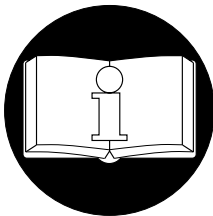
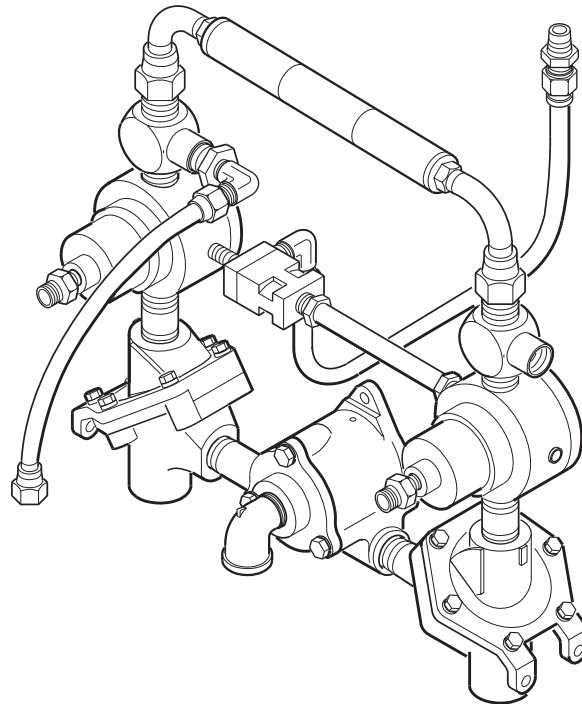


CLASSIC I-R AIR WINCH

REMOTE CONTROL

PILOT AIR VALVE KITS

PARTS LIST



READ THIS MANUAL BEFORE USING THESE PRODUCTS. This manual contains important safety and installation information. Make this manual available to all persons responsible for the operation, installation and maintenance of these products.

⚠ WARNING

Always install, inspect and maintain these Remote Control Kits in accordance with American National Standards Institute Safety Code (ASME B30.7) and any other applicable safety codes and regulations.

Refer all communications to the nearest Ingersoll-Rand Material Handling Products Office or Distributor.

Form MHD56065
Edition 2
April 1998
71116552
© 1998 Ingersoll-Rand Company

INGERSOLL-RAND

MATERIAL HANDLING

PILOT AIR VALVE KIT ASSEMBLY NOTES

Reference Information

Winches must have the remote control valve chest installed in order to install the Pilot Air Valve Kit. Table 1 lists the applicable winch manual necessary to determine any additional parts required to install the Pilot Air Valve Kit on your particular winch. For assistance contact the factory or your nearest **Ingersoll-Rand** distributor.

Table 1

WINCH MODELS	MANUAL FORM NUMBER
D6U and D6UL	P5637
HU, HUL, HUA, HUAL, HUB and HUBL	P5918
KU, KUA, KUL and KUAL	*
K4U AND K4UL	P5893
K5UL	
K6U, K6UL, K6UL36, K6UL48, K6UA and K6UAL	P5869
ODR40A15	P6263
ODR60A20	P6264
ODR100A24 and ODR100A36	P6265

* Manual not available for these units. Reference Manual Form Number P5893 for general guidance.

General Notes

1. Item numbers of parts in this manual may not agree with the item numbers of identical parts as shown in other manuals. The item numbers in this manual are for use only in the identification of components associated with drawings found in this manual.
2. During installation, inspection and maintenance observe the following:
 - a. Maintain a clean, dust free work area.
 - b. Keep open piping and disassembled components covered to prevent the entry of dirt and contaminants into the system.
 - c. Observe proper safety requirements when operating this equipment.
 - d. Prior to disassembly, isolate the pilot air valve piping and the winch from the air source. Tag the air isolation control to prevent accidental operation when working on the system components.
 - e. When repairs have been completed, purge the piping with clean, filtered air prior to connecting the pilot air valve piping to the winch.
 - f. Test winch and pilot air valve piping components (including lever control or pendant) prior to allowing the unit to be used for general service.

Pilot Air Valve Adjustments

Pendant Control Adjustments

The pilot air valve pendant remote control is factory set for maximum load conditions necessary for test certification. The system can be adjusted in the field for optimum control and performance on a particular application. Adjust the pendant as follows:

1. Set-up and operate hoist as described by the applicable winch operation manual listed in Table 1.
2. **Adjust Up Signal Bleed Valve (17).**
While lifting load, open up the signal bleed valve (17) enough to allow winch to reach full speed when the pendant lever is fully depressed.

If valve is not open far enough, the winch will reach full speed before the pendant lever is fully depressed. If valve is open too far, the winch will not reach maximum speed.

3. **Adjust Down Signal Bleed Valve (17).**
While lowering load, open down signal bleed valve (17) enough to allow winch to reach full speed when the pendant lever is fully depressed.

If valve is not open far enough, the winch will reach full speed before the pendant lever is fully depressed. If valve is open too far, the winch will not reach maximum speed.

4. **Adjust Brake Bleed Valve.**

This valve is similar to the signal bleed valve and is located in the brake signal line.

Adjust the brake bleed valve to trim the brake release pressure to hold the load without back-dropping (lowering slightly after a stop) or over traveling.

If valve is not open far enough, the brake will release too soon causing the load to back drop. If valve is open too far, the brake will not release soon enough and it will drag.

Lever Control Adjustments

Adjust brake bleed valve as described in "Pendant Control Adjustments" section. No adjustment is necessary for the **UP** signal or **DOWN** signal on the lever control operator.

PILOT AIR VALVE KIT LIST

WINCH MODELS	PART NUMBER	
	Pendant Control Kit	Lever Control Kit
D6U and D6UL with automatic brake	D6U-PAK269AB	D6U-PAK686AB
EU, EUL with automatic brake	HU-PAK269AB	HU-PAK686AB
HU, HUL, HUA, HUAL, HUB and HUBL with automatic brake		
H5U and H5UL with automatic brake	KU-PAK269AB	KU-PAK686AB
KU, KUA, KUL and KUAL with automatic brake		
K4U AND K4UL with automatic brake		
K5UL with automatic brake		
ODR40A15 and ODR60A20 with automatic brake		
UW50A30 with automatic brake	K6U-PAK269AB	K6U-PAK686AB
K6U, K6UL, K6UL36, K6UL48, K6UA and K6UAL with automatic brake		
ODR100A24 and ODR100A36 with automatic brake		

PARTS ORDERING INFORMATION

The use of other than **Ingersoll-Rand Material Handling Products** replacement parts will invalidate the Company's warranty.

If the Pilot Air Valve Kit was supplied as original equipment with your winch it is recommended that the following information be recorded for your convenience and future reference.

Winch Model Number: _____

Winch Serial Number: _____

Date Purchased: _____

If the Pilot Air Valve Kit was installed after your original winch purchase (retro-fit) it is recommended that the following information should also be recorded with the above.

Pilot Air Valve Kit Part Number: _____

Date Purchased: _____

When ordering replacement parts, please specify the following:

1. Complete model number and serial number as it appears on the nameplate.
Examples:
 - a. D6U-PAK269 or D6U-PAK269AB
 - b. KU-PAK686 or KU-PAK686AB
2. Part number(s) and part description as shown in this manual.
3. Quantity required.

When the life of this equipment has expired, it is recommended that it be disassembled, degreased and parts separated as to materials so that they may be recycled.

NOTICE

• **Continuing improvement and advancement of design may cause changes to this equipment which are not included in this manual. Manuals are periodically revised to incorporate changes. Always check the manual edition number on the front cover for the latest issue.**

Return Goods Policy

Ingersoll-Rand will not accept any returned goods for warranty or service work unless prior arrangements have been made and written authorization has been provided from the location where the goods were purchased.

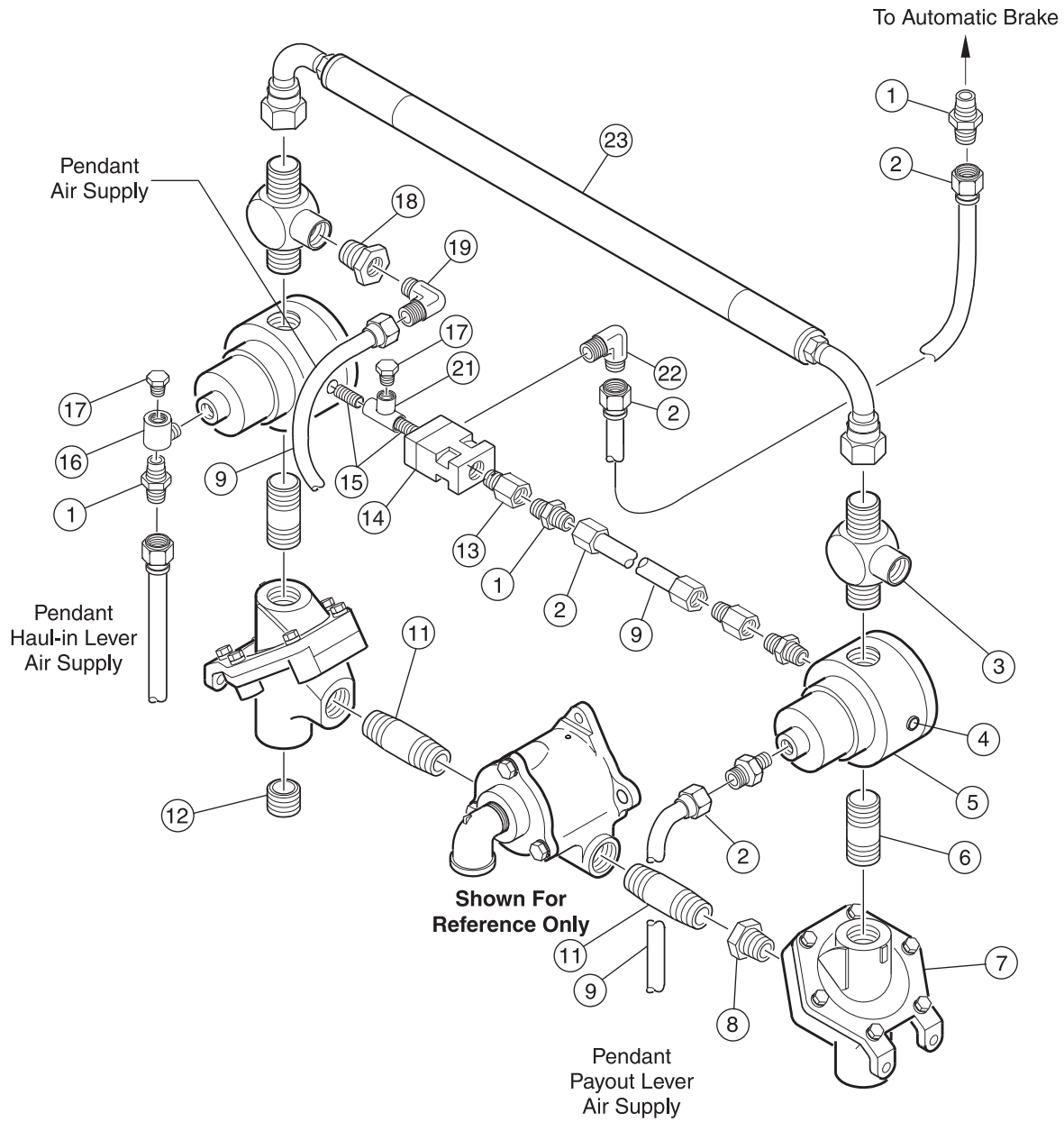
For additional information contact:

Ingersoll-Rand Material Handling
 P.O. Box 24046
 2724 Sixth Avenue South
 Seattle, WA 98124-0046 USA
 Phone: (206) 624-0466
 Fax: (206) 624-6265

or

Ingersoll-Rand Material Handling
 Samiia, Douai Operations
 111, avenue Roger Salengro
 59450 Sin Le Noble, France
 Phone: (33) 3-27-93-08-08
 Fax: (33) 3-27-93-08-00

PILOT AIR VALVE KIT DRAWING



(Dwg. MHP0383)

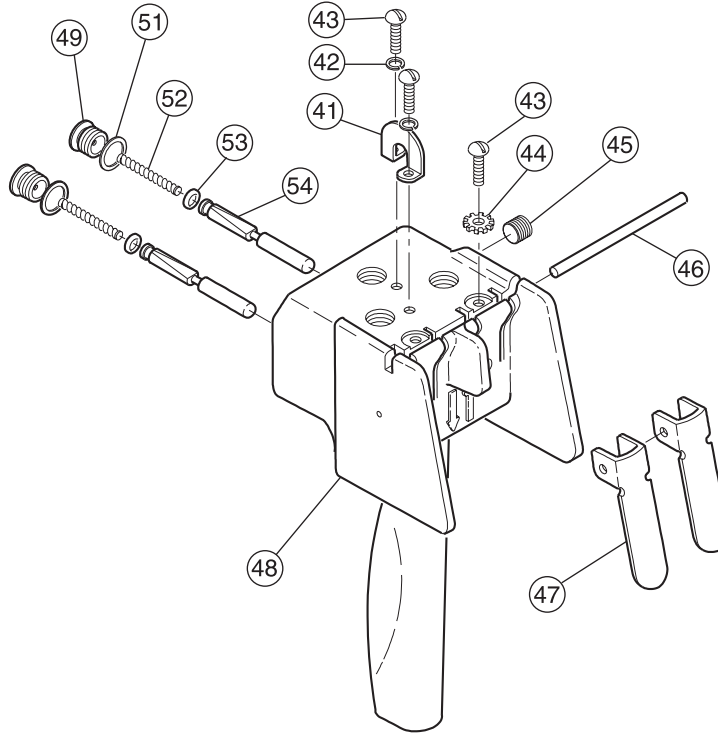
PILOT AIR VALVE KIT PARTS LIST

ITEM NUMBER	DESCRIPTION OF PART	QUANTITY REQUIRED		PART NUMBER			
		Pendant Control (269AB)	Lever Control (686AB)	D6U-PAK	HU-PAK	KU-PAK	K6U-PAK
1	Fitting, Adapter	5		53939			
2	Fitting, Swivel	5		51029			
3	Fitting, Tee	2		K6U-927			
4	Plug	2		ROH-377			
5	Regulator	2		K6U-200			
6	Fitting, Connector	2		51785		C10-286	
7	Dump Valve	2		KU-939			
8	Fitting, Bushing	2		C10-284	HX-284		
9	Bulk Hose *	Specify Length		50923			
11	Fitting, Connector	2		P25-200	HHM-286		
12	Vented Plug	2		---	PAK-943		
13	Adapter	1		51361707			
14	Valve, Shuttle	1		50277			
15	Fitting, Nipple	2		HUS-908			
16	Fitting, Tee	2	---	---	54977		
17	Bleed Valve	3	---	HU-264-4			
18	Fitting, Bushing	1		D01-705			
19	Fitting, Elbow	1		53934			
21	Fitting, Tee	2	---	K6U-926			
22	Fitting, Elbow	1		52182			
23	Hose With Fittings	1		HU-925		K6U-925	

ACCESSORIES

Control Hose	Specify length	50923-XX
Quick Exhaust Valve	1 per 10 ft. of Control Hose	20417
Hose Binder	1 per 5 - 7 ft. of Control Hose	D10-927

PENDANT CONTROL ASSEMBLY DRAWING AND PARTS LIST

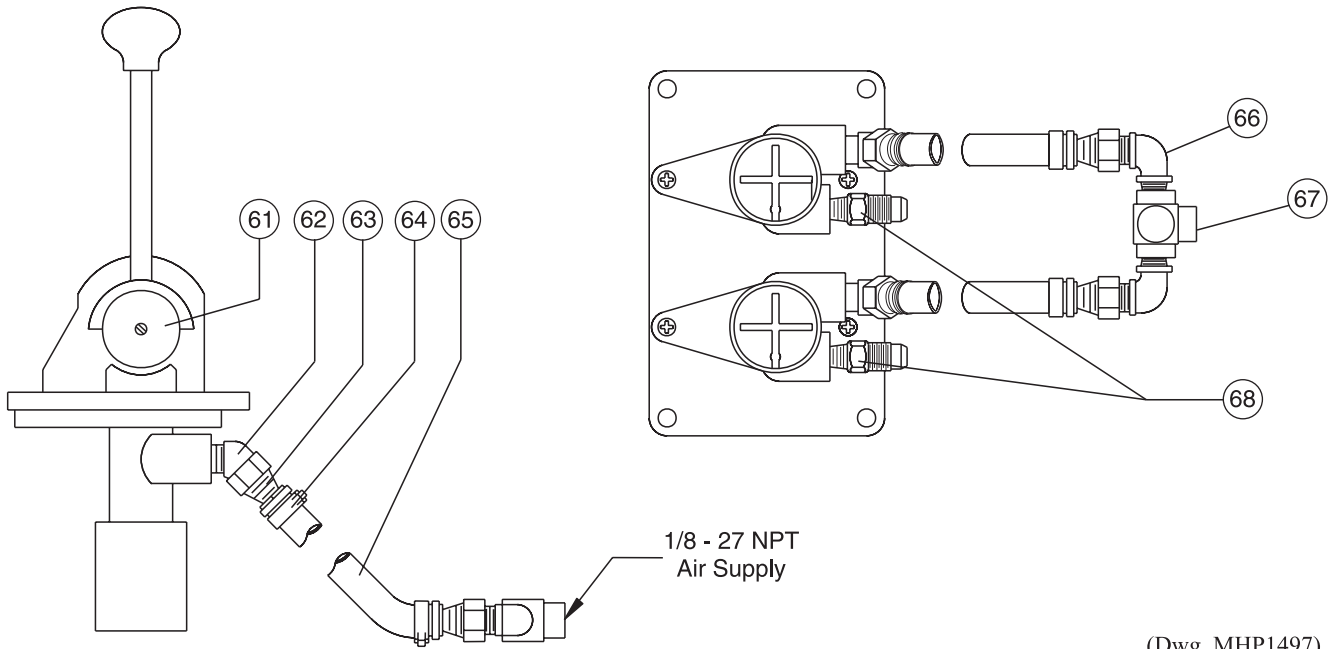


(Dwg. MHP1499)

ITEM NUMBER	DESCRIPTION OF PART	QTY. REQUIRED	PART NUMBER
40	Pendant Assembly (Consists of items 41 thru 54.)	1	MLK-A269C
41	Strain Relief Support	1	MLK-450
42	Lockwasher	2	H54U-352
43	Screw, SH	4	HRE20A-68
44	Lockwasher	2	D02-138
45	Pipe Plug	1	54247
46	Pin	2	DLC-120A
47	Throttle Valve Lever	2	MLK-273
48	Pendant Handle	1	MLK-269A
49	Throttle Valve Cap	2	MLK-266A
• 51	Gasket	2	MLK-504
52	Throttle Valve Spring	2	MLK-51A
53	Throttle Valve Face	2	R000BR1C-283
54	Throttle Valve	2	MLK-K264B

• Recommended spare.

LEVER CONTROL ASSEMBLY DRAWING



(Dwg. MHP1497)

ITEM NUMBER	DESCRIPTION OF PART	QTY. REQUIRED	PART NUMBER
60	Lever Control Valve Assembly (Consists of items 61 thru 68)	1	UWD-A686
61	Control Valve	1	VWD-686
62	Fitting, Elbow	2	25619
63	Fitting, Swivel	4	UWD-162
64	Clamp	4	CA110-476A
65	Hose	As Required *	50923-XX
66	Fitting, Elbow	2	MLK-161
67	Fitting, Tee	1	25620
68	Fitting, Straight	2	52092

XX = Order Hose (item 5) in feet; i.e., for 10 foot hose order 50923-10.

United States Office Locations

For Order Entry, Order Status and Technical Support

**Ingersoll-Rand
Material Handling**
P.O. Box 24046
2724 Sixth Avenue South
Seattle, WA 98124-0046
Phone: (206) 624-0466
Fax: (206) 624-6265

Ingersoll-Rand Distribution Center

P.O. Box 618
510 Hester Drive
White House, TN 37188
Phone: (615) 672-0321
Fax: (615) 672-0801

Web Site at:
www.ingersoll-rand.com

Regional Sales Offices

Chicago, IL
888 Industrial Drive
Elmhurst, IL 60126
Phone: (630) 530-3873
Fax: (630) 530-3891

Detroit, MI

23192 Commerce Drive
Farmington Hills, MI 48335
Phone: (248) 476-6677
Fax: (248) 476-6670

Houston, TX

450 Gears Road
Suite 210
Houston, TX 77067-4516
Phone: (281) 872-6800
Fax: (281) 872-6807

Los Angeles, CA

11909 E. Telegraph Road
Santa Fe Springs, CA
90670-0525
Phone: (562) 948-4189
Fax: (562) 948-1828

Philadelphia, PA

P.O. Box 425
900 E. 8th Ave., Suite 103
King of Prussia, PA 19406
Phone: (610) 337-5930
Fax: (610) 337-5912

International Office Locations

Offices and distributors in principal cities throughout the world. Contact the nearest **Ingersoll-Rand** office for the name and address of the distributor in your country or write/fax to:

Ingersoll-Rand Material Handling

P.O. Box 24046
2724 Sixth Avenue South
Seattle, WA 98124-0046
USA
Phone: (206) 624-0466
Fax: (206) 624-6265

Canada

National Sales Office Regional Warehouse Toronto, Ontario

51 Worcester Road
Rexdale, Ontario
M9W 4K2
Phone: (416) 213-4521
Fax: (416) 213-4510
Order Desk
Fax: (416) 213-4605

Regional Sales Offices Edmonton, Alberta

1430 Weber Center
5555 Calgary Trail N.W.
Edmonton, Alberta
T6H 2P9
Phone: (403) 438-5039
Fax: (403) 437-3145

Montreal, Quebec

3501 St. Charles Blvd.
Kirkland, Quebec
H9H 4S3
Phone: (514) 695-9040
Fax: (514) 695-0963

British Columbia

1200 Cliveden Avenue
Delta, B. C.
V3M 6G4
Phone: (604) 523-0803
Fax: (604) 523-0801

Latin America Operations

Ingersoll-Rand Production Equipment Group

730 N.W. 107 Avenue
Suite 300, Miami, FL
33172-3107
Phone: (305) 559-0500
Fax: (305) 559-7505

Europe, Middle East and Africa

Ingersoll-Rand Material Handling Douai Operations

111, avenue Roger Salengro
59450 Sin Le Noble, France
Phone: (33) 3-27-93-08-08
Fax: (33) 3-27-93-08-00

Asia Pacific Operations

Ingersoll-Rand (Japan) Ltd. Shin-Yokohama Square Bldg. (5TH Floor)

2-3-12 Shin-Yokohama,
Kouhoku-Ku, Yokohama-shi,
Kanagawa Pref. 222 Japan
Phone: 81-45-476-7800
Fax: 81-45-476-7806

Russia

Ingersoll-Rand Company

Kuznetsky Most 21/5
Moscow 103895 Russia
Phone: 7-095-921-53-21
7-095-923-91-34
Fax: 7-095-924-46-25