





FISHER ENGIEERING, ROCKLAND, MAINE - 04841

SUBJECT TO CHANGE

9-5-84

	SERIES G		L W-W/O DUAL FUEL INJECT		1985 PECULIAR HYDRAULICS, B.D. HPS4565 1985 SLC, UNDERHOOD VALVE A4468
ſ	REF.	QUANTITY R	EQUIRED IN	PART	DESCRIPTION
l	NO.	A4468	HPS4565	NO.	
ľ	1	1		A318	CYLINDER ASSEMBLY (10")
l	2	1		319	SWIVEL ADAPTER
l	3	2		314	CLEVIS PIN
l	4	8		330	RETAINING RING
١	5		1	376 A1587	32" H.P. HOSE, 1/4 P to 1/4 P (H TO C)
l	6	2	1	4424	DISCONNECT ASSEMBLY 36" H.P. HOSE, 1/4 P to 1/4P (H TO C)
I	7 8		1	765	1/4 BRASS BAR STREET ELL
l	9	2	•	A3660	CYLINDER ASSEMBLY (12")
l	10	2		2780	BRASS ELL (FORGED)
١	11	4		883	ANCHOR PIN
l	12		1	4467	DISCONNECT MOUNTING PLATE
I	13	1		A4466	CONTROL VALVE ASSEMBLY
	14	*		2351	90° DWIVEL ADAPTER (SHORT)
١	15	2		1658	QUILL
1	16	B	1	5192	60" H.P. HOSE, 1/4 P TO 1/4 P (V TO C)
	17	2		1588	DUST PLUG
-	18			2115	UNIVERSAL BRACE TAB
	19	,	1	5178	VALVE PLATE
1	20	4	4		5/16 x 1 CAPSCREW (NC)
1	21	6 7	- 8 - 4		5/16 LOCKWASHER 5/16 NUT (NC)
	22 23	2	4	4483	CLEVIS
	24	2		4494	10-32 SQUARE NUT
	25	2		4491	CLEVIS PIN, 1"
	26	-			
	27	2		4493	PUSH NUT (3/16)
	28 29	2		4908	BUSHING
***	30	2		3042	GROMMET
	31	1 -	2	4485	7/8" SNAP RING
	32		1	4486	BULKHEAD ADAPTER
	33		2	4949	30" CONTROL CABLE , SLC
	34		3		1/4 LOCKWASHER
	35		3		1/4 NUT (NC)
	36		1	4419	SINGLE LEVER CONTROL HEAD
	37	1			SAFETY DECAL
	38		1	5180	VALVE PLATE BRACE
	39				
	40		ł	l	
	41			1	3/8 x 3/4 CAPS CREW (NC) GRADE 5 PLATED
	42 43		2 2		3/8" LOCKWASHER
	44	}		· ·	3/6 LOCKWASIER
	44				
	46		→ 1	5785	PUMP BRACKET
	47		***	19. 19. 2. 200.	· · · · · · · · · · · · · · · · · · ·
	48		April 1		
	49	1		A2311	PUMP TANK ASSEMBLY
	50				
	51		2	5193	54" H.P. HOSE, 1/4 P to 1/4 P (V TO H)
	52		1	3696	PUMP SHEAVE
			<u> </u>	2(4.77)75	0/841 SUBJECT TO CHANGE 1-16-85
	FISHE	R ENGINEERI	NG, ROCKLAND	, MAINE -	04841 SUBJECT TO CHANGE 1-16-85

SERIES G		. W-W/O DU A L 'UEL INJECTEI		1983-1985 PECULIAR HYDRAULICS, B.D. HPS4565 1985 SLC, UNDERHOOD VALVE A4468
REF.	QUANTITY R A4468	FQUIRED IN HPS4565	PART NO.	DESCRIPTION
53 54	4	1 4	4921	SADDLE BRACKET, UNIVERSAL 5/16" FLATWASHER
55 56	.1	a Arranda a Arranda Arranda	2036	STRAP
57	1		2116	ROD
58 59	1			1/4 x 1 CAPSCREW (NC) 1/4 LOCKWASHER
60 61	1	1	5652	1/4 NUT (NC) 28" H.P. HOSE, 1/4 P to 3/8 P (P TO V)
62		1	5653	28" L.H. HOSE (P TO V)
63 64	3		3666	TIE WRAP 5/16 x 1-1/2 CAPSCREW (NC), GRADE 5
65 66	ī		4477	3/8" SPLIT HOSE GROMMET
67		4	2318	1/4" BRASS BAR ELL
68 69			·	
70 71 72		4 4	4268	3/8 x 4-1/4 (NC) CAPSCREW - GRADE 5 SPACER WASHER
73 74				
75		1	5786	DRIVE SHEAVE
76 77 78		1	5026 419	FAN SPACER 53" V-BELT
79 80			·	
81 82 83		3 3		1/4 " FLATWASHERS 1/4 x 3/4 (NC) CAPSCREW
84 85		4	4487	5/16 x 1-1/4 (NF) GR. 5 CAPSCREW 5/16 x 1 HEX HEAD, SELF TAPPING SCREW
86		3	3058	1/4 P to 9/16 O-RING STRAIGHT ADPT. MALE, BOTH E
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1-16-85

SUBJECT TO CHANGE

FISHER ENGINEERING, ROCKLAND, MAINE - 04841

SERIES G

V8351 5.8L W-W/O DUAL SMOG PUMP 1983-1985 V8-302 W/FUEL INJECTED ENGINE

1985

PECULIAR HYDRAULICS, SLC. B.D. UNDERHOOD VALVE

HPS4565

DASH BRACKET & HARDWARE WILL BE FOUND IN PECULIAR ATTACHING BOX. (STEP "L") NOTE:

SEE COMMON HYDRAULIC INSTRUCTIONS BEFORE PROCEEDING.

- A. LOOSEN ALL VEHICLE BELTS.
- B. REMOVE FOUR 3/8 CAPSCREWS FROM CRANKSHAFT DRIVE PULLEY AND DISCARD.
- C. INSTALL DRIVE SHEAVE (75) INTO CENTER OF CRANKSHAFT PULLEY BEING CERTAIN MACHINED PILOT OF DRIVE SHEAVE SEATS IN CRANKSHAFT PULLEY. FASTEN DRIVE SHEAVE TO CRANK-SHAFT WITH FOUR 3/8 x 4-1/4" CAPSCREWS (70) AND FOUR SPACER WASHERS (71) IN HOLES BOLTS WERE REMOVED FROM IN STEP B AND TIGHTEN. RETIGHTEN ALL LOOSENED BOLTS.
- D. REMOVE AND DISCARD FOUR CAPSCREWS HOLDING FAN TO WATER PUMP SHAFT FLANGE. PLACE FAN SPACER (76) BETWEEN FAN AND PULLEY. REINSTALL FAN AND SECURE WITH FOUR 5/16 x 1-1/4 GR. 5 CAPSCREWS (84) AND LOCKWASHERS (21).
- E. INSTALL PUMP BRACKET (46) TO THE TWO TAPPED HOLES ON FRONT OF THE WATER PUMP (DRIVER'S SIDE) USING TWO 3/8 x 3/4 CAPSCREWS (42) AND LOCKWASHERS (43).
- F. BEND 3/4" OF LONG END OF UNIVERSAL BRACE TAB (18) UP ABOUT 45°. INSTALL THIS BENT END ON THE SAME INTAKE MANIFOLD STUD THAT HOLDS THE COIL BRACKET USING THE EXISTING
- G. HOLDING PUMP TANK (49) IN BENCH VISE, SCREW 1/4" BRASS BAR ELL (67) ONTO PRESSURE PORT OF PUMP AND SCREW QUILL (15) INTO RETURN PORT OF PUMP. INSTALL PUMP SHEAVE (52) ONTO PUMP SHAFT AND TIGHTEN USING LOCKNUT SUPPLIED WITH PUMP.
- H. INSTALL PUMP WITH ATTACHED FITTINGS AND SHEAVE INTO SADDLE BRACKET (53) USING ONE 5/16 x 1-1/2 BOLT (64) GRADE 5 , LOCKWASHER (21), AND NUT (22). ATTACH SADDLE BRACKET AND PUMP TO PUMP BRACKET USING TWO 5/16 x 1 CAPSCREWS (NC) (20), FLATWASHERS (54), LOCKWASHERS (21) AND NUTS (22).
- INSTALL 53" V-BELT (77) BETWEEN DRIVE SHEAVE AND PUMP SHEAVE. ADJUST TO PROPER TENSION BY PIVOTING SADDLE BRACKET AND PUMP TANK ON TOP BOLT.
- SLIDE UNIVERSAL TANK STRAP (56) ON OVER REAR OF PUMP TANK. PLACE FLAT END OF UNIVERSAL BRACE ROD (57) BETWEEN TANK STRAP EARS (56) AND ATTACH WITH ONE 1/4 x 1 CAPSCREW (NC) (58), LOCKWASHER (59) AND NUT (60). INSTALL ONE 5/16 NUT (22) AND FLATWASHER (54) ON UNIVERSAL BRACE ROD AND FIT IT TO TAB INSTALLED ON STUD. SAW EXCESS OFF UNIVERSAL BRACE ROD AND ATTACH TO TAB WITH ONE 5/16" NUT (22), LOCKWASHER (21) AND FLATWASHER (54) ON EACH SIDE OF TAB.
- INSIDE CAB, REMOVE "HOOD" RELEASE BRACKET FROM DASH BRACE, REMOVE (AND SAVE) METRIC BOLI HOLDING PARKING "BRAKE" BRACKET TO DASH BRACE.
- PLACE ONE 5/16 x 1 CAPSCREW (20) DOWN THROUGH RIGHT END OF DASH BRACKET STRIP (39) (THIS BOLT CANNOT BE INSTALLED AFTER MOUNT IS ATTACHED TO DASH). ATTACH DASH BRACKET (39) TO VEHICLE DASH BRACE USING METRIC BOLT (SAVED FROM STEP K) IN HOLE FROM WHICH IT WAS REMOVED. DO NOT TIGHTEN. PLACE A 5/16 x 1 SELF TAPPING SCREW (85) UP INTO NEXT HOLE TO RIGHT. DO NOT TIGHTEN. PLACE ANOTHER 5/16 x 1 SELF TAPPING SCREW (85) UP THROUGH BOTH "HOOD" RELEASE BRACKET (LEFT HOLE) AND DASH MOUNT. SECURE RIGHT HAND SIDE OF "HOOD" BELEASE BRACKET BY ATTACHING A 5/16 NUT (22), LOCKWASHER (21) AND FLAT-WASHER (54) ON BOLT PREVIOUSLY INSTALLED DOWN THROUGH RIGHT HAND SIDE OF DASH MOUNT STRIP. BEFORE TIGHTENING DASH MOUNT ASSEMBLY UP INTO POSITION, PLACE TWO 1/4 x 1/2 CAPSCREWS (41) DOWN THROUGH REAR HOLES IN DASH MOUNT (SEE PHOTO - THESE CANNOT BE PLACED AFTER DASH MOUNT IS INSTALLED).
- M. DRILL (3) 5/8" HOLES IN FIREWALL (FOR CONTROL CABLES AND WIRING HARNESS) USING DRILL-ING GUIDE AS A REFERENCE ONLY. BEFORE DRILLING, ENSURE THAT BOTH SIDES OF FIREWALL ARE CLEAR OF OBSTRUCTIONS, WIRES, ETC. DRILL 1/2" HOLE IN UNDERSIDE OF DASH AS SHOWN IN DASH PHOTO. REMOVE JAM NUTS AND WASHERS FROM VALVE END OF CABLES (33) AND INSERT FROM INSIDE CAB THROUGH DRILLED HOLES IN FIREWALL. ATTACH CABLES TO CONTROL HEAD AS PER COMMON HYDRAULIC INSTRUCTIONS, ATTACH CONTROL HEAD (36) TO DASH MOUNT WITH PRE-VIOUSLY INSTALLED 1/4 x 1/2 CAPSCREWS (41) AND SECURE WITH 1/4 LOCKWASHERS (34) AND NUTS (35).
- N. WITH CONTROL VALVE IN BENCH VISE, INSTALL (3) 9/16 O-RING TO 1/4" PIPE ADAPTER (86) IN LIFT AND ANGLE PORTS. ON EACH INSTALLED ADAPTER INSTALL ONE 1/4" BRASS BAR ELL(67) WHEN TIGHTENING ELLS (67), AIM THEM AWAY FROM SPOOL ENDS ON VALVE.

PECULIAR HYDRAULICS, SLC, B.D. UNDERHOOD VALVE

HPS4565

INSTALLATION INSTRUCTIONS

- O. IF YOUR VEHICLE HAS A BRACKET OWER THE TOP OF THE IGNITION BOX (DRIVER'S SIDE FENDER-WELL) IT MUST BE RELOCATED. REMOVE BRACKET, ROTATE 90° AND PLACE IT ON THE FENDER-WELL. USING MOUNTING HOLES IN BRACKET AS A GUIDE, MARK AND DRILL THREE 9/32" HOLES. FASTEN BRACKET TO INNER FENDER WITH THREE 1/4 x 3/4 CAPSCREWS (83), FLATWASHERS (82), LOCKWASHERS (34) AND NUTS (35).
- P. INSTALL VALVE PLATE BRACE (38) TO EXISTING HOLE ON DRIVER'S SIDE INNER FENDER USING ONE 5/16 x 1 SELF TAPPING SCREW (85). (USE 1/4" HOLE JUST AFT OF WINDSHIELD WASHER RESERVOIR. IF HOOD RELEASE CABLE TIE DOWN IS ATTACHED HERE, MOVE TIE DOWN TO ANOTHER HOLE). ALIGN HOLE IN OTHER END WITH VALVE PLATE HOLE NEAREST ENGINE. ALIGN VALVE PLATE AND DRILL (4) 11/32" HOLES THROUGH PLASTIC FENDER LINER, USING VALVE PLATE HOLES AS A GUIDE. ATTACH VALVE PLATE AND BRACE TO FENDER LINER USING (4) 5/16 X 1 CAPSCREWS (20), FLATWASHERS (54), LOCKWASHERS (21) AND NUTS (22). ASSEMBLE CONTROL VALVE (13) AS PER COMMON HYDRAULIC INSTRUCTIONS. INSTALL VALVE TO VALVE PLATE WITH FASTENERS FOUND IN VALVE BAG. ATTACH ONE END OF 28" H.P. HOSE (61) TO 1/4" BRASS BAR ELL (67) ON BACK OF PUMP AND OTHER END TO 90° SWIVEL ADAPTER (14) IN "IN" PORT OF VALVE. PUSH ONE END OF 28" L.P. HOSE (62) ONTO THE QUILL (15) SCREWED INTO THE BACK OF PUMP AND OTHER END ONTO THE QUILL (15) SCREWED INTO THE BACK OF PUMP AND OTHER END ONTO THE QUILL (15) SCREWED INTO THE BACK OF PUMP AND OTHER END ONTO THE QUILL (15) SCREWED INTO THE BACK OF PUMP AND OTHER END ONTO THE QUILL (15) SCREWED INTO THE BACK OF PUMP AND OTHER END ONTO THE QUILL (15) SCREWED INTO THE BACK OF PUMP AND OTHER END ONTO THE QUILL (15) SCREWED INTO THE BACK OF PUMP AND OTHER END ONTO THE QUILL (15) SCREWED INTO THE BACK OF PUMP AND OTHER END ONTO THE QUILL (15) SCREWED TO 90° ADAPTER
- Q. DRILL A 1-7/8" HOLE THROUGH MIDDLE OF RADIATOR WEB ON DRIVER'S SIDE, APPROXIMATELY 9-1/2" BELOW TOP OF RADIATOR. (CHECK TO ENSURE THIS LINES UP WITH GRILL SPACE). INSTALL SPLIT HOSE GROMMET AROUND HOLE (65).
- R. INSTALL 60" H.P. HOSE (16) TO BRASS ELL INSTALLED ON LIFT CYLINDER PORT OF VALVE (SPOOL #1). INSTALL (2) 54" HOSES TO BRASS ELLS ON ANGLE PORTS (SPOOL #2). ROUTE 60" AND 54" HOSES THROUGH HOLE AND OUT THROUGH GRILL NEAR CENTER OF VEHICLE. ATTACH 60" HOSE TO PREVIOUSLY INSTALLED 90° SWIVEL ADAPTER (2) ON LIFT CYLINDER.
- S. POSITION DISCONNECT BRACKET (12) OVER THE THREE 11/32" HOLES IN DRIVER'S SIDE HEAD-GEAR POST AND ATTACH USING TWO 5/16 x 1 CAPSCREWS (20), LOCKWASHERS (21) AND NUTS (22) IN TOP AND BOTTOM HOLES. INSTALL FEMALE DISCONNECT HALF (6) IN TOP 7/8" HOLE OF DISCONNECT BRACKET USING ONE SNAP RING (31) ON BACK SIDE. OF BRACKET. INSTALL MALE DISCONNECT HALF (6) AND BULKHEAD ADAPTER (32) IN BOTTOM 7/8" HOLE USING ONE SNAP RING (31) IN FRONT OF BRACKET. INSTALL DUST PLUGS (17) OVER ENDS OF HOSES. CONNECT 54" RIGHT ANGLE HOSE (SPOOL #2, CYL. B) TO BACK OF FEMALE DISCONNECT INSTALLED IN TOP HOLE OF DISCONNECT BRACKET. CONNECT 54" LEFT ANGLE HOSE (SPOOL #2, CYL. A) TO BOTTOM (MALE)DISCONNECT. TIGHTEN BY HOLDING HOSES AND ROTATING THE DISCONNECT HALVES IN BRACKET.
- T. TIGHTEN ALL FITTINGS, BOLTS AND NUTS. ENSURE THAT HOSES ARE KEPT AWAY FROM SHARP EDGES AND MOVING PARTS AND SECURE HOSES WITH NYLON TIES (63) AND PLACE SAFETY DECAL (37) ON DASH BESIDE CABLE CONTROL HEAD (36).
- U. FILL PUMP RESERVOIR WITH TYPE "A" AUTOMATIC TRANSMISSION FLUID, START ENGINE, LIFT AND ANGLE BLADE. NOTE: (IF BLADE ANGLES OPPOSITE FROM CONTROL LEVER POSITION, SWITCH THE TWO H.P. HOSES BEHIND THE DISCONNECT BRACKET FROM ONE DISCONNECT HALF TO THE OTHER). CHECK RESERVOIR OIL LEVEL WITH LIFT CYLINDER FULLY RETRACTED. OPERATE CYLINDERS TO REMOVE AIR FROM SYSTEM. RECHECK RESERVOIR OIL LEVEL WITH LIFT CYLINDER FULLY RETRACTED.