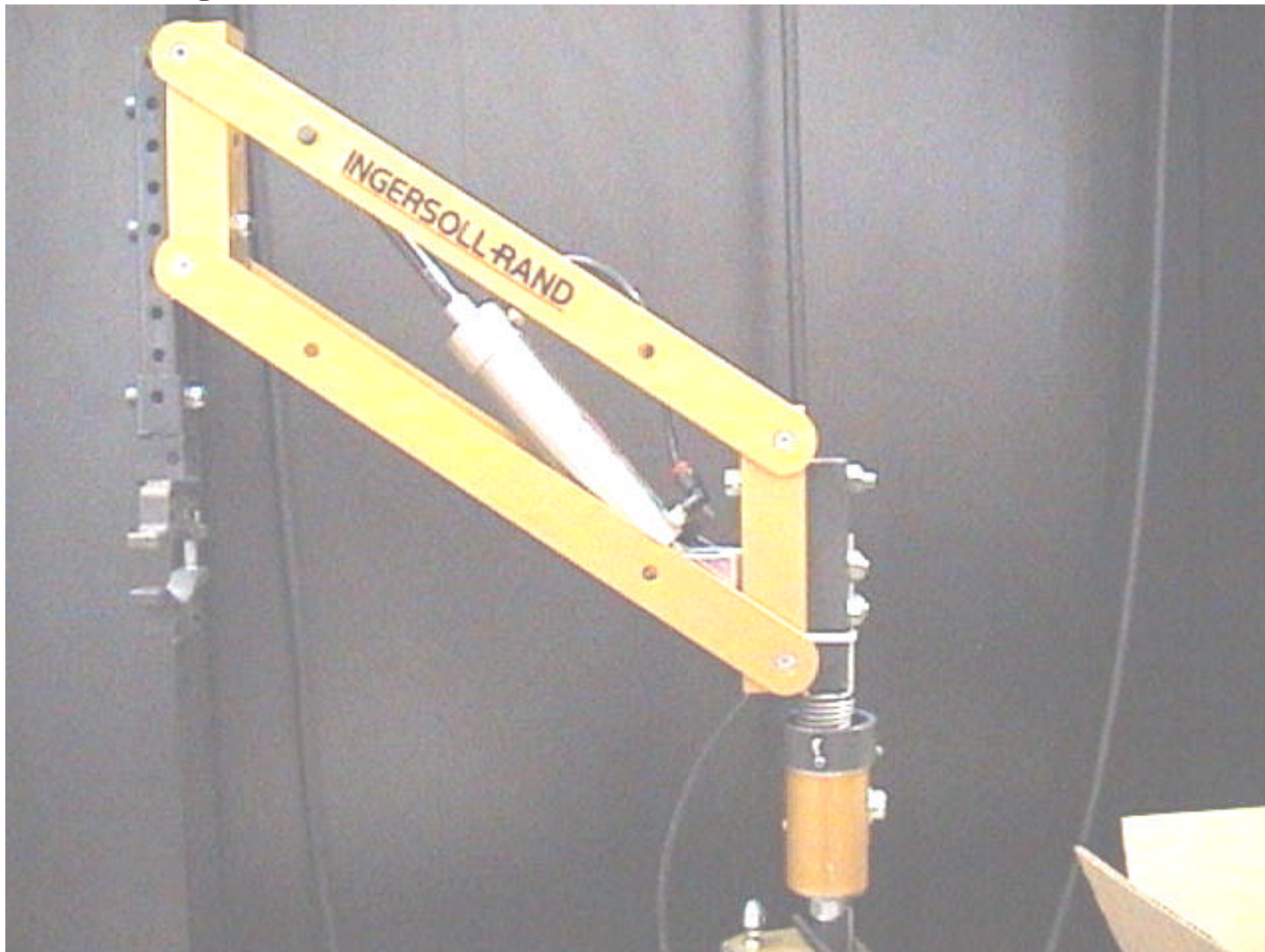


**IR** Assembly Solutions

# Light Duty Torque Arm



# Light Duty Torque Arm

## Description of Operation

The tool arm is an integrated group of components designed to maximize the interaction of man and machine.

Ease of operation minimizes operator fatigue and incorporates added safety during the performance of repetitive tasks.

The tool arm is assembled at the factory for ease of installation. The arm will automatically raise up and retract to the operators right.

# Light Duty Torque Arm

## Principle of Operation

The tool arm is designed to allow vertical and/ or horizontal operational control within a specific ranger of motion.

During travel ensure the tool path is clear and pay attention to the direction of travel during movement.

Vertical raising and lowering of the tool should be easily accomplished by exerting force on the tool.

Use the tool to move side to side and to raise or lower the tool arm.

# Light Duty Torque Arm

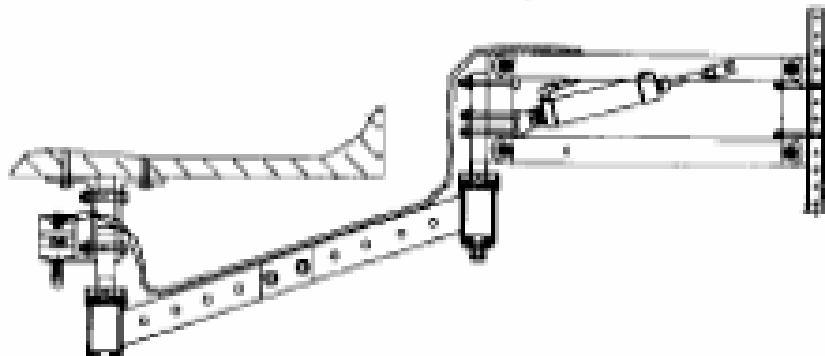
## Specifications

Weight	14.96 Kg (33 Lbs.)
Maximum Torque	80Nm (60 ft.-lbs.)
Maximum Travel	508mm (20 in.)
Maximum Capacity	13.6Kg (30 lb.) @ 698Kpa (100psi)
Maximum Tool Diameter	63.5mm (2.5 in.)
Material	Anodized Aluminum

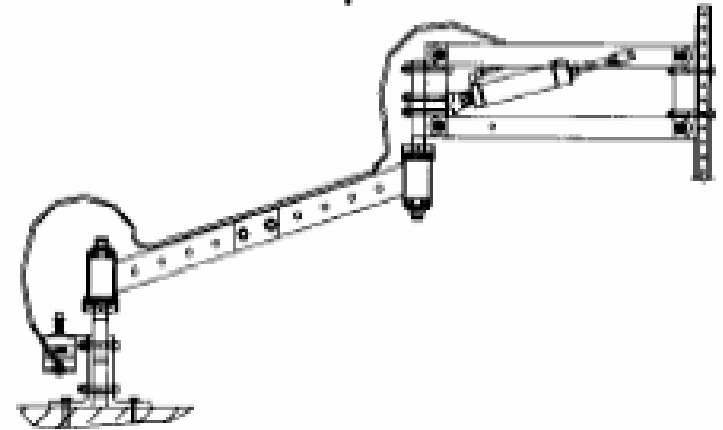
# Light Duty Torque Arm

## Configurations

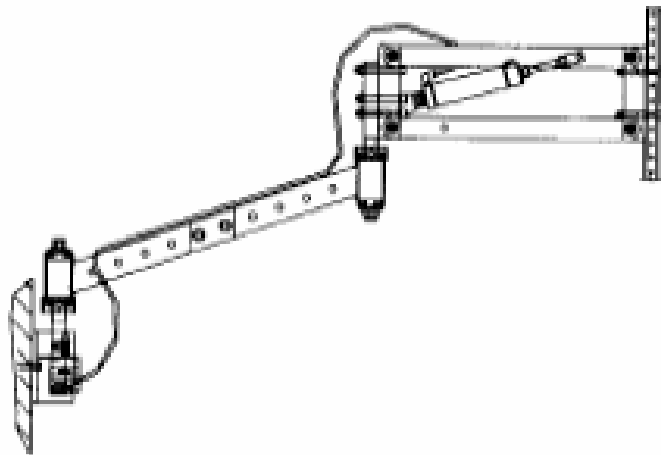
**Overhead Mount Extension Up**



**Table Mount Extension Up**



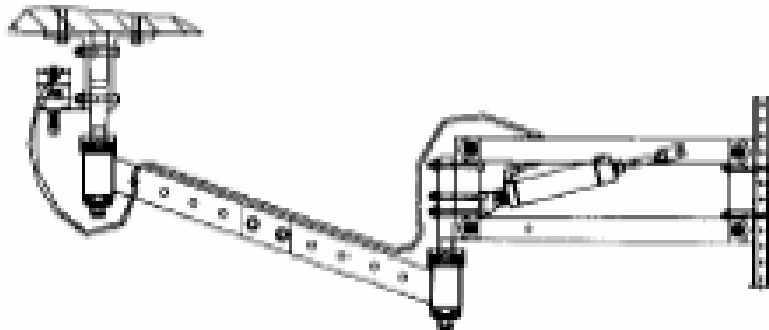
**Wall Mount Extension Up**



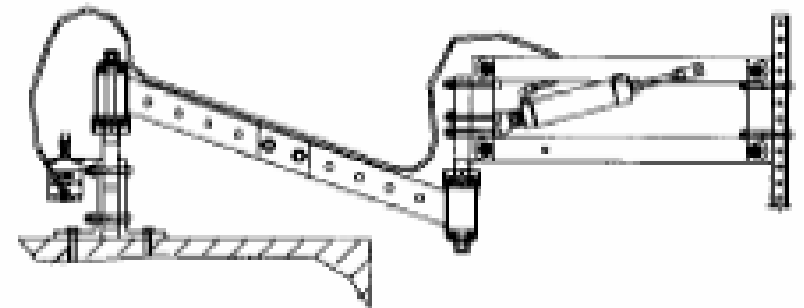
# Light Duty Torque Arm

## Configurations

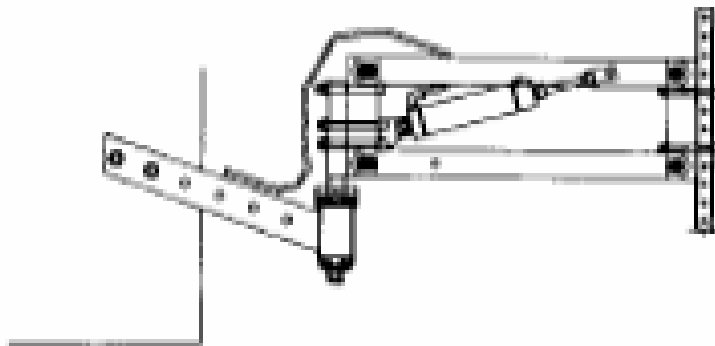
**Overhead Mount Extension Down**



**Table Mount Extension Down**



**Fixed Machine Mount**



# Light Duty Torque Arm

## Tool Holder Options

PN ZHS52000

Fixed Axis Tool Holder

Applications:

Right Angle Tools

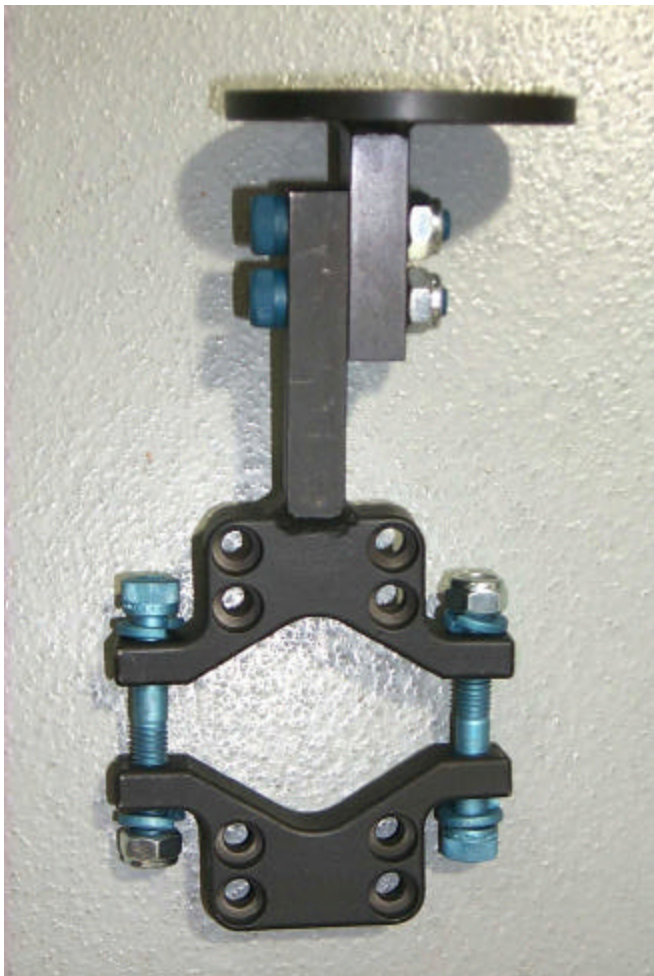
Maximum Capacity

100Nm (74 ft. lb.)

Features:

Fixed Axis control to prevent misalignment of tool to part

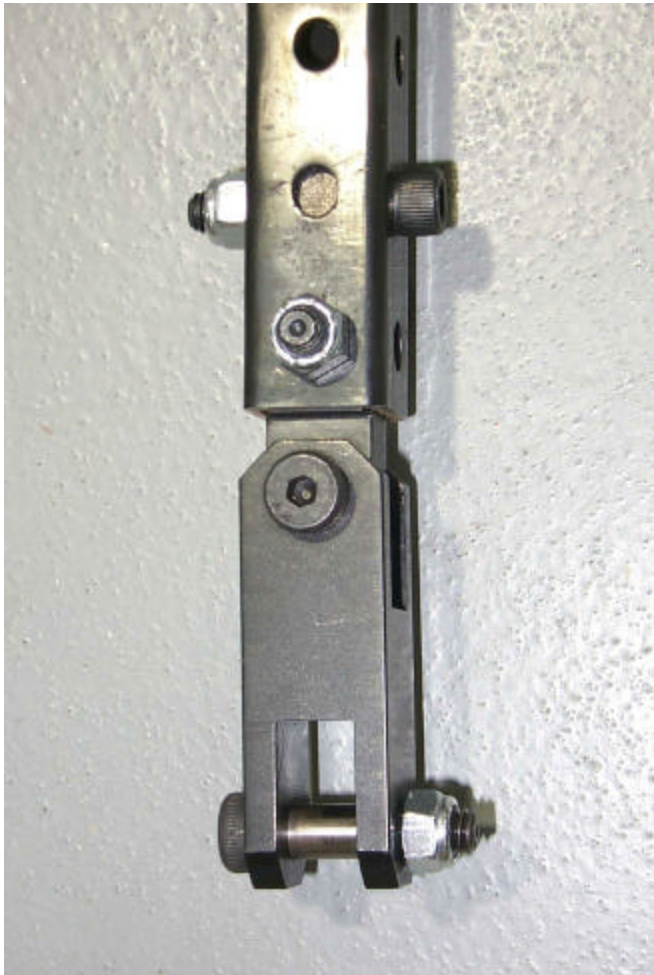
Tool can be installed in any orientation and secured





# Light Duty Torque Arm

## Tool Holder Options



PN 54033162

Bi-Directional Tool Holder

Applications:

Push to start tools/ In-line screwdrivers

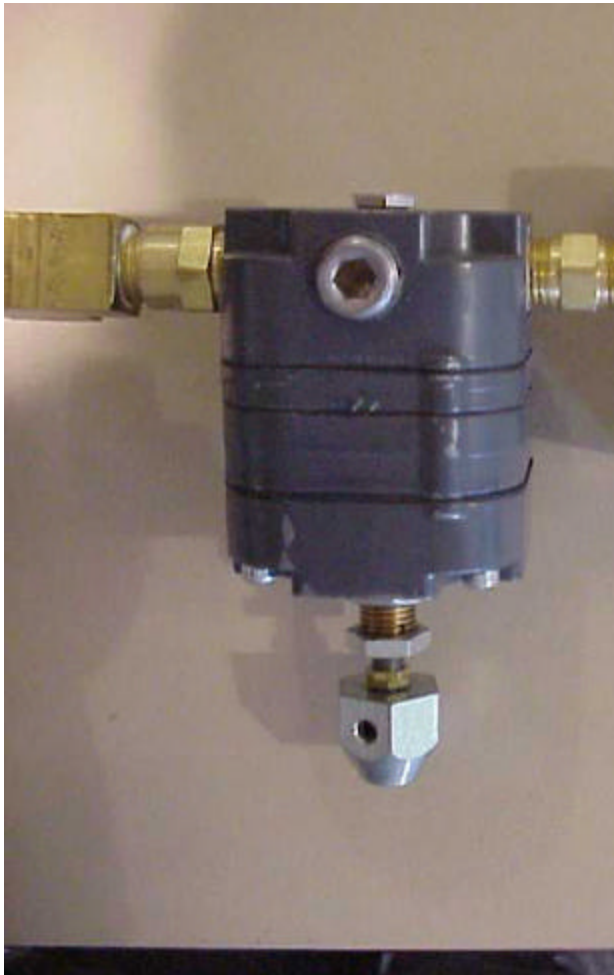
Features:

Two axis of motion for tool to part alignment



# Light Duty Torque Arm

## Control Option



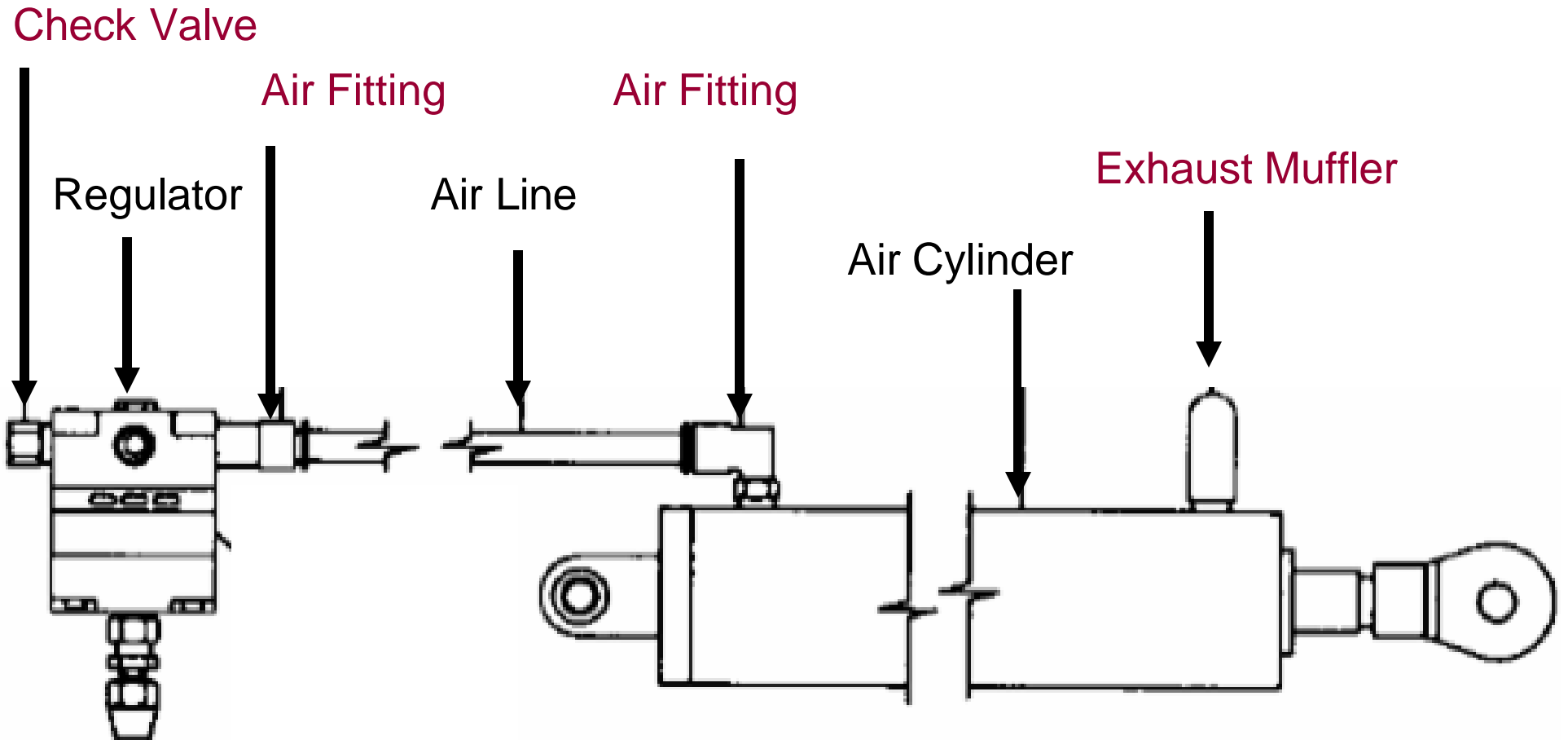
**Adjustable Self- relieving regulator**

**Utilizes regulator- same as Balancer BA control**

**Balances tool or can be set to raise when  
work is complete**

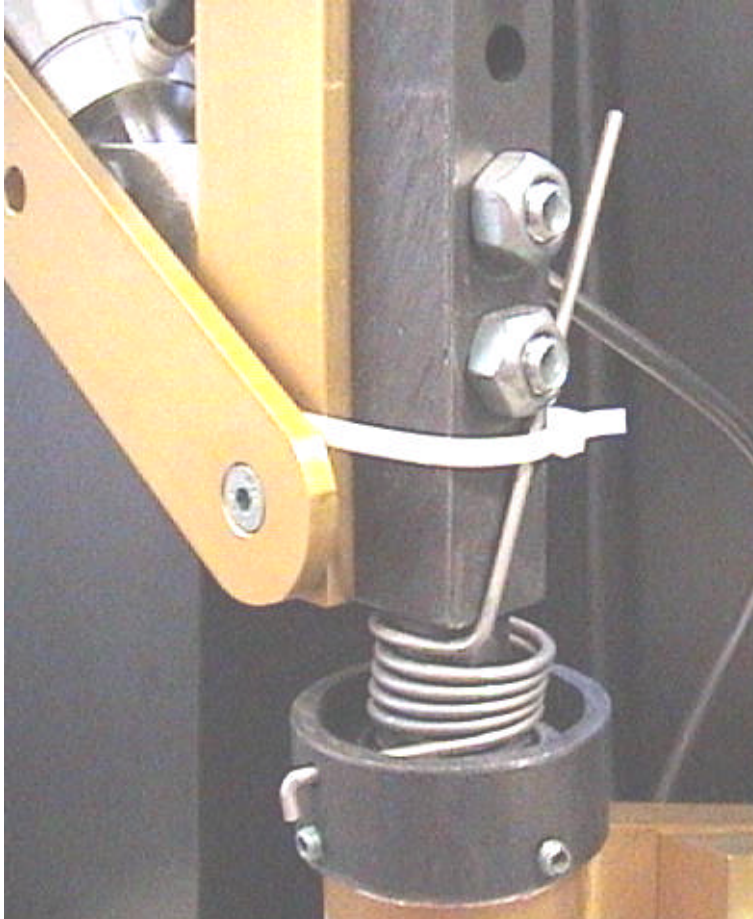
# Light Duty Torque Arm

## Control Option



# Light Duty Torque Arm

## Retract Feature



**Torsion Spring retracts arm out of work area when cycle is complete**

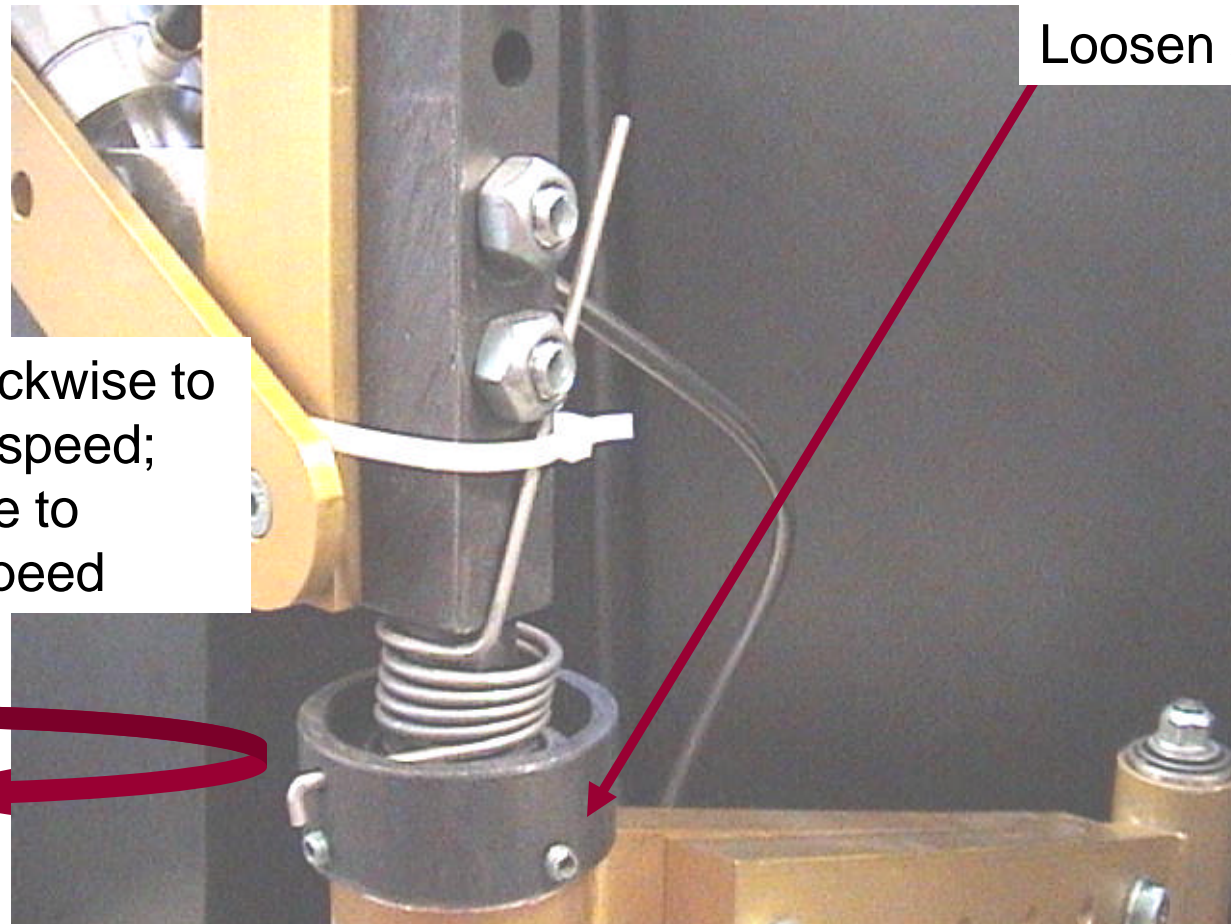
**Proper Operation the torsion spring should be compressed when extended and relax when retracted**

**Adjustable- Rotating the lower mounting collar clockwise will increase tension arm retracts more quickly**

**Replace upper pivot assembly with lower to change direction of retract.**

# Light Duty Torque Arm

## Retract Adjustment



Loosen set screw

Rotate collar clockwise to increase retract speed; counterclockwise to reduce retract speed



# Light Duty Torque Arm

## Troubleshooting

COMPONENT	SYMPTOM	REMEDY
Pivot Assemblies	Movement is not smooth, or may be binding.	Inspect pivot assembly. Repair or replace as necessary to ensure pivot assembly movement is smooth and does not bind. Check spring retract adjustment.
	Fasteners are loose.	Ensure fasteners are tightened to rated torque specifications.
	Lack of lubrication in pivot assembly.	Lubricate pivot assembly.
Control Hoses	Hose leaks at fittings or along length of hose.	Replace worn, leaking or damaged hoses and fittings.
	Hose binding at connections.	Ensure swivel connections operate correctly without sticking or binding. Replace fittings that stick or bind.
Cylinder	Effort to extend or retract Tool Arm is not equal.	Check regulator adjustment.
		Ensure cylinder vent is clean and unrestricted.
Parallel Links	Movement up and down is restricted.	Inspect flanged bushings. Replace flanged bushings if worn or damaged.

Complete instructions in MHD56174, Light Duty Tool Arm Service and Installation Manual

# Light Duty Torque Arm

## Maintenance & Inspections

### Beginning of shift

Operator should test arm to ensure smooth and unrestricted movement

Check for loose fasteners

Check tool is secure in tool holder

Check air system for leaks and arm for drifting down

### Annual Inspections

Inspect all components for wear

Maintenance personnel should torque fasteners



# Light Duty Torque Arm

## Review

### Applications

Torque Range- up to 80 Nm

Tool Capacity- up to 14.96 Kg

Tools- In-line push to start or screwdriver & right angle wrenches

### Features

Wall/ Machine/ Table Mounting

Spring retract from work area

Adjustable regulator to balance tool

Two styles of tool holder for fixed or bi-directional movement