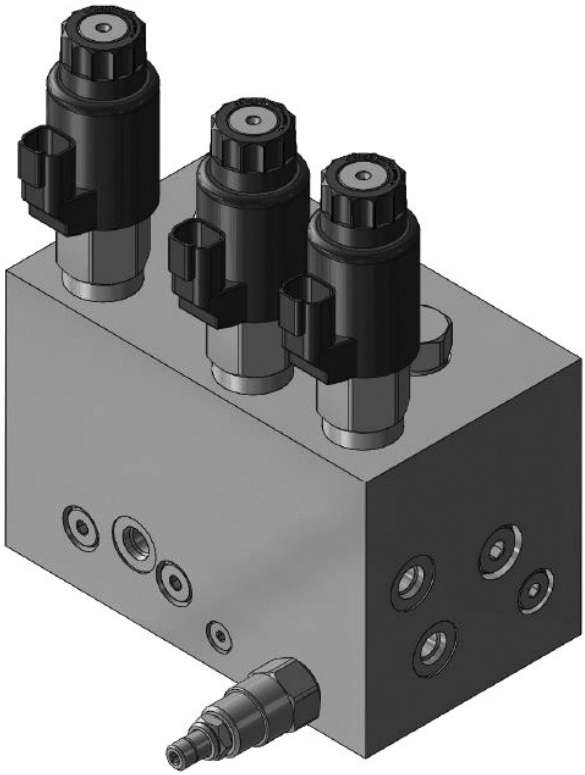
APSP-203 CAL

INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL

FEATURES • VALVE FUNCTIONS • ADJUSTMENTS • SCHEMATICS



Muncie Power Products, Inc.

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FEATURES

DIRECT ACTING – PROPORTIONAL SOLENOID VALVES

ADJUSTABLE MAIN RELIEF

POST COMPENSATED – FLOW SHARING

ONLY COMPATIBLE WITH PISTON PUMPS

MANUAL OVERRIDES

SPECIFICATIONS

Maximum System Pressure.....3,000 PSI
Pre-set Relief Setting (2,000 PSI)

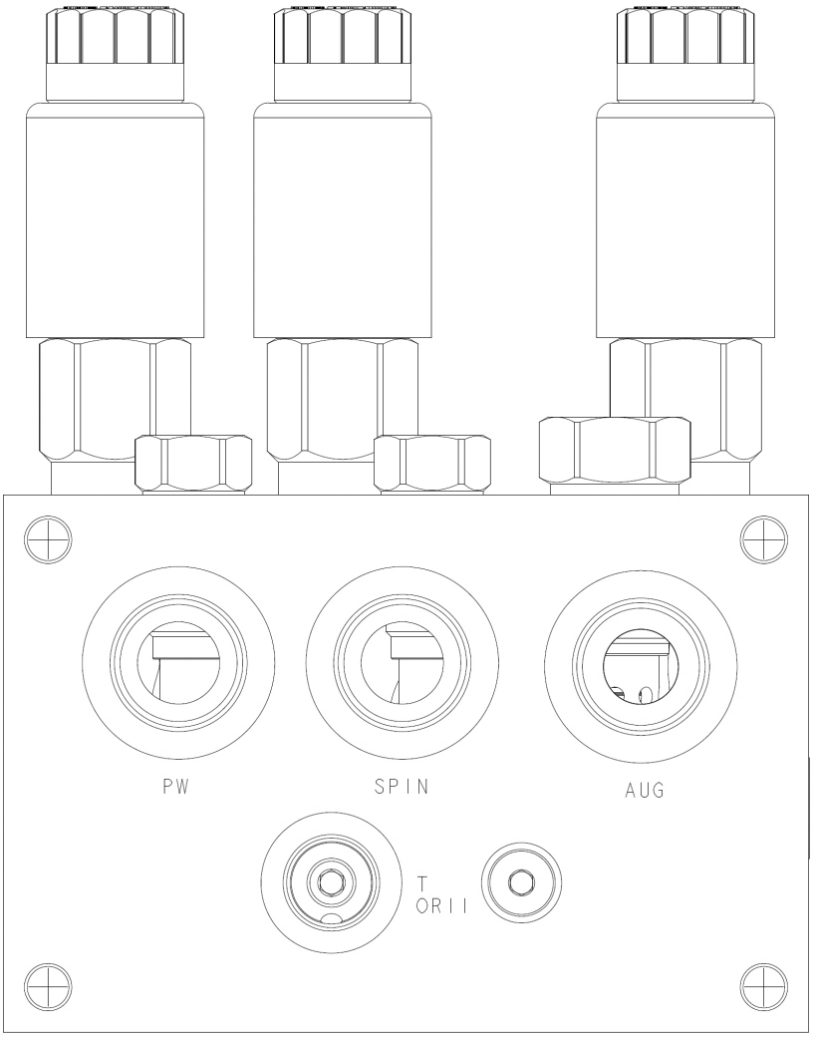
Auger Flow (Proportional)..... 15 GPM

Spinner Flow (Proportional) ..... 10 GPM

Pre-Wet Flow (Proportional)..... 10 GPM

WORKPORTS

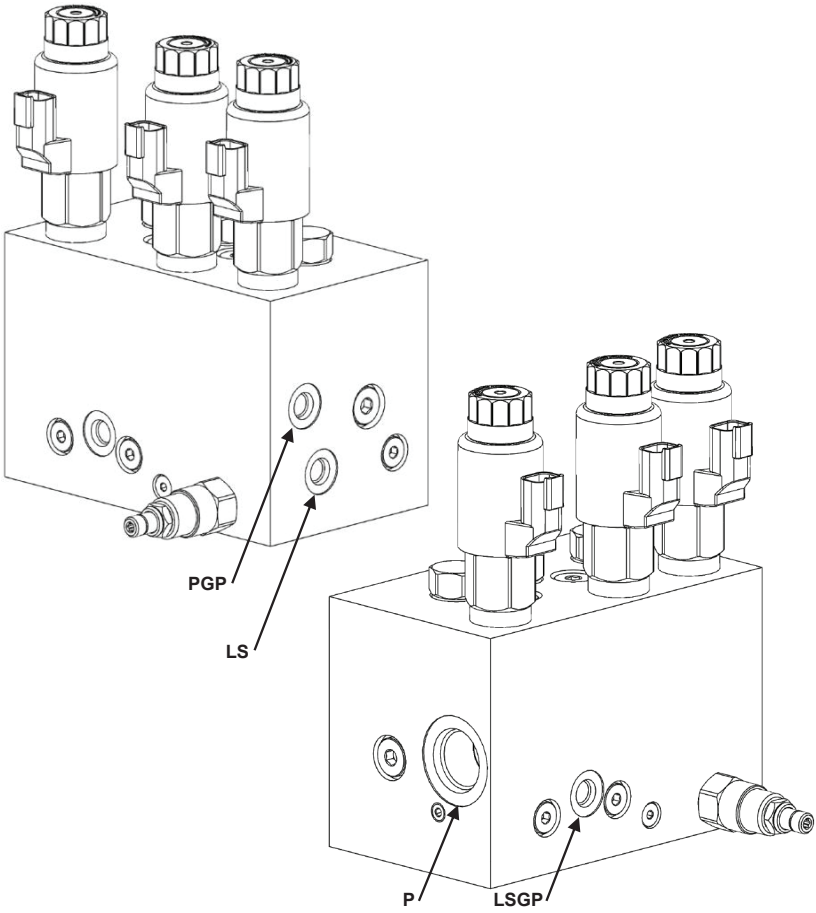
APSP-203-CAL



DESIGNATION	DESCRIPTION	SIZE (SAE)
PW	PRE-WET	12
SPIN	SPINNER	12
AUG	AUGER	12
T	TANK	8

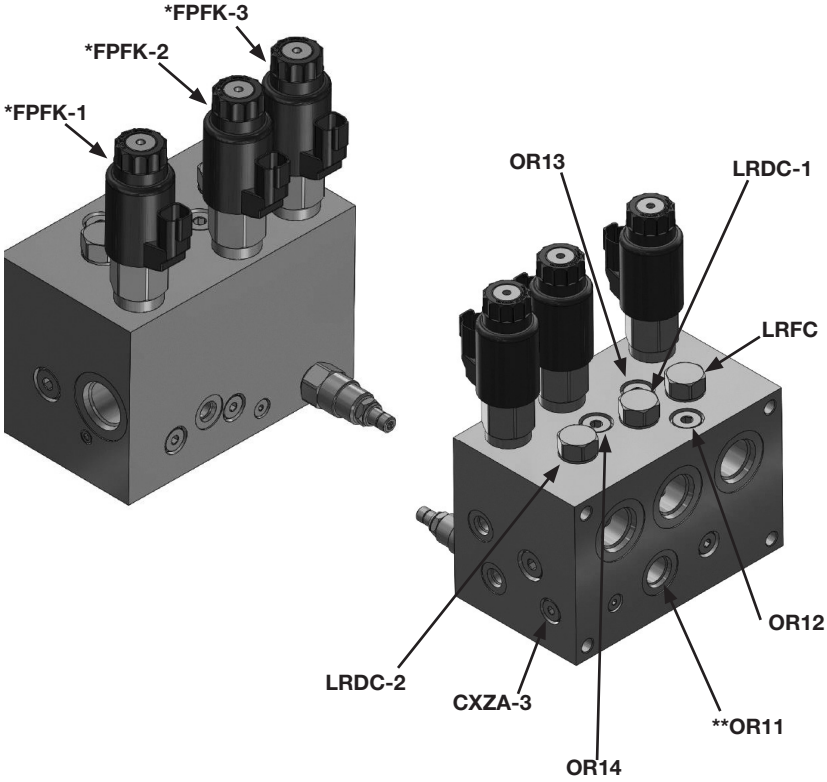
WORKPORTS

APSP-203-CAL



DESIGNATION	DESCRIPTION	SIZE (SAE)
LSGP	LOAD SENSE GAUGE PORT	4
PGP	PRESSURE GAUGE PORT	4
LS	LOAD SENSE	4
P	PUMP	12

CARTRIDGE DESIGNATIONS AND PART NUMBERS

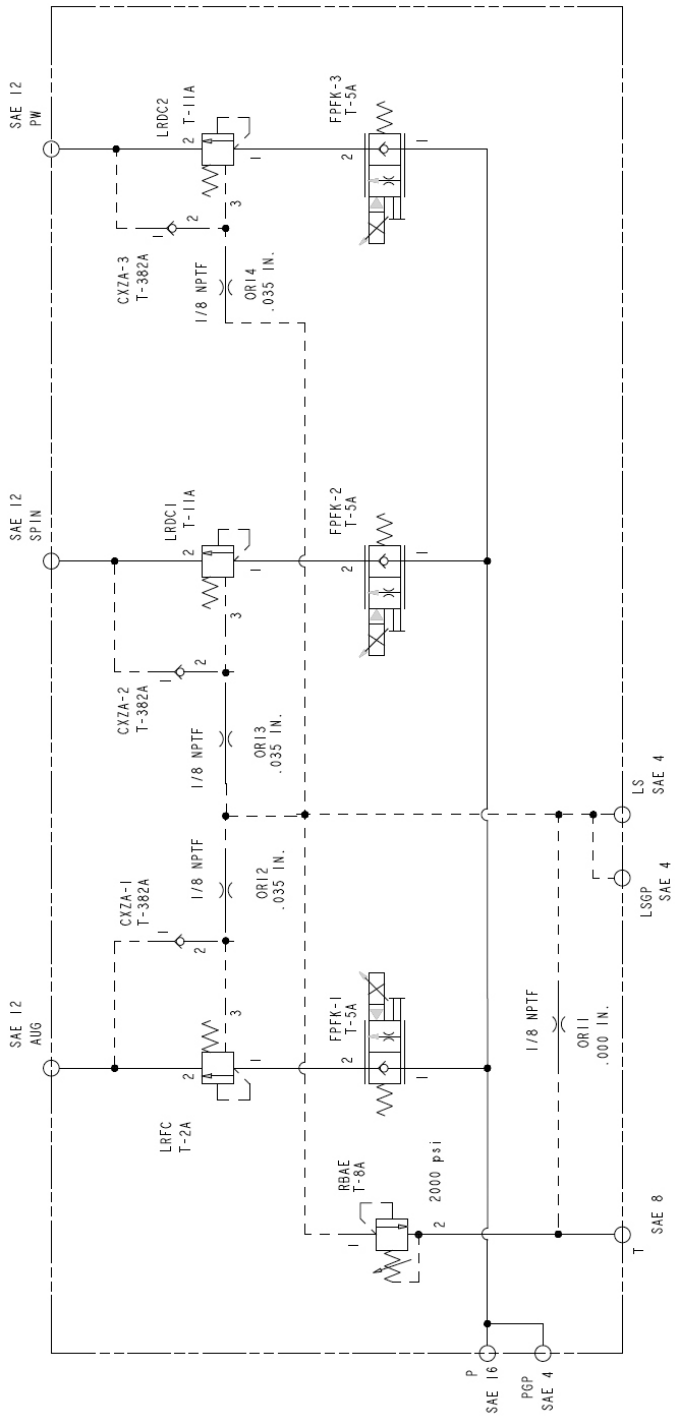


DESIGNATION	SUN P/N	FUNCTION
CXZA-1 – CXZA-3	CXZA-XAN	CHECK VALVE
*FPFK-1	FPFK-MDN912	AUGER FLOW CONTROL
*FPFK-2	FPFK-MBN912	SPINNER FLOW CONTROL
*FPFK-3	FPFK-MBN912	PRE-WET FLOW CONTROL
LRFC	LRFC-XDN	30 GMP MODULATING ELEMENT
LRDC-1 – LRDC-2	LRDC-XDN	15 GPM MODULATING ELEMENT
RBAE	RBAE-LAN	RELIEF VALVE
**OR11	280-039-000	¼ NPTF ORIFICE PLUG-0.000"
OR12 – OR14	280-039-035	¼ NPTF ORIFICE PLUG-0.035"

*** Coil P/N: 770912**

**** OR11 is located inside the Tank port cavity.**

SCHEMATIC

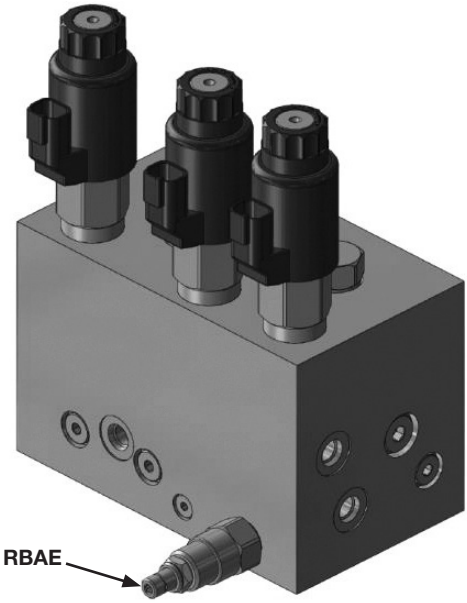

SAE 12
PW
LRDC2
T-11A
FPFK-3
T-5A
CXZA-3
T-382A
1/8 NPTF
ORI4
.035 IN.
SAE 12
SPIN
LRDC1
T-11A
FPFK-2
T-5A
CXZA-2
T-382A
1/8 NPTF
ORI3
.035 IN.
CXZA-1
T-382A
1/8 NPTF
ORI2
.035 IN.
SAE 12
AUG
FPFK-1
T-5A
LRFC
T-2A
RBAE
T-8A
2000 psi
1/8 NPTF
ORI1
.000 IN.
LS
SAE 4
LSGP
SAE 4
T
SAE 8
P
SAE 16
PGP
SAE 4

RELIEF VALVE ADJUSTMENTS

Main System Relief (Factory Setting 2,000 PSI) – RBAE

1. The tools required to adjusting the main relief setting includes: 9/16" wrench and a 5/32" Allen drive.
2. Tee a pressure gauge into the PGP port on the right side of the manifold

   (Gauge greater than 3,000 PSI)
3. Loosen the lock nut while holding the Allen screw stationary.
4. Start the truck and deadhead flow at either the Auger, Spinner or Pre-Wet. (Pressure will increase to the main relief setting.)



5. While observing the pressure gauge, turn the Allen screw CCW to decrease pressure and CW to increase pressure.

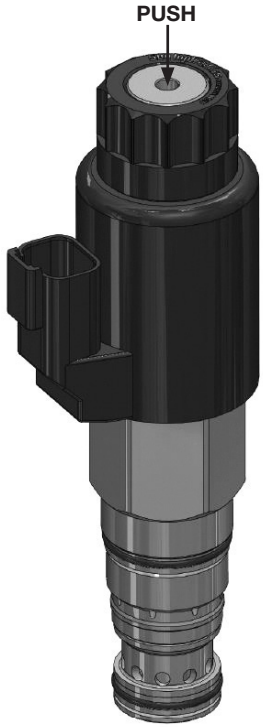
   ***DO NOT EXCEED 3,000 PSI**
6. Once the desired pressure has been established, hold the Allen screw stationary and tighten the lock nut.

MANUAL OVERRIDE INSTRUCTIONS

FPFK1 — FPFK3 — Auger/Spinner/Pre-Wet

1. To manually override: Locate the small override stem on the top of the valve (located in the recessed hole), push down the stem to override the valve. The override is a momentary spring return override, force must be applied for override to function.

2. To disengage the manual override: Simply release tension from the stem, allowing it to return to the standard position.



TROUBLESHOOTING

SYMPTOM	SOLUTION
• Either the auger, spinner or pre-wet operate at full speed without controller engagement.	• Check manual overrides for functionality, be sure that manual override depresses and spring returns to the up position (Reference pg. 9 for manual override instructions). • Remove FPFK-1, FPFK-2 or FPFK-3 from manifold and inspect cavity and cartridge for contamination.
• Either the auger, spinner or pre-wet are inoperative.	• Check to see if function operates with manual override (Reference pg. 9 for instructions). • Inspect wiring and check continuity of Deutsch connector into solenoid receptacle. • Verify that the flow is not bypassing motor (loss of efficiency). • Verify that FPFK-1 — FPFK-3 solenoids are magnetized when energized.
• No function operates, system doesn't build pressure.	• Inspect OR11 inside the tank port cavity, make sure the orifice is in place. Refer to pg.6. • Check main relief (RBAE) for contamination. • Verify that pump is producing flow.
• Manifold operates continuously at main relief pressure (2,000 PSI).	• Inspect plumbing – if applicable, check quick disconnects. • Inspect LS drain orifice for contamination, located in the sectional valve.

NOTES

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201 East Jackson Street • Muncie, Indiana 47305
800-367-7867 • Fax 765-284-6991
info@munciepower.com • www.munciepower.com