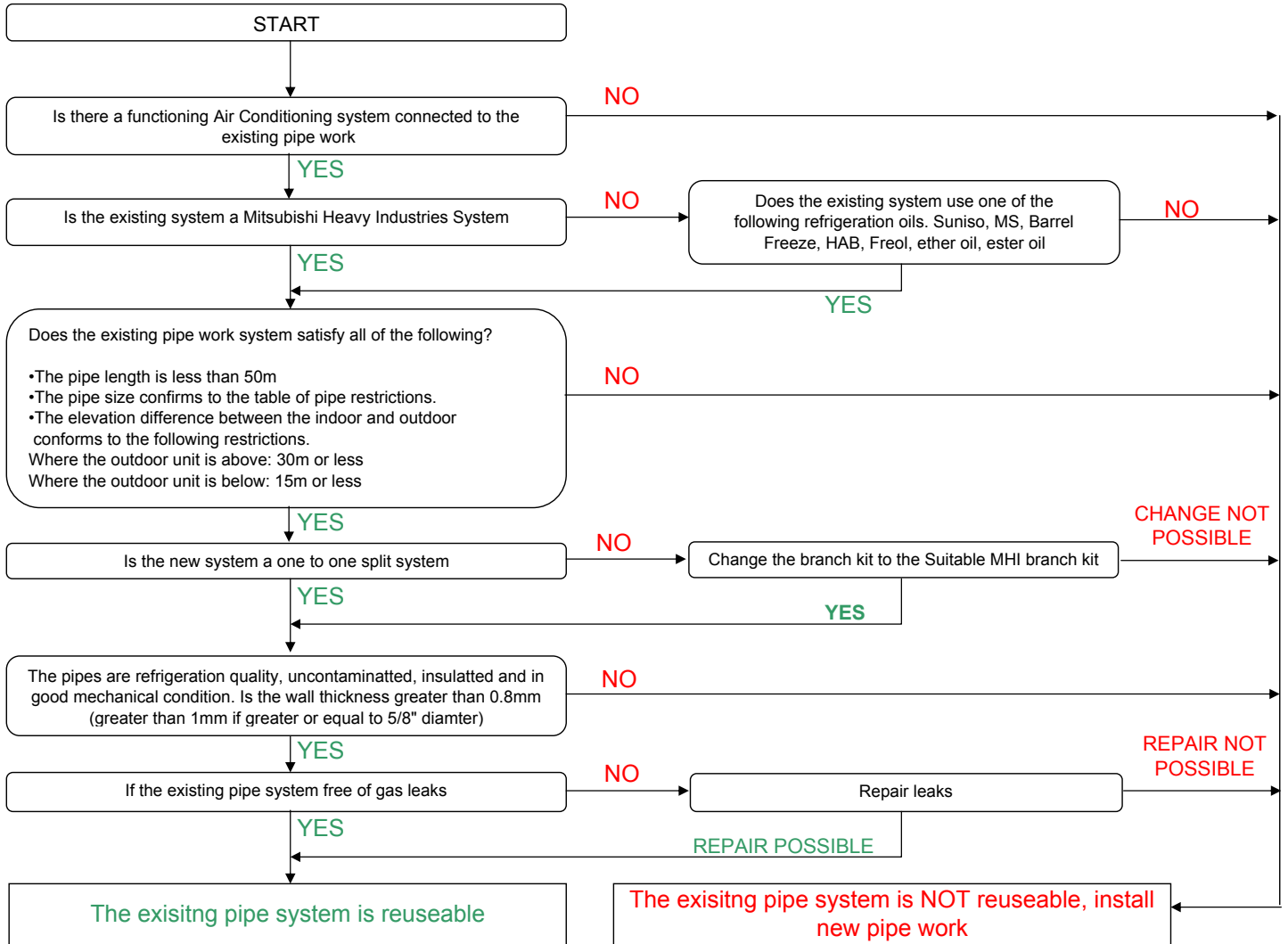







# MHI, Utilising Existing Pipework







Procedure	
<ul style="list-style-type: none"> <li>All processes must be done safely.</li> <li>All refrigerant-handling procedures must be adhered to.</li> <li>Pressure testing and dehydration must be done to achieve a successful outcome.</li> </ul>	<ul style="list-style-type: none"> <li>Operate <b>existing</b> equipment in cooling for 30 minutes, then pump down. <i>If you can not run the system the existing pipework CAN NOT be used and new pipe work must be used</i></li> <li>Recover remaining refrigerant from isolated pipework.</li> <li>Flush pipework with (oxygen free) nitrogen at 8 psig. Where a twin circuit is used, the individual branches must be flushed; check that any oil is clean. <i>If oil is not clean or any foreign matter is discharged the existing pipework system CAN NOT be used and new pipe work must be used</i></li> <li>Connect new components with the flare nuts supplied. Flared connections must be re-made.</li> <li>Leak test at 500 psig for at least one hour (oxygen-free nitrogen).</li> <li>Triple-evacuate to 4 Torr (4000 Micron) and maintain for at least 30 minutes.</li> <li>Add additional refrigerant if necessary (in liquid state); additional charge is determined by the length and size of the liquid line <b>used</b>.</li> <li>Slowly open both isolation valves and operate the system in the cooling mode.</li> <li>Close liquid isolation valve and when suction pressure is 10 to 20 psig, remove gauge line from the Schrader valve.</li> <li>Re-open liquid valve, replace all caps and ensure that system is free of leaks.</li> </ul>

# Pipework Compatibility Charts

## Key to symbols

-  Standard pipe work size
-  Pipe work size can be used
-  Pipe work size can be used but max pipe run will be reduced
- Cooling  Pipe work size can be used but cooling capacity will drop
-  Pipe work size can not be used

## FDC71V





	Liquid & Gas Pipe Size		
	3/8" 1/2"	3/8" 5/8"	1/2" 5/8"
Compatibility	Cooling  		
Max 1 Way pipe length (m)	35	50	25
Pre Charged for	30	30	15
Additional Charge (g/m)	60	60	80

If the pipe length is less than 5m, refrigerant must be removed.

Any pipe size combination not listed above can not be used.

For a twin system only 3/8", 1/2" or 3/8", 5/8" pipe sizes can be used from the branch to the indoor units, at an additional charge of 60g/m

## FDC100-140V













	Liquid & Gas Pipe Size			
	3/8" 5/8"	3/8" 3/4"	1/2" 5/8"	1/2" 3/4"
Compatibility		 <sup>1</sup>		 <sup>1</sup>
Max 1 Way pipe length (m)	50	50	25	25
Pre Charged for	30	30	15	15
Additional Charge (g/m)	60	60	80	80

<sup>1</sup>, When 3/4" pipe work is used turn dip switch SW5-1 to on on the outdoor unit.

If the pipe length is less than 5m, refrigerant must be removed.







Any pipe size combination not listed above can not be used.

## FDC100-140V Twins & Triples

		Branch Pipe Liquid & Gas Sizes		
		3/8" 1/2"	3/8" 5/8"	3/8" 3/4"
FDC100V	Twin			
FDC125V	Twin			 <sup>1</sup>
FDC140V	Twin			 <sup>1</sup>
	Tripple			
Additional Charge (g/m)		60	60	60

<sup>1</sup>, When 3/4" pipe work is used turn dip switch SW5-1 to on on the outdoor unit.

## FDC200V









	Liquid & Gas Pipe Size			
	3/8"	1/2"	1/2"	5/8"
	7/8"	7/8"	1 1/8"	7/8"
Compatibility	Cooling  	Cooling  		
Max 1 Way pipe length (m)	35	35	70	24
Pre Charged for	30	15	15	9
Additional Charge (g/m)	60	120	120	200

If the pipe length is less than 3m, remove 1kg of refrigerant from factory charge volume

Any pipe size combination not listed above can not be used.

## FDC200V







### Twins, Triples & Quads

	First Branch		Second Branch	
	3/8"	3/8"	3/8"	3/8"
	5/8"	3/4"	1/2"	5/8"
Twin		 <sup>1</sup>	NA	NA
Triple		 <sup>1</sup>	NA	NA
Quad		 <sup>1</sup>		

<sup>1</sup>, When 3/4" pipe work is used turn dip switch SW5-1 to on on the outdoor unit.

Any pipe size combination not listed above can not be used.

## FDC250V









	Liquid & Gas Pipe Size			
	1/2"	1/2"	5/8"	5/8"
	7/8"	1 1/8"	7/8"	1 1/8"
Compatibility	Cooling  		Cooling  	
Max 1 Way pipe length (m)	35	70	35	40
Pre Charged for	30	25	18	13
Additional Charge (g/m)	120	120	200	200

If the pipe length is less than 3m, remove 1kg of refrigerant from factory charge volume

Any pipe size combination not listed above can not be used.

## FDC250V

### Twins, Triples & Quads

	First Branch		Second Branch	
	3/8"	3/8"	3/8"	3/8"
	5/8"	3/4"	5/8"	3/4"
Twin		 <sup>1</sup>	NA	NA
Triple		 <sup>1</sup>	NA	NA
Quad		 <sup>1</sup>		 <sup>1</sup>

<sup>1</sup>, When 3/4" pipe work is used turn dip switch SW5-1 to on on the outdoor unit.

Any pipe size combination not listed above can not be used.