Keep With Loader Operator's Manual

VALVE AND PLUMBING KIT INSTRUCTIONS NEW HOLLAND TRACTORS WITH CCLS DELUXE REMOTES

MODEL	2WD	4WD	LESS CAB	WITH CAB
3230, 3430	X	x	×	
3930, 4630	X	x	X	

Valve and plumbing kit can be installed using tools ordinarily available. Valve control handle has been factory preassembled for ease of installation. Shut off engine and engage brakes during installation.

NOTE: Apply sealant only to all tapered threads unless coupled with swivel adapters. When using teflon tape, wrap tape clockwise (as viewed from end) and wrap only twice. Keep sealant away from first two threads of tapered end to prevent contamination of hydraulic fluid. Do not use sealant on o-ring or flare adapter threads.

INSTALLING VALVE AND VALVE STAND TO TRACTOR (Figures 1 & 1A)

- Attach valve box assembly and valve mounting bracket (1) to clutch housing using 3/4-10 x 2 cap screws (15), 3/4 lock washers (16) and spacer plate (14). Tractors with loader use no spacer plate, and tractors without loader use spacer plate.
- Route hoses down and rearward to hydraulic combining valve, securing hoses behind tractor oil lines as shown in figure 1 and 1A. Be sure hoses do not interfere with tractor controls or foot throttle linkages.

PLUMBING CONTROL VALVE TO TRACTOR HYDRAULICS (Figures 1 & 1A)

NOTE: To identify pressure, load sense and tank hoses, refer to Figure 1.

 Disconnect small load sense line from left side of tractor combining valve and remove 90° fitting from load sense port.

NOTE: In some cases the front left bolt of the combining valve must be removed to facilitate removal of the 90 fitting in the load sense port.

Install adapter swivel (6) into port vacated. Connect shuttle valve (7) to adapter swivel (6). Connect steel load sense line to shuttle valve (7). Connect 90° elbow (8) to open end of shuttle valve (7) and attach 1/4 x 58 load sense hose (22) to 90° elbow (8), refer to Figure 1.

NOTE: $1/4 \times 58$ load sense hose (22) and $1/2 \times 54$ pressure hose (21) are wrapped with a protective sleeve. Do not remove.

- Disconnect pressure line from right side of combining valve. Remove 90° fitting and install branch tee (17) into pressure port of combining valve. Connect steel pressure line to branch tee (17) and attach 1/2 x 54 pressure hose (21) to branch tee (17).
- Remove plug from hydraulic tank port on tractor rear axle and install adapter fitting (2). Connect street tee (3) to adapter (2). Install plug (5) into street tee (3). Connectl 90° elbow (4) into street tee (3) (see figure 1A). Route tank hose (20) around rear of tractor, behind 3-pt. hitch top linkage yoke and attach to 90° elbow (4).
- 4. Use small plastic tie straps (11) to hold tank, pressure and load sensing hoses from rubbing against 3-point lift arms, brake levers, shift levers, etc., on tractor that could cause hose wear.
- 5. Tighten fittings as required. The auxiliary valve installation is now complete.



WARNING: Escaping hydraulic fluid under pressure can penetrate skin causing serious injury.

- DO NOT use your hands to check for leaks. Use a piece of cardboard or paper to search for leaks.
- Stop engine and relieve pressure before connecting or disconnecting lines.
- Tighten all connections before starting engine or pressurizing lines.

If any fluid is injected into skin, obtain medical attention immediately or gangrene may result.

PLUMBING LOADER TO CONTROL VALVE

NOTE: For a simplified view of Plumbing Loader to Control Valve and Self Leveling Valve see (Figures 3 & 4). Refer to Figure 4 for location of straps (11) and rubber tie straps (12) on a typical loader installation.

Install 1/2 x 120 hoses (19) onto boom oil line tubes.
 Install and tighten hose fittings one at a time from bottom up. Loosening closest oil line clamp will ease installation.

NOTE: Adapter fittings (13) required on some model loaders.

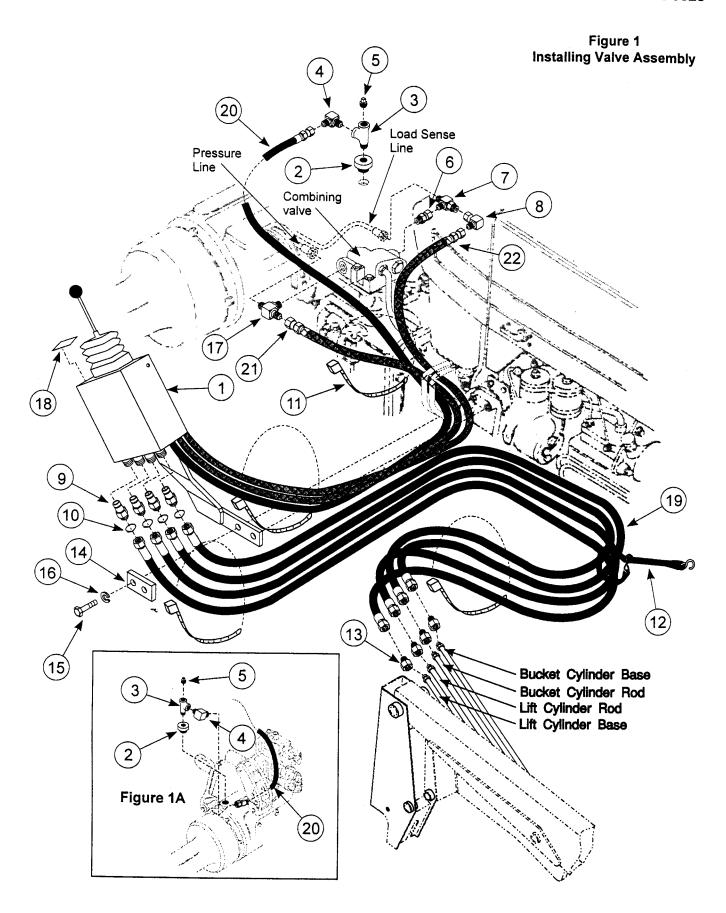
2. Install male quick couplers (9), and colored rings (10) onto free ends of hoses. Do not overtighten male couplers.

- 3. Connect hoses as shown in Figures 1 and 1A.
- 4. After all plumbing has been completed and all parts have been tightened, start engine and slowly cycle lift and bucket cylinders several times to purge air out of system, then retract cylinders and shut off tractor engine. Add additional tractor hydraulic fluid as specified in tractor owners manual to bring level of hydraulic fluid up to full.

NOTE: When cycling loader, operate loader according to operation decal (18). If direction of control lever is wrong, or loader will not lower, recheck connections shown.

PARTS LIST - VALVE AND PLUMBING KIT

ITEM	SMC NO.	NH NO.	DESCRIPTION	QTY.
1	46150	SML46150	VALVE BOX ASSEMBLY	1
2	34643	SML34643	FITTING, Adapter, 1-3/8-12 x 1/2 NPT	1
3	37050-4	509959	FITTING, Street Tee, 1/2	<u>i</u>
4	39609-4	76352	FITTING, Elbow, 1/2 NPT x 3/4-16, 90°	1
5	G103868	84296	FITTING, Plug, Square head, 1/2 NPT	i
6	42062-4	SML420624	FITTING, Adapter, 7/16-20 x 7/16-20 JIC, Swivel	i
7	44275	SML44275	SHUTTLE VALVE Assembly	1
8	34128-4	86512933	FITTING, Elbow, 7/16-20 x 7/16-20 JIC, 90°	1
9	6137-6	SML61376	FITTING, Adapter, Coupling, 1/2-14	4
10	36240-9 thru 12	SML36240	BAND, Spiral Identification, 1 inch, Blue, Red, Yellow, Green	1 ea.
11	8137-1	SML81371	STRAP, Reusable Tie, 3/16 x 11	4
12	7438-1	SML74381	STRAP, Rubber	2
13	41054-1	SML410541	ADAPTER, 7/8-14 x 3/4-16 (Used with 7/8-14 JIC Oil Lines Only)	4
14	36772-6	SML367726	SPACER, .50 Thick x 1.50 Wide x 4.50 Long	1
15	G271771	88557	SCREW, Cap, 3/4-10 x 2	,
16	G131046	87340	WASHER, Lock, 3/4	
17	46161-1	SML461611	FITTING, Branch Tee	1
18	38929	SML38929	DECAL, Single handle control	1
19	41053	SML41053	HOSE, 1/2 x 120	<u> </u>
20	38792-11	SML3879211	HOSE, 1/2 x 86	1
21	46138-1	SML461381	HOSE, 1/2 x 54	1
22	46147-1	SML461471	HOSE, 1/4 x 58	1



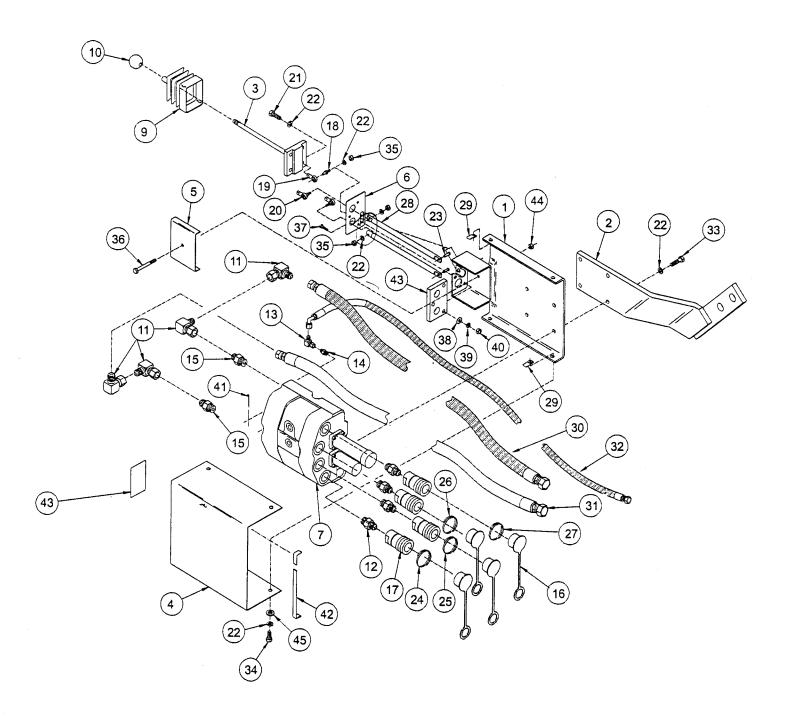
3 of 8

BUNDLE 2-6525 715430016

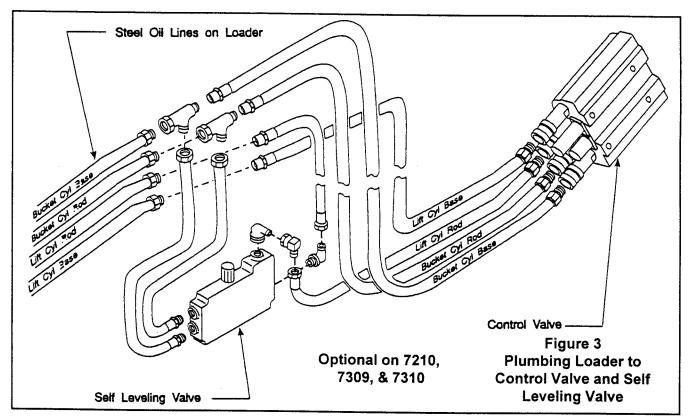
VALVE ASSEMBLY - PREASSEMBLED

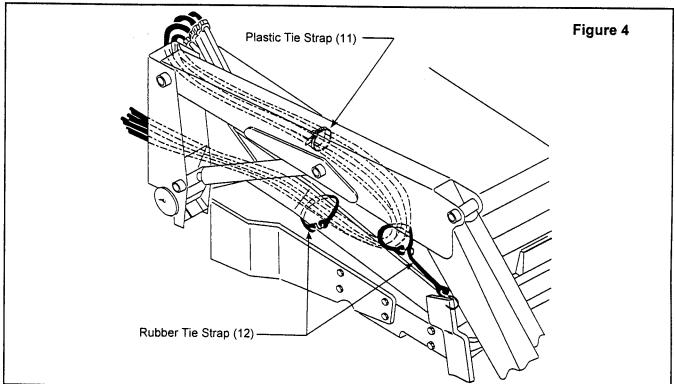
1 46148 SML4618 BRACKET ASSEMBLY, Valve Mounting 1 2 46160 SML46165 BRACKET ASSEMBLY 1 3 46155 SML46155 HANDLE ASSEMBLY 1 4 46153 SML46153 VALVE BOX COVER 1 5 46154 SML48163 VALVE BOX COVER 1 6 40828 SML40828 BOOT PLATE 1 7 46605 SML4813 VALVE, Walvoil 1 8 40811 SML40811 GUIDE PLATE 1 10 38902 SML38902 KNOB, Valve Handle 1 11 34128-1 182977 FITTING, Elbow, 7/8-14 JJC Swivel x 7/8-14 JJC x 90 4 12 39280-10 SML3928010 FITTING, Elbow, 7/8-14 JJC CFlare x 90 1 13 34128-4 86512933 FITTING, Elbow, 7/16-20 Flare x 90 1 14 32844-19 86507102 FITTING, Adapter, 9/16-18 O-ring x 7/16-20 Flare x 90 1 15 32844-9 86507102 FLTIN	ITEM	SMC NO.	NH NO.	DESCRIPTION	QTY.
3 46155 SML46155 HANDLE ASSEMBLY 1 4 46153 SML46154 VALVE BOX COVER 1 5 46154 SML46154 COVER 1 6 40828 SML480828 BOOT PLATE 1 7 46605 SML48608 VALVE, Walvoil 1 8 40811 SML48011 GUIDE PLATE 1 9 36077 SML38077 BOOT 1 10 38902 SML38902 KNOB, Valve Handle 1 11 34128-1 182977 FITTING, Sibrow, 7/8-14 JIC Swivel x 7/8-14 JIC x 90 4 12 39280-10 SML3928010 FITTING, Sibrow, 7/8-14 JIC Swivel x 7/8-14 JIC x 90 1 13 34128-4 86512933 FITTING, Sibrow, 7/8-14 JIC Swivel x 7/8-14 JIC x 90 1 14 32844-9 86507102 FITTING, Sibrow, 7/16-20 x 7/16-20 Fiare x 90 1 15 32844-9 86507102 FITTING, Adapter, 1-1/16-20 x 7/16-20 Fiare x 90 1 16 43834-1 SML4814				BRACKET ASSEMBLY, Valve Mounting	1
4 46153 SML46154 VALVE BOX COVER 1 5 46154 SML46154 COVER 1 6 40828 SML40828 BOOT PLATE 1 7 46605 SML46605 VALVE, Walvoil 1 8 40811 SML48811 GUIDE PLATE 1 9 36077 SML3807 BOOT 1 10 38902 SML38902 KNOB, Valve Handle 1 11 34128-1 182977 FITTING, Elbow, 778-14 JIC Swivel x 7/8-14 JIC x 90 4 12 39280-10 SML3928010 FITTING, Elbow, 778-14 JIC Swivel x 7/8-14 JIC x 90 4 14 3284-12 139398 FITTING, Elbow, 778-20 XIC 2-0 Flare x 90 1 15 3284-12 139398 FITTING, Elbow, 778-16-20 XIR-20 Flare x 90 1 16 4838-4 SML48384 DUST CAP, 1/2 2 16 4838-4 SML48384 DUST CAP, 1/2 4 17 6147-8 SML48384 DUST CAP, 1/2 4	2			_ :	1
5 46154 SML46154 COVER 6 40828 SML40828 BOOT PLATE 1 7 46605 SML408060 VALVE, Walvoil 1 8 40811 SML40801 GUIDE PLATE 1 9 36077 SML38907 BOOT 1 10 38902 SML392800 KNOB, Valve Handle 1 11 34128-1 182977 FITTING, Elbow, 778-14 JIC Swivel x 7/8-14 JIC x 90 4 12 39280-10 SML3928010 FITTING, Elbow, 776-20 X 7/6-20 Flare x 90 1 13 34128-4 86512933 FITTING, Elbow, 776-20 X 7/6-20 Flare x 90 1 15 32844-9 86507102 FITTING, Elbow, 776-20 X 7/6-20 Flare x 90 1 16 4838-4 SML48384 DUST CAP, 1/2 2 16 4838-4 SML48384 DUST CAP, 1/2 4 17 6147-8 SML61478 COUPLER, Female Quick, 1/2-14 4 18 3890-4 SML389904 BAL JOINT 1			SML46155		1
6 40828 SML40828 BOOT PLATE 1 7 46805 SML46605 VALVE, Walvoil 1 8 40811 SML48811 GUIDE PLATE 1 9 36077 SML3807 BOOT 1 10 38902 SML3902 KNOB, Valve Handle 1 11 34128-1 182977 FITTING, Elbow, 7/8-14 JIC Swivel x 7/8-14 JIC x 90 4 12 39280-10 SML3928010 FITTING, Elbow, 7/8-14 JIC C Swivel x 7/8-14 JIC x 90 4 14 32844-12 139398 FITTING, Elbow, 7/8-14 JIC C Swivel x 7/8-14 JIC x 90 1 15 32844-9 86507102 FITTING, Adapter, 9/16-20 Rize x 90 1 16 4838-4 SML49334 DUST CAP, 1/2 COUPLER, Female Quick, 1/2-14 4 17 6147-8 SML49344 DUST CAP, 1/2 COUPLER, Female Quick, 1/2-14 4 18 3890-4 SML38904 SML38904 BALL JOINT 1 19 3690-4 SML38904 BALL JOINT 1 <td></td> <td></td> <td></td> <td></td> <td>1</td>					1
7 48605 SML46605 VALVE, Walvoil 1 8 40811 SML40811 GUIDE PLATE 1 9 36077 SML38077 BOOT 1 10 38902 SML38902 KNOB, Valve Handle 1 11 34128-1 182977 FITTING, Elbow, 7/8-14 JIC Swivel x 7/8-14 JIC x 90 4 12 39280-10 SML3928010 FITTING, Elbow, 7/8-14 O-Ring x 1/2-14 NPTF 4 13 34128-4 86512933 FITTING, Elbow, 7/16-20 x 7/16-20 Flare x 90 1 15 32844-9 86507102 FITTING, Adapter, 9/16-18 O-ring x 7/16-20 JIC 1 16 4838-4 SML61478 COUPLER, Fernale Quick, 1/2-14 4 16 4838-4 SML61478 COUPLER, Fernale Quick, 1/2-14 4 18 3890-2 SML38900-4 SML1, Joint 1 20 26009-4 SML260094 ROD END 2 21 G181608 280483 SCREW, Cap, 5/16-24 x 1 3 22 G120214 80681 </td <td>5</td> <td></td> <td>SML46154</td> <td></td> <td>1</td>	5		SML46154		1
8 40811 SML40811 GUIDE PLATE 9 36077 SML36077 BOOT 10 38902 SML38902 KNOB, Valve Handle 11 34128-1 182977 FITTING, Elbow, 7/8-14 JIC Swivel x 7/8-14 JIC x 90 4 12 39280-10 SML3928010 FITTING, Straight, 7/8-14 O-Ring x 1/2-14 NPTF 4 4 32844-12 139398 FITTING, Elbow, 7/16-20 x 7/16-20 Flare x 90 1 5 32844-9 8650102 FITTING, Adapter, 9/16-18 O-ring x 7/16-20 JIC 1 6 4838-4 SML48384 DUST CAP, 1/2 16 487-8 SML61478 COUPLER, Fernale Quick, 1/2-14 18 38904-2 SML389042 STUD, Ball Joint, 5/16-24 19 38900-4 SML389042 STUD, Ball Joint, 5/16-24 10 2609-4 SML360094 ROD END 2 1 G181608 280483 SCREW, Cap, 5/16-24 x 1 3 36240-10 SML36240 BAND, Spiral Identification, 1 inch, Blue 1 36240-11 SML36240 BAND, Spiral Identification, 1 inch, Rependent 1 2 36240-11 SML36240 BAND, Spiral Identification, 1 inch, Green 1 SML46137 ROD, Spool Extension 2 46147-1 SML461471 HOSE, 1/2 x 86 3 46157 SML461381 HOSE, 1/2 x 86 3 46167-1 SML461381 HOSE, 1/2 x 86 3 46167-1 SML461471 HOSE, 1/2 x 86 3 46147-1 SML461471 HOSE, 1/2 x 86 3 4616004 S778-7 SCREW, Cap, 5/16-18 x 3/4 4 46138-1 SML461471 HOSE, 1/2 x 86 3 46147-1 SML4					1
9 36077 SML36077 BOOT 10 38902 SML36902 KNOB, Valve Handle 11 34128-1 182977 FITTING, Elbow, 778-14 JIC Swivel x 778-14 JIC x 90 4 12 39280-10 SML3928010 FITTING, Elbow, 778-14 JIC Swivel x 778-14 JIC x 90 4 13 34128-4 86512933 FITTING, Elbow, 778-14 O-Ring x 712-14 NPTF 4 13 34128-4 86512933 FITTING, Elbow, 7716-20 Flare x 90 1 1 15 32844-9 86507102 FITTING, Adapter, 9/16-18 O-ring x 7716-20 JIC 1 5 32844-9 86507102 FITTING, Adapter, 1-1/16-12 O-ring x 778-14-JIC 2 16 4838-4 SML48384 DUST CAP, 1/2 17 6147-8 SML61478 COUPLER, Female Quick, 1/2-14 18 38904-2 SML389042 STUD, Ball Joint, 5/16-24 19 38900-4 SML389004 BLJ JOINT 10 26009-4 SML260094 ROD END 21 G181608 280483 SCREW, Cap, 5/16-24 x 1 23 6021-16 SML602116 PIN, Clewis, 5/16 x 1 24 36240-9 SML36240 BAND, Spiral Identification, 1 inch, Blue 1 36240-11 SML36240 BAND, Spiral Identification, 1 inch, Red 1 36240-11 SML36240 BAND, Spiral Identification, 1 inch, Red 1 36240-11 SML36240 BAND, Spiral Identification, 1 inch, Red 1 36240-11 SML36240 BAND, Spiral Identification, 1 inch, Green 1 28 46157 SML46157 ROD, Spool Extension 2 96067-1 9626645 NUT, Speed Clip, 5/16-18 3 46138-1 SML461381 HOSE, 1/2 x 86 3 46138-1 SML461381 HOSE, 1/2 x 86 3 46147-1 SML3879211 HOSE, 1/2 x 86 3 46147-1 SML461471 HOSE, 1/4 x 58 3 6090-46 43128 SCREW, Cap, 5/16-18 x 3/4 3 6180077 87872 SCREW, Cap, 5/16-18 x 3/4 3 6180077 87872 SCREW, Cap, 5/16-18 x 3/4 3 6180077 87872 SCREW, Cap, 5/16-18 x 3/4 3 6180078 87361 WASHER, Lock, 1/4 x 58 3 6120380 80682 WASHER, Lock, 1/4 x 20 3 83899 SML247653 TRIM, Plastic, 13 inches 1 1 1 5 38929 SML247653 TRIM, Plastic, 13 inches 1 1 5 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5			SML46605	VALVE, Walvoil	1
10	8		SML40811	GUIDE PLATE	1
11 34128-1 182977 FITTING, Elbow, 7/8-14 JIC Swivel x 7/8-14 JIC x 90 4 12 39280-10 SML3928010 FITTING, Elbow, 7/8-14 O-Ring x 1/2-14 NPTF 4 13 34128-4 86512933 FITTING, Elbow, 7/16-20 Flare x 90 1 14 32844-12 139398 FITTING, Adapter, 9/16-18 O-ring x 7/16-20 JIC 1 15 32844-9 86507102 FITTING, Adapter, 1-1/16-12 O-ring x 7/8-14-JIC 2 16 4838-4 SML4384 DUST CAP, 1/2 4 17 6147-8 SML61478 COUPLER, Female Quick, 1/2-14 4 18 3890-2 SML389004 STUD, Ball Joint, 5/16-24 1 19 3890-4 SML389004 BALL JOINT 1 20 26009-4 SML260094 ROD END 2 21 G181608 280483 SCREW, Cap, 5/16-24 x 1 3 22 G120214 80681 WASHER, Lock, 5/16 14 23 6021-16 SML602116 PIN, Clewis, 5/16 x 1 2 24					1
12 39280-10 SML3928010 FITTING, Straight, 7/8-14 O-Ring x 1/2-14 NPTF 4			SML38902		1
13				FITTING, Elbow, 7/8-14 JIC Swivel x 7/8-14 JIC x 90	4
13 34128-4 86512933 FITTING, Elbow, 7/16-20 x 7/16-20 Flare x 90 1 14 32844-19 86507102 FITTING, Adapter, 9/16-18 O-ring x 7/16-20 JIC 1 15 32844-9 86507102 FITTING, Adapter, 9/16-18 O-ring x 7/8-14-JIC 2 16 4838-4 SML48384 DUST CAP, 1/2 4 17 6147-8 SML61478 COUPLER, Female Quick, 1/2-14 4 18 38904-2 SML389042 STUD, Ball Joint, 5/16-24 1 19 38900-4 SML389004 BALL JOINT 1 10 26009-4 SML280094 ROD END 2 21 G181608 280483 SCREW, Cap, 5/16-24 x 1 3 22 G120214 80681 WASHER, Lock, 5/16 1 23 6021-16 SML602116 PIN, Clevis, 5/16 x 1 2 24 36240-9 SML36240 BAND, Spiral Identification, 1 inch, Blue 1 25 36240-11 SML36240 BAND, Spiral Identification, 1 inch, Yellow 1 27			SML3928010	FITTING, Straight, 7/8-14 O-Ring x 1/2-14 NPTF	4
15 32844-9 86507102 FITTING, Adapter, 1-1/16-12 O-ring x 7/8-14-JIC 2 16 4838-4 SML48384 DUST CAP, 1/2 4 17 6147-8 SML61478 COUPLER, Female Quick, 1/2-14 4 18 38904-2 SML389004 STUD, Ball Joint, 5/16-24 1 19 38900-4 SML389004 BALL JOINT 1 20 26009-4 SML260094 ROD END 2 21 G181608 280483 SCREW, Cap, 5/16-24 x 1 3 22 G120214 80681 WASHER, Lock, 5/16 14 23 6021-16 SML602116 PIN, Clevis, 5/16 x 1 2 24 36240-10 SML36240 BAND, Spiral Identification, 1 inch, Blue 1 25 36240-11 SML36240 BAND, Spiral Identification, 1 inch, Red 1 26 38240-12 SML46157 ROD, Spool Extension 2 29 6067-1 9626645 NUT, Speed Clip, 5/16-18 4 30 46138-1 SML461381<			86512933	FITTING, Elbow, 7/16-20 x 7/16-20 Flare x 90	1
16 4838-4 SML48384 DUST CAP, 1/2 4 17 6147-8 SML61478 COUPLER, Female Quick, 1/2-14 4 18 38904-2 SML389042 STUD, Ball Joint, 5/16-24 1 19 38900-4 SML389004 BALL JOINT 1 20 26009-4 SML260094 ROD END 2 21 G181608 280483 SCREW, Cap, 5/16-24 x 1 3 22 G120214 80681 WASHER, Lock, 5/16 14 23 6021-16 SML602116 PIN, Clevis, 5/16 x 1 2 24 36240-19 SML36240 BAND, Spiral Identification, 1 inch, Blue 1 25 36240-10 SML36240 BAND, Spiral Identification, 1 inch, Yellow 1 26 36240-11 SML36240 BAND, Spiral Identification, 1 inch, Green 1 27 36240-12 SML36240 BAND, Spiral Identification, 1 inch, Green 1 28 46157 SML36240 BAND, Spiral Identification, 1 inch, Yellow 1 29		- · · · · - -		FITTING, Adapter, 9/16-18 O-ring x 7/16-20 JIC	1
16 4838-4 SML48384 DUST CAP, 1/2 4 17 6147-8 SML61478 COUPLER, Female Quick, 1/2-14 4 18 38904-2 SML389042 STUD, Ball Joint, 5/16-24 1 19 38900-4 SML389004 BALL JOINT 1 20 26009-4 SML260094 ROD END 2 21 G181608 280483 SCREW, Cap, 5/16-24 x 1 3 22 G120214 80681 WASHER, Lock, 5/16 14 23 6021-16 SML602116 PIN, Clevis, 5/16 x 1 2 24 36240-10 SML36240 BAND, Spiral Identification, 1 inch, Blue 1 25 36240-10 SML36240 BAND, Spiral Identification, 1 inch, Yellow 1 26 36240-12 SML36240 BAND, Spiral Identification, 1 inch, Green 1 28 46157 SML46157 ROD, Spool Extension 2 29 6067-1 9626645 NUT, Speed Clip, 5/16-18 4 30 46138-1 SML461381		32844-9	86507102	FITTING, Adapter, 1-1/16-12 O-ring x 7/8-14-JIC	2
18 38904-2 SML389042 STUD, Ball Joint, 5/16-24 1 19 38900-4 SML389004 BALL JOINT 1 20 26009-4 SML260094 ROD END 2 21 G181608 280483 SCREW, Cap, 5/16-24 x 1 3 22 G120214 80681 WASHER, Lock, 5/16 14 23 6021-16 SML602116 PIN, Clevis, 5/16 x 1 2 24 36240-9 SML36240 BAND, Spiral Identification, 1 inch, Blue 1 25 36240-10 SML36240 BAND, Spiral Identification, 1 inch, Red 1 26 36240-11 SML36240 BAND, Spiral Identification, 1 inch, Yellow 1 27 36240-12 SML36240 BAND, Spiral Identification, 1 inch, Green 1 28 46157 SML46157 ROD, Spool Extension 2 29 6067-1 9626645 NUT, Speed Clip, 5/16-18 4 30 46138-1 SML461381 HOSE, 1/2 x 54 1 31 38792-11 <t< td=""><td></td><td></td><td>SML48384</td><td>DUST CAP, 1/2</td><td>4</td></t<>			SML48384	DUST CAP, 1/2	4
19 38900-4 SMI.389004 BALL JOINT 1 20 26009-4 SMI.260094 ROD END 2 21 G181608 280483 SCREW, Cap, 5/16-24 x 1 3 22 G120214 80681 WASHER, Lock, 5/16 14 23 6021-16 SML602116 PIN, Clevis, 5/16 x 1 2 24 36240-9 SMI.36240 BAND, Spiral Identification, 1 inch, Red 1 25 36240-10 SMI.36240 BAND, Spiral Identification, 1 inch, Yellow 1 26 36240-12 SMI.36240 BAND, Spiral Identification, 1 inch, Green 1 27 36240-12 SMI.36240 BAND, Spiral Identification, 1 inch, Green 1 28 46157 SMI.46157 ROD, Spool Extension 2 29 6067-1 962645 NUT, Speed Clip, 5/16-18 4 30 46138-1 SMI.461381 HOSE, 1/2 x 86 1 31 38792-11 SMI.3879211 HOSE, 1/2 x 86 1 32 46147-1 <td< td=""><td></td><td></td><td>SML61478</td><td>COUPLER, Female Quick, 1/2-14</td><td>4</td></td<>			SML61478	COUPLER, Female Quick, 1/2-14	4
20 26009-4 SML260094 ROD END 2 21 G181608 280483 SCREW, Cap. 5/16-24 x 1 3 22 G120214 80681 WASHER, Lock, 5/16 14 23 6021-16 SML602116 PIN, Clevis, 5/16 x 1 2 24 36240-9 SML36240 BAND, Spiral Identification, 1 inch, Blue 1 25 36240-10 SML36240 BAND, Spiral Identification, 1 inch, Red 1 26 36240-11 SML36240 BAND, Spiral Identification, 1 inch, Green 1 27 36240-12 SML36240 BAND, Spiral Identification, 1 inch, Green 1 28 46157 SML46157 ROD, Spool Extension 2 29 6067-1 9626645 NUT, Speed Clip, 5/16-18 4 30 46138-1 SML461381 HOSE, 1/2 x 54 1 31 38792-11 SML3879211 HOSE, 1/2 x 86 1 32 46147-1 SML461471 HOSE, 1/2 x 86 1 34 G180077 87872			SML389042	STUD, Ball Joint, 5/16-24	1
21 G181608 280483 SCREW, Cap, 5/16-24 x 1 3 22 G120214 80681 WASHER, Lock, 5/16 14 23 6021-16 SML602116 PIN, Clevis, 5/16 x 1 2 24 36240-9 SML36240 BAND, Spiral Identification, 1 inch, Blue 1 25 36240-10 SML36240 BAND, Spiral Identification, 1 inch, Red 1 26 36240-11 SML36240 BAND, Spiral Identification, 1 inch, Green 1 27 36240-12 SML36240 BAND, Spiral Identification, 1 inch, Green 1 28 46157 SML46157 ROD, Spool Extension 2 29 6067-1 962645 NUT, Speed Clip, 5/16-18 4 30 46138-1 SML461381 HOSE, 1/2 x 86 1 31 38792-11 SML3879211 HOSE, 1/2 x 86 1 32 46147-1 SML461471 HOSE, 1/2 x 54 1 33 6090-46 43128 SCREW, Cap, 8MM-1.25 x 30MM Class 8.8 4 34 G1800			SML389004	BALL JOINT	1
21 G181608 280483 SCREW, Cap, 5/16-24 x 1 3 22 G120214 80681 WASHER, Lock, 5/16 14 23 6021-16 SML602116 PIN, Clevis, 5/16 x 1 2 24 36240-9 SML36240 BAND, Spiral Identification, 1 inch, Blue 1 25 36240-10 SML36240 BAND, Spiral Identification, 1 inch, Red 1 26 36240-11 SML36240 BAND, Spiral Identification, 1 inch, Yellow 1 27 36240-12 SML36240 BAND, Spiral Identification, 1 inch, Green 1 28 46157 SML46157 ROD, Spool Extension 2 29 6067-1 9626645 NUT, Speed Clip, 5/16-18 4 30 46138-1 SML461381 HOSE, 1/2 x 54 1 31 38792-11 SML3679211 HOSE, 1/4 x 58 1 32 46147-1 SML461471 HOSE, 1/4 x 58 1 33 6090-46 43128 SCREW, Cap, 8MM-1.25 x 30MM Class 8.8 4 34 G18			SML260094		2
23 6021-16 SML602116 PIN, Clevis, 5/16 x 1 2 24 36240-9 SML36240 BAND, Spiral Identification, 1 inch, Blue 1 25 36240-10 SML36240 BAND, Spiral Identification, 1 inch, Red 1 26 36240-11 SML36240 BAND, Spiral Identification, 1 inch, Yellow 1 27 36240-12 SML36240 BAND, Spiral Identification, 1 inch, Green 1 28 46157 SML46157 ROD, Spool Extension 2 29 6067-1 9626645 NUT, Speed Clip, 5/16-18 4 30 46138-1 SML461381 HOSE, 1/2 x 54 1 31 38792-11 SML3879211 HOSE, 1/2 x 86 1 32 46147-1 SML461471 HOSE, 1/2 x 86 1 33 6090-46 43128 SCREW, Cap, 8MM-1.25 x 30MM Class 8.8 4 34 G180077 87872 SCREW, Cap, 5/16-18 x 3/4 4 35 G120368 12628 NUT, Hex, 5/16-24 1 36 G180					
24 36240-9 SML36240 BAND, Spiral Identification, 1 inch, Blue 1 25 36240-10 SML36240 BAND, Spiral Identification, 1 inch, Red 1 26 36240-11 SML36240 BAND, Spiral Identification, 1 inch, Yellow 1 27 36240-12 SML36240 BAND, Spiral Identification, 1 inch, Yellow 1 28 46157 SML46157 ROD, Spool Extension 2 29 6067-1 9626645 NUT, Speed Clip, 5/16-18 4 30 46138-1 SML461381 HOSE, 1/2 x 54 1 31 38792-11 SML3879211 HOSE, 1/2 x 86 1 32 46147-1 SML461471 HOSE, 1/2 x 86 1 33 6090-46 43128 SCREW, Cap, 8MM-1.25 x 30MM Class 8.8 4 34 G180077 87872 SCREW, Cap, 5/16-18 x 3/4 4 35 G120368 12628 NUT, Hex, 5/16-24 1 36 G180048 87405 SCREW, Cap, 1/4-20 x 2-1/2 1 37 G1			80681	WASHER, Lock, 5/16	
24 36240-9 SML36240 BAND, Spiral Identification, 1 inch, Blue 1 25 36240-10 SML36240 BAND, Spiral Identification, 1 inch, Red 1 26 36240-11 SML36240 BAND, Spiral Identification, 1 inch, Yellow 1 27 36240-12 SML36240 BAND, Spiral Identification, 1 inch, Green 1 28 46157 SML46157 ROD, Spool Extension 2 29 6067-1 9626645 NUT, Speed Clip, 5/16-18 4 30 46138-1 SML461371 HOSE, 1/2 x 54 1 31 38792-11 SML3879211 HOSE, 1/2 x 86 1 32 46147-1 SML461471 HOSE, 1/2 x 86 1 33 6090-46 43128 SCREW, Cap, 8MM-1.25 x 30MM Class 8.8 4 34 G180077 87872 SCREW, Cap, 5/16-18 x 3/4 4 35 G120368 12628 NUT, Hex, 5/16-24 1 36 G180048 87405 SCREW, Cap, 1/4-20 x 2-1/2 1 37 G18					2
26 36240-11 SML36240 BAND, Spiral Identification, 1 inch, Yellow 1 27 36240-12 SML36240 BAND, Spiral Identification, 1 inch, Green 1 28 46157 SML46157 ROD, Spool Extension 2 29 6067-1 9626645 NUT, Speed Clip, 5/16-18 4 30 46138-1 SML461381 HOSE, 1/2 x 54 1 31 38792-11 SML3879211 HOSE, 1/2 x 86 1 32 46147-1 SML461471 HOSE, 1/2 x 86 1 33 6090-46 43128 SCREW, Cap, 8MM-1.25 x 30MM Class 8.8 4 34 G180077 87872 SCREW, Cap, 5/16-18 x 3/4 4 35 G120368 12628 NUT, Hex, 5/16-24 1 36 G180048 87405 SCREW, Cap, 1/4-20 x 2-1/2 1 37 G180022 88146 SCREW, Cap, 1/4-20 x 1 3 39 G120380 80682 WASHER, Lock, 1/4 3 40 G120375 .7770 NUT, Hex, 1/4-20 3 40 G120375 .7770 NU				BAND, Spiral Identification, 1 inch, Blue	
27 36240-12 SML36240 BAND, Spiral Identification, 1 inch, Green 1 28 46157 SML46157 ROD, Spool Extension 2 29 6067-1 9626645 NUT, Speed Clip, 5/16-18 4 30 46138-1 SML461381 HOSE, 1/2 x 54 1 31 38792-11 SML3879211 HOSE, 1/2 x 86 1 32 46147-1 SML461471 HOSE, 1/4 x 58 1 33 6090-46 43128 SCREW, Cap, 8MM-1.25 x 30MM Class 8.8 4 34 G180077 87872 SCREW, Cap, 5/16-18 x 3/4 4 35 G120368 12628 NUT, Hex, 5/16-24 1 36 G180048 87405 SCREW, Cap, 1/4-20 x 2-1/2 1 37 G180022 88146 SCREW, Cap, 1/4-20 x 1 3 38 G120392 87361 WASHER, Flat, 1/4 3 40 G120375 .7770 NUT, Hex, 1/4-20 3 41 G121222 280250 PIN, Cotter, 3/32 x 3/4 2 42 24765-3 SML247653 TRIM, Plastic, 13 inc				BAND, Spiral Identification, 1 inch, Red	1
28 46157 SML46157 ROD, Spool Extension 2 29 6067-1 9626645 NUT, Speed Clip, 5/16-18 4 30 46138-1 SML461381 HOSE, 1/2 x 54 1 31 38792-11 SML3879211 HOSE, 1/2 x 86 1 32 46147-1 SML461471 HOSE, 1/4 x 58 1 33 6090-46 43128 SCREW, Cap, 8MM-1.25 x 30MM Class 8.8 4 34 G180077 87872 SCREW, Cap, 5/16-18 x 3/4 4 35 G120368 12628 NUT, Hex, 5/16-24 1 36 G180048 87405 SCREW, Cap, 1/4-20 x 2-1/2 1 37 G180022 88146 SCREW, Cap, 1/4-20 x 1 3 38 G120392 87361 WASHER, Flat, 1/4 3 39 G120380 80682 WASHER, Lock, 1/4 3 40 G120375 .7770 NUT, Hex, 1/4-20 3 41 G121222 280250 PIN, Cotter, 3/32 x 3/4 2 42 24765-3 SML247653 TRIM, Plastic, 13 inches 1			-	BAND, Spiral Identification, 1 inch, Yellow	1
29 6067-1 9626645 NUT, Speed Clip, 5/16-18 4 30 46138-1 SML461381 HOSE, 1/2 x 54 1 31 38792-11 SML3879211 HOSE, 1/2 x 86 1 32 46147-1 SML461471 HOSE, 1/4 x 58 1 33 6090-46 43128 SCREW, Cap, 8MM-1.25 x 30MM Class 8.8 4 34 G180077 87872 SCREW, Cap, 5/16-18 x 3/4 4 35 G120368 12628 NUT, Hex, 5/16-24 1 36 G180048 87405 SCREW, Cap, 1/4-20 x 2-1/2 1 37 G180022 88146 SCREW, Cap, 1/4-20 x 1 3 38 G120392 87361 WASHER, Flat, 1/4 3 39 G120380 80682 WASHER, Lock, 1/4 3 40 G120375 .7770 NUT, Hex, 1/4-20 3 41 G121222 280250 PIN, Cotter, 3/32 x 3/4 2 42 24765-3 SML247653 TRIM, Plastic, 13 inches 1 43 38929 SML38929 DECAL, Valve Operation 1					1
30 46138-1 SML461381 HOSE, 1/2 x 54 1 31 38792-11 SML3879211 HOSE, 1/2 x 86 1 32 46147-1 SML461471 HOSE, 1/4 x 58 1 33 6090-46 43128 SCREW, Cap, 8MM-1.25 x 30MM Class 8.8 4 34 G180077 87872 SCREW, Cap, 5/16-18 x 3/4 4 35 G120368 12628 NUT, Hex, 5/16-24 1 36 G180048 87405 SCREW, Cap, 1/4-20 x 2-1/2 1 37 G180022 88146 SCREW, Cap, 1/4-20 x 1 3 38 G120392 87361 WASHER, Flat, 1/4 3 39 G120380 80682 WASHER, Lock, 1/4 3 40 G120375 .7770 NUT, Hex, 1/4-20 3 41 G121222 280250 PIN, Cotter, 3/32 x 3/4 2 42 24765-3 SML247653 TRIM, Plastic, 13 inches 1 43 38929 SML38929 DECAL, Valve Operation 1 44 G9424215 280129 NUT, Lock, 1/4-20 1 <td></td> <td></td> <td></td> <td></td> <td>2</td>					2
31 38792-11 SML3879211 HOSE, 1/2 x 86 1 32 46147-1 SML461471 HOSE, 1/4 x 58 1 33 6090-46 43128 SCREW, Cap, 8MM-1.25 x 30MM Class 8.8 4 34 G180077 87872 SCREW, Cap, 5/16-18 x 3/4 4 35 G120368 12628 NUT, Hex, 5/16-24 1 36 G180048 87405 SCREW, Cap, 1/4-20 x 2-1/2 1 37 G180022 88146 SCREW, Cap, 1/4-20 x 1 3 38 G120392 87361 WASHER, Flat, 1/4 3 39 G120380 80682 WASHER, Lock, 1/4 3 40 G120375 .7770 NUT, Hex, 1/4-20 3 41 G121222 280250 PIN, Cotter, 3/32 x 3/4 2 42 24765-3 SML247653 TRIM, Plastic, 13 inches 1 43 38929 SML38929 DECAL, Valve Operation 1 44 G9424215 280129 NUT, Lock, 1/4-20 1					4
32 46147-1 SML461471 HOSE, 1/4 x 58 1 33 6090-46 43128 SCREW, Cap, 8MM-1.25 x 30MM Class 8.8 4 34 G180077 87872 SCREW, Cap, 5/16-18 x 3/4 4 35 G120368 12628 NUT, Hex, 5/16-24 1 36 G180048 87405 SCREW, Cap, 1/4-20 x 2-1/2 1 37 G180022 88146 SCREW, Cap, 1/4-20 x 1 3 38 G120392 87361 WASHER, Flat, 1/4 3 39 G120380 80682 WASHER, Lock, 1/4 3 40 G120375 .7770 NUT, Hex, 1/4-20 3 41 G121222 280250 PIN, Cotter, 3/32 x 3/4 2 42 24765-3 SML247653 TRIM, Plastic, 13 inches 1 43 38929 SML38929 DECAL, Valve Operation 1 44 G9424215 280129 NUT, Lock, 1/4-20 1					1
33 6090-46 43128 SCREW, Cap, 8MM-1.25 x 30MM Class 8.8 4 34 G180077 87872 SCREW, Cap, 5/16-18 x 3/4 4 35 G120368 12628 NUT, Hex, 5/16-24 1 36 G180048 87405 SCREW, Cap, 1/4-20 x 2-1/2 1 37 G180022 88146 SCREW, Cap, 1/4-20 x 1 3 38 G120392 87361 WASHER, Flat, 1/4 3 39 G120380 80682 WASHER, Lock, 1/4 3 40 G120375 .7770 NUT, Hex, 1/4-20 3 41 G121222 280250 PIN, Cotter, 3/32 x 3/4 2 42 24765-3 SML247653 TRIM, Plastic, 13 inches 1 43 38929 SML38929 DECAL, Valve Operation 1 44 G9424215 280129 NUT, Lock, 1/4-20 1					1
34 G180077 87872 SCREW, Cap, 5/16-18 x 3/4 4 35 G120368 12628 NUT, Hex, 5/16-24 1 36 G180048 87405 SCREW, Cap, 1/4-20 x 2-1/2 1 37 G180022 88146 SCREW, Cap, 1/4-20 x 1 3 38 G120392 87361 WASHER, Fiat, 1/4 3 39 G120380 80682 WASHER, Lock, 1/4 3 40 G120375 .7770 NUT, Hex, 1/4-20 3 41 G121222 280250 PIN, Cotter, 3/32 x 3/4 2 42 24765-3 SML247653 TRIM, Plastic, 13 inches 1 43 38929 SML38929 DECAL, Valve Operation 1 44 G9424215 280129 NUT, Lock, 1/4-20 1					1
35 G120368 12628 NUT, Hex, 5/16-24 1 36 G180048 87405 SCREW, Cap, 1/4-20 x 2-1/2 1 37 G180022 88146 SCREW, Cap, 1/4-20 x 1 3 38 G120392 87361 WASHER, Flat, 1/4 3 39 G120380 80682 WASHER, Lock, 1/4 3 40 G120375 .7770 NUT, Hex, 1/4-20 3 41 G121222 280250 PIN, Cotter, 3/32 x 3/4 2 42 24765-3 SML247653 TRIM, Plastic, 13 inches 1 43 38929 SML38929 DECAL, Valve Operation 1 44 G9424215 280129 NUT, Lock, 1/4-20 1					4
36 G180048 87405 SCREW, Cap, 1/4-20 x 2-1/2 1 37 G180022 88146 SCREW, Cap, 1/4-20 x 1 3 38 G120392 87361 WASHER, Flat, 1/4 3 39 G120380 80682 WASHER, Lock, 1/4 3 40 G120375 .7770 NUT, Hex, 1/4-20 3 41 G121222 280250 PIN, Cotter, 3/32 x 3/4 2 42 24765-3 SML247653 TRIM, Plastic, 13 inches 1 43 38929 SML38929 DECAL, Valve Operation 1 44 G9424215 280129 NUT, Lock, 1/4-20 1					4
37 G180022 88146 SCREW, Cap, 1/4-20 x 1 3 38 G120392 87361 WASHER, Flat, 1/4 3 39 G120380 80682 WASHER, Lock, 1/4 3 40 G120375 .7770 NUT, Hex, 1/4-20 3 41 G121222 280250 PIN, Cotter, 3/32 x 3/4 2 42 24765-3 SML247653 TRIM, Plastic, 13 inches 1 43 38929 SML38929 DECAL, Valve Operation 1 44 G9424215 280129 NUT, Lock, 1/4-20 1		_			•
38 G120392 87361 WASHER, Flat, 1/4 3 39 G120380 80682 WASHER, Lock, 1/4 3 40 G120375 .7770 NUT, Hex, 1/4-20 3 41 G121222 280250 PIN, Cotter, 3/32 x 3/4 2 42 24765-3 SML247653 TRIM, Plastic, 13 inches 1 43 38929 SML38929 DECAL, Valve Operation 1 44 G9424215 280129 NUT, Lock, 1/4-20 1					·
39 G120380 80682 WASHER, Lock, 1/4 3 40 G120375 .7770 NUT, Hex, 1/4-20 3 41 G121222 280250 PIN, Cotter, 3/32 x 3/4 2 42 24765-3 SML247653 TRIM, Plastic, 13 inches 1 43 38929 SML38929 DECAL, Valve Operation 1 44 G9424215 280129 NUT, Lock, 1/4-20 1					
40 G120375 .7770 NUT, Hex, 1/4-20 3 41 G121222 280250 PIN, Cotter, 3/32 x 3/4 2 42 24765-3 SML247653 TRIM, Plastic, 13 inches 1 43 38929 SML38929 DECAL, Valve Operation 1 44 G9424215 280129 NUT, Lock, 1/4-20 1					
41 G121222 280250 PIN, Cotter, 3/32 x 3/4 2 42 24765-3 SML247653 TRIM, Plastic, 13 inches 1 43 38929 SML38929 DECAL, Valve Operation 1 44 G9424215 280129 NUT, Lock, 1/4-20 1					
42 24765-3 SML247653 TRIM, Plastic, 13 inches 1 43 38929 SML38929 DECAL, Valve Operation 1 44 G9424215 280129 NUT, Lock, 1/4-20 1	-				
43 38929 SML38929 DECAL, Valve Operation 1 44 G9424215 280129 NUT, Lock, 1/4-20 1					
44 G9424215 280129 NUT, Lock, 1/4-20				I KIIVI, Plastic, 13 inches	
1101, 4000, 111 20				DECAL, Valve Operation	•
4 0120083 01302 WASHER, FIRE, 5/16					
		0120090	01302	WASHER, FIRE, 0/16	4

Figure 2 Control Valve



BUNDLE 2-6525



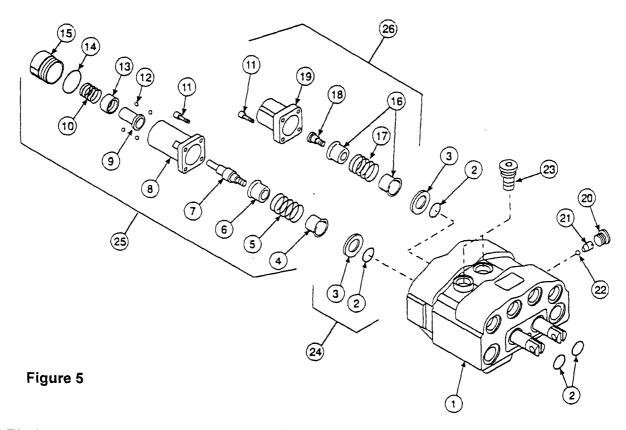


SECURING HOSES USING RUBBER TARP STRAPS (Figure 4)

Install loader onto tractor according to instructions included with mounting kit. Use larger plastic tie strap (not shown) to bundle 1/2 x 120 hoses together. Loop

one rubber strap (12) around hoses onto itself, and secure other end near front mounting. Wrap remaining rubber strap around bundled hoses and loader side frame. Make sure rubber straps secure hoses away from tractor axle, wheel or moving loader parts.

715430016 BUNDLE 2-6525



PARTS LIST - WALVOIL VALVE - 46605

ITEM	SMC NO.	NH NO.	DESCRIPTION	QTY.
1	*		VALVE BODY (includes spools)	1
2	*		SEAL, O-Ring	4
3	*		WASHER, 18MM x 34MM x 4MM	2
4	45024	SML45024	BUSHING	1
5	45025	SML45025	SPRING	1
6	45026	SML45026	BUSHING	1
7	45027	SML45027	PIN, Spool Anchor	1
8	*		COVER	1
9	45029	SML45029	BUSHING, Carrier	1
10	45030	SML45030	SPRING	1
11	45028	SML45028	SCREW, Cap, Socket Head, 5MM x 16MM	8
12	45032	SML45032	BALL BEARING	4
13	45033	SML45033	RING, Thrust	1
14	45031	SML45031	O-Ring	1
15	*		END ČAP	1
16	45034	SML45034	BUSHING	2
17	45035	SML45035	SPRING	1
18	45036	SML45036	SCREW, Spool Control	1
19	*		ENDCAP	1
20	45041	SML45041	PLUG,	1
21	45042	SML45042	PLUG, with seat	1
22	45043	SML45043	BALL BEARING	1
23	45023	SML45023	LOAD CHECK PLUG, VR10	2
24	45020	SML45020	SEAL KIT, Body [item #2 (Qty. 4) and item #3 (Qty. 2)]	1
25	45021	SML45021	REPAIR KIT [items 4, 5, 6, 7, 9, 10, 11 (Qty. 4), 12 (Qty. 4), 13, 14 & 15]	1
26	45022	SML45022	REPAIR KIT [items 11 (Qty. 4), 16 (Qty. 2), 17, 18 & 19]	1

^{*} Not available as repair part. Order appropriate repair kit or complete valve (44753).

BUNDLE 2-6525 715430016

INSTALLATION INSTRUCTIONS