

SIZE TM10 TENSIONING MANIFOLD

PRINCIPLES OF OPERATION

The Winch may be mounted on a moving object such as a barge, or it may be mounted on a stationary object such as a dock.

Size TM10 Tensioning Manifolds are automatic Winch control devices which maintain nearly uniform pull on the wire rope. This Manifold is for use with Winches requiring 200 cfm (5.66 m³/min) of air or less.

One Tensioning Manifold is required for use with each Winch. Make certain that both the Winch and Manifold are securely anchored. While the Tensioning Manifold should be installed as close as practical to the Winch, the Winch should not be used to support the weight of the Manifold.

A Winch on which a Tensioning Manifold is installed should preferably have a remote control valve chest. However, the Manifold can be installed on Winches having manual throttle valve chests. If the Manifold is used with a Winch having a manual throttle valve chest, securely block open the throttle lever in the position which causes wire rope to be hauled in. If the Winch has a remote control valve chest, install the Manifold at the left-hand side of the valve chest when viewed from the motor end of the Winch.

ADJUSTMENT OF THE TENSIONING CIRCUIT

Adjust the tensioning circuit as follows:

1. Close the Shut-off Valve (12) in the bypass circuit. Adjust the Pressure Regulator (11) to a pressure near the bottom of its range (30 to 40 psi/2.1 to 2.8 bar/206 to 276 kPa) air pressure so it will not pass air. Set the Relief Valve (6) so that it will pass air slightly at the 30 to 40 psi setting. The wire rope should be slack between the anchor and the Winch throughout the entire motion cycle.
2. Fully open the Shut-off Valve (3) in the tensioning circuit.
3. Gradually turn the adjusting screw on the Pressure Regulator (11) in until the Winch responds by taking up slack in the wire rope.
4. Increase the Relief Valve setting until the Valve closes when the Winch is pulling and opens when the Winch is being overhauled.
5. Observe the Winch and wire rope through a complete motion cycle.
6. Repeat steps 3, 4 and 5 until the wire rope remains taut during an entire motion cycle. These adjustments should be performed in time with the motion cycle and rapidly enough to minimize any shock loads on the wire rope.

Note: Sufficient air pressure must be applied through the Regulator (11) to maintain tension of the wire rope when the motion cycle changes from overhauling to pulling. The Relief Valve setting must be low enough to allow free exhaust of air when wire rope is being pulled from the Winch.

HOW TO ORDER

Order all repair parts for your Ingersoll-Rand Tool by the **NAME** and **NUMBER** shown in the Repair Part List section. **Never** use the illustration numbers which appear in the first column.

For prompt service and genuine Ingersoll-Rand parts, place orders with the nearest Ingersoll-Rand Branch Office or Authorized Distributor.

Notice: The use of other than genuine Ingersoll-Rand replacement parts may result in decreased tool performance and increased maintenance, and may, at the Company's option, invalidate all warranties.

Refer All Communications to the Nearest
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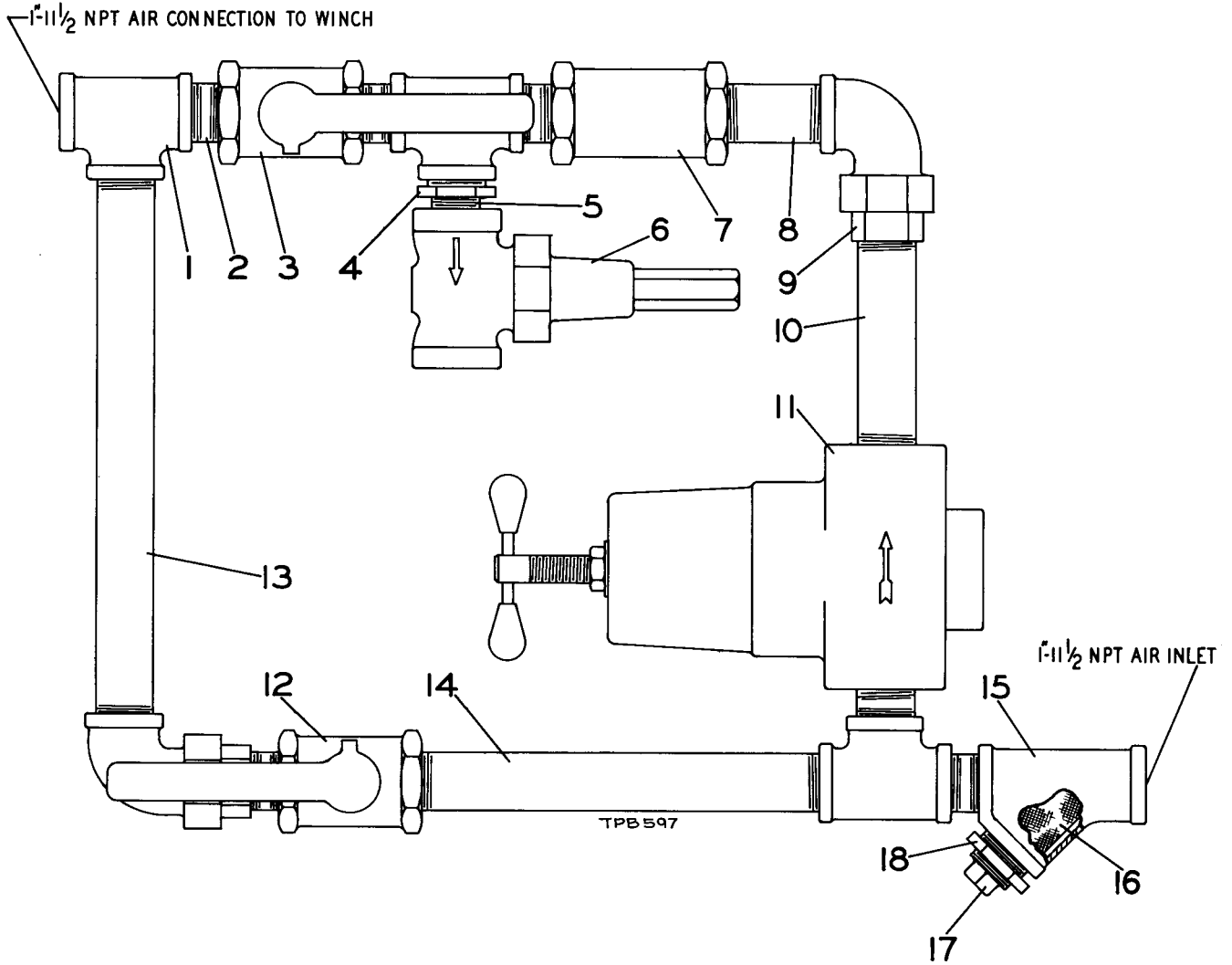
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Size TM10 Tensioning Manifold

PART NUMBER FOR ORDERING

	Tensioning Manifold	TM10
1	Pipe Tee, 1" NPT (3)	TM10-900
2	Pipe Nipple, 1" NPT x 2" long (7)	HHM-286
3	Shut-off Valve, 1" NPT	TM10-901
4	Pipe Bushing, 1" NPT x 3/4" NPT	C10-284
5	Pipe Nipple, 3/4" NPT x 2" long	D02-456
6	Relief Valve	TM20-910
7	Check Valve	TM10-903
8	Pipe Nipple, 1" NPT x 3-1/2" long	C10-286
9	Union Elbow, 1" NPT (2)	HX-282
10	Pipe Nipple, 1" NPT x 6" long	HHM-287
11	Pressure Regulator	TM10-906
12	Shut-off Valve, 1" NPT	TM10-901
13	Pipe Nipple, 1" NPT x 13-9/16" long	TM10-904
14	Pipe Nipple, 1" NPT x 10-3/8" long	TM10-909
15	Air Strainer Assembly	HU-A267AT
16	Air Strainer Screen	HU-61AT
17	Air Strainer Plug	D02-351
18	Air Strainer Cap	HU-268AT

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