



X-1R Global Ltd

To: All X-1R distributors From: Nigel (Mac) McKenzie

Cc: Date 5th September 2019

Subject: Increase of CVT fluids anti-shudder protection – JASO M349 Proton Test

The good reports regarding the effectiveness of the X-1R CVT Treatment continue to flow in. Users of the product are waxing lyrical about the ability of our newest item to reduce shuddering and restore a 'like-new' feeling to even well-worn Continuous Variable Transmissions.

We like the anecdotal information we receive but in the real world we need to have real scientific data to back our claims. Therefore we are undertaking a series of test on our CVT Treatment using the Japanese Automotive Standards Organizations (JASO) M349 protocol at the respected K.K.SVC Tokyo testing facility.

The results of our second JASO M349 anti shudder test are now in. For the second test we used a commonly used CVT lubricant used by Proton in Malaysia and once again I am pleased to announce that our product was capable of significantly improving the ability of the lubricant in the CVT to resist shudder. The report is attached but in Summary at lower speeds we managed to stop the onset of shudder from 108 hours to over 300 hours. Which is of course significant.

Nigel McKenzie

Attached report K.K. SVC report No. 312207



Test Results Report

Report No. 312207 and No.312512

FOR
X1R Global Limited

4. September 2019

Submitted by
K.K. SVC Tokyo
4052-2, Nakatsu, Aikawa-cho,
Aiko-gun, Kanagawa-ken
243-0303, JAPAN

1. Test method

LVFA Friction Test : JASO M349

2. Test sample code :

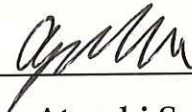
PROTON GEAR OIL FOR CVT (No Add)

PROTON GEAR OIL FOR CVT (with your additive)

3. Test results

Attached sheet

Submitted by : K.K. SVC Tokyo
Technical Service Center
Manager, Business Promotion Team



Atsushi Sugouchi

2. $d\mu/dV$ anti-shudder service life Report

2.1 $d\mu/dV(0.3)$ result [Enter a value of $d\mu/dV(0.3)$ times 1000]

Fluid type		PROTON GEAR OIL FOR CVT (With your additive)			PROTON GEAR OIL FOR CVT (No add)		
Performance test temp		40°C	80°C	120°C	40°C	80°C	120°C
Cumulative total time of durability test	0 h	5.3	4.8	15.3	12.4	7.2	15.3
	24 h	19.8	14.2	16.5	27.5	21.4	19.0
	30 h	22.1	13.9	17.8	26.0	19.3	18.6
	36 h	24.6	17.3	19.1	26.4	19.5	19.5
	42 h	24.0	17.2	19.3	25.9	19.5	18.9
	48 h	25.1	16.2	17.3	23.6	17.3	15.7
	54 h	23.0	14.6	16.0	21.0	13.9	14.7
	60 h	21.4	11.0	14.3	19.0	12.9	13.0
	72 h	16.7	5.7	8.4	18.5	10.3	11.9
	84 h	13.7	2.5	5.5	16.1	7.6	7.4
	96 h	14.9	1.8	5.7	13.9	2.7	4.6
	108 h	13.9	1.8	3.9	12.8	-0.1	1.5
	120 h	14.9	2.4	4.4	11.8	-2.8	-2.7
	144 h	14.4	2.6	3.3	11.2	-4.0	-6.1
	168 h	15.3	5.2	4.9	12.3	-3.8	-6.5
	192 h	16.0	7.0	6.2	12.4	-3.5	-6.5
	216 h	17.0	7.2	7.4	12.5	-4.2	-5.8
	240 h	16.4	8.7	7.2	14.0	-2.6	-5.5
	264 h	16.1	8.8	8.3	13.7	-3.0	-4.9
288 h	15.0	8.7	8.9	13.0	-2.6	-3.7	
300 h	15.9	9.4	8.9	12.6	-3.3	-4.3	

2.2 $d\mu/dV(0.9)$ result [Enter a value of $d\mu/dV(0.9)$ times 1000]

Fluid type		PROTON GEAR OIL FOR CVT (With your additive)			PROTON GEAR OIL FOR CVT (No add)		
Performance test temp		40°C	80°C	120°C	40°C	80°C	120°C
Cumulative total time of durability test	0 h	3.8	0.9	0.1	5.9	0.5	-0.0
	24 h	9.2	2.9	0.3	10.6	5.6	2.2
	30 h	10.3	3.5	0.4	10.4	5.6	1.9
	36 h	11.3	4.5	1.1	10.7	5.6	2.2
	42 h	11.5	5.1	1.3	10.7	5.7	2.3
	48 h	12.3	4.6	0.9	10.7	5.0	1.3
	54 h	12.2	4.7	0.7	10.7	4.0	0.0
	60 h	12.3	4.3	0.5	10.9	3.3	-0.0
	72 h	11.5	3.1	0.3	11.6	3.7	-0.2
	84 h	12.1	2.6	0.2	12.0	2.6	-0.6
	96 h	11.7	2.3	0.1	12.5	2.3	-1.9
	108 h	11.8	2.5	0.2	12.6	2.1	-2.7
	120 h	11.5	2.4	0.1	13.4	1.7	-2.0
	144 h	11.6	2.7	0.3	14.3	1.5	-2.2
	168 h	11.8	3.2	0.4	14.9	1.0	-1.8
	192 h	11.9	3.5	0.5	15.7	0.4	-1.4
	216 h	11.7	4.1	0.7	16.0	-0.1	-0.9
	240 h	11.3	4.2	0.9	16.0	-0.3	-0.1
	264 h	12.0	4.3	1.1	16.6	-0.7	-0.1
288 h	12.0	4.1	0.6	16.2	-0.5	-0.1	
300 h	11.6	3.7	0.2	16.8	-0.9	-0.1	

3.1 Anti-shudder service life $d\mu/dV$ (0.3)

$d\mu/dV$ value specified by the parties concerned, s/m \times 1000		
PROTON GEAR OIL FOR CVT (With your additive)	40°C	(300h Over)
	80°C	(300h Over)
	120°C	(300h Over)
PROTON GEAR OIL FOR CVT (No add)	40°C	(300h Over)
	80°C	108 h
	120°C	120 h

3.2 Anti-shudder service life $d\mu/dV$ (0.9)

$d\mu/dV$ value specified by the parties concerned, s/m \times 1000		
PROTON GEAR OIL FOR CVT (With your additive)	40°C	(300h Over)
	80°C	(300h Over)
	120°C	(300h Over)
PROTON GEAR OIL FOR CVT (No add)	40°C	(300h Over)
	80°C	216 h
	120°C	60 h