

Maintenance Logs

To avoid costly repairs and down-time, it is imperative to develop and practice good maintenance procedures from the beginning. These procedures fall into daily, weekly, monthly and quarterly increments, and are outlined in this section. All recommended maintenance must be performed by competent service personnel.

This section covers:

- Operational Maintenance
- Appearance Maintenance
- Long-Term Maintenance Schedule

NOTICE

Record the date and machine hours on the maintenance log provided for your convenience in the Owner's Guide. Records of maintenance must be kept and copies may be required to be furnished to HydraMaster before the warranty is honored. It is recommended that you affix a copy of the log on the vehicle door near your unit for convenience and to serve as a maintenance reminder.

OPERATIONAL MAINTENANCE

This section contains recommendations for maintenance that will affect the service life of your unit.

NOTICE

HydraMaster recommends that you follow the vehicle maintenance schedule as stated by the manufacturer. All HydraMaster references to vehicle maintenance serve as general vehicle service reminders. If there are any questions regarding servicing of your vehicle, please contact your local vehicle dealership.



Perform Descaling as Required

Scale deposits on the interior of the heating system can cause a noticeable loss in heating performance. Deposits of this kind result from hard water deposits, excessive chemical use or improper chemicals. The frequency with which descaling procedures are required will vary. If your area has particularly hard water or you see evidence of deposits in the water system, you may have to descale monthly.

To descale your system:

- 1. Add an appropriate descaler chemical to your water box.
- 2. Circulate it through the heating system. Let it stand.
- 3. Flush and repeat as necessary.
- 4. Clean all screens and strainers, and check them frequently following descaling.

NOTICE

If you are circulating a descaler through the flowmeter, make sure to run clean water through the flowmeter after you perform this procedure.

APPEARANCE MAINTENANCE

Maintaining the original appearance of your unit is important for two reasons:

- 1. It represents a big dollar investment for your cleaning business and its appearance should reflect that fact. A dirty machine does not look professional.
- Maintenance, troubleshooting and repair is much easier to accomplish on a clean, well-maintained unit. Regular cleaning of the machine offers you an opportunity to visually inspect all parts of the machine and spot potential problems before they occur.

The following maintenance is recommended by the manufacturer at the frequency indicated:

Daily

- Wipe machine down thoroughly with a damp cloth.
- Flush recovery tank out thoroughly.
- Clean wand to maintain original appearance.
- Wipe down vacuum and high pressure hoses as needed.
- · Visually inspect hoses for cuts, etc.



<u>Weekly</u>

- Wipe down entire unit as needed.
- Apply good coat of auto wax to all painted surfaces inside and out.
- Thoroughly clean wand and inspect for clogged jet, debris in vacuum slot and leaking fittings at valve.
- Apply light coat of auto wax to wand. Thoroughly clean vacuum and high pressure hoses including hose cuffs.

LONG-TERM MAINTENANCE SCHEDULE

The following components or systems should be serviced or replaced at the specified intervals.

Component	Interval (Machine hours / months of service)
High pressure water pump rebuild	2,000 / 24
Vehicle engine thermostat (Replace with genuine Ford part)	2,000 / 24
Vehicle engine accessory drive belt	2,000 /24
CDS xDrive blower silencer and exhaust plumbing	4,000 / 48
CDS xDrive and vehicle heater hoses	4,000 / 48
CDS xDrive wire harness	4,000 / 48



Weekly Maintenance Date Hour Meter Reading **Technician Initials** Vehicle/CDS xDrive - check for leaks Pump oil - check Belts and pulleys - check for wear High pressure lines-internal - check for chafing Recovery tank inlet filter - remove and clean Recovery tank - clean Chemical container - remove and clean Vac. relief valve - inspect, clean Engine rpm - check with CDS xDrive unit Float switches - clean and inspect Hoses and quick connects; check for wear; replace as needed ATTENTION: Additional break-in period maintenance required! One time change of pump oil after 50 hours of operation; every 300 hours thereafter. Blower oil - change after first 100 hours of use. **Monthly Maintenance** Flush chemical system with vinegar All fasteners; tighten as needed Engine air cleaner - inspect Battery terminals - clean as needed



Chemical pump valves and diaphragm - check			
Chemical pump - inspect			
Vehicle fuel lines - check for chaffing or wear			
CDS xDrive wiring harness - check for chafing or wear			
Bearings/power pack pillow block - grease		_	
Vehicle wiring harness - check for chafing or wear		0	
Pump oil - change (every 300 hours)			
Blower oil - change (every 400 - 500 miles)			
Every 50	0 Hours		
Salsa Heat Exchanger (if equipped) - clean and inspect			
Yearly Maintenance (or Every 1,00	0 Hours, Whichever C	omes First)	
Vehicle - complete service			
Cooling system - flush			
Transmission fluid - change		0	
Blower Drive Belt		0	



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Vehicle fuel lines - check for chaffing or wear		0	
CDS xDrive wiring harness - check for chafing or wear		0	
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Every 500) Hours		
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Transmission fluid - change			
Blower Drive Belt			



Weekly Maintenance

Date	-	-					
Hour Meter Reading Technician Initials		<u> </u>					
Technician initials		<u> </u>					
Vehicle/CDS xDrive - check for leaks		0		0		0	
Pump oil - check							
Belts and pulleys - check for wear		_					
High pressure lines-internal - check for chafing	0	0					
Recovery tank inlet filter - remove and clean							
Recovery tank - clean							
Chemical container - remove and clean		0		0			
Vac. relief valve - inspect, clean							
Engine rpm - check with CDS xDrive unit operating							
Float switches - clean and inspect							
Hoses and quick connects; check for wear; replace as needed		_			_		
ATTENTION: Additiona	al break-i	n period	mainten	ance req	uired!		
One time change of pump oil after 50 hours of operation; every 300 hours thereafter.		0					
Blower oil - change after first 100 hours of use.							
Mo	onthly Ma	aintenand	се				
Flush chemical system with vinegar							
All fasteners; tighten as needed		0		_			
Engine air cleaner - inspect							
Battery terminals - clean as needed							
Blower drive belt - check							



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Chemical pump - inspect		0	
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Weekly Maintenance

Date								
Hour Meter Reading		 						
Technician Initials		<u> </u>						
Vehicle/CDS xDrive - check for leaks				0	0	0	0	0
Pump oil - check		0						
Belts and pulleys - check for wear								
High pressure lines-internal - check for chafing								
Recovery tank inlet filter - remove and clean					0		0	0
Recovery tank - clean		0		0				
Chemical container - remove and clean		0		0	0		0	0
Vac. relief valve - inspect, clean								
Engine rpm - check with CDS xDrive unit operating								
Float switches - clean and inspect								
Hoses and quick connects; check for wear; replace as needed		_	_	_	_		_	_
ATTENTION: Additiona	al break-ii	n period	mainten	ance req	uired!			
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Me	onthly Ma	intenand	e					
Flush chemical system with vinegar								
All fasteners; tighten as needed								
Engine air cleaner - inspect								
Battery terminals - clean as needed								_
Blower drive belt - check								



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Chemical pump - inspect		0	
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Vehicle - complete service			
Cooling system - flush			
Transmission fluid - change			
Blower Drive Belt			



MAINTENANCE CHART - 8 TO 600 HOURS

					DA	LY N	AINT	ENA	NCE	CDS	xDriv	e - F	ORD	TRAI	NSIT										
								Ch	neck e	engine	oil le	evel													
									neck b																
									heck																
									recov																
									ınd cle																
							Inspe	ct an	d clea	ın gar	den h	ose s	screer	n											
				Vis	ually i	nspe	ct mad	chine	for lo	ose v	vires,	oil lea	aks, w	vater	leaks	, etc									
	Inspe	ect re	cover	y tan	k staiı	nless	steel	filter	for clo	oggin	g or d	amaç	ge; cle	ean, r	epair	or re	olace	as ne	eeded						
Inspect and clean the	e vac	uum s	slot o	n the	clean	ing w	and. V	Vatch	n for s	harp	edge	s that	may	tear t	the ca	rpet;	remo	ve an	ny sha	ırp ed	ges a	as req	uired		
	Lu	brica	te blo	wer lu	ube po	ort wi	th a H	ydral	Maste	r-rec	omme	ended	spra	y lubr	icant	(P/N	000-0	087-0	06)						
					INT		AL IN																		
Engine oil and filter Pump oil *						CI	nange	oll a	nd filte		_		first 5			_	cheve	er cor	nes fi	rst					
Blower oil **							U	se Ae	eon P		_		hange				nours	of us	e.						
SERVICE	8	25	50	75	100	125			200					325		375	400	425		475	500	525	550	575	600
Float switches		C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I
Check around vehicle and CDS xDrive for evidence of			СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН
oil/fluid leaks			ОП	СП	ОП	ОП	ОП	ОП	ОП	СП	СП	ОП	ОП	ОП	OH	ОП	ОП	ОП	CH	ОП	ОП	ОП	ОП	СП	СП
All belts and pulleys (check for			СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН
wear)			011	011	OII	OII	OII	OII	51	511	511	OIT	OII	011	011	511	011	011	U11	011	011	011	511	J	011
High pressure lines - internal (check for chafing)			СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН
Recovery tank (clean																									
thoroughly with high pressure			C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I
washer)																								ш	
Chemical container - remove and clean			C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I
Blower inlet filter inside																									
recovery tank			C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I
Vehicle engine rpm on CDS			СН	СН	СН	CH	CH	СН	СН	СН	СН	СН	СН	СН	CH	CH	CH	CH	CH	СН	CH	CH	CH	CH	CH
Hoses and quick connects; check for wear; replace as			СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН
needed			011	OII	OII	OII	OII	OH	OII	OII	OII	OII	OII	OII	011	OII	011	011	"	011	011	011	OII		011
* Pump oil, GP series 100			R	СН	СН	СН	СН	СН	СН	СН	СН	СН	R	СН	СН	CH	СН	СН	СН	СН	CH	СН	CH	СН	R
Vacuum Relief Valve -		C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I
inspect, clean SERVICE	8	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600
Flush chemical system with		25		75	F	120		175		220		210		323		373		723		4/5		323		5/5	
vinegar			F		F		F		F		F		F		F		F		F		F		F		F
All fasteners; tighten as needed ***			СН		СН		СН		СН		СН		СН		СН		СН		СН		СН		СН		СН
Engine air cleaner filter					C/I				C/I				C/I				C/I				C/I				C/I
Battery connections					C/I				C/I				C/I				C/I				C/I				C/I
Blower drive belt (P/N 000-					СН				СН				СН				СН				СН				СН
010-009) Chemical pump valves and			\vdash														<u> </u>							\blacksquare	
diaphragm											СН										СН				
Chemical pump											СН										СН				
Vehicle fuel lines (chafing or											СН										СН				
wear) All wiring harnesses (chafing																									
or wear)											СН						1	1			СН				
** Blower oil					R												R								
SERVICE	8	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600
Blower Heat Exchanger																					C/I				
Check all phase cable connections and phase cable																					СН				
for damage or overheating														L		L	L	L	L	L	L		L	<u> </u>	<u> </u>
									Perf	orm o	comp	ete v	ehicle	mair	ntena	nce y	early								
Van's cooling system; add new anti-freeze																									
Van's transmission fluid																									
vario tranomiosion nulu																									

- * Refers to pump oil

 ** Refers to blower oil

 *** Check blower, front end fasteners

Adjust	Α
Check	CH
Clean and Inspect	C/I
Clean and Lubricate	C/L
Flush	F
Lubricate	L
Replace	R

CAUTION

References to van maintenance in this section in no way relieve customer of responsibility to follow all Ford maintenance procedures.



MAINTENANCE CHART - 675 TO 1200 HOURS

					AILY	MAII	NTEN	ANC	E CD	S xDr	rive -	FOR	D TR	ANSIT								
									k engi													
							(Checl	k blow	ver oil	level											
								Chec	k pun	np oil	level											
							Emp	ty rec	overy	/ tank	inlet	filter										
						lr	spec	t and	clean	orific	e and	d filter	s									
						Ins	pect a	and cl	ean q	arder	n hose	e scre	en									
			\	/isuall	v inst	pect n	nachii	ne for	loose	e wire	s. oil	leaks	. wate	er leaks	s. etc							
In	snect	recov														lace a	s need	led				
Inspect and clean the v			<u> </u>							_									ednes	as ren	uired	
•					_					•	•		•				37-006	•	cugoo	uo req	uncu	
	Lubin	cate i	JIOVVC											NSIT	t (1 /1 4	000-00	37-000	,				
Engine oil and filter	Г			•											ns, whi	cheve	r come	s first				
Pump oil *														ours o								
Blower oil **							_								t 100 l		_					
SERVICE Float switches	675																1200					
Check around vehicle and	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	G/I	C/I	C/I
CDS xDrive for evidence of	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН
oil/fluid leaks																						
All belts and pulleys (check for wear)	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН
High pressure lines - internal																						
(check for chafing)	CH	CH	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	CH	СН	CH	CH	CH	CH	CH	СН	CH
Recovery tank (clean																						
thoroughly with high pressure washer)	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I
Chemical container - remove																						
and clean	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I
Blower inlet filter inside	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I
recovery tank																						
Vehicle engine rpm on CDS Hoses and quick connects;	CH	CH	CH	CH	СН	CH	СН	CH	СН	СН	СН	CH	CH	CH	CH	CH	CH	CH	CH	CH	CH	CH
check for wear; replace as	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН	СН
needed																						
* Pump oil, GP series 100	CH	CH	CH	СН	СН	CH	СН	CH	СН	R	СН	СН	СН	CH	CH	CH	CH	CH	CH	CH	CH	R
Vacuum Relief Valve - inspect, clean	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I	C/I
SERVICE	675	700	725	750	775	800	825	850	875	900	925	950	975	1000	1025	1050	1075	1100	1125	1150	1175	1200
Flush chemical system with		F		F		F		F		F		F		F		F		F		F		F
vinegar				L.				Ŀ		·										·		·
All fasteners; tighten as needed ***		СН		СН		СН		СН		СН		СН		СН		СН		CH		СН		CH
Engine air cleaner filter		C/I				C/I				C/I				C/I				C/I				C/I
Battery connections		C/I				C/I				C/I				C/I				C/I				C/I
Blower drive belt (P/N 000-010-		СН				СН		1		СН				R				СН				СН
009) Chemical pump valves and																						
diaphragm				СН										CH								
Chemical pump				СН										СН								
Vehicle fuel lines (chafing or				СН										СН								
wear) All wiring harnesses (chafing																						
or wear)				СН				1						CH								
** Blower oil						R																R
SERVICE	675	700	725	750	775	800	825	850	875	900	925	950	975	1000	1025	1050	1075	1100	1125	1150	1175	1200
Blower Heat Exchanger Check all phase cable														C/I								
connections and phase cable														СН								
for damage or overheating		<u> </u>	L				$ldsymbol{ld}}}}}}$	Ļ		Щ							<u> </u>	L				
Vania analing quaterns1-1					Р	erforr	n con	nplete	vehi	cle ma	ainter	nance	yearl	y				ı				
Van's cooling system; add	1		l	1		Ī	ı	ı		1 1					1	1	i l	ı	F			1
new anti-freeze																			г			

- * Refers to pump oil
- ** Refers to blower oil
- *** Check blower, front end fasteners

Adjust	Α
Check	СН
Clean and Inspect	C/I
Clean and Lubricate	C/L
Flush	F
Lubricate	L
Replace	R

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