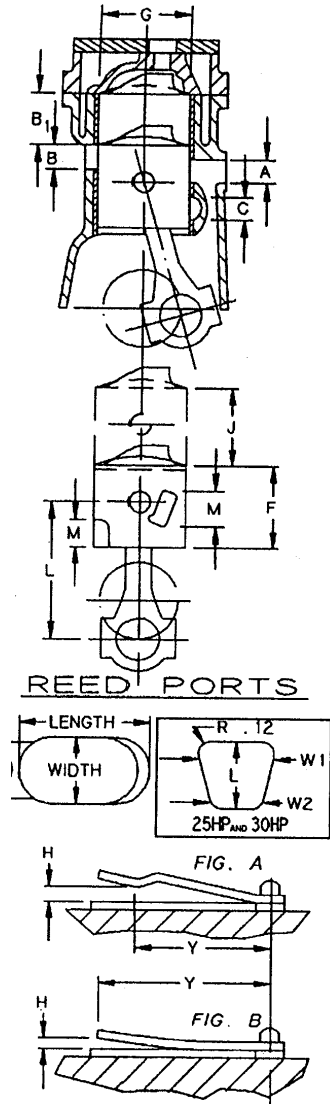


Date: 2-25-2015

Model Year:

### RACE CLASS: SPORT-C Tohatsu / Nissan



MANUFACTURER				NISSAN / TOHATSU				
ADVERTISED SALES NAME				NS40C				
DISPLACEMENT MAX			in <sup>3</sup>	30.1				
NUMBER OF CYLINDERS				2				
MIN. VOLUME OF COMBUSTION CHAMBER INC'L SPARK PLUG HOLE)			cm <sup>3</sup>	26.5				
CARBURETOR	VENTURI	±.015	in	1.259				
	BORE	±.015	in	1.574				
	QUANTITY PER ENGINE			1				
POWERHEAD SPECIFICATIONS	G	CYLINDER BORE	±.003	in	2.755			
	J	PISTON STROKE	±.011	in	2.519			
	L	ROD LENGTH	±.006	in	4.566			
	K	DECK HEIGHT	±.012	in	7.12			
	F	PISTON LENGTH	±.030	in	2.637			
	M	PORT HEIGHT	±.030	in	--			
	NUMBER OF PORTS PER CYLINDER	A	TRANSFER		3			
		B	EXHAUST		1			
		C	PISTON		2			
	PORT HEIGHT	A	TRANSFER	±.035	in	0.531		
		B	EXHAUST	±.035	in	1.062		
		B <sub>1</sub>	EXHAUST	±.035	in	1.456		
		C	PISTON	±.035	in	--		
	PORT TIMING	A	TRANSFER	±2°	ATC	120°		
B		EXHAUST	±2°	ATC	93°			
C		PISTON	±2°	ATC	--			
REED BLOCK (ONE CYLINDER)	# OF PORTS				6/CYLINDER			
	LENGTH x WIDTH SIZE OF PORTS		MAX	in	3 @ 1.000, 3 @ .890x0.640			
	REED MAT'L				Any Material			
	REED THICKNESS		±.001	in	X			
	H	REED STOP HGT.	MAX	in	.250			
Y	CHECKING DIS.	±.030	in	1.098				
WEIGHT (ONE SET)	FLYWHEEL		MIN	lbs	7.5			
	PISTONS, RINGS, ROD, WRIST PIN, SPACERS, BEARINGS		MIN	lbs	14.0			

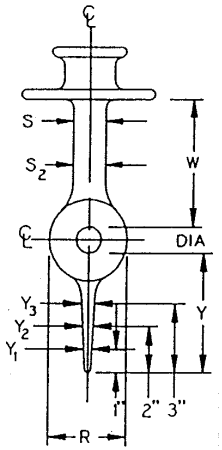
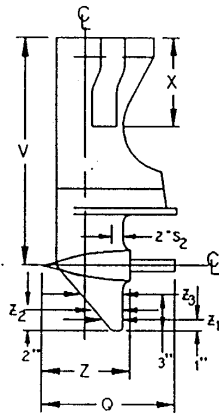
Flat Plate Volume- Cylinder head removed from block, sparkplug hole volume included.  
 Clearance Volume- Cylinder head on motor piston @ TDC, sparkplug hole volume included

WARNING! FOR INSPECTION ONLY! These specifications are not intended as a guide for modification or "blueprinting" and are subject to change as needed.

Date: 2-25-2015

Model Year:

### RACE CLASS: SPORT-C



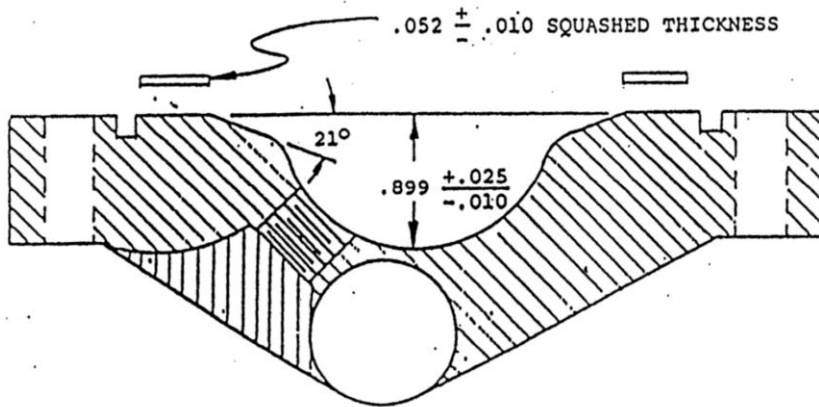
MANUFACTURER				Nissan/Tohatsu					
GEARCASE MODEL IDENTIFICATION				NS40C					
ADVERTISED SALES NAME				NS40C					
GEARCASE SPECIFICATIONS	GEAR RATIO			13:25					
	X	EXHAUST TUBE LENGTH- POWERHEAD BASE TO PRIMARY TUBE END	±.25	in	S=12.10 L=14.10				
	Q	TORPEDO LENGTH (W/ PROPSHAFT)	MAX	in	14.370				
	R	TORPEDO WIDTH	MIN	in	3.425				
	S	STRUT WIDTH	MIN	in	1.496				
	S <sub>2</sub>	STRUT WIDTH (2" FORWARD OF TRAILING EDGE)	MIN	in	--				
	W	DIS. FROM PROPSHAFT TO CAVITATION PLATE	±.2	in	5.944				
	Y	LENGTH OF SKEG FROM PROPSHAFT	±.2	in	5.875				
	Z	TORPEDO LENGTH	±.2	in	8.74				
	V	PROPSHAFT CENTERLINE TO POWERHEAD BASE	LONG SHAFT	±.2	in	29.467			
			SHORT SHAFT	±.2	in	24.467			
	Y <sub>1</sub>	SKEG THICKNESS	MIN	in	.25				
	Y <sub>2</sub>	SKEG THICKNESS	MIN	in	--				
	Y <sub>3</sub>	SKEG THICKNESS	MIN	in	.49				
	Z <sub>1</sub>	SKEG CORD LENGTH	±.2	in	3.25				
Z <sub>2</sub>	SKEG CORD LENGTH	±.2	in	--					
Z <sub>3</sub>	SKEG CORD LENGTH	±.2	in	6.0					
DIA	PROPSHAFT DIA	±.1	in	.748					

WARNING! FOR INSPECTION ONLY! These specifications are not intended as a guide for modification or "blueprinting" and are subject to change as needed.

Date: 2-25-2015

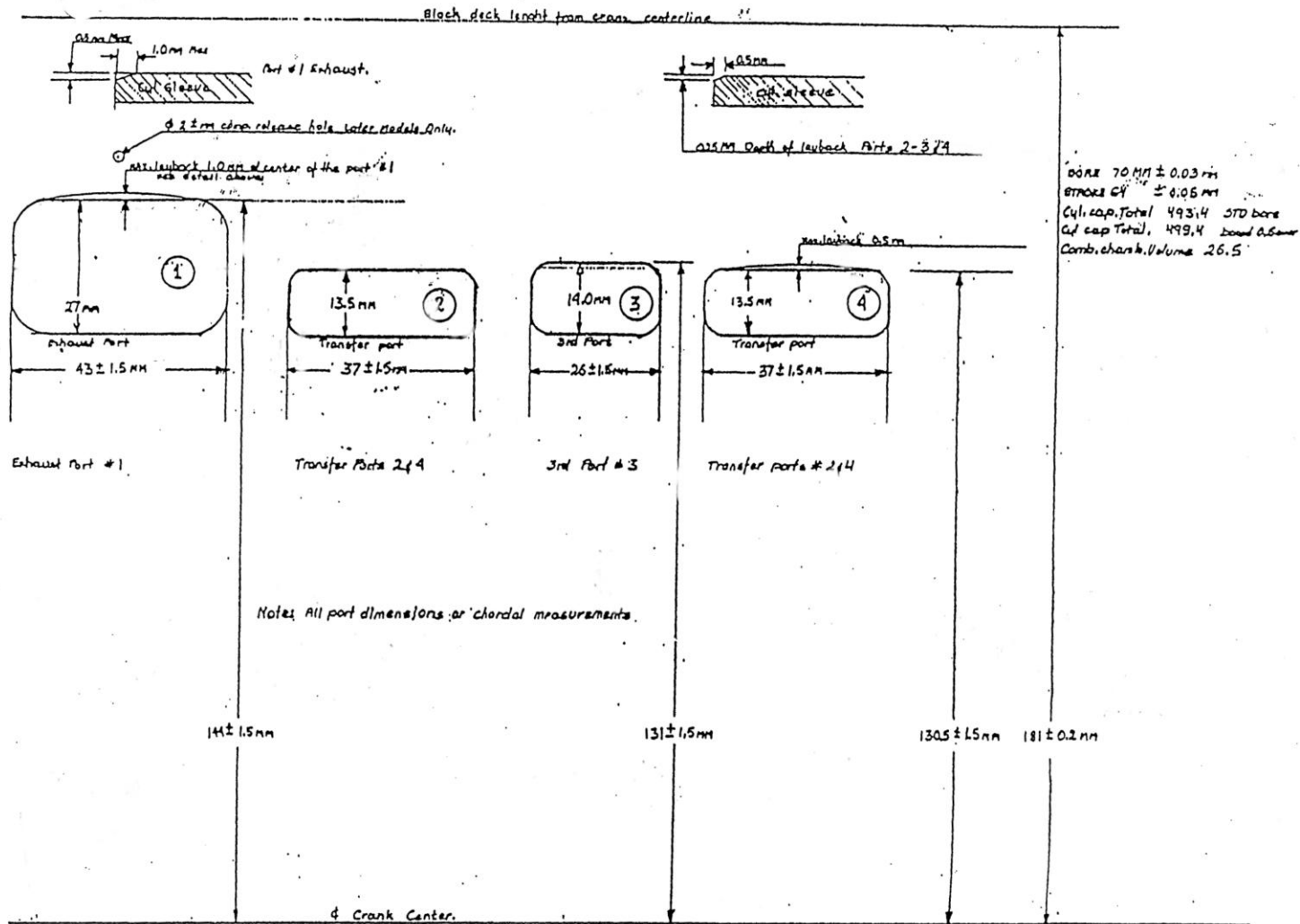
Model Year:

## SPORT-C NOTES: NISSAN/TOHATSU



1. Dimension for exhaust pipe and adapter measured in place on the motor are as follows: 12.5 in. for short and 14.5 in for long.
2. Timing stop boss may not be altered or removed.
3. OEM carburetor airbox and front plug may not be altered or removed.
4. Grinding will be permitted to match to block casting to the ports/liner. No grinding is permitted beyond 5/8 inch past the liner into the casting of the block.
5. The Only Approved Aftermarket ignition parts are CDI Electronics (RaPair) CD Box # R346-06260-2
6. It is permissible to add additional support to the electric starter.
7. **When measuring cylinder block deck height use the "K" dimension from the Engine Specification Sheet.**
8. **Tohatsu has superseded the flywheel, CDI and coil assemblies used on the Sport C engine, the old parts are no longer available. The new style flywheels (P/N 361-060910M) have "FP5506" stamped into the top of them. The newer style flywheel has been shown to work with the older style ignition system. Flywheels marked "FP5506" with a minimum weight of 7 lb. 3oz. are legal; all others must weight 7 lb. 8 oz. as currently listed on the Engine Inspection Sheet. The newer CDI and coil assemblies can be used on any motor with either flywheel,**

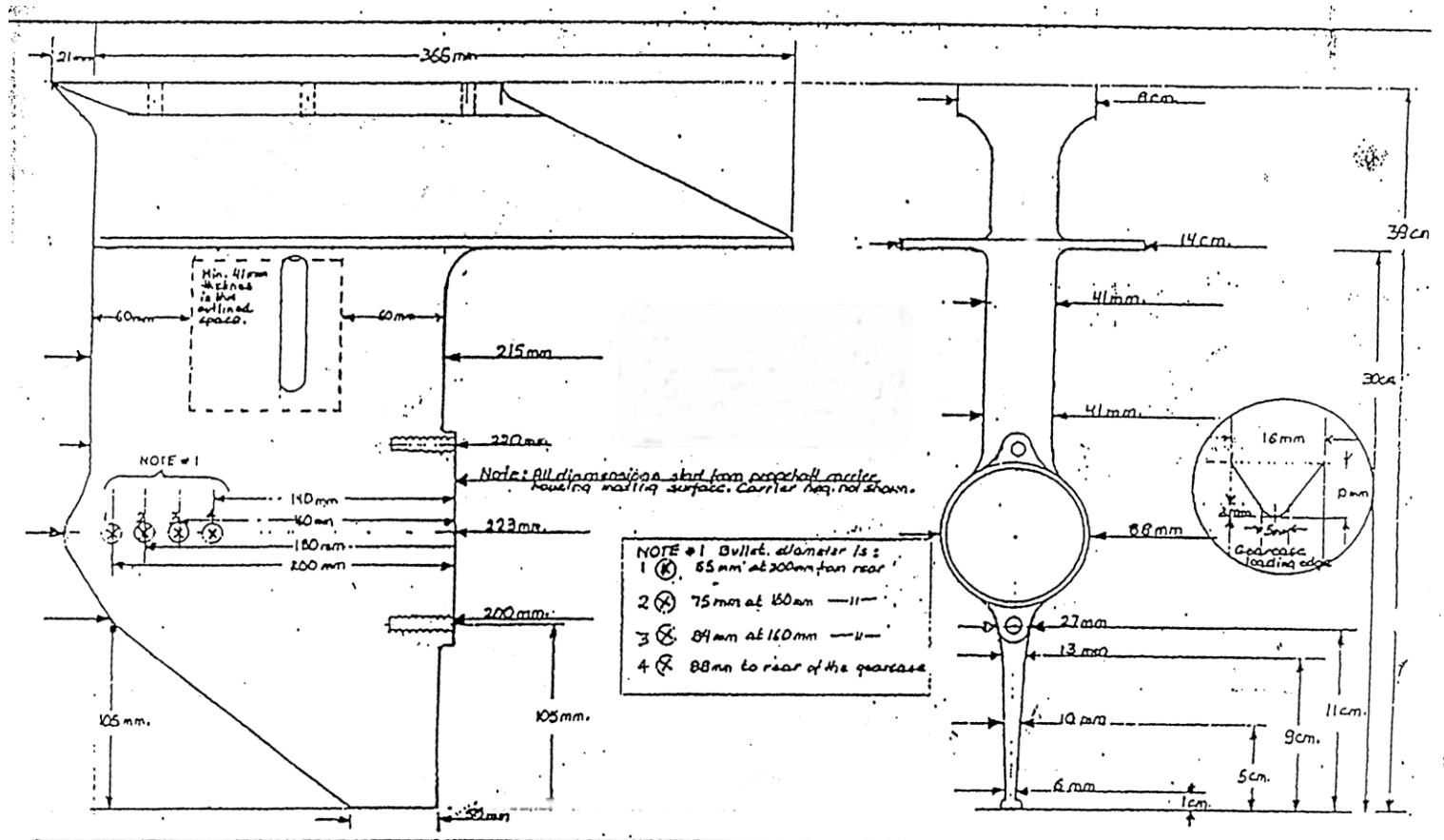
### SPORT-C NOTES: NISSAN/TOHATSU



M 40C TOHATSU. Port layout dimensions. APDA Inspection sheet.  
 Port layback specifications details

Prepared Jan 17, 1991 by Roman L KRUK CHIEF, TOHATSU USA TECH. DEPT

### SPORT-C NOTES: NISSAN/TOHATSU



TOHATSU M40C A TOLERANCE OF  $\pm 2.0\text{mm}$ ,  $-1.0\text{mm}$  WILL BE ALLOWED

by: Ronan L. Krul. Chief, Tohatsu USA Tech Dept.	Drawn for: Richard Wexler APCA Tech Insp Com.	Spec. produced for APCA use ONLY Damian L. Krul. Tohatsu USA
scale: 3.0:1	Accepted by: To be used as a guide ONLY APCA	
date: Feb 19-1991	Date: THE SPEC. SHEET DIMENSIONS HAVE PRECEDENCE	
no: APBA <del>recommended</del> recommended gearbox spec.		

Date: 2-25-2015

Model Year:

## Sport C Technical Standards

Max. Total Cu. In. Displacement	Minimum Boat length	Minimum Weight	Class type
35.00 CI	8' (14' Max.)	675 Lbs.	Pure Stock

Minimum age requirements 14

Total Cu. Ft. of Foam  
in Boat, Including  
Cockpit

**Sport C**

Cu. Ft. of Foam in  
Reinforced Cockpit  
Structure, If So Equipped

**4.0 CF**

**2.0 CF**

### Sport C Boat Standards (see also Rule 18)

- (1) Boat must be of vee, flatbottom, modified vee, or tunnel design; no hydros.
- (2) Driver must be seated in a seat.
- (3) Running surfaces may be altered.
- (4) Factory or non-factory turn fins or skegs are allowed.
- (5) Super Stock and Altered engines are not eligible in OPC Sport classes.
- (6) Power trim and/or adjustable spoilers shall be allowed in Sport classes.
- (7) Transom adapters for raising, lowering or extending the engine will be allowed, but must be fixed while underway.

### Sport C Motor Standards (see also Rule 20)

- (1) Engine cowling must be in place during race. If cowling or engine is repainted it must be repainted to original colors to retain product identification.
- (2) Tiller arms may be removed.
- (3) Any reed material will be acceptable.
- (4) Gearcases may have their outside surfaces contoured, however, they must meet production specifications.
- (5) Solid or pinned motor mounts allowed.
- (6) Allow the sharpening of the skeg to a 1/32 radius and remove wear plate.
- (7) Sport C engines may have a substitution of a maximum of 2 sleeves of any manufacturer with original porting specifications and the same material will be allowed for the repair of damaged cylinders.
- (8) Grinding will be permitted to match to block casting to the ports/liner. No grinding is permitted beyond 5/8 inch past the liner into the casting of the block.

**WARNING! FOR INSPECTION ONLY!** These specifications are not intended as a guide for modification or "blueprinting" and are subject to change as needed.

Date: 2-25-2015

Model Year:

- (9) All specifications of OPC Technical specs must be maintained
- (10) It is permissible to add additional support to the electric starter.

## **REVISIONS:**

**Rev: 2.25.2015 Note #7 added to clarify inspection of "K" dimension. Note #8 added to include superseded flywheel and coil assemblies.**