOLTS THEN TURN ADJUSTER BOLTS BY HAND UNTIL BOLT TOUCHES STOP PAD ON CHASSIS.

PARTS:

1	TORSION BAR BUSHINGS (8)	970-6420
2	TORSION BARS (4)	950-15326-SIZE
3	RF TORSION ARM	970-6404
4	LF TORSION ARM	970-6405
5	RR TORSION ARM	970-6408
6	LR TORSION ARM	970-6407
7	CHROMOLY RH ROD ENDS (2)	910-02176
8	JAM NUTS (2)	175-6045-RH
9	TORSION STOPS (4)	970-6409
10	AFCO SHOCKS:	
	LF	970-16061
	RF	970-16721
	LR	970-16073
	RR	970-16741
11	SHOCK BOLT KIT	970-8336



STAY AT PEAK PERFORMANCE!
LET OUR TECHS KEEP YOUR SHOCKS PERFORMING WITH SERVICE & DYNO TESTING

SPEEDWAY MOTORS
SHOCK TECHNOLOGIES

CALL ONE OF OUR EXPERIENCED TECHS FOR DETAILS

PARTS:

1 JAZ FUEL CELL ASSEMBLY 458-50000



FUEL CELL ASSEMBLY AND INSTALLATION

- 1) POSITION FUEL CELL ON CHASSIS AND MEASURE TO MAKE SURE CELL IS CENTERED.
- 2) MARK THE 4 MOUNTING HOLE LOCATIONS ON THE CELL WITH A SCRIBE.
- 3) DRILL $\frac{5}{16}$ " MOUNTING HOLES IN THE CELL.
- 4) MARK THE TOP OF THE TANK FOR THE FILL NECK HOLES.
- 5) DRILL $\frac{1}{4}$ " HOLES FOR THE FILL NECK.
- 6) MEASURE TO FIND THE CENTER OF THE FILL NECK BOLT HOLES AND DRILL A $3\frac{1}{2}$ " HOLE.
- 7) DRILL THE BOTTOM RIGHT REAR DIMPLE IN CELL FOR A -6 BULKHEAD FITTING.
- 8) DRILL THE TOP FRONT DIMPLES IN THE CELL FOR A VENT AND -6 BULKHEAD FITTING.
- 9) CLEAN TANK THOROUGHLY BEFORE MOUNTING.
- 10) INSTALL BULKHEAD FITTINGS AND VENT IN CELL AND SECURELY TIGHTEN.
- 11) INSTALL CELL ON CHASSIS WITH THE MOUNTING BOLTS SUPPLIED.
- 12) INSTALL THE TOP FILL NECK

MOUNTING HOLES



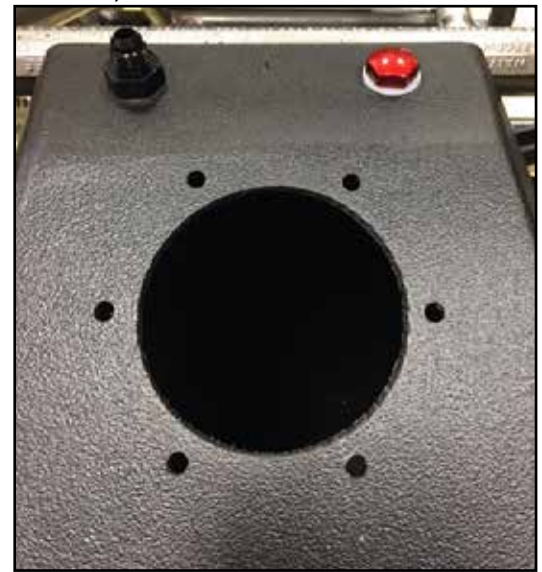
FILL NECK HOLE SCRIBE AND DRILL



BOTTOM REAR DIMPLE



BULKHEAD / VENT



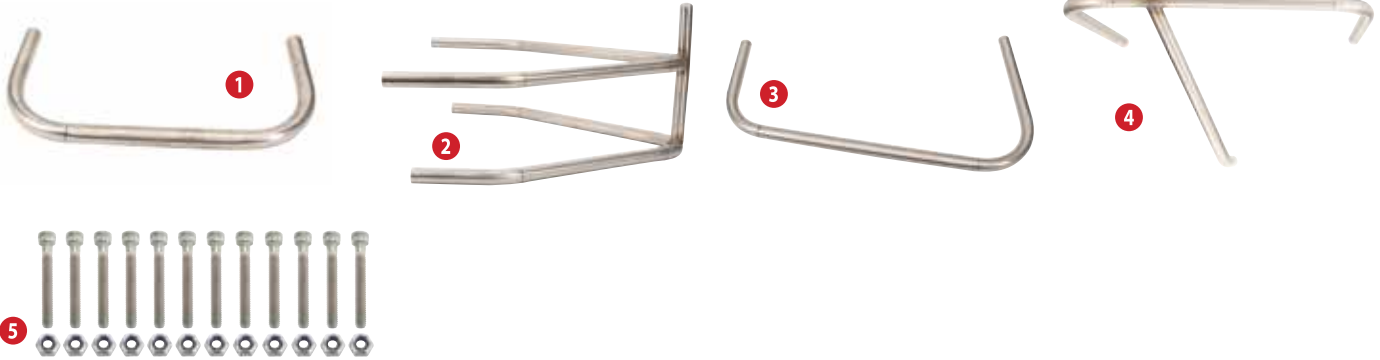


BUMPERS AND NERF BAR INSTALLATION

1) INSTALL PRE DRILLED BUMPERS AND NERFS TO CHASSIS WITH BOLT KIT

PARTS:

1	FRONT BUMPER	970-6400
2	REAR BUMPER	970-6401
3	LEFT NERF	970-6402
4	RIGHT NERF	970-6403
5	BUMPER/NERF BOLT KIT	940-73080



PARTS:

1	WING TREE ASSEMBLY	970-8111
2	TOP WING BOLT KIT	970-8330
3	WING ACTUATOR	910-64290-6
	TOP WING POSTS	970-8000

TOP WING MOUNT ASSEMBLY AND INSTALLATION

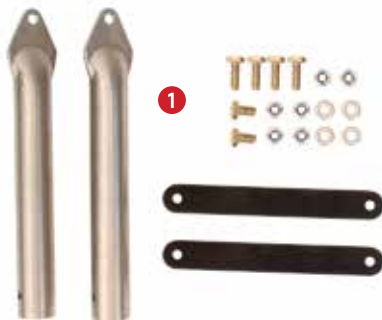


- 1) INSTALL FRONT POSTS IN CHASSIS AND DRILL FOR PINCH BOLTS. THE POST WITH THE TAB GOES ON THE LEFT SIDE.
- 2) SECURE TOP POSTS WITH PINCH BOLTS.
- 3) INSTALL ADJUSTER LEGS IN REAR TREE AND SECURE WITH QUICK PINS.
- 4) BOLT REAR TREE BOTTOM LEGS TO CHASSIS WITH $\frac{3}{8}$ " CAP SCREWS SUPPLIED. DO NOT OVER TIGHTEN AS WING TREE MUST PIVOT ON CHASSIS TABS.
- 5) INSTALL ELECTRIC WING ACTUATOR.
- 6) CONNECT WING ACTUATOR WIRE TO WING SWITCH.

PARTS:

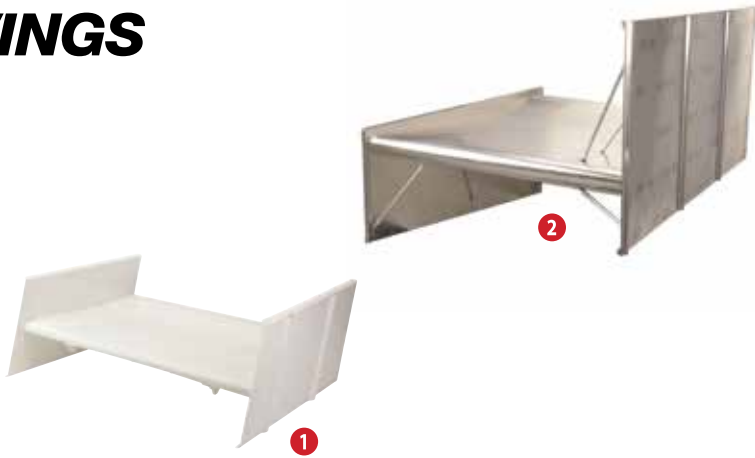
1	NOSE WING MOUNT ASSEMBLY	970-8003
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NOSE WING MOUNT ASSEMBLY





WINGS



PARTS:

1	NOSE WING	970-64029
2	TOP WING	970-64030

BODY INSTALLATION

1) RE INSTALL ALL PRE DRILLED BODY PANELS AS SHOWN.

PARTS:

1	SCOOP HOOD	970-65001-COLOR
2	NOSE	976-14004-COLOR
3	VISOR	970-65005-COLOR
4	RH ARMGUARD	970-65004-COLOR
5	LR SAFETY PANEL	970-65007
6	LH CAGE PANEL	976-14010
7	RH COCKPIT PANEL	970-65011
8	LS RADIATOR SIDE PANEL	970-65008
9	RS RADIATOR SIDE PANEL	970-65014
10	RH ENGINE PANEL	970-52097

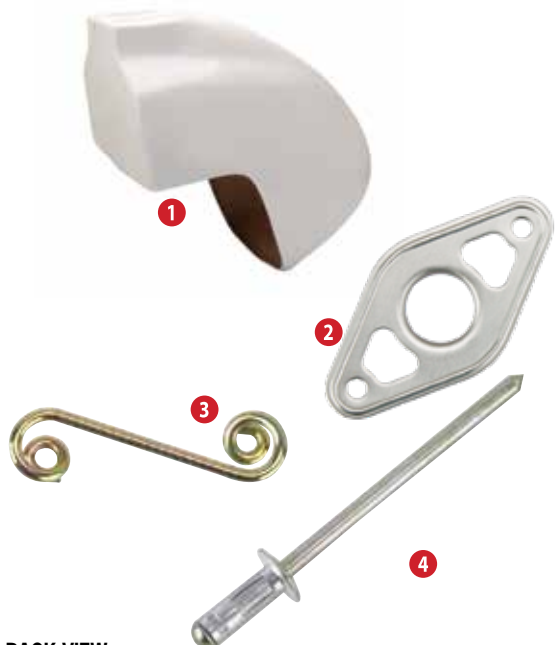


PARTS:

1	TANK COVER	970-52094-COLOR
2	BODY SAVER	910-07106
3	DZUS SPRINGS	910-07102
4	1/8" RIVETS	910-04016

FIBERGLASS TANK COVER

TOP VIEW



BACK VIEW





TOOLS



WHEEL LUGNUT WRENCH
950-82314



STAGGER TAPE
910-82015



**CHAIN
BREAK TOOL**
910-82314



VALVE CORE TOOL
910-82335



**TIRE PRESSURE
GAUGE**
300-3658



SETUP BLOCKS
940-82752 (1.75"-4")
940-82754 (3"-6")



**ANGLE
FINDER**
910-89409



FUEL LEVEL STICK
910-11782

RECOMMENDED CHASSIS ADJUSTMENTS

LOOSE (for tight condition use opposite adjustments)

- Move wing back
- Increase wing angle 28 deg. Max.
- Decrease stagger
- Add weight to LF
- Raise front of car
- Lower air PSI in rear tires
- Decrease LF Shock rebound
- Move RR wheel in

TIGHT ON CORNER ENTRY

- Move RR wheel out
- Increase air PSI to RR
- Move wing front and Decrease angle
- Lower front of chassis
- Decrease weight on LF
- Increase stagger
- Increase LF Shock rebound (tie down)
- Increase LR Shock rebound (tie down)
- Stiffer RR shock
- Stiffer RF Torsion bar
- Softer LF Torsion bar

LOOSE ON CORNER EXIT

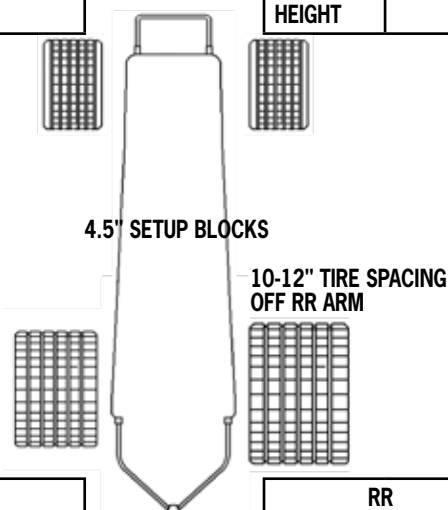
- Move wing back
- Increase wing angle 28 deg. Max.
- Decrease stagger
- Raise front of car
- Lower air PSI in rear tires
- Decrease LF Shock rebound
- Add weight to RF
- Add weight to LR
- Stiffer LR Torsion bar
- Softer RR Torsion bar

SLICK TRACK

3" SETUP BLOCKS

LF	
BAR	800
URNS	ADD 1-3
SHOCK	2C 2R
TIRE	
AIR PRES.	8
WEIGHT	
HEIGHT	

RF	
BAR	825
URNS	0
SHOCK	4C 1R
TIRE	
AIR PRES.	10
WEIGHT	
HEIGHT	



LR	
BAR	875/900
URNS	0
SHOCK	3C 7R
TIRE	
AIR PRES.	5
WEIGHT	
HEIGHT	

RR	
BAR	800
URNS	0
SHOCK	4C 6R
TIRE	
AIR PRES.	6
WEIGHT	
HEIGHT	

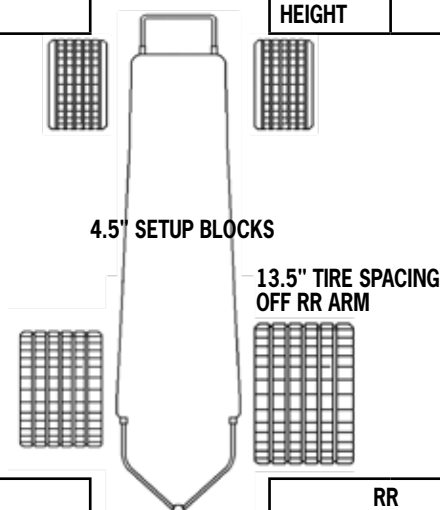
SPROCKETS	
TIRE STAGGER	6" - 7"
WING LOCATION	28 DEG MIDBACK

HEAVY TRACK

3.75" SETUP BLOCKS

LF	
BAR	750
URNS	2 OFF
SHOCK	2C 5R
TIRE	
AIR PRES.	10
WEIGHT	
HEIGHT	

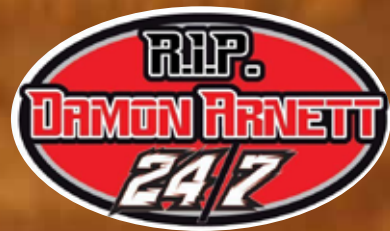
RF	
BAR	825
URNS	0
SHOCK	5C 3R
TIRE	
AIR PRES.	12
WEIGHT	
HEIGHT	



LR	
BAR	875
URNS	0
SHOCK	3C 10R
TIRE	
AIR PRES.	7
WEIGHT	
HEIGHT	

RR	
BAR	800
URNS	0
SHOCK	5
TIRE	
AIR PRES.	12
WEIGHT	
HEIGHT	

SPROCKETS	
TIRE STAGGER	8" - 9.5
WING LOCATION	20 DEG FRONT



PAYING TRIBUTE TO OUR PAST FRIEND AND CUSTOMER WHO TRAGICALLY LOST HIS LIFE IN A WORK ACCIDENT.

DAMON ARNETT

7/11/59 - 11/10/15

GOD SPEED OUR FRIEND!



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LOOSE (for tight condition use opposite adjustments)

- Move wing back
- Increase wing angle 28 deg. Max.
- Decrease stagger
- Add weight to LF
- Raise front of car
- Lower air PSI in rear tires
- Decrease LF Shock rebound

TIGHT ON CORNER ENTRY

- Move RR wheel out
- Increase air PSI to RR
- Move wing front and Decrease angle
- Lower front of chassis
- Decrease weight on LF
- Increase stagger
- Increase LF Shock rebound (tie down)
- Increase LR Shock rebound (tie down)
- Stiffer RR shock
- Stiffer RF Torsion bar
- Softer LF Torsion bar

LOOSE ON CORNER EXIT

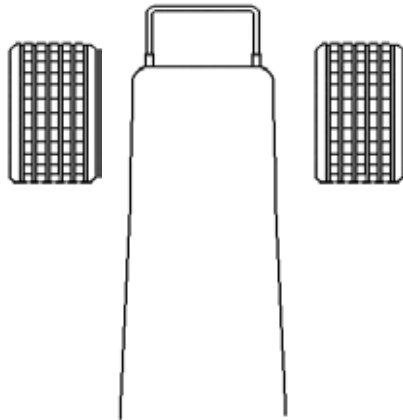
- Move wing back
- Increase wing angle 28 deg. Max.
- Decrease stagger
- Raise front of car
- Lower air PSI in rear tires
- Decrease LF Shock rebound
- Add weight to RF
- Add weight to LR
- Stiffer LR Torsion bar
- Softer RR Torsion bar

DATE _____ EVENT _____

TRACK **SLICK TRACK** START POS. _____ FINISH POS. _____

3" SET-UP BLOCKS

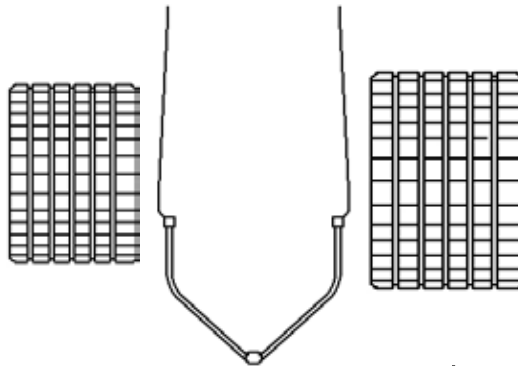
L.F.	
BAR	800
TURNS	Add 1-3
SHOCK	3C 2R
TIRE	
AIR PSI.	8
WEIGHT	
HEIGHT	



R.F.	
BAR	825
TURNS	0
SHOCK	4C 1R
TIRE	
AIR PSI.	10
WEIGHT	
HEIGHT	

4.5" SET-UP BLOCKS

L.R.	
BAR	875/900
TURNS	0
SHOCK	3C 7R
TIRE	
AIR PSI.	5
WEIGHT	
HEIGHT	



R.R.	
BAR	800
TURNS	0
SHOCK	4C 6R
TIRE	
AIR PSI.	6
WEIGHT	
HEIGHT	

SPROCKETS _____

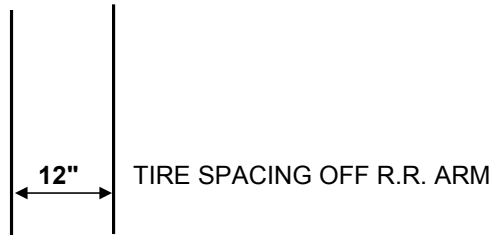
TIRE STAGGER **6" TO 7"** _____

WING ANGLE **28 DEG.** _____

WING LOCATION **MID BACK - BACK** _____

TRACK CONDITION _____

COMMENTS / CHANGES _____

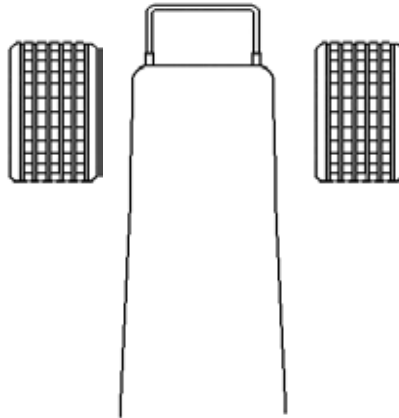


DATE _____ EVENT _____

TRACK HEAVY TRACK START POS. _____ FINISH POS. _____

3-3/4" SET-UP BLOCKS

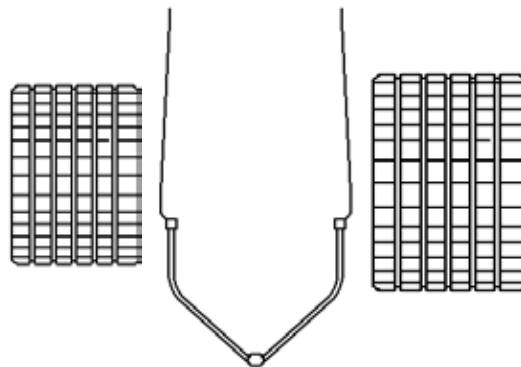
L.F.	
BAR	750
TURNS	2 OFF
SHOCK	3C 5R
TIRE	
AIR PSI.	10
WEIGHT	
HEIGHT	



R.F.	
BAR	825
TURNS	0
SHOCK	5C 3R
TIRE	
AIR PSI.	12
WEIGHT	
HEIGHT	

4.5" SET-UP BLOCKS

L.R.	
BAR	875
TURNS	0
SHOCK	3C 10R
TIRE	
AIR PSI.	7
WEIGHT	
HEIGHT	



R.R.	
BAR	800
TURNS	0
SHOCK	5
TIRE	
AIR PSI.	12
WEIGHT	
HEIGHT	

SPROCKETS _____

TIRE STAGGER **8" TO 9-1/2"** _____

WING ANGLE **20 DEG.** _____

WING LOCATION **FRONT** _____

TRACK CONDITION _____

COMMENTS / CHANGES _____

