

AERO-MOTIVE COMPANY

A Woodhead Industries, Inc. Subsidiary



IMPORTANT SAFETY INSTRUCTIONS

Please read this manual carefully and follow its instructions. Improper use or failure to follow these instructions could result in serious injury, death or property damage. Operators should be instructed in the safe and proper use and maintenance of this product. Keep this manual for future reference.

The following safety precautions call attention to potentially dangerous conditions.



DANGER: Immediate hazards which **WILL** result in severe personal injury or death.



WARNING: Hazards or unsafe practices which **COULD** result in severe personal injury or death.



CAUTION: Hazards or unsafe practices which **MAY** result in *minor* personal injury or product or property damage.

NOTE: Instruct operators in the safe, proper use and maintenance. Keep this manual for future reference.

GENERAL INFORMATION



WARNING: Do **NOT** exceed pressure limits of 250 PSIG for oxygen and 15 PSIG for acetylene. Hazards or unsafe practices **COULD** result in severe personal injury or death.



WARNING: Do **NOT** use any hydrocarbon-based lubricant on the welding hose reel. Hazards or unsafe practices **COULD** result in severe personal injury or death.

The welding hose reel is a low pressure, pass-through device that does not incorporate any pressure relief or regulating devices. Supply lines must include regulators to ensure that the gas supply does not exceed pressure limits of 250 PSIG for oxygen and 15 PSIG for acetylene. Supply line ends should be flexible, and line should also include valves to allow convenient shut off of the gas supply for service of welding reel. To prevent hazardous combination of oxygen and hydrocarbons, all gas fitting and surrounding parts must be free of oil and grease. For more information on cleaning requirements for equipment used in oxygen service, refer to COMPRESSED GAS ASSOCIATION pamphlet G-4-1.

INSTALLATION



WARNING: Failure to read, understand, and follow these instructions may result in hazards or unsafe practices **COULD** result in severe personal injury or death.



CAUTION: Operators need to be instructed on the safe, proper use and maintenance of this product. Keep this manual for future references. Hazards or unsafe practices **MAY** result in *minor* personal injury or product or property damage.

MOUNTING



DANGER: A secondary safety cable or chain is to be attached to all reels mounted overhead to prevent reel from falling. Immediate hazards **WILL** result in severe personal injury or death.

Reels shipped with hose are ready for installation. See "Service" for instructions on how to install hose. The fixed base of the cable reel allows mounting in several different positions including base up, base down, or wall mounted. To mount reel keep main shaft horizontal. The centerline of drum must be on

line with hose pay out. When mounted overhead in base up position, add a secondary chain, bracket, or other safety device to prevent the reel from falling in case the mounting bolts are removed or become loosened from vibration.

GUIDE ARM

Hose rollers protect working hose during travel. Position guide arm at the attitude that will allow working hose to unwind from the reel with minimum deflection. To adjust attitude of the guide arm, loosen screws, and move arm to the desired position and tighten screws.

SUPPLY HOSE

Assemble supply hose to mainshaft. Do not use rigid pipe at input connection.

SUPPLY LINE CONNECTIONS

The requirements for gas supply connections to the welding hose reel are:

- Lines must include regulators to ensure that the gas supply does not exceed pressure limits of 250 PSIG for oxygen and 15 PSIG for acetylene.
- The supply line ends should be a minimum of 18 inches of flexible line.
- Lines should include valves to allow convenient shut off of gas supply for service of reel.
- All fittings and surrounding parts must be clean and completely free of oil and grease.
- Supply connections are inverted flare fittings; Do NOT use any pipe joint compound or thread tape.
- Connect oxygen supply to elbow fitting (Item 12 on Parts List). Connect acetylene supply to elbow fitting (Item 35 on Parts List).


WORKING HOSE INSTALLATION

NOTE: The reel features an anti-backlash clutch. If working hose over runs during rewind, the spring anchor automatically disengages for reel axle to protect spring for backlash force.

Install working hose only after frame has been properly secured in the desired operating location. To install working hose, apply spring tension by winding empty flange and drum assembly 16 to 18 turns. Make sure ratchet pawl engages ratchet wheel. As an added precaution, clamp flange and drum assembly in position to protect against spring retraction while making hose connections. Make sure that all fittings and surrounding parts are clean and free of oil & grease. Connect working hose to labeled couplers on swivel assembly; Do NOT use any pipe joint compound or thread tape. Release clamp and ratchet wheel. Allow hose to retract while walking toward reel.

SERVICE

SPRING AND HUB ASSEMBLY REPLACEMENT

 **WARNING:** Make sure working hose is free of tension before starting to disassemble the flange and drum assembly. Hazards or unsafe practices COULD result in severe personal injury or death.

 **WARNING:** Never attempt to remove spring from spring pocket container. Hazards or unsafe practices COULD result in severe personal injury or death.

To remove spring and hub assembly, disconnect gas supply at elbow fittings and remove elbow fitting along with the bushing. Remove flange and drum assembly, main shaft, and all attached parts from the frame. When removing the main shaft, take care to secure key. Remove lock washers and nuts, while holding ratchet wheel to spring and hub assembly. Remove lock washers, and nuts while holding spring and hub assembly to flange and drum assembly. To replace spring and hub assembly, reverse the above procedures.

SWIVEL ASSEMBLY REPLACEMENT

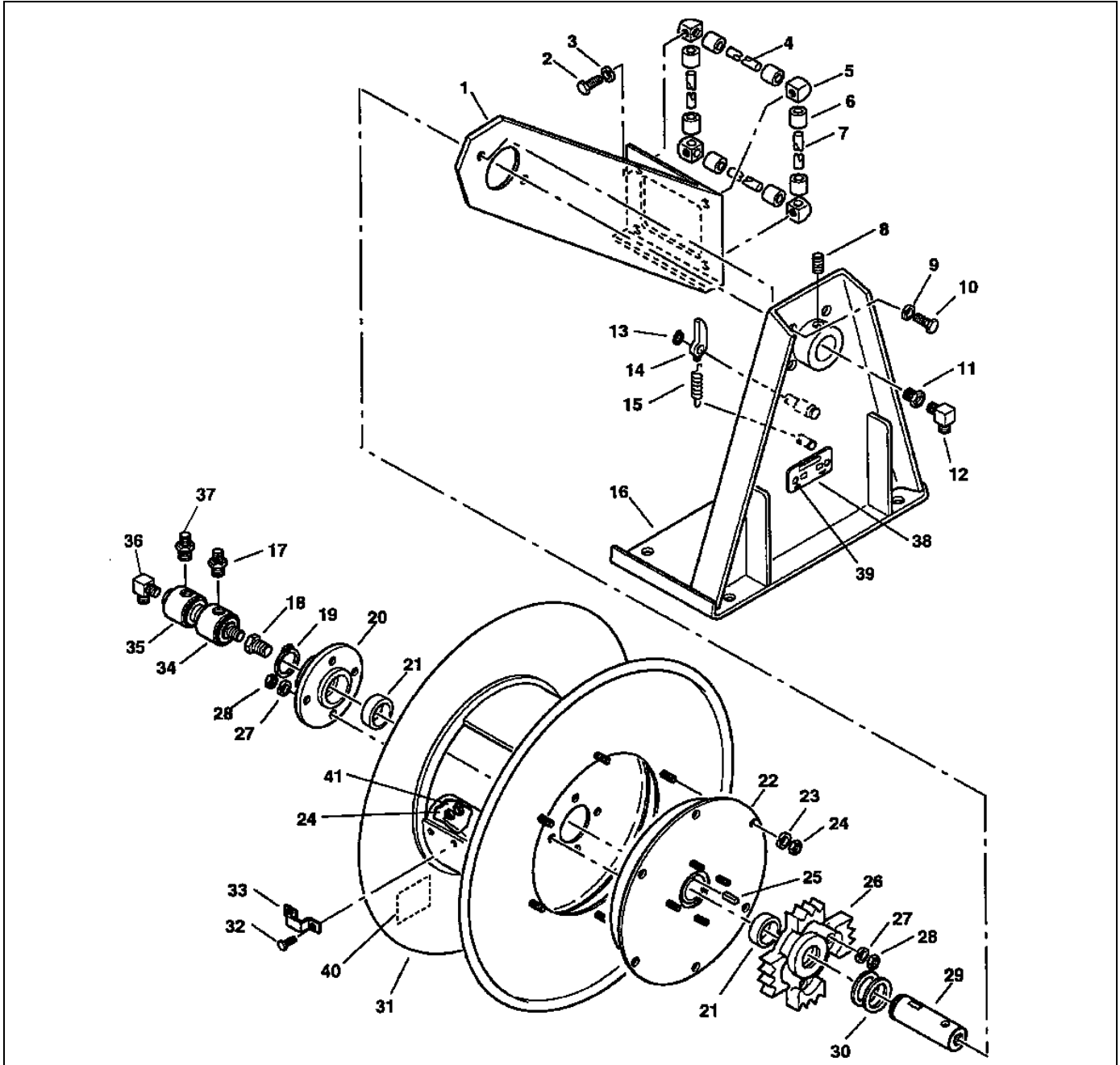
The swivel assemblies are not serviceable. An individual swivel assembly can be replaced if it becomes damaged or is found to leak. To remove swivel assembly, remove elbow fittings and the two hose couplers. Remove bushing from main shafts and disconnect bushing from swivel assembly. When

replacing swivel assembly, make sure that all fittings and surrounding parts are clean and free grease and oil. Do not use pipe joint compound or thread tape.

MAINTENANCE

The welding hose reels are designed to operate maintenance-free. There are not tension adjustments and the rotating components are permanently lubricated. To ensure continued safe operation, inspect working hose and gas fittings on a regular basis and replace any components that show signs of wear or damage.

REPLACEMENT PARTS



Reference Number	Part Number	Qty.	Description
1	H25410002	1	Arm; Guide
2	00032P0101	4	Screw

3	00101P0021	4	Washer; Lock
4	T051223794	2	Rod; Roller
5	T001221980	4	Roller MTG. BLKT.
6	T001222390	12	Roller
7	T027223794	2	Rod; Roller
8	C04100439	1	Screw; Set
9	2500050761	2	Washer; Lock
10	C11000259	2	Screw
11	C32410418	1	Bushing (T8120)
12	00746P0001	1	Fitting; Elbow (Oxygen)
13	C01700229	1	Ring; Retaining
14	M67710006	1	Pawl; Ratchet
15	5385600000	1	Spring
16	H22110003	1	Frame
17	00750P0001	1	Coupling; Hose (Oxygen)
18	00669P0025	1	Bushing
19	00576P0020	1	Ring; Retaining
20	M75120001	1	Collar
21	C52410002	2	Bearing
22	H41710001	1	Assembly; Spring & Hub
23	00103P0025	6	Washer; Lock
24	00151P0025	6	Nut
25	4077300006	1	Key
26	M67620004	8	Wheel; Ratchet
27	C01200218	8	Washer; Lock
28	C22020310	1	Nut
29	M37760174	1	Shaft; Main
30	4011900000	A/R	Spacer
31	H42330001	1	Assembly; Flange & Drum
32	00030P0211	1	Screw
33	01220P0002	1	Clamp; Hose
34	B33130001	1	Assembly; Swivel (Oxygen)
35	6126100000	1	Assembly; Swivel (Acetylene)
36	00746P0002	1	Fitting; Elbow (Acetylene)
37	00750P0002	1	Coupling; Hose (Acetylene)
38	5831000000	1	Plate; Name
39	00209P0023	2	Rivet; Pop
40	M13620024	1	Label; Warning
41	00101P0015	2	Washer; Lock

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