14May74 91977

Add ½ qt XLR (6TX) 20-50 → almost full ~200 kms

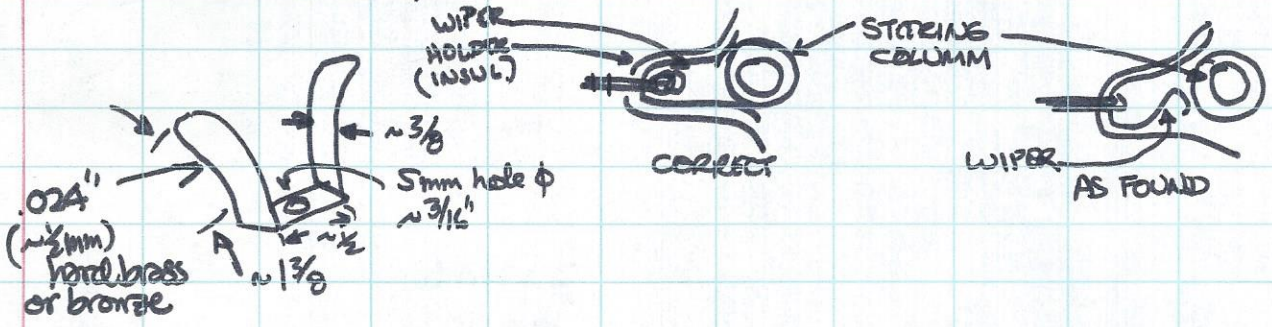
16May74 91990

13 km test ride (gentle) - seems O.K.

- Ck diff lube level: O.K. ½"-½" below filler hole
- Ck play-adjustment unchanged: O.K. So far, so good...
- Add ~3½ cc of molybdenum disulfide powder - center w/DEM - O.K.

17May74 91990

- minor elect. adj. Set turn signals to cancel - will need to epoxy bakelite frame where assembly screws onto metal switch (lever sticking out from steering column.
- Correct horn pickup on steering column - the orig. wiper has been bent & almost worn thru - meas. to make new one:



25May74 92401 After 2 or 3 trips to el Verano Inn.

- Generator failure: Symptoms: began not charging (Red lite on; Ammeter ≤ 0) at lower revs. Chg O.K. @ ~3500 & up. Fan belt failed altogether. Barging on VR never helped.

VM on Red & Green wires from Gen → 0 volts.

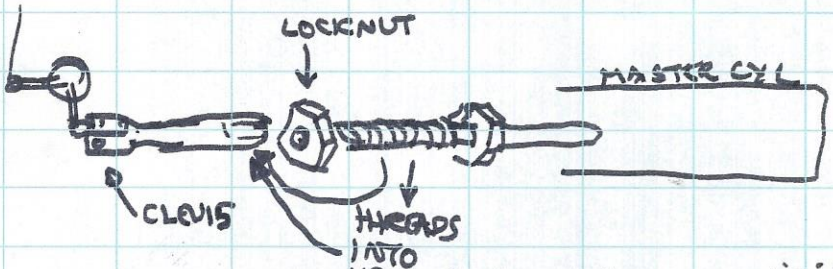
Brushes:  ← wearing dimension = ~9/16" 250TR: 11/16 (from back)

Swapping brushes w/spare generator cured it. They are ~⅛" longer. Get new brush set for spares

93672 Δ OIL/FILTER — 93,672 6-74
Δ DIFF OIL 94,086 7·74 3½ pts 140 wt
Grease 3cc MoS_2
94086 Pack whl brngs - new brngs where needed : both outsides (#1 AA)
F BRAKE CYL OVERHAUL

26 JUNE 74 93672
· Δ OIL Δ FRANTZ FILTER 9 qt GTX 20-50 - may be I low - do later.

Attempt to take up freeplay in Brake linkage:

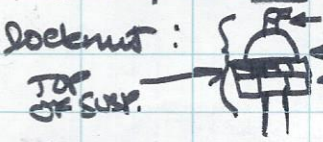


Backed this out until it fell apart then threaded it ben enough TO → Locknut.
~2" free pedal travel - may be a little better.

25 JULY 74 93086 = 94086 (digit didn't move)
· DRAIN DIFF ~2000 KM TO Δ 'break-in' oil.
3½ pts 140 wt + 3 oz MoS_2 ccd all looked O.K. - two small brass(?) shavings. No leaks

21 JULY 74 - Monterey HCR / Pebble Beach Prep.
- Δ Radiator cap to AC RC-1

13 AUG 74 ~~94086~~ 94583 After Monterey HCR BROKEN ODOMETER
· LUBE - all but Lower LHS - do w/ whl brng pack
· REMOVE WHL BRNGS FOR INSP/GREASE Lube Lower LHS grease fitting & outside (small) RHS whl brng ~~bad~~ retainer broken!
R [redacted] F. SUSP. SIDES LOOSE - either Kingpin or outer A-arm links & they are NEW (7455 KM) - try adj. kingpin by upper nut & locknut:



Seems to work.

· Begin F wheel cyl brake overhaul

Δ PLUGS 94913 9-74

VALVE / HEAD OVERHAUL

AUG 74 94583 ~~94586~~

· F. Whl Brake Cyl overhaul. 1⅛" cylinders RM kit WK 36 (62-65 Plymouth, etc.)
1 kit per side

· Replace outer whl brngs both sides. ALL WHL BRNGS SAME AS TR

· RF suspension is still LOOSE @ kingpin (seems to be less than before)

· R whl cyls overhauled 1⅛" cylinders RM kits WK.36 (4)
take ~ .001½ off all pistons - 3 or 4 were stuck.

· TOP UP STEERING BOX w/ 140 wt adjust sector shaft to {no bind / no play} @ center

3 SEPT 74 94913

· Δ spark plugs - to B 7EC's (Removed B-7ES's) MY FIRST PLUG Δ (?)
8600+ KM .027 GAP 22 FT-LB ⅞ in.
Old plugs had 2 SOLID Cu washers each, except #7 (only one)
(Probably removed on plug ck 29 Jan 72)
New plugs installed with 1 std (crushable) washer each. - Run OK.
Torque plugs to 22 FT-LB after test run (hot)

23 Oct 74 After Sears Point Historic Automobile Day.
Ran well for HOE

· Chemical check reveals both headgaskets leaking - will remove heads after TR winter maintenance.

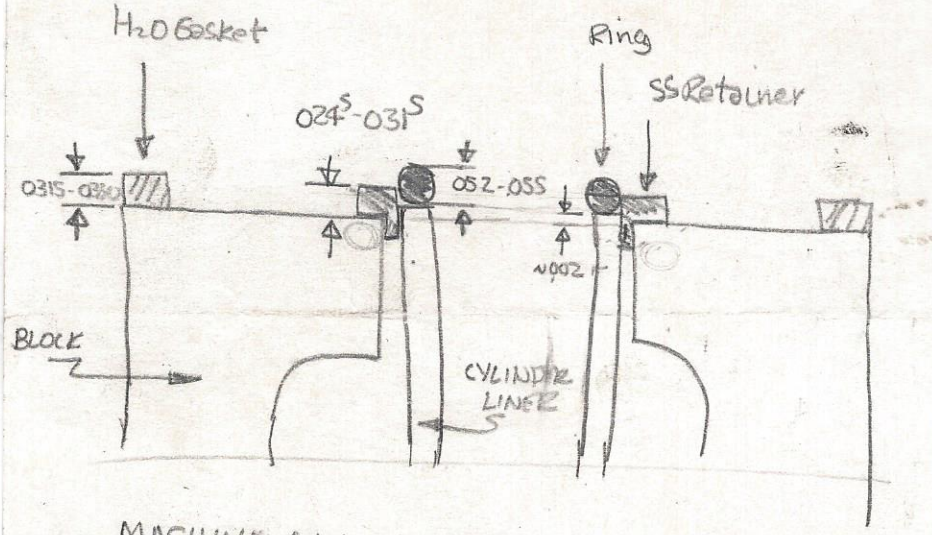
~~94594~~ REMOVE CYLINDER HEADS

· Time & details on worksheet (next to last section in Logbook)
· Guides valves and springs worn
· #2 exh valve burned. #2 plug had shown H_2O: this is the leak
· All locating rings for comp. head gaskets rotted but #11 (opposite #2)
· VALVE DIAMETERS (Heads) Intake: 34mm Exhaust: 29mm
STD 250 GT (from heads of 9636T): 32 30 !
#5 11 I keeper (one only) doesn't match the rest - repl w/ one from 9636T
#10 I spring (one) WELDED to lower keeper - repl (over keeper " " "

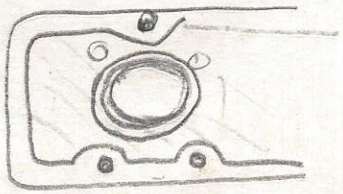
Rings .052 - .055

SS Retainers: .024S - .031S

H_2O Gasket - .031S - .033O

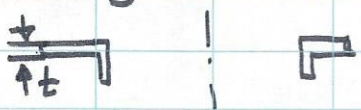


MACHINE ALL S.S RETAINER RINGS TO ~ .0245



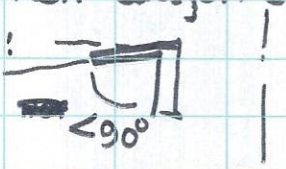
Head/Valve Overhaul 1-75 con't

Replace rotted steel compression gasket retainer rings w/ SS ones from David Clarke -

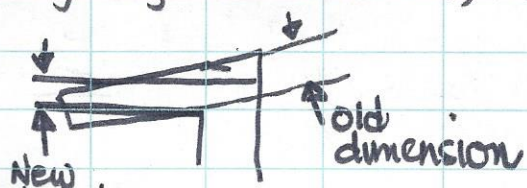


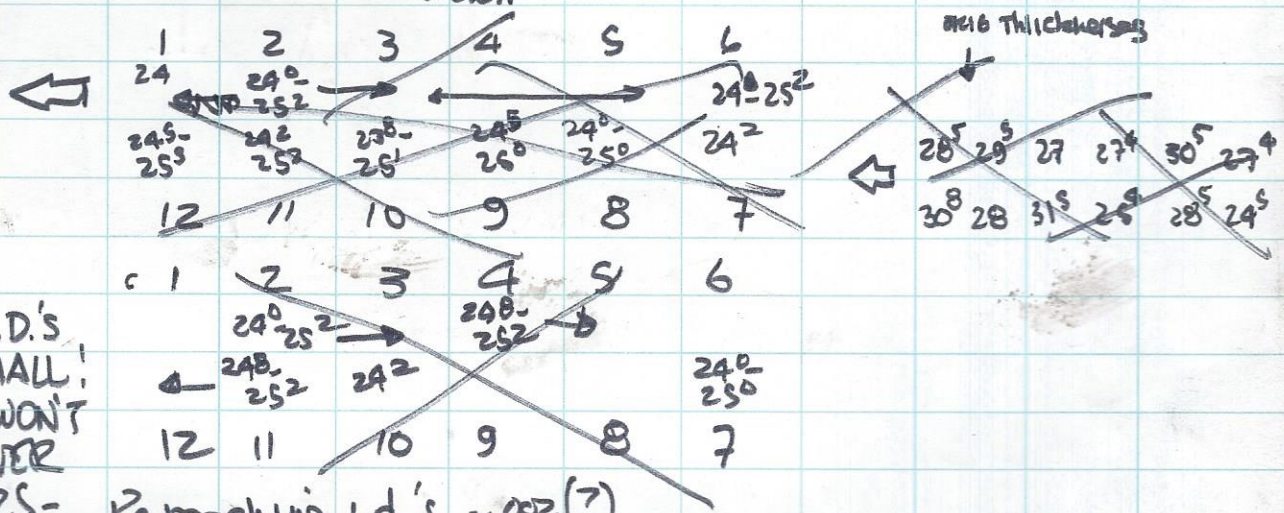
orig. t on SS rings varied from .024^{5}-.031^{5}! peripheral H$_2$O gaskets (new) :.031^{5}-.033 :. one section may not crush ⇒ H$_2$O Leak (compression gaskets 052 - 055 unused)

George Newell machined all to → .025 - 025^{5} max/023^{8}-024^{5} min much better than original! (They were of non-uniform thickness & slightly "hat brimmed"; i.e.:



Cut so:





ALL I.D.'s TOO SMALL! SOME WON'T FIT OVER LINERS - Remachine i.d.'s ~.002 (?)

Roughly meas O.D. of Liner (where ring fits): 3.___ :

TRY ONE RING FOR FIT: NOT MACHINED YET

1	2	3	4	5	6	7	8	9	10	11	12
.269	263	265	263-5	265-6	268-9	265	267-8	268-9	264.5	265	265+
Too large	OK-loose	OK-loose	Good-to-loose	OK	Too large	OK	Too large	Too large	OK-loose	OK-loose	OK

~ Liner meas by vernier caliper

Test Ring fit ↓

CYL #	3. —	COMMENTS
1	.269	Too large
2	.263 (SMALLEST)	Good fit
3	.265	"
4	.263-5	Good to loose
5	.265-6	OK
6	.268-9 (LARGEST)	Too large
7	.265	OK
8	.267-8	Too large
9	.268-9	"
10	.264-5	Good
11	.265	Good
12	.265+	OK

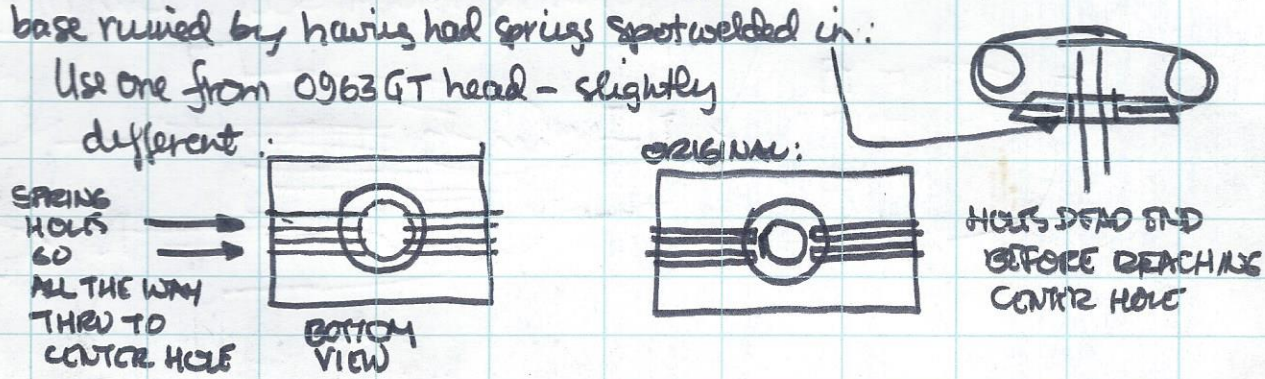
Re-machined rings:

TAG COLOR	SIZE	#	
	.670:	6	→ Firmfit #7 OK 3,5,10,11,12
	.NO Δ:	2	Firmfit 2 & 4
	.672	4	→ Press fit #1,6,8,9

Δ OIL/FILTER 94594 (8/75)
NEW ADJ SCREWS (94900 8/75)

Rings machined i.d. - George Newell. Chart on opposite page -

· 4 JULY 75 - Found FIRST set of used Testa Rossa valvesprings - only slightly worn: USE
12 AUG Glass Bead Clean used springs
13 AUG LAP IN S CK W/PRUSSIAN BLUE - seats on head 'B' (LHS) - taught by Crazy Leonard how to do it. - All O.K.
14 AUG - Assemble 'B' head using used valvesprings - all ok - except #10 I valvespring base ruined by having had springs spotwelded in:
Use one from 0963 GT head - slightly different:



Otherwise appear the same - use.

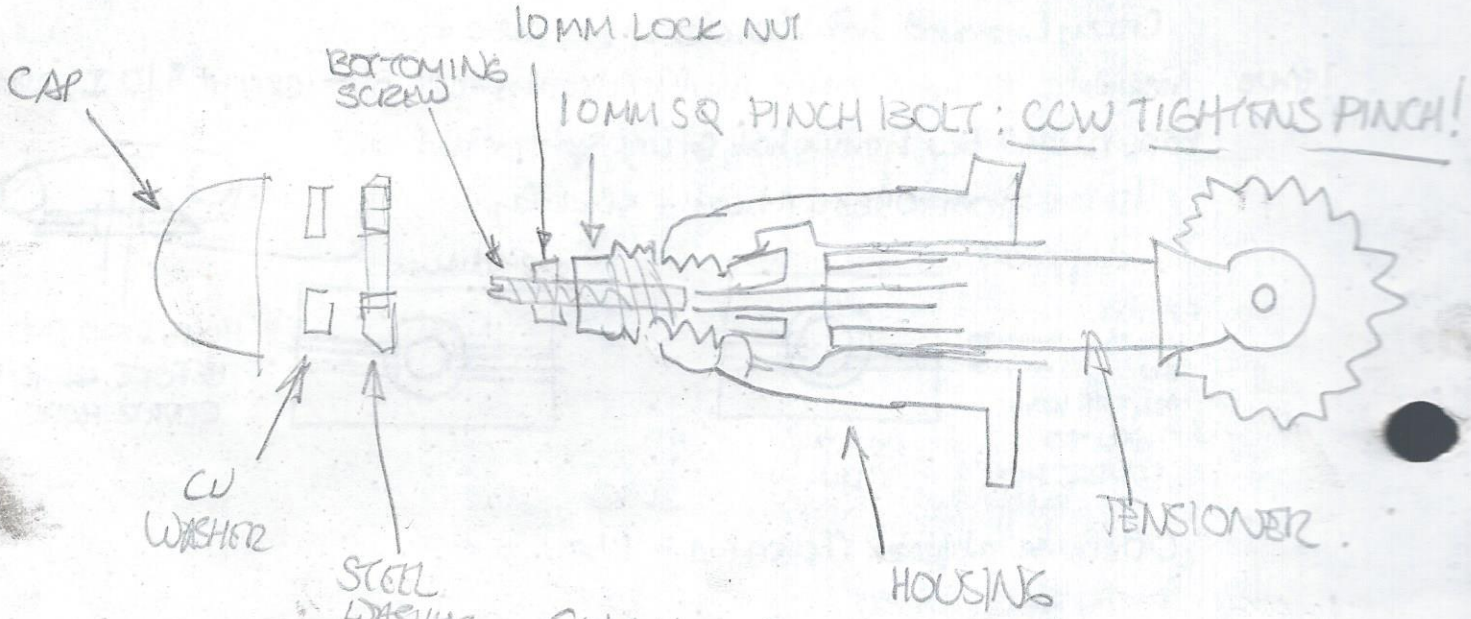
16 AUG BEGIN INSTL HEADS

RHS

CYC -	1	2	3	4	5	6
RTNG COLOR CODE	BLUE	—	RED	—	RED	BLUE

FIT COMP GASKETS - SILICONE GREASE TOP/COPPERKOTE SPRAY BOTTOM (DGM)
OIL HOLE: SQUARE SEC. O-RING (not like 250TR): 8x14x3.5 mm.
Cut thickness ½ mm to 3 mm (SWG suggestion) - Set in RTV - Copperkote top
TIMING COVER TO HEAD SQUARE O-RING (267x80x4½ mm) set in w Gaskacinch
Outer Hd Gasket - 4 BOLT PATTERN - PUNCH HOLES FOR 3 BOLT, TRIM & INSTL W/RTV (both sides) T: 55 FT-LB.
CAM & BRGS - NEW ADJ SCREWS T: 20 FT-LB.
TRANS O/C & FILTER 94594 = 95594
RHS Exh manif clean old gaskets & reuse. tighten from end flanges to center

CAM CHAIN TENSIONER



CHAIN TENSIONER SETUP.

17 AUG Begin prep LHS cyl-

Clean - instl retainer rings

Cyl-	7	8	9	10	11	12
Color code	Red	Blue	Blue	Red	Red	Red

18 AUG LHS ON - USE MODIF GASKET AS RHS - (DGM Recommended)

Oil O Rig cut to ~3mm thick

Oversize (Alfa) Head nut washers used on inside (short) studs

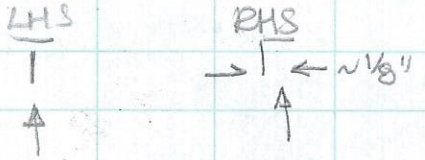
55 FT-LBS

19 AUG INSTL CAM/~~RED~~ BRNGS - NEW ADJ SCREWS T: 20 FT LB

BOLT ON CAM SPROCKETS : CHAINS/SPROCKETS/CAMS INDEXED W/WHITE PAINT - RETURN TO THESE POSITIONS:

A. Take tens up on LHS chain : bolt on sprocket to LHS cam.

B. " " " " RHS " across Gen drive: bolt on sprocket to RHS cam The arrows & marks now:



ONE

ONE LINK SLACK ON RHS CHAIN LINES UP POINTER & CAM MARK! - Not like it came apart, but looks right.

NO: GEN SPROCKET NOT ENGAGED:

RHS can too far forward

Loosen bmgs & tap cam back. NOW ALL MARKS & PAINT

LINE UP

INSTL TENSIONER.

(STRIPPED BRNG STUD REPL #2 CYL EXH "FRONT" STUD

SET VALVE CLEARANCES -

Some spring/rocker arm interference: NOTED: E: 5, 8, 9

Keep watch I: 3, 9

T CAM SPROCKETS : 20 FT-LB

BATTERY ON TRICKLE CHG: ~6 PM } 6 HRS
OFF. 12PM }

6:30 AM
11:30 AM } 5 HRS

11 HRS

10 - 12:30 2.5
1:30 - 7:30 6

$$\begin{array}{r} 2\,52 \\ 24\overline{)6168} \\ 48 \\ \hline 136 \\ 120 \\ \hline 48 \end{array}$$

CHG ON: 1700 21 AUG

20 AUG 75

- CUT/TRIM INSTL CAM COVER GASKETS: GASKACINCH TO HEAD: GREASE TOPS BEFORE INSTL.
- INSTL. RADIATOR HOSES/THERMOSTATE, ETC.
- CONN OIL. P. GA. LINE TO BLOCK / H_2O T. GA. WIRE
- REPLACE PIECE OF FLEX FUEL LINE LOCATED @ RF SIDE OF OIL PAN (OLD ONE LOOKED BRITTLE)
- STRIP/BEAD BLAST CAM COVERS (DONE LAST 2 DAYS) - PRIME (IN & OUT) W/($ZNCR_2$)
- FIT CAM SPROCKET COVERS - TRIM O-RINGS TO FIT (NEW RINGS INST. W/HEADS)
- INSTL CARBURETORS & MECH FUEL PUMP
  - FUEL MANIFOLD IS A TIGHT FIT TO FUEL PUMP ???
  - ELEC F. PUMP ON TO CK FOR LEAKS - CORRECTED LEAKS: OK.
- FIT DIST DRIVES - NOT BOLTED DOWN UNTIL DISTS. ARE CKED FOR ALIGN

21 AUG 75

(BATTERY ON TRICKLE CHG FOR 11 HRS)

- PAINT/BAKE CAM COVERS - ASSEMBLE T. LINKAGE, KNOBS ETC. (CRACKLE FINISH + ACRYLIC LACQUER)
- REMOVE CARBS! : NECESSARY TO PROPERLY FIT FUEL LINE: GOES ON LHS OF CARBS
  CK FOR LEAKS W/E. FUEL P.: OK
- CK CLEARANCE: UPPER VALVESPRING TO ROCKER ARM: SOME TOUCH (used .003 feeler gauge)

cyl:	1	2	3	4	5	6	7	8	9	10	11	12
I			X						X			
E				X	X			X	X		X	

"X" indicates touching spring & rocker arm under full valve opening
DGM advises to "run & look"

- INSTL CAM COVERS, IGN WIRE LOOMS, THROTTLE LINKAGE & RHS OIL FILLER TUBE (LHS AWAITING EXH MANIF GASKETS: EXH MANIF MUST GO ON FIRST)
- GREASE ALL THROTTLE LINKAGE BALL JOINTS
- INSTL CAM SPROCKET COVERS, LHS END PLUG (FRONT)
- FILL SUMP: 10 QTS GTX 20W-50
- CRANK FOR OIL P. TEST - BATTERY WEAK (JUMPED) → 40 PSI: SEEMS TIGHT.

LHS DIST DRIVE SEAL (@ HEAD) LEAKS: NO EXPL @ SUG (20×40×10 SEAL)

- INSTL LHS EXH MANF (3 new gaskets @ rear: #7, 8, 9) HEAT SHIELD, OIL FILLER PIPE
  exh manif has to be driven over studs - (tighten from #7 & 12 first)

o 562 6122 DUANE BRACKEN
h 938.9351

CHG BATTERY
ON 21AUG1700

↓

TURNED OFF W/SHOP LITES!
(DRAINED BATTERY OVERNITE)

ON FULL-TIME OUTLET:
22AUG ~2000