



# INJECTOR SPECIFICATION

EDITION: 11

APPLICATIONS: SEE PAGE 2

CALIBRATION DATA: SEE PAGE 3

DATED: 03-05-97

CUSTOMER: NAVISTAR INTERNATIONAL TRANSPORTATION CORP.

## NOZZLE HOLDER ASSEMBLY NO. 30523

SUPERSEDES:

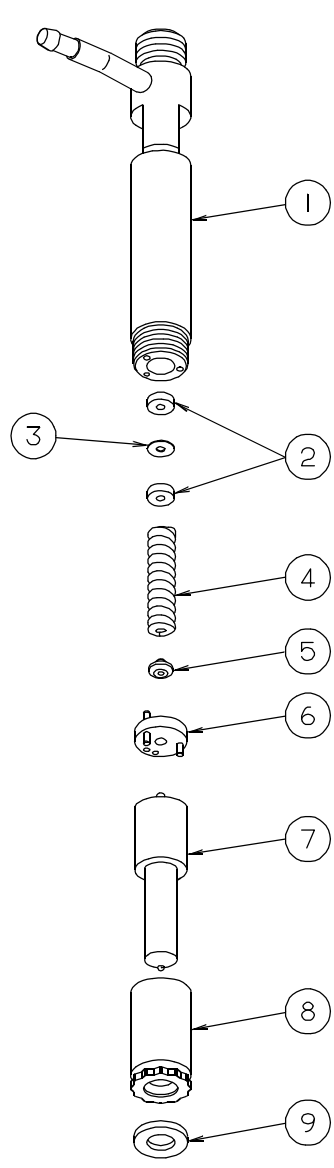
CUSTOMER PART NO.: SEE PAGE 2

TEST STAND: ISO 8984

NOTE: Reference Conventional Injector Service Manual 99118 for additional service information.

1. CALIBRATION FLUID...SAE J967 / ISO 4113  
(Ref. S.B. 201). AT ROOM TEMPERATURE (70°-80° F)
2. CALIBRATING HIGH PRESSURE PIPES... 0.063 X 12"  
(1.6 X 305 mm)

ITEM NO.	PART NO.	QTY.	DESCRIPTION	* USE AS REQUIRED	
				PART NO.	THICKNESS mm inches)
1	30520	1	BODY, nozzle holder		
2	780058	1	SPACER, shim		
3	SEE TABLE	*	SHIM, pressure adjusting	780060 780068 780061 780062 780063 780065 780066 780067 780064	0.051 (.002) 0.102 (.004) 0.178 (.007) 0.254 (.010) 0.635 (.025) 0.711 (.028) 0.762 (.030) 0.889 (.035) 0.952(.0375)
4	781720	1	SPRING, pressure adjusting		
5	780081	1	SEAT, spring		
6	32972	1	PLATE ASSEMBLY, adapter		
7	PAGE 2	1	NOZZLE ASSEMBLY, hole type (not included in nozzle holder assembly)		
8	780118	1	NUT, nozzle retaining (torque to 54-61 N·m 40-45 lbf·ft)		
9	PAGE 2	1	WASHER, SEALING (purchased separately)		
<b>FOR ENGINEERING USE ONLY</b>					
		DATE	ECN NO.	EDITION	
		5-07-93	21187/22125/22441	1	
		8-06-93	22658	2	
		9-20-93	22737	3	
		1-06-94	22978	4	
		2-16-94	23042	5	
		3-22-94	22829	6	
		5-23-94	22740	7	
		7-08-94	22829	8	
		2-01-95	22829	9	
		1-10-97	24597	10	
		3-05-97	23600	11	



**APPLICATION AND SERVICE INFORMATION  
FOR HOLDER ASSEMBLY 30523**

INJECTOR			NOZZLE		STANADYNE SEALING WASHER (SEE NOTE 1 )	NGD APPLICATION (SEE NOTE 2 )
STANADYNE PART NO.	CUSTOMER PART NO.	INSCRIPTION CODE	STANADYNE PART NO.	INSCRIPTION CODE		
30507	1820832C91	A	30524	1820833C1	770056	DT 466 (SERVICE ONLY)
30508	1820834C91	B	30525	1820835C1	770056	DT 408 & DT 466
30509	1820836C92	C	30526	1820837C1	31113	DT 408
30510	1820838C91	D	30527	1820839C1	770056	DT 408 & DT 466
30511	1820840C91	E	30528	1820841C1	770056	DT 466
30512	1820842C91	F	30529	1820843C1	770056	DT 408 & DT 466
30513	1820844C91	G	30530	1820845C1	770056	DT 466
30514	1820846C91	H	30538	1820847C1	770056	530
30515	1820848C91	J	30539	1820849C1	770056	DT 466 & 530
30516	1820890C91	K	30540	1820891C1	770056	530
30517	1820892C91	L	30541	1820893C1	770056	530
30518	1820894C91	M	30542	1820895C1	770056	530
30916	1822141C91	N	30915	1822142C1	770056	530
30919	1822143C92	P	30918	1822144C1	31113	DT 408
31114	1822349C91	R	30525	1820835C1	31113	DT 408
31115	1822351C91	S	30527	1820839C1	31113	DT 408
31116	1822352C91	T	30529	1820843C1	31113	DT 408
31219	1822527C91	U	31218	1822526C1	770056	530
31363	1823282C91	V	30526	1820837C1	770056	DT 408 & DT 466
31401	1823148C91	W	30918	1822144C1	770056	DT 408
31507	1823755C91	AA	30918	1822144C1	770056	DT 408
31508	1823757C91	AB	30525	1820835C1	770056	DT 408
31509	1823759C91	AC	30527	1820839C1	770056	DT 408
31510	1823761C91	AD	30526	1820837C1	770056	DT466
31511	1823763C91	AE	30528	1820841C1	770056	DT 466
31512	1823765C91	AF	30530	1820845C1	770056	DT 466
31513	1823767C91	AG	30539	1820849C1	770056	INTERNATIONAL 530
31514	1823769C91	AH	31218	1822526C1	770056	INTERNATIONAL 530
31515	1823771C91	AJ	30540	1820891C1	770056	INTERNATIONAL 530
31516	1823773C91	AK	30541	1820893C1	770056	INTERNATIONAL 530
31722	1823931C91	AL	31721	1823932C1	770056	INTERNATIONAL 530
31725	1823933C91	AM	31724	1823934C1	770056	INTERNATIONAL 530
31728	1823935C91	AN	31727	1823936C1	770056	INTERNATIONAL 530
31731	1823937C91	AP	31730	1823938C1	770056	INTERNATIONAL 530
32083	1824779C91	AR	32082	1824780C1	770056	INTERNATIONAL 530/330
33351	1830028C91	X	33350	1830029C1	770056	INTERNATIONAL 530

NOTE 1: SEALING WASHER 31113 IS 1mm THICKER THAN 770056 AND IS COLORED BLUE FOR IDENTIFICATION.

NOTE 2: BECAUSE OF INJECTOR APPLICATION COMPLEXITY, IT IS RECOMMENDED THAT THE LATEST CUSTOMER SERVICE INSTRUCTIONS BE CONSULTED FOR INJECTOR USAGE AND REPLACEMENT CONFIRMATION.

**CALIBRATION AND SERVICE INFORMATION  
FOR HOLDER ASSEMBLY 30523**

INJECTOR NO.	OPENING PRESSURE				MAX. VALVE LIFT mm (inches)	NO. OF HOLES @ DIA. mm (inches)
	NEW AND SERVICE		RESET BELOW			
	PSI	MPa	PSI	MPa		
30507	3600 - 3750	24.82 - 25.86	2900	20.0	0.300 (.0118)	5 @ 0.235 (.0093) VCO
30508	3600 - 3750	24.82 - 25.86	2900	20.0	0.300 (.0118)	5 @ 0.245 (.0096) VCO
30509	3600 - 3750	24.82 - 25.86	2900	20.0	0.300 (.0118)	5 @ 0.250 (.0098) VCO
30510	3600 - 3750	24.82 - 25.86	2900	20.0	0.325 (.0128)	5 @ 0.265 (.0104) VCO
30511	3600 - 3750	24.82 - 25.86	2900	20.0	0.325 (.0128)	5 @ 0.270 (.0106) VCO
30512	3600 - 3750	24.82 - 25.86	2900	20.0	0.350 (.0138)	5 @ 0.275 (.0108) VCO
30513	3600 - 3750	24.82 - 25.86	2900	20.0	0.350 (.0138)	5 @ 0.280 (.0110) VCO
30514	3600 - 3750	24.82 - 25.86	2900	20.0	0.350 (.0138)	4 @ 0.300 (.0118) VCO
30515	3600 - 3750	24.82 - 25.86	2900	20.0	0.375 (.0148)	4 @ 0.310 (.0122) VCO
30516	3600 - 3750	24.82 - 25.86	2900	20.0	0.400 (.0157)	4 @ 0.320 (.0126) VCO
30517	3600 - 3750	24.82 - 25.86	2900	20.0	0.400 (.0157)	4 @ 0.330 (.0130) VCO
30518	3600 - 3750	24.82 - 25.86	2900	20.0	0.425 (.0167)	4 @ 0.335 (.0132) VCO
30916	3600 - 3750	24.82 - 25.86	2900	20.0	0.475 (.0187)	4 @ 0.360 (.0142) VCO
30919	3600 - 3750	24.82 - 25.86	2900	20.0	0.275 (.0108)	5 @ 0.225 (.0089) VCO
31114	3600 - 3750	24.82 - 25.86	2900	20.0	0.300 (.0118)	5 @ 0.245 (.0096) VCO
31115	3600 - 3750	24.82 - 25.86	2900	20.0	0.325 (.0128)	5 @ 0.265 (.0104) VCO
31116	3600 - 3750	24.82 - 25.86	2900	20.0	0.350 (.0138)	5 @ 0.275 (.0108) VCO
31219	3600 - 3750	24.82 - 25.86	2900	20.0	0.350 (.0138)	4 @ 0.290 (.0114) VCO
31363	3600 - 3750	24.82 - 25.86	2900	20.0	0.300 (.0118)	5 @ 0.250 (.0098) VCO
31401	3600 - 3750	24.82 - 25.86	2900	20.0	0.275 (.0108)	5 @ 0.225 (.0089) VCO
31507	4200 - 4350	28.96 - 30.00	3500	24.13	0.275 (.0108)	5 @ 0.225 (.0089) VCO
31508	4200 - 4350	28.96 - 30.00	3500	24.13	0.300 (.0118)	5 @ 0.245 (.0096) VCO
31509	4200 - 4350	28.96 - 30.00	3500	24.13	0.325 (.0128)	5 @ 0.265 (.0104) VCO
31510	4200 - 4350	28.96 - 30.00	3500	24.13	0.300 (.0118)	5 @ 0.250 (.0098) VCO
31511	4200 - 4350	28.96 - 30.00	3500	24.13	0.325 (.0128)	5 @ 0.270 (.0106) VCO
31512	4200 - 4350	28.96 - 30.00	3500	24.13	0.350 (.0138)	5 @ 0.280 (.0110) VCO
31513	4200 - 4350	28.96 - 30.00	3500	24.13	0.375 (.0148)	4 @ 0.310 (.0122) VCO
31514	4200 - 4350	28.96 - 30.00	3500	24.13	0.350 (.0138)	4 @ 0.290 (.0114) VCO
31515	4200 - 4350	28.96 - 30.00	3500	24.13	0.400 (.0157)	4 @ 0.320 (.0126) VCO
31516	4200 - 4350	28.96 - 30.00	3500	24.13	0.400 (.0157)	4 @ 0.330 (.0130) VCO
31722	4200 - 4350	28.96 - 30.00	3500	24.13	0.325 (.0128)	5 @ 0.265 (.0104) VCO
31725	4200 - 4350	28.96 - 30.00	3500	24.13	0.350 (.0138)	5 @ 0.275 (.0108) VCO
31728	4200 - 4350	28.96 - 30.00	3500	24.13	0.325 (.0128)	5 @ 0.270 (.0106) VCO
31731	4200 - 4350	28.96 - 30.00	3500	24.13	0.350 (.0138)	5 @ 0.280 (.0110) VCO
32083	4200 - 4350	28.96 - 30.00	3500	24.13	0.375 (.0148)	5 @ 0.295 (.0116) VCO
33351	3600 - 3750	24.82 - 25.86	2900	20.0	0.475 (.0187)	4 @ 0.400 (.0157) VCO

FOR BAR MULTIPLY MPa BY 10

MAXIMUM VALVE LIFT FOR SERVICE: +0.05mm BEYOND VALUE SHOWN IN TABLE