SANDY SPRING VOLUNTEER FIRE DEPARTMENT

Boat Support 740 Driver Operator Training
MCFRS ID 8-17-4156
June 2018

OBJECTIVE

- Upon the completion of the Boat Support 740 Delivery Training the driver operator candidate will be able to identify components and safely operate the apparatus and it's associated equipment in accordance with manufactures specifications and unit design.

BEFORE OPERATING

- All Driver Operators shall read the Ram Owners manual before driving or operating the unit.

- All equipment manuals shall be read before using the equipment.

SECTION 1

Vehicle and Safety Information

SPECIFICATIONS

- 2017 Ram 5500 4x4
- 6.7 L Cummins Turbo Diesel Engine
  - Output: 325 hp @ 2,900 rpm   Torque: 750 lb. ft@ 1,600 rpm
- 6 speed Automatic Aisin AS69RC Heavy Duty Transmission
- 4.44 Axle Ratio
- Dual Alternators rated at 440 amps, electronic voltage monitoring module/ Idle up system
- PTO Prep and Upfitter Electronic Module (VSIM)
- Heavy Duty Front Suspension Group
- Transfer Case Skid Plate Shield, and other underbody protection
- Trailer Brake Controller
- Security Alarm
- GVWR: 19,000 Lbs.
- GAWR Front: 7,250 lbs.
- GAWR Rear: 13,500 lbs.
- Payload: 10,320 lbs.
- Towing Capacity: 17,170 lbs.
- GCWR: 26,000 lbs.
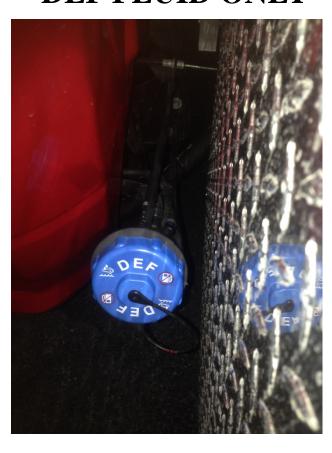- Wheelbase: 173.4"
- Seats: 5

SPECIFICATIONS

- Boat Support 740 loaded with BT740B and equipment:
- GVW Total: 13,100 lbs.
- Overall Length: 24'0" (including rear hitch)
- Overall Width (Mirror to Mirror):
  - Mirrors down: 8'7.5" (103.5")
  - Mirrors Up: 9'1" (109")
- Overall Height: 9'0" (108")

FLUID FILLS AND CAPACITIES

- Diesel Fuel Capacity:
  - 52.0 gallons
- DEF Capacity:
  - 9 gallons MOPAR DEF or API Certified to ISO 22241
  - Do not "Top Off" DEF Fluid. Allow DEF fluid to run low.
- Oil Type and Capacity:
  - 12 Quarts with filter 15W-40 MOPAR or meets Chrysler Materials Standard MS-10902 and the API CJ-4 engine oil category (Shell Rotella and Shell Rimula)
- Transmission Fluid:
  - MOPAR ASRC Automatic Transmission Fluid or equivalent
- Coolant:
  - 5.7 Gallons MOPAR Antifreeze/ Coolant Ten Year/ 150,000 Mile formula
- Power Steering Fluid:
  - MOPAR Power Steering Fluid +4 or MOPAR ATF +4 automatic transmission fluid
- Brake Fluid:
  - MOPAR DOT3 and SAE J1703. DOT 4 can be used if DOT 3 is not available.
- Front and Rear Axle Fluid:
  - Synthetic GL-5 SAE 75W-90.
- Transfer Case:
  - MOPAR BW44-44 Transfer Case Fluid
- Lubrication Points:
  - MOPAR Multi-Purpose Grease, NLGI Grade 2 E.P. or equivalent

DIESEL AND DEF FILL

DEF FLUID ONLY

DIESEL FUEL ONLY

UNDER THE HOOD

- Fluid Checks
- DOT inspection
- (2) Circuit Breakers for accessories
  - If tripped, send an email to fleet@ssvfd.com
  - This indicates that there might be a significant electrical problem

REGENERATION

- Ram vehicles do not have manual regeneration
- They do utilize DEF (Diesel Exhaust Fluid)
  - DEF does not have a long shelf life.
  - Again, Do not "Top Off" DEF Fluid. Allow DEF fluid to run low to 1/4 tank, then refill.
- Under typical operating conditions, No indications of regeneration state will be displayed.

REGENERATION

- If the message "Exhaust System- Regeneration Required Now" message appears on the cluster screen, the truck needs to be driven at highway speeds for a minimum of 45 minutes.
- Electronic Vehicle Information Center (EVIC) Messages:
  - Exhaust System- Regeneration Required Now
    - Displayed when DPF filter reaches 80% capacity
  - Exhaust Filter XX% Full
    - Displayed when DPF Filter is approaching full
  - Exhaust System- Regeneration in Process Exhaust Filter XX% Full
    - Indicated DPF is self cleaning . Maintain current driving condition until regeneration is completed
  - Exhaust System- Regeneration Completed
    - Message confirms DPF cleaning is completed
  - Exhaust Service Required- See Dealer Now
    - Indicates regeneration has been disabled due to a system malfunction. The Powertrain Control Module (PCM) will register a fault code and the instrument panel will display the Malfunction Indicator Light (MIL).
      - Record this fault code for the defect report. **Place vehicle Out of Service.**
  - Exhaust Filter Full- Power Reduced See Dealer
    - Power will be reduced to protect engine. **Place vehicle OOS.**

WATER IN FUEL MESSAGE

- If the "Water In Fuel" indictor comes on:
  - DO NOT START THE ENGINE
  - PLACE UNIT OUT OF SERVICE

TIRE INFORMATION & INFLATION

- Front Tires:
  - 225/70R19.5G All Position FT/RR Traction
  - Pressure: *80 PSI COLD*

- Rear Tires:
  - 225/70R19.5G All Position FT/RR Traction
  - Pressure: *70 PSI COLD*

SECTION 2

Cab, Dash, and Console Controls

STARTING PROCEEDURE

1. Place Key in Ignition

2. Turn to on

3. Wait until glow plug light turns off

4. Start Engine

SHUT DOWN PROCEEDURE

- Let the engine run at idle for at least two minutes before shutting it down, to allow the turbo to properly cool.

CAB CONTROLS

CAB CONTROLS

- You can control the HVAC and the Radio from the screen or manually below the screen

- The screen has more selections for the user

- When placed into reverse, the screen becomes the backup camera.

DASH CONTROLS

Dash controls are on the steering wheel

DASH CONTROLS

- Status screen allows you to view the engine status as well as other vehicle readings very precisely (digital display vs. standard analog dash display)

UCONNECT 8.4 RADIO

- The Screen has many features. It controls the:
  - Radio
  - Media
  - Climate
  - Navigation (not activated at this time)
  - Cell Phone
    - Do not recommend syncing your cell phone to the Boat Support. All of your contacts, messages, and more will be uploaded to the truck.
  - When placed into reverse, camera view will show up on the screen

RADIO CONNECTIONS, 12 VDC POWER, AND USB OUTLET

- You can connect into the radio using the USB connection or 6mm audio connection, located on the rear top of the console
- There are three 12 VDC power points
  - Ignition Hot
    - One below the key ignition (12 VDC @ 13 amps)
  - Battery Hot (Always on)
    - Two on the rear top of the console (12 VDC @ 15 amps)
- USB Charging Outlets
  - Battery Hot (Always on)
    - Two sets of USB Outlets (5VDC @ 2.1 amps each)

NOTE: When charging or using devices plugged in to the unit, please make sure the engine is running or the shoreline is plugged in.

CONSOLE- EMERGENCY AND SCENE LIGHTING

Auxiliary 1 to 4: Off-road Lighting

•Aux 1- Front Bumper Driving Lights

•Aux 2- Front Lightforce Lights

•Aux 3-Driver Side Body Flood Lights

•Aux 4-Officer Side Body Flood Lights

Havis Switch Row 1:

•Emergency Lighting

•Switch 1- Master

•Switch 2 to 7 are other sections that can be turned on/ off as needed. The MASTER does not need to be on for switches 2 to 7.

Havis Switch Row 2:

•Switch 8: Arrowstick Left

•Switch 9: Arrowstick Right

>•Switch 8 and 9 is center out
>
>•Switch 8 and/ or 9 override Switch 7, Arrowstick in Red emergency mode.

•Switch 10- Take Down (Whelen Freedom Bar)

•Switch 11- Left Alley (Whelen Freedom Bar)

•Switch 12- Right Alley (Whelen Freedom Bar)

•Switch 13- Rear Flood Lights

•Switch 14 Ground and compartment lights

CONSOLE- SIREN CONTROLS

- Whelen Siren
  - Turn on power switch
  - All siren tones can be turned on by the console control switch or RAM horn
  - Siren can be used as a PA
- Powercall Siren
  - Flip up red cover and turn switch to "on". Flip cover down to turn off.

MOTOROLA 8500 MOBILE RADIO

- The radio is connected to three speakers

  1) Cab on the back of the console

  2) Interior of the body at the rear, on the ceiling

  3) Turn the Whelen Siren to "Radio" mode, and it will project through the front speaker.

     Note: The front speaker is controlled by the radio volume knob, and not the Whelen Siren volume control.

- The radio is programmed for all normal channels, SOPS, and VHF.

- GPS tracking is enabled

MOTOROLA MCFRS FLEET MAP

- The 8500 is not available yet, however, the 7500 Fleetmap has all the channels
  - except AACO FD1 (between FRED and CRF1)

MCFRS Boat APX 7500

Accessed using the "**Chan**" radio menu option

Zone	Name	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R/S
RIZ	DC FEMS RIZ	UUC 1	UUC 2	UUC 3	UUC 4	MA 1	MA 2	MAF 1	MAF 2	EMA 1	EMA 2	BLANK	BLANK	BLANK	SPARE 1	SPARE 2	CW 1		
0H	DC FEMS	1 UMC	2 CNMC	3 NOTIFY	4 MEDSTAR	5 HUH	6 PIW	7 GTOWN	8 WGUH	9 UMCPED	10 PROV	11 POISON	12 SIBLEY	13 WHC	14 SPARE	15 VA	16 PGHC		
0B	DC FEMS	1 DISP	2 MAIN	3 INC 50	4 VRS 10	5 INC 51	6 INC 52	7 INC 60	8 VRS 20	9 INC 61	10 INC 62	11 SOD 1	12 SOD 2	13 SPEV3	14 SPEV 4	15 VRS	16 DIR		
0A	DC FEMS	1 DISP	2 MAIN	3 INC 30	4 VRS 30	5 INC 31	6 INC 32	7 INC 40	8 VRS 40	9 INC 40	10 INC 42	11 EMS 3	12 EMS 2	13 EMS 3	14 EMS 4	15 VRS	16 DIR		
0	DC FEMS	1 DISP	2 MAIN	3 INC 10	4 VRS 10	5 INC 11	6 INC 12	7 INC 20	8 VRS 20	9 INC 21	10 INC 22	11 EMS 5	12 EMS 6	13 SPEV1	14 SPEV 2	15 DIR2	16 DIR1		
1	Arlington FD	DISP	RESP	INC1	TAC1B	TAC1C	CMD1	INC2	TAC2B	CMD2	INC3	TAC3B	CMD3	VRS	T/A	REGRP			
A1	Arlington FD	DISP	RESP	SPEVT1	SPEVT2	SPEVT3	SPEVT4	SPEVT5	SPEVT6	SPEVENT-CMD	LOG-W	LOG-OPS	LOG-CMD	BOMB-TAC	BOMB-CMD	T/A	FT MYER		
B1	Arlington FD	DISP	RESP	FPO1	FPO2	FPO3	FPO4	TINC1	TTAC1B	TTAC1C	TCMD1	TINC2	TTAC2B	TTAC2C	TCMD2	T/A			
2	Alexandria FD	DISPATCH	BRAVO	CHARLIE	DELTA	ECHO	FOXTROT	GOLF	HOTEL	INDIA	JULIET	KILO	LIMA	MIKE	AX HOSP	T/A	DISPATCH	REGRP	
3	MWAA FD	DISP	RESP	INC1	INC2	INC3	CMND 1	CMND 2	ADMIN	AMP CCF	UNP CMND	K	L BU 1	M BU2	IAD ALERT	SAFETY	DISP	REGRP	
41	FFX FD Alt	DISP	RESP	INTER	D	E	F	G	H	I	J MC 1	K MC 2	L GF 1	MGF2	N T/A	SAF	DISP		
43	FFX FD Alt	DISP	B	L	D	E	F	G	H	I	J	K	L	M E	N T/A	SAF	DISP		
48	FFX FD BU	AISP	RESP	INTR	D	E	F	G	H	I	J	K	L	M	N T/A	SAF	DISP		
5	PW FIRE	DISP	RESP 1	INC1	D	E	F	G	H	I	J	K	L INC2	M KNX	N TAS	SAF	DISP		
51	PW FIRE	DISP	RESP 2	INC3	D	E	F	G	H	I	J	K	L INC4	M KNX	N TAS	SAF	DISP		
6	Loudoun FD	DISP	RESP	CD10	TC11	TC12	TC13	CD20	TC21	TC22	TC23	CD30	TC31	TC32	SFT1	SFT2	RESP	REGRP	
N	NIST	FIRE	POLICE	Safety	Reactor	Emergency	Announce	NIST SEC	Plant	BLANK	BLANK	BLANK	BLANK	BLANK	VRS 1	FDTA	OPS		
L	GOVT EMG	LGEM 1	LGEM 2	LGEM 3	LGEM 4	LGEM 5	LGE ANN	LGCRD1	LGCRD2	LGCRD3	LGCRD4	LGCRD ANN	LGEM SEC	VRS1D	VRS 1 R	RINS1 D	911		
J	PUBL SAFETY	SEV 1	SEV 2	SEV 3	SEV 4	SEV 5	SEV 6	SEV ANNC	PS 1	PS 2	PS 3	PS 4	PS ANNC	VRS3 D	VRS 3 R	RINS3 D	RINS2 D		
I7	IMT	IMT1 CMD	IMT 2 OPS	IMT3 LOGS	IMT 4	IMT 5	IMT 6	A7 TACA	IMT 8	IMT 9	IMT 10	IMT 11	IMT 12	VRS1	VRS 3 R	RINS3	OPS		
I	MCU	FD TAC92R	EMG SOUTH 1	D3	EMG NORTH 1	EMG NORTH 2	BLANK	A7 TACA	Takoma PK	Rock City	Gaith FCTC	MSP RockIN	ICC IDF	MC Park PC	MC Security	MCPS Secrty	OPS		
	MCU	Rockville	Bethesda	Silv Sprg	Wheaton	Germtwn	Mont Vill		BETHESDA	CLARKSBURG	DAMASCUS	DARNESTWN	DICKERSON	GAITHERSBG	OLNEY	TAKOMA PK			
V7	VHF MCFRS	A DISPR	B DPSR	C RockR	D BethR	E VMED28D	F UTU'D	G UTUD	H DPSD	I VSAR 16D	J VTAC 14D	K VFIRE 23D	L VFIRE 23D	M-VFIRE 24D	N 8TAC91R	O FDTA	OPS T		
7 FG	Main	DISP	OPS	INC10	INC11	INC12	VRS 1	INC20	INC21	INC22	VRS 1	ALT 7K	FD SEC 7L	FD SEC 7M	VRS 1	FDTA	OPS OPS		
71 FG	Alt	DISP	OPS	INC30	INC31	INC32	VRS 1	INC40	INC41	INC42	VRS 1	ALT 71K	FDSEC71L	FDSEC71M	VRS 1	FDTA	OPS v16		
72 FG	EMS	DISP	OPS	EMRC	CNSL1	CNSL2	INC50	INC51	INC52	VRS2	INC60	INC61	INC62	VRS2	VRS2	FDTA		HNET	
73 FG	SOPS	DISP	OPS	SOPS10	SOPS11	SOPS DIR	SOPS20	SOPS21	SOPS22	SOPS Adm	GreatFalls	MARINE 16	MARINE 22A	SOPS VRS	SOPS VRS	OPS	Wx Manassas Wx Pikesville	Wx DC	
74 FG	Secure	DISP	OPS	INC70s	INC71s	INC72s	ANNC70s	INC80s	INC81s	INC82s	ANNC80s	ALT74Ks	ALT 74Ls	ALT74Ms	SECVRS	SEC DIR	OPS		
75 FG	Coord	DISP	OPS	FD MDTF1Sec	FD RailSec	FD HM Sec	WRTSec	FS50 Sec	FS51Sec	FS52Sec	FS53 Sec	ALT74Ks	BLANK	BLANK	FDTA	OPS		
76 FG	Admin	Senior Staff	OPSAdm	IA	FEI	CODE	CMF	PSTA 1	PSTA 2	PSTA 3	PSTA 4	LFRD 1	LFRD2	FDAdm	MC Security	MCPS Secrty	RADIO	REGRP	0
78FG	Batt	DISP	OPS	BATT1	BATT2	BATT3	BATT4	BATT5	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	VRS3	FDTA		
79	Hosp Secure	Holy Cross	Mont Med Ctr	Nat Mil Med	Shady Grove	Suburban	Wash Advent	ALL HOSP	HANNC	MED Star	Children's	SIBLY	Holy-X-GT	GeorgeWash	INOVA	HCGHAdult	HCGHPed		
*79	Hosp Clear	Holy Cross	Mont Med Ctr	Nat Mil Med	ShadyGrove	Suburban	Wash Advent	ALL HOSP	HANNC	MED Star	Children's	SIBLY	Holy-X-GT	GeorgeWash	INOVA	HCGH Adult	HCGH Ped		
8A	PG North	A1-DISP	A2-OPS1	A3-INC 50	A4-INC 51	A5-INC 52	A6-CMD 50	A7-INC 60	A8-INC 61	A9-INC 62	A10-CMD 60	A11-NSTR ALRM 1	A12-NSTR ALRM 2	A13-ADM	A14-DVRS	A15-FD TA	A16-OPS 1	REGRP	
8B	PG EMS	B1-DISP	B2-OPS1	B2-OPS2	B4-RESCUE1	B5-RESCUE2	B6-MED CALL	B7-MED A	B8-MED B	B9-MED C	B10-INC 10	B11-INC 11	B12-INC 12	B13-CMD10	B14-ADM C14-	B15-FD TA	B16-OPS 1		
8C	PG South	C1-DISP	C2-OPS 2	C3-INC 70	C4-INC 71	C5-INC 72	C6-CMD 70	C7-INC 80	C8-INC 81	C9-INC 82	C10-CMD 80	C11-S STR ALRM1	C12-S STR ALRM2	C13-ADM D13-	DVRS D14-	C15-FD TA	C16-OPS 2		
8D	PG SOPS	D1-DISP	D2-OPS 1	D3-TAC 10	D4-TAC 11	D5-TAC 12	D6-TCMD 10	D7-TAC 20	D8-TAC 21	D9-TAC 22	D10-TCMD 20	BLANK	BLANK	ADM SE12-	DVRS SE12-	D15-FD TA	D16-OPS 2		
8SE	SP EVENT	SE-1SPEV 1	SE2-SPEV 2	SE3-SPEV 3	SE4-SPEV 4	SE5-SPEV 5	SE6-SPEV 6	SE7-SPEV 7	SE8-SPEV8	SE9-SPEV 9	SE10-SPEV 10	SE11-SPEV 11	SE12-SPEV 12	SPEV13	SPEV14	D15-TA SE15	SE12-SPEV16	9CMA	
9	Fred FD	DISP	EMS 1	FIRE 1	TAC 10	TAC 11	TAC 12	TAC 13	TAC 14	TAC 20	TAC 21	TAC 22	TAC 23	TAC 24	VRS	RINS5D	DISP	REGRP	
91	Fred FD	DISP	EMS 2	FIRE 2	TAC 30	TAC 31	TAC 32	TAC 33	TAC 34	TAC 40	TAC 41	TAC 42	TAC 43	TAC 44	VRS	RINS5D	DISP		
92	Fred FD	DISP	ADMIN	CALL 1	MULTI-3	MED 4	BLANK	BLANK	BLANK	TRN 50	TRN 51	TRN 52	TRN 53	TAC 54	VRS	RINS5D	DISP		
Fred	Multi	MULTI-CALL	MULTI-2	MULTI-3	MULTI-4	MULTI-5	MULTI-6	7FG10	8FG11	9FG12	TTAC51D	TTAC51R	TTAC51D	TTAC51D	TTAC53R	TTAC54R		
CRF1	Carroll	A1 MAIN	A2 FIRE	A3EMS1	A4 CALL801	A5 MED 804	A6 MED 808	A7FG10	A8FG11	A9FG12	A10FG13	A11FG20	A12FG21	A13FG22	A14FG23	A15 FDTA	A16DISP		
CRF2	Carroll	B1 MAIN	B2FIRE	B3EMS2	B4 BLNK	B5 BLNK	B6 BLNK	B7FG30	B8FG31	B9FG32	B10FG33	B11FG40	B12FG41	B13FG42	B14FG43	B15FDTA	B16DISP	REGRP	
HOF A	Howard A	A1 DISP	A2OPS1	A3OPS2	A4 HCGHA	A5 HCGHP	A6 BAT 1	A7BAT2	A8 EMKX	A9 NDP1	A10 SDP1	A11 FDELK	A12 PDELK	A13 FIOP12	A14RINS5D	A15RINS6D	A16 DISP	REGRP	
HOF B	Howard B	BRAVO 1	BRAVO 2	BRAVO 3	BRAVO 4	B5-WATER	B6-STAGE	BRAVO 7	B8-EMKX	B9-NDP1	B10-SDP1	B11-MPTY	B12-MPTY	B13-IFOP10	B14-RN5D	B15-RN6D	B16BRAVO1		
HOF C	Howard C	CHARLIE 1	CHARLIE 2	CHARLIE 3	CHARLIE 4	C5-WATER	C6-STAGE	CHARLIE 8	C8-EMKX	C9-NDP1	C10-SDP1	C11-MPTY	C12-MPTY	C13-FIOP11	C14-RN5D	C15-RN6D	C16 CHARLIE1		
HOF D	Howard D	DELTA 1	DELTA 2	DELTA 3	DELTA 4	D5-WATER	D6-STAGE	DELTA 7	D8-EMKX	D9-NDP1	D10-SDP1	D11-MPTY	D12-MPTY	D13-RN5D	D14-RN5D	D15-RN6D	D16DELTA1		
MARINE	VHF	6 Safety	7A Commercial	8 Commercial	9 Calling	10 Commercial	11 Commercial	12 Port Ops	13 Bridge Nav	14 Port Ops	16 Distress	17 St & Lc Gov	18A Commercial	19A Commercial	20 Port Ops	20A Port Ops	21A USCG	22A USCG 23A USCG	More +
MD	1st Call	MD CALL	MD TAC1	MD TAC2	MD TAC3	MD TAC4	MD TAC5	MD TAC6	MD TAC7	MD TAC8	MD TAC9	MD TAC10	MD TAC11	MD TAC12	MD TAC13	MD TAC14	MD TAC15	Regroup	
MA11	VHF	VCALL 10	VTAC11 LE	VTAC12 LE	VTAC13 LE	VTAC14 LE	VTAC33 LE	VTAC34 LE	VTAC35 LE	VTAC36 LE	VTAC37	VTAC3B							
MA12	VHFLE	LE 1	2 VFIRE22	3 VFIRE23	4 VFIRE24	5 VFIRE2S	6 VFIRE26	7 VMED29	8 VMED29	9 VLAW31								
MA13	VHF	VHFIR	IR 1	IR 2	IR 3	IR 4	IR 5	IR 6	IR 7	IR 8	VLAW32							
MA14	VHFIR	1 7CALL5D	7CALL50D	7CALL70 D	7TAC71 R	7TAC72 R	7TAC73 R	7TAC73 R	7TAC53 R	7TAC54R	IR 9	SAR NFM	MARINE 16	MARINE 17	VTAC 14				
MA71	700 MHz	R	7CALL70 D	7LAW61 D	7LAW62 D	7LAW81 R	7LAW81 D	7LAW82 R	7LAW82 D	7MOB99 R	7TAC54D	7TAC5BR	7TAC75D	7TAC7BR	7TAC56D				
MA72	700 FD	7CALL70 R	7LAW61 D	7LAW62 D	7LAW82D	7LAW81 R	7LAW82D	7MOB99 R	7MOB99 D	7TAC74 R	7TAC74 D	7TAC75 R	7GTAC57D	7TAC7N D	7TAC56D				
MA73	700 LE	7LAW61 R	7FIRE63D	7LAW64D	7MED65D	7MED65D	7MED66R	7MED66D	7FIRE83R	7MOB99 D	7GTAC57 R	7GTAC57D	7GTAC77 R	7MED56R	7MED66D				
MA74	700 FD	7FIRE63R								7FIRE83D	7FIRE84R	7FIRE84D	7FIRE84D	7MED8BR	7MED66D	7MED87R	7MED87D		
MA81	800 Nat	8CALL90R	8TAC91 R	8TAC92 R	8TAC93 R	8TAC93 R	8TAC93 R	8TAC94 R	8TAC94 R	BLANK	BLANK	BLANK	VRS 3D	VRS 3R	70 FDTA			
MA82	800 Regnl	RINS 1R	RINS 1D	RINS 2R	RINS 2D	RINS 3R	RINS 3D	RINS4 R	RINS 4D	RINS 5R	RINS 5D	RINS 6R	RINS 6D	VRS3D	VRS3R	7O FDTA	7P OPS		

VHF RADIO

- VHF Radio can turned on using the volume knob.
- The VHF radio has all the VHF Channels (more than the Motorola 8500 Mobile Radio)

MARINE VHF RADIO CHANNELS LIST

01A	20
05A	20A
06	21A
07A	22A
08	23A
09	24
10	25
11	26
12	27
13	28
14	63A
15	65A
16	66A
17	67
18A	68
19A	69
20	70
	71

MOBILE RADIO OPERATIONS

- The Motorola 8500 Mobile radio is primary
- As incidents build out, multiple channels may be used for different divisions and/ or to assist with communications
- If having radio problems
  - 7O
  - 7N (If VRS is available)
  - VHF (ECC and also patch with 800 MHz)

MOBILE RADIO OPERATIONS

- The VHF marine mobile radio can enhance operations in a few ways
  - Communicate with other personnel
  - Communicate with boaters
    - Example: Triadelphia Reservoir has boaters that utilize small to medium size craft with VHF radios.
  - VHF usually works well when the 800 MHz radios do not.

TOW/ HAUL MODE

- From Ram: "When towing in hilly areas, towing a heavy trailer, carrying a heavy load, etc., and frequent transmission shifting occurs, press the TOW/HAUL switch to select TOW/HAUL mode.
- This will improve performance and reduce the potential for transmission overheating or failure due to excessive shifting.
- When operating in TOW/HAUL mode, transmission up-shifts are delayed, and the transmission will automatically downshift (for engine braking) during steady braking maneuvers."
- If you need Tow/Haul, you need to activate it each time the engine is started

INTEGRATED TRAILER BRAKE CONTOLLER

- Works with electric and electric over hydraulic (EOH) trailer braking systems
- Adjust GAIN by pressing +/- buttons above the manual trailer brake activation slide switch
  - SSVFD trailers use between 2.5-3.5 GAIN. If the trailer brakes grab hard when pressing the vehicle brakes, lower the GAIN setting number.
- If trailer begins to sway, DO NOT press vehicle brake. Manually squeeze trailer brake controller until sway stops, usually 1-3 seconds.

EXHAUST BRAKE

- Full Power- press switch 1 time (yellow icon)
  - Applies full braking power when accelerator is released
- Smart Brake- press switch 1 more time (green icon)
  - Does not active when accelerator is released
  - Activates full braking power when brakes are applied.
- Off- press switch 1 more time

EXHAUST BRAKE

- Higher engine speeds result in higher exhaust braking force. For optimal braking power, use the exhaust brake with Tow/ Haul mode.

- DO NOT use the exhaust brake when driving in slippery or icy conditions.

ELECTRONIC STABILITY CONTROL (ESC)

- If the Electronic Stability Control (ESC) light flashes, use the least amount of throttle needed.

- Adapt your speed and driving to the conditions at hand.

- If in deep mud, snow, sand, gravel, etc., the ESC can be switched off if needed.

PTO PROVISION

- PTO Provision is not currently used

HIGH IDLE

- The engine will idle up when more power is needed for accessories, however, idling for long periods of time is bad for the engine.

- The engage high idle:

  1) Make sure the Boat Support is in park, and the parking brake is set

  2) Turn on cruise control

  3) Press and hold "SET" for about 3 seconds (the RPM should rise to approximately 1200 RPM).

SECTION 3

Body Information

BODY SPECIFICATIONS

- Reading Steel Body
- Model SPM48-108DW
- Compartments for gas storage and gas powered tools
  - D1: Driver side lower front compartment
  - D2: Driver side lower middle compartment
  - D3: Driver side lower rear compartment

SECTION 4

Circle Check

CIRCLE CHECK

- Before moving the Boat Support, do a circle check per policy.
- In addition, don't forget to check on two additional items:
  - Boat 740 Bravo
    - Properly secured with all 4 straps
  - Boat 740 Bravo Motor
    - Properly secured on mount

SECTION 5

Off Road Operations

OFF ROAD OPERATIONS

- Make sure compartment doors are closed and all equipment is secure

- Check clearance, especially with the boat on top

- Trailering in muddy terrain can be difficult. The trailer acts as an anchor, and will make access much harder.

FOUR WHEEL DRIVE

- There are no manual hubs to engage 4 wheel drive
- The manual selector is on the floor, to the right of the driver
- 4 wheel high can be engaged while moving
- 4 wheel low needs to be engaged when stopped
- Be careful not to shift the gearbox into neutral. When putting the transfer switch is in neutral and the transmission is in park, the truck is still in neutral, and will roll.
- Always use the parking brake and wheel chocks, on and off road!

FOUR WHEEL DRIVE

- If stuck:
  - Engage 4 Wheel Drive Low Range
  - Disable Electronic Stability Control (ESC)
  - Do not spin tires above 15 mph
  - You can use "Rocking:"
    - Turn the wheels right and left to clear the area around the wheels
    - Shift back and forth between DRIVE and REVERSE while gently pressing the accelerator.
      - After every 5 rocking cycles, place transmission into NEUTRAL to cool down for at least 1 minute
      - Do not spin tires above 15 mph

WINCH AND ANCHOR POINTS

- Smittybilt Winch located in the Buckstop bumper
  - Bumper cover can be removed to access winch.
    - Place in the cab when not using!
- Anchor Locations
  - (2) front tow hooks
  - Front Hitch
    - Will have the D ring shank in as the default

Winch Specifications

- Winch: Smittybilt XRC 17.5 Gen2 Waterproof
- Pulling capacity up to 17,500 lbs.
- Remote control with 12' lead and LED indicator for operator feedback
- 94' of 7/16" cable with hook and roller fairlead

WINCH SPECIFICATIONS

Cable Layer	Rated Line Pull	Cumulative Cable Capacity
1	17,500 lbs	19.68 ft
2	14,583 lbs	45.92 ft
3	12,411 lbs	75.44 ft
4	10,822 lbs	93.48 ft

Line Pull (Lbs.)	Line Speed (Ft/ Min)	Motor Current
0	22.632	75 amps
3000	10.824	140 amps
6000	7.872	210 amps
9000	6.232	270 amps
12000	5.248	330 amps
15500	3.936	390 amps
17500	3.2472	435 amps

WINCH OPERATIONS

- Link to MANUAL (Model 97417)

WINCH MAINTENANCE

- Run the winch **MONTHLY** at a minimum! This gets the gears lubricated, which extends the life of the unit.

- Smittybilt recommends (Page 12):
  - It is highly recommended that the winch be used regularly (once a month). Simply power the cable out 15m (49 feet), free spool 5m (16 feet), and then power back in.

AFTER OFF-ROADING

- Disengage 4 wheel drive
- Make sure no mud or debris are stuck between the dual tires
- Check Tire Pressure
- Wash the unit, including the underbody

SECTION 6

Towing

TOWING

- Rear Hitch
  - 2.5 inch, Class V Hitch
  - 20,000 lbs. pull (WD or non WD)
  - 2,700 lbs tongue (WD or non WD)
    - **Limited by Chassis: Max tow is 17,170 lbs.**
    - Limited by lowest rated component (i.e. shank or ball)
- Front Hitch
  - Designed to be used an anchor point or for towing a trailer from the front of the truck.
    - Front towing is useful for maneuvering a boat trailer into a tight ramp situation

USING TOW/ HAUL MODE

- See Slide 30

ADDITIONAL RESOURCES

- [RAM Manual](#)

QUESTIONS???

- Email fleet@ssvfd.com